

## Staff Summary for February 14-15, 2024

**10. Regulation Change Petitions (Marine)****Today's Item**Information Action 

This is a standing agenda item for the Commission to receive new regulation change petitions and act on regulation change petitions received from the public at previous meetings. For this meeting:

- (A) Receive new petitions for regulation change
- (B) Act on previously received regulation change petitions

**Summary of Previous/Future Actions****(A) *New Petitions for Regulation Change – Receipt***

- **Today receive new petitions** **February 14-15, 2024**
- Potentially act on new petitions **April 17-18, 2024**

**(B) *Petitions for Regulation Change – Scheduled for Action***

- Received 20 marine protected area (MPA) regulation change petitions **December 13-14, 2023**
- **Today potentially act on petitions** **February 14-15, 2024**

**Background****(A) *Receive New Petitions for Regulation Change***

Pursuant to Section 662, any person requesting that the Commission adopt, amend, or repeal a regulation must complete and submit form FGC 1. Regulation change petition forms submitted by the public are “received” at this Commission meeting under (A) if they are delivered by the public comment or supplemental comment deadlines or delivered in person to the Commission meeting.

Under the Bagley-Keene Open Meeting Act, the Commission cannot discuss or act on any matter not included on the agenda, other than to determine whether to schedule issues raised by the public for consideration at future meetings. Thus, petitions for regulation change generally follow a two-meeting cycle of receipt and decision. The Commission will determine the outcome of petitions received at today’s meeting at the next regularly scheduled Commission meeting (currently April 17-18, 2024) under (B), following staff evaluation, unless the petition is rejected under 10-day staff review as prescribed in subsection 662(b).

No new petitions for regulation change were received by the comment deadline.

**(B) *Act on Previously-Received Regulation Change Petitions***

Petitions received at the previous meeting are scheduled for Commission consideration at the next regularly scheduled business meeting under (B). A petition may be (1) denied, (2) granted, or (3) referred to a committee, staff or the Department for further evaluation or information-gathering. Referred petitions are scheduled for action once the evaluation is completed and a recommendation made.

## Staff Summary for February 14-15, 2024

Today, 20 MPA petitions received in December are scheduled for action and summarized in Exhibit B1:

- I. *Petition 2023-14MPA*: Allow commercial take of red sea urchins in nine state marine conservation areas (SMCAs) (Exhibit B3)
- II. *Petition 2023-15MPA*: Reclassify three northern Channel Islands state marine reserves (SMRs) to SMCAs and allow *either* the limited take of highly migratory species and possession of coastal pelagic species, *or* the take of pelagic finfish (Exhibit B4) (*note: this corrects the agenda description of petitioned changes*)
- III. *Petition 2023-16MPA*: Reclassify Stewarts Point and Bodega Head SMRs to SMCAs and allow commercial take of salmon (Exhibit B5)
- IV. *Petition 2023-18MPA*: Modify allowed uses for four MPAs in Santa Barbara Channel and eliminate two special closures (Exhibit B6)
- V. *Petition 2023-19MPA*: Designate new "Chitqawi" SMCA near Morro Bay with tribal take exemption for and co-management with the Santa Ynez Band of Chumash Indians (Exhibit B7)
- VI. *Petition 2023-20MPA*: Add tribal take exemption to Point Buchon SMCA for co-management with Santa Ynez Band of Chumash Indians, and modify northern boundary of Point Buchon SMR (Exhibit B8)
- VII. *Petition 2023-21MPA*: Modify Pyramid Point SMCA to remove recreational take of surf smelt; continue current tribal take exemption for Tolowa Dee-ni' Nation (Exhibit B9)
- VIII. *Petition 2023-22MPA*: Define "rocky intertidal zone," add research, monitoring, restoration and education allowance, and clarify protections in several Orange County MPAs (Exhibit B10)
- IX. *Petition 2023-23MPA*: Reclassify three SMCAs to SMRs, designate one new SMR in Monterey, and make various changes related to kelp restoration (Exhibit B11)
- X. *Petition 2023-24MPA*: Expand Laguna Beach no-take SMCA southward to border of City of Laguna Beach and modify Dana Point SMCA boundaries (Exhibit B12)
- XI. *Petition 2023-25MPA*: Change boundaries and allowed uses at several Catalina Island MPAs (Exhibit B13)
- XII. *Petition 2023-26MPA*: Shift Swami's SMCA southward, and clarify protections at three estuarine no-take SMCAs in San Diego County (Exhibit B14)
- XIII. *Petition 2023-27MPA*: Reclassify a portion or all of Anacapa SMCA to an SMR (Exhibit B15)
- XIV. *Petition 2023-28MPA*: Designate a new SMR at Point Sal, or designate as an SMCA with a tribal take exemption based on tribal consultation (Exhibit B16)
- XV. *Petition 2023-29MPA*: Designate new "Mishopshno" SMCA near Santa Barbara with a tribal take exemption for and co-management with Santa Ynez Band of Chumash Indians (Exhibit B17)



## Staff Summary for February 14-15, 2024

- XVI. *Petition 2023-30MPA*: Revise the recreational crab take regulations for Big River SMCA (Exhibit B18)
- XVII. *Petition 2023-31MPA*: Reclassify Drakes Estero SMCA to an SMR and combine with Estero de Limantour SMR as a single SMR (Exhibit B19)
- XVIII. *Petition 2023-32MPA*: Reclassify Duxbury Reef SMCA as an SMR and expand northern and southern boundaries (Exhibit B20)
- XIX. *Petition 2023-33MPA*: Expand the boundaries of five SMRs and one SMCA, and designate a new SMR off Pleasure Point, in Santa Cruz (Exhibit B21)
- XX. *Petition 2023-34MPA*: Reclassify Point Buchon SMCA to an SMR and modify take at Farnsworth Onshore and Offshore SMCAs to only allow recreational spearfishing (Exhibit B22)

For 17 of the 20 petitions, multiple requested MPA changes are bundled into single documents, consistent with the Commission's request to consolidate proposals. The resulting individual proposed changes (86) are itemized by petition in Exhibit B2 and each identified under a "Tracking ID." The table in Exhibit B2 specifies the MPA affected or proposed, identifies an overall regulatory action category, and provides the petitioner's justification, among other information. Co-developed by Department and Commission staffs, the table assigns unique tracking IDs in each petition to support evaluations and tracking of individual recommendations.

In addition, six of the petitions include non-regulatory MPA management requests. Normally, non-regulatory requests fall under a separate agenda item (Agenda Item 11 for today's meeting). While the non-regulatory requests are included in Exhibit B2 for this item, they are also extracted and included in a separate table as an exhibit for Agenda Item 11 to better allow for tracking.

Note that following receipt of petitions in December, individual petitions were posted and linked on the Commission's online [Accepted Petitions for Regulation Change Documents Index](#); however some errors in petition description or missing petition attachments were identified. The errors have now been addressed.

### *Petition Evaluation Process*

In August 2023, the Commission expressed support for Department use of a framework of "considerations" to assist in its evaluation of petitions the Commission receives related to changes to the MPA network. The considerations were summarized by the Department following discussion and guidance by the Marine Resources Committee at its July 2023 meeting. The Department and individual commissioners generally supported the considerations that may guide evaluation of petitions referred to the Department for review. A summary document of the evaluation framework and considerations is available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=216395&inline>.

The Commission also supported scheduling discussions at Marine Resources Committee meetings as the Department completes its evaluation of petitions. Not all Department evaluations are anticipated to be completed at the same time; rather, petitions referred to the

## Staff Summary for February 14-15, 2024

Department may have different timelines for completed evaluations, depending on the type and complexity of request(s). Staff recommends that the Department focus its evaluation and recommendations on those proposed actions that are regulatory in nature and within Commission authority. Commission staff supports coordination and engagement with other agencies of jurisdiction during the evaluation of MPA proposals that overlap with or are adjacent to areas of other jurisdictions, consistent with the MLMA and master plan for MPAs.

### Significant Public Comments

There are 26 comment letters related to petitions that were received and are summarized and organized in Exhibit B23 by support for, opposition to, and/or input on specific petitions; the exhibit also includes a compilation of individual comment emails and letters.

### Recommendation

**Commission staff:** (1) Refer all petitions to the Department for evaluation (see Exhibit B1 for specific recommendations for each petition), (2) support the Department in using the MPA petition framework considerations, as presented to the Commission in August 2023, when evaluating referred MPA petitions and (3) directs staff to coordinate with the Department on engagement activities with other agencies of jurisdiction during the MPA petitions evaluation process.

### Exhibits

- B1. [Summary of petitions for regulation change scheduled for action](#)
- B2. [Summary of MPA petitions separated into discrete action items, with the proposed action and justification stated by the petitioner](#)
- B3. [Petition 2023-14MPA, received November 13, 2023](#)
- B4. [Petition 2023-15MPA, received November 22, 2023](#)
- B5. [Petition 2023-16MPA, received November 22, 2023](#)
- B6. [Petition 2023-18MPA, received November 28, 2023](#)
- B7. [Petition 2023-19MPA, received November 29, 2023](#)
- B8. [Petition 2023-20MPA, received November 29, 2023](#)
- B9. [Petition 2023-21MPA, received November 29, 2023](#)
- B10. [Petition 2023-22MPA, received November 29, 2023](#)
- B11. [Petition 2023-23MPA, received November 29, 2023](#)
- B12. [Petition 2023-24MPA, received November 29, 2023](#)
- B13. [Petition 2023-25MPA, received November 30, 2023](#)
- B14. [Petition 2023-26MPA, received November 30, 2023](#)
- B15. [Petition 2023-27MPA, received November 30, 2023](#)
- B16. [Petition 2023-28MPA, received November 30, 2023](#)
- B17. [Petition 2023-29MPA, received November 30, 2023](#)
- B18. [Petition 2023-30MPA, received November 30, 2023](#)
- B19. [Petition 2023-31MPA, received November 30, 2023](#)
- B20. [Petition 2023-32MPA, received November 30, 2023](#)

## Staff Summary for February 14-15, 2024

- B21. [Petition 2023-33MPA, received November 30, 2023](#)
- B22. [Petition 2023-34MPA, received November 30, 2023](#)
- B23. [Summary of comments and compiled comment letters received between December 22, 2023 and February 1, 2024.](#)

**Motion**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission (1) adopts the staff recommendations in Exhibit B1 to refer all marine protected area regulation petitions to the Department for review and recommendation, (2) supports the Department in using the MPA petition framework considerations when evaluating referred MPA petitions, and (3) directs staff to coordinate with the Department on engagement activities with other agencies of jurisdiction during the MPA petitions evaluation process.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission (1) adopts the staff recommendations in Exhibit B1 to refer all marine protected area regulation petitions to the Department for review and recommendation, except: \_\_\_\_\_, (2) supports the Department in using the MPA petition framework considerations when evaluating referred MPA petitions, and (3) directs staff to coordinate with the Department on engagement activities with other agencies of jurisdiction during the MPA petitions evaluation process.

## CALIFORNIA FISH AND GAME COMMISSION

### PETITIONS FOR REGULATION CHANGE - ACTION ON FEBRUARY 14-15, 2024

FGC - California Fish and Game Commission   DFW - California Department of Fish and Wildlife   MRC - Marine Resources Committee  
 MPA - marine protected area   SMR - state marine reserve   SMCA - state marine conservation area

**Grant:** FGC is willing to consider the petitioned action through a process   **Deny:** FGC is not willing to consider the petitioned action   **Refer:** FGC needs more information before the final decision

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt	FGC Initial Action Date	Initial Staff Recommendation
2023-14MPA	11/13/2023	David Goldenberg, California Sea Urchin Commission	MPAs: Commercial sea urchin take in several SMCAs	Allow commercial take of urchins in nine SMCAs	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-15MPA	11/22/2023	Blake Hermann	MPAs: Classification and take at Footprint, Gull Island, and Santa Barbara Island SMRs	Reclassify three SMRs in the northern Channel Islands, Santa Barbara County, as SMCAs and allow either the limited take of highly migratory species and possession of coastal pelagic species, or allow the take of pelagic finfish	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-16MPA	11/22/2023	Richard Ogg, Bodega Bay Fishermen's Association	MPAs: Classification at Stewarts Point and Bodega Head SMRs for commercial salmon take	Reclassify Stewarts Point and Bodega Head SMRs as SMCAs to allow commercial take of salmon by trolling	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-18MPA	11/28/2023	Greg Helms, Santa Barbara Channel MPA Collaborative	MPAs: Uses at 4 Santa Barbara Channel MPAs; eliminate 2 special closures	Modify multiple MPAs within Santa Barbara Channel to allow a range of activities, from changes to take of natural resources restrictions to vessel landing requirements	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation. The petition includes two non-regulatory management recommendations, which will be tracked and considered under non-regulatory requests.
2023-19MPA	11/29/2023	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	MPAs: New Chitqawi SMCA with tribal take exemption in central coast	Designate new Chitqawi SMCA with a tribal take exemption for the Santa Ynez Band of Chumash Indians along the central coast	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-20MPA	11/29/2023	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	MPAs: Tribal take exemption at Point Buchon SMCA; boundary of SMR	Add a tribal take exemption to Point Buchon SMCA for co-management with Santa Ynez Band of Chumash Indians, and modify northern boundary of the Point Buchon SMR	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation. The petition includes one non-regulatory management recommendation, which will be tracked

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt	FGC Initial Action Date	Initial Staff Recommendation
							and considered under non-regulatory requests.
2023-21MPA	11/29/2023	Rosa Laucci, Tolowa Dee-ni' Nation	MPAs: Boundary at Pyramid Point SMCA; tribal take only	Modify take allowances in Pyramid Point SMCA to no-take with tribal exemption and change northern boundary to align with California/Oregon state line	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-22MPA	11/29/2023	Wendy Berube, Orange County Coastkeeper	MPAs: Uses at several Orange County MPAs	Change color coding on outreach maps, add language to tidepool take prohibitions, modify definition of tidepools, and allow research, monitoring, restoration and education in Orange County MPAs, with the exception of Upper Newport Bay (Bolsa Chica, Laguna Beach, Crystal Cove, and Dana Point)	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation. The petition includes two non-regulatory management recommendations, which will be tracked and considered under non-regulatory requests.
2023-23MPA	11/29/2023	Keith Rootsart, Giant Kelp Restoration Project	MPAs: Classification of three SMCAs and new MPA in Monterey; allowed uses for kelp restoration	Reclassify three SMCAs as SMR, designate Tanker's Reef as an SMR, allow kelp restoration in these four MPAs as follows: allow unlimited urchin take, allow outplanting of kelp, kelp spore dispersal, and kelp canopy pruning without a DFW scientific collecting permit (SCP). Proposes several actions to support kelp restoration such as placement of buoys around restoration sites, establishing a new process for restoration permits in DFW SCP program; designating "adopted reefs;" and others.	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation; note that Commission staff is not clear whether the Commission possess authority to address several of the requested actions in the petition. Staff intends to review the extent of the Commission's authority related to the requests in parallel with Department's evaluation. See agenda item 10, Exhibit B2 for more details about individual petitioned actions. In addition, the petition includes two non-regulatory management recommendations, which will be tracked and considered under non-regulatory requests.
2023-24MPA	11/29/2023	Mike Beanen, Laguna Bluebelt Coalition	MPAs: Boundaries of Laguna Beach and Dana Point SMCAs	Extend Laguna Beach SMCA southern boundary to the southern border of city of Laguna Beach, which will require modification of northern boundary of Dana Point SMCA	12/13-14/2023	2/14-15/2024	REFER to DFW for review and recommendation.
2023-25MPA	11/30/2023	Burton Miller, Catalina Island MPA Collaborative	MPAs: Boundaries and take for several Catalina Island MPAs	Change color designation of Blue Cavern Onshore and Casino Point SMCAs, change boundary of Long Point SMR, and remove allowance for feeding fish at Lover's Cove and Casino Point SMCAs	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation. The petition includes two non-regulatory management recommendations, which will be tracked and considered under non-regulatory requests.
2023-26MPA	11/30/2023	Lisa Giffillan, WILDCOAST, and	MPAs: Boundaries at Swami's SMCA, modify three	Shift Swami's SMCA south from the lifeguard tower to the State/Solana Beach line to cover tidepools on south side and change map color of no-take SMCAs at Batiquitos	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation. The petition includes one non-regulatory management recommendation, which will be tracked

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt	FGC Initial Action Date	Initial Staff Recommendation
		San Diego MPA Collaborative	estuarine no-take SMCAs in San Diego County	Lagoon, San Elijo Lagoon, and Famosa Slough from purple to red			and considered under non-regulatory requests.
2023-27MPA	11/30/2023	Azsha Hudson, Environmental Defense Center	MPAs: Classification of Anacapa SMCA	Reclassify Anacapa SMCA as an SMR or reclassify the portion of the SMCA from shore to at least 30 meters depth	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-28MPA	11/30/2023	Lisa Suatoni, National Resources Defense Council	MPAs: New MPA at Point Sal	Designate a new SMR around Point Sal in central California and consult with tribes first to determine whether an SMCA with exemptions for cultural and subsistence use is warranted	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-29MPA	11/30/2023	Lisa Suatoni, National Resources Defense Council	MPAs: New Mishopshno MPA with tribal take exemption near Santa Barbara	Designate Mishopshno SMCA, a California-Chumash co-management MPA that allows take by members of the Santa Ynez Band of Chumash Indians for traditional, ceremonial, cultural and subsistence purposes	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-30MPA	11/30/2023	Robert Jamgochian	MPAs: Recreational ocean take of crabs at Big River SMCA	Change gear restrictions within Big River SMCA to only allow Type A hoop nets that are collapsible and eliminate the hoop net Type B option (rigid frame) from general provisions, reduce the number of set traps allowed from 10 to 5, and reduce the bag and possession limit for recreational take of crabs from 10 to 5	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-31MPA	11/30/2023	Ashley Eagle-Gibbs, Environmental Action Committee of West Marin	MPAs: Classification of Drakes Estero SMCA and combine with Estero de Limantour SMR	Subsume Drakes Estero SMCA into Estero de Limantour SMR to create a single SMR	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-32MPA	11/30/2023	Ashley Eagle-Gibbs, Environmental Action Committee of West Marin	MPAs: Classification and expansion of Duxbury Reef SMCA	Change Duxbury Reef SMCA as an SMR, extend the southern boundary further south, and extend the northern boundary to the Double Point Special Closure	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.
2023-33MPA	11/30/2023	Laura Deehan, Environment California Research and Policy Center, and Azul	MPAs: Expansion of several MPAs and new MPA in Santa Cruz	Expand boundaries of SMCAs and SMRs, and designate new MPA	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt	FGC Initial Action Date	Initial Staff Recommendation
2023-34MPA	11/30/2023	Laura Deehan, Environment California Research and Policy Center, and Azul	MPAs: Classification of Point Buchon SMCA; take at Farnsworth SMCAs	Reclassify Point Buchon SMCA as a SMR, and modify regulations of Farnsworth Onshore and Farnsworth Offshore SMCAs to allow only recreational spearfishing.	12/13-14/2023	2/14-15/2023	REFER to DFW for review and recommendation.



## California Fish and Game Commission Marine Protected Area (MPA) Petitions for Regulation Change

*February 7, 2024*

In late 2023, the California Fish and Game Commission (Commission) received 20 MPA petitions; however, most of the MPA petitions include multiple regulatory and non-regulatory requests embedded within the petitions. Commission and California Department of Fish and Wildlife (CDFW) staffs partitioned the MPA petitions into discrete unique action requests and categorized them by affected MPA, bioregion, Marine Life Protection Act (MLPA) action category (modify, establish, or abolish), action type (e.g., boundaries, take, classification), proposed action, and the justification as stated by the petitioner. For ease of viewing in the table, the Commission petition tracking number and the unique action request numbers have been combined into one category, titled “Tracking ID.”

Select acronyms: SMCA = state marine conservation area, SMR = state marine reserve, DMR = decadal management review, SCP = scientific collecting permit

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-14MPA_1	David Goldenberg, California Sea Urchin Commission (CSUC)	Sea Lion Cove SMCA	North	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, “Explore innovate approaches to engage the fishing industry in MPA research and management”; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_2	David Goldenberg, CSUC	Stewart's Point SMCA	North	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, “Explore innovate approaches to engage the fishing industry in MPA research and management”; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.



Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-14MPA_3	David Goldenberg, CSUC	Salt Point SMCA	North	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovate approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_4	David Goldenberg, CSUC	Double Cone Rock SMCA	North	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovate approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_5	David Goldenberg, CSUC	Naples SMCA	South	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovate approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_6	David Goldenberg, CSUC	Anacapa Island SMCA	South	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovate approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_7	David Goldenberg, CSUC	Point Dume SMCA	South	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovate approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-14MPA_8	David Goldenberg, CSUC	Point Vicente SMCA	South	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovative approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-14MPA_9	David Goldenberg, CSUC	Swami's SMCA	South	Modify	Take	Allow commercial take of sea urchin	Proposal is consistent with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c, "Explore innovative approaches to engage the fishing industry in MPA research and management"; Commercial urchin fishing can help the recovery and resiliency of kelp ecosystems.
2023-15MPA_1	Blake Hermann	Footprint SMR	South	Modify	Classification /Take	Reclassify SMR to SMCA to allow either limited take of highly migratory species (HMS) and possession of coastal pelagic species, or take of pelagic finfish via four options. Possible methods of take include hook-and-line, surface fishing, harpoon, and deep-set buoy gear	This proposal provides an opportunity to fill knowledge gaps by converting no-take MPAs to limited take MPA; these MPAs weren't originally designed to protect pelagic species or HMS as MPAs have minimal protective benefits to HMS; there is an equity imbalance, as a higher proportion of the MPAs within the Channel Islands are no-take SMRs compared to the rest of the state which has a greater percentage of SMCAs; public support from fishery businesses, groups, and individuals; calls to DMR appendix A bullet points: "Allow take of migratory and pelagic species in MPAs that currently do not allow it" and "Return MPA fishing opportunities, especially in legacy fishing areas that were previously open to fishing."

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-15MPA_2	Blake Hermann	Gull Island SMR	South	Modify	Classification /Take	Reclassify SMR to SMCA to allow either limited take of HMS and possession of coastal pelagic species, or take of pelagic finfish via four options. Possible methods of take include hook-and-line, surface fishing, harpoon, and deep-set buoy gear	This proposal provides an opportunity to fill knowledge gaps by converting no-take MPAs to limited take MPA; these MPAs weren't originally designed to protect pelagic species or HMS as MPAs have minimal protective benefits to HMS; there is an equity imbalance, as a higher proportion of the MPAs within the Channel Islands are no-take SMRs compared to the rest of the state which has a greater percentage of SMCAs;; public support from fishery businesses, groups, and individuals; calls to DMR appendix A bullet points: "Allow take of migratory and pelagic species in MPAs that currently do not allow it" and "Return MPA fishing opportunities, especially in legacy fishing areas that were previously open to fishing."
2023-15MPA_3	Blake Hermann	Santa Barbara Island SMR	South	Modify	Classification /Take	Reclassify SMR to SMCA to allow either limited take of (HMS and possession of coastal pelagic species, or take of pelagic finfish via four options. Possible methods of take include hook-and-line, surface fishing, harpoon, and deep set-buoy gear	This proposal provides an opportunity to fill knowledge gaps by converting no-take MPAs to limited take MPA; these MPAs weren't originally designed to protect pelagic species or HMS as MPAs have minimal protective benefits to HMS; there is an equity imbalance, as a higher proportion of the MPAs within the Channel Islands are no-take SMRs compared to the rest of the state which has a greater percentage of SMCAs;; public support from fishery businesses, groups, and individuals; calls to DMR appendix A bullet points: "Allow take of migratory and pelagic species in MPAs that currently do not allow it" and "Return MPA fishing opportunities, especially in legacy fishing areas that were previously open to fishing."
2023-16MPA_1	Richard Ogg, Bodega Bay Fisherman's Marketing Association	Stewart's Point SMR	North	Modify	Classification /Take	Reclassify SMR to SMCA to allow commercial take of salmon by trolling	Broadening areas where salmon trolling is allowed will improve fishery resiliency as the fishery is currently at risk; aligns with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-16MPA_2	Richard Ogg, Bodega Bay Fisherman's Marketing Association	Bodega Head SMR	North	Modify	Classification /Take	Reclassify SMR to SMCA to allow commercial take of salmon by trolling	Broadening areas where salmon trolling is allowed will improve fishery resiliency as the fishery is currently at risk; aligns with the MLPA Master Plan for MPA goals and objectives 1.1, 1.5, 2.4, and 5.1 and the DMR recommendation 6c.
2023-18MPA_1	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	Vandenberg SMR	Central	Modify	Classification /Take	Divide into two MPAs; redesignate a narrow alongshore portion as SMCA and allow recreational shore fishing for finfish by hook and line	Maintain contribution to MLPA Master Plan goals 1- 4 and 6 while addressing equity concerns caused by consumptive activity allowed nearby and within Vandenberg SMR.
2023-18MPA_2	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	Point Conception SMR	South	N/A	Non-regulatory	Continued support of Marine Monitor (M2) radar monitoring	Aligns with the DMR management program of enforcement and compliance; consistent with MLPA Master Plan goal 5.
2023-18MPA_3	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	Kashtayit SMCA	South	Modify	Take	Simplify take regulations to: "Recreational take of finfish, invertebrates (except rock scallops and mussels), and giant kelp by hand harvest is allowed."	Simplifies regulatory language and enhances public understanding without compromising the intent of the MPA.
2023-18MPA_5	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	Campus Point SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	Enhances public understanding.
2023-18MPA_6	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	San Miguel Island Special Closure	South	Abolish	Special closure	Eliminate pinniped special closure MPA	Simplifies regulatory language; consistent with MPA design guidelines.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-18MPA_7	Greg Helms, Co-chair, Santa Barbara Channel MPA Collaborative	Anacapa Island Special Closure	South	Modify	Allowable uses	Revise regulations to allow boat access to Frenchy's Cove	Accounts for regional stakeholder group intent while addressing non-consumptive access concern.
2023-18MPA_8	Greg Helms, Ocean Conservancy	Anacapa Island Special Closure	South	Abolish	Special closure	Reassess and consider removing the full-island special closure	Simplifies regulatory language; consistent with MPA design guidelines.
2023-19MPA_1	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	N/A	Central	Establish	Establish new MPA	Designate new tribal co-management SMCA with the Santa Ynez Band of Chumash Indians between Morro Bay and Cambria	Reaching 30x30; lack of existing tribal co-management in the area.
2023-20MPA_1	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	Point Buchon SMCA	Central	N/A	Non-regulatory - tribal	Establish co-management with Chumash at Point Buchon SMCA (maybe SMR too)	Point Buchon SMCA may be included in the proposed Chumash Heritage National Marine Sanctuary, so co-management may help that future scenario.
2023-20MPA_2	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	Point Buchon SMR	Central	Modify	Boundaries	Adjust the northern boundary to align with Point Buchon	Extending boundary to the physical Point Buchon will provide geographic marker to fishermen (cited in MPA Collaborative Regulatory Recommendation).
2023-21MPA_1	Rosa Laucci, Tolowa Dee-ni' Nation	Pyramid Point SMCA	North	Modify	Take	Remove take allowance for recreational surf smelt by dip net or Hawaiian type throw net; retain current tribal take exemption	Smelt is culturally important species to the Tolowa Dee-ni' Nation and has declined significantly.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-21MPA_2	Rosa Laucci, Tolowa Dee-ni' Nation	Pyramid Point SMCA	North	Modify	Boundaries	Change northern boundary to align with recognized California/Oregon state line	Original boundary used a mapping system that does not align with on-the-ground state line.
2023-22MPA_1	Wendy Berube, Orange County Coastkeeper	Bolsa Chica Basin SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	An Orange County MPA Collaborative (OCMPAC) consensus; public confusion on what purple means so it will be simpler if all no-take areas are red on outreach and education maps.
2023-22MPA_2	Wendy Berube, Orange County Coastkeeper	Laguna Beach SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	An OCMPAC consensus; public confusion on what purple means so it will be simpler if all no-take areas are red on outreach and education maps.
2023-22MPA_3	Wendy Berube, Orange County Coastkeeper	Crystal Cove SMCA	South	Modify	Allowable uses	Add "non-living, geological or cultural" to marine resource tidepool take prohibition for consistency with 632(a)1(C)	An OCMPAC consensus; adds clarification that tidepool protection includes rocks and shells.
2023-22MPA_4	Wendy Berube, Orange County Coastkeeper	Crystal Cove SMCA	South	Modify	Allowable uses	Change the description of tidepools to "rocky intertidal zone" with a modified definition, "the rocky intertidal zone includes all hard substrate between the highest high tide and lowest low tide."	An OCMPAC consensus; unclear that "area encompassing the rocky pools" includes all of the rocky intertidal habitat.
2023-22MPA_5	Wendy Berube, Orange County Coastkeeper	Dana Point SMCA	South	Modify	Allowable uses	Add "non-living, geological or cultural" to marine resource tidepool take prohibition for consistency with 632(a)1(C)	An OCMPAC consensus; adds clarification that tidepool protection includes rocks and shells.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-22MPA_6	Wendy Berube, Orange County Coastkeeper	Dana Point SMCA	South	Modify	Allowable uses	Change the description of tidepools to “rocky intertidal zone” with a modified definition, “the rocky intertidal zone includes all hard substrate between the highest high tide and lowest low tide.”	An OCOMPAC consensus; unclear that "area encompassing the rocky pools" includes all of the rocky intertidal habitat.
2023-22MPA_7	Wendy Berube, Orange County Coastkeeper	All Orange County MPAs, besides Upper Newport Bay	South	Modify	Allowable uses	Add an amendment that “Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department.”	Difficult to obtain permits for research, monitoring, and restoration in MPAs which is imperative to responding quickly in the face of changing oceanographic conditions; all rocky intertidal and reef habitats in Orange County are in MPAs, so there is no alternative for scientific study.
2023-23MPA_1	Keith Rootsart, Giant Giant Kelp Restoration Project (G2KR)	Edward F. Ricketts SMCA	Central	Modify	Classification /Take	Reclassify SMCA to an SMR to prohibit take	Protect restored kelp forests; improve diver safety from fishing boat propellers and fishing gear.
2023-23MPA_2	Keith Rootsart, G2KR	Edward F. Ricketts SMCA	Central	Modify	Take	Allow unlimited urchin removal	Restore kelp forests.
2023-23MPA_3	Keith Rootsart, G2KR	Edward F. Ricketts SMCA	Central	Modify	Unclear if within Commission authority	Allow out-planting kelp on the reef without an SCP	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest



Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-23MPA_4	Keith Rootsart, G2KR	Edward F. Ricketts SMCA	Central	Modify	Unclear if within Commission authority	Scientific collecting permit s/restoration: Allow spore dispersal by sporophyte bags without an SCP	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest
2023-23MPA_5	Keith Rootsart, G2KR	Edward F. Ricketts SMCA	Central	Modify	Unclear if within Commission authority	Allow pruning kelp canopy to promote growth and resilience to storms without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; protect restored kelp forest from storm damage.
2023-23MPA_6	Keith Rootsart, G2KR	Pacific Grove Marine Gardens SMCA	Central	Modify	Classification /Take	Reclassify SMCA to an SMR to prohibit take	Protect restored kelp forests; improve diver safety from fishing boat propellers and fishing gear.
2023-23MPA_7	Keith Rootsart, G2KR	Pacific Grove Marine Gardens SMCA	Central	Modify	Take	Allow unlimited urchin removal	Restore kelp forests.
2023-23MPA_8	Keith Rootsart, G2KR	Pacific Grove Marine Gardens SMCA	Central	Modify	Unclear if within Commission authority	Allow pruning kelp canopy to promote growth and resilience to storms without an SCP	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; protect restored kelp forest from storm damage.
2023-23MPA_9	Keith Rootsart, G2KR	Pacific Grove Marine Gardens SMCA	Central	Modify	Unclear if within Commission authority	Allow out-planting kelp on the reef without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest.
2023-23MPA_10	Keith Rootsart, G2KR	Pacific Grove Marine Gardens SMCA	Central	Modify	Unclear if within Commission authority	Scientific Collecting Permits/Restoration: Allow spore dispersal by sporophyte bags without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest



Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-23MPA_11	Keith Rootsart, G2KR	Carmel Bay SMCA	Central	Modify	Classification /Take	Reclassify SMCA to an SMR to prohibit take	Protect restored kelp forests; improve diver safety from fishing boat propellers and fishing gear.
2023-23MPA_12	Keith Rootsart, G2KR	Carmel Bay SMCA	Central	Modify	Take	Allow unlimited urchin removal	Restore kelp forests.
2023-23MPA_13	Keith Rootsart, G2KR	Carmel Bay SMCA	Central	Modify	Unclear if within Commission authority	Allow pruning kelp canopy to promote growth and resilience to storms without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; protect restored kelp forest from storm damage.
2023-23MPA_14	Keith Rootsart, G2KR	Carmel Bay SMCA	Central	Modify	Unclear if within Commission authority	Allow out-planting kelp on the reef without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest
2023-23MPA_15	Keith Rootsart, G2KR	Carmel Bay SMCA	Central	Modify	Unclear if within Commission authority	Scientific collecting permit/restoration: Allow spore dispersal by sporophyte bags without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest
2023-23MPA_16	Keith Rootsart, G2KR	Point Lobos SMR	Central	Modify	Classification /Take	Allow unlimited urchin removal	Restore kelp forests.
2023-23MPA_17	Keith Rootsart, G2KR	Point Lobos SMR	Central	Modify	Unclear if within Commission authority	Allow pruning kelp canopy to promote growth and resilience to storms without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; protect restored kelp forest from storm damage.
2023-23MPA_18	Keith Rootsart, G2KR	Point Lobos SMR	Central	Modify	Unclear if within Commission authority	Allow out-planting kelp on the reef without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-23MPA_19	Keith Rootsaert, G2KR	Point Lobos SMR	Central	Modify	Unclear if within Commission authority	Scientific collecting permit/restoration: Allow spore dispersal by sporophyte bags without an SCP.	The SCP process is difficult to navigate which makes it harder to protect and restore kelp forests; restore kelp forest
2023-23MPA_20	Keith Rootsaert, G2KR	N/A	Central	Establish	Establish new MPA	Establish a new SMR at Tankers Reef	Protect restored kelp forests; improve diver safety from fishing boat propellers and fishing gear.
2023-23MPA_21	Keith Rootsaert, G2KR	Not specified	Central	N/A	Unclear if within Commission authority	Create regulatory pathway to allow placing of artificial reef structures and sunken ship for recreational diving.	Create new habitat for kelp and other marine life; expand diving opportunities.
2023-23MPA_22	Keith Rootsaert, G2KR	Not specified	Central	N/A	Unclear if within Commission authority	Allow placement of buoys in restoration areas	Protect substrate from anchors in restored kelp forests.
2023-23MPA_23	Keith Rootsaert, G2KR	Not specified	Central	N/A	Non-regulatory	Develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and marine managed areas	Allow restoration activities in MPAs.
2023-23MPA_24	Keith Rootsaert, G2KR	Not specified	Central	N/A	Unclear if within Commission authority	Establish a new process in CDFW's scientific collecting permit program for restoration permits	The SCP process is difficult to navigate; wants to conduct restoration without scientific design to test effectiveness of methods.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-23MPA_25	Keith Rootsart, G2KR	N/A	Central		Non-regulatory	Consider proposed kelp restoration sites as G2KR adopted reefs for continued kelp restoration	Protect and restore kelp forests; continued community engagement.
2023-24MPA_1	Mike Beanan, Laguna Bluebelt Coalition	Laguna Beach no-SMCA	South	Modify	Boundaries	Extend the Laguna Beach SMCA no-take regulation down to the southern border of the city of Laguna Beach	Make enforcement easier and more consistent with the same regulations covering the entire city; more effective outreach and education; overharvesting and substrate degradation adversely affects kelp beds in the Dana Point SMCA; the MLPA Master Plan for MPAs says to protect rocky habitat containing kelp; climate change leads to kelp decline so the area needs to be protected from fishing pressure; line of lobster trap buoys creates virtually impenetrable wall to migrating whales; supported by many Laguna Beach residents.
2023-25MPA_1	Burton Miller, Co-chair, Catalina MPA Collaborative	Blue Cavern Onshore SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	A Catalina MPA Collaborative consensus; there are accounts of fishing and poaching observed within the SMCA; a color change would create consistency in and simplify outreach and education materials.
2023-25MPA_2	Burton Miller, Co-chair, Catalina MPA Collaborative	Casino Point SMCA	South	Modify	Allowable uses	Remove the allowance for feeding fish	A Catalina MPA Collaborative consensus; it is against the intent of MPAs; can change fish behavior; public safety issue due to fish aggression.
2023-25MPA_3	Burton Miller, Co-chair, Catalina MPA Collaborative	Casino Point SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	A Catalina MPA Collaborative consensus; color change would create consistency in and simplify outreach and education materials.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-25MPA_4	Burton Miller, Co-chair, Catalina MPA Collaborative	Long Point SMR	South	Modify	Boundaries	Change the type of boundary from a latitude and longitude line to a certain, specified distance from shore. To maintain overall size, the northeast corner could be trimmed and fitted to western edge of offshore boundary to create a standard distance from shore (in a similar fashion to Arrow Point to Lion Head SMCA)	A Catalina MPA Collaborative consensus; there is noncompliance due to misconception of MPA boundaries; outreach would be simplified if the boundary was a specified distance from shore; would not require "advanced navigation techniques such as referencing latitude and longitude".
2023-25MPA_5	Burton Miller, Co-chair, Catalina MPA Collaborative	Lover's Cove SMCA	South	Modify	Allowable uses	Remove the allowance for feeding fish	A Catalina MPA Collaborative consensus; it is against the intent of MPAs; can change fish behavior; public safety issue due to fish aggression.
2023-26MPA_1	Lisa Gilfillan, WILD COAST, San Diego MPA Collaborative	Swami's SMCA	South	Modify	Boundaries	Shift the entire MPA boundary shape south (from the lifeguard tower to State/Solana Beach line to cover tidepool on south side).	Harmful tidepooling south of MPA; enforcement and compliance issues with lobster.
2023-26MPA_2	Lisa Gilfillan, WILD COAST, San Diego MPA Collaborative	Batiquitos Lagoon SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	Only on outreach and education materials to clarify allowed take.
2023-26MPA_3	Lisa Gilfillan, WILD COAST, San Diego MPA Collaborative	San Elijo Lagoon SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	Only on outreach and education materials to clarify allowed take.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-26MPA_4	Lisa Gilfillan, WILD Coast, San Diego MPA Collaborative	Famosa Slough SMCA	South	N/A	Non-regulatory	Change color of no-take SMCA from purple to red on maps	Only on outreach and education materials to clarify allowed take.
2023-27MPA_1	Azsha Hudson, Environmental Defense Center	Anacapa SMCA	South	Modify	Classification /Take	Reclassify SMCA as an SMR or at a minimum reclassify portion of the SMCA from shore to at least 30 meters depth.	Protect eel grass beds; improve enforcement and compliance.
2023-28MPA_1	Lisa Suatoni, National Resources Defense Council (NRDC)	N/A	South	Establish	Establish new MPA	Create a new SMR around Point Sal in central California and consult with tribes first to determine whether an SMCA with exemptions for cultural and subsistence use is warranted	This area is a rich, productive ecosystem that is a part of the biogeographic transition zone; a larval retention zone and a biological hotspot; culturally significant for the Chumash; improve network resilience by providing refugia; lead to equitable access to coastal resources; biologically important area for several marine mammals; undisturbed haul out; would help improve habitat replication in MPAs; adjacent terrestrial areas relatively are undisturbed; improved access for disadvantaged populations to coastal resources and fishing opportunities; climate resilience.
2023-29MPA_1	Lisa Suatoni, NRDC	N/A	South	Establish	Establish new MPA	Establish a new California-Chumash co-management SMCA near Santa Barbara to be named Mishopshno, that allows take by members of Santa Ynez Band of Chumash Indians for traditional, ceremonial, cultural and subsistence purposes	Help meet science guidelines for spacing between protected habitats, improving connectivity and habitat representation; protect habitat for marine wildlife like juvenile white sharks; fisheries bycatch likely main source of mortality for juvenile white sharks; allow enhanced access to shoreline and marine resources for Chumash; proposed SMCA would include estuary, rocky reef with persistent kelp bed, rocky intertidal; rocky intertidal underrepresented in south coast MPAs; increased resiliency of network through climate change and warming events.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-30MPA_1	Robert Jamgochian	Big River Estuary SMCA	North	Modify	Take	Make recreational take of Dungeness crab more restrictive by changing crab gear regulations to only allow Type A hoops and eliminate hoop net Type B option	Insufficient Dungeness crab population data to warrant level of take; Dungeness crab important species for estuary ecology; crabbing has increased over past 5 years; minimal enforcement.
2023-30MPA_2	Robert Jamgochian	Big River Estuary SMCA	North	Modify	Take	Make recreational take of Dungeness crab more restrictive by reducing the number of set traps from 10 to 5 for recreational take of Dungeness crab	Insufficient Dungeness crab population data to warrant level of take; Dungeness crab important species for estuary ecology; crabbing has increased over past 5 years; minimal enforcement.
2023-30MPA_3	Robert Jamgochian	Big River Estuary SMCA	North	Modify	Take	Make recreational take of Dungeness crab more restrictive by reducing the recreational bag limit from 10 crabs per person to 5 crabs per person	Insufficient Dungeness crab population data to warrant level of take; Dungeness crab important species for estuary ecology; crabbing has increased over past 5 years; minimal enforcement.
2023-31MPA_1	Ashley Eagle-Gibbs, Environmental Action Committee of West Marin (EAC)	Drakes Estero SMCA	North	Modify	Classification /Take	Reclassify Drakes Estero SMCA to an SMR to prohibit take	Align with Federal protections and no-take regulations in neighboring SMR; aquaculture operations have ceased; ecologically important estuary; protect restoration done by NPS.
2023-31MPA_2	Ashley Eagle-Gibbs, EAC	Estero de Limantour SMR	North	Modify	Boundaries	Combine SMR with a reclassified Drakes Estero SMR into one single SMR	Easier for enforcement.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-32MPA_1	Ashley Eagle-Gibbs, EAC	Duxbury Reef SMCA	North	Modify	Classification /Take	Reclassify SMCA to an SMR to prohibit take	Easier outreach and enforcement.
2023-32MPA_2	Ashley Eagle-Gibbs, EAC	Duxbury Reef SMCA	North	Modify	Boundaries	Expand the MPA by extending southern boundary and moving northern boundary north to Double Point Special Closure	Protect the entire Duxbury reef habitat and make boundaries easier to interpret; largest shale reef in North America; ecologically significant.
2023-33MPA_1	Laura Deehan, Environment California Research and Policy Center and Azul	Cabrillo SMR	South	Modify	Boundaries	Expand westward and northward by 15.2 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-33MPA_2	Laura Deehan, Environment California Research and Policy Center and Azul	Point Dume SMCA	South	Modify	Boundaries	Expand westward by 4.6 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-33MPA_3	Laura Deehan, Environment California Research and Policy Center and Azul	South Point SMR	South	Modify	Boundaries	Expand westward by 26.3 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-33MPA_4	Laura Deehan, Environment California Research and Policy Center and Azul	Gull Island SMR	South	Modify	Boundaries	Expand northward by 1.8 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.

Tracking ID	Petitioner	Affected MPA	Bio-region	MLPA Action Category	Action Type	Proposed Action	Justification as Stated by Petitioner
2023-33MPA_5	Laura Deehan, Environment California Research and Policy Center and Azul	Point Conception SMR	South	Modify	Boundaries	Expand eastward by 14.6 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-33MPA_6	Laura Deehan, Environment California Research and Policy Center and Azul	Natural Bridges SMR	Central	Modify	Boundaries	Expand southward by 13.7 square miles	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-33MPA_7	Laura Deehan, Environment California Research and Policy Center and Azul	N/A	Central	Establish	Establish new MPA	Designate 3.2 square miles as a new SMR near Pleasure Point	Protect kelp forest habitat identified in the kelp forest resilience report.
2023-34MPA_1	Laura Deehan, Environment California Research and Policy Center and Azul	Point Buchon SMCA	Central	Modify	Classification /Take	Reclassify SMCA to SMR to prohibit take	Improve enforcement and compliance; improve conservation outcomes.
2023-34MPA_2	Laura Deehan, Environment California Research and Policy Center and Azul	Farnsworth Onshore SMCA	South	Modify	Take	Change regulations to allow only recreational spearfishing within the boundaries	Take regulations are too complicated between the onshore and offshore MPAs; fishing activities can damage sensitive habitat; improve conservation outcomes.
2023-34MPA_3	Laura Deehan, Environment California Research and Policy Center and Azul	Farnsworth Offshore SMCA	South	Modify	Take	Change regulations to allow only recreational spearfishing within the boundaries	Take regulations are too complicated between the onshore and offshore MPAs; fishing activities can damage sensitive habitat; improve conservation outcomes.





Tracking Number: (     2023-14MPA     )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission’s authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

**SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: David Goldenberg, Executive Director, California Sea Urchin Commission

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

**2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861, and 6750, Fish and Game Code, and Sections 36725(a) and 36725(e), Public Resources Code.**

**3. Overview (Required) - Summarize the proposed changes to regulations: Allow the commercial take of urchins in the following State Marine Conservation Areas (SMCAs):**

- 1) Sea Lion Cove SMCA
- 2) Stewart’s Point SMCA
- 3) Salt Point SMCA
- 4) Double Cone Rock SMCA
- 5) Naples SMCA
- 6) Anacapa Island SMCA
- 7) Point Dume SMCA
- 8) Point Vicente SMCA
- 9) Swami’s SMCA

**4. Rationale (Required) - Describe the problem and the reason for the proposed change: .**  
The commercial urchin fishery and the resiliency of California’s kelp forests have been identified as being at risk due to climate change. This became a reality with the warm water event that started in 2014 and led to urchin barrens and a decline in kelp forests along the California coast, with declines



in kelp as high as 90% along the north coast. This resulted in a catastrophic decline in urchin landings (4.2 million pounds in 2013 down to 284,000 pounds in 2022), leading to a federal fishery disaster declaration. Allowing commercial urchin fishing within the listed SMCAs will improve the sustainability of the urchin industry and may also support kelp recovery efforts endorsed by the Fish and Game Commission (FGC), Department of Fish and Wildlife (DFW), and the Ocean Protection Council (OPC).

This proposal is consistent with goals and objectives 1.1, 1.5, 2.4, and 5.1 identified in the 2016 Master Plan for Marine Protected Areas (MPA), along with the identified design considerations relative to climate change impacts and preservation of diverse commercial uses. Managed urchin fishing can promote the stability of species diversity and abundance consistent with natural fluctuations in environmental conditions. We believe that commercial urchin fishing can help the recovery of kelp ecosystems impacted by over-abundant urchin populations (urchin barrens) ultimately caused by climate change. This belief is based on the kelp restoration projects funded by the OPC along the north coast that are showing promise. Our petition sets up an economical approach that can be used to expand this effort in selected SMCAs along the entire coastline.

Our proposal is consistent with the Master Plan by protecting habitats (kelp forests) while allowing commercial harvest, thus mitigating some of the significant negative impacts experienced by the fishery when the MPA network was established. The Master Plan also states that the MPA network should consider several factors, including the potential impacts of climate change and the diversity of commercial fishing. The proposal is also consistent with the comprehensive recommendations and science guidelines of DFW's Decadal Management Review, which acknowledged inadequate engagement with the fishing industry and the continuing need for adaptive management under a changing climate. DFW's JEDI Governance recommendation #6(c) clearly states the need to explore innovative approaches to engage the fishing industry in MPA research and management. The industry believes that with the collaboration of CDFW, FGC, OPC, NGO's, academic institutions, and the Tribes it can help address urchin barrens and ultimately restore kelp forests the ecosystems reliant upon them.

Our proposal is supported at the Sea Lion Cove and Double Cone Rock SMCAs by the MPA Collaborative recommendations. The Collaborative also supports continuing the commercial urchin harvest at Saunders Reef SMCA.

The commercial urchin fishery has a long track record of working with DFW, and in recent years with OPC, on research and management issues and is ready to continue that partnership using the recommended changes to the MPA network listed in this petition as an important step in fulfilling the goals of the Marine Life Protection Act and mandates in the Fish and Game Code to support sustainable commercial fisheries.

The science developed to date indicates that in areas lacking significant urchin predators, urchin populations can have negative cascading effects on kelp forests in MPAs and reference sites (Carr et.al., 2021). By functioning as predators, commercial urchin fishermen may help restore and protect kelp forests in MPAs. In accordance with the adaptive management elements of the Master Plan, decadal review, and DFW recommendations, we ask that this petition be collaboratively evaluated by all stakeholders through the rulemaking process of the FGC with respect to improving the resiliency of both the commercial urchin fishery and kelp forests to climate change.



**SECTION II: Optional Information**

5. **Date of Petition:**

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify:

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

Amend Title 14 Section(s): 632(b)(30)(B) ...is allowed. The commercial take of urchins is allowed.

632(b)(16)(B)2...;-and Dungeness...is allowed., and the commercial take of urchins is allowed.

632(b)(33)(B)...dip net. The commercial take of urchins is allowed.

632(b)(35)(B) ... is allowed. The commercial take of urchins is allowed.

632(b)(98)(B) ... 5. The commercial take of urchins is allowed.

632(b)(112)(B)1 ...commercial take of spiny lobster and urchins is allowed.

632(b)(117)(B)2 ...take of urchins; swordfish...

632(b)(119)(B) ...is allowed. The commercial take of urchins is allowed.

632(b)(138)(B) ... 4. The commercial take of urchins is allowed.

Add New Title 14 Section(s):

Repeal Title 14 Section(s):

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation.

If the proposed change requires immediate implementation, explain the nature of the emergency: 2025

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Red Sea Urchin Enhanced Status Report (See California Department of Fish and Game website). California Marine Life Protection Act Master Plan for Marine Protected Areas 2016 (See California Department of Fish and Game website). California’s Marine Protected Area Network Decadal Management Review 2022 (See California Department of Fish and Game website). Monitoring and Evaluation of Kelp Forest ecosystems in the MLPA Marine Protected Area Network (Carr et.al. 2021) (See California Department of Fish and Game website). MPA Collaborative Network (see website, Collaborative Vetted Regulation Recommendations)

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs,



other state agencies, local agencies, schools, or housing: No known negative economic or fiscal impacts of the proposed changes. It is expected that there will be some positive economic benefits by opening formally closed areas to commercial urchin fishing.

**12. Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#)

**SECTION 3: FGC Staff Only**

Date received:

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action:

Meeting date for FGC consideration:

FGC action:

- Denied by FGC
- Denied - same as petition
- Granted for consideration of regulation change

Tracking Number



Tracking Number: (2023-15MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission’s authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

**SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages.*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Blake Hermann

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

**2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:**

-Fish and Game Code (FGC) Division 1, Chapter 2, Sections 200, 205c, 265, and 399

-Fish and Game Code (FGC) Division 2, Chapter 5, Sections 1590 and 1591

-Fish and Game Code (FGC) Division 3, Chapter 10.5, Sections 2860 and 2861

-Fish and Game Code (FGC) Division 6, Chapter 6, Section 6750

-Public Resource Code (PRC) Division 27, Chapter 7, Sections 36725(a) and 36725(e)

**3. Overview (Required) - Summarize the proposed changes to regulations:**

This petition requests a modification to three Marine Protected Areas (MPAs) off Southern Santa Cruz Island and Santa Barbara Island, known as the Footprint Marine Reserve (The Footprint), Gull Island Marine Reserve (Gull Island), and The Santa Barbara Island Marine Reserve (SBI). The Footprint and Gull Island Reserves are located on the southeast and southwest sides of Santa Cruz Island respectively, and the SBI Reserve is located on the south-east corner of Santa Barbara Island.

This petition requests, for the reasons stated in the accompanying sections, that The Footprint, Gull Island, and SBI Reserves be modified and partially opened and converted into limited take conservation areas with implementation of one the following options (listed from the most to least allowances):



Option 1: The least restrictive option, with some existing precedent SCMA's:

- The recreational take of pelagic finfish\* is allowed.
- The commercial take of pelagic finfish\* by hook-and-line, and swordfish by harpoon are allowed.
- Deep-Set-Buoy-Gear (DSBG) is allowed in the federal portions of the proposed MPAs. \*\*

Option 2: Elevated protections in species selectivity (**preferred option**):

- The recreational take of Highly Migratory Species (HMS)\* is allowed.
- The commercial take of Highly Migratory Species (HMS)\* by hook-and-line, and swordfish by harpoon is allowed.
- The possession of Coastal Pelagic Species (CPS) is allowed.
- Deep-Set-Buoy-Gear (DSBG) is allowed in the federal portions of the proposed MPAs. \*\*

Option 3: Option 1 with only allowance of “surface fishing methods.” \*\*\*

- The recreational take of pelagic finfish\* is allowed via surface fishing methods.
- The commercial take of pelagic finfish\* by hook-and-line via surface fishing methods, and swordfish by harpoon are allowed.

Option 4: Option 2 with only allowance of “surface fishing methods.”

- The recreational take of Highly Migratory Species (HMS)\* is allowed via surface fishing methods.
- The commercial take of Highly Migratory Species (HMS)\* by hook-and-line via surface fishing methods, and swordfish by harpoon are allowed.
- The possession of Coastal Pelagic Species (CPS) is allowed.

Each of the above options may also include a reduced in size, more selective, limited-take or no-take zone within the Gull Island and SBI zones. However, as discussed later, these areas are only needed if Options 1 or 3 are selected (See Attached: Full Analysis Document 1).

\*List of State HMS, CPS, and Pelagic finfish per Title 14 CA § 1.49, 1.39, and 632(3):

-Highly migratory species means any of the following: albacore, bluefin, bigeye, and yellowfin tuna (*Thunnus* spp.); skipjack tuna (*Katsuwonus pelamis*); dorado (dolphinfish) (*Coryphaena hippurus*); striped marlin (*Tetrapturus audax*); thresher sharks (common, pelagic, and bigeye) (*Alopias* spp); shortfin mako shark (*Isurus oxyrinchus*); blue shark (*Prionace glauca*); and Pacific swordfish (*Xiphias gladius*).

-Coastal pelagic species means any of the following: northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), Pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), and market squid (*Loligo opalescens*).

-Pelagic finfish, are a subset of finfish defined as: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena* spp.), billfishes (family *Istiophoridae*), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasii*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus* spp.), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias* spp.), swordfish (*Xiphias gladius*), tunas (family *Scombridae*) including Pacific bonito (*Sarda chiliensis*), and yellowtail (*Seriola lalandi*).

\*\*Deep-Set-Buoy-Gear (DSBG), if allowed, would **only** be allowed beyond the 3nm line, outside of state waters, as is currently fished. Barring any future changes or exempted fishing permits (EFPs).

\*\*\*See Full Analysis Document attachment (Document 1) for detailed description.





**4. Rationale (Required)** - Describe the problem and the reason(s) for the proposed change:

*The Problem:*

Initially established in 2003 and federally expanded in 2006, the Channel Islands MPA network containing The Footprint, Gull Island, and SBI Reserves was the first network of its kind in California history. This island network later expanded into the statewide MPA network during coastal implementation phases from 2007-2012. The problem created by these first MPAs was the unintentional protection of seasonal pelagic and highly migratory species that migrate into Southern California during the summer months.

The allowance of limited pelagic or highly migratory take in these areas falls in line with the adaptive management measures set forth in the Decadal Management Review (DMR) and reinforced by the Marine Resource Council's (MRC) near-term recommendations. The proposed changes also fall in line with the MPA Master Plan and align with FGC comments on previous change request petitions.

While maintaining the original intentions for the creation of the MPAs, the proposed changes will have minimal impacts on the ecosystem due to the selective nature of the gear being recommended and highly mobile species it would allow for.

*Summary of the reasons for change:*

This petition aims to prove this proposal is justified by showing the following\*:

- Limited take of pelagic finfish or HMS does not significantly affect or interfere with the species and features the MPAs aim to protect
- The proposed changes provide better equality of MPA policy across the state
- The 20 years of data from these and other MPAs support the proposed changes
- The proposed changes are in line with MPA decadal management review (DMR) comprehensive recommendations and the near-term priority recommendations of the marine resource committee (MRC)
- The proposed changes follow precedent set by the FGC's comments on previously submitted petitions, the current MPA overviews, the 2016 MPA master plan for the southern section, and the original 2002 MPA CEQA for the Channel Islands Network
- The proposed changes exclusively allow for sustainable fishing methods on no at risk populations/species
- The proposed changes support sustainable commercial fisheries the state and NOAA have expressed desire to further expand
- The proposed changes are reasonably enforceable (per discussions with F&G officers)
- The proposed changes have mass public support from the public, fishery groups, non-fishery groups, and conservation organizations

If implemented the resulting changes may have the following effects:

- The Channel Islands MPA network would be updated to allow for a more equitable 60/40 no-take to limited take closure ratio, which would be in line with the state's ratio
- Would provide new fishing opportunities to sustainable recreational and commercial fisheries while producing minimal impacts to the intended protected structures and species



- Provide new research opportunities for observing previous no-take zones under new allowance of pelagic or HMS limited-take
- Help grow local business and further develop the local and state economy

\*Further detailed explanations, analysis, and figures are included in Document 1, and the remaining documentation in the “Supporting Documentation” section.

## SECTION II: Optional Information

5. **Date of Petition:** Submitted-11/22/2023

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify: [Click here to enter text.](#)

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- Amend Title 14 Section(s): Division 1, Subdivision 2, Chapter 11, § 632 |
- Add New Title 14 Section(s): |
- Repeal Title 14 Section(s): |

\*See Document 20 for State and Federal Code modifications example

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: Due to the change regarding modifying existing MPAs that cover both State and Federal waters, the federal bodies (NOAA, NMS, and PFMC) must mirror the above changes in their portions of the MPAs to allow for reasonable enforcement of these areas. Due to the lack of precedent, this being the first time the FGC is allowing petitions for individual or groups of MPAs to be modified, new channels need to be opened in order to facilitate such changes. A reasonable amount of time for all parties (state, federal, and public) to review and confirm the reasonings and data provided is required. This petition simply requests this change be made as soon as is practical. |

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

Document 1: Complete, in-depth analysis of the prescribed changes and key points including weighing out the aforementioned change options, scientific basis, and stock assessment analysis.





## **Why Change These MPAs?**

California's MPA network has provided valuable data for researchers allowing for observations of small-scale ecosystems in their raw form with no human intervention. That being said, all research focuses on the local non-pelagic species in these areas. The reasonings for this will be discussed later in depth but is a result of the massive area pelagic populations cover making their net presence the same everywhere. It is for this reason that if changes are made, the local non-pelagic species will remain unaffected, and still be protected under the proposed changes.

This petition aims to prove that specific limited-take allowances will not significantly interfere with the populations the MPAs aim to protect. This petition requests 3 current MPAs be modified to limited take in order to allow for sufficient numbers of no-take zones to still remain in the Channel Islands Network for research and public non-consumptive use (approximately 60% of the island network will remain no-take zones).

With the proposed change, there lies immense research opportunity in filling gaps in our knowledge. Never has a no-take MPA been converted into a limited-take zone. If there are factors that limited-take of pelagic or HMS does have on the local, non-pelagic populations (currently none are known), this change would allow for a whole new branch of research to take place; observing converted no-take zones after 20 years of historical data.

This petition acknowledges the need for no-take MPAs around the Channel Islands to act as a baseline to research as well as areas for the public to view undisturbed waters, and if implemented approximately 60% of the island network would remain no-take. This would mirror the state average for no-take zones. This petition also acknowledges there is no reason to request for a limited take zone in an area far offshore or often locked by foul weather that would theoretically only be fished a handful of times a year. These areas were selected for the reason that they offer sufficient new opportunities to the fishing community and researchers if the no-take areas are converted into limited-take areas.

A unique fact of these three MPAs, and other MPAs in the Channel Islands network is their expansion beyond state waters, something we see nowhere else in the state. All three of these MPAs are part of this subset of state/federal MPAs, extending 6nm from the islands compared to the traditional 3nm a normal MPA would cover. This means for this specific petition, if changes are made, both State and Federal changes should be mirrored to allow for reasonable enforcement and streamlining of regulations. The Commission and CDFW would likely need to partner with NOAA and the Channel Islands National Marine Sanctuary (CINMS) to make these dual zone changes within each MPA. Therefore, this petition will also be addressing NOAA/CINMS and federal fisheries in addition to the Commission and state, so all agencies are aware of the changes being requested and the supporting factors for this change.

## **The First California MPAs:**

The Channel Islands MPA network was the first set of MPAs in California history. Established in 2003, the state closures were expanded in 2006 into federal waters, completing the Channel Islands MPA network. The first state MPAs off the central coast were then implemented one year later, in 2007, beginning the statewide network. The Channel Islands MPAs had no accompanying southern section coastal MPAs until the southern section's implementation in 2012, which also marked the completion year of the state MPA network and nearly a decade of existence for the Channel Islands MPAs.

Being the first, the Channel Islands Network acted as a baseline, moving the state into previously unexplored territory, that today has grown into the current network. That being said, these first MPA implementations were not perfect. We have learned a lot since their creation, from better understandings of both non-pelagic and pelagic species to new closures ideas that followed in the



four coastal MPA regions. Now that we have had more than 20 years to observe how this island network acts, it is time to make fine-tuned adjustments in order to modernize the Channel Island network to better mirror the remaining state network and the latest research.

### **MPA Intentions - Focus on Local Non-Pelagic Species:**

Being the first set of MPAs and covering both state and federal waters, the state partnered with the Channel Islands National Marine Sanctuary (CINMS) and NOAA to develop a plan in order to determine how the Channel Islands MPA network would look. In the end, a two-part CEQA was developed that laid out the MPA plan for the Channel Islands network, in which the broad and specific reasonings for The Footprint, Gull Island, and SBI reserves were discussed (*Docs. 3-5*).

Broadly speaking all three of these Channel Islands MPAs were put into effect either around common invertebrate/fishing grounds or were built off of an existing invertebrate closure (SBI). The CEQA acknowledges that placing MPAs around these zones may have congested fishing efforts elsewhere and may slow fisheries short-term. However long-term, it was the belief that these protected areas would act as a sort of oasis, growing mass populations inside that would expand out as they grow to capacity inside reserves. These populations would then radiate from these areas and would in turn help fisheries over time.

We can see the idea of protecting the local, nearshore species of the Channel Islands very evident in each of the three MPA justifications in the CEQA (*Docs. 3-5*), the 2016 MPA master plan goals (*Doc. 10*), and the published MPA overviews (*Docs. 7-9*).

According to the CEQA, The Footprint was originally established with the primary intention to protect the unique rocky reefs and rebuild the rockfish populations (*Doc. 7*), The CEQA discussed the depleted groundfish stocks at the time and mentioned how they would benefit the most from the MPA's implementation. The Gull Island and SBI reserves also discuss deep water reefs and rockfish, but focus more on endangered bird nesting grounds, abalone populations, and the more diverse, nearshore species along the islands they border (*Docs. 8 and 9*). The broad implication of the MPAs in the CEQA was the intention that local populations of fish, birds, and mammals inside the MPAs would, "respond to protection within the reserve through increased density, individual size, and reproductive potential," (*Docs. 3 and 4*).

This logic is something we see echoed today in the modern MPA overviews of the three MPAs and the goals of the MPA Master Plan (*Doc. 10*). In the MPA overviews under, "Why was this location chosen for a state marine reserve?" we still see reasons such as the protection of canyons, rocky reefs, pinnacles, kelp forests, and rocky nearshore habitats for local non-pelagic species including copper rockfish, sheepshead, cowcod, and bocaccio. However, there is zero mention of any pelagic or HMS in these overviews. This point is further reinforced by the southern section MPA master plan, where under its goals, states its intentions revolve around protecting the ecosystems within the MPAs and help rebuild rare or depleted populations of species that are, "more likely to benefit from MPAs," and, "Protect selected species and the habitats on which they depend while allowing some commercial and/or recreational harvest of migratory, highly mobile, or other species; and other activities," (*Doc. 10*). All of these protective goals are catered to the local species of non-pelagic fish, while the pelagic goals clearly state that pelagic and HMS should have limited take areas, something that the Channel Island network severely lacks compared to the rest of the state.

### **Proposed Changes Effect on the Original MPA Intentions:**

As mentioned, the original and current goals of these three MPAs revolve around protecting the local, non-pelagic, and nearshore species within them. The idea of a radiating effect helping fisheries around MPAs does indeed hold merit for local populations of non-pelagic species. Species like groundfish that could in theory live, feed, and spawn all within one MPA are a prime example of



this working as intended today. A groundfish that may have lived its entire lifecycle inside of a protected area, will only affect that local protected area if that individual was taken. This is why if implemented, the changes would still protect all invertebrates and non-pelagic species, such as rockfish, leaving the original science backed protections, and MPA intentions, in effect.

In regard to these intentions for pelagic or HMS, limited pelagic or HMS take would not noticeably affect any of the pelagic or HMS populations within our waters. This is the case since pelagic and HMS are either highly mobile or seasonal migrators, moving with currents rather than remaining on structure or in a small MPA zone. It is one thing if an entire or significant population of a species live inside a protected area, but for species that live and move over a vast area, these MPAs are negligible in helping their population. Species that live and feed over massive areas of ocean, and spawn hundreds of miles away from the network are intrinsically less affected by a small area they may or may not pass through each year. Unlike the non-pelagic species covered in the CEQA, Master Plan, and modern overviews, pelagic species' population densities, individual sizes, and reproductive potentials are not meaningfully affected by these MPAs. Populations would essentially remain as affected by human impacts whether this proposal goes into effect or not due to the protected areas covering so little of the area they live in. This is something that was actually touched on in the CEQA, where it is stated, "No-take areas, so long as their size is large relative to the movement of the species, will lead to increased (species) abundance," (*Doc. 6*). Essentially, due to pelagics and HMS covering so much area throughout their travels, the impact on a pelagic or highly migratory species being protected inside the existing MPAs is near zero. Therefore, there is no scientific basis to leave protections for these species in effect within these three MPAs.

A prime example is the swordfish, one of the three primary species that would be reasonably targeted inside the MPAs if partially opened. Satellite tag data from the Pflieger Institute of Environmental Research (PIER) (*Doc. 15*) shows tagged swordfish off southern California traveling from the tag location to as far south as Cabo (900 nm), or nearly as far west as Hawaii (1900 nm) to spawn in the winter/spring. They then migrate back to Southern California one year later in the summer to feed. Like the swordfish, other HMS such as marlin or tuna are also examples of species that travel massive distances every year during their migrations. These species cover so much water that the net environmental impact from small areas like these MPAs is near zero. It is for this reason the petition requests that pelagic or highly migratory species are able to be targeted inside of these three areas.

### **Following MPA Reports, The Need for Adaptive Management:**

In January 2023 the DMR of the State's MPA network was published and contained comprehensive recommendations including the following considerations:

- "Allow take of migratory and pelagic species in MPAs that currently do not allow it" and
- "Return MPA fishing opportunities, especially in legacy fishing areas that were previously open to fishing." (*Doc. 12*)

The Footprint, Gull Island, and SBI Reserves fall under legacy pelagic fishing areas, being once completely open. In alignment with the DMR, these legacy areas can be justifiably re-opened to the limited take of pelagic or HMS per the recommendations.

This change is also supported by the recommendation of the Marine Resource Committee (MRC), as outlined in the networks near-term priorities from the DMR. Stating we must, "Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program." We have had ample time to observe these MPAs over their two-decade existence, now that we better understand the low impacts pelagic and HMS have on the network, we can justifiably adaptively manage these MPAs, opening them to limited take. In addition



to the DMR and MRC recommendations the 2016 MPA master plan directly called for limited take areas of pelagic or HMS. Due to these three MPAs being the among the oldest modern MPAs, existing since 2003, it is possible the Master Plan considerations from 2016 were not as refined in 2003. This is something we can now remedy, by modifying these MPAs to modern network outlooks.

In addition to adaptive management measures there also exists a pre-DMR precedent from the FGC stating that the MPA network is not designed for pelagic or HMS. In 2020 the FGC denied a petition calling for creating a sanctuary/MPA for Great White Sharks near Carpentaria on the grounds that MPAs are intended, “[...] not (to protect) individual species, **especially highly mobile, pelagic species**,” (Doc. 11). Following the FGC’s reason for rejection, this argument can be applied to support the case for the allowance of pelagic or HMS take within the listed reserves, because these species, per their pelagic/highly migratory designation, fall into this category.

**Pursuing Equitable Policy Through Modernized SMCAs:**

The MPA Network was founded on four key pillars with the innovative idea that these pillars would allow for the adaptive management of the system. One of these pillars is policy and permitting which calls for consistent policy across the network to allow for fair network governance.

After the Channel Islands MPAs were established, the remaining network followed. Comparing the Channel Islands network to the remaining state network we see large shifts toward the partial-take state marine conservation areas (SMCAs) and less overall water coverage.

The Channel Islands network of MPAs covers 21% (318 mi<sup>2</sup>) of the total sanctuary waters. Compared to the 16% of state waters currently protected under the network, this means there is a 31% increase in protected areas around the Channel Islands than the rest of the state.

Not only is there an increased area of closures (by percentage) within the Channel Islands network, but also, significantly less relative area open to limited-take. Of the 13 various closures around the island network all but 2 are no-take sections. This only accounts for only 11.43 square miles of water of the 318 square mile closure area, or 3.59% of the sanctuary’s closures. By comparison, the state network contains about 40% limited take areas. This is a wide discrepancy between the Channel Islands network and the state network (Over 10 times the relative area around the Channel Islands is no take compared to the rest of the state). If implemented, the percent area of limited take in the Channel Islands Network would roughly mirror the State’s 40% limited take figure, bringing more equity to the local region. The raw figures are shown in the table below.

Table 1: Comparison of MPA (no-take) and SMCA (limited take) of the Channel Islands MPAs vs the Entire State MPA Network		
	Channel Islands MPA Network (State and Federal Waters)	State MPA Network
% of Waters Protected (no-take and limited take)	21% (~318 mi <sup>2</sup> )	16%
% of network that is No-Take	96.41% (~306.58 mi <sup>2</sup> )	60%
% of network that is limited take	3.59% (~11.41 mi <sup>2</sup> )	40%
% of network that would be limited take if changes implemented*	41.17% (~130.93 mi <sup>2</sup> )	<40%

\*This assumes the optional “nearshore” closures are not implemented and includes the Channel Islands network in the state network figures.





The goal of these changes is to allow for enough reasonable take of pelagic or HMS at comparable levels of opportunity zones to the rest of the MPA network (~40% partial take allowance). If implemented, the Channel Islands network would still have elevated protected area rates, 21% compared to the state average of 16%, but would provide a better ratio of limited take areas.

Current examples of limited take areas outside of the island network in Southern California include SMCAs such as the Pt. Dume, Abalone Cove, Blue Cavern, and Farnsworth SMCAs (*Doc. 17*), which allow for some form of pelagic finfish take. Other statewide examples of limited take SMCAs outside Southern California cater to pelagic finfish and salmon, technically not a pelagic finfish by biological definition, but a species that still covers mass distances every year. This petition simply requests that we adapt too and update the Channel Islands network to the same standards we see in the rest of California.

### **Enforcement Analysis:**

On the surface, the opening of limited take for pelagic or HMS in these current no-take MPAs could create additional enforcement issues for F&G Wardens covering these areas. However, upon talking to the warden office and local wildlife officers it was determined this was not the case. It is the intention of this petition that the changes made would be enforced similarly to how current pelagic allowed SMCA's are enforced. For the local Ventura agency, enforcement would be identical to how officers enforce the Anacapa Island SMCA.

Discussions with the enforcement agency have indicated that there are currently no issues with enforcement in the current pelagic allowed SMCAs. It is their standpoint that the current enforcement regulations are clear and allow officers to make decisions swiftly and appropriately. The current regulation that outlines enforcement of the SMCAs is under California Code of Regulations Title 14 Section 632(a)(1)(C) (*Doc. 18*). To summarize the code, take or possession of species except specific individuals or groups listed is prohibited. Meaning, under the proposed regulations, the take and possession of pelagic or HMS would be allowed within the conservation area, but the take and possession of non-pelagic or non-HMS species, like groundfish, would be not allowed. There is an added exception that only possession of coastal pelagic species (CPS) would be allowed if an HMS specific option is selected (it is preferred one is). The reasoning for this addition is the allowance for such HMS targeting vessels to possess baitfish that is commonly used to target such species. Due to the clear-cut boundaries of enforcement regulations, and the input from F&G wardens, it was determined that the additional enforcement required by these changes is both minimal and overlaps with current pelagic allowed SMCAs they currently patrol and enforce.

### **Mass Public Support:**

The origins of the pelagic allowed zones go back to the original implementation of the Channel Islands MPA network which includes 2 areas for pelagic take. However, the waters these two zones cover are located on the northern side of Anacapa and Santa Cruz islands, areas where very little pelagic/HMS fishing takes place. HMS fishing method trial maps for DSBG and deep drop show a clear picture of the primary pelagic/HMS grounds in southern California (*Doc. 16*). The maps clearly display most pelagic and HMS fishing occurs on the southern sides of the four northern islands. Almost no fishing efforts are made in the two northern zones. Primarily, most pelagic and HMS targeting fishing around the Channel Islands occurs 2-12 miles south of the northern islands, down the entire 4 island chain. All three of the requested MPA lie in these areas.

Fisheries that actively target or have targeted pelagic or HMS off the northern Channel Islands have wanted these types of changes since the implementation of the network and have commented both in the past and present about the desire to allow for more pelagic or HMS limited take.



Comments from 2002 in the CEQA and from 2023 DMR show this desire. However, back in 2002, we did not know nearly as much about the pelagic or HMS migrations and what impacts allowing a small fishery inside these areas could be. Today this is simply not the case. We now know that this change, if implemented, will further streamline current regulations concerning pelagic or HMS, while having a net minimal impact on the local ecosystems inside these MPAs. This petition has the official backing and support of several fishery businesses, groups, and individuals, *Doc. 2 for list and letter*, and also includes a publicly signable petition containing over 880 signatures at the time of submittal.

#### **The 4 Options Breakdown including Stock and Fishery Analysis:**

This section will discuss the impact the allowed fisheries may have on the species that would primarily be targeted, the pros and cons of the four options, and the possible nearshore closure(s). The discussions on the four options and optional no take zones are meant to provide the thoughts and opinions of pelagic and HMS fishery groups and individuals for the Commission to better understand their viewpoints.

**-Pelagic and HMS Stock and Fishery Analysis:** Out of all of the HMS, Bluefin tuna migrate the furthest in terms of net geographical distance traveled in their lifetime, with individuals who reach maturity traveling from the coast of California across the Pacific to Japan, moving up to 70 miles per day during said migration. Billfish (Swordfish or Marlin) travel in two more distinct groups, rotating from California either toward the mid-Pacific and Hawaii or off the coast of Mexico, moving up to 35 miles per day according to tag data. All these species and the other pelagic and HMS affected by this change follow migrations similar to these, coming into waters off of California in the early summer (June-July), and mostly departing by early winter (November-December). This migration timeline and fishing attempts toward HMS in California are directly related, meaning most, if not all, fishing will be during these 5-7 months, leaving waters relatively untouched the remaining months of each year.

The fishery impact from these changes would be minimal to the overall take of HMS and their stocks. It is the primary intention of this petition that the species primarily targeted inside of these areas (if HMS or pelagic fishing is allowed), would be swordfish, bluefin tuna, and striped marlin. While some other attempts toward more exotic species such as yellowfin or dorado may occur, it would be rarely available.

Fishery efforts in these MPAs also need to be considered. Pelagic and HMS do not remain in small areas, rather moving with the water and currents. HMS fishery efforts would not be concentrated inside of these proposed limited-take areas, but rather flow through them as the water these species follow flows through these areas. The fishery would cover the same grounds it does today, with the changes allowing targeting through these areas compared to having to work around them as these species move through them. The two most targeted species in these areas that would be retained are bluefin tuna and swordfish. Striped marlin would likely be targeted the most in terms of fishing effort, but almost all marlin captures are recreational and result in a release.

According to NOAA the bluefin tuna population is not subject to overfishing and stock assessments show the population has “significantly increased,” (*Doc. 13*). If any of the listed options is accepted, all recreational methods of take would be available for bluefin tuna. A majority of this would be hook-and-line, with spearfishing taking up the remaining numbers. Commercially, only hook-and-line bluefin would be permitted as spearfishing is not a commercial option. A concern that was raised was the allowance of commercial hook-and-line bluefin take within these areas. Some groups believed allowing commercial take would prove to have too much of an impact on the stock. However, observing NOAA commercial landing data we see that California’s commercial fishermen only account for 2% of the yearly Pacific bluefin that is commercially harvested, meaning the local commercial fishery has a minimal impact on the stock (*Doc. 13*).



The stock numbers and movements are similar for swordfish as well. NOAA lists the Pacific swordfish stock is at safe levels and not subject to overfishing (*Doc. 14*). The total local impact by California vessels is listed as minimal with a “significant majority” of swordfish landed by Hawaii based longline vessels. Commercially, with the phasing out of the drift gillnet (DGN), both the state and federal agencies have made it readily apparent they are trying to find new ways to better target and expand commercial swordfish in California. All three of these current MPAs lie in the middle of some of the only reliably fishable swordfish grounds in the Channel Islands. All sit downwind of islands that block the wind and provide fair weather for fishing to occur on days fishing elsewhere is not possible under current allowed commercial methods (Harpoon and DSBG). This is especially the case for harpoon swordfish, a fishery that requires flat-calm water. The allowance for partial take of swordfish inside these regions would allow for a larger calm area to be covered and fished for migrating swordfish.

Unlike bluefin, depending on the accepted option, certain allowances for swordfish take would be made, but some may still be restricted. Options 1 and 2, if either are accepted, would allow all recreational methods for take of swordfish. Historically, this has almost exclusively been surface baiting basking swordfish, a fishery with zero deep water impacts, and has near zero impacts on anything in that area except for the swordfish it targets. Recently however, anglers have begun to mirror commercial methods, and have begun placing baited hooks at deeper depths (~900-1000 ft) for swordfish. Under current regulation, this method of “deep dropping” has no difference/distinction between hook-and-line fishing and would therefore be allowed.

For commercial methods of take, harpoon swordfish would be allowed under any accepted option. This globally recognized sustainable fishery with zero bycatch, is a fishery perfectly suited to have as little impact as possible on the local, non-pelagic ecosystems when a fish is taken. However, like the recreational hook-and-line case, the allowance of commercial hook-and-line for pelagic or HMS inside these regions would allow commercial deep drop of swordfish.

Along with deep drop methods, and in the spirit of fairness to the commercial fleets, Options 1 and 2 would also allow the use of standard-deep-set-buoy-gear (DSBG) in the federal waters only of the proposed limited-take areas (as it is currently primarily fished). DSBG is currently a federally exclusive fishery, with the exception of one exempted fishing permit (EFP). DSBG is a method consisting of ten separate flags and buoys with one line and one hook on each flag/buoy and is a modern sustainable fishery for swordfish. Due to the nature of these areas overlapping federal waters containing a harpoon allowance (state and federal), the argument for federal authorization of DSBG in these areas is being requested if hook-and-line deep drop is allowed. As previously mentioned, this change, along with other federal water changes would assumably be made by NOAA and the CINMS working with the state.

These methods of targeting swordfish at depth do have more impact than recreational surface baiting or commercial harpooning. However, the impact of these methods and their bycatch is minimal on non-HMS or pelagic species. This type of fishing has been praised by conservation organizations like Oceana and PEW for its high selectivity and extremely low bycatch (*Links 5/6*). There is also over 10 years of historical catch data for DSBG, the method that hook-and-line deep drop branched from, and 7 years of data from NOAA detailed in the chart below.

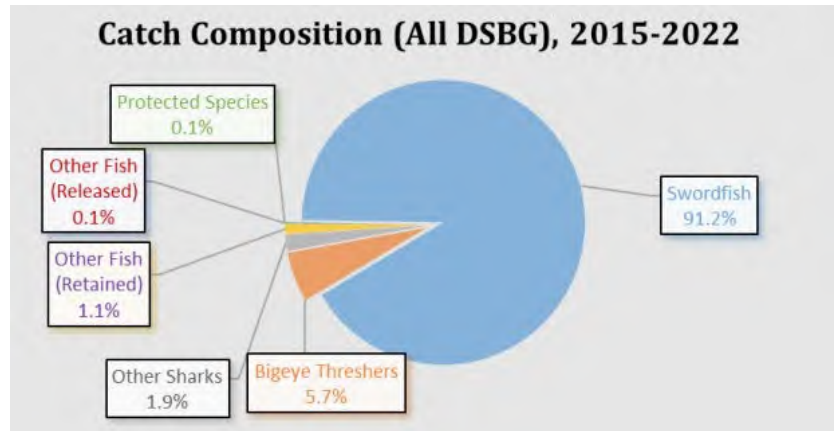


Looking at the data we can see that from 2015-2022, DSBG captured 91.2% swordfish, and a 96.9% mix of swordfish and thresher shark (another HMS). Of the “other sharks” and “other fish” most of these species were a mix of other pelagics (i.e., mako sharks, opah, and escolar). This means that nearly 99.8% of all species caught with DSBG are HMS.

Almost no non-pelagic or non-HMS species have been landed under this type

of fishery, due to its extreme selectivity. In the small number of cases where non-HMS species were hooked, the active tending of this gear allows for most bycatch to be released alive and well. Since deep drop methods mirror DSBG it is reasonable to assume their catch rates would mirror DSBG rates as well. It is for this reason that deep drop and federal authorization of DSBG for swordfish were listed allowances under Options 1 and 2, since they produce the lowest bycatch numbers, but produce the higher success rates for swordfish catch compared to harpoon or surface baiting.

If Options 1 and 2 are rejected but Option 3 or 4 are accepted, all HMS or pelagic targeting methods would still be allowed except those going deep to primarily target swordfish. These options call for the use of only “surface fishing methods,” a term used to describe all non-deep drop methods. This includes methods such as trolling, live bait casting, lure casting, live bait drifting (on the surface), and all other methods anglers or commercial fishermen use besides deep dropping or DSBG.



-The 4 Options and Their Reasonings: Each of the four options is designed to have a minimal impact on the protected area’s local ecosystem but vary in both allowed species and allowed gear types. There are really two sets of choices, when we break down the 4 options. The first choice allows either pelagic finfish take and possession, or HMS take and possession with possession of coastal pelagic species (CPS). The logic behind allowing pelagic finfish is primarily the precedent already set on other SMCAs. Pelagic finfish cover the 3 species that would primarily be targeted (swordfish, bluefin tuna, and striped marlin), cover other pelagic species that would occasionally be targeted, and have existing SMCAs elsewhere that already allow for this subset of species. However, this list also covers more species than the HMS list, and as will be discussed, these extra species may pose undesirable issues if limited-take implementations are not made properly. The logic behind allowing HMS take and possession, and CPS possession is that the three targeted species also fall under this more selective classification of species. Meaning there would be a more selective list of species allowed to be taken, thus less overall impact on what could be done inside these areas. Allowing only HMS limited take would also avoid the possible pelagic finfish issues discussed below. The reasoning for the CPS allowance is it would allow common baitfish used to fish HMS to still be retained inside of these areas.

The second choice is the allowance of all hook-and-line methods, including deep drop, and DSBG or only allowing “surface fishing methods.” The logic with allowing deep drop and federal DSBG allowance is the data shows that these methods are extremely selective and prove effective in targeting primarily swordfish at depth. This choice would allow for more area of opportunity to selectively target swordfish, something the State, NOAA, and PFMC has made very apparent they want to help accomplish, especially commercially with the end of the gillnet dropping landings of California swordfish. The logic with allowing “surface fishing methods” is an attempt at regulating out the deep dropping methods inside of these zones if the State deems them too impactful to allow. If





this choice is made, it would make the limited-take areas more selective to swordfish methods only, leaving surface baiting recreationally and harpooning commercially as the only allowed methods to target swordfish. If this option is selected, the state would have to clearly define “deep dropping” (to not allow it) or define “surface fishing methods” (to only allow those).

In addition to the four main options, there exists a final choice of adding a nearshore closure to the Gull Island and SBI zones with more selective or no fishing methods being allowed. The selected limited take option would then be implemented outside of this boundary throughout the remaining “offshore” area. The logic behind this choice has several factors, some of which are the existence of a nearshore/offshore pair in the Farnsworth and Point Buchon SMCAs, and the desire to continue having stricter limited-take or no-take regions closer to the more diverse shorelines. These nearshore regions rarely contain any species this petition intends on anglers targeting, meaning whether or not a nearshore zone is implemented, areas this close to the respective islands would have such a low fishery presence that they would effectively remain untouched, with one key exception.

**If** an option allowing the hook-and-line take of pelagic finfish is made it is recommended that the nearshore region be implemented. This is due to the fact that limited-take of pelagic finfish by hook-and-line would allow certain game fish species to be targeted in the local, nearshore ecosystems on fishing beds. The intent of this petition is to protect from this type of fishing allowance, intending limited take allowance for these regions to be open water fishing of pelagic or highly migratory species during their movements. This possibility of nearshore bed fishing is only the case for two species on the pelagic finfish list, yellowtail and barracudas. These are species that if pelagic finfish were allowed with no nearshore zone implemented, would definitely be targeted within the nearshore areas of the SBI and Gull Island closures. Again, it is the intention of this petition to only allow for offshore take of pelagic or highly migratory species, primarily billfish and tuna. Allowing pelagic finfish with no nearshore region that accounts for bed fishing of pelagic species such as yellowtail may interfere with the local ecosystem we still aim to protect. If the below listed coordinates are the border for the nearshore regions (table 2), the water outside of these areas at Gull Island and SBI is reasonably deep enough to ensure little to no effort would be made to target these species and would yield almost zero results.

Table 2: Proposed Coordinates and options for the Nearshore limited or no take areas for Gull Island and Santa Barbara Island	
Gull Island Nearshore MPA	Santa Barbara Island Nearshore MPA
33° 58.000' N. lat. 119° 53.000' W. long, and 33° 55.800' N. lat. 119° 48.000' W. long	The 1nm boundary of SBI within the current MPA
Regulation within nearshore area:	Regulation within nearshore area:
Recreational and commercial take of (pelagic finfish or HMS, depending on the state’s choice) is allowed via surface casting, kite fishing, and surface trolling. The commercial take of swordfish by harpoon is allowed. (preferred)	Recreational and commercial take of (pelagic finfish or HMS, depending on the state’s choice) is allowed via surface casting, kite fishing, and surface trolling. The commercial take of swordfish by harpoon is allowed. (preferred)
Or	Or
A no-take region (not preferred)	A no-take region (not preferred)



The listed coordinates for the nearshore closures are only the listed coordinates for the dividing line between the proposed nearshore area and the offshore limited take SMCA and FMCA. The collective closure borders of the nearshore and offshore areas would be the same area as the current MPAs. If these are placed in effect along with the selected option applied outside, these nearshore regions would cover sufficient area to prevent nearshore bed-fishing efforts. While possible changes to these borders may be made, it is the fisheries' belief they are sufficient in preventing what would otherwise be a problem if an unrestricted pelagic finfish option is accepted. Further consultations with active fishery members should be made if these borders are desired to be modified. The preference for stricter limited-take rather than no-take is simply that these areas would contain so little presence of these species, that they would effectively be fully protected. During the time that pelagic or HMS do travel through these nearshore areas, fishing opportunities are so infrequent the opportunity to limited take should be allowed due to how minimally they would occur.

### **The Most Requested Option and Closing Remarks:**

It is this petition's preference that in order to avoid the nearshore pelagic finfish risk all together, one of the two HMS allowance options be selected (Options 2 or 4) with the nearshore zone not selected. Option 2 is the preferred selection since this option allows for the most HMS opportunity, recreationally and commercially, while still remaining extremely selective, and leaving a minimal impact on the local, non-pelagic ecosystems. Option 2, with no accompanying nearshore zones would allow for HMS targeting within the entire area. In the unlikely case HMS are present nearshore, they may still be targeted with minimal local impact as they move through an area under the same selective fishing methods allowed elsewhere. The lack of nearshore zones in this case would also allow for easier enforcement of the area by wardens not having to worry about different zones within an area. If a nearshore region is desired, the more selective limited-take option is preferred. This change would still allow for selective enough take of HMS and prevent any bottom fishing activity nearshore.

In terms of the three MPAs, all three MPAs would preferably be converted to limited take areas. Discussions with those involved in the possible affected fisheries revealed a strong preference for The Footprint to be converted to limited take, with Gull Island and SBI having equal amounts of preference to be opened to limited take.

In closing this analysis, special thanks to all the individuals who provided the input and data to make this petition possible. I would especially like to thank the FGC and its staff for their assistance with and the creation of this adaptive management process.

### **Remaining Supporting Documents and Sources:**

Document 2: Supporters letter for the petition. Summarizes the petition, its reasonings, and its intentions. Was sent out to business and individuals that could be impacted by this change or provide scientific input asking for their support of the petition and its rationale (signature list on the letter).



CHANNEL COAST MARINE





Dear FGC,

On behalf of the hundreds of thousands of anglers that frequent Southern California, and all of the businesses they support, the following organizations and individuals extend their special support and ask for your approval of this petition. This petition would allow for the limited recreational and commercial take of Pelagic Finfish or Highly Migratory Species (HMS) via select, sustainable fishing methods. The changes would apply to the following Marine Protected Areas (MPAs):

- The Footprint Marine Reserve
- Gull Island Marine Reserve
- The Santa Barbara Island Marine Reserve

This proposed regulation modification aims to return extremely selective take opportunities that the original MPA network implementation unintentionally removed. These regions would become state and federal marine conservation areas (SMCAs/MCAs) but would still provide the original protections to the species and ecosystems each of the MPAs intends to preserve.

The allowance of pelagic or HMS in these areas would provide more equal opportunities to anglers around Southern California targeting fast moving species, like billfish or tuna. Currently, these species cannot be followed into these zones as they move through them, traveling with the currents rather than remain on the structure or in the local ecosystems the MPAs are intended to protect. If accepted, anglers would have the opportunity to follow these species as they constantly flow in and out of these areas.

The push for this change is backed by the California State 2022 MPA Decadal Review, the MRC's near-term objectives, the 2016 MPA Master Plan, and several other state and federal reports/comments. We the fisherman, groups, clubs, and business owners, of California kindly ask for your approval of this petition.

Sincerely,

AFTCO  
CCA California  
Pfleger Institute of Environmental Research (P.I.E.R.)  
Wild Oceans  
BD Outdoors  
Bear Flag Fish Co.  
Bluewater Seafood  
Chula Seafood  
The Tuna Club  
Balboa Angling Club  
CISCOS Sportfishing  
Hooks Sportfishing  
Legit Sportfishing  
Eric's Tackle Shop  
Channel Coast Marine  
Executive Yachts  
Bight Sportfishing  
Bad Company Fishing Adventures  
Seal Beach Fish Co.  
Wild Local Caught Seafood

Santa Monica Seafood  
Ocean Pride Seafood  
Santa Barbara Fish Market

Special Individuals: Chukey S, Theresa L, Casey S, Nathen P, Ron H, Sean B, Morgan L, Bill S, Donald K, Christian H, Andrew W, Carl S, Michael M, Thomas C, Wes L, Marc H, Eric H, Bryce H, Ethan H, Steve W, Don G, Ryder D, Fisher D, Jonnah G, Jake K, Brandon H, Patrick O, John J, Bill W, Steve M, Eric H, Sean S, Ryder A, Evan K

And the over 880 members of the public that have signed the public support petition as of submittal (11/22), visible here: <https://chnng.it/2wy2dHSS6r>





Documents 3, 4, and 5: Original founding reasoning for the Footprint, Gull Island, and Santa Barbara Island MPAs respectively, to be created and expanded into federal waters of the marine sanctuary from the Channel Islands CEQA in 2002. There is little to no mention of pelagic or HMS species, with primary objectives for the Footprint MPA being groundfish replenishment, and for Gull Island and SBI MPAs, being either or a mix of abalone, rockfish, or endangered bird populations. Original paper found here: <https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=151023>

#### Footprint State Marine Reserve

The Footprint SMR is located in open waters in the passage south of Santa Cruz and Anacapa Islands. The Footprint SMR is 28.6 nm<sup>2</sup>, **6.4 square nautical miles of which would be within State waters and the rest** entirely within Federal waters. It is described and analyzed here as a part of the entire recommendation, but not the decision before the Fish and Game Commission. The majority of the proposed Footprint SMR is sand or gravel between 90-900 ft. The Footprint includes several submerged rocky features, including pinnacles and submarine canyons that once supported large population of numerous rockfish species. Today, the rockfish populations around the Footprint are severely depleted from intensive recreational and commercial fishing in the region. Although populations are depleted, the habitat supports a variety of species, including bocaccio and cowcod, both recognized as overfished by the PFMC. Fish populations in the vicinity of the Footprint are likely to respond to protection within a reserve through increased density, individual size, and reproductive potential.



Gull Island, Santa Cruz Island State Marine Reserve

The Gull Island SMR is located on the southwest side of Santa Cruz Island. The reserve includes 2.9 nautical miles of shoreline from Morse Point to the point along the shore at 33° 58' N, 119° 48' W. The reserve extends south approximately three nautical miles to the State waters boundary. The Gull Island SMR contains 16.2 square nautical miles. A subsequent Federal waters phase would add 22.1 square nautical miles for a cumulative total of 38.3 square nautical miles.

Historically, Gull Island supported a diverse and abundant marine fauna. Although these populations are reduced, the habitat supports a variety of species. Fish populations in the vicinity of Gull Island are likely to respond to protection within a reserve through increased density, individual size, and reproductive potential. The Gull Island SMR would protect a variety of different habitat types from the nearshore to the continental slope. Sand beach is the predominant shoreline habitat at the border of the Gull Island SMR. Endangered snowy plovers may occur there and the beach supports one of the few populations of pismo clams at the islands. The remaining shoreline is covered with cobble beaches.

Subtidal habitats in the Gull Island SMR are mixed sand and rocky reefs. Red and green algae dominate inshore areas. Gull Island supports an intermittent population of giant kelp, but the kelp populations are reduced. Subtidal habitats support patchy populations of surfgrass. Rocky intertidal and subtidal habitats once supported populations of red, pink, white, and black abalone, but only a small population of red abalone, and very few black abalone have been observed recently. The Gull Island area supports large populations of purple urchins. Rocky subtidal habitats from Gull Island to Laguna Point support populations of spiny lobster. Purple hydrocoral (*Allopora*) is found in deeper rocky reefs around Gull Island.

Shallow rocky habitat extends offshore to Gull Island. Nearshore reefs support populations of various rockfish species. However, rockfish are not as diverse in this region because of physical changes associated with the mixing of warmer waters from the California Counter Current with cooler waters from the California Current. Southern species such as

5-27

California sheephead and wrasses are relatively common in the Gull Island region. The region also supports spawning populations of white seabass and halibut. Thresher and mako sharks are fished in the deeper waters near stronger currents.





### Santa Barbara Island State Marine Reserve

Santa Barbara Island SMR is located at the southeast side of Santa Barbara Island. The reserve includes one nautical mile of shoreline from South Point to the eastern point of the

5-22

island. The reserve boundaries extend east and south to the State waters boundary. The Santa Barbara Island SMR contains 13.2 square nautical miles. A subsequent Federal waters addition would add 46.3 square nautical miles for a cumulative total of 59.5 square nautical miles.

Santa Barbara Island, Sutil Island, and Shag Rock support major seabird and marine mammal colonies. Santa Barbara Island supports breeding colonies of numerous seabirds, including the endangered California brown pelican, western gull, black oystercatcher, black storm-petrel, Leach's storm-petrel, Brandt's cormorant, pelagic cormorant, Cassin's auklet, pigeon guillemot and Xantus's murrelet. California sea lions haul out on sandy beaches on the southeastern side of Santa Barbara Island. Harbor seals and northern elephant seals occasionally haul out in the same place.

The exposed rocky shoreline along Santa Barbara Island is interspersed with occasional cobble beaches (10-12 m wide) in protected coves. The rocky intertidal habitat descends steeply to patchy reefs in large areas of sand. Patchy populations of surfgrass grow on subtidal rocks (15-20 m). Populations of giant kelp on reefs around Santa Barbara Island have declined relative to historical data. Red and purple sea urchins and brittle stars (*Ophiothrix*) dominate the rocky subtidal habitats around Santa Barbara Island. Spiny lobsters are abundant in rocky subtidal habitats in the vicinity of South Point and large mussel beds can be found in the rocky intertidal habitats on the southeastern side of Santa Barbara Island.

The continental shelf drops to approximately 200 m less than ½ mile from shore, and continues to drop to 400 m within 3 miles of Santa Barbara Island. In the past, populations of white, green, pink, and black abalone inhabited intertidal and subtidal rocky habitats. The reserve includes rocky subtidal habitats, from approximately 25-66 m, that may contribute to the recovery of the endangered white abalone. Sandy subtidal habitats support halibut populations near the northern border of the Santa Barbara Island SMR. California sheephead have been observed near South Point.





**Document 6:** Original 2002 CEQA: Dr. Ray Hilborn stating the size of an MPA must be large relative to a species' total movement to be actually impactful on their population abundance.

has reached population levels which increase natural mortality rates...@ Likewise, Dr. Ray Hilborn of the University of Washington=s College of Ocean and Fishery Sciences noted in comments on proposals for marine reserves in the Sanctuary that, A...it is almost universally accepted that exploitation reduces population sizes.... **No-take areas, so long as their size is large relative to the movement of the species, will lead to increased abundance within the reserve.**@

**Documents 7, 8, and 9:** Current Footprint, Gull Island, and SBI MPA descriptions in “Why the location was chosen...” (Highlighted below)

**Footprint State Marine Reserve**  
Southern California - Established January 2012

**What is a California marine protected area (or “MPA”)?**  
An MPA is a type of managed area primarily set aside to protect or conserve marine life and habitats in marine or estuarine waters. California's MPA Network consists of 124 areas with varying levels of protection, and 14 special closures, all designed to help safeguard the state's marine ecosystems. Fishing and collecting are banned at marine reserves such as Footprint State Marine Reserve, providing this MPA with the highest level of protection.

One goal for California's MPAs was to strategically place them near each other to form an interconnected network that would help to preserve the flow of life between marine ecosystems. Within that network each MPA has unique goals and regulations, and non-consumptive activities, permitted scientific research, monitoring, and educational pursuits may be allowed.

**Why was this location chosen for a state marine reserve?**  
One of the goals for Footprint State Marine Reserve is to protect the deepwater communities of fish and invertebrates located at this convergence of warm water currents from the tropics and cold water currents from Alaska. The resulting rich and varied marine life here includes many different species. Colorful cold-water corals and sponges cover the large cobble and boulder features of the reserve. Deep, rocky reefs provide habitat for copper rockfish, cowcod, and bocaccio, while brittle stars and California sea cucumbers can be found on the sandy seafloor.

Footprint State Marine Reserve was established as one of 13 Channel Islands MPAs in 2003, and re-established as part of the statewide MPA Network in 2012. This state marine reserve shares a southern border with the federal Footprint Marine Reserve, and overlaps a portion of the [Channel Islands National Marine Sanctuary](#). Placing a state marine reserve here provides very high levels of protection for local marine species and the habitats they use.

**Quick Facts: Footprint State Marine Reserve**

- **MPA size:** 7.05 square miles
- **Depth range:** 171 to 1,656 feet
- **Habitat composition:**  
Rock: 0.35 square miles  
Sand/mud: 4.80 square miles

**Further Information:**

- MPA Website: [www.wildlife.ca.gov/MPAs](http://www.wildlife.ca.gov/MPAs)
- MPA and Sportfishing Interactive Map: [www.wildlife.ca.gov/OceanSportfishMap](http://www.wildlife.ca.gov/OceanSportfishMap)
- Email: [AskMarine@wildlife.ca.gov](mailto:AskMarine@wildlife.ca.gov)

Photos - Upper: Common bottlenose dolphins leaping of the reserve. photo © Adam Seaton CC BY-NC 2.0 Lower right: Copper rockfish and pink gorgonian near Anacapa Island. CDFW/MARE photo. Lower left: Purple gorgonian and a sea cucumber near Anacapa Island. ©DFW/MARE photo.

**Report poachers and polluters**  
Call CallTIP: 1 (888) 334-2258  
or text 847411 - begin message with "Calltip"  
followed by the details.





Gull Island State Marine Reserve  
Southern California - Established January 2012



**What is a California marine protected area (or "MPA")?**

An MPA is a type of managed area primarily set aside to protect or conserve marine life and habitats in marine or estuarine waters. California's MPA Network consists of 124 areas with varying levels of protection, and 14 special closures, all designed to help safeguard the state's marine ecosystems. Fishing and collecting are banned at marine reserves such as Gull Island State Marine Reserve, providing this MPA with the highest level of protection.

One goal for California's MPAs was to strategically place them near each other to form an interconnected network that would help to preserve the flow of life between marine ecosystems. Within that network each MPA has unique goals and regulations, and non-consumptive activities, permitted scientific research, monitoring, and educational pursuits may be allowed.

**Why was this location chosen for a state marine reserve?**

One of the goals for Gull Island State Marine Reserve is to protect the diverse submarine canyon, rocky reef and pinnacle, kelp forest, and sandy plain habitat found at this location, where warm water currents from the tropics and cold water currents from Alaska converge. These habitats are used by a rich and varied selection of marine fish and invertebrates such as purple hydrocoral, a species not often seen in the Northern Channel Islands. Kelp forests and reefs provide shelter for opaleye, California spiny lobster, and cabezon, while schools of California barracuda and bonito may be seen in deeper, offshore waters.

Gull Island State Marine Reserve was established as one of 13 Channel Islands MPAs in 2003, and re-established as part of the statewide MPA Network in 2012. The reserve shares a southern border with the federal Gull Island Marine Reserve, and overlaps a portion of the Channel Islands National Marine Sanctuary and Channel Islands National Park. Placing a state marine reserve here provides very high levels of protection for local marine species and the habitats they use.

**Report poachers and polluters**  
Call CallTIP: 1 (888) 334-2258  
or text 847411 - begin message with "CallTIP"  
followed by the details.



**Quick Facts: Gull Island State Marine Reserve**

- **MPA size:** 19.93 square miles
- **Shoreline span:** 3.2 miles
- **Depth range:** 0 to 2,205 feet
- **Habitat composition:**
  - Rock: 4.03 square miles
  - Sand/mud: 16.55 square miles



**Further Information:**

- MPA Website: [www.wildlife.ca.gov/MPAs](http://www.wildlife.ca.gov/MPAs)
- MPA and Sportfishing Interactive Map: [www.wildlife.ca.gov/OceanSportfishMap](http://www.wildlife.ca.gov/OceanSportfishMap)
- Email: [AskMarine@wildlife.ca.gov](mailto:AskMarine@wildlife.ca.gov)

Photos - Upper: Gull Island, photo by R.Schwemmer, NOAA/CI/NMMS. Lower right: Purple hydrocoral and sea urchin at Gull Island State Marine Reserve, CDFW, photo by D. Stein. Lower left: Opaleye in the kelp forest at Gull Island State Marine Reserve, CDFW, photo by D. Stein

Santa Barbara Island State Marine Reserve  
Southern California - Established January 2012



**What is a California marine protected area (or "MPA")?**

An MPA is a type of managed area primarily set aside to protect or conserve marine life and habitats in marine or estuarine waters. California's MPA Network consists of 124 areas with varying levels of protection, and 14 special closures, all designed to help safeguard the state's marine ecosystems. Fishing and collecting are banned at marine reserves such as Santa Barbara Island State Marine Reserve, providing this MPA with the highest level of protection.

One goal for California's MPAs was to strategically place them near each other to form an interconnected network that would help to preserve the flow of life between marine ecosystems. Within that network each MPA has unique goals and regulations, and non-consumptive activities, permitted scientific research, monitoring, and educational pursuits may be allowed.

**Why was this location chosen for a state marine reserve?**

One of the goals for Santa Barbara Island State Marine Reserve is to protect the sandy seafloor, surfgrass, kelp forest, and rocky nearshore habitat found there. Sea urchins, California mussels, and acorn barnacles thrive along the island's rocky coastline. Giant sea bass, California sheephead, and Pacific angel sharks hunt and seek shelter in the island's kelp forests and eelgrass beds, while California halibut and other flatfish rest in the sandy sediments. Santa Barbara Island is also home to a large breeding colony of Scripps's murrelet, a seabird on California's threatened species list, and fourteen other species of bird.

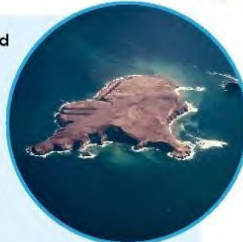
Santa Barbara Island State Marine Reserve was established as one of 13 Channel Islands MPAs in 2003, and re-established as part of the statewide MPA Network in 2012. This state marine reserve shares a southeastern border with the federal Santa Barbara Island Marine Reserve. The reserve overlaps part of the Channel Islands National Park and Channel Islands National Marine Sanctuary. Placing a state marine reserve here provides very high levels of protection for local marine species and the habitats they use.

**Report poachers and polluters**  
Call CallTIP: 1 (888) 334-2258  
or text 847411 - begin message with "CallTIP"  
followed by the details.



**Quick Facts: Santa Barbara Island State Marine Reserve**

- **MPA size:** 12.77 square miles
- **Shoreline span:** 0.8 miles
- **Depth range:** 0 to 1,655 feet
- **Habitat composition:**
  - Rock: 0.74 square miles
  - Sand/mud: 2.43 square miles



**Further Information:**

- MPA Website: [www.wildlife.ca.gov/MPAs](http://www.wildlife.ca.gov/MPAs)
- MPA and Sportfishing Interactive Map: [www.wildlife.ca.gov/OceanSportfishMap](http://www.wildlife.ca.gov/OceanSportfishMap)
- Email: [AskMarine@wildlife.ca.gov](mailto:AskMarine@wildlife.ca.gov)

Photos - Upper: Aerial view of Santa Barbara Island, photo © Jesse Hodge CC BY-NC-ND 2.0. Lower right: Pacific angel shark at Santa Barbara Island State Marine Reserve, CDFW/MARE photo. Lower left: Pink gorgonian at Santa Barbara Island State Marine Reserve, CDFW/MARE photo.





Document 10: MPA Master plan goal for the southern section, that calls for the protections of at-risk local species while allowing for limited take of pelagic or HMS.

Goal 2. To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

- 1. Help protect or rebuild populations of rare, threatened, endangered, depressed, depleted, or overfished species, and the habitats and ecosystem functions upon which they rely.
2. Sustain or increase reproduction by species likely to benefit from MPAs, with emphasis on those species identified as more likely to benefit from MPAs, and promote retention of large, mature individuals.
3. Sustain or increase reproduction by species likely to benefit from MPAs with emphasis on those species identified as more likely to benefit from MPAs through protection of breeding, spawning, foraging, rearing or nursery areas or other areas where species congregate.
4. Protect selected species and the habitats on which they depend while allowing some commercial and/or recreational harvest of migratory, highly mobile, or other species; and other activities.

Document 11: Denied petition for White Shark MPA on grounds MPAs are especially not focused on pelagic or HMS (Highlighted below)

Appendix G: Decadal Management Review Supplemental Tables



Table with 5 columns: ACTION TYPE, YEAR, REQUEST, RATIONALE, ADAPTIVE MANAGEMENT ACTION TAKEN. It contains three rows of data regarding denied petitions for MPA regulations.



**Document 12:** MPA Decadal Review-Appendix A: Comprehensive Recommendations for the Review- Recommends to open legacy grounds and allow pelagic/HMS take in MPAs (Highlighted below)

*Regulatory and Review Framework*


- Conduct annual engagement meetings with stakeholders to inform them about MPA Management Program activities that inform decadal reviews.
- Define clear management reporting goals, including the scale of reporting at the statewide, regional, or local scale.
- Ensure that adaptive management changes to individual MPAs and the MPA Network are evidence based.
- Simplify designations by changing no-take SMCAs to SMRs after maintenance of existing infrastructure is permitted.
- Return MPA fishing opportunities, especially in legacy fishing areas that were previously open to fishing.
- Allow take of migratory and pelagic species in MPAs that currently do not allow it.
- Allow commercial urchin take in MPAs that allow commercial lobster take.
- Do not allow boat operations within 100 yards of a remnant kelp forest within MPAs.
- Requests to change specific MPAs (not including formal petitions; see Appendix G):
  - Relocate Piedras Blancas MPA north, just south of Cape San Martin to protect nursery grounds.
  - Increase the size of Matlahuayl State Marine Reserve to include Point La Jolla and the Boomer Beach area where the sea lion colony is located.

**Document 13:** NOAA Stock and Fishery Analysis for Bluefin Tuna, stock status, and minimal habitat impacts highlighted.

SPECIES DIRECTORY

## Pacific Bluefin Tuna

Overview | Seafood | Management | Resources




**Pacific Bluefin Tuna**  
*Thunnus orientalis*

Also Known As  
Northern bluefin tuna, Tuna, Bluefin tuna


Quick Facts

REGION Pacific Islands, West Coast


 **FISHWATCH**  
U.S. SEAFOOD FACTS


### About the Species


Although Pacific-wide populations are well below target levels, U.S. wild-caught Pacific bluefin tuna is a smart seafood choice because it is sustainably managed under rebuilding measures that limit harvest by U.S. fishermen.




*School of bluefin tuna. Credit: NOAA Fisheries*

 **Population**  
The stock is overfished, but the fishing rate promotes population growth.

 **Fishing Rate**  
Not subject to overfishing.

 **Habitat Impacts**  
Fishing gear used to catch bluefin tuna rarely contacts the seafloor so habitat impacts are minimal.

 **Bycatch**  
Regulations are in place to minimize bycatch.

### Population Status

- According to the 2022 stock assessment, Pacific bluefin tuna is overfished, but not subject to overfishing. Summary stock assessment information can be found on [Stock SMART](#).
- NOAA Fisheries first determined the Pacific bluefin tuna stock to be overfished in 2013. The 2022 assessment completed by the [International Scientific Committee for Tuna and Tuna-Like Species](#) in the North Pacific Ocean found the stock is still overfished, but stock size has significantly increased.

- The average annual bluefin landings by U.S. commercial vessels fishing in the eastern Pacific Ocean represent only 2 percent of the average annual landings from all fleets fishing there.






**Document 14:** NOAA Stock and Fishery Analysis for Swordfish, stock status and minimal habitat impacts highlighted.

SPECIES DIRECTORY

## North Pacific Swordfish

Overview | Seafood | Resources



**North Pacific Swordfish**  
*Xiphias gladius*

**Also Known As**  
Broadbill swordfish, Espada, Emperado, A'u, Mekajiki, Shurume


**Quick Facts**

REGION Pacific Islands, West Coast

**FISHWATCH**  
U.S. SEAFOOD FACTS

### About the Species

U.S. wild-caught North Pacific swordfish is a smart seafood choice because it is sustainably managed and responsibly harvested under U.S. regulations.



Researchers tagging a swordfish. Credit: Pflieger Institute of Environmental Research

**Population**  
The stocks are **not overfished**.

**Fishing Rate**  
The Western and Central North Pacific stock is not subject to overfishing. Reduced to end overfishing for the Eastern Pacific stock.

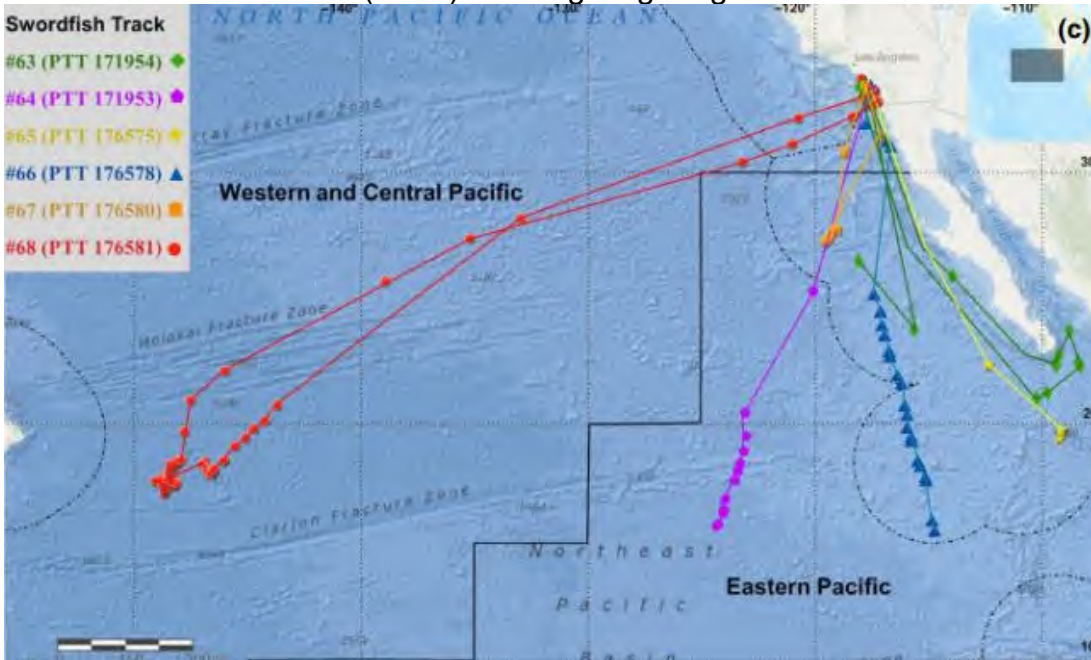
**Habitat Impacts**  
Fishing gear used to catch Pacific swordfish rarely contacts the seafloor so habitat impacts are minimal.

**Bycatch**  
Regulations are in place to minimize bycatch.

### Population Status

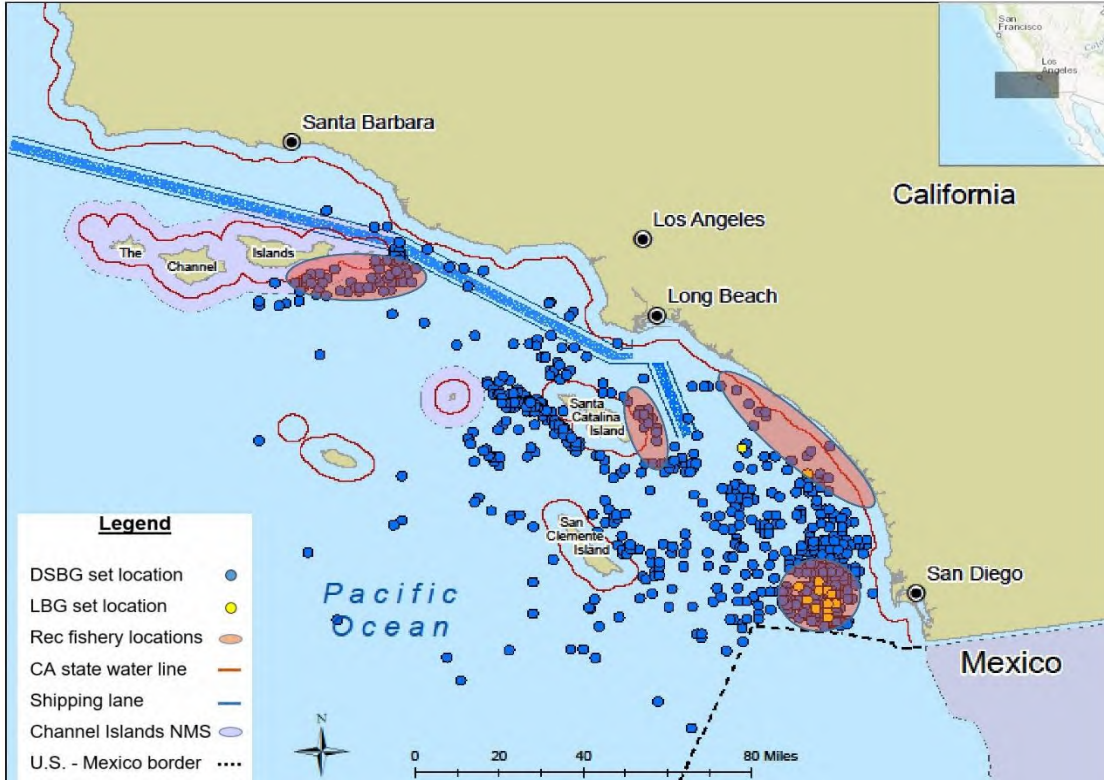
- There are two stocks of North Pacific swordfish: the Eastern Pacific Ocean stock and the Western and Central North Pacific Ocean stock. According to the most recent stock assessments:
  - The Eastern Pacific Ocean stock is not overfished but is subject to overfishing (2014 stock assessment). Summary stock assessment information can be found on [Stock SMART](#).
  - The Western and Central North Pacific Ocean stock is not overfished and is not subject to overfishing (2018 stock assessment). Summary stock assessment information can be found on [Stock SMART](#).

**Document 15:** Swordfish migration data collected via satellite tags deployed by the Pflieger Institute of Environmental Research (PIER) showing long ranges swordfish travel relative to the MPAs.

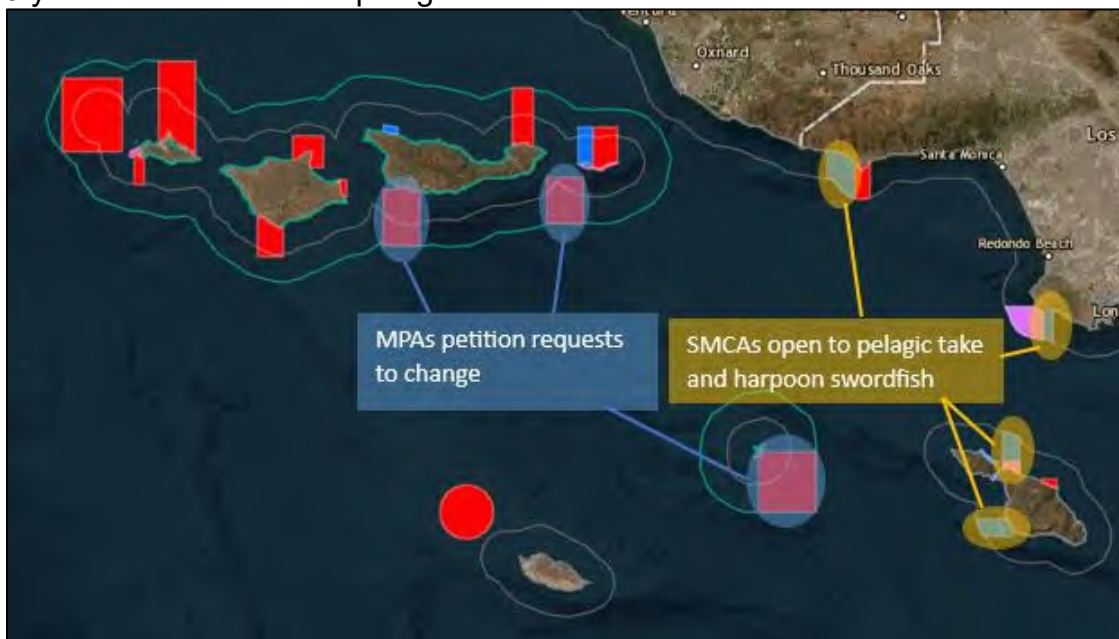




**Document 16:** DSBG and deep drop fishery efforts map displaying the wide area HMS fishing activity covers, and lack of northern Santa Cruz and Anacapa island efforts, where the only 2 SMCA are located.



**Document 17:** Current pelagic finfish limited take SMCA outside of the Channel Islands Network. These limited take MPAs were implemented in 2012, after the island network in 2003, and display the 9 year shift toward more pelagic allowed areas.

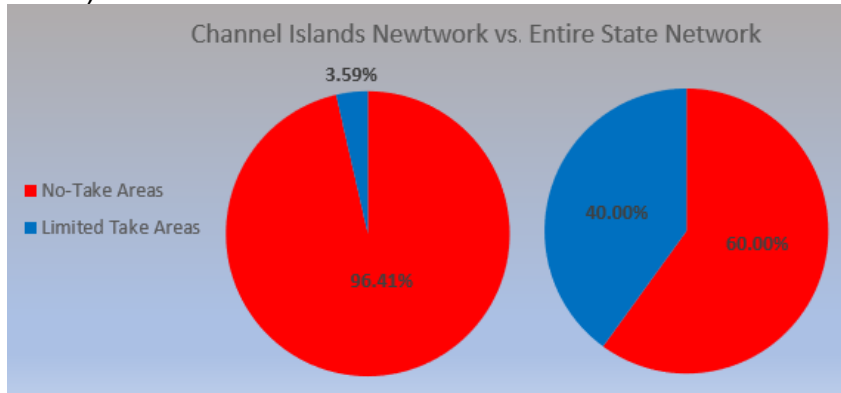




**Document 18:** Definition of State Marine Conservation Areas per California Code of Regulations Title 14 Section 632(a)(1)(C). The recommended change would make these MPAs effectively SMCAs and MCAs with limited HMS take and CPS possession.

(C) State Marine Conservation Areas: In a state marine conservation area, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes except as specified in subsection 632(b), areas and special regulations for use. The department may issue scientific collecting permits pursuant to Section 650. The commission may authorize research, education, and recreational activities, and certain commercial and recreational harvest of marine resources, provided that these uses do not compromise protection of the species of interest, natural community, habitat, or geological features.

**Document 19:** Charts displaying no-take vs limited-take areas around the Channel Islands vs. the whole State MPA Network showing the disparity of no-take areas around the islands. If the changes are made, this disparity would all but disappear (see Table 1 in the analysis for before and after ratios). The calculation also includes federal sections of the MPAs.



**Document 20:** How the regulatory language could read if the preferred proposed change was selected (limited HMS take, deep drop methods and federal DSBG allowed, no nearshore closure) Existing regulation modifications presented similar to how CDFW shows yearly changes, ~~crossed-out~~ being removed regulation and **red** being the amended regulation. State and federal sections are listed with proposed changes. For simplicity the federal amendments will follow the states for the MPA specific changes.

**State and Federal Definition Modifications-**

Amend: 14 CCR § 632 (a)\*\* **and** 15 CFR 922.71:

**(13) Highly Migratory Species.** Highly migratory species, for the purpose of this section, are a subset of finfish defined as: albacore, bluefin, bigeye, and yellowfin tuna (*Thunnus* spp.); skipjack tuna (*Katsuwonus pelamis*); dorado (dolphinfish) (*Coryphaena hippurus*); striped marlin (*Tetrapturus audax*); thresher sharks (common, pelagic, and bigeye) (*Alopias* spp); shortfin mako shark (*Isurus oxyrinchus*); blue shark (*Prionace glauca*); and Pacific swordfish (*Xiphias gladius*). \*Marlin is not allowed for commercial take

**(14) Coastal Pelagic Species:** Coastal pelagic species, for the purpose of this section, are a subset of finfish and invertebrates defined as: northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), Pacific mackerel (*Scomber japonicus*), jack mackerel (*Trachurus symmetricus*), and market squid (*Loligo opalescens*).





\*\***(13)** and **(14)** exclusive to 14 CCR § 632 (a), amendments to 15 CFR 922.71 would read identical but not include “**(13)**” and “**(14)**.” Highly Migratory species and Coastal Pelagic species are defined under State regulations (Title 14 §1.49 and 1.39), meaning the change to Title 14 § 632 (a) may not be required.

State MPA Modifications-

Amend: 14 CCR § 632 (b) (109)

(109) Gull Island State Marine ~~Reserve~~. **Conservation Area.**

(A) This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:

33° 58.065' N. lat. 119° 50.967' W. long.;

33° 58.000' N. lat. 119° 51.000' W. long.;

33° 58.000' N. lat. 119° 53.000' W. long.;

33° 55.449' N. lat. 119° 53.000' W. long.; thence eastward along the three nautical mile offshore boundary to

33° 54.257' N. lat. 119° 48.000' W. long.; and

33° 57.769' N. lat. 119° 48.000' W. long.

(B) ~~Area restrictions defined in subsection 632(a)(1)(A) apply.~~ **Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:**

- 1. The recreational take of highly migratory species is allowed.**
- 2. The commercial take of highly migratory species by hook-and-line and swordfish by harpoon is allowed. The use of standard deep-set-buoy-gear is permitted outside of state waters (3nm).**
- 3. The possession of coastal pelagic species is allowed.**

Amend: 14 CCR § 632 (b) (114)

(114) Footprint State Marine ~~Reserve~~. **Conservation Area.**

(A) This area is bounded by the straight lines connecting the following points in the order listed except where noted:

33° 59.300' N. lat. 119° 30.965' W. long.;

33° 57.510' N. lat. 119° 30.965' W. long.; thence eastward along the three nautical mile offshore boundary to

33° 57.264' N. lat. 119° 25.987' W. long.;

33° 59.300' N. lat. 119° 25.987' W. long.; and

33° 59.300' N. lat. 119° 30.965' W. long.

(B) ~~Area restrictions defined in subsection 632(a)(1)(A) apply.~~ **Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:**

- 1. The recreational take of highly migratory species is allowed.**



2. The commercial take of highly migratory species by hook-and-line and swordfish by harpoon is allowed. The use of standard deep-set-buoy-gear is permitted outside of state waters (3nm).
3. The possession of coastal pelagic species is allowed.

Amend: 14 CCR § 632 (b) (116)

(116) Santa Barbara Island State Marine ~~Reserve~~ **Conservation Area**.

(A) This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed except where noted:

33° 28.500' N. lat. 119° 01.813' W. long.;

33° 28.500' N. lat. 118° 58.051' W. long.; thence along the three nautical mile offshore boundary to

33° 24.842' N. lat. 119° 02.200' W. long.; and

33° 27.911' N. lat. 119° 02.200' W. long.

(B) ~~Area restrictions defined in subsection 632(a)(1)(A) apply.~~ **Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:**

1. The recreational take of highly migratory species is allowed.
2. The commercial take of highly migratory species by hook-and-line and swordfish by harpoon is allowed. The use of standard deep-set-buoy-gear is permitted outside of state waters (3nm).
3. The possession of coastal pelagic species is allowed.

NOTE: It may not be required to mention deep-set-buoy-gear (DSBG) in the state regulation as it would not be allowed in state waters. However, as all regulations (State and federal) may be listed under one “rulebook” this mention of federal DSBG allowance maybe needed.

Federal Modifications-

Amend: 15 CFR 922.73(b):

(b) **Marine conservation area.** Unless prohibited by [50 CFR part 660](#) (Fisheries off West Coast States), the following activities are prohibited and thus unlawful for any person to conduct or cause to be conducted within the **specified** marine conservation areas described in appendix C to this subpart, except as specified in paragraphs (b) through (e) of [§ 922.72](#):

**(b.1). Anacapa Island Marine Conservation Area**

(1) Harvesting, removing, taking, injuring, destroying, collecting, moving, or causing the loss of any Sanctuary resource, or attempting any of these activities, except:

(i) Recreational fishing for pelagic finfish; or

(ii) Commercial and recreational fishing for lobster.

(2) Possessing fishing gear on board a vessel, except legal fishing gear used to fish for lobster or pelagic finfish, unless such gear is stowed and not available for immediate use.

(3) Possessing any Sanctuary resource, except legally harvested fish.

**(b.2) Gull Island (Santa Cruz Island) Marine Conservation Area**



(1) Harvesting, removing, taking, injuring, destroying, collecting, moving, or causing the loss of any Sanctuary resource, or attempting any of these activities, except:

- (i) Recreational fishing for highly migratory species; or
- (ii) Commercial fishing for highly migratory species by hook-and-line and harpoon. DSBG is allowed inside of federal waters.
- (iii) Possession of coastal pelagic species.

(2) Possessing fishing gear on board a vessel, except legal fishing gear used to fish for highly migratory species, unless such gear is stowed and not available for immediate use.

(3) Possessing any Sanctuary resource, except legally harvested fish.

**(b.3) Footprint Marine Conservation Area**

(1) Harvesting, removing, taking, injuring, destroying, collecting, moving, or causing the loss of any Sanctuary resource, or attempting any of these activities, except:

- (i) Recreational fishing for highly migratory species; or
- (ii) Commercial fishing for highly migratory species by hook-and-line and harpoon. DSBG is allowed inside of federal waters.
- (iii) Possession of coastal pelagic species.

(2) Possessing fishing gear on board a vessel, except legal fishing gear used to fish for highly migratory species, unless such gear is stowed and not available for immediate use.

(3) Possessing any Sanctuary resource, except legally harvested fish.

**(b.4) Santa Barbara Island Marine Conservation Area**

(1) Harvesting, removing, taking, injuring, destroying, collecting, moving, or causing the loss of any Sanctuary resource, or attempting any of these activities, except:

- (i) Recreational fishing for highly migratory species; or
- (ii) Commercial fishing for highly migratory species by hook-and-line and harpoon. DSBG is allowed inside of federal waters.
- (iii) Possession of coastal pelagic species.

(2) Possessing fishing gear on board a vessel, except legal fishing gear used to fish for highly migratory species, unless such gear is stowed and not available for immediate use.

(3) Possessing any Sanctuary resource, except legally harvested fish.

Amend: Appendix B to Subpart G of Part 922 (Marine Reserve Boundaries) for 15 CFR 922

B.4, B.5, B.6, B.7, and B.8.

**B.4. Gull Island (Santa Cruz Island) Marine Reserve**

~~The Gull Island Marine Reserve (Gull Island) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B-4, and the following textual description.~~

~~The Gull Island boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary then follows the 3 nmi~~



~~State boundary westward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.~~

~~Table B-4—Gull Island (Santa Cruz Island) Marine Reserve~~

<del>Point</del>	<del>Latitude</del>	<del>Longitude</del>
<del>1</del>	<del>33.86195 ° N</del>	<del>119.80000 " W</del>
<del>2</del>	<del>33.86195 ° N</del>	<del>119.88330 " W</del>
<del>3</del>	<del>33.92690 ° N</del>	<del>119.88330 " W</del>
<del>4</del>	<del>33.90700 ° N</del>	<del>119.80000 " W</del>
<del>5</del>	<del>33.86195 ° N</del>	<del>119.80000 " W</del>

**B.4. Scorpion (Santa Cruz Island) Marine Reserve**

The Scorpion Marine Reserve (Scorpion) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B-5, and the following textual description.

The Scorpion boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary then follows the 3 nmi State boundary westward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.

~~Table B-4—Scorpion (Santa Cruz Island) Marine Reserve~~

<del>Point</del>	<del>Latitude</del>	<del>Longitude</del>
<del>1</del>	<del>34.15450 ° N</del>	<del>119.59170 " W</del>
<del>2</del>	<del>34.15450 ° N</del>	<del>119.54670 " W</del>
<del>3</del>	<del>34.10140 ° N</del>	<del>119.54670 " W</del>
<del>4</del>	<del>34.10060 ° N</del>	<del>119.59170 " W</del>
<del>5</del>	<del>34.15450 ° N</del>	<del>119.59170 " W</del>

**B.6. Footprint Marine Reserve**



The Footprint Marine Reserve (Footprint) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B-6, and the following textual description.

The Footprint boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary follows the 3 nmi State boundary northeastward and then southeastward until it intersects the line defined by connecting Point 4 and Point 5 along a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.

Table B-6—Footprint Marine Reserve

Point	Latitude	Longitude
1	33.90198 ° N	119.43311 " W
2	33.90198 ° N	119.51609 " W
3	33.96120 ° N	119.51609 " W
4	33.95710 ° N	119.43311 " W
5	33.90198 ° N	119.43311 " W

**B.5. Anacapa Island Marine Reserve**

The Anacapa Island Marine Reserve (Anacapa Island) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B-7, and the following textual description.

The Anacapa Island boundary extends from Point 1 to Point 2 along a straight line. It then extends to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary follows the 3 nmi State boundary westward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.

Table B-5—Anacapa Island Marine Reserve

Point	Latitude	Longitude
1	34.08330 ° N	119.41000 " W
2	34.08330 ° N	119.35670 " W
3	34.06450 ° N	119.35670 " W
4	34.06210 ° N	119.41000 " W



Point	Latitude	Longitude
5	34.08330 ° N	119.41000 " W

~~B.8. Santa Barbara Island Marine Reserve~~

~~The Santa Barbara Island Marine Reserve (Santa Barbara) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B–8, and the following textual description.~~

~~The Santa Barbara boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary follows the 3 nmi State boundary northeastward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line. The boundary then extends from Point 5 to Point 6 along a straight line.~~

~~Table B–8—Santa Barbara Island Marine Reserve~~

Point	Latitude	Longitude
1	33.36320 ° N	118.90879 " W
2	33.36320 ° N	119.03670 " W
3	33.41680 ° N	119.03670 " W
4	33.47500 ° N	118.97080 " W
5	33.47500 ° N	118.90879 " W
6	33.36320 ° N	118.90879 " W

Amend: Appendix C to Subpart G of Part 922 (Marine Conservation Area ~~Boundary~~ **Boundaries**) for 15 CFR 922

**C.2. Gull Island (Santa Cruz Island) Marine Conservation Area**

The Gull Island Marine Conservation Area (Gull Island) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B–4, and the following textual description.

The Gull Island boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary then follows the 3 nmi State boundary westward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.

Table B–4—Gull Island (Santa Cruz Island) Marine Conservation Area

Point	Latitude	Longitude
1	33.86195 ° N	119.80000 " W



Point	Latitude	Longitude
2	33.86195 ° N	119.88330 " W
3	33.92690 ° N	119.88330 " W
4	33.90700 ° N	119.80000 " W
5	33.86195 ° N	119.80000 " W

### C.3. Footprint Marine Conservation Area

The Footprint Marine Conservation Area (Footprint) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B–6, and the following textual description.

The Footprint boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary follows the 3 nmi State boundary northeastward and then southeastward until it intersects the line defined by connecting Point 4 and Point 5 along a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line.

Table B–6—Footprint Marine Conservation Area

Point	Latitude	Longitude
1	33.90198 ° N	119.43311 " W
2	33.90198 ° N	119.51609 " W
3	33.96120 ° N	119.51609 " W
4	33.95710 ° N	119.43311 " W
5	33.90198 ° N	119.43311 " W

### C.4. Santa Barbara Island Marine Conservation Area

The Santa Barbara Island Marine Conservation Area (Santa Barbara) boundary is defined by the 3 nmi State boundary, the coordinates provided in Table B–8, and the following textual description.

The Santa Barbara boundary extends from Point 1 to Point 2 along a straight line. It then extends along a straight line from Point 2 to the 3 nmi State boundary where a line defined by connecting Point 2 and Point 3 with a straight line intersects the 3 nmi State boundary. The boundary follows the 3 nmi State boundary northeastward until it intersects the line defined by connecting Point 4 and Point 5 with a straight line. At that intersection, the boundary extends from the 3 nmi State boundary to Point 5 along a straight line. The boundary then extends from Point 5 to Point 6 along a straight line.

Table B–8—Santa Barbara Island Marine Conservation Area

Point	Latitude	Longitude
1	33.36320 ° N	118.90879 " W
2	33.36320 ° N	119.03670 " W
3	33.41680 ° N	119.03670 " W
4	33.47500 ° N	118.97080 " W
5	33.47500 ° N	118.90879 " W
6	33.36320 ° N	118.90879 " W





Links to data sources:

1. CDFW Marine Species Portal: <https://marinespecies.wildlife.ca.gov/> for Bluefin Tuna, Swordfish, and Striped Marlin
2. NOAA Species Directory: <https://www.fisheries.noaa.gov/species-directory> for North Pacific Swordfish and Pacific Bluefin Tuna
3. PIER papers: <https://pier.org/resources/publications/> for swordfish migratory movements DOI: 10.1111/fog.12461, and DOI:10.1111/j.1365-2419.2010.00543.x
4. WCPFC stock analysis: <https://www.wcpfc.int/current-stock-status-and-advice> for Pacific Bluefin Tuna, North Pacific Swordfish, North Pacific Striped Marlin
5. Oceana DSBG Sustainability Article: <https://usa.oceana.org/press-releases/new-day-dawns-for-whales-sea-turtles-and-sustainable-swordfish-fishing-off-californias-shores/>
6. PEW DSBG Sustainability Article: <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/06/22/us-approves-sustainable-way-to-catch-swordfish-off-west-coast>
7. MPA regional info: <https://californiampas.org/mpa-regions/north-coast-region>
8. Channel Islands Network info (NOAA): <https://channelislands.noaa.gov/about/maps.html#:~:text=Channel%20Islands%20National%20Marine%20Sanctuary%20protects%201%2C470%20square%20miles%20of,Miguel%2C%20and%20Santa%20Barbara%20islands>
9. MPA Master Plan hub: <https://wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan>

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

- Would give local charter businesses better access to local Northern Channel Island banks, helping business and reducing fuel costs and emissions spent traveling further offshore.
- Would significantly assist the commercial swordfish industry, returning legacy harpoon fishery waters, and allowing for more sustainable, domestic product to be landed by harpoon and DSBG.

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

None to my knowledge. |

**SECTION 3: FGC Staff Only**

Date received: |11/22/23. |

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ |

Meeting date for FGC consideration: \_\_\_\_\_ |

FGC action:



State of California – Fish and Game Commission

**PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE**

FGC 1 (Rev 06/19) Page 35 of 35

- Denied by FGC
- Denied - same as petition  \_\_\_\_\_  
Tracking Number
- Granted for consideration of regulation change

**From:** Glen Spain <fish1ifr@aol.com>  
**Sent:** Wednesday, November 22, 2023 12:20 PM  
**To:** FGC <FGC@fgc.ca.gov>  
**Cc:** [REDACTED]  
**Subject:** Petition for Rulemaking and Fish & Game Commission Regulation Changes

California Fish & Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

PO Box 944209  
Sacramento, CA 94244-2090

Via Email: [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)

To the Commission Staff:

Enclosed is the Petition of Mr. Richard Ogg, who is a Board member of the Pacific Coast Federation of Fishermen's Associations (PCFFA), for a change in Fish & Game Commission regulations, as explained in the Petition attached. The document attached is in PDF format for your convenience.

**Both PCFFA and its sister organization, Institute for Fisheries Resources (IFR), carefully considered this Petition and both organizations fully support this Petition.** It makes sense to provide salmon trolling opportunities in these areas, particularly since salmon trolling (which is conducted far above any sea bottom habitat areas) has NO IMPACT on any bottom habitat areas, is a highly selective barbless hook fishery, and only captures salmon that are merely very temporarily migrating through these regions and (being anadromous) are not directly dependent in any way on these MPA ocean ecosystems for their spawning and the vast majority of their rearing.

Please add PCFFA/IFR to the email response list for the review of this Petition, along with Mr. Ogg at his email noted in the Petition. PCFFA/IFR's email is the origin of this email and is: [fish1ifr@aol.com](mailto:fish1ifr@aol.com).

Thanks for your consideration! We are also today mailing this Petition, along with a copy of this email, to the Commission via first class US surface mailing as well, to make sure that this Petition of properly and timely filed.

=====  
Glen H. Spain, J.D., Acting Executive Director  
Pacific Coast Federation of Fishermen's Associations (PCFFA)  
and the Institute for Fisheries Resources (IFR)  
PO Box 11170, Eugene OR 97440-3370  
Phone: 541-689-2000 Email: [fish1ifr@aol.com](mailto:fish1ifr@aol.com)  
=====



Tracking Number: (2023-16MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain the necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: [Richard \(Dick\) Ogg- Bodega Bay Fisherman's Marketing Association](#)

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: [Authority: Sections 200, 205\(c\), 265, 399, 1590, 1591, 2860, 2861, and 6750, Fish and Game Code, and Sections 36725\(a\) and 36725\(e\), Public Resources Code.](#)**

### **3. Overview (Required) - Summarize the proposed changes to regulations: [Allow the commercial take of salmon by troll in the following State Marine Reserves \(SMRs\) by converting them to State Marine Conservation Areas \(SMCAs\):](#)**

- 1) [Stewarts Point Marine Reserve](#)
- 2) [Bodega Head State Marine Reserve](#)

### **4. Rationale (Required) - Describe the problem and the reason for the proposed change: [The commercial salmon fishery has been identified as being at risk due to climate change. The Landings have declined significantly during the last decade. The recent drought precipitated the closure of the 2023 salmon season, with additional season closures likely. This resulted in a federal fishery disaster declaration. The existing Marine Protection Areas \(MPAs\) create problematic fishing practices by creating obstacles to efficient trolling around Bodega Head and Stewarts Point Reserves, forcing inefficient fishing and preventing access to otherwise productive trolling grounds. Allowing commercial salmon trolling in these two MPAs will help with efficiency and ultimately resiliency in the fishery.](#)**



This proposal is consistent with goals and objectives 1.1, 1.5, 2.4, and 5.1 identified in the 2016 Master Plan for Marine Protected Areas (MPA), along with the identified design considerations relative to climate change impacts and preservation of diverse commercial uses.

Our proposal is consistent with the Master Plan by maintaining protections under an SMR while allowing commercial salmon harvest by troll, thus mitigating some of the negative impacts experienced by the fishery when the MPA network was established. The Master Plan also states that the MPA network should consider several factors, including the potential impacts of climate change and the diversity of commercial fishing. The proposal is also consistent with the comprehensive recommendations and science guidelines of the California Department of Fish and Wildlife’s (CDFW) Decadal Management Review, which acknowledged inadequate engagement with the fishing industry and the continuing need for adaptive management under a changing climate. CDFW’s JEDI Governance recommendation #6(c) clearly states the need to explore innovative approaches to engage the fishing industry in MPA research and management.

Our proposal was discussed with the local collaborative, and it was interested in more information on the issue at Stewarts Point Reserve but was not supportive of the proposal at Bodega Head Reserve.

The commercial salmon fishery has a long track record of working with CDFW on research and management issues and is ready to continue that partnership using the recommended changes to the MPA network listed in this petition as an important step in fulfilling the goals of the Marine Life Protection Act and mandates in the Fish and Game Code to support sustainable commercial fisheries.

The science developed to date indicates that fishing for pelagic fishes (including salmon) in SMCAs does not appear to affect their performance compared to SMRs where no fishing is allowed (Carr et.al., 2021). In accordance with the adaptive management elements of the Master Plan, decadal review, and DFW recommendations, we ask that this petition be collaboratively evaluated by all stakeholders through the rulemaking process of the FGC with respect to improving the resiliency of both the commercial urchin fishery and kelp forests to climate change.

## **SECTION II: Optional Information**

**5. Date of Petition:** November 20

**6. Category of Proposed Change**

Sport Fishing

Commercial Fishing

Hunting

Other, please specify: [\[Click here to enter text.\]](#)



7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

X Amend Title 14 Sections:

- 632(b)(34) ~~Stewarts Point Marine Reserve Conservation Area~~
  - B Subsection 632(a)(1)(AC) apply, with the following specified exception: the commercial take of salmon by troll is allowed
- 632(b)(39) ~~Bodega Head State Marine Reserve Conservation Area~~
  - B Subsection 632(a)(1)(AC) apply...Fish and Game Code and the commercial take of salmon by troll is allowed

Add New Title 14 Section(s): [Click here to enter text.]

X Repeal Title 14 Section(s): [ ]

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.]

Or X **Not applicable.**

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: **2025**

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports, and other documents:

- **Salmon Enhanced Status Report** (<https://marinespecies.wildlife.ca.gov/>)
- **California Marine Life Protection Act Master Plan for Marine Protected Areas 2016** (<https://wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan>)
- **California's Marine Protected Area Network Decadal Management Review 2022** (<https://wildlife.ca.gov/Conservation/Marine/MPAs/Management/Decadal-Review>)
- **Monitoring and Evaluation of Kelp Forest Ecosystems in the MLPA Marine Protected Area Network (Carr et.al.2021)** ([Report](#))
- **MPA Collaborative Network** (<https://www.mpacollaborative.org/blog/collaborative-network-guidance-for-mpa-petitions>) Collaborative Vetted Regulation Recommendations)

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: **There are no known negative economic or fiscal impacts of the proposed changes. It is expected that there will be some positive economic benefits by opening formally closed areas to commercial salmon fishing by troll.**

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text. ]





**SECTION 3: FGC Staff Only**

Date received: [\[Click here to enter text.\]](#) 11/22/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ ]

Meeting date for FGC consideration: \_\_\_\_\_ ]

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_ ]
- Granted for consideration of regulation change

Tracking Number



Tracking Number: (2023-18MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Greg Helms

Address:

Telephone number:

Email address: [ghelms@oceanconservancy.org](mailto:ghelms@oceanconservancy.org)

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code..

**3. Overview (Required)** - Summarize the proposed changes to regulations: This Petition requests 7 MPA network refinements representing consensus recommendations of the Santa Barbara Channel MPA Collaborative. The refinements address MLPA governance and management pillars aimed at enhanced compliance/enforceability, regulatory clarity, and MPA design guidelines.

**4. Rationale (Required)** - Describe the problem and the reason for the proposed change: The 7 MPA refinements are proposed to improve and refine MPAs and/or MPA management in Santa Barbara and Ventura Counties based on Santa Barbara Channel MPA Collaborative Members' on-the-ground/water experience as well as the findings of the MLPA Decadal Management Review. MPA outcomes are closely linked with their core management pillars including research and monitoring; education and outreach; policy and permitting; and enforcement and compliance. The 7 proposed refinements in this petition are described in the attached narrative, and appear under Santa Barbara/Ventura in the spreadsheet submitted by the Collaborative Network and linked [here](#). Column D of the spreadsheet summarizes the concern/problem addressed and column G provides the justification for the proposed refinement.



**SECTION II: Optional Information**

5. **Date of Petition:** [November xx, 2023.]

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify: [MPAs, Section 632.]

7. **The proposal is to:** (To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)

- Amend Title 14 Section(s): [[Westlaw regulations.](#) ]
- Add New Title 14 Section(s): [Click here to enter text.]
- Repeal Title 14 Section(s): [Click here to enter text.]

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.]

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: [See attached narrative and rationale.]

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: [These adjustments likely pose minimal economic impact and would fall well within the range evaluated in the original CEQA document.]

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text. ]

**SECTION 3: FGC Staff Only**

Date received: [11/28/2023 ]

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number



Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ |

Meeting date for FGC consideration: \_\_\_\_\_ |

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_  
Tracking Number
- Granted for consideration of regulation change



State of California – Fish and Game Commission

**PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE**

FGC 1 (Rev 06/19) Page 4 of 4

Petition for MPA refinements  
Submitted by Greg Helms  
Co-chair, Santa Barbara Channel MPA Collaborative

Background and Overall Rationale: The Santa Barbara Channel MPA Collaborative (SBC Collaborative) is composed of members from organizations and agencies aiding management and community engagement with MPAs in Santa Barbara and Ventura, CA. SBC Collaborative actively engages in MPA outreach and monitoring, gathering community input, and conducting projects to increase MPA awareness and compliance, visitation, and protection. SBC Collaborative engaged closely with the Decadal Management Review, considered members' on-the-ground experiences of local MPAs, convened to discuss each MPA in the Santa Barbara Channel Region in the context of the Decadal Review, and offers the following 7 MPA refinements recommended by consensus (consensus refers to all present during the in-person meeting of the SBC Collaborative on July 11, 2023) for consideration by the California Fish & Game Commission (FGC). Each is intended to enhance MPA success in attaining the goals of the Marine Life Protection Act (MLPA); discussion of each recommendation draws from guidance provided by the FGC Marine Resource Committee at the 2023 DMR convening and the follow-up MRC meeting on July 20, 2023.

**Consensus recommendations:**

1. Vandenberg SMR: Create a narrow alongshore SMCA allowing shore fishing for finfish by hook and line only.

Guiding rationale: Maintain contribution to MLPA goals 1-4, 6 while addressing equity concerns caused by consumptive activity allowed nearby within Vandenberg SMR.

Discussion: Vandenberg SMR is a core State Marine Reserve serving to anchor the MLPA Central Coast Study Region size, spacing and habitat representation goals; the SMR includes coastline along Vandenberg Space Force Base and at Surf Beach, the key coastal access point along an otherwise remote coastal area for residents in and around Lompoc, CA. Recreation at Surf Beach is constrained by seasonal snowy plover conservation regulations. An equity concern has arisen due to the SMR restrictions not being applied to Vandenberg Space Force personnel and dependents, in contrast to non-military residents at nearby Surf Beach who must comply. Petitioner believes this inequity can best be resolved by equally enforcing no-take regulations throughout this SMR, but that such enforcement may be infeasible. Therefore, it is recommended that hook and line only fishing from shore be allowed within a newly established SMCA, to consist of a 100-meter zone inshore of the existing SMR allowing hook and line fishing for finfish only along the coastal dimension of the existing MPA shape. The new SMR/SMCA regulations would apply and be enforced equitably across military and civilian populations.

2. Point Conception SMR: Provide continued support for Marine Monitor (M2) radar, ground-truthing, and agency coordination

Guiding rationale: Governance - To improve compliance and/or enforceability; MLPA Goal 5

Discussion: Point Conception anchors the northern reaches of the South Coast Study Region MPA network, protecting remote coastal and offshore habitats. Its remoteness, as well as extensive coastal



private land, pose access challenges for traditional enforcement by CDFW wardens. To address this, radar surveillance systems have been successfully employed to aid monitoring of the SMR. Collaborative members report M2 radar systems are providing crucial use data for the MPA but note high vessel activity that is a potential cause for concern. SBC collaborative recommends continued support for the M2 radar system to continue monitoring vessel activity within the SMR, and for ground-truthing and agency coordination to distinguish recreational (surf) visitation from potential MPA violations. California's MPA network includes several remote MPAs for which traditional enforcement patrols may not be adequate to ensure compliance; the Point Conception SMR M2 radar system may serve as an important model for addressing these challenges.

3. Kashtayit SMCA: Refine regulatory language to: "Recreational take of finfish, invertebrates, and giant kelp is allowed."

Guiding Rationale: Governance - Simplifies regulatory language and enhances public understanding.

Discussion: Kashtayit SMCA is a small SMCA aimed at cultural resource protection and education. Kashtayit SMCA is located along the highly visited Gaviota State Beach. Members of the SBC Collaborative (including enforcement partners) report visitors, along with those working to improve compliance, have difficulty interpreting the existing regulatory language for the SMCA due to its length and parenthetical exceptions. The recommended refinement would include and protect most species intended for protection with much greater clarity and public understanding. An additional recommendation is that State officials help collaborate locally for repairs to the Gaviota Pier to aid public access and safety in and around Kashtayit SMCA.

4. Campus Point No-Take SMCA: Use red, rather than purple, to identify this MPA on maps

Guiding rationale: Governance – enhances public understanding.

Discussion: On- and offshore hook and line fishing continue to be observed by SBC Collaborative participants, suggesting greater compliance with no-take regulations can be achieved. Our recommendation here is to depict this no-take SMCA in red, consistent with the other no-take MPAs and likely a clearer indication that the MPA is effectively a State Marine Reserve to the public.

5. San Miguel Island Special Closure: Consider removal of pre-existing special closure

Guiding rationale: Simplifies regulatory language; MPA design guidelines

The San Miguel Island Special Closure was originally designed to reduce disturbance to pinniped rookeries between Castle Rock and Judith point and was retained at the time of MLPA South Coast MPA design. The closure entails a seasonal exemption for sea urchin fishing and includes lengthy language pertaining to two separate regulations. With a NMFS marine mammal station equipped with M2 radar onsite and large, stable pinniped populations present in this zone, we encourage the State to consider whether the Special Closure remains a necessary sub-component of MPA design offshore western San Miguel Island.

6. Anacapa Island Special Closure – Revise to allow vessel access/landing at Frenchy's cove

Guiding rationale: Governance – accounts for Regional Stakeholder Group (RSG) intent while addressing non-consumptive access concern.

Discussion: In establishing an SMR/SMCA complex at Anacapa Island, the RSG retained two existing Special Closures designed to protect seabirds and brown pelicans, respectively. Aligning the boundaries of new MPA complex with those of the two special closures has interfered with the intended allowance for vessels to land safely at Frenchy's Cove. It is recommended that this intent be more effectively secured by including an exemption in the Special Closure for traditional vessel access and landing.

7. Anacapa Island Special Closure: Reassess and consider removing the full-island special closure

Guiding rationale: Simplifies regulatory language; MPA design guidelines

Discussion: Anacapa Island, as discussed above, has a SMR/SMCA complex overlain over one full-island, depth-based seabird protection closure and another special closure designed to protect brown pelicans. The overlapping conservation zones are visually confusing and, in particular, the broader seabird closure is based on depth along a steep, cliffside seabed area that is difficult to comply with and enforce. Given the extensive MPA and closure complex established to protect marine life including seabirds, SBC Collaborative recommends reassessment of the full-island closure and consideration of its removal as appropriate.



Tracking Number: ( \_2023-19MPA\_ )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Sam Cohen, Esq. Santa Ynez Band of Chumash Mission Indians |  
100 Via Juana Road  
PO Box 517 Santa Ynez, California 93460  
Telephone number: [REDACTED]  
Email address: [scohen@chumash.gov](mailto:scohen@chumash.gov)

**2. Rulemaking Authority (Required)** - Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

**3. Overview (Required)** - This attached Summary for this Petition describes a proposed additional California-Chumash co-management SMCA that is referred to as "Chitqawi" – the northern most coastal Chumash village site of the territory traditionally inhabited by the diverse Chumash peoples. The proposed new regulations are as follows:

(B) Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:

1. The recreational take of finfish [subsection 632(a)(2)], invertebrates except rock scallops and mussels by hand harvest is allowed.
2. Take pursuant to activities authorized under subsection 632(b)(97)(C) is allowed.
3. The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) of these regulations and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians. |

**4. Rationale (Required)** - To ensure 30% of California waters are fully protected by 2030 and to foster Tribal engagement and co-management of MPAs, this Petition submitted by the Santa Ynez Band of Chumash Indians (SYBCI) recommends an additional MPA for the Central Coast Region MPA network. There is no Tribal MPA for co-management within this regional network.



The SYBCI are co-managers of four south coast SMCAs. The Tribe is recommending the adoption of a new MPA between Morro Bay and Cambria for the Central Coast Region. Describe the problem and the reason for the proposed change: [Click here to enter text.](#)

**SECTION II: Optional Information**

5. **Date of Petition:** [November 9, 2023](#)

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify: [MPAs, Section 632](#)

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- Amend Title 14 Section(s): [Westlaw regulations.](#)
- Add New Title 14 Section(s): [Click here to enter text.](#)
- Repeal Title 14 Section(s): [Click here to enter text.](#)

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: [At the discretion of the Commission.](#)

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: [Please see attached.](#)

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: [Unknown.](#)

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

[Please see attached.](#)

**SECTION 3: FGC Staff Only**

Date received: [11/29/2023](#)

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number



Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ |

Meeting date for FGC consideration: \_\_\_\_\_ |

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_  
Tracking Number
- Granted for consideration of regulation change



**SUMMARY INFORMATION FOR PETITION TO THE CALIFORNIA FISH AND  
GAME COMMISSION FOR REGULATORY CHANGE**

**A Petition to Add *Chitqawi* SMCA to the Central Coast MPA Network**

**Submitted By**

Sam Cohen, Esq.  
Government Affairs & Legal Specialist  
**Santa Ynez Band of Chumash Mission Indians**  
PO Box 517 | Santa Ynez, CA 93460  
805.688.7997 Office

Date: November 11, 2023

**Overview.** California has begun its first 10-year review of the state’s marine protected areas (MPAs) network. The State’s first decadal management review of the MLPA will be used to inform the future of marine life protection in California waters.

Since the adoption of State MPAs, Governor Gavin Newsom laid out a goal to protect 30% of the land, water, and marine area over the decade. The current level of marine area designated in some type of MPA in each region is far less than the goal to protect 30% of California marine waters. Improvements to the existing MPA network are warranted. Changes to the existing MPA Network are based on the statutory authority of the Fish and Game Commission to take the action requested (Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code).

California should add marine area to the existing MPA Network for two primary reasons:

- (i) To ensure the designed benefits of marine reserves an insurance factor<sup>1</sup> is needed to protect marine life and habitat from the synergistic impacts of anthropogenic disturbance events. Marine life is impacted by ecosystem disturbance associated with short term and long-term factors associated with climate disturbance, such as the warming of sea surface temperature, among other anthropogenic pressures.<sup>2</sup> An insurance factor, such as increasing the scale of MPA networks, may provide a protective measure to marine life impacted by anthropogenic impacts. Given the ten-year history of the benefits of MPAs within State waters, the Commission should consider adding other MPAs to the existing network given evidence of climate disturbance on marine life. For example, there is evidence of large areas of warming of sea surface temperature and associated ecosystem disturbance within the California Current.<sup>3</sup>
- (ii) To strengthen the role of the Tribes in co-management and monitoring efforts and marine education activities throughout the marine region, additional Tribal MPAs are warranted today.<sup>4</sup> Additional Tribal MPAs should be designed within the existing MPA networks to ensure that Tribal nations are integrated and engaged in marine life protection and education efforts. Additional designation of Tribal MPAs is also

---

<sup>1</sup> Allison, Gary W., Steven D. Gaines, Jane Lubchenco, And Hugh P. Possingham, Ensuring Persistence of Marine Reserves: Catastrophes Require Adopting an Insurance Factor, *Ecological Applications*, 13(1) Supplement (2003): S8–S24.

<sup>2</sup> Smith, J. G., Free, C. M., Lopazanski, C., Brun, J., Anderson, C. R., Carr, M. H., Claudet, J., Dugan, J. E., Eurich, J. G., Francis, T. B., Hamilton, S. L., Mouillot, D., Raimondi, P. T., Starr, R. M., Ziegler, S. L., Nickols, K. J., & Caselle, J. E. (2023). A marine protected area network does not confer community structure resilience to a marine heatwave across coastal ecosystems. *Global Change Biology*, 29, 5634–5651. <https://doi.org/10.1111/gcb.16862>

<sup>3</sup> Rodríguez-Rodríguez, D., and Javier Martínez-Vega. (2022) Ecological effectiveness of marine protected areas across the globe in the scientific literature. *Advances in Marine Biology* 92: 129-153 provide a detailed empirical review of the scientific literature on the ecological benefits of marine protected areas.

<sup>4</sup> McGinnis, M.V. and R. Cordero. *Tribal Marine Protected Areas: Protecting Maritime Ways and Tribal Practices*. A White Paper produced by the Wishtoyo Foundation. 2004.

warranted given recent California and federal guidelines and initiatives that support Tribal co-management and collaborative natural resource management and planning.



To ensure 30% of state waters are fully protected by 2030 and to foster Tribal engagement and co-management of MPAs, this Santa Ynez Band of Chumash Indian's (SYBCI) Petition emphasizes the need to designate an additional Tribal co-management SMCA for the Central Coast Region. This Petition recommends that the Central Coast Region MPA network (identified in the map below)<sup>5</sup> should be strengthened to support an additional Chumash SMCA. There is no such Tribal MPA for co-management within this regional network. This Petition includes a general characterization of the proposed new MPA including location and regulatory information for the Tribal co-management of *Chitqawi*<sup>6</sup> for the region.

**Rationale.** MPAs were established pursuant to the Marine Life Protection Act (MLPA) of 1999, and through a collaborative public process known as the MLPA Initiative process, which involved regional stakeholder groups such as

commercial and recreational anglers, tribal and government representatives, educators, researchers, and conservationists. Environmental Impact Reports were prepared for each of the four study areas, including the Central Coast Region (Pigeon Point to Point Conception). The MPA network for the Central Coast Region was approved by the Commission in 2007.

California's first decadal management review of the MLPA began in 2022. One goal of the decadal management review is for the California Department of Fish and Wildlife (CDFW) to evaluate and adaptively manage the established MPA Network. The regional networks that were established by the State included input from participants in collaborative planning efforts

<sup>5</sup> The map is from California Central Coast Marine Protected Areas. Baseline Data Collection Summary Report. Publication No. T-068 (December 2008). California Sea Grant College Program University of California, San Diego. Page 2.

<sup>6</sup> For a discussion of Chitqawi and other central coast Chumash history, see Milliken, R. and John R. Johnson (March 2005). An Ethnogeography of Salinan and Northern Chumash Communities – 1769 to 1810. Available at:

[https://digitalcommons.csumb.edu/hornbeck\\_ind\\_1/4/?utm\\_source=digitalcommons.csumb.edu%2Fhornbeck\\_ind\\_1%2F4&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://digitalcommons.csumb.edu/hornbeck_ind_1/4/?utm_source=digitalcommons.csumb.edu%2Fhornbeck_ind_1%2F4&utm_medium=PDF&utm_campaign=PDFCoverPages)

including members of the scientific community, conservationists, and marine resource users. Scientific input on the benefits of MPAs to marine ecosystems contributed to these early MPA planning processes.

There was very little effort by the State during the early period of the implementation of the MLPA to consider Tribal MPAs in the network design. There was also a general lack of agreement to establish MPA networks that would allow for ecological resilience of marine systems given the range of impacts and pressures associated with climate change, including the rise of sea surface temperature. Since the adoption of the MPA Network, there has been considerable evidence on the benefits of traditional ecological knowledge and other indigenous experience in marine life protection. There is also more information on the importance of marine reserves as management tools to support marine life protection in a context of climate change.<sup>7</sup>

The SYBCI are co-managers of four existing SMCAs. There exists no Tribal co-managed MPA within this network. Following adoption of MPAs in the North Coast MPA Planning Process, a regulatory provision was adopted by the California Department of Fish and Game Commission (hereafter “Commission”) to provide exemptions from MPA-specific area and take regulations for individual federally recognized California Tribes (i.e., tribal exemptions), through a petition process by the Commission. Tribal take can be authorized in MPAs that overlap with areas of historic and/or current uses for gathering, ceremony, or harvest as reflected in a factual record of use provided by the Tribe. Amendments to MPA regulations were approved by the Commission for two different tribes: the Kashia Band of Pomo Indians (the Kashia) and the Santa Ynez Band of Chumash Indians (hereafter “SYBCI”). The SYBCI is the only federally recognized Chumash Tribe. The Chumash-California MPAs are Naples SMCA, *Kashtayit* SMCA, Point Dume SMCA, and Anacapa Island SMCA that provide Tribal exemptions.

The SYBCI is recommending the adoption of a new MPA between Morro Bay and Cambria for the Central Coast Region. This Petition refers to the additional California-Chumash co-management SMCA as “Chitqawi” – the northern most coastal Chumash village site of the territory traditionally inhabited by the diverse Chumash peoples. Chitqawi is a coastal village of the Chumash that exists on the northern boundary of the Morro Bay area (although the exact location is unknown). The proposed SMCA is named after the Chumash village. The Chumash word Chitqawi appears to have many different spellings.<sup>8</sup> An early reference to the village site was *Chotcagua*, which was probably a rancheria of 60 people encountered by the Portolá expedition at the north side of Morro Bay in the fall of 1769. A similar placename “Chotosilul,” recorded for a young couple baptized at Mission San Luis Obispo by Father Lasuén in 1800, may be synonymous with Chotcagua.

The proposed general location of Chitqawi SMCA is depicted in the Map (attached to this letter). The SYBCI is proposing a general location; the specific location is identified below but the Tribe

---

<sup>7</sup> *Scientific Guidance for Evaluating California’s Marine Protected Area Network*. A Report by the Ocean Protection Council Science Advisory Team Working Group and California Ocean Science Trust (June 2021).

<sup>8</sup> See Milliken, R., and John R. Johnson. *An Ethnogeography of Salinan and Northern Chumash Communities – 1769 to 1810*.

is willing to collaborate with State partners to consider this proposed SMCA in more detail given the state's interest in pursuing additional marine protective measures and pursuing offshore wind energy in the general area of Morro Bay.

There are many benefits to co-management of marine protected areas.<sup>99</sup> The benefits include:

- more appropriate rules and regulations that can respond rapidly to changing socio-ecological conditions.
- more effective and efficient enforcement due to increased legitimacy of the management structures.
- can increase equitable and fair use of resources; and
- can contribute to the empowerment and development of marginalized communities.

A general summary of the proposed new Chitqawi SMCA is as follows:

Location:

NW Corner:

120° 55' 07.93184807" W

35° 24' 07.27987892" N

NE Corner:

120° 52' 12.77783307" W

35° 24' 07.66583976" N

SE Corner:

120° 52' 14.60088309" W

35° 21' 40.65821016" N

SW Corner:

120° 55' 12.28543284" W

35° 21' 38.75344654" N

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed. The Morro Bay estuary is a “nursery of the sea” because numerous animal species rely on estuaries for nesting and breeding. Most of the fish and shellfish eaten in the United States, including salmon, herring, and oysters, complete at least part of their life cycles in estuaries. Many of these species were essential to the maintenance of Chumash culture and maritime society. Additional protective measures that extend beyond the MPAs designated within the Morro Bay estuary are warranted, including a SMCA in the marine area to the north of the estuary and within State marine waters.

Regulations: The Chumash requested the Commission to apply tribal take provisions in four SMCAs in Southern California that are within their areas of historic and/or current tribal use. With the proposed new Chitqawi SMCA, the Chumash would be allowed to fish with the use of hand-based equipment. The proposed exemptions would be consistent with allowing tribal take exemptions as currently defined in Title 14, §632(a)(11), which identify how a member of a federally recognized tribe may be authorized to take living marine resources from an MPA with site-specific take restrictions. Members taking living marine resources under this provision are

---

<sup>99</sup> *Moving toward Co-Management of the Proposed Chumash Heritage National Marine Sanctuary*. A Paper Prepared for the Santa Ynez Band of Chumash Indians. Michael Vincent McGinnis. Bioregional Planning Associates. (March 2022). The paper includes a review of the literature and technical reports on co-management marine life protection.



subject to current seasonal, bag, possession, gear and size limits in existing Fish and Game Code statutes and regulations of the Commission, except otherwise provided for in Title 14, §632(b). No member, while taking living marine resources pursuant to this section, may be assisted by any person who does not possess a valid tribal identification card and is not properly licensed to take living marine resources. Nothing in the proposed regulation is intended to conflict with, or supersede, any state or federal law regarding the take of protected, threatened, or endangered species. The box below includes language for the new regulations associated with the proposed Chitqawi SMCA:

(B) Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:

1. The recreational take of finfish [subsection 632(a)(2)], invertebrates except rock scallops and mussels by hand harvest is allowed.
2. Take pursuant to activities authorized under subsection 632(b)(97)(C) is allowed.
3. The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) of these regulations and shall comply with all other existing regulations and statutes:  
Santa Ynez Band of Chumash Indians.

Examples of species likely to benefit nearshore rockfish, squid, mussels, turban snails, limpets, among other species, including California halibut. There are benefits to marine life, including sea birds, which depend on the Morro Bay estuary during part of their life cycle, since the estuary is a nursery to the sea. The new SMCA will also provide for protection of a diverse area containing shallow hard and soft habitats, sandy bottom, and associated fish and invertebrate species adjacent to an existing estuary (that is part of the National Estuary Program).

#### Detailed Objectives:

- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals.
- Protect larval sources and enhance reproductive capacity of nearshore fish and invertebrate species.
- Provide protection to nearshore shelf rockfish species.
- Replicate within a state marine reserve the range of shallow habitats found at Cambria and White Rock SMCAs.
- Include and replicate sandy beaches, shallow hard and soft bottom habitat.

The SYBCI appreciates the opportunity to recommend the adoption of this new co-management MPA within the Central Coast Region network. We would welcome the opportunity to discuss this proposal in more detail with State partners during the planning effort that is currently underway for the State's first decadal management review of the MLPA and MPA Network.

# Proposed Chitqawi State Marine Conservation Area Santa Ynez Band of Chumash Indians

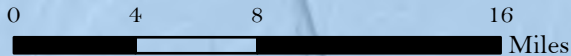


**Legend**

-  Proposed Chitqawi SMCA
-  State Marine Reserve
-  State Marine Conservation Area
-  State Marine Park
-  State Marine Recreational Management Area
-  Coast Line



- 1 **Piedras Blancas State Marine Reserve**
- 2 **Piedras Blancas State Marine Conservation Area**
- 3 **Cambria State Marine Conservation Area**
- 4 **White Rock (Cambria) State Marine Conservation Area**
- 5 **Morro Bay State Marine Reserve**
- 6 **Morro Bay State Marine Recreational Management Area**
- 7 **Point Buchon State Marine Reserve**
- 8 **Point Buchon State Marine Conservation Area**



# CO-MANAGEMENT OF CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS

**A White Paper Produced for The Santa Ynez Band of Chumash Indians  
with Funding Provided by the 7<sup>th</sup> Generation Advisors**



**MICHAEL VINCENT MCGINNIS, PhD**

Bioregional Planning Associates Sacramento California



## EXECUTIVE SUMMARY




Malibu's Paradise Cove August 19, 2011. Chumash paddle their tomol to meet the sailors in seven vaka moanas or sailing canoes from the Pacific Voyage. *Photo: M.V. McGinnis.*

ACROSS THE PACIFIC RIM, Tribal and Indigenous peoples are participating and co-managing marine protected areas. These co-management experiences provide opportunities and challenges to sustain Indigenous maritime practices. Co-management of marine protected areas can foster the integration of scientific and traditional ecological knowledge systems.

The planning effort under the Marine Life Protection Act (MLPA) of 1999 currently involves federally recognized Tribes. The goal of this report is to strengthen the opportunities to implement co-management of designated California-Chumash marine conservation areas located at Anacapa Island, Naples, Point Dume, and Kashtayit in southern California.

The implementation of the existing California-Chumash marine conservation areas is ongoing, and the State plans to review the progress of the MLPA in 2022. At that time changes may be made to the existing legislative framework, and other planning and decision-making changes



may be developed to foster further cooperation with Tribes and the State in the implementation of the MLPA and the co-management of designated marine conservation areas.

Based on a review of case study materials and the literature on co-management of protective areas, there are three major recommendations described in this report. First, a move from consultative co-management to collaborative management of designated California-Chumash marine conservation areas is warranted. Second, the following factors contribute to successful implementation of co-management of State-Tribal protected areas: public access to Tribal members to the protected area; the proximity to use of the marine area; the scientific baseline information on the ecology of the marine area; the historical level of customary marine resource use; the institutional capacity to monitor the designated MPA; the enforcement capacity and capability of partnering agencies and the Tribe of the MPA; and the available customary values and ecosystem goods and services provided by the MPA. These factors are used to analyze the four alternative California-Chumash marine conservation areas. Third, the Chumash should consider joining the Tribal Marine Stewards Network pilot program as the fifth partner in the collaborative network effort. There is currently no southern California Tribal partner in the pilot program. Two California-Chumash marine conservation areas may be appropriate to consider by the Chumash members given the analysis in this report -- the *Kashtayit* or Point Dume marine conservation areas. This recommendation is based on the historical use of customary practice by the Chumash of these areas; the proximity of use to these areas; the availability of public access to the sites; and other factors. Furthermore, the Chumash should consider ways to contribute as co-managers to the enforcement, education, information exchange, and the monitoring efforts to further the implementation of existing California-Chumash marine conservation areas.



## TABLE OF CONTENTS

INTRODUCTION.....	5
CHUMASH TEK AND THE SOUTHERN CALIFORNIA BIGHT.....	6
CO-MANAGEMENT PRINCIPLES.....	8
THE EARLY PHASE OF CO-MANAGEMENT OF CALIFORNIA-TRIBAL MPAS.....	12
<i>The Move toward Tribal Exemption.....</i>	12
<i>Co-management and the California Department of Fish and Wildlife.....</i>	14
<i>The Tribal Marine Stewards Pilot Program.....</i>	15
<i>Moving from Consultation Co-Management to Collaborative Co-Management.....</i>	16
CASE STUDIES OF CO-MANAGEMENT.....	18
AN ANALYSIS OF FOUR CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS .....	21
<i>Institutional Capacity and Capability to Monitor and Enforce.....</i>	22
REFERENCE .....	23

### List of Figures, Tables and Maps

Map 1. <i>Santarosae</i> Island before Sea-Level Rise.....	7
Figure 1. Co-Management Principles.....	9
Figure 2. Hybrid Management.....	10
Table 1. A Comparison of California and Tribal Management Systems.....	10
Figure 3. Types of Co-Management.....	11
Table 2. Alternative Analysis of California-Chumash Marine Conservation Areas.....	21

## INTRODUCTION

Me'pshumawish. Together we are making health, harmony, peace.

This study builds on a previous report entitled *Tribal Marine Protected Areas: Protecting Maritime Ways and Cultural Practices* (McGinnis 2004) produced for the *Wishtoyo Foundation*. At the time of publication of that report, the Marine Life Protection Act (MLPA) of 1999 did not include a statutory role for the Tribes in the collaborative network process (Sagkof et al. 2021). In their legal analysis of the changing role of the Tribes in the MLPA Berkeley and Williams (2019: 307) write:

Like the vast majority of California laws, the MLPA did not specifically address the rights and concerns of Indian tribes even though the California coast is Indian Country for many tribes. The failure of the legislature to acknowledge the centuries-long stewardship of coastal resources by Indian people, and the commencement of a resources-protection process that did not include tribes, resulted in initial opposition from Indian tribes. Many tribes feared the process would simply be the latest in a long history of state actions that risked the extinguishment of cultural practices. Instead, despite initial misunderstandings, the [marine protected area] MPA designation process elevated tribal engagement in state natural resource management and may be the catalyst for a fundamental shift in California's approach to tribal nations.

Requests to amend MPA regulations were submitted to the FGC by two different tribes: the Kashia Band of Pomo Indians and the Santa Ynez Band of Chumash Indians (hereafter, the Chumash). Tribal take was authorized in marine conservation areas that overlap with areas of historic and/or current uses for gathering, ceremony, or harvest as reflected in a factual record of use provided by a Tribe. There are four California-Chumash marine conservation areas that are located at sites in state waters at Anacapa Island, Naples, Point Dume, and *Kashtayit*.

The implementation of the existing California-Tribal marine conservation areas is ongoing. The first Decadal Management Review of the MLPA will take place in 2022, and will serve to review and potentially update four primary objectives of the MPA Management Program:

- Outreach and Education,
- Research and Monitoring,
- Enforcement and Compliance, and
- Policy and Permitting

The FWC will receive this review at their December 2022 meeting and decide whether to direct CDFW and its partners to pursue recommendations and identified next steps. At that time changes may be made to the existing legislative framework, and other planning and decision-making changes may be developed in cooperation with Tribes and California resource agencies to strengthen the co-management of designated marine conservation areas.

This paper begins with a description of the importance of traditional ecological knowledge or TEK and the Southern California Bight. Second, the paper characterizes the preliminary stages of implementation of the MLPA, and the changing role Tribes have in the collaborative network and decision-making. The paper reviews the co-management literature to suggest the need to move from *consultative* co-management to *collaborative* management of designated California-Chumash marine conservation areas.

In the last section, an analysis of the four alternative California-Chumash marine conservation areas is described. The alternative analysis is based on the following factors that contribute to successful co-management implementation:

- public access to Tribal members.
- the proximity to use of the marine area.
- the scientific baseline information on the ecology of the marine area.
- the historical level of customary marine resource use.
- the institutional capacity to monitor the designated MPA; and,
- the enforcement capacity and capability of partnering agencies and the Tribe of the MPA.

## **CHUMASH TEK AND THE SOUTHERN CALIFORNIA BIGHT**

Federally recognized tribes are not mere stakeholders in the MLPA decision-making and collaborative process. As co-managers of marine life protection and management, Tribes are sovereign nations. Traditional ecological knowledge (TEK) is essential to the maintenance of Tribal maritime culture and should be considered a key facet of the co-management process for California-Chumash marine conservation areas. Moreover, the public and resource agencies can learn from TEK.

TEK is based on the interaction between traditional or Indigenous culture and the ecosystems that Tribal peoples are irrevocably connected to. In *Sacred Ecology*, Fikret Berkes (2008) describes two primary aspects of TEK that are important to consider as California and the Tribes move forward in the implementation of the MLPA. First, TEK should be considered a “process” rather than a “content.” TEK is a process insofar as it changes and adapts to changes with ecosystems and cultural values. Second, there are benefits from a stronger integration and partnership between those who have TEK and scientific knowledge.

One hundred and forty-eight historic Chumash village sites have been identified from Malibu to San Luis Obispo, including eleven on Santa Cruz Island, eight on Santa Rosa Island, and two on San Miguel Island (Glassow 1995). The archaeological record shows that traditional Chumash maritime practices changed with a changing socio-ecological context. Mussel shells uncovered at excavated historical Chumash village sites indicate cyclical periods of species decline and rebound. These cyclical periods reflect changes in oceanographic setting of the California Current and the Southern California Bight, including short-term and longer-term (e.g., interdecadal oceanographic regime shifts) changes in sea surface temperature and associated changes in biogeography of fishes and invertebrates (Kennett 2005).


Moreover, archaeological and ethnographic evidence suggest that the periodic movement of Chumash village areas helped mediate socio-ecological changes in food security (Rick 2007). As in other traditional societies such as the Māori and other Pacific Islanders, Tribal peoples monitored and temporarily banned fishing certain species in order for their respective populations to reach a more stable abundance. Chumash coastal inhabitants would change their diet to reflect changes in their food availability. Seaweeds, kelps, and other marine plants helped sustain Chumash populations; marine plants were often an essential food source during times of food insecurity.

Chumash TEK served the needs of cultural adaptation to changes in the socio-ecology of the Southern California Bight. The northern Channel Islands area were one connected island called *Santarosae* that was located nine kilometers from the coastal mainland (depicted in Map 1). Large-scale sea-level rise during the late Pleistocene and early Holocene periods inundated nearshore areas in many parts of the world, producing drastic changes in local ecosystems and obscuring significant portions of the archeological record (Reeder-Myers et al. 2015). Sea level was about 80–85 meters lower than present at the time of the first known human Chumash occupation.

**Map 1. Santarosae Island before Sea-Level Rise**



Source: KCET, *California's Atlantis: The Lost Superisland of Santarosae*, available at: <https://www.kcet.org/shows/lost-la/californias-atlantis-the-lost-superisland-of-santarosae>



There were major consequences from sea level rise on traditional cultures and customary practices of coastal southern California (Kennett 2005). At the close of the Pleistocene and start of the Holocene, people in coastal California faced shrinking land, intertidal, and subtidal zones that were used for food gathering and other customary uses. This led to a decline in food security and migration of traditional cultures. Second, as a consequence of sea-level rise in the Southern California Bight, including the Channel Islands and the coastal mainland areas, the archaeological and cultural areas used near river and creek mouths, coastal beach areas, and other areas historically inhabited by the Chumash are submerged today (Glassow 1995).

In addition, European colonialization of [Alta] California significantly impacted Chumash society (Dartt-Newton and Erlandson 2006). As Dartt-Newton and Erlandson (2006: 419):

While natural environmental fluctuations may have played a role in the movement of Chumash people to the missions (particularly in the abandonment of Channel Island villages after AD 1810), we contend that colonial oppression and Spanish-induced environmental degradation were the chief culprits. No amount of scientific data can blunt the harsh realities of the mission period, when the Chumash and other California Indians died by the tens of thousands and most survivors were reduced to a humiliating slavery-like condition.

Overall, the socio-ecology of the islands and coastal mainland changed and so did the traditional and customary practices of the Chumash (Holmes and Johnson 1998). Chumash knowledge evolves with changes in living conditions. Chumash TEK sustained the diverse communities for thousands of years.

Tribes have a substantive role in the co-management of California-Tribal marine conservation areas. One hope is that Tribal TEK can contribute to the strengthening of the public's awareness of the sacred and customary values of coastal and marine ecosystems in California. These coastal and marine ecosystems have long been influenced by human activities and customary practices.

## **PRINCIPLES OF CO-MANAGEMENT**

Definitions of co-management focus on sharing management responsibility between government and stakeholders (Brown and Pomeroy 1998; Pomeroy 2001; Berkes et al. 2001). Borrini-Feyerabend et al. (2000) note that co-management is a situation in which two or more social actors negotiate, define, and guarantee amongst themselves an equitable sharing of the management functions, entitlements, and responsibilities for a marine area. In this case, the sharing of responsibility under the MLPA is between State agencies and the Chumash.

There are many benefits to co-management. The benefits include:

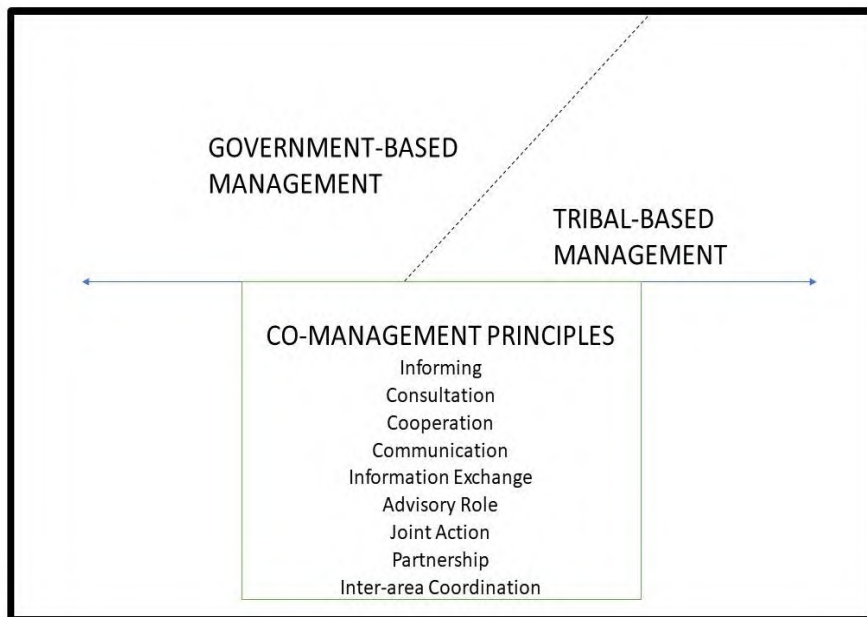
- improved management due to incorporation of better scientific evidence and TEK (Pinkerton 1989).
- more appropriate rules and regulations that can respond rapidly to changing socio-ecological conditions (Berkes et al. 2001; Ebbin 2002; Hernes et al. 2005).



- more effective and efficient enforcement due to increased legitimacy of the management structures (Berkes et al. 2001; Hanna 2003; Pinkerton and John 2008).
- can increase equitable and fair use of resources (Beierle and Cayford 2002; Borrini-Feyerabend et al. 2004; Coffey 2005); and
- can contribute to the empowerment and development of marginalized communities (Birner and Wittmer 2003; Hara and Nielsen 2003; Jentoft 2003; Pomeroy and Viswanathan 2003).

Figure 1 includes a general characterization of principles of co-management.

**Figure 1. Co-Management Principles**



There are three forms of co-management (depicted in Figure 2 below). The most common arrangement is described as “consultative co-management” whereby the resource agencies often consult with stakeholders or, in this case, Tribes (Brown and Pomeroy 1999). The term “collaborative co-management” connotes a stronger partnership where there is a sharing of authority and responsibility (Kurien 1988; McConney et al.1998). Third is “delegated co-management” that includes, but is not limited to, community-based management since national or state co-management structures are especially common in fisheries management (Jacobs 1998; McConney and Mahon 1998). Establishing successful co-management is seldom immediate. Like most participatory processes it takes time and careful attention to partnership building and strategic planning.

**Figure 2. Types of Co-Management**

<b>TRADITIONAL RESOURCE MANAGEMENT</b>	<b>TYPES OF CO-MANAGEMENT</b>
Government has the most control	<u>Consultative Co-Management</u> Government interacts with partners But makes all decision
	<u>Collaborative Co-Management</u> Government and the tribes work closely and share decisions
	<u>Delegated Co-Management</u> Government lets formally organized tribes make decisions

A collaborative co-management approach to marine life protection requires the integration of two systems of governance and management. Tribal and customary management and marine ecosystem-based management systems have contrasting goals, inferred social and ecological benefits, and spatial scales. A general comparison of the diverse systems of management is found in Table 1.

**Table 1. A Comparison of California and Tribal Management Systems**

<b>Management and Planning in the California MLPA</b>	<b>Tribal and Customary Management</b>
Use of Ecosystem-based Principles in Planning	Cyclical processes and periodic benefits
Science-based Decision-making	Emphasis on the cultivation of TEK
Collaborative & Stakeholder based Planning	Utilitarian goals
Often dominated by Biological Conservation Goals	Sensitive to Socio-economic and Socio-ecological transformation
Operates on larger scales (e.g., networks of small reserves)	Complex tenure systems may hinder larger-scale conditions

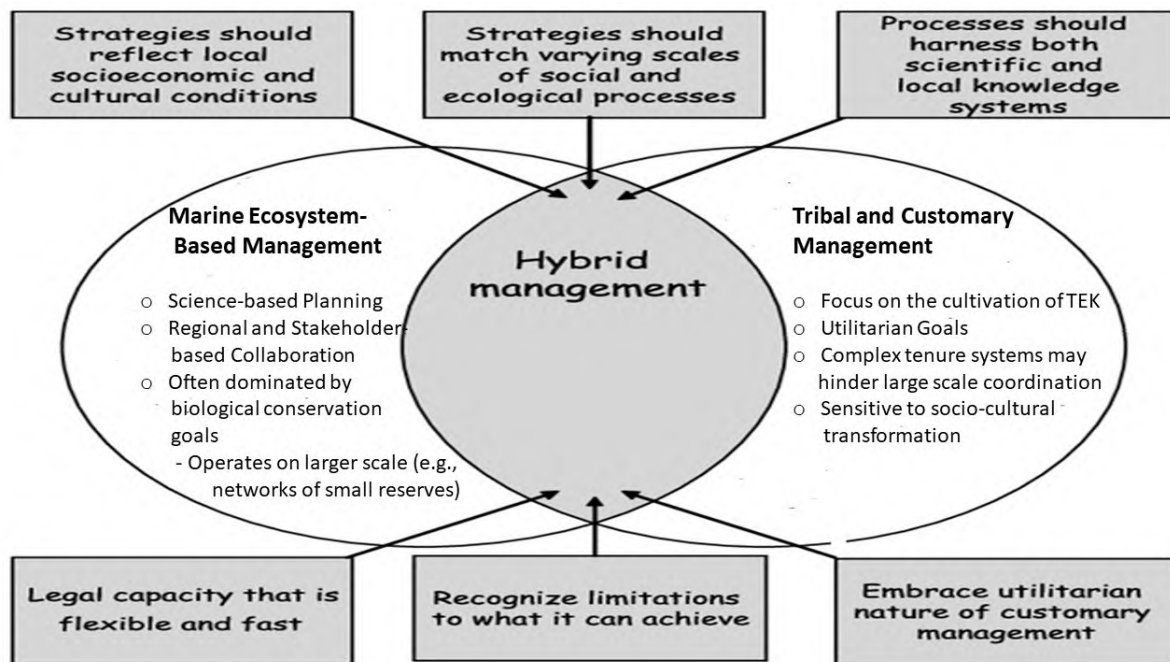
In collaborative co-management, there are three institutional factors that can contribute to the successful integration of authority and responsibility:

- Planning processes, including the monitoring and enforcement of marine protected areas, should harness both scientific and TEK systems.

- Program strategies should match varying scales of social, economic, and ecological processes.
- Program strategies should reflect local or regional socio-cultural conditions as they change overtime and as new information is gathered, e.g., strategic management should support adaptive approaches to planning in the future.

A hybridized co-management approach to marine life protection is depicted in Figure 3.

**Figure 3. Hybrid Management**



(After Pomeroy and Berkes 1997: 466)

Since the adoption of the MLPA in 1999, a number of steps have been taken by policymakers, resource agencies and members of Tribes to establish and encourage co-management of California-Tribal MPAs. Initial Studies, as required by CEQA, have been submitted and regulatory provisions have been approved by the California Department of Fish and Wildlife Commission (FGC). Governor Brown and Governor Newsome have signed Executive Orders to encourage co-management of marine resources with Tribes. California resource agencies have approved strategic goals and objectives in support of co-management principles to encourage co-management of California-Tribal marine conservation areas. Collaborative networks have been established that include formal Tribal membership. Pilot programs between California and the Tribes to develop monitoring programs and the deployment of data gathering to strengthen monitoring of existing MPAs have been developed.

## CO-MANAGEMENT OF CALIFORNIA-CHUMASH MPAS

This section provides a general description of the early implementation of co-management of the California-Chumash marine conservation areas. A detailed overview of the early implementation of the MLPA and the role of the Tribes in the process is available at Sofka and colleagues (2021: 80-113) and Berkey and Williams (2019). These studies describe the collaborative, legal and historical role of the Tribes during the implementation of the MLPA.

### *The Move toward Tribal Exemption*

Following adoption of MPAs in the North Coast MLPA planning process, a regulatory provision was adopted by the California Fish and Game Commission (FGC) to provide exemptions from MPA-specific area and take regulations for individual federally recognized California Tribes (i.e., tribal exemptions), through a petition process by the Commission. Requests to amend MPA regulations were submitted to the FGC by two different tribes: the Kashia Band of Pomo Indians (the Kashia) and the Chumash (Berkey and Williams 2019; Dudek 2018).

### *Tribal Take*

“Federally recognized tribe” means any tribe on the List of Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, published annually in the Federal Register. Any member of a federally recognized tribe authorized to take living marine resources from an area with area-specific take restrictions in subsection 632(b), when engaging in take within an authorized area shall possess on his person, in his immediate possession, or where otherwise specifically required by law to be kept, any valid license, report card, tag, stamp, validation, permit, or any other entitlement that is required in the Fish and Game Code, or required by other state, federal, or local entities, in order to take living marine resources. Members shall possess a valid photo identification card issued by a federally recognized tribe that contains expiration date, tribal name, tribal member number, name, signature, date of birth, height, color of eyes, color of hair, weight, and sex; and display any of the items listed above upon demand to any peace officer. Members taking living marine resources under this provision are subject to current seasonal, bag, possession, gear and size limits in existing Fish and Game Code statutes and regulations of the commission, except as otherwise provided for in subsection 632(b). No member, while taking living marine resources pursuant to this section, may be assisted by any person who does not possess a valid tribal identification card and is not properly licensed to take living marine resources. Nothing in the regulation is intended to conflict with, or supersede, any state or federal law regarding the take of protected, threatened or endangered species [Title 14, 632(a)(11)].

The Chumash requested the Commission to apply tribal take provisions in four SMCAs in southern California that are within their areas of historic and/or current tribal use. The regulations for the State Marine Conservation Areas (as January 1, 2019) are taken from California Code of Regulations (CCR) Title 14, Section 632, and are as follows:

The exemptions are consistent with allowing tribal take exemptions as currently defined in Title 14, §632(a)(11) (noted above), which identify how a member of a federally recognized tribe may be authorized to take living marine resources from an MPA with site-specific take restrictions.

A description of each California-Chumash marine conservation area is below (Dudek 2018):

**1) Kashtayit State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take of finfish, invertebrates except rock scallops and mussels, and giant kelp (*Macrocystis pyrifera*) by hand harvest is allowed.
  - ii) Take pursuant to the maintenance of artificial structures and operation and maintenance of existing facilities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by the Department
- b) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.

**2) Naples State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take by spearfishing of white seabass and pelagic finfish is allowed.
  - ii) The commercial take of giant kelp (*Macrocystis pyrifera*) by hand harvest or by mechanical harvest is allowed.
- b) Take pursuant to operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.
- c) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(98) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians

**3) Point Dume State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take by spearfishing of white seabass and pelagic finfish is allowed.
  - ii) The commercial take of swordfish by harpoon; and coastal pelagic species by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.
- b) Take pursuant to beach nourishment and other sediment management activities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.
- c) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b) (117) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians



#### 4) **Anacapa Island State and Federal Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:
  - i) The recreational take of spiny lobster and pelagic finfish and the commercial take of spiny lobster is allowed.
- b) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b) (112) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians

The Chumash remain subject to the Anacapa Island Special Closure regulations where it overlaps with the Anacapa Island SMCA and are not exempt from the Anacapa Island Federal Marine Conservation Area take restrictions. Fishing with use of hand-based equipment and intertidal collection is allowed in this area, for which there is no pelican fledging area closure. Therefore, there are currently no exemptions in federal waters of the Channel Islands National Marine Sanctuary.

With respect to the role of the Tribes in the MLPA process Berkey and Williams (2019: 349-350) note that Governor Brown in Executive Order B-10-11 moved forward with formally recognizing the role of federally recognized tribes in marine governance:

The perceptions of tribal representatives who participated in the late stages of the MLPA process bears out the truth of the Governor’s observation. One tribal advocate said that, though there is a great deal of work yet to be done to fully recognize tribal rights to marine resources, the “space created by the MLPA is a promising first step.”

Both the State and some tribal representatives see a trend toward a marked increase in tribal participation in the development of state policy beyond that of marine resources. While not every tribe has the resources to respond to state agency invitations, at least they have a greater opportunity.

In Executive Order N-82-20 Governor Newsome also recognized the role of the Tribes in marine resource protection and supported further development and movement toward co-management of MPAs.

#### ***Co-management and the California Department of Fish and Wildlife***

The Tribal Communication and Consultation Policy provides the foundation for the CDFW to work cooperatively, communicate effectively, and consult with Tribes. This policy also serves as the CDFW’s primary means to implement Executive Order B-10-11 and the California Natural Resource Agency’s Tribal Consultation Policy.

The *Master Plan for Marine Protected Areas – Appendix B* from the CDFW (2016: B-10) describes the existing co-management policy with respect to Tribes as follows:

The purpose of this policy is to create a means by which tribes and Fish and Game Commission can effectively work together to realize sustainably managed natural resources of mutual interest.

This CDFW (2016) identifies the following priorities:

1. Communication. Both FWC and the Tribes are faced with innumerable demands on their limited time and resources. In the interest of efficiency, FWC will annually host a Tribal planning meeting to coordinate the upcoming regulatory and policy activities before FWC. The meeting will provide a venue for education about process, identifying regulatory and policy needs, and developing collaborative interests; this will include inviting sister agencies to participate.
2. Collaboration. In areas or subjects of mutual interest, FWC will pursue partnerships with tribes to collaborate on solutions tailored to each tribe's unique needs and capacity. The structure of these collaborative efforts can range from informal information sharing to Memorandum of Understanding (MOU) with more specific agreements regarding working relationships and desired outcomes, to co-management agreements with specific responsibilities and authorities.
3. Record-keeping. FWC will maintain a record of all comments provided by Tribes and will include them in administrative records where appropriate.
4. Training. FWC will provide training to interested Tribes on its processes for regulation and policy development.

The FWC *Co-Management Vision Statement and Definition* (February 2020) states:

The vision of tribes, the California Fish and Wildlife Commission, and the California Department of Fish and Wildlife is to engage in a collaborative effort between sovereigns to jointly achieve and implement mutually agreed upon and compatible governance and management objectives to ensure the health and sustainable use of fish and wildlife [*my emphasis*].

Definition: A collaborative effort established through an agreement in which two or more sovereigns mutually negotiate, define, and allocate amongst themselves the sharing of management functions and responsibilities for a given territory, area or set of natural resources [*my emphasis*].

The above strategy adopted by the CDFW clearly suggests the value of *collaborative* co-management with the Chumash to implement marine conservation areas.

### ***The Tribal Marine Stewards Pilot Program***

Esgro (2020) notes that Tribes are engaged with California resource managers in multiple forums for MPA management through participation in multiple decision-making bodies, notably the CDFW Tribal Subcommittee and representatives at the MPA Statewide Leadership Team (MSLT). California's MSLT includes four regional Tribal representatives to ensure that Tribes

are directly involved in the development of MPA policy. Tribal participation in the collaboratives has given way to funded Tribal-specific projects and initiatives.

In 2020, a Tribal Marine Stewards Network Pilot Program was approved by the Ocean Protected Council (OPC) that included a disbursement of \$1,000,000 to the California Indian Environmental Alliance (CIEA) to support the development of a Tribal Marine Stewards Network pilot program. The objective of the program is to enhance engagement with Tribes and protect and restore coastal and marine ecosystems. According to OPC, this program is a mechanism to “advance California’s efforts to support [I]ndigenous stewardship and adopt meaningful co-management measures.”

The program is composed of four partner Tribes (Tolowa Dee-ni’ Nation, Resighini Rancheria, Kashia Band of Pomo Indians, and the Amah Mutsun Tribal Band), and is supported by two non-governmental organizations (CIEA and Ecotrust). The program focuses on MPA monitoring and notes that Tribes will work to identify a fifth Tribe, ideally in southern California, who is interested in participating in the network. At the time of the writing of this report, the Chumash are not formally involved in this pilot program.

A timeline that includes a general summary of development in the co-management approach in California is below:

- Executive Order (“EO”) B-10-11 started state agency tribal consultation under Gov. Brown
- 2012 Natural Resources Agency adopts Tribal Consultation policy
- 2014 CDFW adopts tribal Communication and Consultation Policy
- 2015 FGC Adopts Tribal Consultation Policy
- 2019 EO N-15-19 reaffirms Tribal Consultation by Gov. Newsom
- 2020 Tribal Subcommittee of FGC Adopts Co-Management Vision & definition
- 2020 Gov. 2d Annual Tribal nations Conference, Christina Snider, Gov. Tribal Advisor requests each tribe apply for co-management opportunities
- 2020 - Sept. 25: Gov. Newsom issues Statement of Administration Policy, Native American Ancestral Lands, “to facilitate tribal access, use and co-management of state owned or controlled natural lands.”
- 2020 - Oct. 7: EO N-82-20 “to conserve 30% of California’s land and coastal waters by 2030” and “to incorporate Tribal expertise and traditional ecological knowledge.”

### ***Moving from Consultation Co-Management to Collaborative Co-Management***

In an evaluation of the MLPA collaborative network process, Sofka et al. (2021) describe a number of recommendations that can strengthen the collaborative co-management of California-Chumash marine conservation areas. Sofka et al. (2021) recommend the following:

- *Improve Tribal Engagement, Protocols, and Initiatives*
  - Provide cross-cultural training by establishing periodic cross-cultural training opportunities. Trainings should foster cultural awareness around interactions with Tribal groups. Allocate time and funding for ongoing collaborative, network, and

state cross-cultural training that reflects local Tribal culture, histories, and connection to place.

- Protocols to prioritize respect, reciprocity, and free, prior, and informed consent in all interactions that acknowledge historical and current injustices related to Tribal sovereignty. Sofka et al. (2021) recommend that California should evaluate how Tribal consent, respect, or reciprocity may have been violated with respect to resource management issues in general, and marine conservation specifically. California should review ways to redress these past violations, with an emphasis on transparency and accountability.
- Establish and abide by anti-discrimination policies approved and/or developed by Tribes. Sofka et al. (2021) recommend that California should determine which forms of discrimination, biases, or stereotypes Tribes have encountered through their participation in the collaboratives and MPA management. The State should review existing agency policies and interpretations that constrain Tribal participation, including but limited to considerations of inclusivity and accessibility.
- Consider the utility of developing a statewide MPA tribal committee and/or statewide Tribal collaborative.
- Engaging Tribes as partners in co-management, not stakeholders. The State should involve Tribal participants in decision-making bodies, forums, and protocols surrounding the control and co-management of MPAs. They also recommend that the State review how principles of Tribal co-management have been violated with respect to resource management issues in general, and ocean/MPA conservation specifically.
- Ensure Tribal co-authorship of language in all formal agreements. Sofka et al. (2021) recommend that Tribal authorship should take place in future planning and policymaking to ensure that Tribal perspectives, preferences, and confidentiality are appropriately captured.
- Establish protocols for integrating aspects of Tribal stewardship. Sofka et al. (2021) recommend that California establish and codify appropriate policies, best practices, and protocols at the collaborative and State levels of governance that emphasize the integration and acknowledgement of Tribal stewardship at all levels of MPA management. They also recommend that the State prioritize Tribally led and managed stewardship projects, such as the Tribal Marine Stewards Network.
- Prioritize the inclusion of all forms of Tribal and indigenous communities and recognize that Tribal communities exist far beyond federal recognition. Sofka et al. (2021) recommend that California prioritize the involvement of diverse forms of Tribal arrangements including but not limited to federally recognized Tribes, State recognized Tribes, unrecognized Tribes, consortiums, etc. The State should review with Tribal participants what groups have been excluded from this MPA management in the past, and the procedures which facilitated that exclusion. Sofka et al. (2021) also recommend that the Tribes and California determine how

management and planning approaches can be modified to engage a variety of formal and informal Tribal arrangements.

- *Establish Protections and Protocols for Tribal Decision-Making and Authority Around Knowledge and Data. This should include the establishment of policies with Tribal participants for knowledge requests, use, sharing, and mobilization within the collaboratives.*
  - Anticipate and honor diverse Tribal preferences for data management, collection, analysis, and use. These protocols should facilitate Tribal participation and information sharing in collaboratives and beyond, creating an atmosphere of consent.
  - Understand that Tribes may not consent to the sharing of their knowledge and data that has been passed down and safeguarded for generations. Similarly, acknowledge the diversity of Tribal science and knowledge, how it differs from non-Tribal science, and the ways in which TEK can be better protected.
  - Consider the integration of Tribally selected models of Indigenous data governance and data protection at all levels of MPA collaborative management. Sofka et al. (2021) recommend that California and the Tribes carefully review Tribal decision-making authority and consider if there have been instances where Tribes felt as though they did not have control over their data, and if so, what policies could be established to mitigate these scenarios going forward.

Careful consideration of these recommendations is warranted to strengthen the collaborative co-management approach to California-Chumash marine conservation areas.

## CASE STUDIES OF CO-MANAGEMENT

This section includes a brief characterization of case studies on implementation of co-managed State-Tribal or Indigenous protected areas.

### *Fiji Locally Managed Marine Area (LMMA) Network*

A locally managed marine area (LMMA) differs from a typical MPA in that LMMAs “are characterized by local ownership and/or control,” whereas other forms of MPA are usually “designated by levels of management via a top-down approach” (Govan et al. 2006). The LMMA Network supports a collaborative co-management approach to manage coastal and marine resources. LMMA supports networks in Indonesia, the Philippines, Papua New Guinea, Palau, Pohnpei, Fiji and the Solomon Islands, and engages with more than fifteen other countries in the Indo Pacific. Case studies of member organizations within the LMMA are found in Rocliffe et al. (2014), Jupiter et al. (2014), and Robertson et al. (2020).

Increasingly, the LMMA Network is sharing its lessons globally, with increased interest not only in improved conservation outcomes, but also with an increased focus on social justice and the rights of traditional resource owners. Robertson et al. (2020) note that a LMMA, in the South Pacific context, is rooted in traditional and customary fisheries management and is designed to



gain support and active engagement from the local community, with the latter being a key condition for the successful and lasting implementation of MPAs.

The Fiji Locally Managed Marine Area (FLMMA) Network supports traditional communities who have observed declines in marine resources and their customary use of marine resources and want to act. The FLMMA Network is a non-profit and charitable association of resource conservation NGOs, government departments, academic institutions and over four hundred communities working together as co-managers to promote and encourage the preservation, protection and sustainable use of marine resources in Fiji.

The goals of the FLMMA are to:

- Provide practical capacity building, cost-effective and culturally appropriate engagement tools to promote locally led dialogues and management.
- Assist communities in managing their resources, often utilizing a revival of cultural traditions strengthened by contemporary science.
- Build trust, resiliency, confidence, and innovation through lesson sharing between practitioners.
- Follow a code of conduct that ensures community interests are the heart of any conservation effort.
- Advocate for communities at the national, regional, and international levels, for fair partnerships, policies, and support.

### ***The Challenge of MPA governance in New Zealand and the Role of Māori***

When New Zealand was settled by Europeans, a treaty was signed between Māori and the British Crown, called the Treaty of Waitangi. The Treaty gave guarantees that Māori would retain ownership and sovereignty over their customary resources. However subsequent government action deprived Māori of rights and land. It was only in the 1970s that the New Zealand government began to recognize the importance of partnership with the diverse Māori peoples. Today, much of the policy and legislation in relation to oceans governance requires consultation with local Māori (*tangata whenua*) and tribes (*iwi*) (McGinnis 2012).

The New Zealand government, as part of its obligations to Māori under the Treaty of Waitangi, has provided for some coastal and marine areas to be subject to the control of local Māori. Two types of protection can be granted over areas: *mātaitai* and *taiāpure*. *Mātaitai* reserves are established to protect traditional fishing grounds in internal waters or coastal waters. Within a *mātaitai*, commercial fishing is prohibited, but recreational fishing can continue. The *tangata whenua* can also request the Minister of Fisheries to create bylaws that restrict or prohibit recreational fishing. Other customary reserves are *taiāpure*-local fisheries. Consultation is required and an appeal against a decision by the Minister of Fisheries to establish a *taiāpure*-local fishery can be heard by a tribunal. Due to this process, they are harder to establish than *mātaitai*. The national government of New Zealand can deny designation of *taiāpure*-local fisheries.

There are several problems regarding Māori rights with respect to marine protection, and co-management has failed (McGinnis 2012). Application for marine reserve designation is

dependent on approval from other interested parties and government agencies. Current co-management legislation requires the Crown acting through the Department of Conservation have the final say regarding marine reserve management (Dodson, 2014). Co-management in New Zealand has not empowered local iwi or tribes in co-governance – there remains unequal authority between cultural groups and governmental organizations. Collaborative co-management could potentially minimize marginalization of Māori communities and increase successful marine reserve implementation (Carlsson and Berkes 2005; Berkes 2009; Mossop 2020). Fragmented government authority and inter-agency conflict also contribute to failure to live up to international best practice in protected area management in New Zealand.

### ***Co-management between Australia and the Miriuwung-Gajerrong People of Western Australia***

Collaborative co-management involves Australia and the Miriuwung-Gajerrong people of Western Australia, and the partnership that has evolved shows co-management can provide equity in managing a protected area (Hill, 2011). In this case, collaborative co-management established a balance between Indigenous values and State conservation values.

Co-management is central to the Australian government’s approach to this conservation/ Indigenous nexus, and to delivering the enhanced equity with Indigenous people in protected areas. Indigenous people favor community-controlled approaches to protected areas in this region of Australia. Hill (2011) describes a number of reasons for the success of the Australia-Miriuwung-Gajerrong co-management model:

- Respect the rights of traditional owners, custodians, or users to lands, territories and resources Indigenous land ownership
- Free, prior and informed consent of the Traditional Owners
- Legal protection for rights and interests of parties
- Respect and strengthen Indigenous peoples’ institutions and customary laws
- Coherent and effective Indigenous representative party with legitimacy
- Sufficient resources to enable Indigenous participation
- Conflict management
- Respect and strengthen Indigenous peoples’ exercising of authority and control
- Commitment of Indigenous people to assume the opportunities
- Appropriate technical and other advice
- Clear understanding of Indigenous ideas about success
- Traditional Owners in driving role

As a general summary, Hill (2011) identified three factors of significance for the establishment of a successful co-management of a protected area: (1) a foundation platform of recognition of rights and interests; (2) a set of effective organizations to support the roles of the key actors; and (3) effective mechanisms for working together.

A number of factors contribute to unsuccessful co-management, such as: unclear law with vague strategic and programmatic development; failure to uphold treaty rights and obligations for

Indigenous or Tribal peoples regarding their use or right to access protected areas; lack of resources granted to Indigenous or Tribal peoples to participate as partners in co-management planning and decision-making; lack of funding granted to implement and enforce co-management plans; lack of leadership; and, the lack of institutional capacity to address conflicts between partners in co-management planning efforts.

[An *Addendum* describes the co-management framework that has been adopted and implemented for the Olympic National Marine Sanctuary.]

## **AN ANALYSIS OF FOUR CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS**

Based on an analysis of the scholarly literature and case study material published on co-management of protected areas, this section provides an alternative analysis based on a sample of factors that often contribute to successful State-Tribal partnerships. The primary factors used in the analysis are:


- Public access of a marine area by Tribal members.
- The proximity to use of the marine area by Tribal members.
- The scientific baseline information on the ecology of the marine area.
- The historical level of customary marine resource use.
- The institutional capacity to monitor the designated MPA and enforce rules and regulations.

Table 2 depicts a general summary of the findings from this analysis. A characterization of the institutional capacity and capability of partnering organizations to monitor and enforce the rules and regulations of MPAs is described as well in the sections below the table.

**[insert Table 2]**

### ***Institutional Capacity and Capability to Monitor and Enforce***

A comprehensive evaluation of the institutional capacity and capability to monitor and enforce the existing MPA network is beyond the scope of this project. Starting in 2007, California Sea Grant partnered with the California Ocean Protection Council (OPC) and CDFW to administer research project funding for baseline monitoring of MPA's. These projects aimed to establish a snapshot of marine ecosystems and human activities around the time of the establishment of the new MPAs, and to document initial socioeconomic and ecological changes after the MPAs take effect. The South Coast was the third region to be studied as part of the MPA Baseline Monitoring Program. The projects ran from 2011 to 2017.



The MPA monitoring framework explicitly mentions the potential role of citizen science programs in MPA monitoring (CDFG 2008). Recently, many citizen-based science programs have endeavored to help provide these much-needed data (Freinwald et al., 2018).

Implementation of MPAs under the MLPA Initiative in Southern California was followed by a monitoring program to establish a comprehensive baseline of the ecological conditions of several marine ecosystems at the time of MPA implementation. This baseline monitoring consortium involved several citizen science monitoring programs alongside more traditional academic monitoring programs, creating an opportunity to evaluate the potential for citizen scientists to become more involved in future long-term monitoring efforts.

Enforcement of existing CDFW regulations is based on education, public outreach, and a number of other factors, including the number of marine wardens. In an undercover operation and subsequent boarding by officers in 2013, CDFW wildlife officers observed eighteen violations including poaching within California's MPA network, exceeding the possession limits of several fish species, using illegal methods to take fish, and failing to report accurate counts on logbooks. Monitoring and enforcement of MPA regulations will depend on the resources available to citizens, resource agencies and the Tribes to co-management designated areas. One obstacle often recognized in marine life protection is an "implementation deficit" whereby deficits occur during the implementation phase of policy development when there is a mismatch between fields of regulatory action. This can occur immediately or across a longer-term implementation phase. Immediate implementation deficits are caused by an excessively general definition of regulations or when policy goals are not operationalized in this field.

### ***Recommendation***

Based on the alternative analysis, the Chumash should consider joining the Tribal Marine Stewards Network pilot program as the fifth partner in the collaborative network effort. There is currently no southern California Tribal partner in the pilot program.

Two California-Chumash marine conservation areas may be appropriate to consider by the Chumash members given the analysis above: the *Kashtayit* or Point Dume marine conservation areas. This recommendation is based on the historical use of customary practice by the Chumash of these areas; the proximity of use to these areas; and the availability of public access to the sites.

Furthermore, the Chumash should consider ways to contribute as co-managers to the enforcement and monitoring efforts to further the implementation of existing California-Chumash marine conservation areas.

## REFERENCES

- Beierle, T.C. and J. Cayford (2002). *Democracy in practice: public participation in environmental decisions*. Resources for the Future: Washington, D.C.
- Berkes, F. (2008). *Sacred Ecology*. Routledge.
- Berkes, F. (2009). Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*, 90(5):1692–1702.
- Berkes, F., R. Mahon, P. McConney, R. Pollnac, R. Pomeroy (2001). *Managing small-scale fisheries: Alternative directions and methods*. International Development Research Centre: Ottawa, O.N.
- Berkey, C.G. and S.W. Williams (2019). California Indian Tribes and the Marine Life Protection Act: The Seeds of a Partnership to Preserve Natural Resources, *Am. Indian L. Rev.* 43: 307.
- Borrini-Feyerabend, G., M. Pimbert, M.T. Farvar, A. Kothari, Y. Renard (2004). *Sharing power: Learning by-doing in co-management of natural resources throughout the world*. IIED and IUCN/CEESP/CMWG: Cenesta, Tehran.
- California Department of Fish and Game (2008). *Master plan for marine protected areas*. Sacramento, CA: California Department of Fish and Game.
- California Department of Fish and Wildlife (CDFW) (2016). California's Marine Protected Area (MPA) Network. March 1, 2016. Available at: <https://wildlife.ca.gov/Conservation/Marine/MPAs/Network>
- Carlsson, L., and F. Berkes. (2005). Co-management: Concepts and methodological implications. *Journal of Environmental Management* 75(1), 65-76.
- Coffey, C. (2005) What role for public participation in fisheries governance? in *Participation in fisheries governance*. Springer: Dordrecht, The Netherlands. Pages 27-44.
- Dartt-Newton, D. and J.M. Erlandson (2006). Little Choice for the Chumash: Colonialism, Cattle, and Coercion in Mission Period California, *American Indian Quarterly* (30): ¾: 16–30. <http://www.jstor.org/stable/4139021>.
- Davis, N.A. (2008). Evaluating collaborative fisheries management planning: A Canadian case study. *Marine Policy* 32: 867-876.
- Dodson, G. (2014). Co-Governance and Local Empowerment? Conservation Partnership Frameworks and Marine Protection at Mimiwhangata, New Zealand. *Society & Natural Resources* 27(5), 1-19.
- Ebbin, S.A (2002). Enhanced fit through institutional interplay in the Pacific Northwest salmon comanagement regime. *Marine Policy* 26: 253-259.
- Ebbin, S.A. (2009). Institutional and ethical dimensions of resilience in fishing systems: Perspectives from co-managed fisheries in the Pacific Northwest. *Marine Policy* 33: 264-270.



Ebbin, S.A. (2011). The problem with problem definition: Mapping the discursive terrain of conservation in two Pacific salmon management regimes. *Society and Natural Resources: An International Journal* 24(2): 148-164.

Esgro, M. (2020). Tribal Marine Stewards Network Pilot Program. Ocean Protection Council. Available at: [https://opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20200619/Item6a\\_TribalMarineStewardsNetwork\\_FINAL.pdf](https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200619/Item6a_TribalMarineStewardsNetwork_FINAL.pdf)

Freiwald, J, Meyer, R, Caselle, J.E., et al. (2018). Citizen science monitoring of marine protected areas: Case studies and recommendations for integration into monitoring programs. *Mar Ecol.*: 39:e12470. <https://doi.org/10.1111/maec.12470>

Glassow, M. (1995). *Purisimeno Chumash Prehistory: Maritime Adaptations Along the Southern California Coast (Case Studies in Archaeology)*. Wadsworth Publishing; 1st edition (November 17)

Govan, H., A. Tawake, K. Tabunakawai (2006). Community-based marine resource management in the South Pacific. *Parks* 16 (1): 63-67.

Hanna, S. (2003). The economics of co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 51-60.

Hara, M., and J.R. Nielsen (2003). Experiences with fisheries co-management in Arica. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 81-98.

Hernes, H., S. Jentoft, K.H. Mikalsen (2005). Fisheries governance, social justice, and participatory decision-making. in *Participation in fisheries governance*. Springer: Dordrecht, The Netherlands. Pages 103-118.

Hill, R. (2011). Towards equity in indigenous co-management of protected areas: cultural planning by Miriuwung-Gajerrong People in the Kimberley, Western Australia. *Geographical Research* 49(1), 72-85.

Holmes, M.S., and J.R. Johnson (1998). *The Chumash and Their Predecessors: An Annotated Bibliography*. Contributions in Anthropology No. 1, Santa Barbara Museum of Natural History

Jentoft, S., K.H. Mikalsen, H. Hernes (2003). Representation in fisheries co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 281-292.

Jupiter, S., P. Cohen, R. Weeks, A. Tawake, H. Govan (2014). Locally managed marine areas: Multiple objectives and diverse strategies. *Pacific Conservation Biology* 20. 10.1071/PC140165.

Kennett, D.J. (2005). *The Island Chumash: Behavioral Ecology of a Maritime Society*. The University of California Press.

McGinnis, M.V. (2004). *Tribal Marine Protected Areas: Protecting Maritime Ways and Cultural Practices*. Produced for Wishtoyo Foundation. Bioregional Planning Associates. With Roberta Cordero.

McGinnis, M.V. (2012). Marine Governance: The New Zealand Dimension. Final Report. Funded by the Ministries of New Zealand. Emerging Issues Program. School of Government, Victoria University Wellington, New Zealand. April. Available at: [https://cbe.miis.edu/cgi/viewcontent.cgi?article=1000&context=cbe\\_working\\_papers](https://cbe.miis.edu/cgi/viewcontent.cgi?article=1000&context=cbe_working_papers)

Mossop, J. (2020). Marine Protected Areas and Area-Based Management in New Zealand, *Asia-Pacific Journal of Ocean Law and Policy* 5(1), 169-185. doi: <https://doi.org/10.1163/24519391-00501009>

Pinkerton, E. (1989). Introduction: Attaining better fisheries management through co-management – prospects, problems, and propositions. in *Co-Operative management of local fisheries: New directions for improved management and community development*. Pinkerton, E., editor. The University of British Columbia Press: Vancouver, B.C. Pages 3-33.

Pomeroy, R. (2003). The government as a partner in co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 247-262.

Pomeroy, R.S. and F. Berkes (1997). Two to tango: The role of government in fisheries comanagement. *Marine Policy* 21(5): 465-480.


Reeder-Myers, L., Erlandson, J.M., D.R. Muhs, T.C. Rick (2015). Sea level, paleogeography, and archeology on California's Northern Channel Islands *Quaternary Research* 83(2): 263 – 272.

Rick, T.C. (2007) *The Archaeology and Historical Ecology of Late Holocene San Miguel Island*. Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles. [*Perspectives in California Archaeology* 8.]

Robertson, T., S. Greenhalgh, I. Korovulavula, T. Tikoibua, Pio Radikedike, P. Stahlmann-Brown (2020). Locally managed marine areas: Implications for socio-economic impacts in Kadavu, Fiji, *Marine Policy* 117, 103950. <https://doi.org/10.1016/j.marpol.2020.103950>.

Rocliffe S, Peabody S, Samoily M, Hawkins JP (2014) Towards A Network of Locally Managed Marine Areas (LMMAs) in the Western Indian Ocean. *PLoS ONE* 9(7): e103000. <https://doi.org/10.1371/journal.pone.0103000>

Seid-Green, Y. (2014). *Defining Co-management: Levels of Collaboration in Fisheries Management*. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Marine Affairs University of Washington



Sofka, G., K. Guo, J. Hassen, C. Horbat, K. Maloney, D. Triebwasser (2021). *California's Marine Protected Areas through Bottom-Up Collaboration*. Funded by California MPA Collaborative Network & Resources Legacy Fund. Master of Science Program School for Environment and Sustainability University of Michigan. April.

Yaffee, S.L. (2020). *Beyond Polarization: Public Process and the Unlikely Story of California's Marine Protected Areas*. Island Press.

# SANTA YNEZ BAND OF CHUMASH INDIANS

P.O. BOX 517 · SANTA YNEZ · CA · 93460

Tel: 805.688.7997 · Fax: 805.686.9578

[www.santaynezchumash.org](http://www.santaynezchumash.org)



November 28, 2023

California Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

## **Re: Petitions to the California Fish and Game Commission Regulation Change submitted by the Santa Ynez Band of Chumash Indians**

Dear Commissioners,

The Santa Ynez Band of Chumash Indians welcomes the opportunity to submit the required forms (FGC 1) and summary narratives to the California Department of Fish and Game Commission to revise and amend existing regulations for marine protected areas within the Central Coast MLPA Region. Please find attached the following forms and documentation:

- 1) Petition to the California Fish and Game Commission for Regulation Change (FGC 1) for a new Chitqawi SMCA with a Summary Narrative and Map for consideration in the Central Coast Region.
- 2) Petition to the California Fish and Game Commission for Regulation Change (FGC 1) for amendments to the existing Point Buchon SMCA and SMR in the Central Coast Region with a Summary Narrative and White Paper produced by the Santa Ynez Band of Chumash Indians.

If you have any questions, please contact Sam Cohen, at 805-245-9083.

Thank you,

*Sam Cohen*

Sam Cohen, Esq.  
Government Affairs and Legal Specialist



Tracking Number: (2023-20MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Sam Cohen, Esq. Santa Ynez Band of Chumash Mission Indians  
100 Via Juana Road  
PO Box 517 Santa Ynez, California 93460  
Telephone number: [REDACTED]  
Email address: scohen@chumash.gov

**2. Rulemaking Authority (Required)** - Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

**3. Overview (Required)** - To ensure 30% of California waters are fully protected by 2030 and to foster Tribal engagement and co-management of MPAs, this Petition submitted by the Santa Ynez Band of Chumash Indians (SYBCI) recommends that the Point Buchon SMCA be designated as a Chumash SMCA that will support Tribal engagement and co-management of the SMCA within the Central Coast Region network. Regulatory changes are also described in the attached Summary for this Petition. The SYBCI also supports the MPA Collaborative Network's Regulatory Recommendation (Row 104, Column E) to adjust the boundary of the Point Buchon SMR to the north to better capture the offshore marine area of the Point and to clarify the boundary of the SMR. The attached Summary for this Petition describes these proposed actions further. The proposed new regulations are as follows:

(B) Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:

1. The recreational take of finfish [subsection 632(a)(2)], invertebrates except rock scallops and mussels by hand harvest is allowed.
2. Take pursuant to activities authorized under subsection 632(b)(97)(C) is allowed.



3. The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) of these regulations and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians. |

4. **Rationale (Required)** – There are no Tribal MPAs designated within the Central Coast Region network. The proposed Chumash Heritage National Marine Sanctuary (CHNMS) is currently under review by the Federal government for potential designation. The marine area of the Point Buchon SMCA may be included in the designated CHNMS. Therefore, the SYBCI recommends that the Commission consider a new designation of this SMCA as a Chumash co-managed SMCA.

This would be the fifth Chumash-California SMCA. In addition, in light of management and enforcement considerations associated with the Point Buchon SMR, the SYBCI supports the regulatory and boundary changes recommended by the MPA Collaborative Network’s Regulatory Recommendation (Row 104, Column E) to move the SMR’s boundary to the north to better capture the marine area offshore the Point and to improve enforcement of the marine reserve area.

SECTION II: Optional Information

5. **Date of Petition:**

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify:

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- Amend Title 14 Section(s):
- Add New Title 14 Section(s):
- Repeal Title 14 Section(s):

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:





**12. Forms:** If applicable, list any forms to be created, amended or repealed:

| Please see attached. |

**SECTION 3: FGC Staff Only**

Date received: | Click here to enter text. |

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ |

Meeting date for FGC consideration: \_\_\_\_\_ |

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number

**SUMMARY INFORMATION FOR PETITION TO THE CALIFORNIA FISH AND  
GAME COMMISSION FOR REGULATORY CHANGE**

**A Petition to Amend the Point Buchon SMCA and Point Buchon SMR**

**Submitted By**

Sam Cohen, Esq.  
Government Affairs & Legal Specialist  
**Santa Ynez Band of Chumash Mission Indians**  
PO Box 517 | Santa Ynez, CA 93460  
805.688.7997 Office

Date: November 11, 2023

**Overview.** California has begun its first 10-year review of the state’s marine protected areas (MPAs) network. The State’s first decadal management review of the MLPA will be used to inform the future of marine life protection in California waters.

Since the adoption of State MPAs, Governor Gavin Newsom laid out a goal to protect 30% of the land, water, and marine area over the decade. The current level of marine area designated in some type of MPA in each region is far less than the goal to protect 30% of California marine waters. Improvements to the existing MPA network are warranted.

There currently exists no Tribal MPA within the Central Coast Network. California should change designation of existing areas within the MPA Network to ensure that Tribal and Indigenous communities can engage, collaborate, and co-manage marine areas associated with coastal areas they have inhabited for thousands of years.<sup>1</sup> To strengthen the role of the Tribes in co-management and monitoring efforts and marine education activities throughout the marine region, the Santa Ynez Band of Chumash Indians (SYBCI) recommends amendment to the existing Point Buchon SMCA and SMR. The Tribe recommends that the Commission consider a new designation at the Point Buchon Chumash-California SMCA.

The proposed Chumash Heritage National Marine Sanctuary is currently under review by the Federal government for potential designation. NOAA identified an Agency-Preferred Alternative consisting of Alternative 2, Cropped Bank to Coast, and Sub-Alternative 5b, Gaviota Coast Extension that includes the marine areas of Point Buchon SMCA and SMR.<sup>2</sup> The marine area of the Point Buchon SMCA may be included in the designated CHNMS. To foster co-management and Tribal engagement, the SYBCI recommends that the Commission consider a new designation of this SMCA as a Chumash co-managed SMCA.<sup>3</sup> This Petition emphasizes the need to designate an additional Tribal SMCA for the Central Coast Region. This Petition recommends that the Central Coast Region MPA network should reflect the type of co-management of marine resources that is envisioned by State and Federal Tribal engagement and collaborative management guidelines. There is currently no Tribal MPA for co-management within this regional network. This Petition includes a general characterization of the proposed new Tribal co-management Point Buchon SMCA and includes recommendations for a minor change to the northern boundary of the Point Buchon SMR.

**Rationale.** MPAs were established pursuant to the Marine Life Protection Act (MLPA) of 1999. Environmental Impact Reports were prepared for four study areas, including the Central Coast Region (Pigeon Point to Point Conception). The MPA network for the Central Coast Region was approved by the Commission in 2007.

California’s first decadal management review of the MLPA began in 2022. One goal of the decadal management review is for the California Department of Fish and Wildlife (CDFW) to

---

<sup>1</sup> Berkey, C.G. and S.W. Williams (2019). California Indian Tribes and the Marine Life Protection Act: The Seeds of a Partnership to Preserve Natural Resources, *Am. Indian L. Rev.* 43: 307.

<sup>2</sup> See: NOAA (2023) *Proposed Chumash Heritage National Marine Sanctuary. Draft Environmental Impact Statement.* Section 5.4.

<sup>3</sup> Please note that under a separate Petition submitted by the SYBCI also recommend that the Commission accept our recommendation to create a new Chumash-California SMCA that we refer to as *Chitqawi* near the mouth of the Morro Bay estuary along the coast toward Cambria.

evaluate and adaptively manage the established MPA Network. The regional networks that were established by the State included input from participants in collaborative planning efforts including members of the scientific community, conservationists, and marine resource users. Scientific input on the benefits of MPAs to marine ecosystems contributed to these early MPA planning processes.

Point Buchon State Marine Reserve (SMR) and Point Buchon State Marine Conservation Area (SMCA) are located eight miles south of Morro Bay in San Luis Obispo County. The onshore-offshore pair of adjoining MPAs covers almost nineteen square miles of rocky reefs, sandy seafloor and beaches, kelp forests, rocky intertidal areas, and offshore pinnacles. The MPAs also contain some of the shallowest cold-water corals in California. Point Buchon SMR encompasses more than 6½ square miles of ocean waters and spans 2½ miles of coastline between Coon Creek and the Diablo Canyon nuclear power plant. Point Buchon SMCA sits offshore of the SMR and encompasses more than 12 square miles of water that range from about 200 to 400 feet deep.

Changes to the existing MPA Network are based on the statutory authority of the Fish and Game Commission to take the action requested (Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code).

**The Need for Additional Tribal MPAs.** There was very little effort by California resource agencies during the early period of the implementation of the MLPA to consider Tribal MPAs in the network design. Since the adoption of the MPA Network, there has been considerable evidence on the benefits of traditional ecological knowledge and other indigenous experience in marine life protection.<sup>4</sup> The Ocean Protection Council Science Advisory Team Working Group and California Ocean Science Trust (June 2021) note the important role of the Tribes in the management of MPAs.<sup>5</sup> Moreover, based on this recognition, the SYBCI are co-managers of four existing SMCAs. Following adoption of MPAs in the North Coast MPA Planning Process, a regulatory provision was adopted by the California Department of Fish and Game Commission (hereafter “Commission”) to provide exemptions from MPA-specific area and take regulations for individual federally recognized California Tribes (i.e., tribal exemptions), through a petition process by the Commission. Tribal take can be authorized in MPAs that overlap with areas of historic and/or current uses for gathering, ceremony, or harvest as reflected in a factual record of use provided by the Tribe. Amendments to MPA regulations were approved by the Commission for two different tribes: the Kashia Band of Pomo Indians (the Kashia) and the Santa Ynez Band of Chumash Indians (hereafter “SYBCI”). The SYBCI is the only federally recognized Chumash Tribe. The Chumash-California MPAs are Naples SMCA, *Kashtayit* SMCA, Point Dume SMCA, and Anacapa Island SMCA that provide Tribal exemptions.

---

<sup>4</sup> To support this general claim, we have attached *Co-Management of California-Chumash Marine Conservation Areas*. A White Paper produced for the Santa Ynez Band of Chumash Indians with funding provided by the 7th Generation Advisors. November. 2021.

<sup>5</sup> *Scientific Guidance for Evaluating California’s Marine Protected Area Network*. A Report by the Ocean Protection Council Science Advisory Team Working Group and California Ocean Science Trust (June 2021).

The SYBCI recommends that the Commission adopt similar amendments to the Point Buchon SMCA so that co-management efforts can begin for these important cultural and ecological areas within the Central Coast Region. Buchon is a Chumash ethnohistorical village site (referred to by an early Spanish colonialist in the 18<sup>th</sup> Century who after meeting the leader of the village referred to the area as El Buchon [translated in Spanish as “the goiter”]).<sup>6</sup> It is an area of special spiritual significance to the Chumash maritime peoples.

The Point Buchon SMCA warrants careful consideration by the Commission as an additional co-managed Tribal MPA. There are benefits to co-management of MPAs.<sup>7</sup> The benefits include:

- more appropriate rules and regulations that can respond rapidly to changing socio-ecological conditions.
- more effective and efficient enforcement due to increased legitimacy of the management structures.
- can increase equitable and fair use of resources; and
- can contribute to the empowerment and development of marginalized communities.

**Regulations:** The Chumash requested the Commission to apply tribal take provisions in four SMCAs in Southern California that are within their areas of historic and/or current tribal use. With the proposed amendments to the regulations associated with the Point Buchon SMCA, the Chumash would be allowed to fish with the use of hand-based equipment. The proposed exemptions would be consistent with allowing tribal take exemptions as currently defined in Title 14, §632(a)(11), which identify how a member of a federally recognized tribe may be authorized to take living marine resources from an MPA with site-specific take restrictions. Members taking living marine resources under this provision are subject to current seasonal, bag, possession, gear and size limits in existing Fish and Game Code statutes and regulations of the Commission, except otherwise provided for in Title 14, §632(b). No member, while taking living marine resources pursuant to this section, may be assisted by any person who does not possess a valid tribal identification card and is not properly licensed to take living marine resources. Nothing in the proposed regulation is intended to conflict with, or supersede, any state or federal law regarding the take of protected, threatened, or endangered species. The box below includes language for the new regulations associated with the proposed Point Buchon SMCA:

(B) Area restrictions defined in subsection 632(a)(1)(C) apply, with the following specified exceptions:  
1. The recreational take of finfish [subsection 632(a)(2)], invertebrates except rock scallops and mussels by hand harvest is allowed.

---

<sup>6</sup> Bryne, S. (2004). Historical and Archaeological Evidence Regarding the Location of the Chumash Village of El Buchon in Price Canyon, San Luis Obispo County, CA. Society for California Archaeology Southern California CA Data Sharing Meetings. Fort Hunter-Liggett.

<sup>7</sup> *Moving toward Co-Management of the Proposed Chumash Heritage National Marine Sanctuary*. A Paper Prepared for the Santa Ynez Band of Chumash Indians. Michael Vincent McGinnis. Bioregional Planning Associates. (March 2022). The paper includes a review of the literature and technical reports on co-management marine life protection.

2. Take pursuant to activities authorized under subsection 632(b)(97)(C) is allowed.
3. The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) of these regulations and shall comply with all other existing regulations and statutes:  
Santa Ynez Band of Chumash Indians.

The SYBCI appreciates the opportunity to recommend the adoption of this new co-management MPA within the Central Coast Region network. We would welcome the opportunity to discuss this proposal in more detail with State partners during the planning effort that is currently underway for the State's first decadal management review of the MLPA and MPA Network.

**Change to the northern boundary of the Point Buchon SMR.** The SYBCI also supports the MPA Collaborative Network's Regulatory Recommendation (noted in Row 104, Column E of their Worksheet) to adjust the boundary of the Point Buchon SMR to the north so that the reserve can better capture the offshore marine area of the Point and to clarify the boundary of the SMR.

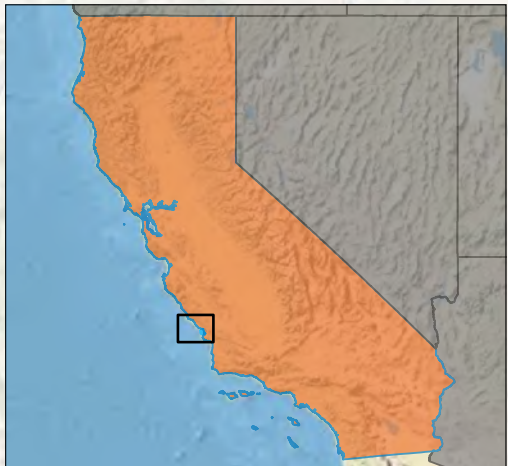


# Proposed Chitqawi State Marine Conservation Area Santa Ynez Band of Chumash Indians

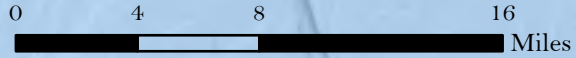


**Legend**

-  Proposed Chitqawi SMCA
-  State Marine Reserve
-  State Marine Conservation Area
-  State Marine Park
-  State Marine Recreational Management Area
-  Coast Line



- 1 **Piedras Blancas State Marine Reserve**
- 2 **Piedras Blancas State Marine Conservation Area**
- 3 **Cambria State Marine Conservation Area**
- 4 **White Rock (Cambria) State Marine Conservation Area**
- 5 **Morro Bay State Marine Reserve**
- 6 **Morro Bay State Marine Recreational Management Area**
- 7 **Point Buchon State Marine Reserve**
- 8 **Point Buchon State Marine Conservation Area**



# CO-MANAGEMENT OF CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS

**A White Paper Produced for The Santa Ynez Band of Chumash Indians  
with Funding Provided by the 7<sup>th</sup> Generation Advisors**



**MICHAEL VINCENT MCGINNIS, PhD**

Bioregional Planning Associates Sacramento California

## EXECUTIVE SUMMARY




Malibu's Paradise Cove August 19, 2011. Chumash paddle their tomol to meet the sailors in seven vaka moanas or sailing canoes from the Pacific Voyage. *Photo: M.V. McGinnis.*

ACROSS THE PACIFIC RIM, Tribal and Indigenous peoples are participating and co-managing marine protected areas. These co-management experiences provide opportunities and challenges to sustain Indigenous maritime practices. Co-management of marine protected areas can foster the integration of scientific and traditional ecological knowledge systems.

The planning effort under the Marine Life Protection Act (MLPA) of 1999 currently involves federally recognized Tribes. The goal of this report is to strengthen the opportunities to implement co-management of designated California-Chumash marine conservation areas located at Anacapa Island, Naples, Point Dume, and Kashtayit in southern California.

The implementation of the existing California-Chumash marine conservation areas is ongoing, and the State plans to review the progress of the MLPA in 2022. At that time changes may be made to the existing legislative framework, and other planning and decision-making changes



may be developed to foster further cooperation with Tribes and the State in the implementation of the MLPA and the co-management of designated marine conservation areas.

Based on a review of case study materials and the literature on co-management of protective areas, there are three major recommendations described in this report. First, a move from consultative co-management to collaborative management of designated California-Chumash marine conservation areas is warranted. Second, the following factors contribute to successful implementation of co-management of State-Tribal protected areas: public access to Tribal members to the protected area; the proximity to use of the marine area; the scientific baseline information on the ecology of the marine area; the historical level of customary marine resource use; the institutional capacity to monitor the designated MPA; the enforcement capacity and capability of partnering agencies and the Tribe of the MPA; and the available customary values and ecosystem goods and services provided by the MPA. These factors are used to analyze the four alternative California-Chumash marine conservation areas. Third, the Chumash should consider joining the Tribal Marine Stewards Network pilot program as the fifth partner in the collaborative network effort. There is currently no southern California Tribal partner in the pilot program. Two California-Chumash marine conservation areas may be appropriate to consider by the Chumash members given the analysis in this report -- the *Kashtayit* or Point Dume marine conservation areas. This recommendation is based on the historical use of customary practice by the Chumash of these areas; the proximity of use to these areas; the availability of public access to the sites; and other factors. Furthermore, the Chumash should consider ways to contribute as co-managers to the enforcement, education, information exchange, and the monitoring efforts to further the implementation of existing California-Chumash marine conservation areas.



## TABLE OF CONTENTS

INTRODUCTION.....	5
CHUMASH TEK AND THE SOUTHERN CALIFORNIA BIGHT.....	6
CO-MANAGEMENT PRINCIPLES.....	8
THE EARLY PHASE OF CO-MANAGEMENT OF CALIFORNIA-TRIBAL MPAS.....	12
<i>The Move toward Tribal Exemption.....</i>	12
<i>Co-management and the California Department of Fish and Wildlife.....</i>	14
<i>The Tribal Marine Stewards Pilot Program.....</i>	15
<i>Moving from Consultation Co-Management to Collaborative Co-Management.....</i>	16
CASE STUDIES OF CO-MANAGEMENT.....	18
AN ANALYSIS OF FOUR CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS .....	21
<i>Institutional Capacity and Capability to Monitor and Enforce.....</i>	22
REFERENCE .....	23

### List of Figures, Tables and Maps

Map 1. <i>Santarosae</i> Island before Sea-Level Rise.....	7
Figure 1. Co-Management Principles.....	9
Figure 2. Hybrid Management.....	10
Table 1. A Comparison of California and Tribal Management Systems.....	10
Figure 3. Types of Co-Management.....	11
Table 2. Alternative Analysis of California-Chumash Marine Conservation Areas.....	21

## INTRODUCTION

Me'pshumawish. Together we are making health, harmony, peace.

This study builds on a previous report entitled *Tribal Marine Protected Areas: Protecting Maritime Ways and Cultural Practices* (McGinnis 2004) produced for the *Wishtoyo Foundation*. At the time of publication of that report, the Marine Life Protection Act (MLPA) of 1999 did not include a statutory role for the Tribes in the collaborative network process (Sagkof et al. 2021). In their legal analysis of the changing role of the Tribes in the MLPA Berkeley and Williams (2019: 307) write:

Like the vast majority of California laws, the MLPA did not specifically address the rights and concerns of Indian tribes even though the California coast is Indian Country for many tribes. The failure of the legislature to acknowledge the centuries-long stewardship of coastal resources by Indian people, and the commencement of a resources-protection process that did not include tribes, resulted in initial opposition from Indian tribes. Many tribes feared the process would simply be the latest in a long history of state actions that risked the extinguishment of cultural practices. Instead, despite initial misunderstandings, the [marine protected area] MPA designation process elevated tribal engagement in state natural resource management and may be the catalyst for a fundamental shift in California's approach to tribal nations.

Requests to amend MPA regulations were submitted to the FGC by two different tribes: the Kashia Band of Pomo Indians and the Santa Ynez Band of Chumash Indians (hereafter, the Chumash). Tribal take was authorized in marine conservation areas that overlap with areas of historic and/or current uses for gathering, ceremony, or harvest as reflected in a factual record of use provided by a Tribe. There are four California-Chumash marine conservation areas that are located at sites in state waters at Anacapa Island, Naples, Point Dume, and *Kashtayit*.

The implementation of the existing California-Tribal marine conservation areas is ongoing. The first Decadal Management Review of the MLPA will take place in 2022, and will serve to review and potentially update four primary objectives of the MPA Management Program:

- Outreach and Education,
- Research and Monitoring,
- Enforcement and Compliance, and
- Policy and Permitting

The FWC will receive this review at their December 2022 meeting and decide whether to direct CDFW and its partners to pursue recommendations and identified next steps. At that time changes may be made to the existing legislative framework, and other planning and decision-making changes may be developed in cooperation with Tribes and California resource agencies to strengthen the co-management of designated marine conservation areas.



This paper begins with a description of the importance of traditional ecological knowledge or TEK and the Southern California Bight. Second, the paper characterizes the preliminary stages of implementation of the MLPA, and the changing role Tribes have in the collaborative network and decision-making. The paper reviews the co-management literature to suggest the need to move from *consultative* co-management to *collaborative* management of designated California-Chumash marine conservation areas.

In the last section, an analysis of the four alternative California-Chumash marine conservation areas is described. The alternative analysis is based on the following factors that contribute to successful co-management implementation:

- public access to Tribal members.
- the proximity to use of the marine area.
- the scientific baseline information on the ecology of the marine area.
- the historical level of customary marine resource use.
- the institutional capacity to monitor the designated MPA; and,
- the enforcement capacity and capability of partnering agencies and the Tribe of the MPA.

## **CHUMASH TEK AND THE SOUTHERN CALIFORNIA BIGHT**

Federally recognized tribes are not mere stakeholders in the MLPA decision-making and collaborative process. As co-managers of marine life protection and management, Tribes are sovereign nations. Traditional ecological knowledge (TEK) is essential to the maintenance of Tribal maritime culture and should be considered a key facet of the co-management process for California-Chumash marine conservation areas. Moreover, the public and resource agencies can learn from TEK.

TEK is based on the interaction between traditional or Indigenous culture and the ecosystems that Tribal peoples are irrevocably connected to. In *Sacred Ecology*, Fikret Berkes (2008) describes two primary aspects of TEK that are important to consider as California and the Tribes move forward in the implementation of the MLPA. First, TEK should be considered a “process” rather than a “content.” TEK is a process insofar as it changes and adapts to changes with ecosystems and cultural values. Second, there are benefits from a stronger integration and partnership between those who have TEK and scientific knowledge.

One hundred and forty-eight historic Chumash village sites have been identified from Malibu to San Luis Obispo, including eleven on Santa Cruz Island, eight on Santa Rosa Island, and two on San Miguel Island (Glassow 1995). The archaeological record shows that traditional Chumash maritime practices changed with a changing socio-ecological context. Mussel shells uncovered at excavated historical Chumash village sites indicate cyclical periods of species decline and rebound. These cyclical periods reflect changes in oceanographic setting of the California Current and the Southern California Bight, including short-term and longer-term (e.g., interdecadal oceanographic regime shifts) changes in sea surface temperature and associated changes in biogeography of fishes and invertebrates (Kennett 2005).


Moreover, archaeological and ethnographic evidence suggest that the periodic movement of Chumash village areas helped mediate socio-ecological changes in food security (Rick 2007). As in other traditional societies such as the Māori and other Pacific Islanders, Tribal peoples monitored and temporarily banned fishing certain species in order for their respective populations to reach a more stable abundance. Chumash coastal inhabitants would change their diet to reflect changes in their food availability. Seaweeds, kelps, and other marine plants helped sustain Chumash populations; marine plants were often an essential food source during times of food insecurity.

Chumash TEK served the needs of cultural adaptation to changes in the socio-ecology of the Southern California Bight. The northern Channel Islands area were one connected island called *Santarosae* that was located nine kilometers from the coastal mainland (depicted in Map 1). Large-scale sea-level rise during the late Pleistocene and early Holocene periods inundated nearshore areas in many parts of the world, producing drastic changes in local ecosystems and obscuring significant portions of the archeological record (Reeder-Myers et al. 2015). Sea level was about 80–85 meters lower than present at the time of the first known human Chumash occupation.

**Map 1. Santarosae Island before Sea-Level Rise**



Source: KCET, *California's Atlantis: The Lost Superisland of Santarosae*, available at: <https://www.kcet.org/shows/lost-la/californias-atlantis-the-lost-superisland-of-santarosae>



There were major consequences from sea level rise on traditional cultures and customary practices of coastal southern California (Kennett 2005). At the close of the Pleistocene and start of the Holocene, people in coastal California faced shrinking land, intertidal, and subtidal zones that were used for food gathering and other customary uses. This led to a decline in food security and migration of traditional cultures. Second, as a consequence of sea-level rise in the Southern California Bight, including the Channel Islands and the coastal mainland areas, the archaeological and cultural areas used near river and creek mouths, coastal beach areas, and other areas historically inhabited by the Chumash are submerged today (Glassow 1995).

In addition, European colonialization of [Alta] California significantly impacted Chumash society (Dartt-Newton and Erlandson 2006). As Dartt-Newton and Erlandson (2006: 419):

While natural environmental fluctuations may have played a role in the movement of Chumash people to the missions (particularly in the abandonment of Channel Island villages after AD 1810), we contend that colonial oppression and Spanish-induced environmental degradation were the chief culprits. No amount of scientific data can blunt the harsh realities of the mission period, when the Chumash and other California Indians died by the tens of thousands and most survivors were reduced to a humiliating slavery-like condition.

Overall, the socio-ecology of the islands and coastal mainland changed and so did the traditional and customary practices of the Chumash (Holmes and Johnson 1998). Chumash knowledge evolves with changes in living conditions. Chumash TEK sustained the diverse communities for thousands of years.

Tribes have a substantive role in the co-management of California-Tribal marine conservation areas. One hope is that Tribal TEK can contribute to the strengthening of the public's awareness of the sacred and customary values of coastal and marine ecosystems in California. These coastal and marine ecosystems have long been influenced by human activities and customary practices.

## **PRINCIPLES OF CO-MANAGEMENT**

Definitions of co-management focus on sharing management responsibility between government and stakeholders (Brown and Pomeroy 1998; Pomeroy 2001; Berkes et al. 2001). Borrini-Feyerabend et al. (2000) note that co-management is a situation in which two or more social actors negotiate, define, and guarantee amongst themselves an equitable sharing of the management functions, entitlements, and responsibilities for a marine area. In this case, the sharing of responsibility under the MLPA is between State agencies and the Chumash.

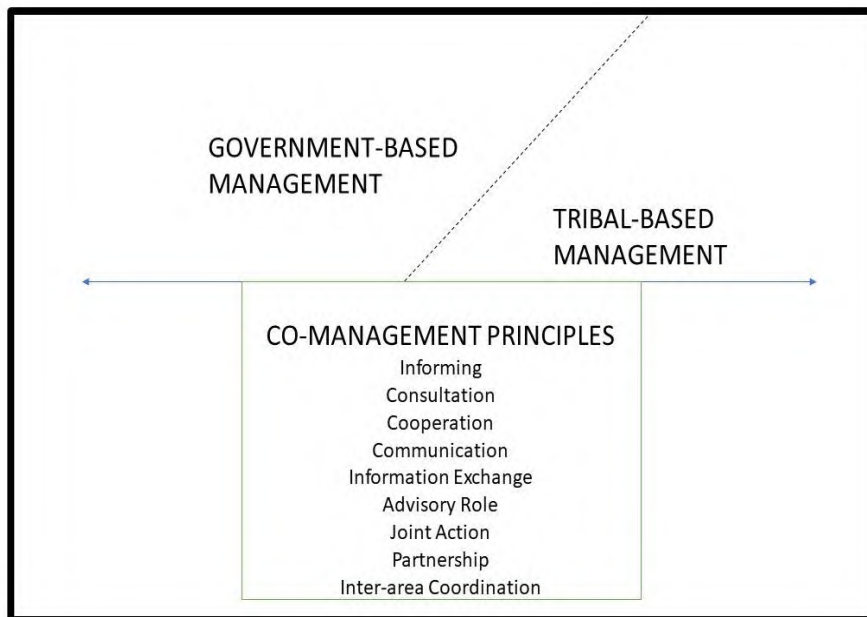
There are many benefits to co-management. The benefits include:

- improved management due to incorporation of better scientific evidence and TEK (Pinkerton 1989).
- more appropriate rules and regulations that can respond rapidly to changing socio-ecological conditions (Berkes et al. 2001; Ebbin 2002; Hernes et al. 2005).

- more effective and efficient enforcement due to increased legitimacy of the management structures (Berkes et al. 2001; Hanna 2003; Pinkerton and John 2008).
- can increase equitable and fair use of resources (Beierle and Cayford 2002; Borrini-Feyerabend et al. 2004; Coffey 2005); and
- can contribute to the empowerment and development of marginalized communities (Birner and Wittmer 2003; Hara and Nielsen 2003; Jentoft 2003; Pomeroy and Viswanathan 2003).

Figure 1 includes a general characterization of principles of co-management.

**Figure 1. Co-Management Principles**



There are three forms of co-management (depicted in Figure 2 below). The most common arrangement is described as “consultative co-management” whereby the resource agencies often consult with stakeholders or, in this case, Tribes (Brown and Pomeroy 1999). The term “collaborative co-management” connotes a stronger partnership where there is a sharing of authority and responsibility (Kurien 1988; McConney et al.1998). Third is “delegated co-management” that includes, but is not limited to, community-based management since national or state co-management structures are especially common in fisheries management (Jacobs 1998; McConney and Mahon 1998). Establishing successful co-management is seldom immediate. Like most participatory processes it takes time and careful attention to partnership building and strategic planning.

**Figure 2. Types of Co-Management**

<b>TRADITIONAL RESOURCE MANAGEMENT</b>	<b>TYPES OF CO-MANAGEMENT</b>
Government has the most control	<u>Consultative Co-Management</u> Government interacts with partners But makes all decision
	<u>Collaborative Co-Management</u> Government and the tribes work closely and share decisions
	<u>Delegated Co-Management</u> Government lets formally organized tribes make decisions

A collaborative co-management approach to marine life protection requires the integration of two systems of governance and management. Tribal and customary management and marine ecosystem-based management systems have contrasting goals, inferred social and ecological benefits, and spatial scales. A general comparison of the diverse systems of management is found in Table 1.

**Table 1. A Comparison of California and Tribal Management Systems**

<b>Management and Planning in the California MLPA</b>	<b>Tribal and Customary Management</b>
Use of Ecosystem-based Principles in Planning	Cyclical processes and periodic benefits
Science-based Decision-making	Emphasis on the cultivation of TEK
Collaborative & Stakeholder based Planning	Utilitarian goals
Often dominated by Biological Conservation Goals	Sensitive to Socio-economic and Socio-ecological transformation
Operates on larger scales (e.g., networks of small reserves)	Complex tenure systems may hinder larger-scale conditions

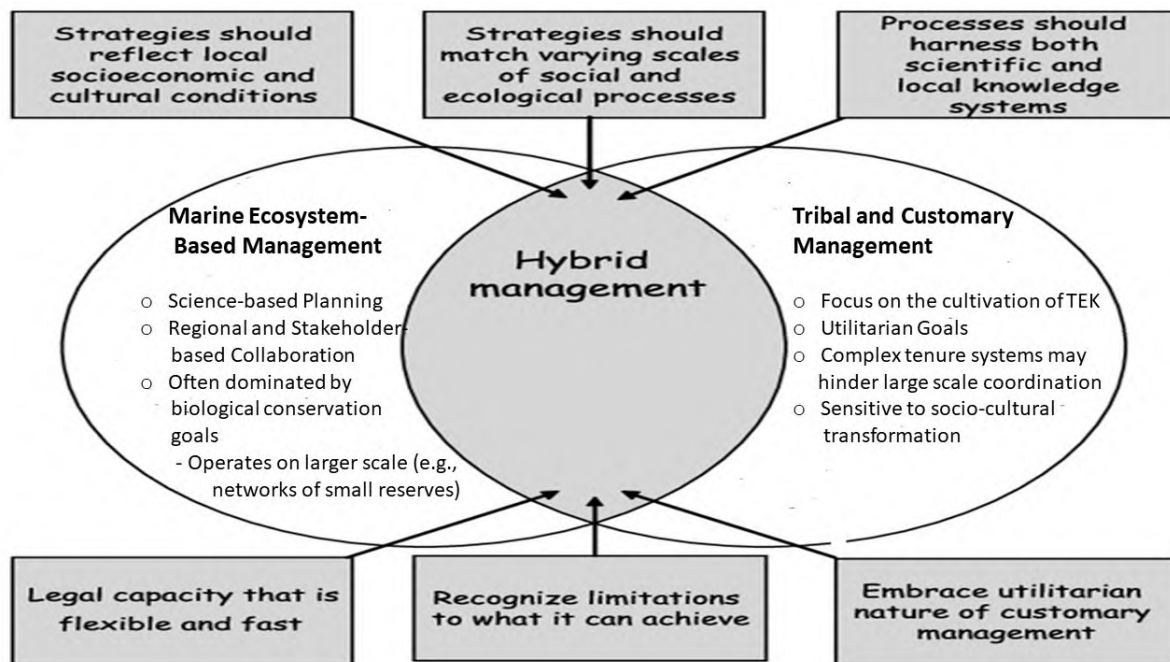
In collaborative co-management, there are three institutional factors that can contribute to the successful integration of authority and responsibility:

- Planning processes, including the monitoring and enforcement of marine protected areas, should harness both scientific and TEK systems.

- Program strategies should match varying scales of social, economic, and ecological processes.
- Program strategies should reflect local or regional socio-cultural conditions as they change overtime and as new information is gathered, e.g., strategic management should support adaptive approaches to planning in the future.

A hybridized co-management approach to marine life protection is depicted in Figure 3.

**Figure 3. Hybrid Management**



(After Pomeroy and Berkes 1997: 466)

Since the adoption of the MLPA in 1999, a number of steps have been taken by policymakers, resource agencies and members of Tribes to establish and encourage co-management of California-Tribal MPAs. Initial Studies, as required by CEQA, have been submitted and regulatory provisions have been approved by the California Department of Fish and Wildlife Commission (FGC). Governor Brown and Governor Newsome have signed Executive Orders to encourage co-management of marine resources with Tribes. California resource agencies have approved strategic goals and objectives in support of co-management principles to encourage co-management of California-Tribal marine conservation areas. Collaborative networks have been established that include formal Tribal membership. Pilot programs between California and the Tribes to develop monitoring programs and the deployment of data gathering to strengthen monitoring of existing MPAs have been developed.



## CO-MANAGEMENT OF CALIFORNIA-CHUMASH MPAS

This section provides a general description of the early implementation of co-management of the California-Chumash marine conservation areas. A detailed overview of the early implementation of the MLPA and the role of the Tribes in the process is available at Sofka and colleagues (2021: 80-113) and Berkey and Williams (2019). These studies describe the collaborative, legal and historical role of the Tribes during the implementation of the MLPA.

### *The Move toward Tribal Exemption*

Following adoption of MPAs in the North Coast MLPA planning process, a regulatory provision was adopted by the California Fish and Game Commission (FGC) to provide exemptions from MPA-specific area and take regulations for individual federally recognized California Tribes (i.e., tribal exemptions), through a petition process by the Commission. Requests to amend MPA regulations were submitted to the FGC by two different tribes: the Kashia Band of Pomo Indians (the Kashia) and the Chumash (Berkey and Williams 2019; Dudek 2018).

### *Tribal Take*

“Federally recognized tribe” means any tribe on the List of Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, published annually in the Federal Register. Any member of a federally recognized tribe authorized to take living marine resources from an area with area-specific take restrictions in subsection 632(b), when engaging in take within an authorized area shall possess on his person, in his immediate possession, or where otherwise specifically required by law to be kept, any valid license, report card, tag, stamp, validation, permit, or any other entitlement that is required in the Fish and Game Code, or required by other state, federal, or local entities, in order to take living marine resources. Members shall possess a valid photo identification card issued by a federally recognized tribe that contains expiration date, tribal name, tribal member number, name, signature, date of birth, height, color of eyes, color of hair, weight, and sex; and display any of the items listed above upon demand to any peace officer. Members taking living marine resources under this provision are subject to current seasonal, bag, possession, gear and size limits in existing Fish and Game Code statutes and regulations of the commission, except as otherwise provided for in subsection 632(b). No member, while taking living marine resources pursuant to this section, may be assisted by any person who does not possess a valid tribal identification card and is not properly licensed to take living marine resources. Nothing in the regulation is intended to conflict with, or supersede, any state or federal law regarding the take of protected, threatened or endangered species [Title 14, 632(a)(11)].

The Chumash requested the Commission to apply tribal take provisions in four SMCAs in southern California that are within their areas of historic and/or current tribal use. The regulations for the State Marine Conservation Areas (as January 1, 2019) are taken from California Code of Regulations (CCR) Title 14, Section 632, and are as follows:

The exemptions are consistent with allowing tribal take exemptions as currently defined in Title 14, §632(a)(11) (noted above), which identify how a member of a federally recognized tribe may be authorized to take living marine resources from an MPA with site-specific take restrictions.

A description of each California-Chumash marine conservation area is below (Dudek 2018):

**1) Kashtayit State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take of finfish, invertebrates except rock scallops and mussels, and giant kelp (*Macrocystis pyrifera*) by hand harvest is allowed.
  - ii) Take pursuant to the maintenance of artificial structures and operation and maintenance of existing facilities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by the Department
- b) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(97) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.

**2) Naples State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take by spearfishing of white seabass and pelagic finfish is allowed.
  - ii) The commercial take of giant kelp (*Macrocystis pyrifera*) by hand harvest or by mechanical harvest is allowed.
- b) Take pursuant to operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.
- c) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(98) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians

**3) Point Dume State Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:
  - i) The recreational take by spearfishing of white seabass and pelagic finfish is allowed.
  - ii) The commercial take of swordfish by harpoon; and coastal pelagic species by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.
- b) Take pursuant to beach nourishment and other sediment management activities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.
- c) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b) (117) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians

#### 4) **Anacapa Island State and Federal Marine Conservation Area Permitted/Prohibited Uses:**

- a) It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:
  - i) The recreational take of spiny lobster and pelagic finfish and the commercial take of spiny lobster is allowed.
- b) The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b) (112) and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians

The Chumash remain subject to the Anacapa Island Special Closure regulations where it overlaps with the Anacapa Island SMCA and are not exempt from the Anacapa Island Federal Marine Conservation Area take restrictions. Fishing with use of hand-based equipment and intertidal collection is allowed in this area, for which there is no pelican fledging area closure. Therefore, there are currently no exemptions in federal waters of the Channel Islands National Marine Sanctuary.

With respect to the role of the Tribes in the MLPA process Berkey and Williams (2019: 349-350) note that Governor Brown in Executive Order B-10-11 moved forward with formally recognizing the role of federally recognized tribes in marine governance:

The perceptions of tribal representatives who participated in the late stages of the MLPA process bears out the truth of the Governor’s observation. One tribal advocate said that, though there is a great deal of work yet to be done to fully recognize tribal rights to marine resources, the “space created by the MLPA is a promising first step.”

Both the State and some tribal representatives see a trend toward a marked increase in tribal participation in the development of state policy beyond that of marine resources. While not every tribe has the resources to respond to state agency invitations, at least they have a greater opportunity.

In Executive Order N-82-20 Governor Newsome also recognized the role of the Tribes in marine resource protection and supported further development and movement toward co-management of MPAs.

#### ***Co-management and the California Department of Fish and Wildlife***

The Tribal Communication and Consultation Policy provides the foundation for the CDFW to work cooperatively, communicate effectively, and consult with Tribes. This policy also serves as the CDFW’s primary means to implement Executive Order B-10-11 and the California Natural Resource Agency’s Tribal Consultation Policy.

The *Master Plan for Marine Protected Areas – Appendix B* from the CDFW (2016: B-10) describes the existing co-management policy with respect to Tribes as follows:

The purpose of this policy is to create a means by which tribes and Fish and Game Commission can effectively work together to realize sustainably managed natural resources of mutual interest.

This CDFW (2016) identifies the following priorities:

1. Communication. Both FWC and the Tribes are faced with innumerable demands on their limited time and resources. In the interest of efficiency, FWC will annually host a Tribal planning meeting to coordinate the upcoming regulatory and policy activities before FWC. The meeting will provide a venue for education about process, identifying regulatory and policy needs, and developing collaborative interests; this will include inviting sister agencies to participate.
2. Collaboration. In areas or subjects of mutual interest, FWC will pursue partnerships with tribes to collaborate on solutions tailored to each tribe's unique needs and capacity. The structure of these collaborative efforts can range from informal information sharing to Memorandum of Understanding (MOU) with more specific agreements regarding working relationships and desired outcomes, to co-management agreements with specific responsibilities and authorities.
3. Record-keeping. FWC will maintain a record of all comments provided by Tribes and will include them in administrative records where appropriate.
4. Training. FWC will provide training to interested Tribes on its processes for regulation and policy development.

The FWC *Co-Management Vision Statement and Definition* (February 2020) states:

The vision of tribes, the California Fish and Wildlife Commission, and the California Department of Fish and Wildlife is to engage in a collaborative effort between sovereigns to jointly achieve and implement mutually agreed upon and compatible governance and management objectives to ensure the health and sustainable use of fish and wildlife [*my emphasis*].

Definition: A collaborative effort established through an agreement in which two or more sovereigns mutually negotiate, define, and allocate amongst themselves the sharing of management functions and responsibilities for a given territory, area or set of natural resources [*my emphasis*].

The above strategy adopted by the CDFW clearly suggests the value of *collaborative* co-management with the Chumash to implement marine conservation areas.

### ***The Tribal Marine Stewards Pilot Program***

Esgro (2020) notes that Tribes are engaged with California resource managers in multiple forums for MPA management through participation in multiple decision-making bodies, notably the CDFW Tribal Subcommittee and representatives at the MPA Statewide Leadership Team (MSLT). California's MSLT includes four regional Tribal representatives to ensure that Tribes

are directly involved in the development of MPA policy. Tribal participation in the collaboratives has given way to funded Tribal-specific projects and initiatives.

In 2020, a Tribal Marine Stewards Network Pilot Program was approved by the Ocean Protected Council (OPC) that included a disbursement of \$1,000,000 to the California Indian Environmental Alliance (CIEA) to support the development of a Tribal Marine Stewards Network pilot program. The objective of the program is to enhance engagement with Tribes and protect and restore coastal and marine ecosystems. According to OPC, this program is a mechanism to “advance California’s efforts to support [I]ndigenous stewardship and adopt meaningful co-management measures.”

The program is composed of four partner Tribes (Tolowa Dee-ni’ Nation, Resighini Rancheria, Kashia Band of Pomo Indians, and the Amah Mutsun Tribal Band), and is supported by two non-governmental organizations (CIEA and Ecotrust). The program focuses on MPA monitoring and notes that Tribes will work to identify a fifth Tribe, ideally in southern California, who is interested in participating in the network. At the time of the writing of this report, the Chumash are not formally involved in this pilot program.

A timeline that includes a general summary of development in the co-management approach in California is below:

- Executive Order (“EO”) B-10-11 started state agency tribal consultation under Gov. Brown
- 2012 Natural Resources Agency adopts Tribal Consultation policy
- 2014 CDFW adopts tribal Communication and Consultation Policy
- 2015 FGC Adopts Tribal Consultation Policy
- 2019 EO N-15-19 reaffirms Tribal Consultation by Gov. Newsom
- 2020 Tribal Subcommittee of FGC Adopts Co-Management Vision & definition
- 2020 Gov. 2d Annual Tribal nations Conference, Christina Snider, Gov. Tribal Advisor requests each tribe apply for co-management opportunities
- 2020 - Sept. 25: Gov. Newsom issues Statement of Administration Policy, Native American Ancestral Lands, “to facilitate tribal access, use and co-management of state owned or controlled natural lands.”
- 2020 - Oct. 7: EO N-82-20 “to conserve 30% of California’s land and coastal waters by 2030” and “to incorporate Tribal expertise and traditional ecological knowledge.”

### ***Moving from Consultation Co-Management to Collaborative Co-Management***

In an evaluation of the MLPA collaborative network process, Sofka et al. (2021) describe a number of recommendations that can strengthen the collaborative co-management of California-Chumash marine conservation areas. Sofka et al. (2021) recommend the following:

- *Improve Tribal Engagement, Protocols, and Initiatives*
  - Provide cross-cultural training by establishing periodic cross-cultural training opportunities. Trainings should foster cultural awareness around interactions with Tribal groups. Allocate time and funding for ongoing collaborative, network, and

state cross-cultural training that reflects local Tribal culture, histories, and connection to place.

- Protocols to prioritize respect, reciprocity, and free, prior, and informed consent in all interactions that acknowledge historical and current injustices related to Tribal sovereignty. Sofka et al. (2021) recommend that California should evaluate how Tribal consent, respect, or reciprocity may have been violated with respect to resource management issues in general, and marine conservation specifically. California should review ways to redress these past violations, with an emphasis on transparency and accountability.
- Establish and abide by anti-discrimination policies approved and/or developed by Tribes. Sofka et al. (2021) recommend that California should determine which forms of discrimination, biases, or stereotypes Tribes have encountered through their participation in the collaboratives and MPA management. The State should review existing agency policies and interpretations that constrain Tribal participation, including but limited to considerations of inclusivity and accessibility.
- Consider the utility of developing a statewide MPA tribal committee and/or statewide Tribal collaborative.
- Engaging Tribes as partners in co-management, not stakeholders. The State should involve Tribal participants in decision-making bodies, forums, and protocols surrounding the control and co-management of MPAs. They also recommend that the State review how principles of Tribal co-management have been violated with respect to resource management issues in general, and ocean/MPA conservation specifically.
- Ensure Tribal co-authorship of language in all formal agreements. Sofka et al. (2021) recommend that Tribal authorship should take place in future planning and policymaking to ensure that Tribal perspectives, preferences, and confidentiality are appropriately captured.
- Establish protocols for integrating aspects of Tribal stewardship. Sofka et al. (2021) recommend that California establish and codify appropriate policies, best practices, and protocols at the collaborative and State levels of governance that emphasize the integration and acknowledgement of Tribal stewardship at all levels of MPA management. They also recommend that the State prioritize Tribally led and managed stewardship projects, such as the Tribal Marine Stewards Network.
- Prioritize the inclusion of all forms of Tribal and indigenous communities and recognize that Tribal communities exist far beyond federal recognition. Sofka et al. (2021) recommend that California prioritize the involvement of diverse forms of Tribal arrangements including but not limited to federally recognized Tribes, State recognized Tribes, unrecognized Tribes, consortiums, etc. The State should review with Tribal participants what groups have been excluded from this MPA management in the past, and the procedures which facilitated that exclusion. Sofka et al. (2021) also recommend that the Tribes and California determine how



management and planning approaches can be modified to engage a variety of formal and informal Tribal arrangements.

- *Establish Protections and Protocols for Tribal Decision-Making and Authority Around Knowledge and Data. This should include the establishment of policies with Tribal participants for knowledge requests, use, sharing, and mobilization within the collaboratives.*
  - Anticipate and honor diverse Tribal preferences for data management, collection, analysis, and use. These protocols should facilitate Tribal participation and information sharing in collaboratives and beyond, creating an atmosphere of consent.
  - Understand that Tribes may not consent to the sharing of their knowledge and data that has been passed down and safeguarded for generations. Similarly, acknowledge the diversity of Tribal science and knowledge, how it differs from non-Tribal science, and the ways in which TEK can be better protected.
  - Consider the integration of Tribally selected models of Indigenous data governance and data protection at all levels of MPA collaborative management. Sofka et al. (2021) recommend that California and the Tribes carefully review Tribal decision-making authority and consider if there have been instances where Tribes felt as though they did not have control over their data, and if so, what policies could be established to mitigate these scenarios going forward.

Careful consideration of these recommendations is warranted to strengthen the collaborative co-management approach to California-Chumash marine conservation areas.

## CASE STUDIES OF CO-MANAGEMENT

This section includes a brief characterization of case studies on implementation of co-managed State-Tribal or Indigenous protected areas.

### *Fiji Locally Managed Marine Area (LMMA) Network*

A locally managed marine area (LMMA) differs from a typical MPA in that LMMAs “are characterized by local ownership and/or control,” whereas other forms of MPA are usually “designated by levels of management via a top-down approach” (Govan et al. 2006). The LMMA Network supports a collaborative co-management approach to manage coastal and marine resources. LMMA supports networks in Indonesia, the Philippines, Papua New Guinea, Palau, Pohnpei, Fiji and the Solomon Islands, and engages with more than fifteen other countries in the Indo Pacific. Case studies of member organizations within the LMMA are found in Rocliffe et al. (2014), Jupiter et al. (2014), and Robertson et al. (2020).

Increasingly, the LMMA Network is sharing its lessons globally, with increased interest not only in improved conservation outcomes, but also with an increased focus on social justice and the rights of traditional resource owners. Robertson et al. (2020) note that a LMMA, in the South Pacific context, is rooted in traditional and customary fisheries management and is designed to

gain support and active engagement from the local community, with the latter being a key condition for the successful and lasting implementation of MPAs.

The Fiji Locally Managed Marine Area (FLMMA) Network supports traditional communities who have observed declines in marine resources and their customary use of marine resources and want to act. The FLMMA Network is a non-profit and charitable association of resource conservation NGOs, government departments, academic institutions and over four hundred communities working together as co-managers to promote and encourage the preservation, protection and sustainable use of marine resources in Fiji.

The goals of the FLMMA are to:

- Provide practical capacity building, cost-effective and culturally appropriate engagement tools to promote locally led dialogues and management.
- Assist communities in managing their resources, often utilizing a revival of cultural traditions strengthened by contemporary science.
- Build trust, resiliency, confidence, and innovation through lesson sharing between practitioners.
- Follow a code of conduct that ensures community interests are the heart of any conservation effort.
- Advocate for communities at the national, regional, and international levels, for fair partnerships, policies, and support.

### ***The Challenge of MPA governance in New Zealand and the Role of Māori***

When New Zealand was settled by Europeans, a treaty was signed between Māori and the British Crown, called the Treaty of Waitangi. The Treaty gave guarantees that Māori would retain ownership and sovereignty over their customary resources. However subsequent government action deprived Māori of rights and land. It was only in the 1970s that the New Zealand government began to recognize the importance of partnership with the diverse Māori peoples. Today, much of the policy and legislation in relation to oceans governance requires consultation with local Māori (*tangata whenua*) and tribes (*iwi*) (McGinnis 2012).

The New Zealand government, as part of its obligations to Māori under the Treaty of Waitangi, has provided for some coastal and marine areas to be subject to the control of local Māori. Two types of protection can be granted over areas: *mātaitai* and *taiāpure*. *Mātaitai* reserves are established to protect traditional fishing grounds in internal waters or coastal waters. Within a *mātaitai*, commercial fishing is prohibited, but recreational fishing can continue. The *tangata whenua* can also request the Minister of Fisheries to create bylaws that restrict or prohibit recreational fishing. Other customary reserves are *taiāpure*-local fisheries. Consultation is required and an appeal against a decision by the Minister of Fisheries to establish a *taiāpure*-local fishery can be heard by a tribunal. Due to this process, they are harder to establish than *mātaitai*. The national government of New Zealand can deny designation of *taiāpure*-local fisheries.

There are several problems regarding Māori rights with respect to marine protection, and co-management has failed (McGinnis 2012). Application for marine reserve designation is

dependent on approval from other interested parties and government agencies. Current co-management legislation requires the Crown acting through the Department of Conservation have the final say regarding marine reserve management (Dodson, 2014). Co-management in New Zealand has not empowered local iwi or tribes in co-governance – there remains unequal authority between cultural groups and governmental organizations. Collaborative co-management could potentially minimize marginalization of Māori communities and increase successful marine reserve implementation (Carlsson and Berkes 2005; Berkes 2009; Mossop 2020). Fragmented government authority and inter-agency conflict also contribute to failure to live up to international best practice in protected area management in New Zealand.

### ***Co-management between Australia and the Miriuwung-Gajerrong People of Western Australia***

Collaborative co-management involves Australia and the Miriuwung-Gajerrong people of Western Australia, and the partnership that has evolved shows co-management can provide equity in managing a protected area (Hill, 2011). In this case, collaborative co-management established a balance between Indigenous values and State conservation values.

Co-management is central to the Australian government’s approach to this conservation/ Indigenous nexus, and to delivering the enhanced equity with Indigenous people in protected areas. Indigenous people favor community-controlled approaches to protected areas in this region of Australia. Hill (2011) describes a number of reasons for the success of the Australia-Miriuwung-Gajerrong co-management model:

- Respect the rights of traditional owners, custodians, or users to lands, territories and resources Indigenous land ownership
- Free, prior and informed consent of the Traditional Owners
- Legal protection for rights and interests of parties
- Respect and strengthen Indigenous peoples’ institutions and customary laws
- Coherent and effective Indigenous representative party with legitimacy
- Sufficient resources to enable Indigenous participation
- Conflict management
- Respect and strengthen Indigenous peoples’ exercising of authority and control
- Commitment of Indigenous people to assume the opportunities
- Appropriate technical and other advice
- Clear understanding of Indigenous ideas about success
- Traditional Owners in driving role

As a general summary, Hill (2011) identified three factors of significance for the establishment of a successful co-management of a protected area: (1) a foundation platform of recognition of rights and interests; (2) a set of effective organizations to support the roles of the key actors; and (3) effective mechanisms for working together.

A number of factors contribute to unsuccessful co-management, such as: unclear law with vague strategic and programmatic development; failure to uphold treaty rights and obligations for

Indigenous or Tribal peoples regarding their use or right to access protected areas; lack of resources granted to Indigenous or Tribal peoples to participate as partners in co-management planning and decision-making; lack of funding granted to implement and enforce co-management plans; lack of leadership; and, the lack of institutional capacity to address conflicts between partners in co-management planning efforts.

[An *Addendum* describes the co-management framework that has been adopted and implemented for the Olympic National Marine Sanctuary.]

## AN ANALYSIS OF FOUR CALIFORNIA-CHUMASH MARINE CONSERVATION AREAS

Based on an analysis of the scholarly literature and case study material published on co-management of protected areas, this section provides an alternative analysis based on a sample of factors that often contribute to successful State-Tribal partnerships. The primary factors used in the analysis are:


- Public access of a marine area by Tribal members.
- The proximity to use of the marine area by Tribal members.
- The scientific baseline information on the ecology of the marine area.
- The historical level of customary marine resource use.
- The institutional capacity to monitor the designated MPA and enforce rules and regulations.

Table 2 depicts a general summary of the findings from this analysis. A characterization of the institutional capacity and capability of partnering organizations to monitor and enforce the rules and regulations of MPAs is described as well in the sections below the table.

[insert Table 2]

### *Institutional Capacity and Capability to Monitor and Enforce*

A comprehensive evaluation of the institutional capacity and capability to monitor and enforce the existing MPA network is beyond the scope of this project. Starting in 2007, California Sea Grant partnered with the California Ocean Protection Council (OPC) and CDFW to administer research project funding for baseline monitoring of MPA's. These projects aimed to establish a snapshot of marine ecosystems and human activities around the time of the establishment of the new MPAs, and to document initial socioeconomic and ecological changes after the MPAs take effect. The South Coast was the third region to be studied as part of the MPA Baseline Monitoring Program. The projects ran from 2011 to 2017.



The MPA monitoring framework explicitly mentions the potential role of citizen science programs in MPA monitoring (CDFG 2008). Recently, many citizen-based science programs have endeavored to help provide these much-needed data (Freinwald et al., 2018).

Implementation of MPAs under the MLPA Initiative in Southern California was followed by a monitoring program to establish a comprehensive baseline of the ecological conditions of several marine ecosystems at the time of MPA implementation. This baseline monitoring consortium involved several citizen science monitoring programs alongside more traditional academic monitoring programs, creating an opportunity to evaluate the potential for citizen scientists to become more involved in future long-term monitoring efforts.

Enforcement of existing CDFW regulations is based on education, public outreach, and a number of other factors, including the number of marine wardens. In an undercover operation and subsequent boarding by officers in 2013, CDFW wildlife officers observed eighteen violations including poaching within California's MPA network, exceeding the possession limits of several fish species, using illegal methods to take fish, and failing to report accurate counts on logbooks. Monitoring and enforcement of MPA regulations will depend on the resources available to citizens, resource agencies and the Tribes to co-management designated areas. One obstacle often recognized in marine life protection is an "implementation deficit" whereby deficits occur during the implementation phase of policy development when there is a mismatch between fields of regulatory action. This can occur immediately or across a longer-term implementation phase. Immediate implementation deficits are caused by an excessively general definition of regulations or when policy goals are not operationalized in this field.

### ***Recommendation***

Based on the alternative analysis, the Chumash should consider joining the Tribal Marine Stewards Network pilot program as the fifth partner in the collaborative network effort. There is currently no southern California Tribal partner in the pilot program.

Two California-Chumash marine conservation areas may be appropriate to consider by the Chumash members given the analysis above: the *Kashtayit* or Point Dume marine conservation areas. This recommendation is based on the historical use of customary practice by the Chumash of these areas; the proximity of use to these areas; and the availability of public access to the sites.

Furthermore, the Chumash should consider ways to contribute as co-managers to the enforcement and monitoring efforts to further the implementation of existing California-Chumash marine conservation areas.

## REFERENCES

- Beierle, T.C. and J. Cayford (2002). *Democracy in practice: public participation in environmental decisions*. Resources for the Future: Washington, D.C.
- Berkes, F. (2008). *Sacred Ecology*. Routledge.
- Berkes, F. (2009). Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*, 90(5):1692–1702.
- Berkes, F., R. Mahon, P. McConney, R. Pollnac, R. Pomeroy (2001). *Managing small-scale fisheries: Alternative directions and methods*. International Development Research Centre: Ottawa, O.N.
- Berkey, C.G. and S.W. Williams (2019). California Indian Tribes and the Marine Life Protection Act: The Seeds of a Partnership to Preserve Natural Resources, *Am. Indian L. Rev.* 43: 307.
- Borrini-Feyerabend, G., M. Pimbert, M.T. Farvar, A. Kothari, Y. Renard (2004). *Sharing power: Learning by-doing in co-management of natural resources throughout the world*. IIED and IUCN/CEESP/CMWG: Cenesta, Tehran.
- California Department of Fish and Game (2008). *Master plan for marine protected areas*. Sacramento, CA: California Department of Fish and Game.
- California Department of Fish and Wildlife (CDFW) (2016). California's Marine Protected Area (MPA) Network. March 1, 2016. Available at: <https://wildlife.ca.gov/Conservation/Marine/MPAs/Network>
- Carlsson, L., and F. Berkes. (2005). Co-management: Concepts and methodological implications. *Journal of Environmental Management* 75(1), 65-76.
- Coffey, C. (2005) What role for public participation in fisheries governance? in *Participation in fisheries governance*. Springer: Dordrecht, The Netherlands. Pages 27-44.
- Dartt-Newton, D. and J.M. Erlandson (2006). Little Choice for the Chumash: Colonialism, Cattle, and Coercion in Mission Period California, *American Indian Quarterly* (30): ¾: 16–30. <http://www.jstor.org/stable/4139021>.
- Davis, N.A. (2008). Evaluating collaborative fisheries management planning: A Canadian case study. *Marine Policy* 32: 867-876.
- Dodson, G. (2014). Co-Governance and Local Empowerment? Conservation Partnership Frameworks and Marine Protection at Mimiwhangata, New Zealand. *Society & Natural Resources* 27(5), 1-19.
- Ebbin, S.A (2002). Enhanced fit through institutional interplay in the Pacific Northwest salmon comanagement regime. *Marine Policy* 26: 253-259.
- Ebbin, S.A. (2009). Institutional and ethical dimensions of resilience in fishing systems: Perspectives from co-managed fisheries in the Pacific Northwest. *Marine Policy* 33: 264-270.



Ebbin, S.A. (2011). The problem with problem definition: Mapping the discursive terrain of conservation in two Pacific salmon management regimes. *Society and Natural Resources: An International Journal* 24(2): 148-164.

Esgro, M. (2020). Tribal Marine Stewards Network Pilot Program. Ocean Protection Council. Available at: [https://opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20200619/Item6a\\_TribalMarineStewardsNetwork\\_FINAL.pdf](https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200619/Item6a_TribalMarineStewardsNetwork_FINAL.pdf)

Freiwald, J, Meyer, R, Caselle, J.E., et al. (2018). Citizen science monitoring of marine protected areas: Case studies and recommendations for integration into monitoring programs. *Mar Ecol.*: 39:e12470. <https://doi.org/10.1111/maec.12470>

Glassow, M. (1995). *Purisimeno Chumash Prehistory: Maritime Adaptations Along the Southern California Coast (Case Studies in Archaeology)*. Wadsworth Publishing; 1st edition (November 17)

Govan, H., A. Tawake, K. Tabunakawai (2006). Community-based marine resource management in the South Pacific. *Parks* 16 (1): 63-67.

Hanna, S. (2003). The economics of co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 51-60.

Hara, M., and J.R. Nielsen (2003). Experiences with fisheries co-management in Arica. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 81-98.

Hernes, H., S. Jentoft, K.H. Mikalsen (2005). Fisheries governance, social justice, and participatory decision-making. in *Participation in fisheries governance*. Springer: Dordrecht, The Netherlands. Pages 103-118.

Hill, R. (2011). Towards equity in indigenous co-management of protected areas: cultural planning by Miriuwung-Gajerrong People in the Kimberley, Western Australia. *Geographical Research* 49(1), 72-85.

Holmes, M.S., and J.R. Johnson (1998). *The Chumash and Their Predecessors: An Annotated Bibliography*. Contributions in Anthropology No. 1, Santa Barbara Museum of Natural History

Jentoft, S., K.H. Mikalsen, H. Hernes (2003). Representation in fisheries co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 281-292.

Jupiter, S., P. Cohen, R. Weeks, A. Tawake, H. Govan (2014). Locally managed marine areas: Multiple objectives and diverse strategies. *Pacific Conservation Biology* 20. 10.1071/PC140165.

Kennett, D.J. (2005). *The Island Chumash: Behavioral Ecology of a Maritime Society*. The University of California Press.

McGinnis, M.V. (2004). *Tribal Marine Protected Areas: Protecting Maritime Ways and Cultural Practices*. Produced for Wishtoyo Foundation. Bioregional Planning Associates. With Roberta Cordero.

McGinnis, M.V. (2012). Marine Governance: The New Zealand Dimension. Final Report. Funded by the Ministries of New Zealand. Emerging Issues Program. School of Government, Victoria University Wellington, New Zealand. April. Available at: [https://cbe.miis.edu/cgi/viewcontent.cgi?article=1000&context=cbe\\_working\\_papers](https://cbe.miis.edu/cgi/viewcontent.cgi?article=1000&context=cbe_working_papers)

Mossop, J. (2020). Marine Protected Areas and Area-Based Management in New Zealand, *Asia-Pacific Journal of Ocean Law and Policy* 5(1), 169-185. doi: <https://doi.org/10.1163/24519391-00501009>

Pinkerton, E. (1989). Introduction: Attaining better fisheries management through co-management – prospects, problems, and propositions. in *Co-Operative management of local fisheries: New directions for improved management and community development*. Pinkerton, E., editor. The University of British Columbia Press: Vancouver, B.C. Pages 3-33.

Pomeroy, R. (2003). The government as a partner in co-management. in *The fisheries co-management experience: Accomplishments, challenges, and prospects*. Wilson, D.C., J.R. Nielsen, P. Degnbol, editors. Kluwer Academic Publishers: Dordrecht, The Netherlands. Pages 247-262.

Pomeroy, R.S. and F. Berkes (1997). Two to tango: The role of government in fisheries comanagement. *Marine Policy* 21(5): 465-480.


Reeder-Myers, L., Erlandson, J.M., D.R. Muhs, T.C. Rick (2015). Sea level, paleogeography, and archeology on California's Northern Channel Islands *Quaternary Research* 83(2): 263 – 272.

Rick, T.C. (2007) *The Archaeology and Historical Ecology of Late Holocene San Miguel Island*. Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles. [*Perspectives in California Archaeology* 8.]

Robertson, T., S. Greenhalgh, I. Korovulavula, T. Tikoibua, Pio Radikedike, P. Stahlmann-Brown (2020). Locally managed marine areas: Implications for socio-economic impacts in Kadavu, Fiji, *Marine Policy* 117, 103950. <https://doi.org/10.1016/j.marpol.2020.103950>.

Rocliffe S, Peabody S, Samoily M, Hawkins JP (2014) Towards A Network of Locally Managed Marine Areas (LMMAs) in the Western Indian Ocean. *PLoS ONE* 9(7): e103000. <https://doi.org/10.1371/journal.pone.0103000>

Seid-Green, Y. (2014). *Defining Co-management: Levels of Collaboration in Fisheries Management*. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Marine Affairs University of Washington



Sofka, G., K. Guo, J. Hassen, C. Horbat, K. Maloney, D. Triebwasser (2021). *California's Marine Protected Areas through Bottom-Up Collaboration*. Funded by California MPA Collaborative Network & Resources Legacy Fund. Master of Science Program School for Environment and Sustainability University of Michigan. April.

Yaffee, S.L. (2020). *Beyond Polarization: Public Process and the Unlikely Story of California's Marine Protected Areas*. Island Press.

# SANTA YNEZ BAND OF CHUMASH INDIANS

P.O. BOX 517 · SANTA YNEZ · CA · 93460

Tel: 805.688.7997 · Fax: 805.686.9578

[www.santaynezchumash.org](http://www.santaynezchumash.org)



November 28, 2023

California Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

## **Re: Petitions to the California Fish and Game Commission Regulation Change submitted by the Santa Ynez Band of Chumash Indians**

Dear Commissioners,

The Santa Ynez Band of Chumash Indians welcomes the opportunity to submit the required forms (FGC 1) and summary narratives to the California Department of Fish and Game Commission to revise and amend existing regulations for marine protected areas within the Central Coast MLPA Region. Please find attached the following forms and documentation:

- 1) Petition to the California Fish and Game Commission for Regulation Change (FGC 1) for a new Chitqawi SMCA with a Summary Narrative and Map for consideration in the Central Coast Region.
- 2) Petition to the California Fish and Game Commission for Regulation Change (FGC 1) for amendments to the existing Point Buchon SMCA and SMR in the Central Coast Region with a Summary Narrative and White Paper produced by the Santa Ynez Band of Chumash Indians.

If you have any questions, please contact Sam Cohen, at 805-245-9083.

Thank you,

*Sam Cohen*

Sam Cohen, Esq.  
Government Affairs and Legal Specialist

Tolowa Dee-ni' Nation's  
Petition to the California Fish and Game  
Commission for Regulation Change

Submitted November 29, 2023



Tracking Number: (2023-21MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission’s authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

**SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

1. **Tolowa Dee-ni' Nation requesting the change (Required)**  
Name of primary contact person: Rosa Laucci  
Address: 12801 Mouth of Smith River Road Smith River, CA 95567  
Telephone number: 707-487-9255  
Email address: [rosa.laucci@tolowa.com](mailto:rosa.laucci@tolowa.com)
  
2. **Rulemaking Authority (Required)** - Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.
  
3. **Overview (Required)** - Remove allowance for surf smelt (*Hypomesus pretiosus*) by dip net or Hawaiian type throw net; Change to No-Take SMCA with Tribal exemption for Tolowa Dee-ni' Nation, as stated in E2 of the MPA Collaborative Network’s Regulatory Recommendations (Appendix 2). Change northern boundary to align with recognized California/Oregon state line, as stated in E4 of the MPA Collaborative Network’s Regulatory Recommendations (Appendix 2).
  
4. **Rationale (Required)** - Smelt is culturally important species to the Tolowa Dee-ni' Nation and a “No Take” designation will be clearer to public, reducing violations. See Appendix 1 for further explanations.  
Original boundary used a mapping system that does not align with on-the-ground state line.

**SECTION II: Optional Information**

5. **Date of Petition:** 11/27/2023
  
6. **Category of Proposed Change**  
 Sport Fishing





- Commercial Fishing
- Hunting
- Other, please specify: MPAs, Section 632

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- Amend Title 14 Section(s): Westlaw regulations
- Add New Title 14 Section(s): Click here to enter text.
- Repeal Title 14 Section(s): Click here to enter text.

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** Click here to enter text.  
Or  Not applicable.

9. **Effective date:** As soon as approved.

10. **Supporting documentation:** Additional explanation of rationale (Appendix 1) is attached, along with the Regulatory Recommendations Summary for each MPA Collaborative (Appendix 2).

11. **Economic or Fiscal Impacts:** Please see Appendix 1 for economic impacts

12. **Forms:** Not Applicable

**SECTION 3: FGC Staff Only**

Date received: 11/29/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_  
Tracking Number
- Granted for consideration of regulation change

## Appendix 1

### Rationale for Regulation Change

## Tolowa Dee-ni' Nation Rationale for Marine Protected Area Pyramid Point Regulation Change Petition

Ancestral Territory of the Tolowa Dee-ni' Nation (the Nation) encompass over 90 miles of shoreline in Northern California and Southern Oregon. The central region of the territory has been the hub for the continuance of traditional fishing of the culturally important keystone species, lhvmsr (surf smelt, *Hypomesus pretiosus*). The area of *Tr'uu-luu-k'wvt*, also known as Pyramid Point, a Marine Protected Area designated by the State of California in 2012, is an area where traditional lhvmsr fish camps have been identified and have been utilized since time immemorial.

Lhvmsr has seen significant decline since the late 1990s, as documented by the California Department of Fish and Wildlife and by Tolowa Dee-ni' traditional lhvmsr fishermen. This decline has caused a panic among the Nation's citizens because of the cultural significance of the species, as elders and traditional fishermen are not seeing a return of the smelt to the Tolowa Dee-ni' territory in the numbers they have historically. This species is also of ecological importance as a food source to other cultural keystone species, including salmonids, seabirds, and marine mammals. Federally-listed species within these categories include Steller sea lions, snowy plovers, and the Southern Oregon-Northern California Coast coho salmon. It is imperative the Nation continues to take an active role to determine ecological, environmental, and anthropogenic impacts affecting this invaluable resource. This includes petitioning for the removal of lhvmsr as allowable take from the state's Northernmost Marine Protected Area, Pyramid Point State Marine Conservation Area.

The Tolowa Dee-ni' Nation is the only indigenous group in the lower Pacific Northwest to continue the practice of "fish camp." Tribal families seasonally migrate to the *Tr'uu-luu-k'wvt* territory from July to October and set up temporary housing to fish, camp, and traditionally process the lhvmsr throughout its spawning months. Lhvmsr are harvested with a traditional A-frame net by the men of the society and then processed by the family



members who oversee the family camp unit (see photo above). Pre-contact fish camps were settled along the entire Tolowa Dee-ni' coastline, and despite the confinement of reservation and adjacent beach lands, the Tolowa Dee-ni' have maintained a continual connection to the *Tr'uu-luu-k'wvt* territory fishing grounds and return every season to interact with the ecosystem to practice traditional fishing methods and protocol. The practice of "fish camp" plays a key role in the health of the community and environment and it is important to ensure the continuance of this important cultural tradition. Smelt is an integral part of Tolowa Dee-ni' culture as there are specific prayers and ceremonies centered on lhvmsr, being a key indicator of the health of the local ecosystem. Prior to the first lhvmsr catch, there is traditional protocol that must occur for a productive and successful fishing season.

As original stewards of the land and waters, and because of the importance of this particular fishery to our spiritual, physical, and cultural health and well-being, we have a responsibility to assist in filling the current data gap through assessing the habitat and gathering baseline data that can inform us as to the indicators of species decline. This essential data is severally lacking for lhvmsr in the lower Pacific Northwest. It is imperative that we collect more data, especially comparative data, in order to gain a better understanding of why we are seeing a decline in this species. Once substantial data is collected and analyzed, this will inform the development of a future conservation plan that can address habitat restoration, best management practices, and related policy and regulatory measures, backed by scientific data, to ensure that this ecological and cultural keystone species can make a robust recovery. This is

particularly true for lhvmsr, when research indicates that impacts to relatively few beaches could greatly affect production of the entire species.<sup>1</sup>

The continuance of fish camps located within *Tr'uu-luu-k'wvt* and the intergenerational transmission of knowledge associated with the continued practice is essential for the Tolowa Dee-ni's physical and spiritual welfare. For indigenous peoples, the loss of access to culturally important resources not only impacts the individual, it impacts the entire community and the socio-economic, socio-cultural and socio-political relationships within the community.<sup>2</sup> As Turner et al. notes, "[T]he decline or removal of key food sources can introduce a cascading effect in which important associated cultural practices and institutions are also lost."<sup>3</sup> More seriously, the loss of access to culturally important resources, along with displacement from cultural landscapes considered to be sacred, directly impacts the ability of the individual, family, and community to sustain deeply-held cultural and spiritual relationships with not only the species used, but with associated species and their habitats – relationships that we as indigenous people see as part of our ancestral responsibility and identity. Thus, there is a need to ensure that this cultural practice is continued by future generations and that Tolowa youth are equipped with the traditional knowledge, social protocols, and skills necessary to protect the habitat, properly conserve the species, and maintain the custom.

The extreme commitment to continue the practice of traditional lhvmsr fish camps within *Tr'uu-luu-k'wvt*, and specifically at *Dat-naa-svt*, by Tolowa families and the Nation is well documented. In addition to scholarly accounts of fish camps dating from the 1800s to the

present<sup>4'5'6</sup> these traditions have been well documented in numerous newspaper articles throughout the years.<sup>7</sup> In 2000, the area was determined eligible for listing to the National Register of Historic Places as both an archaeological site and a traditional cultural property (TCP). The TCP eligibility is based on the relationship of the traditional lhvmsr fish camp to the Howonquet village and the associated social codes, fish preservation methods, cultural activities, cultural sites, spiritual and ceremonial connections, North Beach whale rights and ceremonies, and other historic records.<sup>8</sup>



1 Quinn, Timothy and Kirk Krueger, Ken Pierce, Daniel Penttila, Kurt Perry, Tiffany Hicks, and Davy Lowry. 2012. *Estuaries and Coasts* 35:1214–1228

2 Charles A and L Wilson. Human dimensions of protected areas. *ICES Journal of Marine Science*. 66:6-15.

3 Turner NJ, Gregory R, Brooks C, Failing L and T Satterfield. 2008. From invisibility to transparency: identifying the implications. *Ecology and Society* 13(2):7-20.

4 Drucker, Philip A. 1937. The Tolowa and their Southwest Oregon Kin. *University of California Publications in American Archaeology and Ethnology*. 36: 4. 221-299.

5 Kroeber, A. L. and S. A. Barrett. (1960). *Fishing Among the Indians of Northwest California*. Anthropological Records. University of California Press.

6 Byram, S. and D.G. Lewis. (2001) Origin: Wealth of the Northwest Coast. *Oregon Historical Quarterly* 102(2): 126-157.

7 Hanly, "Fish Camp," *News from Native California*, Winter 1996/97; "Preserving tradition; Tolowa gather at beach site to dry smelt for winter stores," *Daily Triplicate*, July 27, 2011; "Learning the traditions; Summer camp passes on Tolowa customs, language to next generation," *Daily Triplicate*, July 20, 2006; "Tradition, preserved. Yaa-ghii--'a' (Fish Camp)," *Daily Triplicate*, August 17, 2007.

8 Lewis, David Gene. 2000. *Tolowa Deeni Fish Camp: A Traditional Cultural and Archaeological Property Nomination to the National Register of Historic Places*. Unpublished Master's Thesis. University of Oregon.

As stated previously, over the years, the Nation has observed and documented a significant decline in the returning numbers of lhvmsr to our traditional fishing grounds and this has caused concerns among tribal citizens that have continued the practice of stewarding this culturally significant resource. In December of 2011, the Nation established a Natural Resources Committee to address the concerns of culturally significant resources, and to be an advisory body to the Tribal Council in respect to ecological and species concerns relating to the cultural needs of the community. Lhvmsr was the first species identified by the Committee as a species of extreme concern. Over the years of observable species decline by the Tolowa Dee-ni' traditional fishermen, neither State or Federal conservation programs in our region, which are responsible for species management, including the recreational and commercial fishery, have addressed the concerns of the Nation.

The California Department of Fish and Wildlife "California Living Marine Resources Status Report" documents a severe decline in the lhvmsr fishery from over 800,000 pounds in 1995 to 1997, to only 100,000 pounds in 1998, and just over 12,000 pounds in 1999.<sup>9</sup> This is approximately a 66% lhvmsr fisheries reduction in just four years. The status report goes on to note that:

*Environmental factors such as seawater temperature changes may dramatically affect population levels. However, given their short life-cycle, excessive fishing could cause smelt populations to plummet in just two or three years. Heavy recreational use of the beaches may also compact gravels and crush recently spawned eggs. It is also possible that the developing eggs may depend on water percolating through the gravels from above, so alterations of inflowing streams or lagoons may affect the suitability of the spawning habitat for egg survival.<sup>10</sup>*

Although there has been more detailed study of lhvmsr in Canada and Washington State and the development of management plans to ensure species abundance/recovery,<sup>11'12'13'14</sup> research and data is severally lacking for northern California and southern Oregon, which includes the ancestral land and waters of the Tolowa Dee-ni'.

Of further concern, smelt is not a substantial commercial or recreational fishery; there has been less than aggressive regulation by the State of California of this key tribal fishery. Access to and the continued use of *Tr'uu-luu-k'wvt* was threatened with the implementation of the California Marine Life Protection Act (MLPA) Initiative on the North Coast, beginning in 2009. The entire area of *Tr'uu-luu-k'wvt* was selected for a marine protected area that would have not allowed *any* recreational and/or commercial fishing. Although the Nation maintains that the State does not have authority to regulate their subsistence, ceremonial, and customary fishing uses because the right to continue these uses has never been ceded or explicitly extinguished by Congress, the State maintained they had authority. Through a difficult and arduous three-year process, the Nation was successful in ensuring that although a marine protected area would be designated at Pyramid Point, that it would continue to allow non-commercial "tribal take" by members of the Nation. Thus, the Tolowa Dee-ni' had once again successfully ensured the continuance of the traditional lhvmsr fish

---

<sup>9</sup> California Department of Fish and Game. 2001. California's Living Marine Resources: A Status Report. Sacramento, CA.

<sup>10</sup> *Ibid.*

<sup>11</sup> Rice, Casimir A. 2006. Effects of Shoreline Modification on Marine Northern Puget Sound Beach: Microclimate and Embryo Mortality in Surf Smelt (*Hypomesus pretiosus*). *Estuaries and Coasts*. 29 (1): 63-71.

<sup>12</sup> Lee, Chris G. and Colin D. Levings. 2007. The Effects of Temperature and Desiccation on Surf Smelt (*Hypomesus pretiosus*) Embryo Development and Hatching Success: Preliminary Field and Laboratory Observations. *Northwest Science*. 81 (2): 166-171.

<sup>13</sup> Krueger, Kirk. L. and Kenneth B. Pierce, Jr., Timothy Quinn, and Daniel E. Penttila. 2010. Anticipated effects of sea level rise in Puget Sound on two beach-spawning fishes, in Shipman, H., Dethier, M.N., Gelfenbaum, G., Fresh, K.L., and Dinicola, R.S., eds., 2010, Puget Sound Shorelines and the Impacts of Armoring—Proceedings of a State of the Science Workshop, May 2009: U.S. Geological Survey Scientific Investigations Report 2010-5254, p. 171-178.

<sup>14</sup> Fisheries and Oceans Canada. 2012. Pacific Region Integrated Fisheries Management Plan: Surf Smelt, April 1, 2012 to December 31, 2014.

camps. However, in this same process, lhvmsr were considered by the Science Advisory Team as a species that would not benefit from marine protected areas, due to their transitory nature. Thus, lhvmsr was a species that was allowed to be taken in any of the State Marine Conservation Areas that allowed some level of species take by recreational and commercial anglers. This includes the marine protected areas designated at Pyramid Point (*Tr'uu-luu-k'wvt*), Redding Rock, Samoa, and Ten Mile, which all include key surf fish spawning habitat. Thus, a prime opportunity to protect spawning habitat from recreational and commercial uses by the general public was overlooked and lost.

Through a commitment to the continuance of this important cultural and subsistence activity and the diligence to ensure that these practices continue, the Nation has secured guaranteed access and political and regulatory recognition to support the continuance of fish camps. All of this, however, is meaningless, if the habitat is not protected and the resource is not healthy and available. Thus, there is a cultural, economic, and ecological need to remove lhvmsr as allowable recreational take within *Tr'uu-luu-k'wvt*.



Appendix 2  
MPA Collaborative Vetted Regulation  
Recommendations

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Onshore and offshore hook and line fishing, collecting sand crabs as bait, kayak fishers, violations from boaters registered in both CA and OR	Remove allowance for surf smelt by dip net or Hawaiian type throw net; Change to No-Take SMCA with Tribal exemption for Tolowa Dee-ni'	Yes	Smelt is culturally important species to Tolowa and No Take designation will be clearer to public, reducing violations	Signs being vandalized, ripped out. Outreach to gain compliance needed (Guardian Watchmen)	Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Take Allowance Change	Yes, from SMCA to No-Take SMCA with Tribal exemption
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Elk Valley Rancheria is interested in exploring the possibility of being included in exempt status	Add Elk Valley Rancheria to exempt Tribes if requested by Tribal Council	Yes	Elk Valley Rancheria has ancestral ties to the area				Take Allowance Change	
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Boundary is in Oregon	Change northern boundary to align with recognized California/Oregon state line	Yes	Original boundary used a mapping system that does not align with on-the-ground state line.		Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Boundary Change	
Del Norte	<a href="#">Point St. George Offshore Reef SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Elk Valley and Tolowa Dee-ni' exempt		No change	Yes						
Del Norte	<a href="#">Sea Lion Rock Special Closure</a>	300'	No data	No change	Yes						
Del Norte	<a href="#">Castle Rock Special Closure</a>	300'	Poke poling at Preston Island and Battery Point and Hook Finger Point during extremely low tides. Kayaks near closure	No change	Yes						
Del Norte	<a href="#">False Klamath Rock Special Closure</a>	300' from 3/1-8/31	Low flyovers by US Coast Guard helicopter. Kayaks near closure, kaking kelp. Dogs off leash	No change	Yes		Signs needed at Wilson Creek. Potential site for CoastSnap to crowdsource changes around rock				
Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt	Hook and line fishing and take of sand crabs regularly occur, especially at southern boundary Gold Bluffs beach traditional smelt camp Track amount of surf smelt taken (25 lbs current limit). Hawaiian Type throw net inappropriate	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor Surf smelt as a part of state monitoring plan.			Language Change	
Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt		Recommend implementing limits on commercial take of surf smelt	Yes	Culturally important species				Take Allowance Change	
Humboldt	<a href="#">Reading Rock SMR</a>	No Take	Drifting commercial crab pots	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Humboldt	<a href="#">Samoa SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Wiyot exempt	Difficult to determine boundaries	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor recreational and commercial (through landing/block reports) take of salmon by troll and surf smelt by dip net and assess effect on population; Signs with you are here map at Mad River			Language Change	
Humboldt	<a href="#">South Humboldt Bay SMRMA</a>	No Take except waterfowl may be taken. Wiyot exempt	Invasive grasses, loss of eelgrass, general threats to habitat. Non Tribal members clamming. Difficult to identify boundaries within South Humboldt Bay	Determine reason it does not extend to southern water's edge and extend if no reason	Yes	Clearer for outreach purposes to say from southern end of bay to 2nd hunter pull out	Direct enforcement to look for unlawful clamming			Boundary Change	
Humboldt	<a href="#">Sugarloaf Island Special Closure</a>	300'		No change	Yes						
Humboldt	<a href="#">South Cape Mendocino SMR</a>	No Take	Minimal patrol	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by LED				
Humboldt	<a href="#">Steamboat Rock Special Closure</a>	300' 3/1-8/31	Confusion on when it is open to swim out to and when it is closed	No change	Yes		Sign that highlights special closure and closure dates				
Humboldt	<a href="#">Mattole Canyon SMR</a>	No Take	Minimal patrol. Some commercial crab pots observed during USCG flyover	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by law enforcement division				
Humboldt	<a href="#">Sea Lion Gulch SMR</a>	No Take	Backpackers harvest mussels along entire Lost Coast Trail; people getting too close to new elephant seal colony. No cell connectivity to determine boundaries of MPA	Move southern boundary south to Cooskie Creek	BLM support but need fisher input	Creek is more identifiable feature for land based outreach to fishers hiking the Lost Coast Trail				Boundary Change	
Humboldt	<a href="#">Big Flat SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Multiple Tribes exempt	Backpackers harvest mussels along entire Lost Coast Trail; surf fishing occurs at Miller Flat. No cell connectivity to determine boundaries of MPA	No change	Yes		More outreach needed for fishers hiking lost coast. Include more detailed information in BLM Lost Coast map				
Mendocino	<a href="#">Double Cone Rock SMCA</a>	Rec take of salmon by trolling; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Unknown. Limited patrol. Report of excessive urchin and need for grazer suppression.	Reassess restoration policy in SMCA's impacted by climate change/kelp loss	Yes	Loss of kelp habitat needs to be addressed in this SMCA	Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Vizcaino Rock Special Closure</a>	300' 3/1-8/31		No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Mendocino	<a href="#">Ten Mile SMR</a>	No Take	Primary concern is shore-based fishing (rod and reel at seaside creek beach). Recreational fishers take rockfish and lingcod, crab pots "walk themselves" into MPA at southern boundary. Dogs off leash.	No change	Yes		OK/boundary sign needed at northern boundary. Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Beach SMCA</a>	Rec take of Dungeness crab by trap, hoop net or hand. Commercial take of Dungeness crab by trap. Many Tribes exempt	Unlawful take of fish (rockfish, lingcod); dogs off leash in snowy plover habitat. Potential sand dump site south side of Ten Mile Beach	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Estuary SMCA</a>	Waterfowl may be taken. Many Tribes exempt	Limited access for fishers	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">MacKerricher SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Multiple violations occur daily since closest to Fort Bragg city center (general fish and game code violations). North boundary (Laguna Point) hotspot for intertidal take	Add protection for intertidal zone, per State Parks, in support for protection of the resource and ease of enforcement/outreach	Many in support but no full consensus	There are limited areas in the county to lawfully take intertidal animals such as mussels, turban snails, limpets, etc.	More enforcement support needed due to limited State Parks personnel. Focus on tidepool education. Intertidal specific take signs are needed	State Parks pending review		Take Allowance Change	
Mendocino	<a href="#">Point Cabrillo SMR</a>	No Take	Lighthouse sees lots of boats fishing offshore of Frolic Cove on northern end of Point Cabrillo SMR or inside	No change	Yes		OK boundary signs would be beneficial on both boundaries for kayak fishing				
Mendocino	<a href="#">Russian Gulch SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	General fish and game code violations	No change	Yes						
Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Increased use for swimming and recreation has led to safety concerns, including close calls between swimmers and hunters. Swimmers mixing with motorized boats may lead to accidents	Hunting should be prohibited due to high public use/public safety issues, per State Parks	Yes	Community reported incidents of near misses between hunters/boaters and swimmers		State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Can MPA restrict motorized vessels if not ecological reserve?	Restrict all motorized vessels with allowance for public safety, per State Parks	Yes, with clarification that motorized vessels are only restricted going east (up river)	West access from launch should be allowed for boaters going out to ocean	Data on crab fishery is needed to determine whether allowance is sustainable. Need clear signage restricting snare traps. Pick up after dog signs needed	State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Van Damme SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Overtake and take of undersize fish	No change	Yes						
Mendocino	<a href="#">Navarro River Estuary SMCA</a>	Rec take of salmonoids by hook and line. Many Tribes exempt. Waterfowl may be taken	People illegally breach sandbar (but outside MPA?)	No change	Yes						
Mendocino	<a href="#">Point Arena SMR</a>	No Take	Fishing in SMR reported by lighthouse manager	No change	Yes		OK boundary signs needed				
Mendocino	<a href="#">Point Arena SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear		No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Mendocino	<a href="#">Sea Lion Cove</a>	Rec and commercial take of finfish	Urchin barrens	Reassess restoration policy in SMCAs impacted by climate change/kelp loss	Yes		Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Saunders Reef SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear and urchin	Citations issued for people diving and taking at Schooner Gulch; illegal shore fishing from Hearn Gulch	No change	Yes		Additional enforcement personnel/efforts are needed				
Sonoma	<a href="#">Del Mar Landing SMR</a>	No Take	Fishing at north end	No change	Yes		Trail pamphlets with MPA information				
Sonoma	<a href="#">Stewarts Point SMR</a>	No Take	Poaching at 3 mile line. Difficult for fishers to determine where 3 mile line is and difficult to enforce from land	Allow for trolling of salmon. Change to SMCA?	No. Discussed with no strong opposition but more info needed	Impact to commercial salmon fishing can be addressed with minimal impact to other resources	More signage needed at public access points			Take Allowance Change	Yes, would change SMR to SMCA. No consensus
Sonoma	<a href="#">Stewarts Point SMCA</a>	Rec take from shore only of marine aquatic plants other than sea palm, marine invertebrates, finfish by hook and line, surf smelt by beach net, species authorized by hand-held dip net	Tribal based MPA	Prohibit all take and add Kashia Pomo to Tribal exemptions to make affirmative rights of Tribal Members re: collection, harvesting, and research	Yes	MPA is only accessed by Kashia Tribal members from shore (owned by Tribe) so would be same protection while acknowledging Tribal rights				Take Allowance Change	Yes, change from SMCA to No-Take SMCA with Tribal exemption
Sonoma	<a href="#">Salt Point SMCA</a>	Recreational take of abalone and finfish allowed	Take of abalone during closure; poaching of intertidal species. Confusion regarding intertidal take	No change	Yes		Needs more signage on collecting/take of shellfish and other non finfish				
Sonoma	<a href="#">Gerstle Cove SMR</a>	No Take	Excessive intertidal take. Rec fishers fishing the line	No change	Yes		Need for good tidepooler rules signs to address harmful tidepooling				
Sonoma	<a href="#">Russian River SMRMA</a>	No take except waterfowl may be taken	Marine mammal disturbance occurring. County of Sonoma needs to conduct restoration work as part of management plan	Allow for restoration work in SMRMA	Yes	Restoration will not impact haul out sites, marine mammals or birds				Other	
Sonoma	<a href="#">Russian River SMCA</a>	Rec take of Dungeness crab by trap, and surf smelt by hand-held dip net or beach net. Commercial take of Dungeness crab by trap	Illegal onshore and offshore fishing; seal disturbance "seal selfies" near Goat Rock. Trash/dogs off leash	No change	Yes		More outreach for out of town fishers/permanent signage				
Sonoma	<a href="#">Bodega Head SMR</a>	No Take	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes	Would require new outreach					
Sonoma/Marin	<a href="#">Bodega Head SMCA</a>	Rec take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net. Commercial take of pelagic finfish by troll fishing gear and round haul net, Dungeness crab by trap, and market squid by round haul net	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Sonoma/Marin	<a href="#">Estero Americano SMRMA</a>	No take except waterfowl may be taken	Confusion as to boundary "high tide line" and who manages strip of beach between ocean and estuary that is often closed; Difficulty identifying eastern boundary. No way to see boundary from shore	No change	Yes		More signs needed at access points here to address compliance concerns				
Marin	<a href="#">Estero de San Antonio SMRMA</a>	No take except waterfowl may be taken	Some take (animal remains) and illegal fishing	No change	Yes						
Marin	<a href="#">Point Reyes SMR</a>	No take	Sand dollar and fossil take, rod and reel fishing from vessels, party boats troll for salmon; violations are limited offshore	No change	Yes		Signage and more enforcement needed, especially at Drakes Beach and Coast Guard Station. Consolidated mixed messaging signs, with dog information.				
Marin	<a href="#">Point Reyes SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Commercial crabbers set coonstripe shrimp traps on top of crab traps; Boundaries in MPA cluster hard to identify; NPS jurisdiction limited to 0.25 miles.	No change	Yes						
Marin	<a href="#">Point Reyes Headlands Special Closure</a>	No access from mean high tide line to a distance of 1000 feet seaward	Recreational vessels fishing in summer; Disturbance spiked in 2020; USFW continues to monitor this area	No change at this time	Yes	Might need to revisit making adjustments in the future if data shows changes/increases in disturbance					
Marin	<a href="#">Estero de Limantour SMR</a>	No take	Difficult to determine boundary between SMR and Drakes Estero SMCA makes enforcement difficult. There are suspicions that poaching of clams occurs in the SMR from people on kayaks from Drakes Estero	Extend SMR designation all the way into Drakes Estero	Yes	NPS in support of expanding SMR because federally designated wilderness, major harbor seal haul out, and critical nursery habitat for leopard shark and bay rays		EAC Marin with NPS letter of support		Boundary Change	
Marin	<a href="#">Drakes Estero SMCA</a>	The recreational take of clams is allowed	Difficult to determine boundary line between Drakes Estero SMCA and Estero de Limantour SMR leading to poaching. Cows accessing/pooping from NPS ranch leased land	Prohibit clamming in Drakes Estero SMCA. Merge with Estero de Limantour SMR.	Yes	SMCA designation was originally due to oyster farm that is no longer there. NPS in support of making into a SMR due to federally designated wilderness area	Give people direction/outreach materials on where they CAN clam safely	EAC Marin with NPS letter of support		Take Allowance Change	Yes, change from SMCA to SMR
Marin	<a href="#">Point Resistance Rock Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels. USFW monitoring area.	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach					
Marin	<a href="#">Double Point/Stormy Stack Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels and surfers, who enter harbor seal rookery. Increased visitation due to people hiking to Alamere Falls	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach and don't want to extend to shore to allow shore access	Put signs with regulations and text about importance of special closure at trailhead; more outreach to boaters about special closures needed				



County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Difficult to enforce and outreach about why you can take finfish but not invertebrates. Beach Watch data at this site for 30 years show slight decrease in activities in last 10 years, but take of invertebrates has been observed, and the Greater Farallones National Marine Sanctuary Superintendent has provided information about the need to consider additional conservation measures at Duxbury Reef. Maria Brown (NMS) submitted a letter saying Duxbury Reef would benefit from increased protection of unique and important habitat of entire reef (largest shale reef in N. America). EAC MPA Watch data shows increased activities, including take and poaching incidents.	Change to SMR because of difficulty of interpretation and enforcement. Extend southern boundary further out to sea (south) and northern boundary to Double Point to fully cover reef	No	No agreement on extending boundaries to cover the reef and changing to SMR. More research needed on benefits of changing existing ribbon from SMCA to SMR; Might be important fishing access point for public	More signs needed and more support for onsite education and enforcement from CDFW to agate beach and land-side terrestrial Duxbury	EAC Marin		Take Allowance Change	Yes, would change SMCA to SMR. No consensus
Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Heavy use and impacts, intertidal take – buckets and tools (e. g., crow bars, tire jacks) used to take black turban snails and purple urchin that are nestled into cracks. People need to break the reef to get to purple urchin	Potential compromise would be to add specific tidepool protections, similar to OC	TBD	NMS would like to continue conversation to explore potential compromises	Research other tidepool docent programs in MPAs with mixed use of allowed fishing/tidepool protections			Language Change	
San Francisco	<a href="#">North Farallon Islands SMR</a>	No Take	Commercial crab case here	No change	Yes	More data needed for this MPA cluster	Increase CDFW LED patrols during peak months. Need for CCFRP program here				
San Francisco	<a href="#">North Farallon Islands Special Closure</a>	No vessel shall be operated or anchored at any time from the mean high tide line to a distance of 1000 feet seaward of the mean lower low tide line of any shoreline of North Farallon Island, or to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of the remaining three southern islets		No change	Yes						
San Francisco	<a href="#">Southeast Farallon Islands SMR</a>	No Take	Small recreational boats. A number of encroachments occur into SMR during better weather months	No change	Yes		Increase patrols from LED and consider M2 radar at this location				
San Francisco	<a href="#">Southeast Farallon Islands SMCA</a>	Recreational take of salmon by trolling and commercial take of salmon by troll fishing gear	Salmon fishers use salmon gear to fish for halibut	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Francisco	<a href="#">Southeast Farallon Islands Special Closure</a>	Closed 300 feet seaward year-round, except Fisherman's Bay to East Landing, southeastern tip of the island and southeastern side of Saddle (Seal) Rock, which is closed from December 1 through September 14. 5 mile per hour speed limit 1000 ft seaward of mean lower low tide of any shoreline. Exhaust system requirements for commercial dive boats	Boats cut across the special closure	No change	Yes	Predates MLPA process, careful consideration went into crafting special closure regulations					
San Mateo	<a href="#">Egg (Devil's Slide) Rock to Devil's Slide Special Closure</a>	A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of any of the three rocks comprising Egg (Devil's Slide) Rock; Transit in between the rock and the mainland between these points is prohibited at any time.	Reported violations include fishing boats inside boundaries and low flying aircraft/drones	Change name to "Devil's Slide Special Closure"	Yes	Egg rock is no longer a name used/recognized locally. Devil's Slide is more appropriate and simpler for outreach				Language Change	
San Mateo	<a href="#">Montara SMR</a>	No Take	A top cited MPA in Central Coast, highest in San Mateo; fishing offshore and tidepool take; Difficulty interpreting southern boundary	Move Montara SMR onshore southern boundary to current Pillar Point SMCA southern boundary (north end of Maverick's Beach), then extending out to current offshore southern SMR boundary point	Yes	Easier for enforcement and makes SMR boundaries consistent with Fitzgerald Marine Reserve boundaries				Boundary Change	
San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net. Dungeness crab by trap, and market squid by round haul net is allowed.	Unclear boundary leads to poaching in intertidal. Difficult for local law enforcement to ensure compliance of tidepool take regulations due to high volume of consumptive visitors	Extend southern SMCA boundary further south to edge of harbor jetty, extending out to existing offshore southern point. Onshore northern boundary would be same as Montara SMR onshore southern boundary	Yes	Would cover entire reef in MPA for ease of allied agency outreach and enforcement.				Boundary Change	
San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net. Dungeness crab by trap, and market squid by round haul net is allowed.		Change regulations to allow for recreational hook and line take of finfish from shore and take of mussels, crabs, snails and seaweeds for equity and access purposes	Yes	Allowing for shore based hook and line and some intertidal take maintains access for consumptive users while applying some protection for a heavily impacted habitat				Take Allowance Change	
San Mateo/Santa Cruz	<a href="#">Año Nuevo SMR</a>	No Take	Unlawful take of snails; fishing; wildlife disturbance. Boats driving squid out of MPA. Confusion because sign at top of trail to Greyhound Rock says fishing beach but must go left at bottom to legally fish	Move southern boundary line to have whole of Greyhound Rock in SMR	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Clearer boundary makes enforcement easier	Ensure sign with map at bottom of trail. Utilize social/digital/traditional media for public outreach	State Parks pending review		Boundary Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Take of mussels at southern boundary Confusion with Año Nuevo SMR boundary/whether fishing is allowed at Greyhound Rock Split between 2 counties	Move northern boundary line to have whole of Greyhound Rock outside of SMCA and in SMR; Move southern boundary south to beginning of Scott Creek bridge	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Reef should be fully protected or fully open. Preference to cover reef but either way will have clearer boundary for outreach/enforcement. Move of southern boundary would cover reef to address intertidal impacts	Need for sign with map at Scotts Creek	State Parks pending review		Boundary Change	
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Confusing regulations	Replace comma with semi-colon in regulations after "giant kelp by hand harvest only", or otherwise edit	Yes	Clearer language needed to clarify you are not required to catch salmon and squid by hand harvest only		State Parks pending review		Language Change	Section 100 change
Santa Cruz	<a href="#">Natural Bridges SMR</a>	No Take	Hard to identify boundaries; safety concerns with fishers and swimmers at Natural Bridges State Park beach	Shift both boundaries south to more identifiable features (4 mile point and Natural Bridge)	Yes	State Parks would like SMR to cover the beach at Natural Bridges SP for public safety reasons	Need for interpretive signs with maps/good tidepooler rules, why MPAs, etc.	State Parks pending review		Boundary Change	
Santa Cruz	<a href="#">Soquel Canyon SMCA</a>	Rec and commercial take of pelagic finfish	Split between 2 counties	No change	Yes						
Monterey	<a href="#">Elkhorn Slough SMR</a>	No Take	Fishing occurs regularly at Kirby Park pier/dock, was originally built for fishers with disabilities with SFRA grant. Inconsistent enforcement.	Move northern boundary south of Kirby Park pier/dock. Shift entire MPA to maintain size	Yes, at both Santa Cruz and Monterey Collaborative meetings	Opens fishing area as originally intended to limit poaching; supports increased enforcement presence in area	If Kirby is open, must be concerted cross-jurisdictional effort to enforce shore waste of fish/debris and other F&G Code violations. Need for good fishing practices outreach	Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550 (a)].	Difficult to determine where SMR/SMCA boundary is (i.e., where kayak fishers can no longer fish).	Move SMR line to bird watching platform (eastern side)	Yes, at both Santa Cruz and Monterey Collaborative meetings	Bird watching platform provides a clear boundary for shore and kayak fishers and would maintain size of SMR with shift off Kirby		Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550 (a)].	Clamming disturbs sea otter rafts. Huge amounts of trash (fishing receptacles full)	Removing allowance for clamming to address impact to otters and human health considerations	Maybe?	Need more info on impact to recreational clambers and safety of consuming clams	Need for more trash receptacles/removal	Elkhorn Slough Foundation		Take Allowance Change	
Monterey	<a href="#">Moro Cojo Slough State Marine Reserve</a>	No take	Some access on eastern end. Agricultural influence. Elkhorn Slough NERR in support of no change	No change	Yes						
Monterey/Santa Cruz	<a href="#">Soquel Canyon State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially illegally set crab traps (commercial) and rockfish take (recreational). Whale disturbance. More impact due to depth restrictions lifted	No change	Yes						
Monterey	<a href="#">Portuguese Ledge State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially rockfish take (recreational). Whale disturbance	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	Fishing debris from Coast Guard pier. Abalone and other intertidal poaching at breakwater	Explore regulations to limit fishing gear loss from Coast Guard pier (such as requiring use of breakaway leaders or no braided line)	Yes	Fishing gear loss impacts wildlife, habitat, and safety of divers due to entanglement	Partner with MBNMS on outreach of litter/derelict fishing gear			Language Change	
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR and join with Lovers Point-Julia Platt SMR	Maybe	No strong opposition but no fishing reps present		Giant Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand		Allow restoration/urchin culling without requiring SCP	No	May lead to destruction of healthy urchins		Giant Giant Kelp Restoration Project (G2KR) - applies to Ed Ricketts, PG Gardens, and Carmel Bay SMCAs, and will include suggestion for buoys on sites		Other	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take	Fishing off Lovers Point rocks, undersize and immature fish, spearfishers and fishing boats catch halibut, illegal tidepool take; confusion around northern boundary line	Move southern boundary line so Lovers Point is either all in or all out (with preference for all in reserve)	No	Disagreement about where to move line	Boundary marker or fishing/no fishing arrow sign needed if boundary doesn't change			Boundary Change	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take		Move southern boundary to end of Lovers Point, splitting point equally in half	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Spearfishing violations, especially from kayaks and dinghies; illegal take of scallops and crustaceans; undersize and immature fish taken Point Pinos is key oystercatcher nesting habitat	Move both boundary lines so Lovers Point and Point Pinos are all out of SMCA and in SMRs because both are key oystercatcher nesting sites	No	Rock outcropping and buoy at Point Pinos (southern boundary) are currently good boundary indicators for boaters				Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand		Move northern boundary to end of Lovers Point	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point and Point Pinos			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR, join with Lovers Point SMR	Maybe	No strong opposition but no fishing reps present		Giant Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR
Monterey	<a href="#">Asilomar State Marine Reserve</a>	No Take	Onshore and offshore fishing common, hook and line from nooks and crannies; harmful tidepooling, tidepool take; wildlife disturbance common Northern boundary at Point Pinos is confusing, splits rocks in half	No change	Yes		Fishing/No Fishing arrow signs needed at Point Pinos				
Monterey	<a href="#">Carmel Pinnacles State Marine Reserve</a>	No Take	Offshore violations common	No change	Yes						
Monterey	<a href="#">Carmel Bay State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Intertidal take common, including abalone and mussels. Golf balls go into MPA and are not collected. Some kelp take at Stillwater Cove	No change	Yes		Work with Pebble Beach on reducing golf ball litter either through requiring biodegradable balls at key holes or ensuring balls are collected by divers				
Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take	Take occurs. Boundaries are confusing	No change	Yes						
Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take		Allow restoration/urchin culling	No	Difficult for enforcement/interpretation in no-take area		Giant Giant Kelp Restoration Project (G2KR)		Other	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Monterey	<a href="#">Point Lobos State Marine Conservation Area</a>	Recreational take of salmon and albacore and the commercial take of salmon, albacore, and spot prawn is allowed		No change	Yes						
Monterey	<a href="#">Point Sur State Marine Reserve</a>	No Take	Violations common between SMR and SMCA, southern corner is hard to enforce. Abalone case reported	Encompass the whole coastline of Point Sur in MPA	No	Keep boundaries as is				Boundary Change	
Monterey	<a href="#">Point Sur State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore		Add bluefin tuna to list of species allowed for take	No	Lessens protection				Take Allowance Change	
Monterey	<a href="#">Big Creek State Marine Reserve</a>	No Take	L-shape of SMR within SMCA is confusing	No change	Yes						
Monterey	<a href="#">Big Creek State Marine Conservation Area</a>	Recreational take of salmon and albacore. Commercial take of salmon, albacore and spot prawn	Potential unlawful fishing off Marine Lab	No change	Yes						
San Luis Obispo	<a href="#">Piedras Blancas State Marine Reserve</a>	No take	Missing signs. Onshore fishing violations (poaching mussels at Point Sierra Nevada). Wildlife disturbance. Extreme angle makes kayak fishers look like they are fishing in SMR	No change	Yes		Use boundary images on signs to help reference angle at pullout.				
San Luis Obispo	<a href="#">Piedras Blancas State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore	Occasional poaching observed. Fishing for rockfish. No albacore, limited salmon observed by fishers/wardens	No change	Yes						
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Harmful tidepooling occurring throughout MPA. Difficult to message good tidepooler rules without designated protections	Add tidepool protection language similar to Crystal Cove and Dana Point SMCA	Yes	Would make it easier to message about responsible tidepooling and reduce inadvertent take	Tools for existing SP tidepool docent program needed here, such as Natural Bridges State Park tidepool cart	State Parks pending review; Environment California?		Take Allowance Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching by kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection and cover some kelp habitat	Yes	May be some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	No commercial take allowed but there is an existing kelp lease?	Remove kelp lease 209 OR clarify that lease holder cannot harvest within Cambria SMCA	Yes	Commercial harvest of kelp is incompatible with MPA regulations that allow recreational take only		Environment California?		Other	
San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching of kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection	Yes	May be some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease		Prohibit commercial take of giant kelp and bull kelp with valid lease and change to an SMR	Yes	Original intent was a reserve but there was existing kelp lease. Current lease holder is fine with relinquishing/ disallowing take of kelp		Environment California?		Take Allowance Change	Yes, would change from SMCA to SMR

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Poaching occurs at southern side that does not allow take of finfish. Line is confusing and unclear on maps and outreach materials. Illegal invertebrate take (e.g., sea stars at jetty, ghost shrimp at Windy Cove). Signs needed at blue pier	Shift no fishing boundary 150 yds north to public access at Pasadena Park (between Santa Ysabel and Baywood Way)	Yes	Makes it easier for county to manage and educate more accurately about fishing/no fishing line	Signs needed, especially at Blue Pier. County can install sign at Pasadena Park			Boundary Change	
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Hunting "within" a bird sanctuary (City of Morro Bay) is confusing, safety concerns for paddlers with increased visitors who are unaware hunting is allowed. Concern about safety issues around hunting around neighborhoods. Trampling of plants occur on shoreline in Baywood Park.	No change to regulations at this time	Yes	Important hunting area. Confusion should be addressed through outreach	Overlay hunting map on SMRMA for outreach purposes. Mixed message signs/more education needed about estuary impacts/erosion: "tread lightly" in Los Osos				
San Luis Obispo	<a href="#">Morro Bay State Marine Reserve</a>	No Take	Some hunting violations, hugging line; Boardwalks work to protect birds! Might be good to have one at Baywood Park at 1st Street	No change (reluctantly)	Yes	Some desire to extend SMR west and into bottom part of bay beneath Baywood Peninsula but do not want to impede on aquaculture	More education and outreach needed				
San Luis Obispo	<a href="#">Point Buchon State Marine Reserve</a>	No Take	Regular poaching offshore, trolling, and stopping to drop a line in water. Busiest MPA in SLO, most violations observed/cited	Move northern boundary to actual Point Buchon	Yes	Clearer boundary for fishers coming from Port San Luis	Boundary marker needed here. Make "flagpole" more visible (hang flag?) if boundary doesn't change	State Parks pending review		Boundary Change	
San Luis Obispo	<a href="#">Point Buchon State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore allowed	Regular poaching, rockfish and lingcod, maybe some squid boats?	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take	Vandenberg Space Force Base (VSFB) allows active-duty officers, their dependents/families, and guests to fish off Vandenberg. Leads to confusion since officially a no-take area. Regulations should match take allowed. Petition has been submitted by City of Lompoc to allow shore fishing at Surf Beach	Change designation to SMCA that allows hook and line for finfish from shore only	Yes	Would increase actual protection due to past 5 Base Commanders' decision to allow all legal take on base and would address equity concerns by allowing access for non-military at Surf Beach		Greg Helms to propose intertidal ribbon		Take Allowance Change	Yes, would change from SMR to SMCA
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take		Reevaluate MOA with VSFB that is being interpreted as allowing for full military recreational take in a no-take SMR	No, not needed if designation is changed to SMCA	Vandenberg conservation officer will enforce updated take regs on military personnel				Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Point Conception SMR</a>	No Take	Recent groundfish case. Difficult for enforcement to access from land through Dangermond Preserve. M2 radar at Pt. Conception shows a lot of boating activity, may be surf related	No change	Yes		Provide continued support for M2 radar with ground truthing and continued coordination/info sharing between agencies				



County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Kashtayit SMCA</a>	Rec take of finfish, invertebrates (except rock scallops and mussels) and giant kelp by hand harvest. Santa Ynez band of Chumash exempt	Illegal and dangerous access down the bluffs on Gaviota. Fishing without a license. Access issues for pier fishers with Gaviota pier closed. Difficult to interpret regulations	Reword regulations for clarity of outreach: "Recreational take of finfish, invertebrates, and giant kelp allowed"	Yes	Simpler regulations will make outreach easier, increasing compliance, with minimal impacts to the resources	Have FGC/State push for pier repair at Gaviota Pier (SB County/State Parks) for safety/access reasons	State Parks pending review/Greg Helms		Language Change	Section 100 change
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Naples SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of giant kelp by hand or mechanical harvest. Santa Ynez Band of Chumash exempt	Hook and line fishing and access issues occur here, and most days there are at least two vehicles for fishing or surfing parked near Naples. Impact to hook and line fishers	Add hook and line to allowed method of take	No	Numbers/impact/level of take different between hook and line and spearfishing. Would drastically reduce protection				Take Allowance Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Campus Point No-Take SMCA</a>	No Take	Onshore and offshore hook and line fishing continues to be observed	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take	Trespassing (e.g., illegal swimming, dogs). People occasionally use nets to fish here and/or fish off bridges at the finger boundaries of the slough. Dumping of sediment still occurs in Goleta Bay	Consider water quality designation for Goleta Bay	Yes	Goleta Bay is between two MPAs and there is a need to address impacts of sediment dumping to subsistence fishers off Goleta Pier		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Richardson Rock SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">San Miguel Island Special Closure</a>	Allowance for sea urchin divers between Castle Rock and Judith Rock SMR western boundary (Point Bennet) between 3/15-4/30 and 10/1-12/15.	Commercial urchin poaching. Purpose to reduce disturbance to pinniped populations. Is closure still necessary? Point Bennet has one of the largest pinniped (six species) rookeries on the West Coast of North America	Reevaluate need for special closure (SC); Clean up language to address confusion between 300 yards describing SC and 100 yards keeping boats from whole Island 102 A.1.(a)	Yes		M2 radar at NMFS marine mammal station	Greg Helms		Language Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Harris Point SFMR</a>	No Take	CDFW sees some fishers that are taking from shore, although it is not common	No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Judith Rock SFMR</a>	No Take		No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Carrington Point SMR</a>	No Take	Confusing angle relative to pier	No change	Yes	NPS outreach on angle has been good	More permanent boundary markers/signage is needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Skunk Point SMR</a>	No Take	Difficult to determine how far offshore boats are (in or out)	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">South Point SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Painted Cave SMCA</a>	Rec take of spiny lobster and pelagic finfish	People are taking non-pelagic fish species, rockfish, California sheephead, and live fish	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Gull Island SFMR</a>	No Take		Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Scorpion SFMR</a>	No Take	Fishing/take in little coves at eastern boundaries. Lobster traps	No change	Yes		More on-island enforcement presence needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/31	Brown pelican area makes it difficult for Island Packers and others to land legally at Frenchy's	Add exemption to allow access/landing Frenchy's Cove	Yes	Intent was to allow landing at Frenchy's Cove but aligning brown pelican closure with SMR/SMCA boundary closed off access to safe landing		Greg Helms		Allowed Activity Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/32	Depth hard to enforce due to sheer drop off from island	Reassess need for Special Closure and consider removing if not justified	Yes	May only need brown pelican closure rather than full island special closure to protect seabirds		Greg Helms		Allowed Activity Change	Yes, would remove special closure
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMCA</a>	Rec take of spiny lobster and pelagic finfish. Commercial take of spiny lobster. Santa Ynez Band of Chumash exempt	Confusion regarding what "pelagic" means may lead to unlawful take	No change	Yes		Outreach needed around pelagics				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMR</a>	No Take	Violations for unlawful take	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Footprint SFMR</a>	No Take	Lots of violations. Boats drift in because they cannot anchor	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Begg Rock SMR</a>	No Take	The MPA violations here are commercial and come from experienced mariners	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Santa Barbara Island SFMR</a>	No Take	Osborne Bank. CPFV/commercial lobster poaching. Overlapping jurisdictions	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed	M2 radar needed to monitor remote MPA			Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt	Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of Swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	State Parks pending review; Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMR</a>	No Take	Angle of eastern boundary is confusing/extends due west and is close to shore	No change	Yes		Use of surveyed boundary images in outreach can help address confusion with eastern boundary at Paradise Cove				
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Frequent noncompliance with MPAs and limited enforcement	No change	Yes		Additional enforcement personnel/efforts are needed				

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Confusion of significance of purple designation	Keep allowance for maintenance but change color from purple to red for ease of public interpretation	Yes	Easier to explain "no take" if consistent with red SMR				Other	
Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat	Harmful tidepooling impacts/take from tidepools. Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Catalina Island)	<a href="#">Arrow Point to Lion Head Point SMCA</a>	All rec and commercial take allowed. Take of invertebrates prohibited	Poaching lobster and abalone. Hoop nets. Difficult to identify 1,000 feet from shore at Indian/Endemic Rock	No change	Yes		Need for a locally managed (research) buoy to mark 1,000 feet point				
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Onshore No-Take SMCA</a>	No Take. No anchor area in original refuge boundaries	Fishing/using hoop nets close to shore at Big Fisherman Cove. Poaching at Yellowtail Point and Bird Rock; Confusion around no anchor zone	Change purple to red for outreach purposes	Yes, only if all current maintenance/access activities are still allowed	Easier to explain "no take" if consistent with red SMR	Need for some boundary marker at Yellowtail Point. MPA Watch transect would help identify use/compliance issues here			Other	
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Offshore SMCA</a>	Rec take of pelagic finfish by hook and line and spearfishing and white seabass by spearfishing and market squid by hand held dip net. Commercial take of pelagic finfish by hook and line and swordfish by harpoon	Take via illegal gear types	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Long Point SMR</a>	No Take	Trolling through MPA occurs. Misconception that MPA is only close to shore. Rental boats go past Long Point and fish	Make a distance from shore rather than lat/long for ease of outreach. Cut off corner and flip and move west (offshore) to maintain size	Yes	Clearer outreach to trollers to stay certain distance from shore, IF maintains size				Boundary Change	
Los Angeles (Catalina Island)	<a href="#">Lover's Cove SMCA</a>	Rec take by hook and line from the Cabrillo Mole is allowed. Feeding fish allowed	Fishing from shore at the ramp near the Mole. Angle is difficult at eastern boundary. Food torpedoes are shot from tourist subs to attract fish to windows	Remove allowance for feeding of fish	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite				Allowed Activity Change	
Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed	Boundaries don't match dive park buoys. Feeding fish may be incompatible use. 40-50' depth at MPA line.	Remove allowance for feeding of fish.	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite	Might need to utilize a weaning off process for fish used to being fed			Allowed Activity Change	
Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed		Change purple to red for outreach purposes for outreach	Yes	Easier to explain "no take" if consistent with red SMR				Other	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Los Angeles (Catalina Island)	<a href="#">Farnsworth Onshore SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; marline, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	More difficult to assess whether poaching is occurring on the backside. Challenging/confusing for fishers	No change	Yes		More outreach to fishers needed on why deep habitat/fish are protected here				
Los Angeles (Catalina Island)	<a href="#">Farnsworth Offshore SMCA</a>	Rec take of pelagic finfish by hook and line or by spearfishing; white seabass by spearfishing; marlin, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	CPFVs (party boats) are seen illegally fishing in Farnsworth Offshore SMCA, moving out if they see the CDFW patrol boat approaching. Regs restricting take of rockfish can be confusing for fishers/challenging to prove rockfish on board was taken outside	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Cat Harbor SMCA</a>	Rec take of finfish by hook and line or by spearfishing, market squid by hook and line, and spiny lobster and sea urchin. Commercial take of sea cucumbers by diving only and spiny lobster and sea urchin. Aquaculture of finfish	Some take of undersized fish	No change	Yes						
Orange	<a href="#">Bolsa Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Confusion between Bolsa Bay and Bolsa Chica Basin MPAs	Potentially combine Bolsa Bay with Bolsa Chica Basin MPAs?	No	State Lands requirement to have fishing				Boundary Change	Yes, would change from SMCA to SMR. No consensus
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Water management infrastructure is failing - needs management and repairs. Shoaling and potential closing of inlet - need cost effective alternative to dredging and \$ to implement. Could ultimately change boundaries of MPAs	MPA should cover all waters in ecological reserve. Move northeastern boundary to Graham	Yes	Makes enforcement easier so CDFW can cite for unlawful fishing using 632 instead of no trespassing		OC Coastkeeper	Wendy Berube	Boundary Change	
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Confusion between Bolsa Bay and Bolsa Chica Basin MPA regulations and whether take is allowed. Bridge inconsistency	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Upper Newport Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Ecological Reserve and MPA overlapping jurisdiction. Fishing from floats by PCH bridge and using gill nets at Jamboree Bridge; kayak fishing	No change	Yes		Harbor and estuary signs needed at Newport Dunes. Additional enforcement personnel/efforts are needed				
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat	Harmful tidepooling and undersized lobster. Nighttime poaching. Angle is difficult at southern boundary	Better define tidepool definition to encompass rocky intertidal habitat	Yes	"Area encompassing the rocky pools" is confusing, makes it sounds like it is only the pools, not intertidal zone when dry	Night vision for State Parks officers to address nighttime poaching	State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat		Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Laguna Beach SMR</a>	No Take	Poaching in gated/private communities; angle is difficult at northern boundary	No change	Yes		More enforcement needed in private community. Bring back community scientist/anglers (i.e., CCFRP) to OC				
Orange	<a href="#">Laguna Beach No-Take SMCA</a>	No Take. Maintenance allowed	Angle is difficult at southern boundary	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR	Produce map that has layer that shows allowed maintenance/artificial structures and scientific take	OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected	Fishing without a license. Night poaching at 3 Arch. Take of limpets at north end. Shift in fishing pressure. Angle is difficult at southern boundary. Harmful tidepooling	Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected		Better define tidepool definition to encompass rocky intertidal habitat or utilize a different term.	Yes	Tidepools are specific to pools but intertidal habitats protected can be free of pools in some cases. "Area encompassing the rocky pools" is unclear whether all rocky intertidal habitat is included here.		OC Coastkeeper	Wendy Berube	Language Change	
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve regulations west of 5 and MPA regulations east of 5	Expand SMCA west of I-5 bridge to encompass all of ecological reserve	No	Expands MPA size, unclear on impacts to recreational fishing				Boundary Change	
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change to blue SMCA with designated fishing areas	Maybe	If does not reduce fishing opportunities under I-5 and 101 bridges, or lessen existing protections				Take Allowance Change	Yes, would change from No-Take SMCA to SMCA
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes if boundaries remain the same	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish	Harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is hard at southern boundary since it splits 2 jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what.)	Move southern boundary to jurisdictional boundary between State Parks and City of Solana Beach for full tidepool protection of reef	No	Increases size of MPA, reducing fishing access, and may impact take of halibut				Boundary Change	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish		Shift entire shape south (lifeguard tower to state/Solana Beach line to cover tidepool on south side)	Yes	Compromise. Keeps same size MPA but covers impacted tidepool area on southern boundary. Lifeguard tower clear boundary at north end		State Parks pending review; Wildcoast		Boundary Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Diego	<a href="#">San Elijo Lagoon No Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Lots of people fishing at entrance to San Elijo lagoon under bridge and in channel	Move boundary to west side of the bridge (prohibiting fishing under the bridge) as long as accommodations are allowed for dredging	Yes	Signs are currently posted on west side of bridge to prohibit people from entering the San Elijo Lagoon. Makes outreach clearer		State Parks pending review; Wildcoast		Boundary Change	
San Diego	<a href="#">San Elijo Lagoon No Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">San Dieguito Lagoon SMCA</a>	Rec take of finfish by hook and line from shore. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve boundaries and regulations and MPA boundaries and regulations. Speculation that extent of water has changed since restoration. Original intent of 632 was to align with 630 in overlapping waters. Non-MPA areas are more restrictive which leads to confusion	Have MPA cover all water within ecological reserve.	Need more information	Check with Joint Power authority because would lessen protections if SMCA (that allows fishing) is expanded to all state waters	Sea level rise impacts should be considered			Boundary Change	
San Diego	<a href="#">San Diego-Scripps Coastal SMCA</a>	Rec take of coastal pelagic species, except market squid, by hook and line only	Harmful tidepooling. People using gear types for fishing for species other than coastal pelagics but gear type cannot assume intent. Makes enforcement difficult. Also safety concerns with surf casters into high use swim/surf area	Add, "except from shore" to prohibit surf hook and line	Yes	Surf fishing from shore causes safety concerns (hooks getting caught on surfers/swimmers). Still allows kayakers to fish for bait fish on way out, which was original intent				Take Allowance Change	
San Diego	<a href="#">Matlahuayl SMR</a>	No Take	Harmful tidepooling. Kayak fishing. Caves are being defaced/graffitied	Add place name (La Jolla) to traditional Kumeyaay name (Matlahuayl)	No	Keep Kumeyaay name only for Tribal acknowledgement. Would also add confusion between other La Jolla MPAs	More focused patrols on caves in La Jolla to address littering/defacement of MPA			Language Change	
San Diego	<a href="#">South La Jolla SMR</a>	No Take	Most highly cited MPA. Poaching of lobster and offshore fishing. Harmful tidepooling. Challenges of parking and access (coastline related challenges due to sea level rise, climate disturbance)	No change	Yes	Focus on local management/outreach/enforcement	Need for more focus on tidepools (outreach/enforcement). More staff for allied agencies to help enforce. Encourage city to maintain safe accessways and deal with coastal erosion problems. More education on marine mammal disturbance				
San Diego	<a href="#">South La Jolla SMCA</a>	Rec take of pelagic finfish by hook and line only		No change	Yes						
San Diego	<a href="#">Famosa Slough No Take SMCA</a>	No Take	Homeless encampments. Construction run-off. Dogs and cats disturbing birds	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Cabrillo SMR</a>	No Take	Harmful tidepooling. Offshore boats but NPS unable to contact other than through megaphone	Work with Kumeyaay to rename MPA to traditional Kumeyaay name	Yes	Kumeyaay name exists for this location. Need to confirm spelling	Additional enforcement personnel/efforts are needed			Language Change	
San Diego	<a href="#">Tijuana River Estuary SMCA</a>	Rec take of coastal pelagic species, except market squid, by hand held dip net. Commercial take of coastal pelagics, except market squid by round haul net	Difficult take regulations to interpret in the field and take by hand held dip net not really occurring, per Imperial Beach lifeguards	No change							





Tracking Number: ( \_2023-22MPA\_ )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

#### **1. Orange County Coastkeeper**

Name of primary contact person: Wendy Berube

Address: 3151 Airway Ave. Suite F-110, Costa Mesa, CA 92626

Telephone number: [REDACTED]

Email address: [wendy@coastkeeper.org](mailto:wendy@coastkeeper.org)

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

#### **3. Overview (Required) -**

- a. In both the Bolsa Chica Basin and Laguna Beach no-take SMCAs, change the purple to red on outreach maps. See rows 150 and 155 on the [MPA Collaborative Network Regulatory Recommendations spreadsheet](#). All items listed in the spreadsheet have been extensively discussed at OCMPAC meetings. The groups reached a consensus at a dedicated regulatory recommendations meeting with broad community representation.
- b. For Crystal Cove and Dana Point SMCAs, add “non-living, geological or cultural” to marine resource tidepool take prohibition for consistency with 632(a)1(C). See rows 153 and 156 on the [MPA Collaborative Network Regulatory Recommendations spreadsheet](#).
- c. For the Crystal Cove and Dana Point SMCAs, change the description of tidepools to “rocky intertidal zone” with a modified definition, “the rocky intertidal zone includes all hard substrate between the highest high tide and lowest low tide.” This definition is provided by Dr. Jayson Smith, professor of intertidal biology at Cal Poly Pomona. See rows 152 and 157 on the [MPA Collaborative Network Regulatory Recommendations spreadsheet](#).



- d. In all Orange County MPAs, with the exception of Upper Newport Bay, add an amendment that “Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department.” Upper Newport Bay already has a similar amendment, which is why it is being excluded from this request: CCR Title 14 Section 632(132)(D): “(D) Maintenance dredging, habitat restoration, research and education programs, maintenance of artificial structures, and operation and maintenance of existing facilities inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by the department.”

**4. Rationale (Required) -**

- a. A no-take SMCA has the same rules for the public as do the SMRs. It is easier for the public to understand the regulations when there are fewer designations. Right now, there is confusion over what the purple area means on the maps that we use for outreach. It would simplify the rules if all no-take areas were red. It is anticipated that other MPA Collaborative members will be submitting similar petitions across the South Coast region. This change supports Decadal Review Prioritized Recommendation #15.
- b. This clarifies that the tidepool protection also includes rocks and shells. Our enforcement partners have reported many people taking rocks and shells from the MPA. These are important abiotic ecosystem resources and should be explicitly protected.
- c. Tidepools are specific to pools but the intertidal habitats that need protection can be free of pools in some cases. “Area encompassing the rocky pools” is unclear to the public that all rocky intertidal habitat is included here.
- d. It has been widely recognized in OCMPAC meetings as well as in the Decadal Review process that it is extremely difficult to obtain permits to do research, monitoring, and restoration within our MPAs. These practices have been permitted in other coastal MPAs, such as nearby San Elijo Lagoon, where restoration efforts successfully restored the lagoon and coastal dune living shoreline. With climatic uncertainty and sea level rise, it is imperative that we are able to respond quickly to any changes with current and accurate scientific data. In Orange County, all of the rocky intertidal and reef habitats are protected by the MPAs, so there is absolutely no other option for scientific study of this habitat. When we do identify problems and solutions through research, we need to be able to implement those solutions quickly. In many cases, the appropriate response is restoration. To ensure the ecological integrity of the Orange County MPAs, we must permit scientific research, monitoring, and restoration. This knowledge will broaden our understanding of OC MPAs under climatic stress. This change supports Decadal Review Prioritized Recommendations # 11, 17, 25, and 6.

**SECTION II: Optional Information**

**5. Date of Petition: 11/29/2023**

**6. Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting



Other, please specify: MPAs, Section 632.

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

Amend Title 14 Section(s): [Westlaw regulations](#).

Add New Title 14 Section(s):

Repeal Title 14 Section(s):

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition.**

Or  Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

- a. MPA Collaborative Network Regulatory Recommendations Spreadsheet
- b. Letter of support from Dr. Jayson Smith of Cal Poly Pomona
- c. Letter of support from Nancy Caruso, Executive Director of Get Inspired, Inc.
- d. Letter of support from Michael C Couffer, Lead Biologist at Grey Owl Biological Consulting
- e. Letter of support from Dr. Wendy Marshall Lovell, President and CEO of the Ocean Institute
- f. Letter of support from Jessica Brasher, Director of Husbandry and Facilities for the Ocean Institute
- g. Letter of support from Stacey Chartier-Grable, Founder and Director of OC Habitats
- h. Letter of support from the EI Modena Ecological Research Class
- i. Letter of support from the STEM educators at Warner Middle School
- j. Letter of support from Don Cruse
- k. Letter of support from Marius Stanoiu
- l. Letter of support from Noel Besuzzi
- m. Letter of support from Kyle Jenkins
- n. Letter of support from John Phibbs
- o. Letter of support from Barbara Sarp

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, Letter of support from other state agencies, local agencies, schools, or housing. The only fiscal impact would be the cost to reprint any outreach materials with the new red colors on the map.

12. **Forms:** If applicable, list any forms to be created, amended or repealed:



**SECTION 3: FGC Staff Only**

Date received: 11/29/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Orange	<a href="#">Bolsa Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Confusion between Bolsa Bay and Bolsa Chica Basin MPAs	Potentially combine Bolsa Bay with Bolsa Chica Basin MPAs?	No	State Lands requirement to have fishing				Boundary Change	Yes, would change from SMCA to SMR. No consensus
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Water management infrastructure is failing - needs management and repairs. Shoaling and potential closing of inlet - need cost effective alternative to dredging and \$ to implement. Could ultimately change boundaries of MPAs	MPA should cover all waters in ecological reserve. Move northeastern boundary to Graham	Yes	Makes enforcement easier so CDFW can cite for unlawful fishing using 632 instead of no trespassing				Boundary Change	
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Confusion between Bolsa Bay and Bolsa Chica Basin MPA regulations and whether take is allowed. Bridge inconsistency	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Upper Newport Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Ecological Reserve and MPA overlapping jurisdiction. Fishing from floats by PCH bridge and using gill nets at Jamboree Bridge; kayak fishing	No change	Yes		Harbor and estuary signs needed at Newport Dunes. Additional enforcement personnel/efforts are needed				
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat	Harmful tidepooling and undersized lobster. Nighttime poaching. Angle is difficult at southern boundary	Better define tidepool definition to encompass rocky intertidal habitat	Yes	"Area encompassing the rocky pools" is confusing, makes it sounds like it is only the pools, not intertidal zone when dry	Night vision for State Parks officers to address nighttime poaching	State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat		Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Laguna Beach SMR</a>	No Take	Poaching in gated/private communities; angle is difficult at northern boundary	No change	Yes		More enforcement needed in private community. Bring back community scientist/anglers (i.e., CCFRP) to OC				

Orange	<a href="#">Laguna Beach No-Take SMCA</a>	No Take. Maintenance allowed	Angle is difficult at southern boundary	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR	Produce map that has layer that shows allowed maintenance/artificial structures and scientific take	OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected	Fishing without a license. Night poaching at 3 Arch. Take of limpets at north end. Shift in fishing pressure. Angle is difficult at southern boundary. Harmful tidepooling	Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)(1)(C)	Yes	Clarifies tidepool protections to include rocks and shells		OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected		Better define tidepool definition to encompass rocky intertidal habitat or utilize a different term.	Yes	Tidepools are specific to pools but intertidal habitats protected can be free of pools in some cases. "Area encompassing the rocky pools" is unclear whether all rocky intertidal habitat is included here.		OC Coastkeeper	Wendy Berube	Language Change	



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

The El Modena Ecological Research Class submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. The El Modena Ecological Research Class are committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission to **add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

The El Modena Ecological Research Club submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. The El Modena Ecological Research Club are committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission to **add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely, *Yvonne Rebertz, Miguel Angel Aguilar, Heather Velazquez*

California Fish and Game Commission

P.O. Box 944209

Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

On behalf of the Ocean Institute, I, Jessica Brasher, submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. The Ocean Institute is committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Jessica Brasher  
Director of Husbandry and Facilities  
Ocean Institute

11/27/23

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090



Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

Get Inspired, Inc has been working on restoration projects in Orange County since 2011, educating over 12,000 students and involving 1,000 community volunteers to survey and restore species to our coast. We submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs.

Orange county's rocky reefs are all included in the MPA network, making it very difficult to request permission for monitoring, research, and restoration. These reefs are unique because of the orientation of our coast and high human impacts due to fishing pressure and tidepooling activities. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed and restore species which are missing from these reefs.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration activities, we urge the commission **to add an amendment to all MPAs within Orange County, with the exception of Upper Newport Bay, that states "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar wording.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

A handwritten signature in blue ink that reads 'Nancy L. Coruso'.

Executive Director  
Get Inspired, Inc  
[www.getinspiredinc.org](http://www.getinspiredinc.org)  
714-206-5147

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

I, Marius Stanoiu, submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. I, Marius Stanoiu, am committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,  
Marius Stanoiu



**Grey Owl Biological Consulting**  
716 Marguerite Avenue, Corona del Mar, California 92625  
(949) 644-7127 [mikecouffer@gmail.com](mailto:mikecouffer@gmail.com)

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 27, 2023

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration within Orange County's Marine Protected Areas

Dear President Sklar and Commissioner Murray,

Grey Owl Biological Consulting submits these comments in support of Orange County Coastkeeper's petition to add an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. My company is committed to coastal protection, supporting the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department." Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Michael C. Couffer  
Owner and Senior Biologist  
Grey Owl Biological Consulting



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

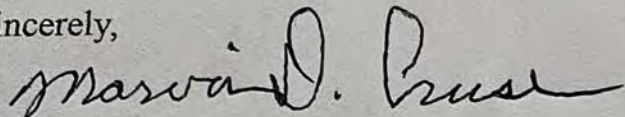
I Marvin D Cruse submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. I Marvin D Cruse are committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

11/28/23

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

The am submitting these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Noel Besuzzi

Noel Besuzzi



The mission of OC Habitats™ (OCH) is to provide a public service for the many habitats of Orange County, California through conservation efforts, rehabilitation, restoration, education, outreach, volunteerism, monitoring, and partnering with other entities whose goal is to promote the preservation, conservation, and restoration of natural habitats and the species therein.

---

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

OC Habitats submits these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for [1] [2] Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. OC Habitats is committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department." Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Stacey Chartier-Grable  
Executive Director and Founder  
[SChartier-Grable@ochabitats.org](mailto:SChartier-Grable@ochabitats.org)





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

I, Kyle Jenkins, a local citizen and avid ocean enthusiast, submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. I strongly believe in and support coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Kyle Jenkins



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

I John Phibbs submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. I John Phibbs are committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

A handwritten signature in black ink, appearing to read "John Phibbs", with a long, sweeping horizontal stroke extending to the right.



**Biological Sciences**  
*College of Science*

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

I am a professor and marine ecologist in the Biological Sciences department at California State Polytechnic University, Pomona and submit this letter in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. My research history and professional service, particularly with Orange County MPAs, show a long-standing commitment to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges but recognize that fundamental research in MPAs still needs to be allowed and the process be made more streamlined.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas function naturally and how they are being affected by anthropogenic impacts, including climate change. It is therefore imperative that science be given the ability to robustly study these habitats and understand how to best protect them.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration, if necessary, I urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

I enthusiastically support California's MPA Network. In the case of Orange County MPAs, I assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Dr. Jayson Smith

A handwritten signature in black ink that reads "Jayson Smith".

Professor  
Department of Biological Science  
jaysonsmith@cpp.edu

3801 W. Temple Ave., Pomona, CA 91768



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

I'm writing in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. I'm committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

*Barbara Sharp*

Barbara Sharp



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

The Ocean Institute submits these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. The Ocean Institute is committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission to **add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

A handwritten signature in black ink that reads "Wendy Marshall". The signature is written in a cursive, flowing style.

Dr. Wendy Leavell  
President/CEO  
Ocean Institute  
[wendy@oceaninstitute.org](mailto:wendy@oceaninstitute.org)  
714.916.3464

California Fish and Game Commission

P.O. Box 944209

Sacramento, CA 94244-2090

Re: Support for OC Coastkeeper Petition to allow scientific research, monitoring, education, and restoration in Orange County Marine Protected Areas

Dear President Sklar and Commissioner Murray,

The STEM educators at Warner Middle School submit these comments in support of Orange County Coastkeeper's petition regarding adding an amendment for Orange County Marine Protected Areas (MPAs) allowing for scientific research, monitoring, education, and restoration within the MPAs. The STEM educators at Warner Middle School are committed to coastal protection, the marine protected area (MPA) network, and the advancement of science to understand and address impending climate change challenges.

Orange County beaches have some of the most beautiful coves and rocky tide pools found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. However, there is still a lot we do not understand about how these areas are being affected by warming water and rising sea levels, among other climate change uncertainties. It is therefore imperative that we study these habitats and understand how to best protect them. We also need to be able to move quickly to enact solutions should they be needed.

To help scientists access permits to conduct research, establish monitoring protocols, and implement restoration if necessary, we urge the commission **to add an amendment to all MPAs within Orange County with the exception of Upper Newport Bay that states, "Scientific research, monitoring, restoration, and education is allowed pursuant to any required federal, state or local permits, or as otherwise authorized by the department."** Upper Newport Bay already has a similar amendment, so it is not necessary to include that MPA.

We enthusiastically support California's MPA Network. In the case of Orange County MPAs, we assert that scientific study, monitoring, and possible restoration are needed to preserve the area's biodiverse marine life in light of changing climatic conditions for future generations.

Sincerely,

Travis Garwick

Renee Balboa

Steve Lambright

Joe Acquarelli



Tracking Number: ( 2023-23MPA )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Keith Rootsart

Address: [REDACTED]

Telephone number: 408-206-0721

Email address: [Keith@g2kr.com](mailto:Keith@g2kr.com)

**2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.**

**3. Overview (Required) - Summarize the proposed changes to regulations:**

Kelp Restoration

Multiple methods in 3 SMCAs and 1 SMR.

Kelp Protection by Redesignation

Edward F. Ricketts State Marine Conservation Area to Edward F. Ricketts State Marine Reserve.

Pacific Grove Marine Gardens State Marine Conservation Area to Pacific Grove Marine Gardens State Marine Reserve.

Carmel Bay State Marine Conservation Area to Carmel Bay State Marine Reserve.

Kelp Protection by Designation

The Tanker's Reef enforcement area as Tanker's Reef State Marine Reserve.

Permission to deploy buoys

Prevent anchor damage to rocky reef denizens,

Navigation aid for kelp restoration activities.



Regulatory Pathway for  
Sunken ship and other artificial reef structures

SCP Framework Changes  
Management of Kelp Restoration

Public Outreach  
Adopt a Reef for Kelp Restoration

**4. Rationale (Required)** - Describe the problem and the reason for the proposed change:

This [Giant Kelp Restoration](#) petition advances MLPA [goals](#) 1-6 and has strong community support of volunteers and grassroots funding. The MPA Collaborative network [lists](#) many of these issues on rows 77, 78, 83, & 88, and was supported by all present at the Monterey MPA Collaborative Meeting at Asilomar, August 16, 2023.

This petition is in alignment with the [prioritized recommendations](#) from the California Marine Protected Area Decadal Management Review, [near-term Priorities \(ongoing- 2 years\)](#), Cornerstone Governance, Regulatory and Review Framework, Recommendation 04. Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program. Also: Management Program, Policy and Permitting 18: Utilize OPC's Restoration and Mitigation Policy to develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and MMAs

Kelp Restoration

Due to widespread urchin barrens following the 2014-2016 marine heat wave and kelp biomass decline in central and northern California, kelp restoration is a proven remedy by scuba divers culling urchins to suppress grazing pressure. Early [results](#) at Tanker's Reef in Monterey have shown that divers culling urchins results in natural kelp recruitment and survival.

This petition will allow certified Kelp Restoration Specialty Divers, recreational and commercial fishermen, to participate in a Regenerative Fishery which suppresses grazing pressure from urchins and promotes giant kelp survival in three State Marine Conservation Areas: Edward F. Ricketts, Pacific Grove Marine Gardens, and Carmel Bay State Marine Conservation Areas and in "Whaler's Cove", a portion of the Point Lobos State Marine Reserve.

The methods will involve multiple techniques to suppress grazing pressure on kelp and to enhance kelp recruitment and survivorship and are explained in further detail in [Blueprint for Kelp Restoration in Monterey](#).

*Suppression:*

Hand culling of urchins.  
Commercial harvest of urchins for urchin ranching and food sales.  
Baiting & trapping urchins.  
Utilizing natural defenses of acid weed.



Removing invasive marine algae.

*Benefitting:*

Pruning kelp canopy to promote growth and resilience to storms.

Out-planting kelp on the reef.

Spore dispersal by sporophyte bags.

Artificial reef structures.

All the methods employed will be detailed, discussed, and approved by the [Department](#) and work would be performed in coordination with other restoration activities. [Reef Check California](#) is our monitoring partner and will perform modified kelp forest monitoring surveys of the treated sites and controls. Reports on the project criteria will be discussed bi-weekly with the Department and as requested by the FGC.

We are asking that these kelp restoration methods be permitted without a SCP both inside and outside MPAs and will involve changes to sportfishing regulations to allow unlimited culling of urchins by hand tools, deploying sporophyte bags, etc. We ask that recreational fishermen be allowed to trap, harvest, capture for research, and cull urchins. Commercial fishing regulations will require a restoration exception to harvesting urchins in MPAs and exemption to the [wanton waste rule](#) for kelp restoration activities to allow commercial fishermen to cull urchins that are below the 4.5 cm minimum useful harvest size or for commercial divers to alternate between commercial and recreational fishing.

Kelp Protection by Redesignation:

The MPAs were mapped without considering the possibility of a native invertebrate species becoming overabundant and gobbling up most of the algae in the ecosystem combined with the Department's unwillingness to address that crisis. Urchin barrens have occurred sporadically for millennia as evidenced by the millions of urchin-made holes in the benthos at Tanker's Reef. 250 years ago, when southern sea otters were nearly extirpated by the fur trade, the abalone and urchins flourished and for 125 years kelp disappeared from the central coast until abalone were eventually overfished and take banned south of San Francisco in [1997](#) and giant kelp again became dominant. In 2007, the central coast MPA rules were formed to prohibit the take of any invertebrates, relying on a written provision for "restoration" as an "allowed" activity in MPAs but the Department does not "permit" restoration because they have conjured a de facto contradictory 7<sup>th</sup> goal of MPAs to "not disturb" them.

In Monterey the community led group Giant Kelp Restoration Project has successfully defended a kelp forest at Tanker's Reef and is aspiring to restore large kelp forests on both sides of the Monterey Peninsula by SCP. FGC would not consider petitions allowing take of invertebrates in the SMCAs & SMRs until the [Decadal Management Review](#) could be completed. Now that the DMR has passed, this petition is seeking to begin the Adaptive Management Review Cycle for the central coast MPAs that have remained unmodified since 2007.

Kelp forests need protection from fishing pressure which has detrimental effects on species richness and kelp biomass. By designating the areas of kelp restoration as State Marine Reserves, fishing pressure will be considerably reduced. This is safer for the volunteer divers involved to avoid fishing boat traffic or getting hooked by fishing gear while diving.





The MLPA is now administered in 3-year Adaptive Management Review Cycles and there is now flexibility in addressing the kelp crisis in a way that accomplishes the MLPA goals but also does not harm the environment in a long term, unforeseen and unwanted way that occurred on the central coast for the last 16 years. The [G2KR](#) projects at Lovers Cove and at [Tanker's Reef](#) demonstrated that the effort of the certified volunteer divers can be consistently and positively directed to restore kelp forests. Restoration work in these clearly described and familiar MPA boundaries would avoid confusion and guide diver effort in a predictable and effective strategy. In an Adaptive Management Review Cycle these methods can be continuously evaluated and adapted to the evolving stressors in the environment and as our knowledge, techniques, and capabilities at restoring kelp similarly evolve.

In future Adaptive Management Review Cycles the consequences of kelp restoration can be reviewed and the FGC may consider applying these methods more broadly, changing allowed methods, and allowing fishing under modified conditions. The other Monterey SMRs are acting as “controls” without treatment, but in the next review cycle we may ask for those SMRs to be treated as well in order to halt urchin migration and to achieve our goal, pledged to the [Kelp Forest Alliance](#), to restore 2000 acres of giant kelp around the Monterey Peninsula by 2030.

[Research](#) shows the reduced fishing pressure in places where fish are born will be beneficial to the fishery in the future when more fish live to adulthood and make more fish. In the future the kelp situation may change, and these places may be opened again in future management cycles to fishing for selected species, or in coordination with scientific monitoring protocols. The three State Marine Conservation Areas mentioned presently have diminished fish stocks and species richness and could benefit from a temporary fishing prohibition. This closure, in coordination with kelp restoration, will benefit adjacent areas with the “spillover effect” of the MPAs providing better fishing opportunities for participants.

This closure would not affect commercial fishermen who are prohibited from fishing in SMCAs already, but mostly the recreational fishermen who fish from shore. The fishermen fishing from boats are typically fishing further from shore because the fish are not as plentiful in the nearshore SMCAs now that the kelp has thinned. Although this closure would prohibit fishing at the Monterey Breakwater parking lot, there is still accessible fishing at the Commercial Wharf. Surf fishing from shore is generally not done at the Tanker's Reef area but further to the north at Sunset, Seacliff and New Brighton State Parks.

There are some fishermen that fish on the west side of Lovers Point and the north side of Point Pinos that would be displaced in a portion of the Pacific Grove Marine Gardens SMCA that is frequented by tourists and rented out by Pacific Grove for [weddings](#). To mitigate the loss of this fishing opportunity we recommend the replacement of the Del Monte Bathhouse [Pier](#), by others. It is not fair that our community group of volunteers is working hard to restore kelp and suppress kelp grazers while the state licenses individuals to fish in the same place and time with activities that are detrimental to that same kelp's growth and survival while also endangering diver's lives with propellers and fishing hooks.

The [Central Coast](#) Regional Stakeholder Group's intent during regional MLPA planning process (including MPA-specific goals/objectives and design considerations), adopted in April



2007, was found to be aligned with our proposal to improve the conservation status. In the [Regional Goals Design Considerations #3](#). "To the extent possible, site MPAs to prevent fishing effort shifts that would result in serial depletion" is what has happened in these places due to fishing pressure being concentrated in only a few accessible places. Redesignating the SMCAs as SMRs aligns with the original intent of more fishing prohibitions at two sites and stopping serial depletion of species at all three sites.

[Edward F. Ricketts SMCA](#) was proposed by the [RSG](#) to be split as half Edward F. Ricketts SMCA and half Edward C. Cooper SMR so the original intent was to make the area closest to the breakwater into a SMR. John Wolfe, Diving representative to the Regional Stakeholder Group, recalled that a disabled veteran testified that the breakwater was the "only place he could fish" so fishing by hook and line was decided to be allowed. There was a favorite wolf eel that lived on the wall and a spearfisherman shot it and threw it in a garbage can and divers were outraged so fishing by spear was not allowed on this site and the site is partially closed to fishing already. The fishermen fishing off the breakwater wall is a constant danger to divers at this most popular dive site on the west coast of North America and for safety it must stop. There is disabled access at the municipal wharf for fishermen.

[Pacific Grove Marine Gardens SMCA](#) was proposed by the [RSG](#) to be an SMR north of Point Pinos. Presently the delineation between Asilomar SMR and PG Marine Gardens SMCA is at Point Pinos, so the original intent was to make a large portion north of the peninsula protected as a SMR. This was the first area impacted by widespread urchin barrens in 2015 and is a high priority site for kelp restoration.

[Carmel Bay SMCA](#) was implemented as designed but has poor fishing opportunities and depletion of species because it is the only accessible fishing place south of the Monterey Peninsula until Malpasos Creek south of Point Lobos SMR. The loss of kelp forests exacerbates the problem because rockfish are born in kelp forests and take 8-10 years to reach maturity.

These MPAs were all [described](#) as "High Priority" sites by OPC's [research](#) that would have the highest probability of kelp restoration success.

#### Kelp Protection by Designation:

We propose that the Tanker's Reef enforcement area be designated the Tanker's Reef State Marine Reserve (working title). This kelp forest was created by volunteer divers and is very vulnerable from fishing pressure because it is outside of MPA fishing prohibitions. Routinely fishermen in boats and kayaks take fish at the 11 acre kelp forest. The experimental 2.5-acre underwater cable grid is studied by OPC, CDFW, MBNMS, and Reef Check California. We try very hard to reduce externalities as much as possible to determine a natural process of kelp reforestation. Fishermen taking fish is an externality for the scientific design and confounds the results. Fishing gear often becomes entangled in underwater navigation cables used to guide divers. Furthermore, boat propellers are a threat to injure scuba divers in the area under the water.

Designating this area as a State Marine Reserve will also protect more sandy habitat at Del Monte Beach, the most eroded beach in California, at a time when the beach is nourished after the closure of [sand mining](#) in Southern Monterey Bay and studied by [USGS](#).



In the [Regional Goals Design Considerations #8](#), “To the extent possible, site MPAs to take advantage of existing long-term monitoring studies” is consistent with designating Tanker’s Reef, the site of CDFW/MBNMS and Reef Check surveys, as a State Marine Reserve.

#### Permission to deploy buoys

Boat anchors on rocky reefs often disturb sensitive marine habitat with their heavy chains scraping in an arc from the anchor to the boat. In a sensitive kelp restoration site that has frequent visits, dropping and recovery of the anchor disturbs the kelp we are trying to defend. By deploying a temporary buoy that the boats can attach to instead of dropping an anchor, the kelp is not disturbed. The use of buoys also aids the divers in the kelp restoration activity by providing underwater visual markers to guide where to cull the urchins and protect the kelp.

This petition seeks to allow seasonal deployment of certain colored and well-maintained buoys to be deployed in kelp restoration areas for the purpose of directing boats where to anchor and to direct divers for the purpose of kelp restoration.

#### Regulatory Pathway for an Artificial Reef:

Since 2010 Scuba divers have expressed an interest in diving on a sunken ship in Monterey Bay and this was proposed by the community group California Ships to Reefs and studied by the Office of National Marine Sanctuaries [in 2012](#). In 2017 Artificial Reefs was established as a priority for Monterey Bay National Marine Sanctuary Advisory Council. This was proposed to CDFW, but because the State has never permitted an artificial reef in State waters, this was never permitted. However, there are 52 other [artificial permitted reefs](#) in California including the Wheeler North Reef in Southern California. created in 2008.

Creating a shipwreck in protected nearshore waters deep enough to not be displaced by winter storms would be of interest to the scuba diving community. It will also serve as a unique scientific baseline to observe what is the order of marine life formation on a “blank” surface. It may also be beneficial to plant kelp on [artificial structures](#) better suited to kelp growth and marine aquaculture. This petition seeks a pathway for the FGC to determine if an artificial reef is in the public interest and establish an application process to obtain permission from CDFW and other state and federal agencies.

This request is in alignment with the [prioritized recommendations](#) from the California Marine Protected Area Decadal Management Review, near-term Priorities (ongoing- 2 years), Cornerstone Governance, MPA Statewide Leadership Team and Partner Coordination 09. Continue to coordinate and collaborate with OPC and other agencies on California’s ocean and coastal priorities to enhance coastal biodiversity, climate resiliency, human access and use, and a sustainable blue economy.

#### SCP Framework Changes

##### Management of Kelp Restoration

This petition is in furtherance of the [prioritized recommendations](#) from the California Marine Protected Area Decadal Management Review, near-term Priorities (ongoing- 2 years), Cornerstone Management Program, Policy and Permitting, Recommendations 17. Improve the application and approval process for scientific collecting permits. And 18. Utilize OPC’s



Restoration and Mitigation Policy to develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and MMAs

We propose to establish a new process in CDFW's Scientific Collecting Permit program for Restoration Permits. Presently the process available for the Department to manage restoration projects in marine ecosystems is the Scientific Collecting Permit process where applicants submit applications for \$71.62 and pay \$269.08 for a [Special Use Permit](#) to operate a project with certain methods, species take restrictions, and reporting requirements. We request similar fees for Kelp Restoration Permits.

In our 2018 SCP permit with Reef Check we were not able to amend the permit to take sufficient red urchins and we had to abandon the project. In our 2 attempts to obtain SCPs for kelp restoration methods we were denied. Our pre-application to cull urchins in 3 SMCAs has been in process for 18 months before we can submit it into the SCP portal. The problem is that kelp restoration seeks to change a grazer species population within the defined area, but "Decision Tree" limits the take of species to not affect and change a species population within the area. This leads to situations where kelp restoration experiments are impossible because the number of permitted animals to take is very small and not enough to benefit the recruitment and survival of kelp forests. This led to the abandonment of our experiment at Lovers Cove in year 3 when we couldn't remove sufficient red urchins.

The scientific method requires isolation of treatment methods and establishment of a control area. This places a limitation on kelp restoration practitioners to only employ singular methods when the best results are possible using [multiple methods](#). This also restricts the kelp restoration activities by attempting to answer scientific questions where the goal is simply kelp restoration and this scientific component is best accomplished by science divers rather than certified kelp restoration specialists. Once a permit application is obtained it is difficult to change as new discoveries are made that affect kelp survivorship and the process to attempt to amend a permit takes over a year. At the end of the typical 3 year SCP permit period the treatment must stop, and the 5 year post-restoration monitoring period begins. This is contradictory to the goals of kelp restoration and has led to similar abandonment of work in the treatment area at Tanker's Reef where the effort is desired to be continued by the volunteers, but because the experiment stops after 3 years, the divers are not allowed to come back and tend the kelp forest they successfully created and defended. The extension of Tanker's Reef is "noticed" at the FGC and hopefully will be extended 5 years, but the point is that restoration should lead the activity and scientific experiments should evaluate, but not interfere with, or seek to end, the restoration effort.

Kelp Restoration is an allowable activity in SMRs, and now with the unanimous passage of [AB63](#), in SMCAs as well. However, restoration is allowed but not permitted. Our attempt to obtain a [Restoration Management Permit](#) was denied because the law does not address conspecifics. The Department could issue a Letter of Authorization, similar to the one written for the Monterey Bay Aquarium to repair intake pipes, but that is not available to us for inequitable reasons that support the built environment over the natural environment. The only available process we are told is available to us is the SCP process, which is exceedingly slow and inappropriate mechanism which, by rule, restricts the restoration activity to being deliberately inconsequential to improving the health of the MPA.



To remedy this, we petition that the Department establish a “Restoration” category in the SCP process that would allow restoration methods, coordinate with CDFW Research, and establish periodic reviews of restoration efforts, allow for 10-year project durations, and allow take of overpopulating species until the species reaches the threshold density observed pre-marine heatwave of 2014.

Additional comments on the SCP Portal and Process are that the website interface is very clunky and time consuming to complete, especially when submitting for take of multiple species at multiple locations and the program slowly populates look-up tables. The response to permit applications is not transparent, we never know who made the comments and there is not an ability to clarify and discuss the commenter’s concerns. There is not an opportunity to have a conversation of what would be acceptable, only a rejection and it becomes incumbent on the petitioner to apply again and guess what would be acceptable. We ask that these issues be repaired in the SCP software and Restoration Project approval process.

#### Public Outreach

This petition asks the FGC to affirm kelp restoration as public policy in MPAs and to celebrate community collaboration in kelp restoration, mitigating climate change, and conserving biodiversity in public outreach to stakeholders and encourage ocean stewardship. At the October 12 [FGC meeting](#) the commissioners suggested kelp practitioner leadership be unified under an “Adopt a Reef” community program, which is a wonderful idea, and we ask the commission to consider our proposed sites as G2KR adopted reefs. We ask that FGC and the Department promote kelp restoration collaboration on their website and in public outreach. This is [prioritized](#) in California Marine Protected Area Decadal Management Review, near-term Priorities (ongoing- 2 years), Cornerstone Management Program, Outreach and Education, Recommendation 16. Conduct more targeted outreach to specific audiences to connect stakeholders with coastal resources and to encourage stewardship and compliance with regulations.

Thank you for considering our petitions! In our effort to be succinct and consolidate seven petitions into one, we reduced arguments in favor of the proposal yet still exceeded 5 pages. Additional rationale/justification is available upon request and may be presented at future FGC meetings.

## **SECTION II: Optional Information**

**5. Date of Petition:** 11/29/23

**6. Category of Proposed Change**

X Sport Fishing

X Commercial Fishing

Hunting

X Other, please specify: MPAs, Section 6.32





- 7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*  
 X Amend Title 14 Section(s): 29.06 and others.  
 X Add New Title 14 Section(s): 29.06 and others.  
 Repeal Title 14 Section(s): [Click here to enter text.](#)
  
- 8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition 2021-025 & 2023-02**  
 Or  Not applicable.
  
- 9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
 If the proposed change requires immediate implementation, explain the nature of the emergency: 4/1/24
  
- 10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: See blue links in this document and supporting documents [here](#).
  
- 11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: See Recreational Sea Urchin fiscal impact study in October FGC Meeting materials [here](#).
  
- 12. **Forms:** If applicable, list any forms to be created, amended or repealed: N/A

**SECTION 3: FGC Staff Only**

Date received:

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action:

Meeting date for FGC consideration:

FGC action:

- Denied by FGC
- Denied - same as petition

Tracking Number

Granted for consideration of regulation change





Tracking Number: ( \_2023-24MPA\_ )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Laguna Bluebelt Coalition**

Name of primary contact person: Mike Beanan

Address: PO Box 9132, Laguna Beach, CA 92652

Telephone number: 949.500.5039

Email address: [mike@lagunabluebelt.org](mailto:mike@lagunabluebelt.org)

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

### **3. Overview (Required) -**

- a. Extend the Laguna Beach SMCA no-take regulation down to the southern border of the city of Laguna Beach. This area is currently covered by the Dana Point SMCA, which only protects tide pool resources, not the offshore kelp beds.

### **4. Rationale (Required) -**

- a. Laguna Beach has recently taken over enforcement of the South Laguna beaches all the way down to the city border. Right now there is confusion due to the different regulations within one city. This regulation change will make enforcement easier and more consistent because it will create continuity within the city, where the same rules apply to all beaches. All Laguna Beach lifeguards have received MPO training and enforce no-take rules for the rest of the city beaches. This will result in an increase in outreach and enforcement effectiveness, which supports priority recommendation number 15.

High fishing and lobstering pressure are taking a toll on the remaining kelp beds in South Laguna due to overharvesting and substrate degradation due to anchor drag. The



Sustainable Fisheries Act of 1996 established new requirements for fishery management councils to identify and describe Essential Fish Habitat and to protect, conserve, and enhance these EFH for the benefit of fisheries. A 2002 update to these EFH regulations allowed fishery management councils to designate Habitat Areas of Particular Concern (HAPCs). HAPCs are considered high priority areas for conservation, management, or research because they are important to ecosystem function, sensitive to human activities, stressed by development, or are rare. The rocky reef and kelp beds in this particular area of South Laguna are slightly different than those in the rest of the city because of the steep drop of the cliffs into the ocean. This creates a unique microhabitat where waters are mixed due to wave refraction off of the cliffs.

There are kelp forests offshore in these areas that are desperately needed as habitat. One of the original design considerations for designating MPAs was to “Include within MPAs suitable rocky habitat containing abundant kelp and/or foliose algae” (CMLPA Master Plan for MPAs, Appendix F). When the MPA boundaries were finalized in 2012, the kelp was at its highest extent of coverage since 1967 (see supplemental graph), so the total area of kelp forest was overestimated. The kelp beds off South Laguna have been nearly decimated by overharvesting and anchor drag and need to be protected. This, in combination with the potential for additional kelp decline due to warm water events makes it imperative that we protect as much as possible.

The Marine Mammal Protection Act also requires action to be taken here. The south end of the no-take SMCA is visible from shore as a line of lobster trap buoys extending out from the cliffs. One MPA watch volunteer reported 223 buoys off of Table Rock beach on 11/8/2023. This represents a virtual “wall” of dangerous trap lines that interrupt whale migration paths. Whales have been seen frequently traveling very close to shore along this stretch of coastline (see supplemental photo of Thousand Steps beach). In 2019, Donna Kalez of Dana Wharf Whale Watching was referenced in a magazine article saying that in the preceding few weeks her captains had logged more than 40 sightings of gray whale cow-calf pairs in the shallow coves of Laguna Beach ([Men’s Journal](#)). The lobster buoy lines create a dangerous obstacle for migrating whales, which are protected under the MMPA.

Residents in South Laguna support the extension of the no-take SMCA as evidenced by the attached letters of support from the Three Arch Bay Community Services District, Orange County Coastkeeper, Laguna Canyon Conservancy, Laguna Bluebelt Coalition, and the South Laguna Civic Association. They feel that it is not equitable to have only the north and central beaches protected. Please see the attached letters of support.

## **SECTION II: Optional Information**

**5. Date of Petition: 11/29/2023**

**6. Category of Proposed Change**

Sport Fishing

Commercial Fishing

Hunting

Other, please specify: MPAs, Section 632.



7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
- Amend Title 14 Section(s): [Westlaw regulations](#).
  - Add New Title 14 Section(s): [Click here to enter text](#).
  - Repeal Title 14 Section(s): [Click here to enter text](#).
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Or  Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency:  
This should be implemented as soon as possible. Ancient California Gray Whale Migration is currently being altered due to proliferation of nearshore lobster traps and rope buoys at the southern SMCA boundary.
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
- (A) Map of proposed Boundary Adjustment.
  - (B) Letter of support from the Three Arch Bay Community Services District
  - (C) Letter of support from the South Laguna Civic Association
  - (D) Letter of support from the Laguna Bluebelt Coalition
  - (E) Letter of support from Orange County Coastkeeper
  - (F) Letter of support from the Laguna Canyon Conservancy
  - (G) Graphic from “Status of the Kelp Beds in 2019: Orange & San Diego Counties.  
Prepared for the Region Nine Kelp Survey Consortium” by MBC Aquatic Sciences
  - (H) Full Report: “Status of the Kelp Beds in 2019”
  - (I) Photo of gray whale at Thousand Steps Beach
11. **Economic or Fiscal Impacts:** There would be a fiscal impact on commercial lobster fishers due to reducing their fishing grounds. However, fishing effort will be closer to Dana Point Harbor to save fuel costs and use of ropeless buoys will be encouraged. With removal of lobster buoy lines as migration barriers, whale watching tours can resume in Laguna Beach (\$10 million estimated annual revenues to Dana Point economy). Less anchoring by CPFVs will reduce anchor drag damaging local reefs and kelp forests. Estimated resident property values gain an increase of 20% from proximity to a fully protected MPA
12. **Forms:** If applicable, list any forms to be created, amended or repealed:  
[Click here to enter text](#).

### SECTION 3: FGC Staff Only

Date received: 11/29/2023

FGC staff action:

- Accept - complete



- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

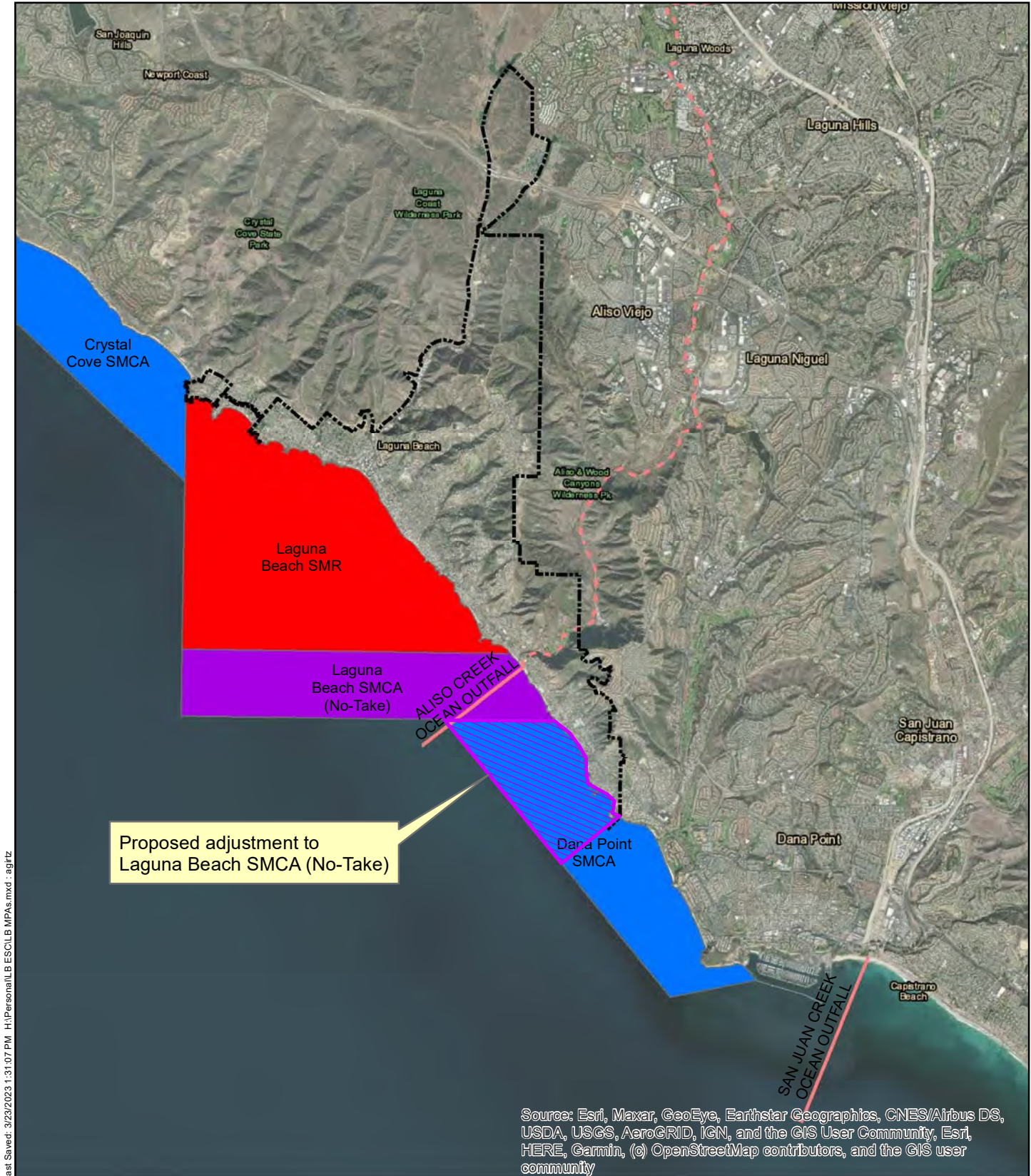
FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change



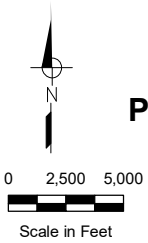


Last Saved: 3/23/2023 1:31:07 PM H:\Personal\LB ESC\LB MPAs.mxd : agitz

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

**Symbology**

- City Limits
- - - SOCWA Effluent Transmission Line
- SOCWA Ocean Outfall
- ▨ Proposed Laguna Beach SMCA (No-Take) Adjustment



**Figure 1**  
**City of Laguna Beach**  
**Proposed Marine Protected Area Adjustment**





# **Status of the Kelp Beds in 2019:**

**Orange and San Diego Counties**

**Prepared for the Region Nine Kelp Survey Consortium**

**MBC Aquatic Sciences**



**STATUS OF THE KELP BEDS IN 2019:  
Orange and San Diego Counties**

*Prepared for:*

**Region Nine Kelp Survey Consortium**

*Prepared by:*

**MBC Aquatic Sciences  
3000 Red Hill Avenue  
Costa Mesa, California 92626**

**August 18, 2020**

# **PROJECT STAFF**

## **Region Nine Kelp Survey Consortium**

Robin Gartman (Chair), Ami Latker City of San Diego Public Utilities Dept.  
Lori Rigby, Luke Christian City of Oceanside  
Ralph Ginese City of Escondido  
Tim Sisk Cabrillo Power LLC, Encina Power Station  
Doug Campbell, Jeff Parks Encina Wastewater Authority  
Owni Toma Fallbrook Public Utility District  
Gary Merrill, Rebecca Bray Genentech  
Michelle Powelson Poseidon Water  
Chris Trees, Mike Thornton San Elijo Joint Powers Authority  
Keith Bacon, Amber Baylor South Orange County Wastewater Authority  
Brian Metz Southern California Edison, SONGS  
Nicholas Chapa U.S. Intl. Boundary & Water Commission

## **Water Board**

Brandi Outwin-Beals, Keith Yaeger San Diego Regional Water Quality Control Board

## **MBC Aquatic Sciences**

### **Marine Scientists**

D.S. Beck D.J. Schuessler  
J.M. Lyons J.J. Sloan  
W.H. Dossett B.L. Smith  
R.H. Moore J.N. Smith  
J.R. Nunez D.G. Vilas  
M.R. Pavlick T.A. Van Duivenbode  
J.L. Rankin

*Cover photograph courtesy of D. J. Schuessler*

EXECUTIVE SUMMARY .....	VI
I - INTRODUCTION .....	1
I.1 - REGION NINE KELP BEDS.....	1
I.2 - KELP BIOLOGY .....	1
II - MATERIALS AND METHODS .....	2
II.1 - KELP DATA COLLECTION.....	2
II.1.A - AERIAL SURVEYS .....	2
II.1.B - VESSEL SURVEYS.....	2
II.2 - KELP DATA ANALYSIS .....	3
III - RESULTS .....	7
III.1 - SUMMARY .....	7
III.2 - SIZE OF KELP BEDS IN REGION NINE.....	7
III.2.A - NEWPORT BEACH TO ABALONE POINT, LAGUNA BEACH .....	7
III.2.B - ABALONE POINT TO CAPISTRANO BEACH.....	8
III.2.C - SAN CLEMENTE TO SAN ONOFRE.....	10
III.2.D - HORNO CANYON TO SANTA MARGARITA RIVER .....	15
III.2.E - NORTH CARLSBAD TO CARLSBAD STATE BEACH.....	17
III.2.F - LEUCADIA TO TORREY PINES .....	17
III.2.G - LA JOLLA .....	20
III.2.H - POINT LOMA TO CORONADO BEACH.....	21
III.2.I - CORONADO BEACH TO U.S./MEXICO BORDER.....	21
IV – DISCUSSION .....	22
IV.1 - REGION NINE KELP BEDS .....	22
IV.2 - ENVIRONMENTAL VARIABLES.....	23
IV.2.A - WATER TEMPERATURE .....	25
IV.3.B - NUTRIENTS .....	28
IV.3.C – UPWELLING.....	31
IV.3.D - ENVIRONMENTAL INDICES.....	33
IV.3.E - WAVE HEIGHTS .....	35
IV.3.F - RAINFALL.....	39
IV.3.G - PHYTOPLANKTON .....	44
IV.3 - KELP RESTORATION.....	47
IV.4 - KELP HARVESTING .....	47
V - UPDATE TO PRESENT.....	52
VI - CONCLUSIONS.....	52
VII - REFERENCES.....	53

## LIST OF FIGURES

Figure 1. Ocean discharges and kelp beds located within Region Nine kelp survey area. ....	4
Figure 2. Summary of Region Nine kelp canopy coverage in 2019. ....	8
Figure 3. Comparisons between the average Orange County ABAPY and the canopy coverage of the kelp beds from Corona del Mar to Dana Point/Salt Creek from 1967 through 2019. ....	9
Figure 4. Comparisons between the average Orange County ABAPY and the canopy coverage from Capistrano Beach to San Mateo Point from 1967 through 2019. ....	15
Figure 5. Comparisons between the average San Diego ABAPY and canopy coverage of the kelp beds from San Onofre to Carlsbad State Beach from 1967 to 2019. ....	16
Figure 6. Comparisons between the average San Diego ABAPY and canopy coverage from Leucadia to Imperial Beach from 1967 to 2019. ....	18
Figure 7. Comparisons between the Point Loma/La Jolla Average ABAPY and canopy coverage of the La Jolla and Point Loma kelp beds from 1967 to 2019. ....	20
Figure 8. Combined canopy coverage of all kelp beds off Orange and San Diego Counties from 1967 through 2019. ....	23
Figure 9. Daily sea surface temperatures (SSTs) at Newport Pier, Oceanside, Scripps Pier, and Point Loma South for 2019, and the long-term harmonic mean for Scripps Pier SIO 60-Day Harmonic calculated from 1917 through 2019). Source: Southern California Coastal Ocean Observation System (SCCOOS) ( <a href="http://www.sccoos.org">www.sccoos.org</a> ) and National Data Buoy Center (NDBC) ( <a href="http://www.ndbc.noaa.gov">www.ndbc.noaa.gov</a> ). ....	27
Figure 10. Temperatures (°C) throughout the water column (near surface to a depth of 60 m) off Point Loma during 2019. Source: City of San Diego, 2019. ....	27
Figure 11. Temperatures (°C) throughout the water column (near surface to a depth of 60 m) off Orange County during 2019. Source: Orange County Sanitation District, 2020. ....	28
Figure 12. Number of days with SSTs >20°C, >18°C, >16°, and <14°C at Newport Pier and Scripps Pier from 2011 to 2019, and the mean from 1994 to 2018 (red line). ....	30
Figure 13. Nutrient Quotient (NQ) values in Region Nine, 1967 to 2019 (dotted line = long-term mean for site). ....	32
Figure 14. (A) Daily Upwelling Index (UI) at 33°N 119°W for 2019. (B) UI anomaly at 33°N 119°W in 2018 (compared to 71-year monthly mean from 1946 through 2018). Source: <a href="http://www.pfeg.noaa.gov/products/PFEL/modeled/indices/upwelling/NA">http://www.pfeg.noaa.gov/products/PFEL/modeled/indices/upwelling/NA</a> . ....	34
Figure 15. Monthly PFEL upwelling index at 33°N 119°W for 2018 and 2019. Source: <a href="http://www.pfeg.noaa.gov/products/PFEL/modeled/indices/upwelling/NA">http://www.pfeg.noaa.gov/products/PFEL/modeled/indices/upwelling/NA</a> . ....	35
Figure 16. The Multivariate Enso Index (MEI), the North Pacific Gyre Oscillation Index (NPGO), and the Pacific Decadal Oscillation Index (PDO). ....	36
Figure 17. Wave height (blue) and direction (red) at A) Oceanside Buoy and B) Point Loma Buoy from January through December 2019. ....	38
Figure 18. Swell height and direction in the Southern California Bight on March 13, 2019. Source: Coastal Data Information Program (CDIP), <a href="http://cdip.ucsd.edu/">http://cdip.ucsd.edu/</a> . ....	41
Figure 19. Swell height and direction in the Southern California Bight on April 10, 2019. Source: Coastal Data Information Program (CDIP), <a href="http://cdip.ucsd.edu/">http://cdip.ucsd.edu/</a> . ....	42
Figure 20. Swell height and direction in the Southern California Bight on May 23, 2019. Source: Coastal Data Information Program (CDIP), <a href="http://cdip.ucsd.edu/">http://cdip.ucsd.edu/</a> . ....	43
Figure 21. Monthly 2018 rainfall and average monthly rainfall recorded for (A) Costa Mesa, and (B) Lindbergh Field (San Diego). ....	44
Figure 22. Phytoplankton concentrations at Newport Pier in 2019. ....	45
Figure 23. Phytoplankton concentrations at Scripps Pier in 2019. ....	46
Figure 24. Administrative kelp bed lease areas in the Region Nine study area. Source: California Department of Fish and Wildlife ( <a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134676&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134676&amp;inline</a> ). ....	50

Figure 25. Commercial kelp harvest landings for giant and bull kelp from 1931 through 2019.  
Source: California Department of Fish and Wildlife  
(<https://www.wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest>)..... 51

## **LIST OF TABLES**

Table 1. Kelp bed overflights in 2019. ....	5
Table 2. Ranking values assigned to kelp beds from Newport Harbor to Imperial Beach based on aerial photographs from 2019 Region Nine quarterly overflights. ....	6
Table 3. Canopy coverage of the Region Nine kelp beds from Laguna Beach to Imperial Beach (kelp beds listed north to south) during 2018 and 2019. ....	11
Table 4. Visual observations of Region Nine kelp beds during January 2020 vessel surveys.....	13
Table 5. Canopy coverage km <sup>2</sup> of the kelp beds from Laguna Beach to Imperial Beach (kelp beds listed from north to south) from 2010 through 2019. ....	24
Table 6. Comparison of mean temperature from 1994 through 2019 versus annual mean temperature from 2011 through 2019 at Newport Pier and Scripps Pier. ....	29
Table 7. Nutrient Quotient calculation for period from July 2018 to June 2019. ....	31
Table 8. Direction of swells in 2019. Source: <a href="http://cdip.ucsd.edu">http://cdip.ucsd.edu</a> . ....	37
Table 9. Large waves in 2019. ....	39
Table 10. Region Nine and Central Region kelp bed designations compared to California Department of Fish and Wildlife kelp bed designations. ....	51

## **LIST OF APPENDICES**

Appendix A – Kelp Canopy Maps

Appendix B – Life History, Historic Kelp Surveys, and Crandall’s Maps

Appendix C – Sea Surface Temperatures

Appendix D – Flight Path, Flight Data Reports, and Field Data Sheets

Appendix E – Kelp Canopy Aerial Photographs

## EXECUTIVE SUMMARY

Aerial imaging surveys of the 24 giant kelp beds off Orange and San Diego counties were conducted for the Region Nine Kelp Survey Consortium (RNKSC) by MBC Aquatic Sciences on March 31, July 19, September 19, and December 19, 2019. The maximum surface canopy observed during 2019 was quantified from color infrared photos of each kelp bed.

The total kelp canopy throughout Region Nine covered approximately 5.2 km<sup>2</sup> in 2019, a 53% decrease compared to 2018. This was similar to the total kelp canopy coverage recorded in 2016 (5.1 km<sup>2</sup>), but considerably larger than the total coverage for 2017 (3.3 km<sup>2</sup>), which was the lowest since 2006. More than half of all kelp beds observed in 2018 disappeared in 2019 (10 out of 18), and none reappeared. The La Jolla and Point Loma kelp beds were the largest, accounting for 99% of the total canopy coverage in 2019.

Vessel surveys of all Region Nine kelp beds were scheduled for late 2019, but were not actually conducted until January 7, 15, and 30, 2020. Visual observations indicated that surface canopy was present at North Laguna Beach, Dana Point/Salt Creek, Leucadia Central and South, Encinitas, Solana Beach, La Jolla North and South, and Point Loma North and South. No surface canopy was observed at South Laguna Beach, South Laguna, or from Capistrano Beach through Leucadia North. Subsurface kelp was observed at many kelp bed locations, even those without visible surface canopy. More detailed in-water surveys were conducted by biologist-divers at three kelp bed locations: Dana Point/Salt Creek, Leucadia North, and the Encina Power Plant.

Water temperatures throughout the RNKSC areas generally were warmer than average throughout most of 2019, particularly from September through December. However, lower than normal temperatures were recorded at Newport Pier during most of April, May, and August, and occasionally during March, June, and July. Lower than normal water temperatures were also occasionally recorded at Scripps Pier from February through October, particularly during the months of June, July and August. Daily sea surface temperature (SST) values rarely fell below 14°C, a threshold below which nutrient availability is much greater than at higher water temperatures, at Newport Pier and Scripps Pier, and never fell below this threshold at Oceanside or Point Loma South.

As in previous years, nutrient availability continued to be low in 2019. Upwelling in 2019 (at a location approximately 161 km west of Solana Beach) generally increased each month from January through August, decreasing through December. Upwelling index values in 2019 were much higher than the long-term mean in July and August, but lower in March, May and June. Upwelling was lower from March through June in 2019 compared with the same time period in 2018, which is when surface water temperatures are generally lower and nutrient availability would be increased. Although upwelling between July and September was higher in 2019 than the previous year, this corresponds to when surface water temperatures are highest and nutrient availability would be decreased.



# **I - INTRODUCTION**

Giant kelp (*Macrocystis pyrifera*) beds along most of the southern California mainland coast have been mapped quarterly by the Region Nine Kelp Survey Consortium (RNKSC) since 1983. The RNKSC participants agreed that the monitoring program would be methodologically based upon aerial kelp surveys that were conducted since 1967 by the late Dr. Wheeler J. North.

## **I.1 - REGION NINE KELP BEDS**

The RNKSC program area extends from Abalone Point in northern Laguna Beach in Orange County southward to the U.S./Mexico Border in San Diego County, and recognizes 24 existing or historic kelp beds (Figure 1). Kelp beds associated with harbors, marinas, or hard substrate also are surveyed. Region Nine supports what are usually the two largest kelp beds in southern California, the La Jolla and Point Loma kelp beds. There are eight ocean outfalls located within the geographical area surveyed on behalf of the RNKSC, including three outfalls that are shared by two different agencies (Figure 1).

One of the objectives of the RNKSC program is to answer several basic monitoring questions regarding the status of kelp beds within the region:

1. What is the maximum areal extent of the coastal kelp bed canopy each year?
2. What is the variability of the coastal kelp bed canopy over time?
3. Are coastal kelp beds disappearing? If yes, what are the factors that could contribute to the disappearance?
4. Are new kelp beds forming?

## **I.2 - KELP BIOLOGY**

If spores and suitable rocky substrate are available, giant kelp can quickly colonize surfaces and grow within a wide range of environmental conditions. Giant kelp grows rapidly and becomes reproductive in less than one year, with population dynamics largely driven by changes in the oceanographic environment, such as temperature and nutrient levels. If not removed prematurely by storms or grazers, large vegetative fronds eventually produce a terminal meristem, stop growing, and senesce. Individual fronds usually live no more than four to nine months, and individual kelp can live up to approximately nine years (Schiel & Foster, 2015). Detailed information on kelp biology is presented in Appendix B.

## **II - MATERIALS AND METHODS**

### **II.1 - KELP DATA COLLECTION**

#### **II.1.A - AERIAL SURVEYS**

In the early-1960s, when kelp surveys began, the surface area of coastal kelp beds was calculated via aerial photography by the late Dr. Wheeler J. North of the California Institute of Technology (Pasadena). Later MBC continued the surveys using a method following that of Dr. North's, as it provided a consistent approach for comparing kelp bed size (North 2001). MBC has continued to use this same methodology for the Region Nine surveys since inception of the program in 1983.

In 2019, Ecoscan Resource Data conducted quarterly overflights of the coastline on behalf of the RNKSC from Newport Harbor (Orange County) to the U.S./Mexico border (San Diego County). Direct downward-looking photographs of the kelp beds were taken from an aircraft modified by Ecoscan Resource Data to facilitate aerial photography. Approximately 200 to 225 high-contrast digital color and infrared photos were taken during each survey. Prior to each survey, the flight crew assessed the weather, marine conditions, and sun angle to schedule surveys on dates when optimum photos could be captured. The pilot targeted the following conditions:

- Weather: greater than a 15,000' ceiling throughout the entire survey range and wind less than 10 knots,
- Marine: sea/swell less than 1.5 m and tide range less than +1.0' Mean Lower Low Water (MLLW) during the survey,
- Sun angle greater than 30 degrees from vertical.

Aerial surveys were flown on March 31, June 19, September 19, and December 19, 2019 (Table 1). The flight path and data sheets from each quarterly aerial survey are included in Appendix D and photographs from each aerial survey are contained in Appendix E.

#### **II.1.B - VESSEL SURVEYS**

A vessel survey is conducted annually to observe all RNKSC kelp beds. The vessel survey for the 2019 survey year was scheduled to occur in December, but was delayed by adverse ocean conditions and was conducted on January 7, 2020 from Imperial Beach to Santa Margarita, on January 15, 2020 from Pendleton Artificial Reef to Capistrano Beach, and on January 30, 2020 from Dana Point to Corona del Mar. During the vessel surveys, biologists visually located each kelp bed by the main surface canopies present, or in the absence of surface kelp, relied upon latitude and longitude coordinates for canopies present during prior years. The presence of subsurface kelp was also recorded via visual observations from the vessel and fathometer readings. During the vessel surveys, more detailed in-water surveys were conducted by biologist-divers at the Dana Point/Salt Creek, Encina Power Plant, and Leucadia North kelp beds. Field data sheets from the vessel surveys are included in Appendix D.

Visual observations of the surface canopy included:

- Extent and density of the bed,
- Tissue color: ranges from pale yellow (indicating poor nutrient uptake) to dark brown (indicating good nutrient intake),
- Frond length on the surface,
- Presence/absence of apical meristems (scimitar = growing tips),
- Extent of encrustations by hydroids or bryozoans,
- Sedimentation on fronds,
- Any evidence of disease, such as holes or black rot,
- Age composition of fronds: young, mature, or senile.

## II.2 - KELP DATA ANALYSIS

All photographs were reviewed after each overflight and the canopy surface area of each kelp bed was ranked in size by subjectively comparing the extent of canopy coverage shown in the photographs to the average historical bed size and photographs from previous surveys (Table 2). The ranking scale ranged from 0 for no kelp, 0.5 for minimal kelp, 1 for well below average kelp, 1.5 for somewhat below average kelp, 2 for below average kelp, 2.5 for average kelp, 3 for above average kelp, 3.5 for somewhat above average kelp, and 4 for well above average kelp. These rankings allowed the archiving of the quarterly survey slides for later retrieval and assembly of a digitized photo-mosaic of each kelp bed that represented the greatest areal extent for each survey year. Individual beds in the composite were selected for detailed evaluation and the surface area of all visible kelp canopies in each distinct kelp bed was calculated.

All digital photographs from one of the four surveys that showed the greatest areal coverage were digitally assembled into a composite photo-mosaic that provided a regional view of entire kelp bed areas. Photos of kelp beds that displayed the greatest canopy coverage during a single survey were used to make photo-mosaics. Usually data from one or two surveys were used to for the photo-mosaics to provide the best estimate of maximum canopy coverage for the year. The Photoshop mosaics were then transferred to Geographic Information System (GIS; ArcGIS 10.3.1) to geo-reference them, and placed into specific California Department of Fish and Wildlife (CDFW) geo-spatial shape files. Each mosaic was geo-referenced to match several prominent features (usually more than three) on the map and converted to Universal Transverse Mercator (UTM), or another acceptable coordinate system, and subsequently converted to a geo-referenced JPEG file. Surface canopy areas were calculated using the image classification function, an extension to the ArcGIS program. The kelp beds from the photos were then layered on standard base maps to facilitate inter-annual comparisons. The “Hard Substrate” layer on the base maps (shown as lightly shaded areas on the maps in Appendix A) was obtained through the CDFW Biogeographic Information and Observation System.

Status of the Kelp Beds in 2019



Figure 1. Ocean discharges and kelp beds located within Region Nine kelp survey area.

**Table 1. Kelp bed overflights in 2019.**

<b>Quarter</b>	<b>Target Date</b>	<b>Actual Date</b>	<b>Comments</b>
1st Quarter	<b>January to March 2019</b>	March 31, 2019	Excellent conditions for photos and observations during overflight
2nd Quarter	<b>April to June 2019</b>	July 19, 2019	Excellent conditions for photos and observations during overflight (survey delayed due to foggy conditions during month of June)
3rd Quarter	<b>July to September 2019</b>	September 19, 2019	Excellent conditions for photos and observations during overflight
4th Quarter	<b>October to December 2019</b>	December 19, 2019	Excellent conditions for photos and observations during overflight

The “Average Bed Area Per Year” (ABAPY) was plotted with results from individual beds to compare canopy sizes and patterns of growth/decline to averages for particular regions. Those regions were: CDFW lease bed 9 in Orange County and CDFW lease beds 5, 6, 7, and 8 in San Diego County (Figure 24). Kelp beds off La Jolla (CDFW lease bed 4, Figure 24) and Point Loma (CDFW lease beds 2 and 3, Figure 24) were treated separately because they are typically much larger beds which would dominate the ABAPY if included with the smaller beds, potentially skewing the data presentation and masking any changes occurring in the smaller beds. Each ABAPY was calculated by summing the annual canopy estimates for the relevant beds during each year and dividing the total by the number of beds included.



Status of the Kelp Beds in 2019

**Table 2. Ranking values of canopy coverage assigned to kelp beds from Newport Harbor to Imperial Beach based on aerial photographs from 2019 Region Nine quarterly overflights.**

Kelp Beds	2019 Quarterly Overflights			
	31 March	19 July	19 September	19 December
Newport Harbor *	—	—	—	—
Corona del Mar	0.5	—	—	—
No. Laguna Beach	0.5	0.5	—	0.5
So. Laguna Beach	0.5	0.5	—	0.5
South Laguna	—	—	—	—
Salt Creek-Dana Point	—	—	—	—
Dana Marina *	—	—	—	—
Capistrano Beach	—	—	—	—
San Clemente	1.5	1.0	—	—
San Mateo Point	0.5	—	—	—
San Onofre	0.5	0.5	—	—
Pendleton Reefs *	—	—	—	—
Horno Canyon	—	—	—	—
Barn Kelp	—	—	—	—
Santa Margarita	—	—	—	—
Oceanside Harbor *	—	—	—	—
North Carlsbad	—	—	—	—
Agua Hedionda	—	—	—	—
Encina Power Plant	—	—	—	—
Carlsbad State Beach	—	—	—	—
North Leucadia	—	0.5	—	—
Central Leucadia	—	—	—	—
South Leucadia	—	—	—	—
Encinitas	—	—	—	—
Cardiff	—	—	—	—
Solana Beach	—	—	—	—
Del Mar	—	—	—	—
Torrey Pines Park	—	—	—	—
La Jolla Upper	0.5	1.5	1.0	1.0
La Jolla Lower	2.5	3.0	1.0	2.5
Point Loma Upper	3.0	4.0	1.5	3.5
Point Loma Lower	3.0	4.0	1.5	2.5
Imperial Beach	—	—	—	—

Ranking values: 0.5 = trace or very small amount of kelp present; 1 = well below average; 1.5 = somewhat below average; 2 = below average; 2.5 = average; 3 = above average; 3.5 = somewhat above average; and 4 = well above average.  
 \* = not a designated kelp bed  
 NI = No Image  
 “-“ = no kelp present  
**Green highlight** = survey utilized to quantify surface canopy area



## III - RESULTS

### III.1 - SUMMARY

Maps showing the areal extent of RNKSC canopy coverage in 2019 are provided in Appendix A. Tables displaying the historical canopy coverage for Region Nine from 1983 through 2019 are included in Appendix B. Delineation of each kelp bed area is shown in Appendix D. Aerial photographs taken during the four quarterly overflights in 2019 are included in Appendix E.

All kelp beds in the RNKSC region attained maximum surface canopy area for the year during either the March or June surveys (Table 2). The total amount of kelp canopy coverage in the RNKSC region was 5.2 km<sup>2</sup> in 2019, decreasing by 53% from 11.0 km<sup>2</sup> in 2018. In 2019, nine kelp beds displayed surface canopy, compared to 18 kelp beds with surface canopy in 2018 (10 kelp beds disappeared in 2019). No kelp beds increased in size and no new kelp beds reappeared in 2019. . The largest beds in the RNKSC region were the La Jolla and Point Loma kelp beds, with Point Loma being the largest at 3.9 km<sup>2</sup> (Figure 2, Panel A). These two large kelp beds accounted for 99% of the total RNKSC kelp coverage in 2019. In 2019, every kelp bed was less than 10% of the maximum size recorded since 1983, with the exception of La Jolla (26%) and Point Loma (50%) (Figure 2, Panel B). All nine of the kelp beds with visible surface canopy decreased in size in 2019 (Figure 2, Panel C).

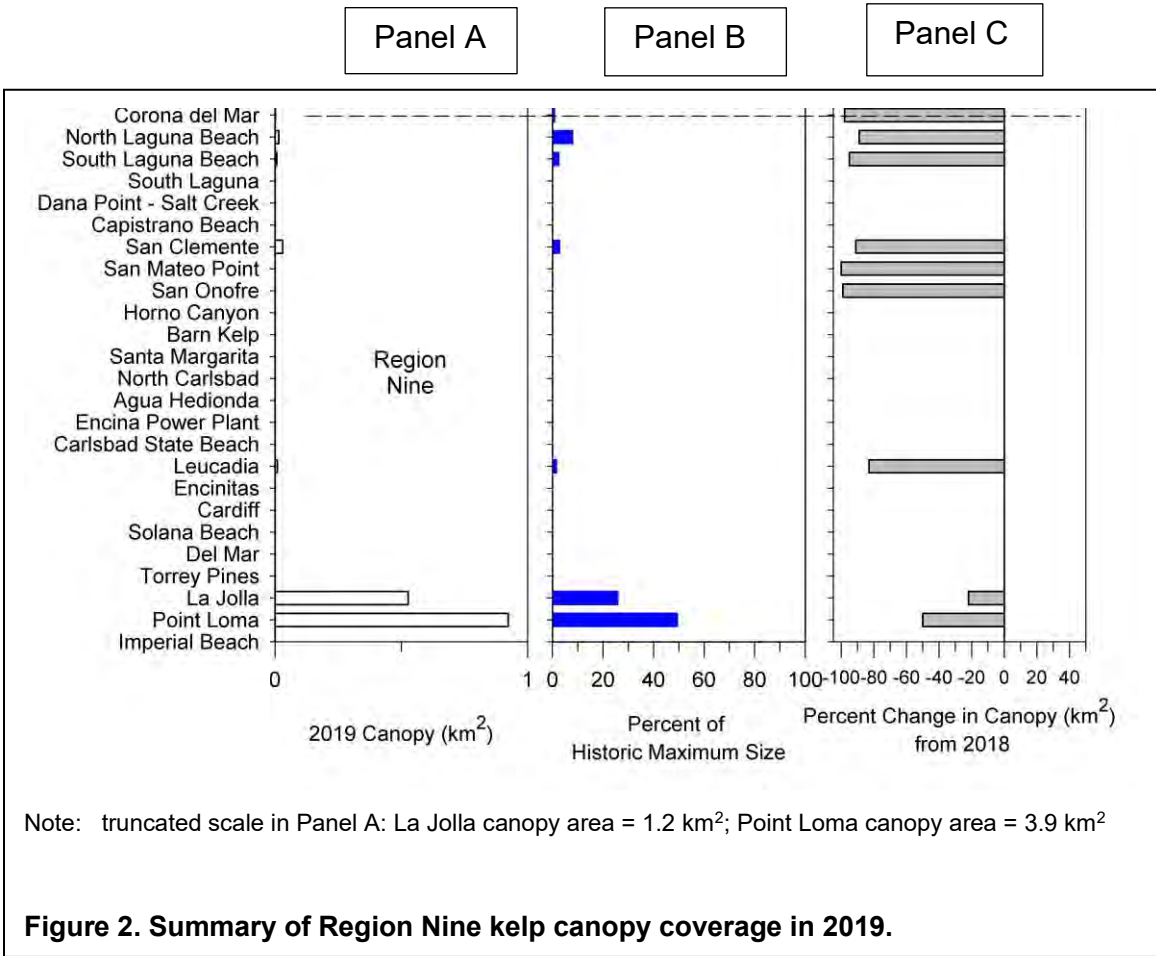
### III.2 - SIZE OF KELP BEDS IN REGION NINE

The following is a synopsis of the status of each of the 24 designated individual kelp beds in the Region Nine during the 2019 survey year based upon the quarterly surveys. Information also is presented on several other areas where kelp beds were present. The comparison of canopy coverage between 2018 and 2019 for each kelp bed is presented in Table 3. Historical canopy coverage since 1911 is presented in Appendix B.4. Visual observations of the kelp beds recorded in Table 4 are based on vessel surveys conducted in January 2020. Observations from diver surveys conducted at the Dana Creek/Salt Point, North Leucadia and Encina Power Plant (Cabrillo Energy, Carlsbad) kelp bed areas are also presented in Table 4.

#### III.2.A - NEWPORT BEACH TO ABALONE POINT, LAGUNA BEACH

**Corona del Mar.** This kelp bed decreased in size by 98%, from 0.119 km<sup>2</sup> in 2018 to 0.003 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was only 1% of the maximum recorded in 2011 (Appendix B.3; Figure 3).

Downcoast from Newport Harbor, giant kelp grows in several small beds collectively referred to as the Corona del Mar kelp bed, or sometimes called the Newport/Irvine Coast kelp bed. The surface canopy area in 2019 was the smallest recorded since 2005. The decrease in size of this bed in 2019 (Figure 3) was similar to the decline of the Orange County ABAPY.



### III.2.B - ABALONE POINT TO CAPISTRANO BEACH

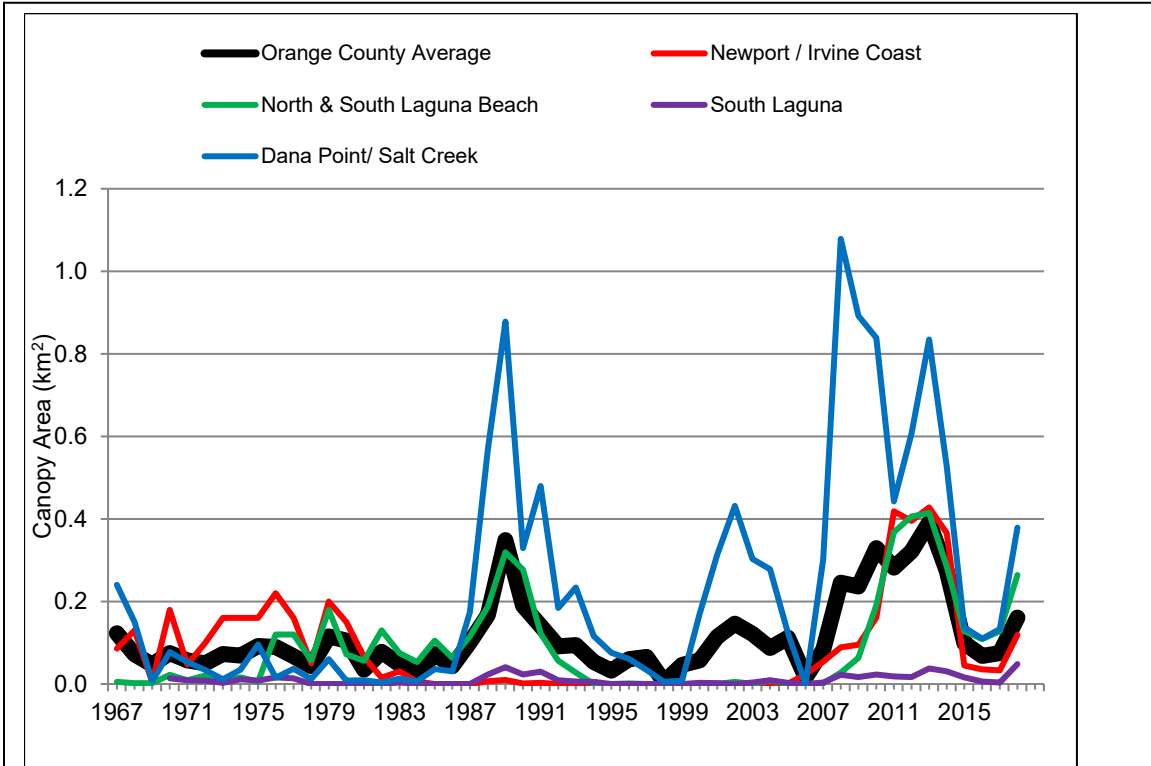
There are five kelp beds located between Abalone Point and Capistrano Beach. In 2019, all five beds decreased in size (Table 3).

**North Laguna Beach/South Laguna Beach.** The North Laguna Beach kelp bed decreased in size by 89%, from 0.133 km<sup>2</sup> in 2018 to 0.015 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was 8% of the maximum recorded in 2012. The South Laguna Beach kelp bed decreased in size by 95%, from 0.131 km<sup>2</sup> in 2018 to 0.007 km<sup>2</sup> in 2019. The canopy area in 2019 was only 2% of the maximum recorded in 2013 (Appendix B.4; Figure 3).

The North and South Laguna Beach beds were rarely visible after the early 1990s until 2008, when they reestablished as a result of restoration efforts. The surface canopy areas of the North and South kelp beds in 2019 were the lowest recorded since 2009 and 2007, respectively. The decreases in size of both beds in 2019 (Figure 3) were similar to the decline of the Orange County ABAPY.

During the January 2020 vessel survey (Table 4), the North Laguna Beach surface canopy was estimated at approximately 100 by 150 meters. Tissue color was light to medium yellow, with no encrustation on fronds and only a few apical meristems were observed. The kelp bed

was composed of approximately 39% senile, 60% mature, and 1% young fronds. Subsurface kelp was visible on the fathometer, extending over a larger area than the surface canopy. No surface canopy was observed at South Laguna Beach, but some subsurface kelp was visible on the fathometer.



**Figure 3. Comparisons between the average Orange County ABAPY and the canopy coverage of the kelp beds from Newport/Irvine Coast (Corona del Mar) to Dana Point/Salt Creek from 1967 through 2019.**

**South Laguna.** This kelp bed disappeared in 2019 (Table 3). This followed 2018, when the surface canopy was the maximum recorded since RNKSC surveys began in 1983 (Appendix B.4; Figure 3).

After nearly disappearing in 2017, the South Laguna kelp bed increased in size by 1,500% in 2018, reaching the highest level observed (0.048 km<sup>2</sup>) since RNKSC surveys began), only to decline once again in 2019. This is the first time that no surface canopy was visible since 2006. The decrease in size of this bed was similar to the decline of the Orange County ABAPY.

No surface or subsurface kelp was observed at South Laguna during the January 2020 vessel survey (Table 4).

**Dana Point/Salt Creek.** This kelp bed disappeared in 2019 (Table 3).

The Dana Point/Salt Creek kelp bed (Appendix A.46) ranged in size from 0.110 to 0.137 km<sup>2</sup> from 2015 to 2017, then increased to 0.379 km<sup>2</sup> in 2018, although it remained well below the levels observed in 2008, 2009, 2010, and 2013 (Figure 3). This also is the first time that no surface canopy was visible since 2006. The decrease in size of this bed in 2019 was similar to the decline in the Orange County ABAPY.

During the January 2020 vessel survey (Table 4), scattered surface canopy was observed at Dana Point/Salt Creek. Tissue color was medium to dark yellow, with less than 25% encrustation on fronds and no apical meristems were observed. The kelp bed was composed of 100% mature fronds.

An in-water survey of the Dana Point/Salt Creek kelp bed was conducted on January 30, 2020. The bottom was composed of approximately 50% boulder, 40% cobble, and 10% sand. In addition to giant kelp, *Laminaria*, *Egregia*, and *Pterogorgia* species of algae were present on the bottom. Kelp fronds were medium yellow in color, with less than 25% encrustation observed. Many sporophylls and juvenile fronds were observed. Fish observed included kelp bass (more than 5), sheephead (1), and rock wrasses (more than 5).

No kelp was observed along the breakwaters in Dana Point Harbor (Appendix A.47) in 2019. This is not a designated kelp bed.

**Capistrano Beach.** This kelp bed disappeared in 2019 (Table 3).

This was the first year that surface canopy had not been observed at the Capistrano Beach kelp bed since 2005 (Appendix B.4; Figure 4). The 2019 decrease in size was similar to the decline of the Orange County ABAPY.

During the January 2020 vessel survey, no surface canopy was observed. However, patches of subsurface kelp were visible on the fathometer at depths of 35 to 45 feet (Table 4).

### III.2.C - SAN CLEMENTE TO SAN ONOFRE

Three kelp beds are located between San Clemente and San Onofre. All three beds decreased in size in 2019 (Table 3).

**San Clemente.** This kelp bed decreased in size by 91%, from 0.335 km<sup>2</sup> in 2018 to 0.030 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was only 3% of the maximum recorded in 2013 (Appendix B.4; Figure 4).

The surface canopy area at the San Clemente kelp bed in 2019 was the lowest amount recorded since 2007 (Appendix B.4; Figure 4). The 2019 decrease in size was similar to the decline of the Orange County ABAPY.

Scattered surface canopy was visible during the January 2020 vessel survey. Tissue color was 5% light yellow, 10% medium yellow, and 85% dark yellow, with 30% encrustation on fronds and 25% apical meristems present. The kelp bed was composed of 10% senile, 85% mature, and 5% young fronds (Table 4).

Status of the Kelp Beds in 2019

**Table 3. Canopy coverage of the Region Nine kelp beds from Laguna Beach to Imperial Beach (kelp beds listed north to south) during 2018 and 2019.**

<b>Kelp Bed</b>	<b>2018 (km<sup>2</sup>)</b>	<b>2019 (km<sup>2</sup>)</b>	<b>Percentage Difference</b>
Newport Harbor	0.113	0	<b>Disappeared</b>
Corona del Mar	0.119	0.003	<b>-98%</b>
North Laguna Beach	0.133	0.015	<b>-89%</b>
South Laguna Beach	0.131	0.007	<b>-95%</b>
South Laguna	0.048	0	<b>Disappeared</b>
Dana Point/Salt Creek	0.379	0	<b>Disappeared</b>
Capistrano Beach	0.018	0	<b>Disappeared</b>
San Clemente	0.335	0.030	<b>-91%</b>
San Mateo Point	0.083	0.0001	<b>-100%</b>
San Onofre	0.127	0.001	<b>-99%</b>
Horno Canyon	0.008	0	<b>Disappeared</b>
Barn Kelp	0.092	0	<b>Disappeared</b>
Santa Margarita	0	0	<b>No change</b>
North Carlsbad	0.038	0	<b>Disappeared</b>
Agua Hedionda	0	0	<b>No change</b>
Encina Power Plant	0.045	0	<b>Disappeared</b>
Carlsbad State Beach	0	0	<b>No change</b>

**Table 3 (continued)**

<b>Kelp Bed</b>	<b>2018 (km<sup>2</sup>)</b>	<b>2019 (km<sup>2</sup>)</b>	<b>Percentage Difference</b>
Leucadia	0.052	0.009	-83%
Encinitas	0.033	0	Disappeared
Cardiff	0.005	0	Disappeared
Solana Beach	0.024	0	Disappeared
Del Mar	0	0	No change
Torrey Pines	0	0	No change
La Jolla	1.566	1.227	-22%
Point Loma	7.920	3.923	-50%
Imperial Beach	0	0	No change
<b>TOTAL</b>	<b>11.037</b>	<b>5.213</b>	<b>-53%</b>

**San Mateo Point.** This kelp bed virtually disappeared, decreasing in size by 100%, from 0.083 km<sup>2</sup> in 2018 to 0.0001 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was less than 0.1% of the maximum recorded in 1989 (Appendix B.4; Figure 4).

The surface canopy area of the San Mateo Point kelp bed in 2019 was the lowest amount recorded since 1998 (Appendix A.50; Figure 4). The 2019 decrease in size was similar to the decline of the Orange County ABAPY.

No surface canopy was observed during the January 2020 vessel survey. Some subsurface individuals were present, approximately 20-feet tall, and one solid patch was observed 0.25 miles south of San Mateo Point (Table 4).

**San Onofre.** This kelp bed decreased in size by 99%, from 0.127 km<sup>2</sup> in 2018 to 0.001 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was 0.2% of the maximum recorded in 1989 (Appendix B.4; Figure 4).



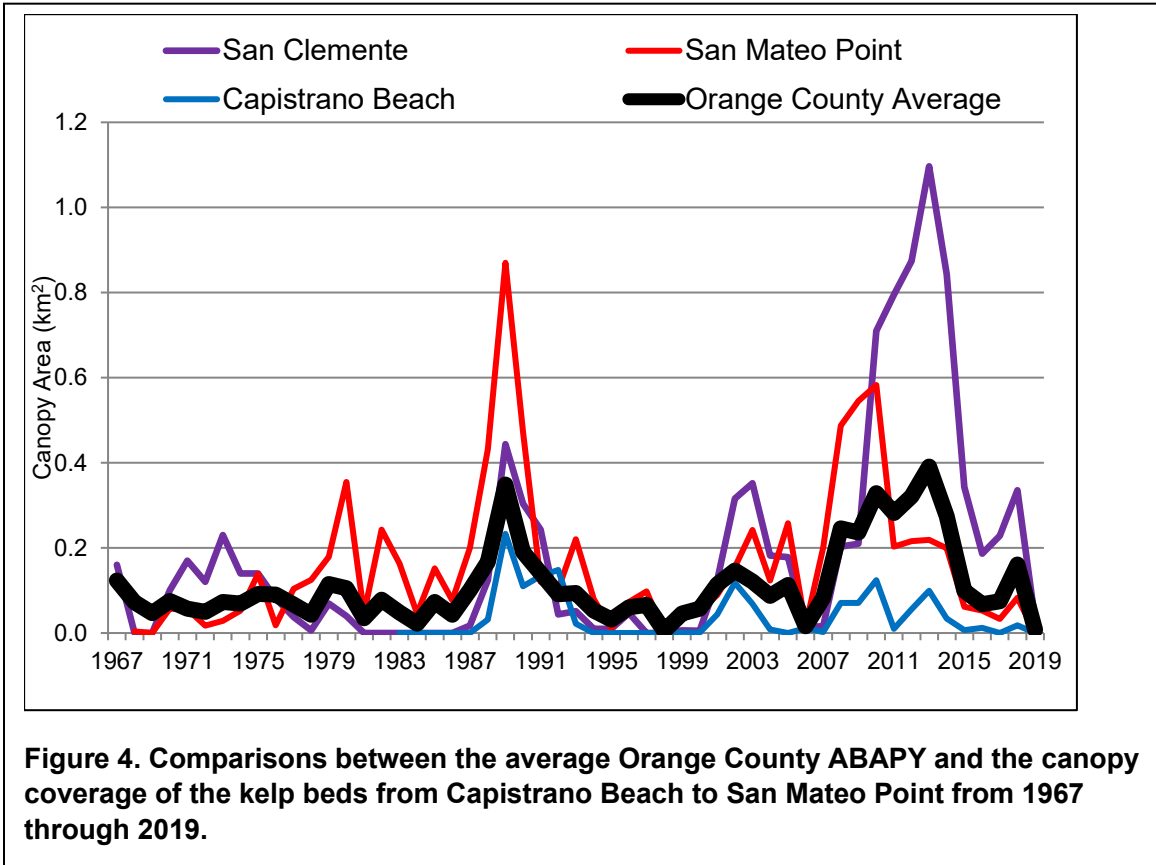
Status of the Kelp Beds in 2019

**Table 4. Visual observations of Region Nine kelp beds during January 2020 vessel surveys.**

Kelp Bed	Surface Canopy		Subsurface Kelp
	Extent	Appearance	
Corona del Mar	none		none
North Laguna Beach	estimated at 100 x 150 meters	light and medium yellow; 39% senile, 60% mature, 1% young; no encrustation; a few apical meristems	subsurface kelp beyond the edges of the surface canopy
South Laguna Beach	none		some subsurface kelp
South Laguna	none		none
Dana Point/Salt Creek	scattered canopy estimated at 400 x 800 meters	medium and dark yellow; 100% mature; less than 25% encrustation; no apical meristems	<b>see discussion of dive survey results</b>
Dana Point Harbor	none		none
Capistrano Beach	none		patches with approximately 15 to 25-foot tall individuals, scattered at approximately 35 to 45-foot depth
San Clemente	scattered kelp canopy	5% light yellow, 10% medium yellow, 85% dark yellow; 10% senile, 85% mature, 5% young; 30% encrustation; 25% apical meristems	scattered individuals approximately 20 to 30 feet tall in patches
San Mateo Point	none		some subsurface kelp, individuals approximately 20-foot tall, 1 solid patch 0.25 miles south of San Mateo Point
San Onofre	none		none
Pendleton Reefs	none		none
Horno Canyon	none		sparse kelp individuals 20 to 30-foot tall
Barn Kelp	none		20 to 30-foot tall kelp individuals, multiple patches at approximately 20 meters depth
Santa Margarita	none		none
North Carlsbad	none		none
Agua Hedionda	none		10-15 individuals on the bottom (two to three patches with up to six individuals)
Encina Power Plant	none		<b>see discussion of dive survey results</b>
Carlsbad State Beach	none		none
Leucadia-north	none		<b>see discussion of dive survey results</b>
Leucadia-central	surface kelp canopy estimated at 100 x 30 meters	50% light tissue color 50% senile, 45% mature, 5% young	subsurface kelp present with visible apical meristems

**Status of the Kelp Beds in 2019**

Leucadia-south	surface kelp canopy estimated at 30 x 30 meters	20% light yellow, 70% medium yellow, 10% dark yellow 18% senile, 80% mature, 2% young	subsurface kelp present with visible apical meristems
Encinitas	surface kelp canopy estimated at 100 x 30 meters	10% light yellow, 70% medium yellow, 20% dark yellow 5% senile, 35% mature, 60% young 40% apical meristems	5- to 10-foot kelp individuals on the bottom; two to three patches of 10-40 individuals scattered over approximately 0.35 miles (some reaching to the surface)
Cardiff	none		several single individuals 10-15 feet tall over approximately 0.25 miles
Solana Beach	scattered surface canopy	30% light yellow, 70% dark yellow	scattered individuals at the south end of the bed, 15-20 feet tall to 30-35 feet tall
Del Mar	none		several individuals 2-3 feet tall over approximately 200 meters
Torrey Pines	none		none
La Jolla North	scattered canopy, estimated at 100 to 200 meters in width		visible subsurface kelp
La Jolla South	continuous canopy south to north end, estimated at 100 to 300 meters in width; lower density inshore than offshore	60% light yellow, 40% dark yellow; 5% senile, 95% mature; 60 to 70% encrustation 2 to 5% apical meristems	subsurface kelp at approximately 70 feet depth
Point Loma North	continuous canopy south to north end, approximately 200 meters width	50% light yellow, 50% dark yellow; 9% senile, 90% mature, 1% young; no encrustation; 1-2% apical meristems	visible subsurface kelp
Point Loma South	continuous canopy south to north end, estimated at approximately 200 meters in width	100% dark yellow; 1% senile, 98% mature, 1% young; 30% encrustation; 1% apical meristems	scattered kelp just below the surface, heavy encrustation, many apical meristems
Imperial Beach	none		none



The surface canopy area of the San Onofre kelp bed in 2019 was the lowest amount recorded since 2006 (Appendices A.50 and A.51, Figure 4)). The 2019 decrease was similar to the decline of the San Diego County average ABAPY.

No surface or subsurface kelp was observed during the January 2020 vessel survey (Table 4).

### III.2.D - HORNO CANYON TO SANTA MARGARITA RIVER

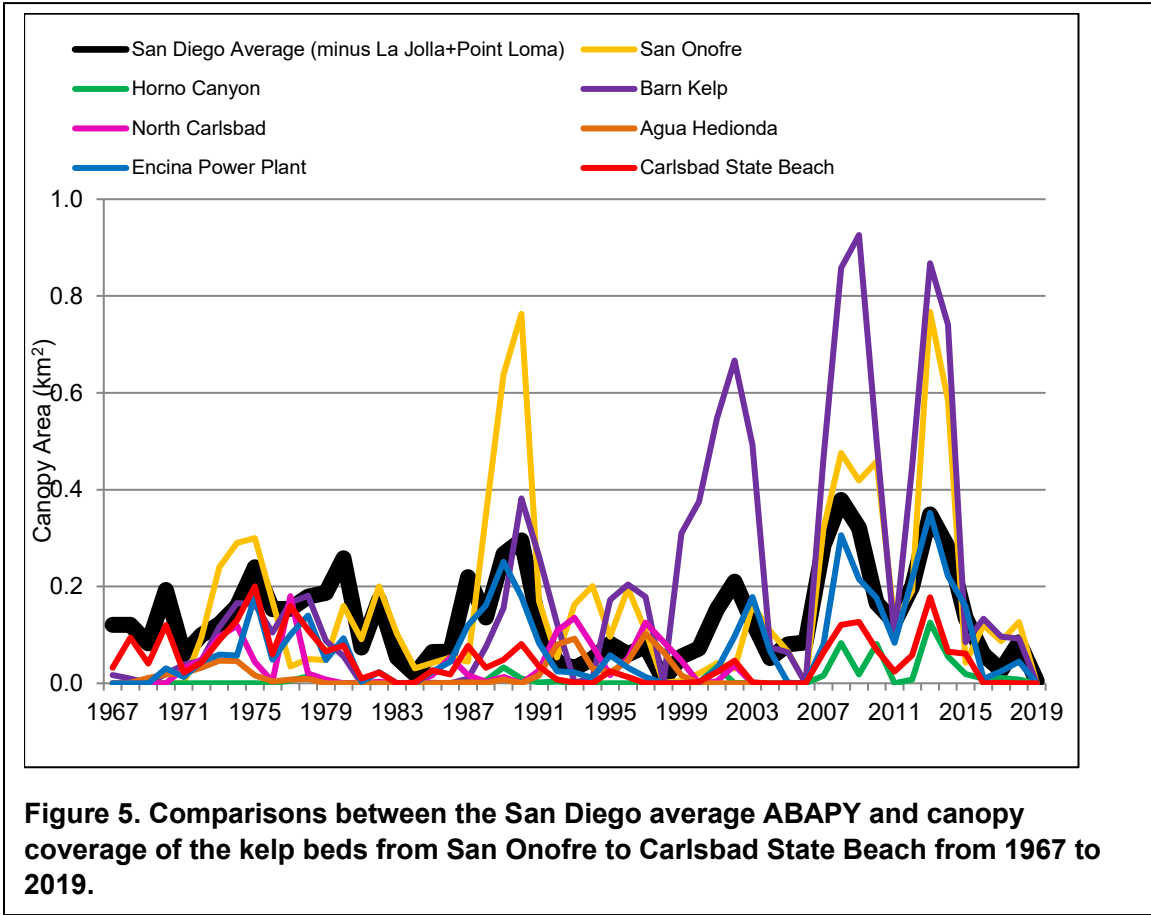
Three kelp beds are located between Horno Canyon and the Santa Margarita River.

**Horno Canyon.** This kelp bed disappeared in 2019 (Table 3).

This was the first year that no surface canopy was observed at the Horno Canyon kelp bed since 2011 (Figure 5). The 2019 decrease in size was similar to the decline of the San Diego County ABAPY.

No surface canopy was visible during the January 2020 vessel survey. However, sparse kelp individuals 20 to 20 feet tall were visible on the fathometer (Table 4).

In addition, the Pendleton Artificial Reef (PAR), which is not a designated kelp bed, is just upcoast from Horno Canyon. No surface canopy or subsurface kelp was observed at this location.



**Barn Kelp.** This kelp bed also disappeared in 2019 (Table 3).

This was the first year that no surface canopy was observed at the Barn Kelp bed since 2006 (Figure 5).

No surface canopy was observed during the January 2020 vessel survey. However, 20- to 30-foot tall kelp individuals were visible on the fathometer in multiple patches at approximately 20 meters depth (Table 4).

**Santa Margarita.** This kelp bed was not observed during 2019, nor was it visible in 2018 (Table 3).

The Santa Margarita kelp bed is a small bed that occasionally forms a canopy off the Santa Margarita River mouth (Appendix A.56). However, surface canopy has only been observed during one year (2013) since 1993 (Appendix B.4).

No surface canopy or subsurface kelp was visible at Santa Margarita during the January 2020 vessel survey.

No kelp was observed in Oceanside Harbor (Appendix A.57; Table 3) in 2019. This is not a designated kelp bed.

### III.2.E - NORTH CARLSBAD TO CARLSBAD STATE BEACH

There are four kelp beds located between North Carlsbad and Carlsbad State Beach. In 2019, three of the beds decreased in size, while the other still was not visible (Table 3).

**North Carlsbad.** This kelp bed disappeared in 2019 (Table 3).

The North Carlsbad kelp bed is usually comprised of several small beds (Appendices A.58 and A.59). This kelp bed was not observed in 2016 and was very small in 2017, but increased considerably in size in 2018 (21% of the maximum size recorded), before disappearing in 2019 (Appendix B.4; Figure 5).

During the January 2020 vessel survey (Table 4), no surface canopy was observed at the North Carlsbad kelp bed.

**Agua Hedionda.** This kelp bed was not observed in 2019 (Table 3), nor has it been visible since 2015 (Figure 5).

No surface canopy was observed at the Agua Hedionda kelp bed during the January 2020 vessel survey (Table 4). However, 10 to 15 subsurface individuals were visible on the fathometer in two to three groups of up to six individuals each.

**Encina Power Plant.** This kelp bed disappeared in 2019 (Table 3).

This was the first time that no surface canopy was observed at the Encina Power Plant kelp bed since 2006 (Appendix A.60, Figure 5)).

No surface canopy was observed at the Encina Power Plant kelp bed during the January 07, 2020 vessel survey (Table 4). Underwater observations were made during a dive survey on the same date. The bottom was composed of flat shale reef, with cobble bottom in some areas. Red alga was the dominant species of algae present. Kelp observed included juvenile individuals; nine new holdfasts were observed. Tissue color of kelp fronds was medium to dark yellow. No encrustation or sediment was observed on the kelp fronds. No fish were observed, but 3 lobsters, 1 white spotted rose anemone (*Urticina eques*), 3 large sea snails (*Kelletia*), 4 turban snails (*Megastraea*), 16 purple sea urchins (*Strongylocentrotus purpuratus*), and 7 red sea urchins (*Mesocentrotus franciscanus*) were observed on the bottom.

**Carlsbad State Beach.** This kelp bed was not observed in 2019, nor was it visible in 2018 (Table 3).

The Carlsbad State Beach (Carlsbad State Park) kelp bed (Appendices A.60 and A.61) was very small or absent from 2016 through 2018, before finally disappearing in 2019 (Figure 5).

No surface canopy or subsurface kelp was observed at the Carlsbad State Beach kelp bed during the January 2020 vessel survey (Table 4).

### III.2.F - LEUCADIA TO TORREY PINES

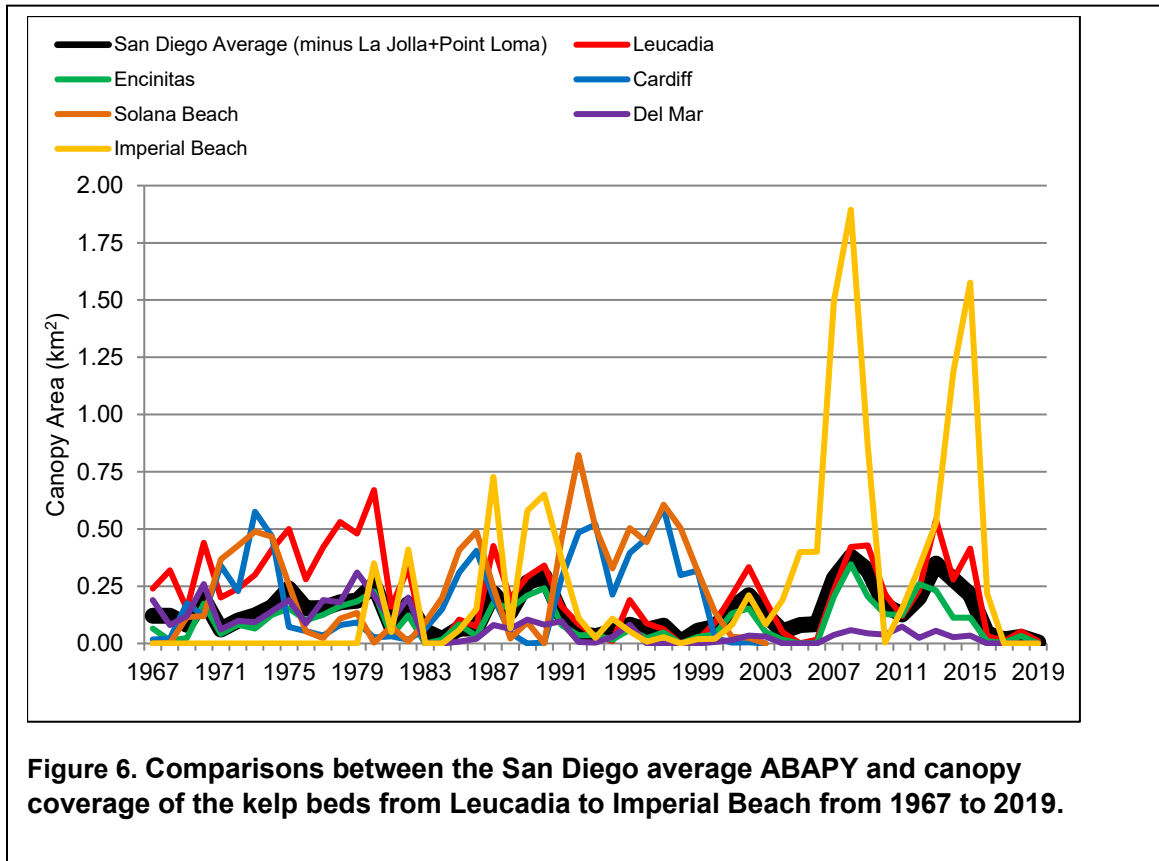
**Leucadia.** This kelp bed decreased in size by 83%, from 0.052 km<sup>2</sup> in 2018 to 0.009 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was only 2% of the maximum recorded in 2013 (Appendix B.4; Figure 6).

The Leucadia kelp bed comprises the North, Central, and South Leucadia kelp beds, which are surveyed as three separate beds because of distinct breaks in the beds (Appendices

A.62 and A.63). In 2013, Leucadia kelp bed increased in size to its highest canopy coverage in the last 30 years (0.541 km<sup>2</sup>), but by 2016 had declined to only 6% of the 2013 maximum and had remained small through 2019 (Appendix B.4; Figure 6). In 2019, kelp canopy was observed only in the North bed.

No surface or subsurface kelp was observed at the North Leucadia Bed during the January 2020 vessel survey (Table 4). Surface canopy was observed at the Central Leucadia kelp bed. The surface canopy was present as scattered kelp over an estimated 100 x 30 meter area. Half of the fronds were light in color, half were dark. Approximately 50% of the fronds were senile, 45% mature, and 5% young. Surface canopy also was observed at the South Leucadia kelp bed. The surface canopy was present as scattered kelp over an estimated 30 x 30 meter area. Fronds were approximately 20% light yellow, 70% medium yellow, and 10% dark yellow. Approximately 18% of the fronds were senile, 80% mature, and 2% young. Fronds were approximately one to two meters in length. Apical meristems were observed subsurface.

Underwater observations were made during a dive survey on the same date. The bottom was composed of shale reef and plate rock. The dominant algae species present was *Egregia*. Kelp observed included one juvenile individual and four recruits, as well as a few adult individuals. Tissue color of kelp fronds was medium to dark yellow.





**Encinitas.** This kelp bed disappeared in 2019 (Table 3).

This was the first time that no surface canopy was observed at the Encinitas kelp bed since 2005 (Appendix A.63; Figure 6).

During the January 2020 vessel survey, scattered surface canopy was observed over an estimated 30 x 100 meter area (Table 4). Kelp fronds ranged from light yellow (10%), medium yellow (70%), to dark yellow (20%) in color. Approximately 5% of the fronds were senile, 35% mature, and 60% young. Scattered subsurface kelp was present, consisting of 10 to 40 individuals ranging in height from 5 to 10 feet.

**Cardiff.** This kelp bed also disappeared in 2019 (Table 3).

This was also the first time that no surface canopy was observed at the Cardiff kelp bed since 2005 (Appendix A.64; Figure 6).

During the January 2020 vessel survey, no surface canopy was visible (Table 4). Subsurface kelp was visible on the fathometer, consisting of several single individuals that were 10- to 15-feet tall over an area of approximately 1,000 feet long.

**Solana Beach.** This is another kelp bed that disappeared in 2019 (Table 3).

This was the first time that no surface canopy was observed at the Solana Beach kelp bed since 1983 (Appendices A.64 and A.65; Figure 6).

During the January 2020 vessel survey, scattered surface canopy was observed at the Solana Beach kelp bed (Table 4). Kelp fronds were approximately 30% light yellow and 70% dark yellow in color. Scattered subsurface kelp was observed visually and/or on the fathometer, with individuals ranging in height from 15 to 35 feet.

**Del Mar.** This kelp bed was not observed in 2019, nor was it visible in 2018 (Table 3).

The Del Mar kelp bed (Appendices A.66 and A.67) is typically one of the smallest beds in Region Nine. No surface canopy has been observed at the Del Mar kelp bed since 2015 (Appendices A.66 and A.67; Figure 6).

No surface canopy was observed at the Del Mar kelp bed during the January 2020 vessel survey (Table 4). Subsurface kelp was visible on the fathometer as 2- to 3-foot tall individuals over an area of approximately 200 meters.

**Torrey Pines.** This kelp bed was not observed in 2019, nor was it visible in 2018 (Table 3).

Torrey Pines kelp bed appeared as a small trace of kelp during La Niña conditions in 1988 and 1989. It reappeared in 2006 with a canopy area of 0.010 km<sup>2</sup> with scattered giant kelp concentrations approximately 1.5 km, 3.5 km, and 5 km north of Scripps Pier. Small canopies were observed in various locations in the area from 2008 through 2013, but this bed was not observed from 2014 through 2019 (Appendices A.67 and A.68).

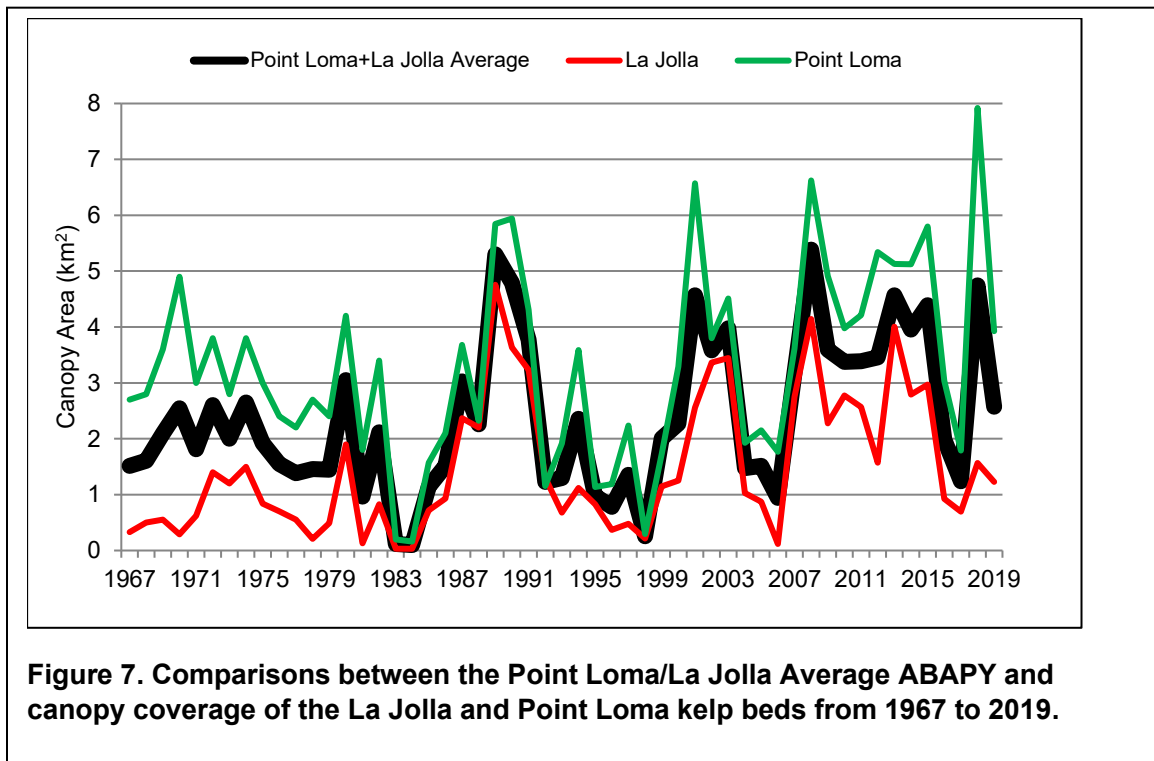
No surface canopy or subsurface kelp was visible during the January 2020 vessel survey (Table 4).

**III.2.G - LA JOLLA**

**La Jolla.** This kelp bed decreased in size by only 22%, from 1.566 km<sup>2</sup> in 2018 to 1.227 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was 26% of the maximum recorded in 1989 (Appendix B.4; Figure 7).

La Jolla kelp bed is composed of two canopies: northern La Jolla and southern La Jolla. Between southern La Jolla and Upper Point Loma (offshore Mission Bay), nearshore habitat is mostly sand and kelp does not grow in this area (Appendices A.70 and A.71). The La Jolla kelp bed decreased in size considerably from 2013 through 2017, resulting in the smallest canopy size since 2006. After more than doubling in size in 2018, the La Jolla kelp bed decreased in size by approximately 20% in 2019 (Appendices A.68 through A.70; Figure 7).

During the January 2020 vessel survey, the La Jolla North kelp bed surface canopy was scattered, covering an estimated area approximately 100 to 200 meters wide (Table 4). Subsurface kelp was visible on the fathometer. The La Jolla South kelp bed surface canopy was continuous from the south to north end, ranging from 100 to 300 meters in width. The density of the surface canopy was lower inshore than offshore. Tissue color was 60% light yellow and 40% dark yellow, with 2 to 5% apical meristems, and the fronds had 60 to 70% encrustation. The kelp bed was composed of approximately 5% senile and 95% mature fronds. Subsurface kelp was visible on the fathometer at a depth of approximately 70 feet.



### III.2.H - POINT LOMA TO CORONADO BEACH

**Point Loma.** This kelp bed decreased in size by 50%, from 7.920 km<sup>2</sup> in 2018 to 3.923 km<sup>2</sup> in 2019 (Table 3). The canopy area in 2019 was 50% of the maximum recorded in 2018 (Appendix B.4; Figure 7).

The Point Loma kelp bed comprises many, usually contiguous, kelp canopies ranging from depths of 5 to greater than 30 meters during years with sufficient nutrients. *Pelagophycus porra* is prevalent beyond about 30 meters depth at Point Loma (Turner et al. 1968). It is the largest bed in Region Nine. The canopy at Point Loma maintained a relatively large size (more than 5 km<sup>2</sup>) from 2013 through 2015. However, decreases in 2016 and 2017 resulted in the smallest sizes measured since 2006. In 2018, the Point Loma kelp bed increased in size considerably, reaching the maximum size observed since RNKSC surveys began in 1983. Even with the decrease in size observed in 2019, this kelp bed remains larger than in 2016 or 2017 (Appendices A.71 through A.74; Figure 7).

During the January 2020 vessel survey, the surface canopy was continuous from the south to the north end at the Point Loma North kelp bed, and was estimated at approximately 200 meters in width (Table 4). Tissue color was 50% light yellow and 50% dark yellow, with no encrustation on the fronds and 1 to 2% apical meristems. Subsurface kelp was visible on the fathometer. A continuous surface canopy from the south to the north end also was visible at the Point Loma South kelp bed, and also was estimated at approximately 200 meters in width. Tissue color was 100% dark yellow, with 30% encrustation of the fronds and 1% apical blades. The kelp bed was composed of approximately 1% senile, 98% mature and 1% young fronds. Scattered kelp was observed just below the surface, with heavy encrustation of the fronds and many apical meristems.

### III.2.I - CORONADO BEACH TO U.S./MEXICO BORDER

No kelp was observed at Coronado Beach (Appendix A.76) or Silver Strand (Appendix A.77), which are not designated kelp beds, during aerial overflights or during the January 2020 vessel survey.

**Imperial Beach.** This kelp bed was not observed in 2019, nor was it visible in 2018 (Table 3).

The surface canopy area of the Imperial Beach kelp bed has fluctuated considerably from year to year, reaching its highest levels in 2008 and 2015 (Appendices A.79 and A.80; Figure 6). No surface canopy was observed in 2017 for the first time since 1998, nor was it visible in 2018 or 2019.

No surface or subsurface kelp was visible at the Imperial Beach kelp bed during the January 2020 vessel survey (Table 4).

## IV – DISCUSSION

### IV.1 - REGION NINE KELP BEDS

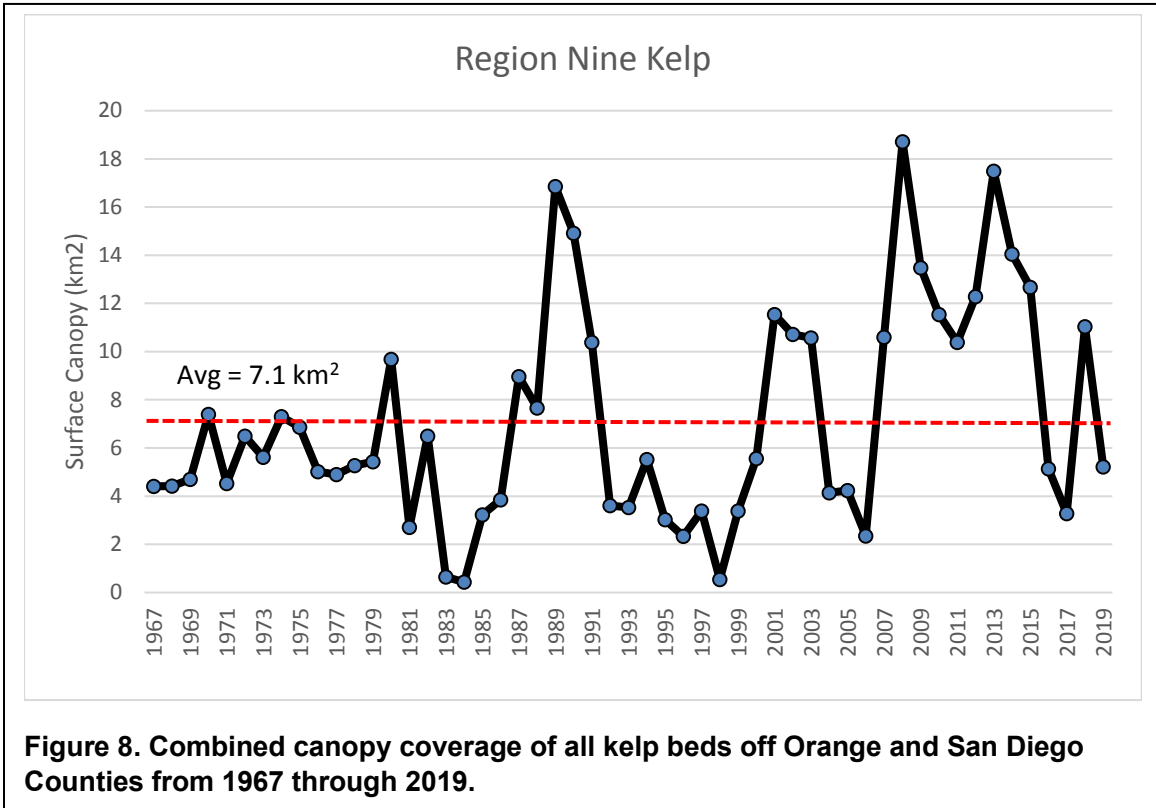
One objective of the RNKSC program is to answer several basic monitoring questions regarding the status of kelp beds within the region:

1. What is the maximum areal extent of the coastal kelp bed canopy each year?
  - the total kelp canopy covered 5.2 km<sup>2</sup> in 2019.
2. What is the variability of the coastal kelp bed canopy over time?
  - the total kelp canopy decreased in size in 2019 by 53% (from 11.0 km<sup>2</sup> to 5.2 km<sup>2</sup>);
  - none of the kelp beds increased in size in 2019
  - all 18 kelp beds with visible surface canopy present in 2018 decreased in size in 2019
3. Are coastal kelp beds disappearing? If yes, what are the factors that could contribute to the disappearance?
  - 10 kelp beds disappeared in 2019: South Laguna, Dana Point/Salt Creek, Capistrano Beach, Horno Canyon, Barn Kelp, North Carlsbad, Encina Power Plant, Encinitas, Cardiff, and Solano Beach. Higher than normal sea surface temperatures and low nutrient availability could have contributed to the disappearance of these 10 kelp beds.
  - Six other kelp beds continued to display no surface canopy in 2019: Santa Margarita and Torrey Pines, which disappeared in 2014; Agua Hedionda and Del Mar, which disappeared in 2016; Imperial Beach, which disappeared in 2017, and Carlsbad, which disappeared in 2018. Above average sea surface temperatures and low nutrient availability may have contributed to the continued absence of surface canopy at these six kelp beds.
4. Are new kelp beds forming?
  - No kelp beds reappeared in 2019.

The total kelp canopy in Region Nine covered approximately 5.2 square kilometers in 2019, which was similar to the total kelp canopy recorded in 2016 (5.1 square kilometers), but larger than the total for 2017 (3.3 square kilometers), the lowest amount of total kelp canopy since 2006 (Table 5, Figure 8). The largest kelp beds were the La Jolla and Point Loma kelp beds, which accounted for 99 percent of the total canopy coverage in 2019. The surface canopy areas of the La Jolla and Point Loma beds were at 26% and 50% of the maximum extent recorded since 1983. However, all of the other kelp beds were at 10% or less of their maximum size (Figure 2), and most were at their lowest levels in years (Solano Beach canopy area was the smallest since 1983, San Mateo Point was the smallest since 1998, and others were the smallest since 2005 to 2009).

Vessel surveys of all Region Nine kelp beds were conducted in January 2020. Visual observations indicated that kelp canopy was present at North Laguna Beach and Dana Point/Salt Creek, but no surface canopy was observed at South Laguna Beach, South Laguna, or from Capistrano Beach to Leucadia North. Surface canopy was also present at Leucadia Central, Leucadia South, Encinitas, Solana Beach, La Jolla, and Point Loma. Subsurface kelp was observed at many bed locations, even those without visible surface canopy. In-water surveys conducted in January 2020 at three kelp beds, Dana Point/Salt

Creek, Leucadia North, and Encina Power Plant, recorded limited numbers of giant kelp individuals on the bottom at each location.



## IV.2 - ENVIRONMENTAL VARIABLES

The productivity and growth of giant kelp forests along the west coast of the United States has been shown to be limited by dissolved inorganic nitrogen, mainly in the form of nitrate (Wheeler and North, 1980; Zimmerman and Kremer, 1984). In the upper ocean (depths less than 200 meters), nitrate concentrations were strongly dependent on density and temperature (Kamykowski and Zentara, 1986). However, temperature apparently accounted for less than half of the variability in canopy area or density of giant kelp within the California Current System (CCS) (North et al, 1993; Tegner et al, 1996). Seawater density has been shown to predict nitrate concentrations in nearshore southern California ocean waters better than temperature, and has been utilized to identify the relative contributions of nitrate concentrations within the CCS from different source waters, primarily including subarctic water, upwelled undercurrent water, subtropical water, and surface runoff (Lynn and Simpson, 1987; Parnell et al, 2010).

Status of the Kelp Beds in 2019

**Table 5. Canopy coverage (km<sup>2</sup>) of the kelp beds from Laguna Beach to Imperial Beach (kelp beds listed from north to south) from 2009 through 2019.**

Kelp Bed	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
N Laguna Beach	0.093	0.147	0.192	0.142	0.120	0.080	0.074	0.096	0.133	0.015
S Laguna Beach	0.098	0.221	0.214	0.273	0.165	0.048	0.035	0.032	0.131	0.007
South Laguna	0.023	0.018	0.017	0.038	0.031	0.016	0.006	0.003	0.048	-
Dana Pt/Salt Crk	0.839	0.442	0.607	0.835	0.528	0.137	0.110	0.133	0.379	-
Capistrano Beach	0.124	0.010	0.056	0.099	0.034	0.007	0.012	0.0004	0.018	-
<b>Total F&amp;W 9</b>	<b>1.178</b>	<b>0.838</b>	<b>1.086</b>	<b>1.385</b>	<b>0.879</b>	<b>0.287</b>	<b>0.237</b>	<b>0.264</b>	<b>0.709</b>	<b>0.022</b>
San Clemente	0.710	0.795	0.874	1.097	0.843	0.343	0.187	0.229	0.335	0.031
San Mateo Point	0.583	0.203	0.216	0.219	0.199	0.062	0.053	0.033	0.083	0.0001
San Onofre	0.458	0.127	0.191	0.767	0.584	0.043	0.120	0.087	0.127	0.001
<b>Total F&amp;W 8</b>	<b>1.750</b>	<b>1.124</b>	<b>1.281</b>	<b>2.083</b>	<b>1.627</b>	<b>0.449</b>	<b>0.359</b>	<b>0.349</b>	<b>0.545</b>	<b>0.032</b>
Horno Canyon	0.081	-	0.008	0.125	0.055	0.019	0.010	0.011	0.008	-
Barn Kelp	0.500	0.095	0.442	0.868	0.741	0.085	0.133	0.096	0.092	-
Santa Margarita	-	-	-	0.080	-	-	-	-	-	-
<b>Total F&amp;W 7</b>	<b>0.581</b>	<b>0.095</b>	<b>0.450</b>	<b>1.073</b>	<b>0.795</b>	<b>0.104</b>	<b>0.143</b>	<b>0.107</b>	<b>0.100</b>	<b>0.000</b>
North Carlsbad	0.078	0.017	0.052	0.125	0.086	0.047	-	0.004	0.038	-
Agua Hedionda	0.031	0.022	0.046	0.102	0.065	0.016	-	-	-	-
Encina Power Plant	0.176	0.084	0.216	0.352	0.221	0.159	0.009	0.025	0.045	-
Carlsbad St. Bch	0.069	0.024	0.058	0.178	0.065	0.061	-	0.001	-	-
<b>Total F&amp;W 6</b>	<b>0.354</b>	<b>0.147</b>	<b>0.372</b>	<b>0.757</b>	<b>0.437</b>	<b>0.282</b>	<b>0.009</b>	<b>0.031</b>	<b>0.083</b>	<b>0.000</b>
Leucadia	0.215	0.119	0.232	0.541	0.279	0.414	0.033	0.010	0.053	0.009
Encinitas	0.128	0.124	0.260	0.231	0.112	0.113	0.009	0.003	0.033	-
Cardiff	0.213	0.395	0.459	0.590	0.299	0.318	0.024	0.003	0.005	-
Solana Beach	0.328	0.504	0.442	0.606	0.504	0.316	0.138	0.029	0.024	-
Del Mar	0.038	0.074	0.024	0.056	0.027	0.034	-	-	-	-
Torrey Pines	0.003	0.031	0.034	0.081	-	-	-	-	-	-
<b>Total F&amp;W 5</b>	<b>0.925</b>	<b>1.247</b>	<b>1.452</b>	<b>2.106</b>	<b>1.221</b>	<b>1.195</b>	<b>0.204</b>	<b>0.045</b>	<b>0.114</b>	<b>0.009</b>
<b>La Jolla F&amp;W 4</b>	<b>2.776</b>	<b>2.565</b>	<b>1.569</b>	<b>4.006</b>	<b>2.790</b>	<b>2.968</b>	<b>0.927</b>	<b>0.694</b>	<b>1.566</b>	<b>1.227</b>
<b>Point Loma F&amp;W 3&amp;2</b>	<b>3.977</b>	<b>4.212</b>	<b>5.340</b>	<b>5.127</b>	<b>5.121</b>	<b>5.806</b>	<b>3.037</b>	<b>1.787</b>	<b>7.920</b>	<b>3.924</b>
<b>Imperial Beach F&amp;W 1</b>	<b>0.004</b>	<b>0.152</b>	<b>0.333</b>	<b>0.526</b>	<b>1.183</b>	<b>1.576</b>	<b>0.217</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL</b>	<b>11.545</b>	<b>10.379</b>	<b>11.882</b>	<b>17.064</b>	<b>14.053</b>	<b>12.667</b>	<b>5.134</b>	<b>3.277</b>	<b>11.037</b>	<b>5.213</b>

Red denotes warm-water years, blue denotes cold-water years, and neutral years are in black

"-" = no canopy area



## IV.2.A - WATER TEMPERATURE

Sea surface water temperature (SST) data is discussed below and has been used as a surrogate for nutrient availability (water temperature is inversely related to nutrient availability). Although there appears to be good evidence that seawater density also can be used as a surrogate, and in some cases, may predict nutrient availability better than temperature (Parnell et al 2010), long-term measurements of density were not available for broad areas of Region Nine. In contrast, nearshore temperature measurements have been ongoing for decades, resulting in readily accessible data sets.

Oceanographic data from shore stations, data buoys, and thermistor strings were used to determine potential effects on kelp bed extent during the study year. These data sources included:

- Water temperature data from automated shore stations at Newport Pier and Scripps Pier. At these locations, automated samplers measured conductivity, temperature, and fluorometry at a frequency of one to four minutes. Samplers were mounted at a depth of 2 meters MLLW at Newport Pier, and at 5 meters MLLW at Scripps Pier. These data were made available in real time via the Southern California Coastal Ocean Observation System (SCCOOS) website ([www.sccoos.org](http://www.sccoos.org)).
- Water temperature data from the National Data Buoy Center (NDBC) for Oceanside and Point Loma South were available in real time via the NDBC website ([www.ndbc.noaa.gov](http://www.ndbc.noaa.gov)). These data buoys recorded water temperature, and wave height, period, and direction at least every 30 minutes (frequency varies for each buoy) from approximately one meter below the waterline.
- Water temperature data were provided by the City of San Diego's Ocean Monitoring Program from a thermistor string approximately 3.8 kilometers west-northwest of Point Loma in 60 meters of water (City of San Diego 2019). Sensors were placed at four-meter intervals from near the sea surface to a depth of 54 meters MLLW.
- Water temperature data were also provided by Orange County Sanitation District from a thermistor mooring located approximately eight kilometers offshore (-118.02220, 33.57620) and upcoast of the outfall in 60 meters of water (Orange County Sanitation District, 2020).

Sea surface temperatures (SST) from Newport Pier, Oceanside, Scripps Pier, and Point Loma South, as well as the Scripps Pier long-term harmonic mean, are presented in Figure 9. Graphs of SST values at each of these individual locations are presented in Appendix C.

Water temperatures throughout the RNKSC region were generally warmer than average throughout most of 2019, particularly from September through December (Figure 9). However, lower than normal temperatures were recorded at Newport Pier during most of April, May, and August, as well as occasionally during March, June, and July. Lower than normal water temperatures were also recorded at Scripps Pier at times from February through October, particularly during the months of June, July and August. Water temperatures at Oceanside and Point Loma South were lower than normal occasionally during the months of February through August and in October, but less frequently than at Newport Pier or Scripps Pier. Daily SST values rarely fell below 14°C, a threshold below

which nutrient availability is increased (Schiel and Foster, 2015)) at Newport Pier and Scripps Pier, but never fell below this threshold at Oceanside or Point Loma South. Overall, the pattern of SST values in 2019 was similar to 2018.

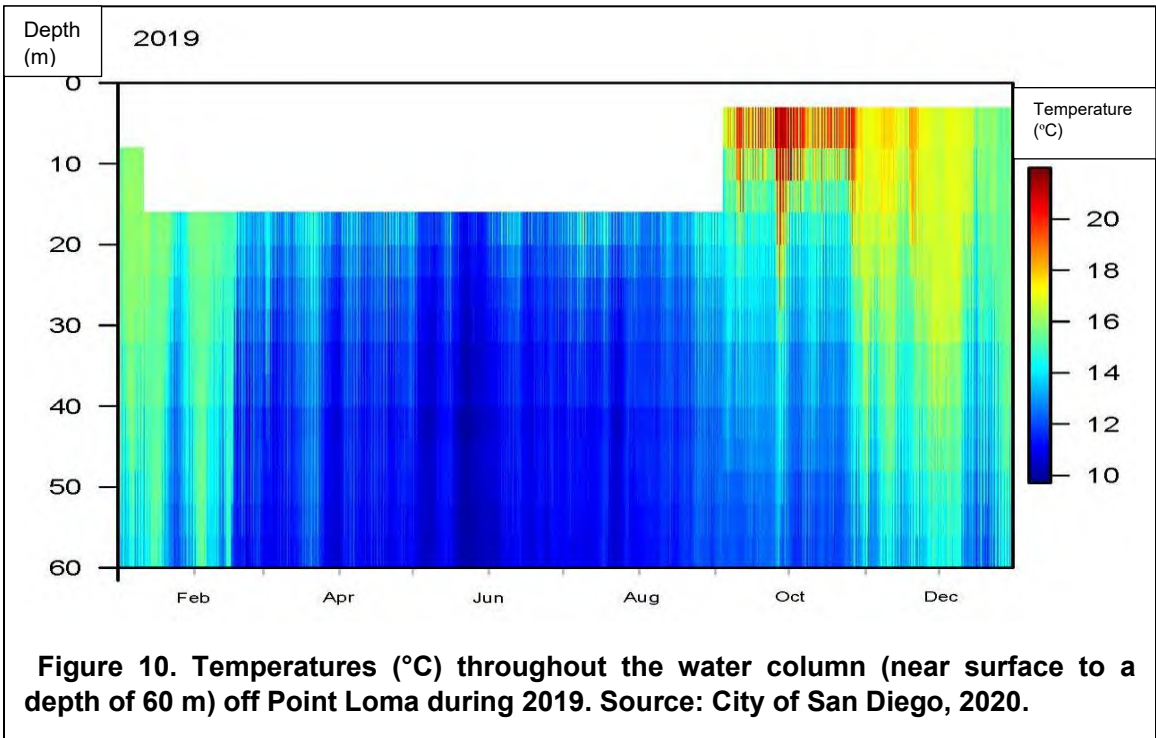
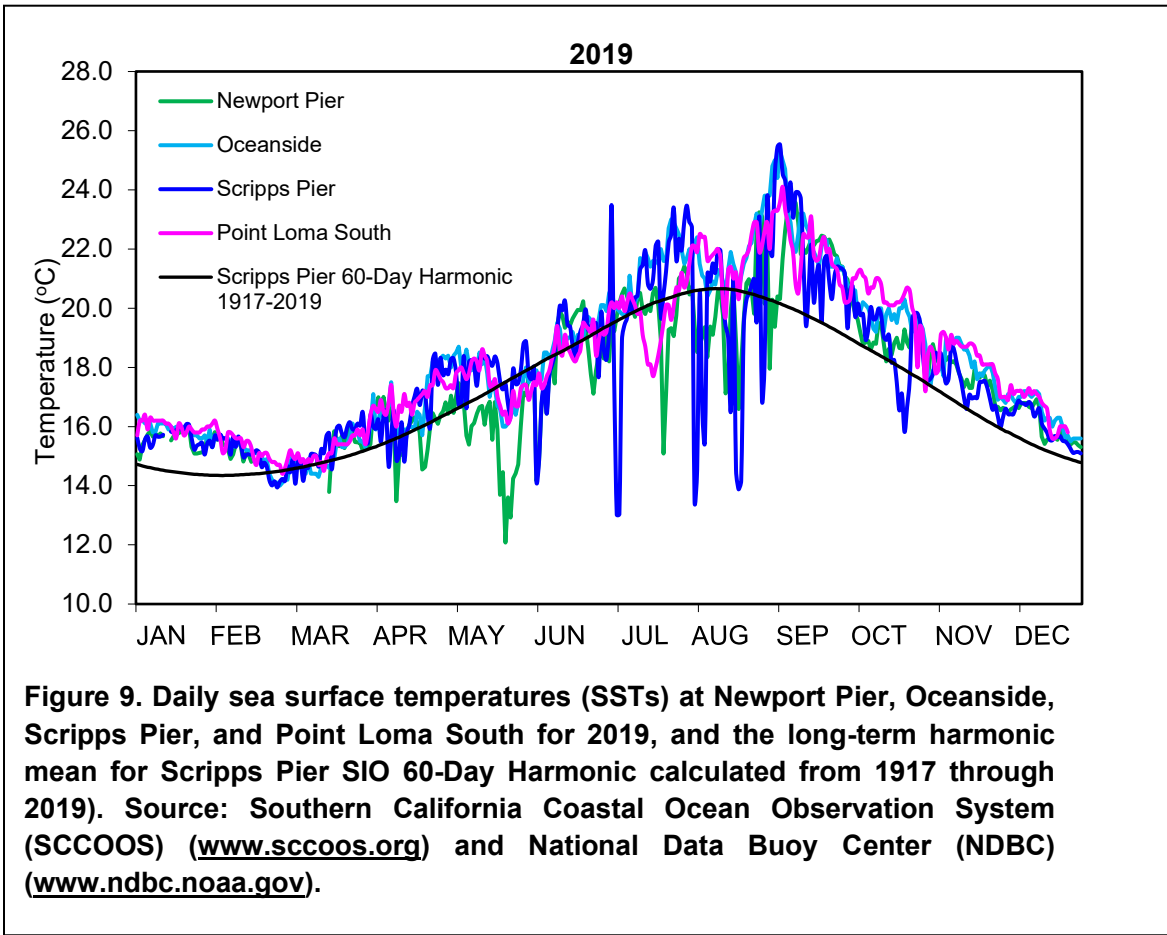
Unfortunately, while SST data were available at several locations in the RNKSC region, sub-surface water temperature data were not as extensive or readily available.

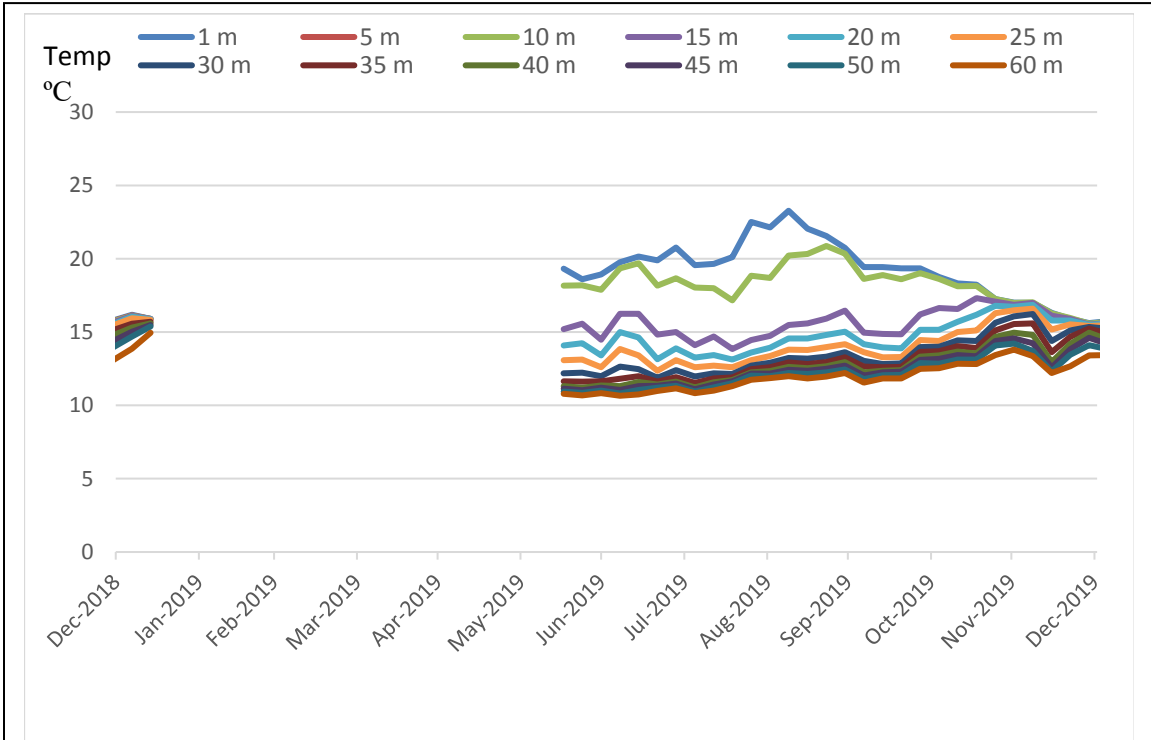
Temperature monitoring accomplished via a thermistor string deployed off Point Loma in 2019 was limited since data for temperatures at the surface down to approximately 15 meters depth were missing from January through August. In September and October, water temperatures were warm in the upper 15 meters of the water column. From November through mid-December, water temperatures were warm to depths up to 50 meters (Figure 10).

Temperature monitoring, also accomplished via a thermistor string deployed offshore of Orange County, was limited since all data from January through August were missing, due to the inability by Orange County Sanitation District personnel to service the mooring due to the COVID pandemic. From June through October, water temperatures in the upper water column from 1 to 10 meters depth were warmer (approximately 17 to 23°C) than at lower depths from 15 to 60 meters (approximately 11 to 16.5 °C). In November and December, water temperatures were cool throughout the water column (Figure 11).

The number of days with SST values <14°C increased slightly in 2019 at Newport Pier (from 1 to 6 days) and decreased slightly at Scripps Pier (from 12 to 5 days) (Figure 12). These values were well below the long-term mean (1994-2018) for Newport Pier (52 days) and lower than the long-term mean for Scripps Pier (16 days). This continues the trend observed over the past several years, as the number of days with water temperatures <14°C has been lower than usual since 2014.

The number of days with water temperatures >18°C in 2019 increased slightly at Newport Pier (from 137 to 146 days), but the number of days with water temperatures >16°C and >20°C decreased (from 254 to 235 days, and from 69 to 61 days, respectively (Figure 9). At Scripps Pier, the number of days with warm temperatures decreased for all three thresholds in 2019. Overall, the pattern of unusually warm SST values observed since 2014 has continued.





**Figure 11. Temperatures (°C) throughout the water column (near surface to a depth of 60 m) off Orange County during 2019. Source: Orange County Sanitation District, 2020.**

### IV.2.B - NUTRIENTS

The Nutrient Quotient (NQ) Index described by North and MBC (2001) provides a useful indicator of the amount of nitrate that is theoretically available for uptake by kelp (in micrograms-per-gram per-hour) (Haines and Wheeler 1978; Gerard 1982). This method allows for an inter-annual comparison of the nutrients available to kelp, making it possible to pinpoint those years when nutrients were either abundant or depleted, and to establish possible temporal trends.

This index is calculated for the 12-month period from July 1 through June 30 (i.e., the 2019 NQ Index values shown on Figure 13 corresponded to the period from July 1, 2019 to June 30, 2020). The NQ Index was calculated for each of four locations (Newport Pier, Oceanside, Scripps Pier, and Point Loma) by averaging the early-morning SST values at each station for each of the 12 months, assigning a point score to each monthly SST average (1 point if the average falls between 16.01 and 17.00°C, 2 points if between 15.01 and 16.00°C, 4 points if between 14.01 and 15.00°C, 8 points if between 13.01 and 14.00°C, and 14 points if between 12.01 and 13.00°C. The NQ for the 12-month period was the sum of the monthly point scores.

The NQ calculations for four locations in Region Nine in 2019/2020 are shown in Table 7. The 2019/2020 NQ Index was calculated to be 8 for Newport Pier, 7 for Oceanside, 7 for

**Status of the Kelp Beds in 2019**

Scripps Pier, and 6 for Point Loma (Table 7). The NQ Indices for all four locations were slightly lower in 2019 than the previous year (Figure 13). This continues the pattern of below average NQ Index levels observed since 2013.

The size of kelp beds in 2019 were likely influenced by the 2018/2019 NQ Index (covering the period from July 2018 through June 2019), since the maximum extent of surface canopy at all of the Region Nine kelp beds occurred in March or June. Although nutrient availability appeared to be similar in 2018 and 2019 based on the NQ Index, the size of the kelp beds in Region Nine decreased considerably in 2019. Upwelling was lower in 2019 than in 2018 during the months of March, May, and June, which may have reduced nutrient availability in 2019, resulting in decreased surface canopy coverage. Overall, the pattern of low nutrient availability observed since 2013 has continued.

The nutrient climate has shifted from waters with sufficient nitrate prior to the 1976/1977 regime shift, to depleted conditions thereafter (Parnell et al. 2010). The sensitivity of kelp canopies to nutrient limitation appeared to have increased after 1977 and was evident by the strong correlation of seawater density ( $\delta_t$ ) and density of giant kelp (Parnell et al. 2010). Unfortunately, density data were not available throughout the RNKSC region. The NQ index recorded during the 1997/1998 El Niño indicated a particularly bad year for kelp beds in the Southern California Bight. During that season, NQ values ranged from 3 to 11. In contrast, during 1988/1989, a year in which kelp beds reached their maximum extents in several decades, NQ values ranged from 27 to 39 (Figure 13). The variability in SSTs and nutrients was driven by prevailing flow characteristics and bathymetric features that resulted in periodic upwelling along the rocky shores of the coastline, particularly at the Dana Point, La Jolla, and Point Loma kelp beds.

**Table 6. Comparison of mean temperature from 1994 through 2019 versus annual mean temperature from 2011 through 2019 at Newport Pier, and Scripps Pier.**

		Annual Mean SST (°C)								
	Mean SST (°C) (1994–2018)	2011	2012	2013	2014	2015	2016	2017	2018	2019
Newport Pier	16.7	15.9	16.6	16.7	18.0	18.4	17.8	17.8	17.9	17.6
Scripps Pier	17.7	15.7	16.6	17.0	18.8	18.9	17.7	17.9	18.6	17.8

Note: red cells indicate years above the long-term mean, white cells indicate years equivalent to the mean, and blue cells indicate years below the long-term mean.

Status of the Kelp Beds in 2019

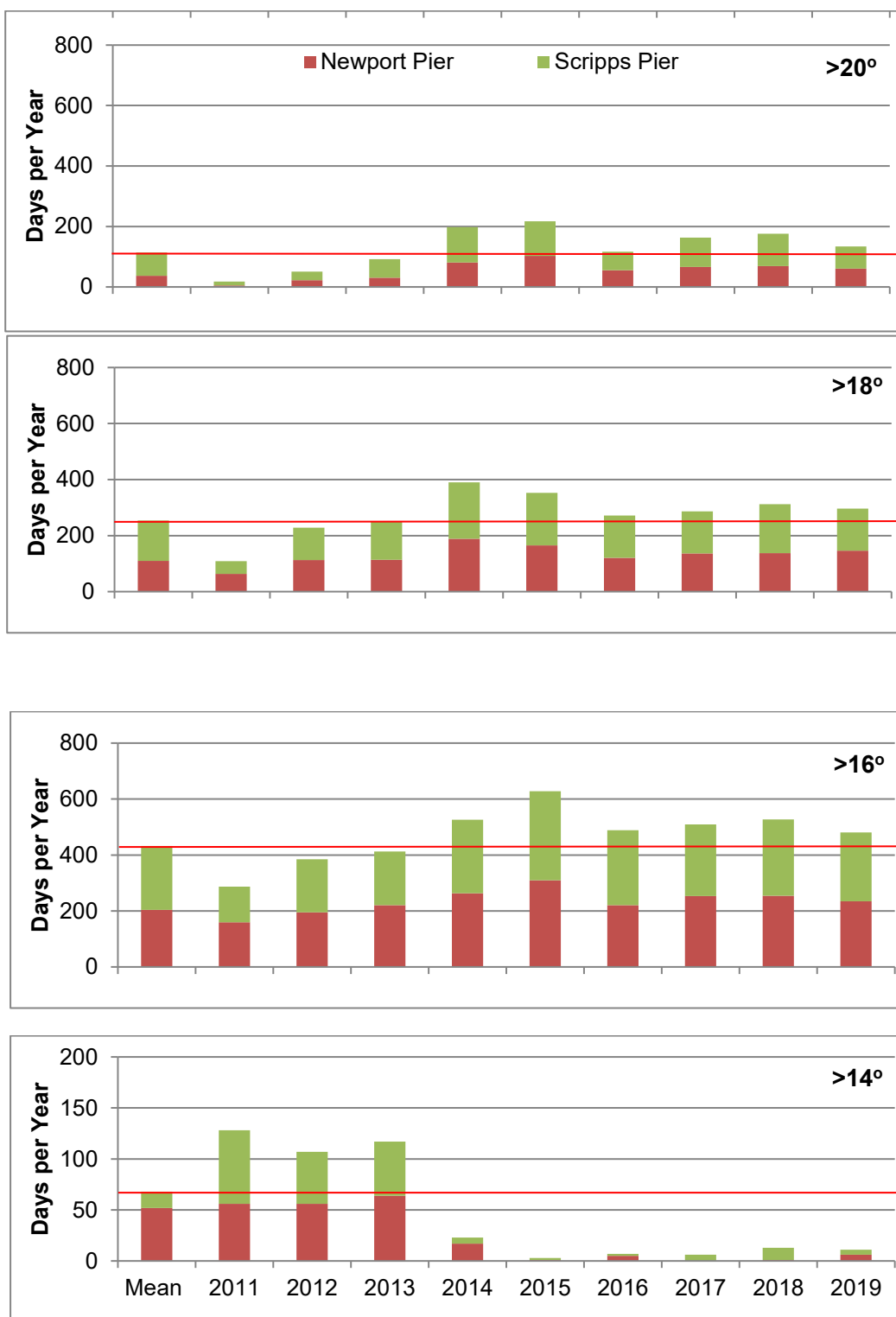


Figure 12. Number of days with SSTs >20°C, >18°C, >16°C, and <14°C at Newport Pier and Scripps Pier from 2011 to 2019, and the mean from 1994 to 2018 (red line).



**Table 7. Nutrient Quotient calculations for period from July 2019 to June 2020.**

Sites	Monthly Average Temperature Ranges (°C) (Weighting Factor Per Month)					Total Nutrient Quotient (Calculation Formula)
	12.01 to 13.00 (14 pts)	13.01 to 14.00 (8 pts)	14.01 to 15.00 (4 pts)	15.01 to 16.00 (2 pts)	16.01 to 17.00 (1 pt)	
Newport Pier				Jan 2020 Feb 2020 Mar 2020	Dec 2019 Apr 2020	(4 pts x 0) + (2 pts x 3) + (1 pt x 2) = 8
Oceanside				Jan 2020 Feb 2020	Dec 2019 Mar 2020 Apr 2020	(4 pts x 0) + (2 pts x 2) + (1 pt x 3) = 7
Scripps Pier				Jan 2020 Feb 2020	Dec 2019 Mar 2020 Apr 2020	(4 pts x 0) + (2 pts x 2) + (1 pt x 3) = 7
Point Loma				Jan 2020 Feb 2020	Dec 2019 Mar 2020	(4 pts x 0) + (2 pts x 2) + (1 pt x 2) = 6

**IV.2.C – UPWELLING**

The frictional stress of equatorial wind on the ocean’s surface, combined with the effect of the earth’s rotation, causes water in the surface layer to move away from the western coast of continental land masses. This offshore moving water is replaced by water which upwells, or flow toward the surface, from depths of 50 to 100 meters or more. Upwelled water is cooler and saltier than the original surface water, and typically has much greater concentrations of nutrients, such as nitrates, phosphates and silicates, that are key to sustaining biological production.

Status of the Kelp Beds in 2019

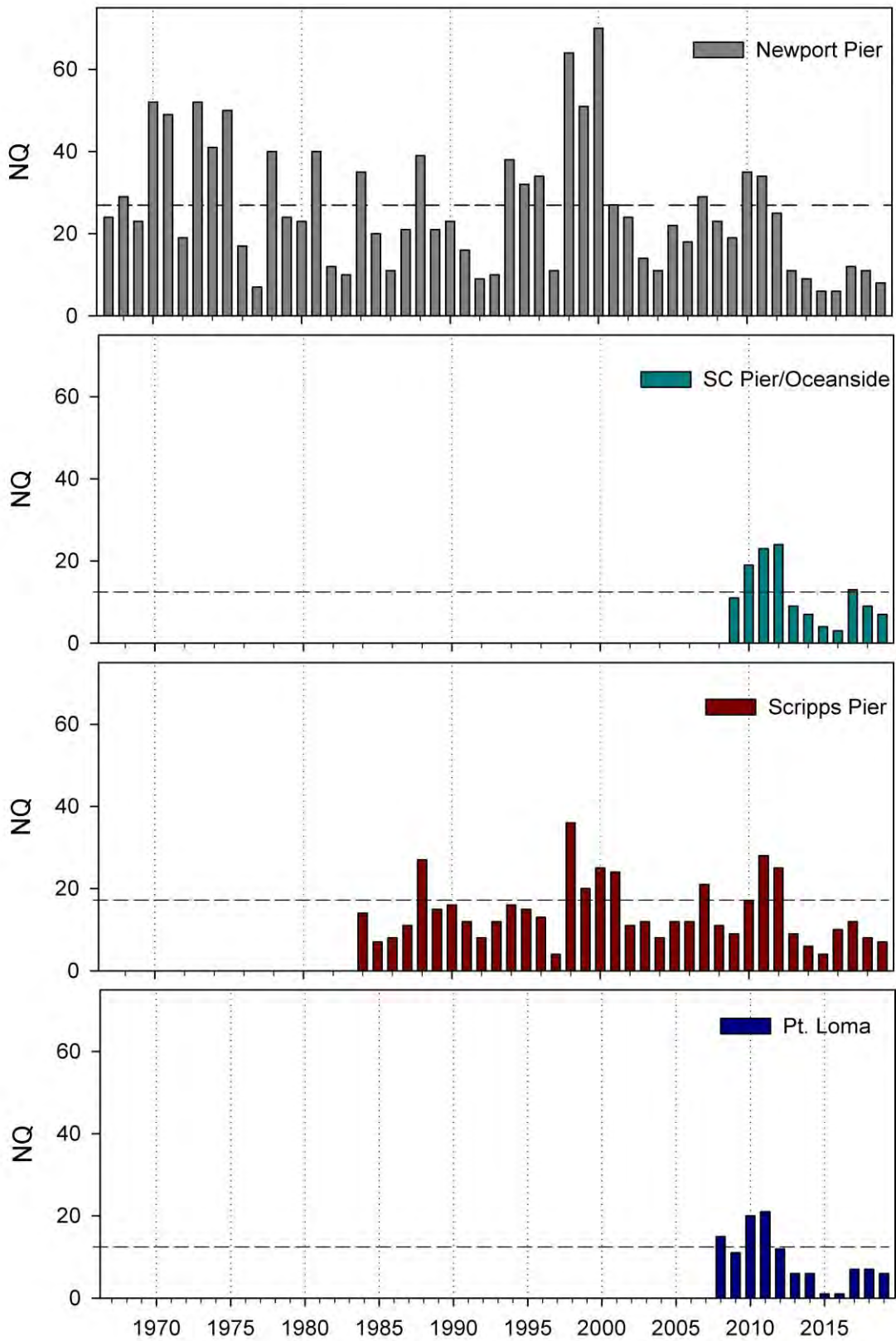


Figure 13. Nutrient Quotient (NQ) values in Region Nine, 1967 to 2019 (dotted line = long-term mean for site).

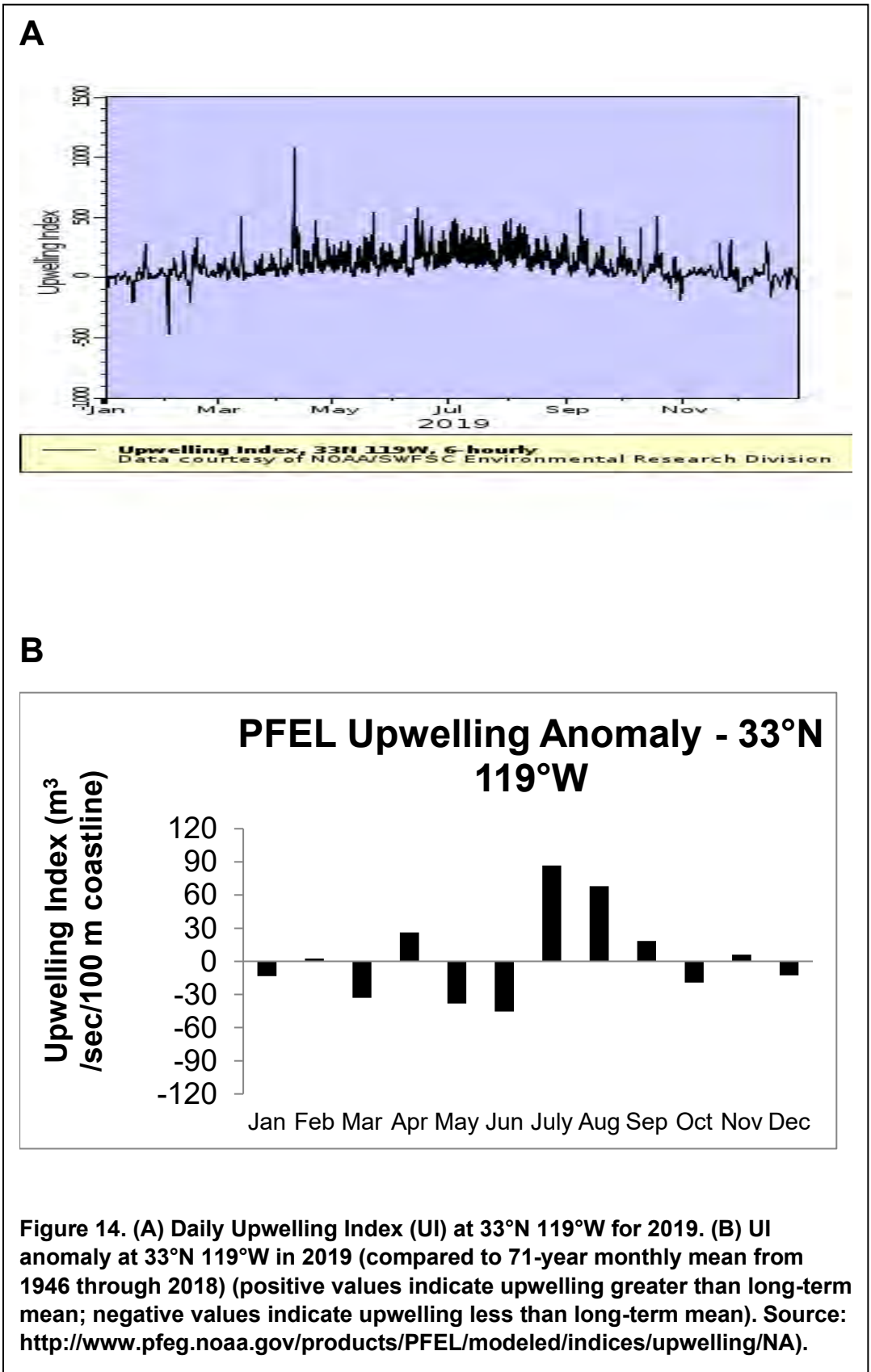
The upwelling index in 2019 (at a location approximately 161 km west of Solana Beach) generally increased each month from January through August, then decreased through December (Figure 14 A). The Upwelling Anomaly Index demonstrates that upwelling in 2019 was much higher than the long-term mean (1946-2018) during the months of July and August, but lower than usual during March, May, and June (Figure 14 B). The monthly PFEL Upwelling Index was lower in 2019 than during 2018 for the months of March, April, May and June (Figure 15), when surface water temperatures generally were lower and more nutrients would be available. However, upwelling was higher in 2019 than the previous year during the months of July, August, and September. Unfortunately, this corresponded to the period of the year when surface water temperatures were highest and nutrient availability was lowest.

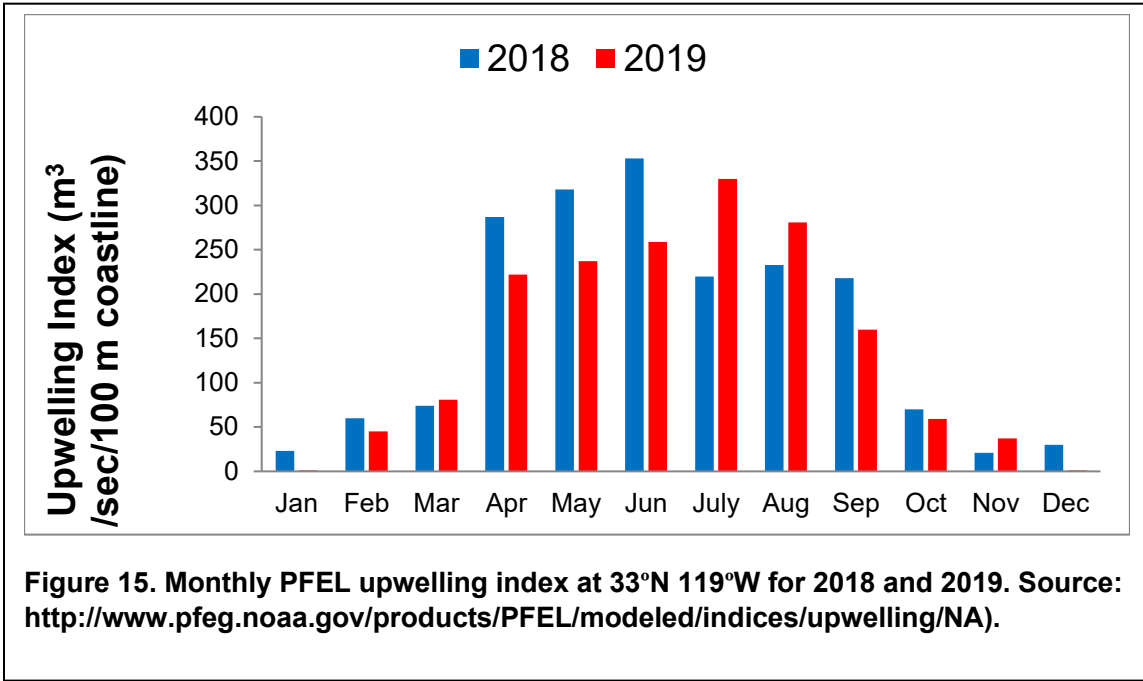
#### **IV.2.D - ENVIRONMENTAL INDICES**

The ENSO is the most important coupled ocean-atmosphere phenomenon affecting inter-annual climate variability. ENSO can be monitored via the Multivariate ENSO Index (MEI), which is based on a suite of six variables observed over the tropical Pacific Ocean (sea-level pressure, zonal and meridional components of the surface wind, the sea surface temperature, the surface air temperature, and the total cloudiness fraction of the sky) (<https://www.esri.noaa.gov/psd/enso/mei/>). Negative values of the MEI represented the cold ENSO phase (i.e., La Niña), while positive MEI values represented the warm ENSO phase (El Niño).

The North Pacific Gyre Oscillation (NPGO) is a climatic pattern that is based on sea surface height variability in the Northeast Pacific Ocean. The NPGO was significantly correlated with fluctuations of salinity, nutrients, and chlorophyll-*a* measured in long-term observations in the California Current and Gulf of Alaska. Fluctuations in the NPGO were driven by regional and basin-scale variations in wind-driven upwelling and horizontal advection, which were the fundamental processes controlling salinity and nutrient concentrations. Nutrient fluctuations drove concomitant changes in phytoplankton concentrations and may have resulted in similar variability in higher trophic levels (<http://www.o3d.org/npgoi/>).

The Pacific Decadal Oscillation (PDO) is a long-lived El Niño-like pattern of Pacific climate variability. The PDO and ENSO had similar spatial climate fingerprints but exhibited very different behavior in time. While twentieth century PDO events typically persisted for 20 to 30 years, typical ENSO events tended to persist for only 6 to 18 months. A “cool” PDO regime persisted from 1890 through 1924 and again from 1947 through 1976, while a “warm” PDO regime dominated from 1923 through 1946 and from 1977 through the mid-1990s. Warm eras correlated with enhanced coastal ocean biological productivity in Alaska and inhibited productivity off the west coast of the United States, while cold PDO eras produced the opposite (<http://research.jisao.washington.edu/pdo>). Causes for PDO fluctuations are not currently known.





The MEI and PDO changed phase about the same time in 2014; the MEI transitioned from negative to positive in April 2014, and the PDO became positive in January 2014 (Figure 26; Mantua 2017; and NOAA-ESRL 2018). The MEI transitioned back to negative in September 2016 but became positive from April through August 2017 before transforming to negative for the remainder of the year (Figure 16). The MEI continued to be negative in early 2018 but shifted to positive in May and continued to be positive throughout 2019, indicating a warm ENSO phase which probably was unfavorable for kelp growth. The PDO remained positive since 2014, but index values indicated that more neutral conditions were present in 2018. However, higher values were recorded in 2019, also indicating a warm ocean regime which probably was unfavorable to kelp (Figure 16). The NPGO changed from positive to negative in October 2013 and has stayed negative for most of the time since then (although it was positive for five months in 2016). NPGO values were strongly negative throughout all of 2017, 2018, and 2019 (Figure 16; Di Lorenzo 2017). The PDO transition to positive indicated warmer temperatures in the North Pacific, while the NPGO transition to negative was indicative of lower productivity along the coast (Di Lorenzo et al. 2008; Leising et al. 2015), conditions that would be expected to adversely affect kelp beds.

#### IV.2.E - WAVE HEIGHTS

Sea and swell height data from Coastal Data Information Program (CDIP) data buoys located off Oceanside and Point Loma were available in real time via the CDIP website (<http://www.cdip.ucsd.edu>).

The directions of swells off Oceanside and Point Loma in 2019 were very similar to 2018 (Table 8). Off Oceanside, waves approached from the south-southwest (202.5°) approximately 43% of the time in 2019, from the south (180°) approximately 17% of the time, and from the west (270°) approximately 14% of the time (Table 8, Figure 17). Offshore of Point Loma, waves were from the south-southwest (202.5°) about 29% of the time, from the west about 26% of the time, and from the south (180°) approximately 17% of the time.

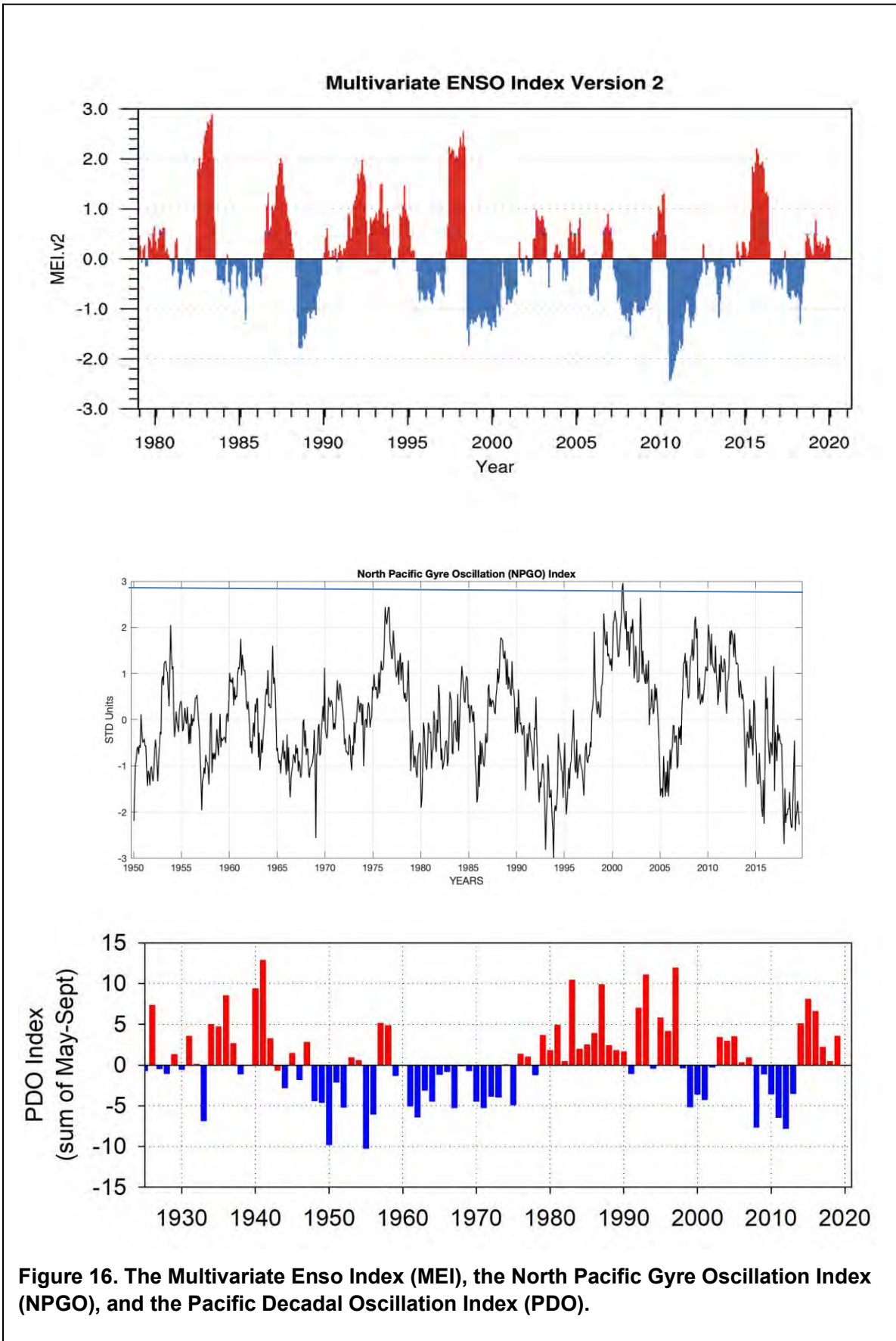


Figure 16. The Multivariate Enso Index (MEI), the North Pacific Gyre Oscillation Index (NPGO), and the Pacific Decadal Oscillation Index (PDO).



**Table 8. Direction of swells in 2019. Source: <http://cdip.ucsd.edu>.**

Direction	Oceanside	Pont Loma South
West (270°)	14%	26%
South (180°)	17%	17%
West-southwest (247.5°)	10%	7%
South-southwest (202.5°)	46%	29%
Southwest (225°)	13%	10%
West-northwest (292.5°)	2%	10%

High-energy waves that negatively affect kelp beds usually are low-frequency, high-amplitude waves approaching from the west. Wave heights at Oceanside (CDIP Buoy 045) only exceeded four meters on one date in 2019 (4.2 m on May 22) (Table 9). Wave heights were not as high as in 2018, when waves exceeded four meters in late February and late November/early December and reached a maximum of 4.9 m on both occasions (MBC 2019). Waves originated primarily from the south and south-southwest (Table 11), which would tend to have less effect on kelp beds than waves originating from the west. Waves exceeding three meters were rarely recorded throughout the year.

Waves originated from the west at Point Loma South (CDIP Buoy 191) approximately one-fourth of the time in 2019. The largest waves (five meters or more) were recorded on April 10 (5.3 meters), May 23 (5.0 meters), and November 21 (5.5 meters). However, none of these waves were as large as those recorded in 2018, which exceeded six meters in early January (maximum of 7.5 meters), mid-January, mid-February, and late November/early December (MBC 2019). Waves larger than four meters were recorded on fewer occasions in 2019 than in 2018.

The storms that occurred from March 12 through 14 produced large wave heights (Table 9) and large nearshore swells were evident along the coastline from Oceanside to San Diego on March 13, 2019 (Figure 18), although the largest waves were observed offshore. The storms that occurred from April 10 through 13 also produced large swells along the coastline from Oceanside to San Diego, but once again the largest waves were offshore (Figure 19). Similar conditions were produced by the storms that occurred on May 22 and 23 (Figure 20).

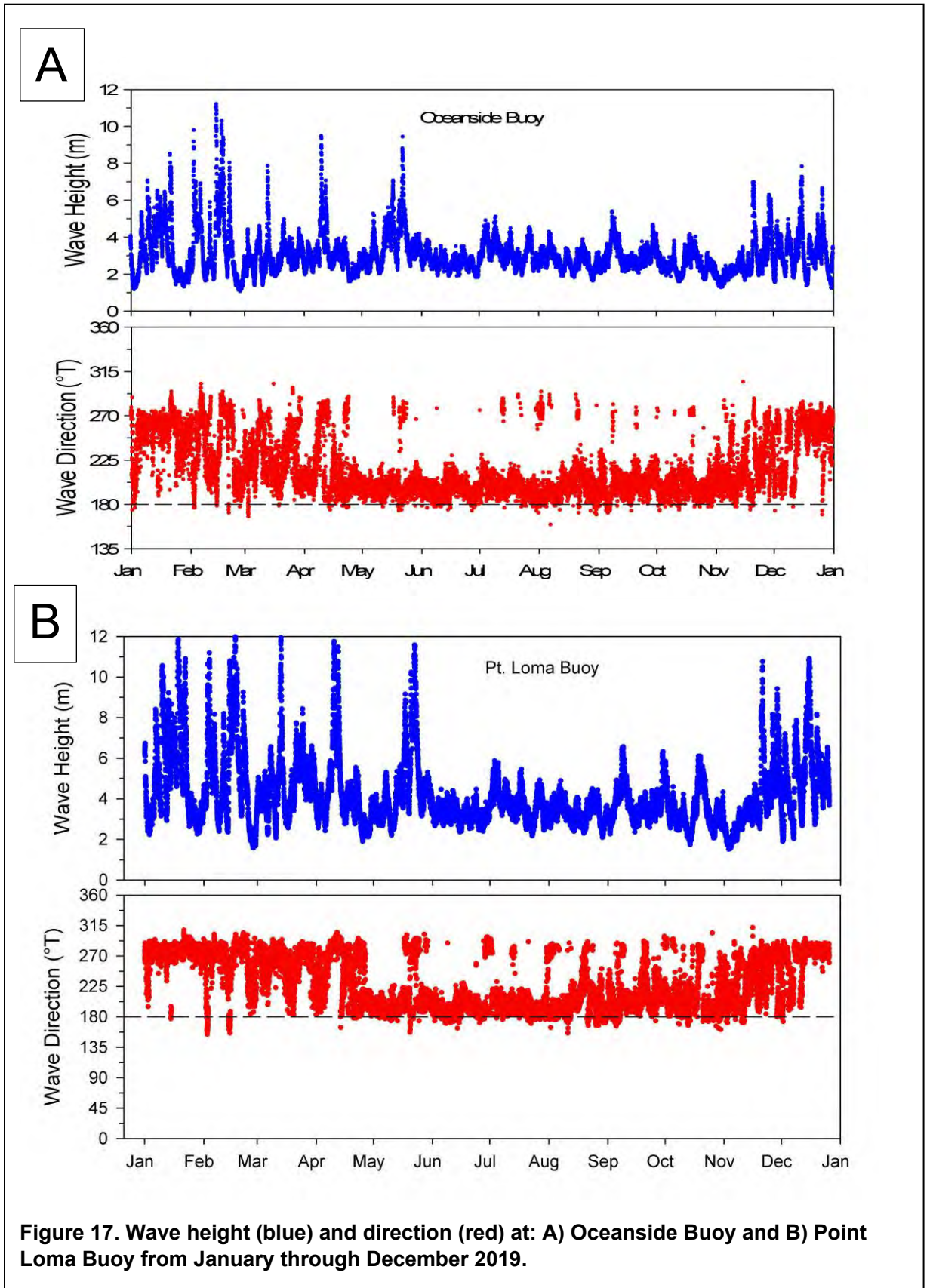


Figure 17. Wave height (blue) and direction (red) at: A) Oceanside Buoy and B) Point Loma Buoy from January through December 2019.

**IV.2.F - RAINFALL**

Periods of sustained high turbidity in southern California waters often result from high rainfall. Rainfall data for Costa Mesa and San Diego are shown in Figure 21.

The total amount of rainfall in 2019 was a little higher than normal for Costa Mesa (12.6 inches versus the long-term average of 11.4 in). Rainfall was much higher than normal during the months of February and December, lower than normal in January, March, April, September and October, and close to normal during November. Total rainfall in 2019 was approximately 50% higher than normal for San Diego (15.3 in versus the long-term average of 10.1 in). Rainfall in San Diego was higher than normal during the months of January, February, May, November, and December, but lower than normal during the months of March, April, September, and October.

These low rainfall levels were unlikely to generate any extended periods of high turbidity and would not be expected to have affected kelp beds in 2019.

**Table 9. Large waves in 2019.**

<b>Date</b>	<b>Oceanside (maximum height in meters)</b>	<b>Point Loma South (maximum height in meters)</b>
February 22	---	3.3
March 5	---	3.0
March 7/8/9	---	3.4/3.1/---
March 12/13/14	---/3.1/---	3.7/4.2/4.1
March 20/21/22/23/24	---/---/---/---/---	3.3/3.7/3.3/3.0/3.6
March 26/27	---/---	3.2/3.1
March 30	---	3.1
April 7/8	---/---	3.1/3.1
April 10/11/12/13	---/---/3.9/---	5.3/3.3/4.8/3.3
April 21/22	---/---	3.0/3.0
May 7	---	3.0
May 16/17/18	3.2/3.8/---/	---/---/3.4

Note: "---" indicates maximum wave height was less than 3.0 meters

**Table 9 (continued). Large waves in 2019.**

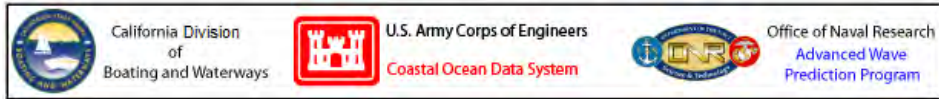
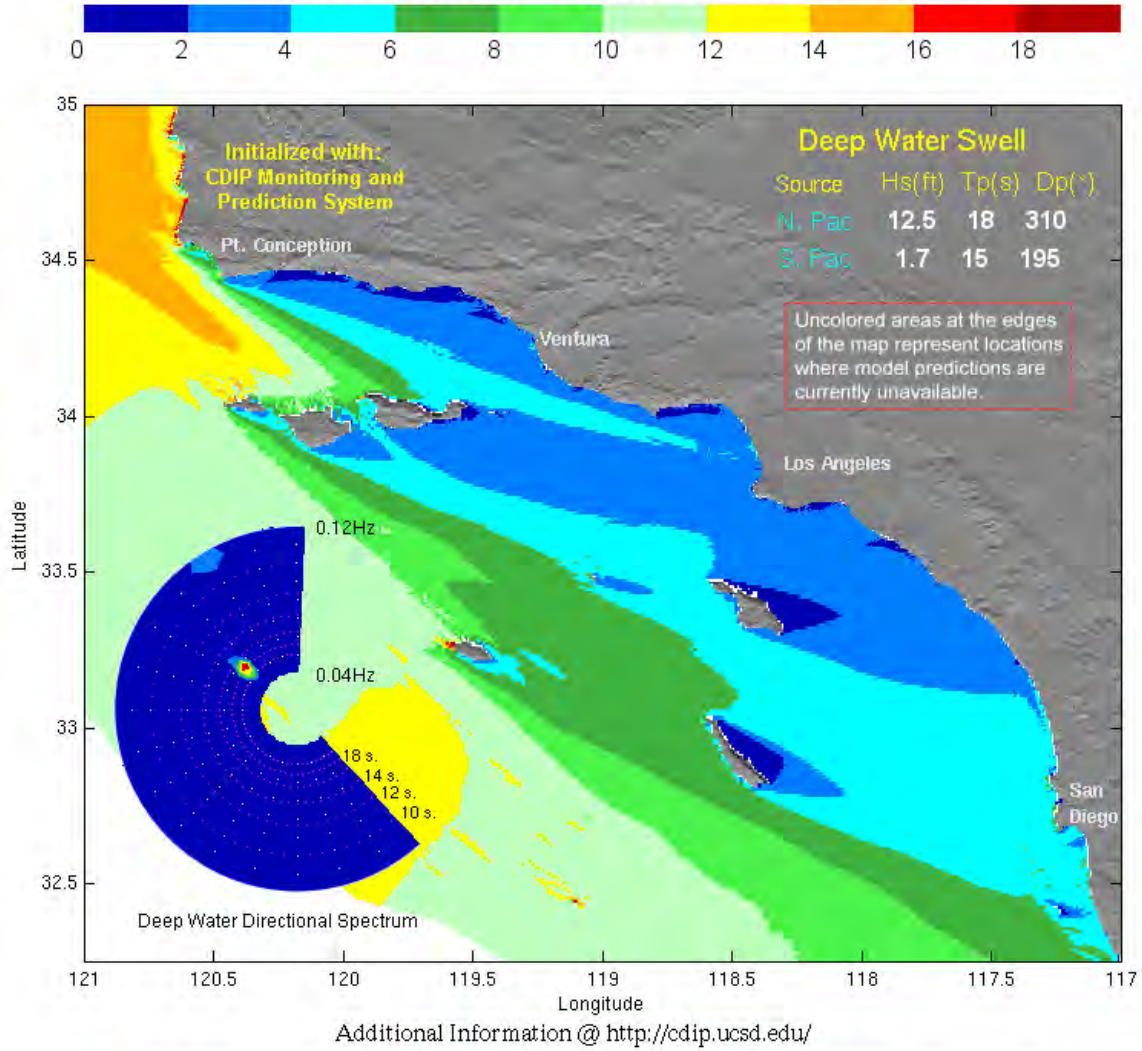
<b>Date</b>	<b>Oceanside (maximum height in meters)</b>	<b>Point Loma South (maximum height in meters)</b>
May 20	---	4.8
May 22/23	4.2/3.2	---/5.0
July 17	---	3.1
September 9	---	3.1
October 1	---	3.0
October 18/19	---/---	3.5/3.3
November 21	3.6	5.5
November 26	---	3.4
November 28/29	3.7/3.4	4.1/3.3
December 3	---	3.4
December 8	---	3.7
December 12/13/14/15/16/17	---/---/3.0/---/---/---	3.0/3.7/3.4/5.2/4.5/3.3
December 19/20/21	---/---/---	3.3/3.0/3.1
December 25/26	---/3.6	3.2/---

Note: "---" indicates maximum wave height was less than 3.0 meters



**Analysis Time - 13 Mar 2019 : 0000 PDT**

**Swell Height (ft) – Southern California Bight**



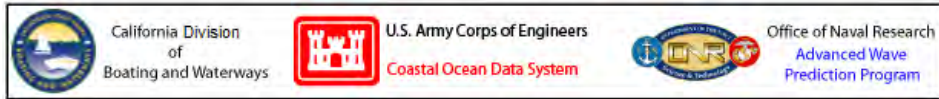
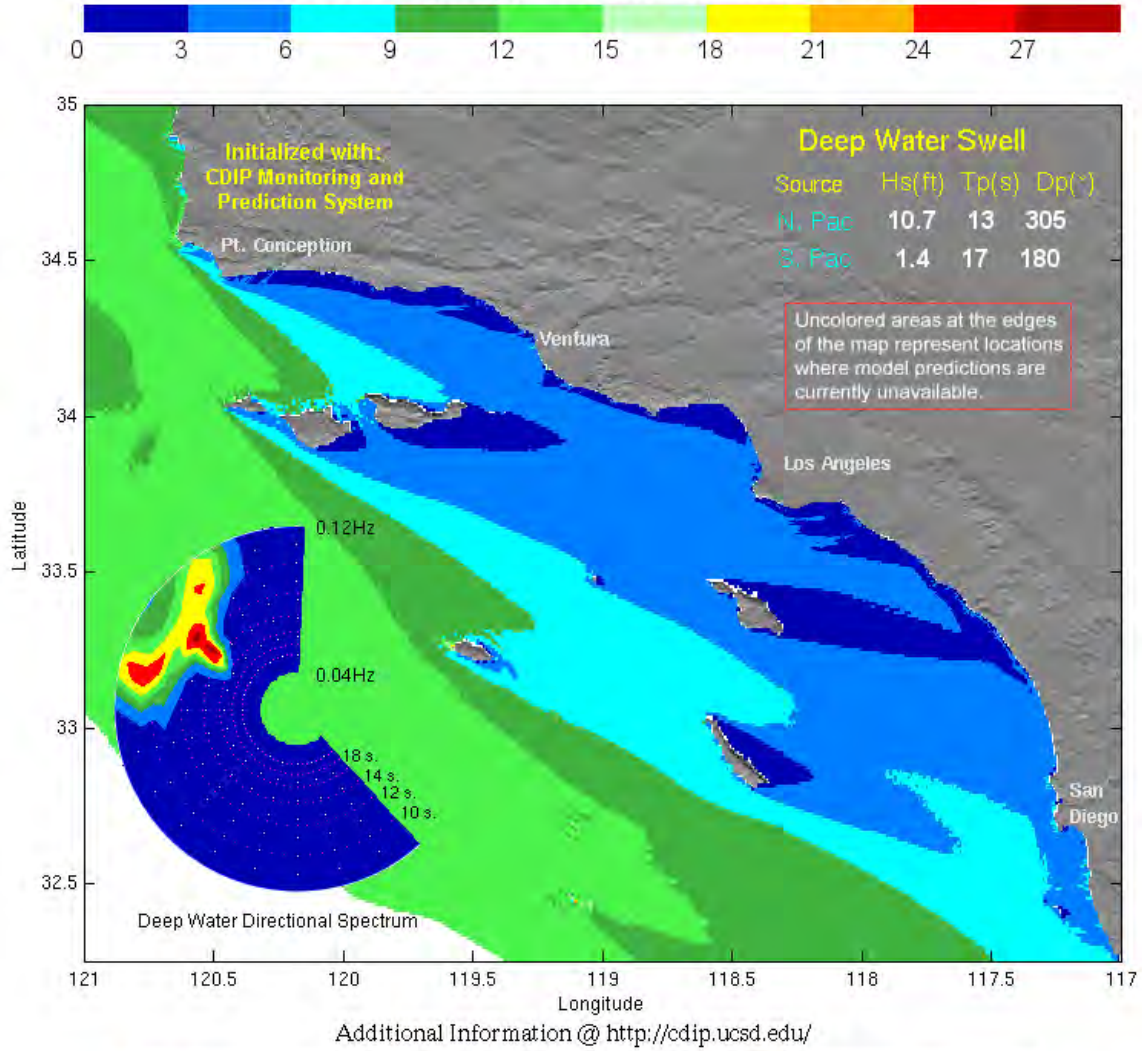
**Figure 18. Swell height and direction in the Southern California Bight on March 13, 2019. Source: Coastal Data Information Program (CDIP), <http://cdip.ucsd.edu/>.**





**Analysis Time - 10 Apr 2019 : 0000 PDT**

**Swell Height (ft) – Southern California Bight**



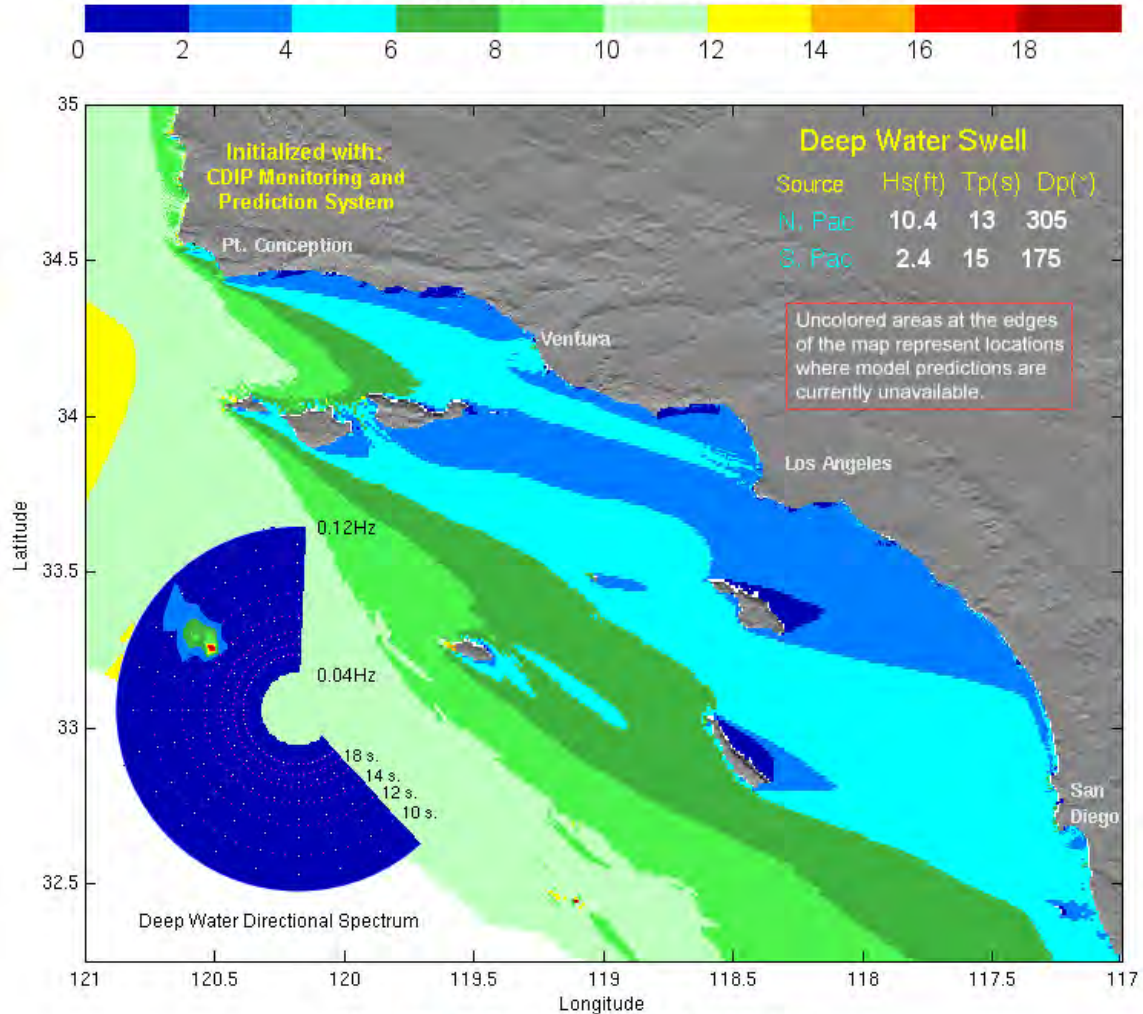
**Figure 19. Swell height and direction in the Southern California Bight on April 10, 2019. Source: Coastal Data Information Program (CDIP), <http://cdip.ucsd.edu/>.**





**Analysis Time - 23 May 2019 : 0000 PDT**

**Swell Height (ft) – Southern California Bight**



Additional Information @ <http://cdip.ucsd.edu/>



**Figure 20. Swell height and direction in the Southern California Bight on May 23, 2019. Source: Coastal Data Information Program (CDIP), <http://cdip.ucsd.edu/>.**

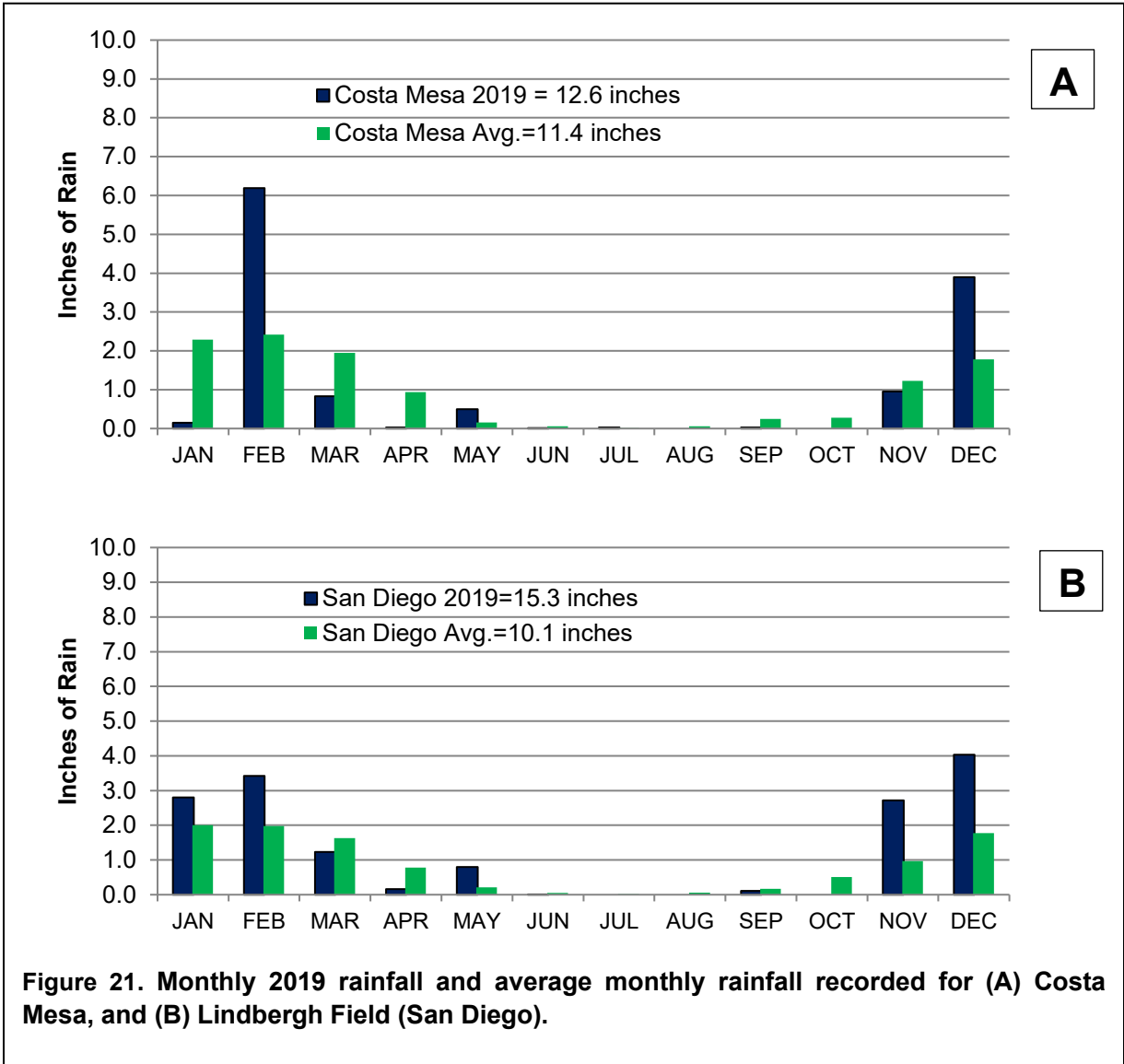


Figure 21. Monthly 2019 rainfall and average monthly rainfall recorded for (A) Costa Mesa, and (B) Lindbergh Field (San Diego).

**IV.2.G - PHYTOPLANKTON**

Harmful Algal Bloom (HAB) data were available in real time for certain locations via the SCCOOS website ([www.sccoos.org](http://www.sccoos.org)).

Two phytoplankton groups associated with harmful algal blooms *Pseudo-nitzschia seriata* group and *Pseudo-nitzschia delicatissima* group were only recorded at Newport Pier during June 2019 (Figure 22 A and B). Domoic acid, a toxin produced by these groups, was not recorded at this location at any time throughout 2019. High concentrations of the *Pseudo-nitzschia seriata* group were recorded at Scripps Pier during April and June 2019, while high concentrations of the *Pseudo-nitzschia delicatissima* group were found throughout the year (March, April, June, September, October, and December) (Figure 23 A and B). However, domoic acid was not recorded at this location any time in 2019.

Status of the Kelp Beds in 2019

High concentrations of phytoplankton can effectively exclude light from all but the shallowest depths, which could limit photosynthetic activity at depth and may have been responsible for a portion of the severe impacts on the kelp bed resources observed in 2005 and 2006 (Gallegos and Jordan 2002, Gallegos and Bergstrom 2005). However, the concentrations recorded in 2019 appear unlikely to have impacted kelp beds.

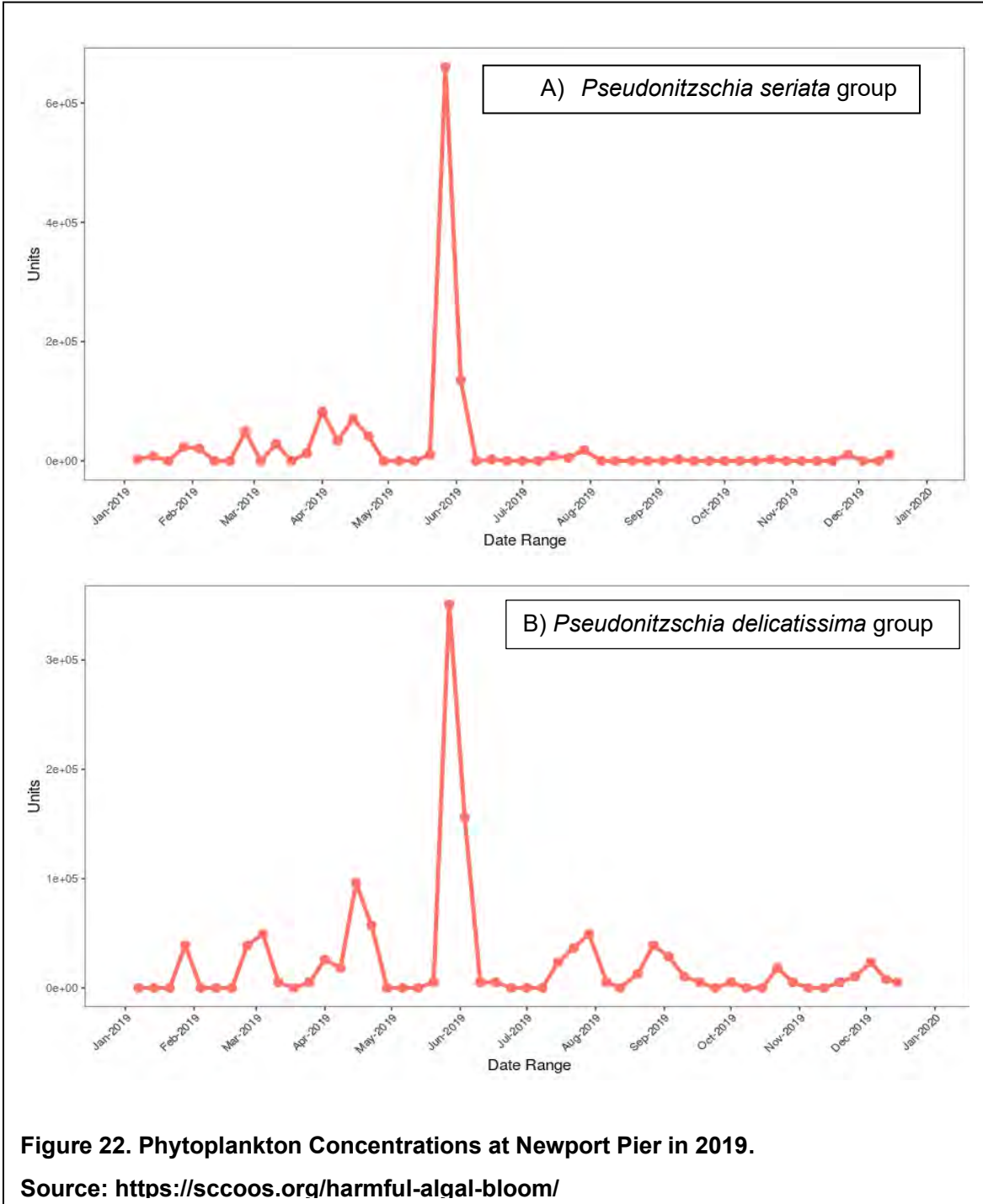


Figure 22. Phytoplankton Concentrations at Newport Pier in 2019.

Source: <https://sccoos.org/harmful-algal-bloom/>

Status of the Kelp Beds in 2019

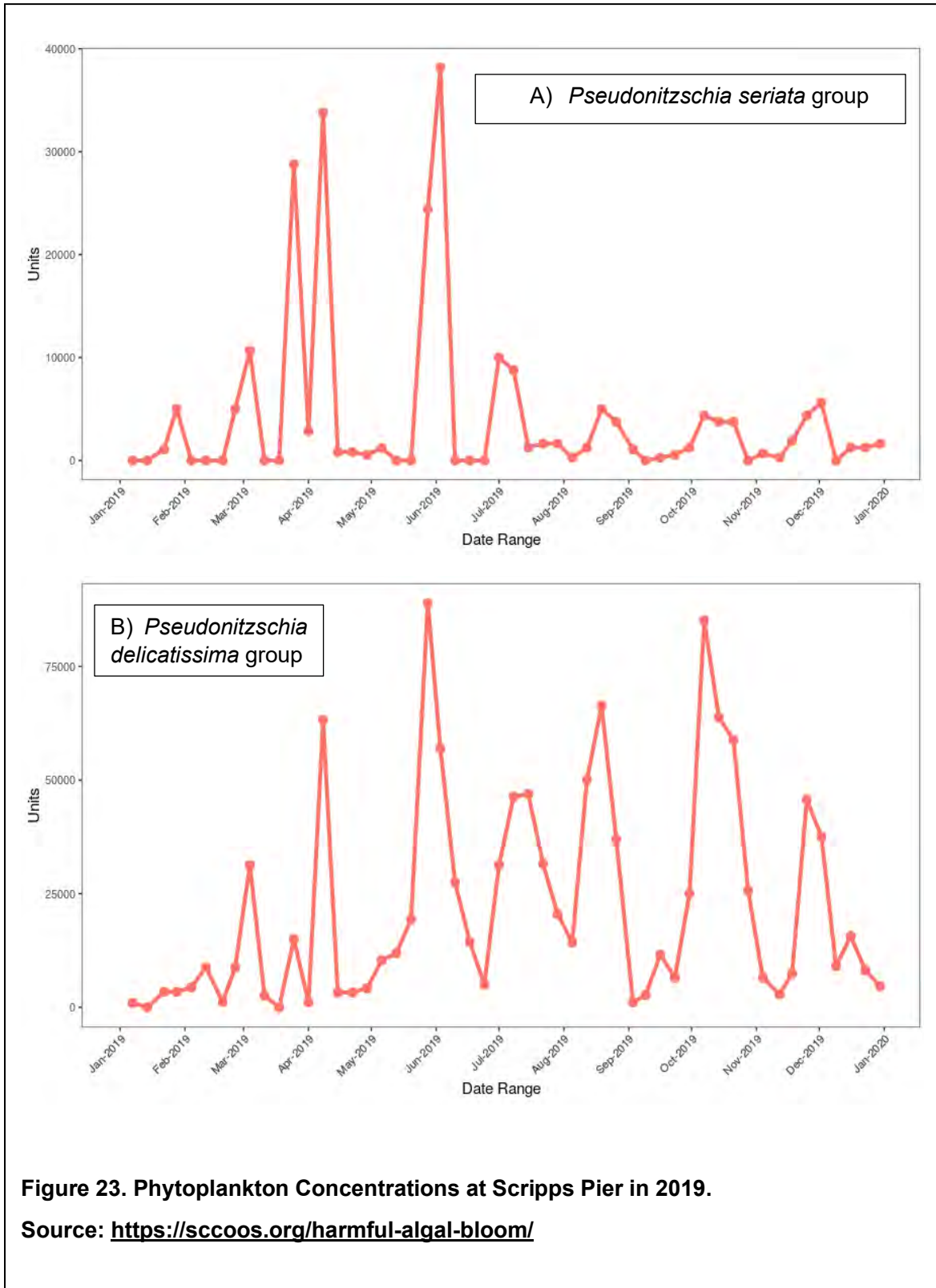


Figure 23. Phytoplankton Concentrations at Scripps Pier in 2019.

Source: <https://sccoos.org/harmful-algal-bloom/>

### IV.3 - KELP RESTORATION

The Orange County Giant Kelp Restoration Project began in 2002 with an aim to restore historical giant kelp forests along the Orange County Coastline via outreach and education. Orange County Coastkeeper worked with volunteers to grow, plant, and monitor giant kelp in northern Orange County. Restoration sites, control sites, and a reference site were chosen in Crystal Cove State Park (Newport Beach), Heisler Park (Laguna Beach) and Salt Creek (Dana Point). Volunteers working with marine biologist Nancy Caruso also removed sea urchins that had overpopulated kelp reefs, relocating them to deeper water.

Beginning in 2002, the kelp beds at San Clemente were enhanced by the placement of approximately 50 small artificial reefs (each measuring 40 m x 40 m) on barren sand at depths of about 12 to 15 m. Kelp immediately recruited to these reefs, and canopies in the shape of small squares were visible during most of the aerial surveys of 2002 and 2003. In early 2008, Southern California Edison (SCE) added additional reef material (covering 0.712 km<sup>2</sup> in total) and kelp recruited to the new reefs in late 2008. However, SCE determined that the 174-acre San Clemente reef was only sustaining approximately half the volume of fish required by its 1991 agreement with the California Coastal Commission. In February 2019, the Coastal Commission approved the SCE proposal to construct an additional 210-acre kelp reef to expand the existing 174-acre Wheeler North Reef. SCE proposed to place 175,000 tons of quarried rock in 23 new polygons north and inshore of the existing reef. The expansion project was scheduled to begin in July 2019 and is expected to be completed in 2020.

### IV.4 - KELP HARVESTING

CDFW has designated 87 administrative kelp beds located offshore of California’s mainland coast and surrounding the Channel Islands. These kelp beds contain giant kelp (*Macrocystis*) or bull kelp (*Nereocystis*), or a combination of both. As of November 2016, each kelp bed falls within one of the following management categories:

Open	Available to harvest by all commercial kelp harvesters	33 kelp beds
Leasable	Available to harvest by commercial kelp harvesters until an exclusive lease is granted by the California Fish and Wildlife Commission, then only available to lessee	28 kelp beds (5 are currently leased)
Lease only	Commercial harvest of kelp is prohibited unless an exclusive lease is granted by the California Fish and Wildlife Commission	3 kelp beds
Closed	Commercial harvest of kelp is prohibited	18 kelp beds

Approximately 41% of the State’s kelp beds have been designated as available for leasing, while approximately 38% have been designated as available for kelp harvest by any licensed kelp harvester (ensuring that smaller kelp harvesters have access to kelp and are not shut



out by lease agreements). Approximately 21% of kelp beds are closed to kelp harvesting, as harvest has been deemed too potentially disruptive to the environment.

All commercial harvesters of marine algae must purchase an annual commercial kelp harvester license and abide by commercial algae harvest regulations (California Code of Regulations, Title 14, Sections 165 and 165.5). Eelgrass (*Zostera* species) and surfgrass (*Phyllospadix* species) are prohibited from commercial harvest. There currently are no provisions for the commercial harvest of other large kelps, such as elk kelp (*Pelagophycus*), feather boa kelp (*Egregia*), or members of the genus *Pterygophora*. Members of the genera *Porphyra*, *Laminaria*, *Monostrema*, and other aquatic plants utilized fresh or preserved as human food are classified as edible seaweeds. Agar-bearing marine algae are defined as members of the genera *Gelidium*, *Pterocladia*, *Gracilaria*, *Iridaea*, *Gloiopeltis*, and *Gigartina*. Edible and agar algae harvesting are governed by regulations.

Kelp harvesters may not cut attached giant and bull kelp at a depth greater than four feet below the sea surface at the time of cutting, may not allow cut kelp to escape from harvest, must weigh and report the amount harvested, and must pay a royalty to the State for each wet ton of kelp harvested. A Commission-approved Kelp Harvest Plan is required for kelp bed lease holders and for the mechanical harvest of kelp in all locations where harvest is allowed.

CDFW is currently reviewing its Management Policies and Harvest Methods guidance document and is drafting several proposed new regulations governing commercial harvest of wild kelp and algae (Rebecca Flores-Miller, pers. comm.). There is no timetable to bring these proposed regulations to the CDFW Commission for adoption during 2020, due to a shortage of staff resources during the COVID 19 pandemic. In the near future, CDFW also plans to review its Royalty Rates and License Fees schedule for commercial harvesters. The royalty rates for kelp were established 24 years ago at \$1.71 per wet ton, and the rates for edible seaweed and agar were established 35 years ago at \$24 and \$17 per wet ton, respectively.

Recreational harvest of marine algae for personal use is permitted in California. Those harvesting for personal use must abide by the regulations governing the recreational harvest. The daily bag limit for recreational harvesters of marine algae is 10 pounds wet weight in the aggregate. Commonly harvested kelp and marine algae include bull kelp (*Nereocystis luetkeana*), giant kelp (*Macrocystis pyrifera*), grapestone or Turkish washcloth (*Mastocarpus papillatus*), bladderwrack (*Fucus distichus*), kombu (*Laminaria setchellii*), wakame (*Alaria marginata*), sea cabbage or sweet kombu (*Saccharina sessilis*), bladder chain kelp or sea fern (*Stephanocystis osmundacea*), nori *Pyropia* spp.), and sea lettuce (*Ulva* species).

Recreational harvesters are prohibited from harvesting or disturbing eelgrass (*Zostera* spp.), surfgrass (*Phyllospadix* spp.), and sea palm (*Postelsia palmaeformis*). Marine aquatic plants may not be cut or harvested in state marine reserves. Regulations may prohibit cutting or harvesting of marine aquatic plants within state marine conservation areas and state marine parks (California Code of Regulations, Title 14, Section 632b).

The administrative kelp bed status in the Region Nine study area is shown in Figure 24. Kelp areas 1 and 2 are open, 3 is leased, 4, 5, and 6 are leasable (except for portions that are closed within marine protected areas), 7, 8, and 9 are open (except for portions of 9 that are closed within marine protected areas), and 10 is closed.



Commercial marine algae harvest data are shown in Figure 25 for the period from 1931 to 2019 (<https://www.wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest>). The annual harvest exceeded 100,000 metric tons in the 1950s, 1960s and 1970s, but declined considerably in the early 1980s. The annual harvest again exceeded 100,000 metric tons in the early 1990s, but subsequently declined. Since 2006, the annual harvest has been relatively low (fewer than 5,000 metric tons per year).

Table 10 shows how the RNKSC kelp bed designations correspond to the State of California's administrative lease kelp bed designations. Multiple RNKSC kelp beds fall within each of lease areas 5 through 9. Lease area 4 contains the La Jolla kelp bed, lease areas 2 and 3 contain the Point Loma kelp bed, and lease area 1 contains the Imperial Beach kelp bed.

In March 2018, Knocean Sciences (Dallas, Texas) applied to the California Department of Fish and Wildlife (CDFW) to renew its existing Kelp Bed No. 3 lease issued in July 2013. Bed No. 3 extends from the southern tip of Point Loma to the south jetty of Mission Bay, and covers an area of 2.58 m<sup>2</sup>. Knocean Sciences proposed to harvest a maximum of 200 tons per year of giant kelp during the first two years of the five-year lease renewal, and 2,000 tons per year during years three through five. As part of the renewal process, Knocean Sciences proposed a royalty bid to the Fish & Game Commission of \$3.00 per wet ton of kelp harvested. Knocean Sciences planned to harvest giant kelp from May through November via mechanical harvesting from vessels specially modified for this purpose. The lease renewal was approved by CDFW in June 2018. CDFW subsequently authorized Dr. Matthew Edwards, San Diego State University, to perform research activities involving giant kelp in Kelp Bed No. 3 (August 2018).

Kelp harvesting peaked in the 1970s, exceeding 150,000 metric tons per year in some years (Figure 25). However, kelp harvesting has been relatively low (fewer than 5,000 metric tons per year) since 2006. It is unlikely that this low amount of kelp harvesting has had any impact on the health of the kelp beds in Region Nine.

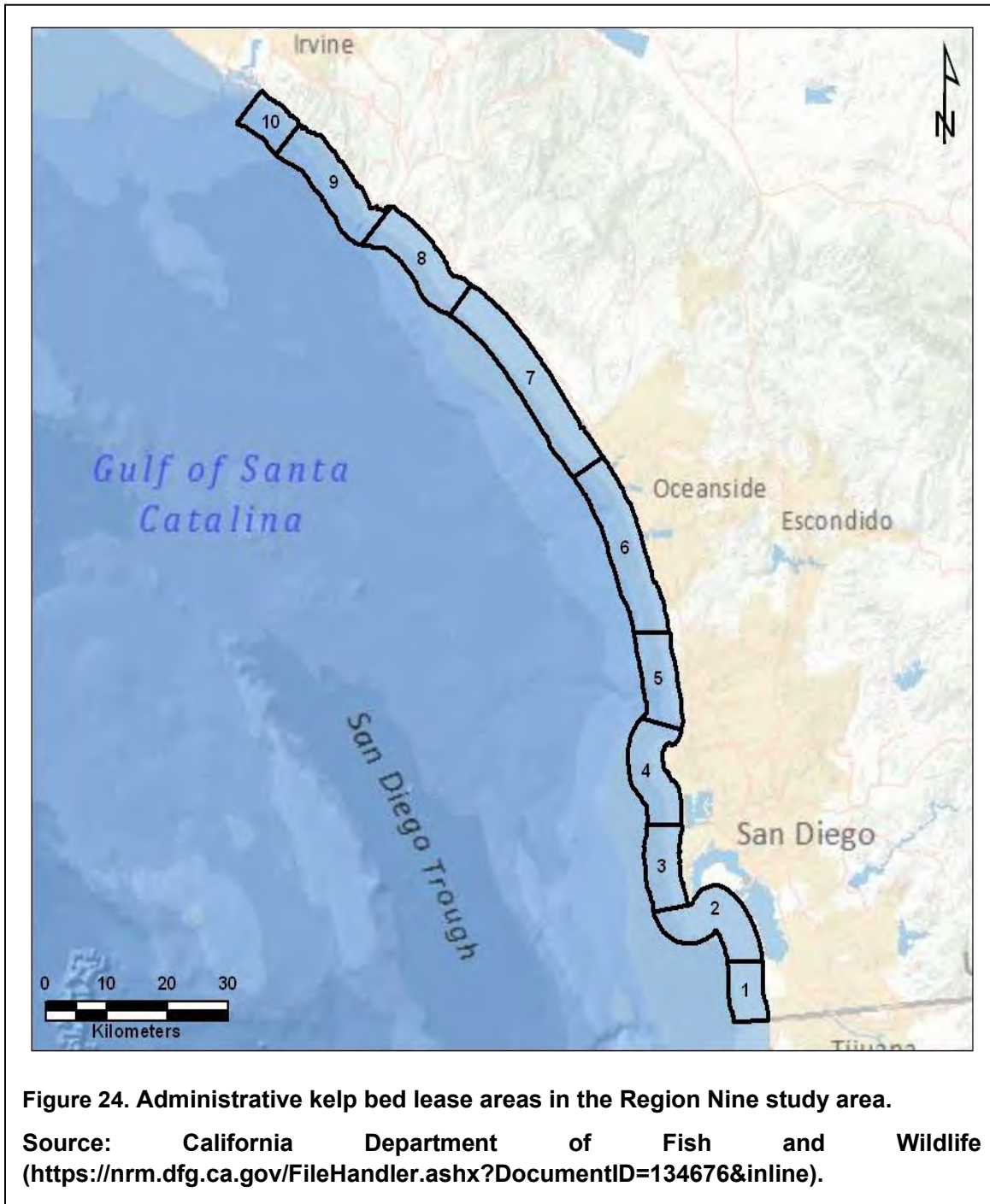


Figure 24. Administrative kelp bed lease areas in the Region Nine study area.

Source: California Department of Fish and Wildlife (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134676&inline>).

Status of the Kelp Beds in 2019

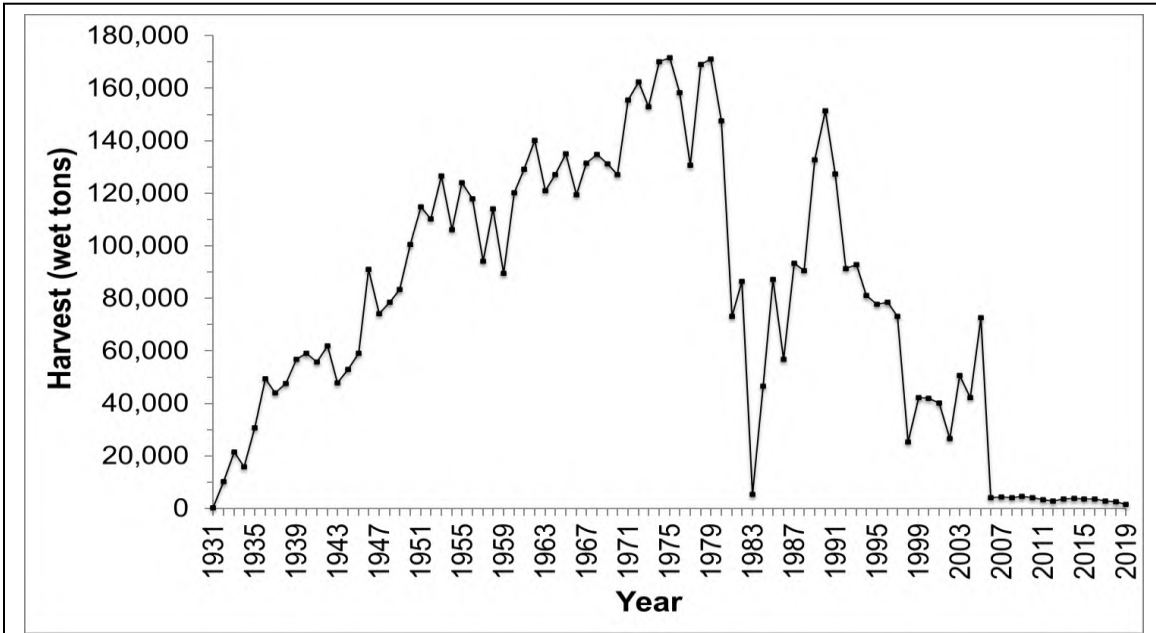


Figure 25. Commercial kelp harvest landings for giant and bull kelp from 1931 through 2019. Source: California Department of Fish and Wildlife (<https://www.wildlife.ca.gov/Conservation/Marine/Kelp/Commercial-Harvest>).

Table 10. Region Nine kelp bed designations compared to California Department of Fish and Wildlife kelp bed designations.

F & W Lease Area	Region Nine Kelp Bed Designations
Bed 1	Imperial Beach
Beds 2 and 3	Point Loma
Bed 4	La Jolla
Bed 5	Leucadia, Encinitas, Cardiff, Solana Beach, Del Mar, Torrey Pines
Bed 6	North Carlsbad, Agua Hedionda, Encina Power Plant, Carlsbad State Beach
Bed 7	Horno Canyon, Barn Kelp, Santa Margarita
Bed 8	San Clemente, San Mateo Point, San Onofre
Bed 9	North Laguna Beach, South Laguna Beach, South Laguna, Dana Point/Salt Creek, Capistrano Beach

## V - UPDATE TO PRESENT

The first aerial survey for 2020 was conducted on April 15, 2020. Little or no kelp surface canopy was observed throughout most of Region Nine. However, the La Jolla Lower and Point Loma kelp beds were extensive, although surface canopy was lower than the maximum observed in 2019 (except for lower Point Loma, which was similar). The second aerial survey was conducted on July 5, 2020. Once again, little or no kelp surface canopy was observed throughout most of the region.

## VI - CONCLUSIONS

Total combined kelp surface canopy decreased substantially (by 53%) in 2019 in Region Nine. More than half of the kelp beds observed in 2018 disappeared in 2019 (10 out of 18), while none reappeared. The total kelp canopy in Region Nine covered approximately 5.2 km<sup>2</sup> in 2019, similar to the total amount recorded in 2016 (5.1 km<sup>2</sup>), but larger than the total for 2017 (3.3 km<sup>2</sup>), which was the lowest amount of total kelp canopy since 2006. The largest beds were the La Jolla and Point Loma kelp beds, accounting for 99% of the total canopy coverage in 2019.

Water temperatures throughout the RNKSC areas generally were warmer than average throughout most of 2019, particularly from September through December. However, lower than normal temperatures were recorded at Newport Pier during most of April, May, and August, as well as at times during March, June, and July. Lower than normal water temperatures also were recorded at Scripps Pier at times from February through October, particularly during the months of June, July and August. Daily sea surface temperature values rarely fell below 14°C (a threshold below which nutrient availability is much greater than at higher water temperatures) at Newport Pier and Scripps Pier, and never fell below this threshold at Oceanside or Point Loma South.

Nutrient availability continued to be low in 2019. Upwelling in 2019 (at a location approximately 161-km west of Solana Beach) generally increased each month from January through August, then decreased through December. Upwelling in 2019 was much higher than the long-term mean during the months of July and August, but lower during March, May and June. Upwelling was lower in 2019 than during 2018 for the months of March, April, May and June, when surface water temperatures generally were lower and nutrient availability would be increased. Although upwelling was higher in 2019 than the previous year during the months of July, August, and September, this corresponded to the period of the year when surface water temperatures were highest and nutrient availability would be decreased.

## VII - REFERENCES

- California Dept. of Fish and Wildlife. 2019. Commercial marine algae harvest data. Web site: [https://www.wildlife.ca.gov/Conservation/Marine/Kelp/Commercial Harvest](https://www.wildlife.ca.gov/Conservation/Marine/Kelp/Commercial%20Harvest).
- City of San Diego. 2020. Thermistor data from offshore Point Loma.
- Di Lorenzo, E. 2017. Monthly North Pacific Gyre Oscillation (NPGO) index values. Web site: <http://www.o3d.org/npgo/npgo.php>
- Di Lorenzo, E., N. Schneider, K. Cobb, P. Franks, K. Chhak, A. Miller, J. McWilliams, S. Bograd, H. Arango, and E. Curchitser. 2008. North Pacific Gyre Oscillation links ocean climate and ecosystem change. *Geophys. Res. Lett.* 35:L08607.
- Gallegos, C.L. and T.E. Jordan. 2002. Impact of the Spring 2000 phytoplankton bloom in Chesapeake Bay on optical properties and light penetration in the Rhode River, Maryland. *Estuaries* 25(4A): 508-518.
- Gallegos, C.L. and P.W. Bergstrom. 2005. Effects of a *Prorocentrum* minimum bloom on light availability for and potential impacts on submersed aquatic vegetation in upper Chesapeake Bay. *Harmful Algae* 4(3): 553-574.
- Gerard, V.A. 1982. *In situ* rates of nitrate uptake by giant kelp, *Macrocystis pyrifera* (L.) C. Agardh: tissue differences, environmental effects, and predictions of nitrogen limited growth. *Journal of Experimental Marine Biology and Ecology* 62: 211-224.
- Haines, K.C. and P.A. Wheeler. 1978. Ammonium and nitrate uptake by the marine macrophytes *Hypnea musciformes* (Rhodophyta) and *Macrocystis pyrifera* (Phaeophyta). *Journal of Phycology* 14: 319-324.
- Kamykowski, D. and S.J. Zentara. 1986. Predicting plant nutrient concentrations from temperature and sigma-t in the world ocean. *Deep Sea Research* 33:89-105.
- Leising, A.W., I.D. Schroeder, S.J. Bograd, J. Abell, R. Durazo, G. Gaxiola-Castro, CICESE, E. Bjorkstedt, J. Field, K. Sakuma, R. Goericke, W.T Peterson, R.D. Brodeur, C. Barcelo, T.D. Auth, E.A. Daly, R.M. Suryan, A.J. Gladics, J.M. Porquez, S. McClatchie, E.D. Weber, W. Watson, J.A. Santora, W.J. Sydeman, S.R. Melin, F.P. Chavez, R.T. Golightly, S.R. Schneider, J. Fisher, C. Morgan, R. Bradley, and P.Warybok. 2015. State of the California Current 2014–15: Impacts of the Warm-Water “Blob”. *CalCOFI Rep.* 56:31-68.
- Mantua, N. 2017. Standardized values for the Pacific Decadal Oscillation (PDO) index. Web site: <http://research.jisao.washington.edu/pdo/PDO.latest>
- MBC Applied Environmental Sciences. 2019. Status of the Kelp Beds 2016 Survey. Prepared for the Central Region Kelp Survey Consortium and the Region Nine Kelp Survey Consortium. 86 p. plus appendices.
- National Oceanic and Atmospheric Administration (NOAA) Earth System Research Laboratory (ESRL). 2019. Multivariate ENSO Index. Web site: <http://www.esrl.noaa.gov/psd/enso/mei/index.html>
- National Oceanic and Atmospheric Administration (NOAA) National Data Buoy Center (NDBC). 2019. Data Buoys. Web site: <http://www.ndbc.noaa.gov>

- National Oceanic and Atmospheric Administration (NOAA) Pacific Fisheries Env. Lab. (PFEG). 2019. Web site: <http://www.pfeg.noaa.gov/products/PFEL/modeled/indices/upwelling/NA>
- National Oceanic and Atmospheric Administration (NOAA) Southwest Fisheries Sci. Center (SWFSC) Env. Res. Div. (ERD). 2019. Web site: <https://swfsc.noaa.gov/erd/>
- North, W.J., D.E. James and L.G. Jones. 1993. History of kelp beds in Orange and San Diego Counties, California. *Hydrobiologia* 260/261:277-283.
- North, W.J. 2001. Analysis of aerial survey data & suggestions for follow-up activities. Prepared for the Region Nine Kelp Survey Consortium. 27 p. plus appendices.
- North, W.J. and MBC Applied Environmental Sciences. 2001. Status of the kelp beds of San Diego and Orange Counties for the years 1990 to 2000. Prepared for the Region Nine Kelp Survey Consortium. Costa Mesa, CA.
- Orange County Sanitation District. 2020. Thermistor data from offshore Orange County.
- Parnell, P.E., E.F. Miller, C.E. Lennert-Cody, P.K. Dayton, M.L. Carter, and T.D. Stebbins. 2010. The response of giant kelp (*Macrocystis pyrifera*) in southern California to low-frequency climate forcing. *Limnology and Oceanography* 55(6) 2686-2702.
- SCCOOS (Southern California Coastal Ocean Observing System). 2019. HAB and ROMS data. Web site: <http://www.sccoos.org>.
- Schiel, D.R. and M.S. Foster. 2015. The biology and ecology of giant kelp forests. University of California Press. 395 pages.
- Tegner, M.J., P.B. Edwards and K.C. Riser. 1996. Is there evidence for long-term climatic changes in southern California kelp forests? California Cooperative Fisheries Investigative Report 37:111-126.
- Wheeler, P.A. and W.J. North. 1980. Effect of nitrogen supply on nitrogen content and growth rates of juvenile *Macrocystis pyrifera* (Phaeophyta) sporophytes. *Journal of Phycology* 16:577-582.
- Zimmerman, R.C. and J.N. Kremer. 1984. Episodic nutrient supply to a kelp forest ecosystem in southern California. *Journal of Marine Research* 42:591-604.

#### **PERSONAL COMMUNICATIONS**

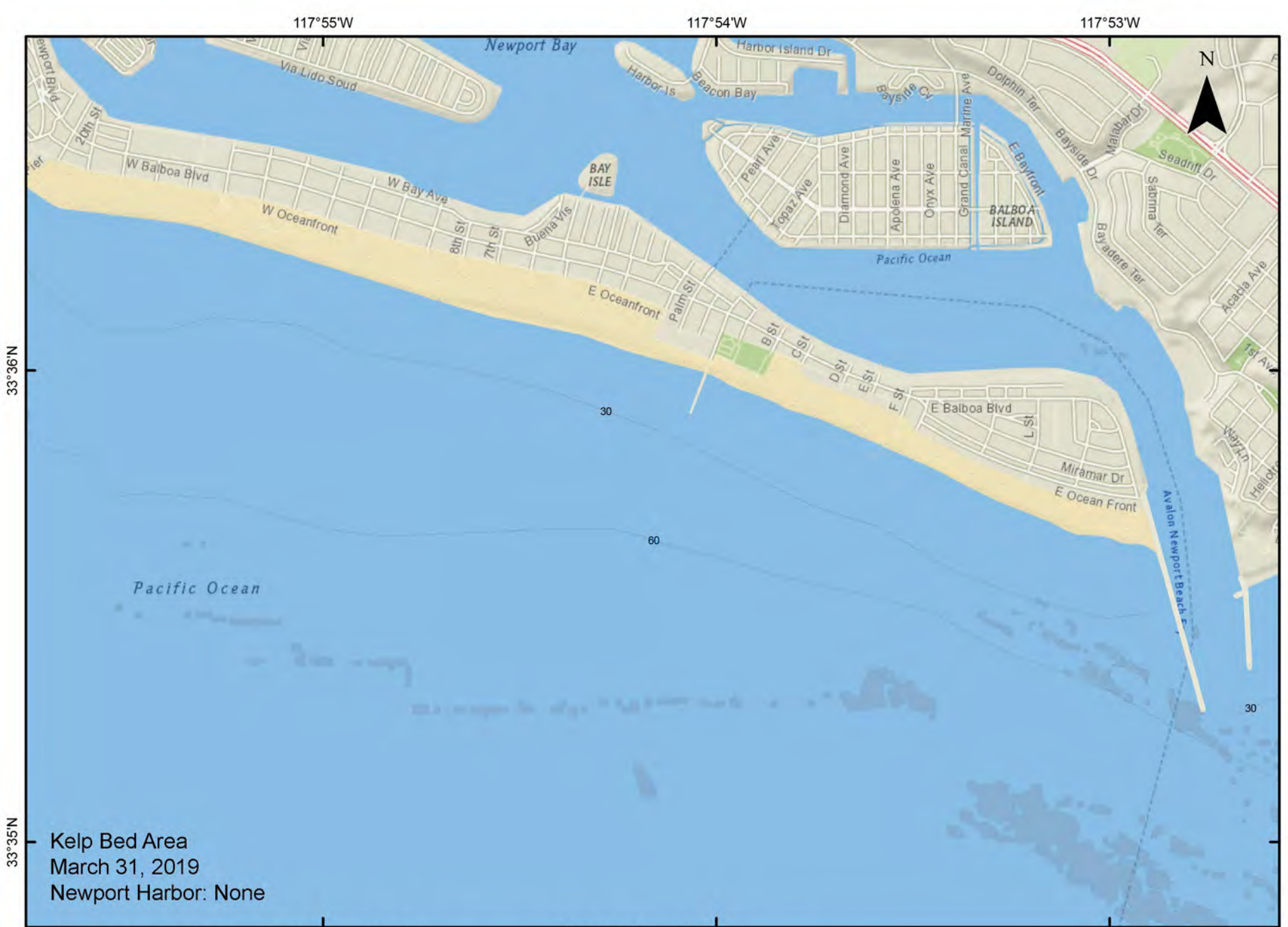
- Flores-Miller, R. 2020. Rebecca Flores-Miller, California Department of Fish and Wildlife, Environmental Scientist. Commercial Kelp and Other Marine Algae Outreach Meeting, June 2, 2020.



***APPENDIX A***

**Kelp Canopy Maps**

---



Kelp Bed Area  
 March 31, 2019  
 Newport Harbor: None



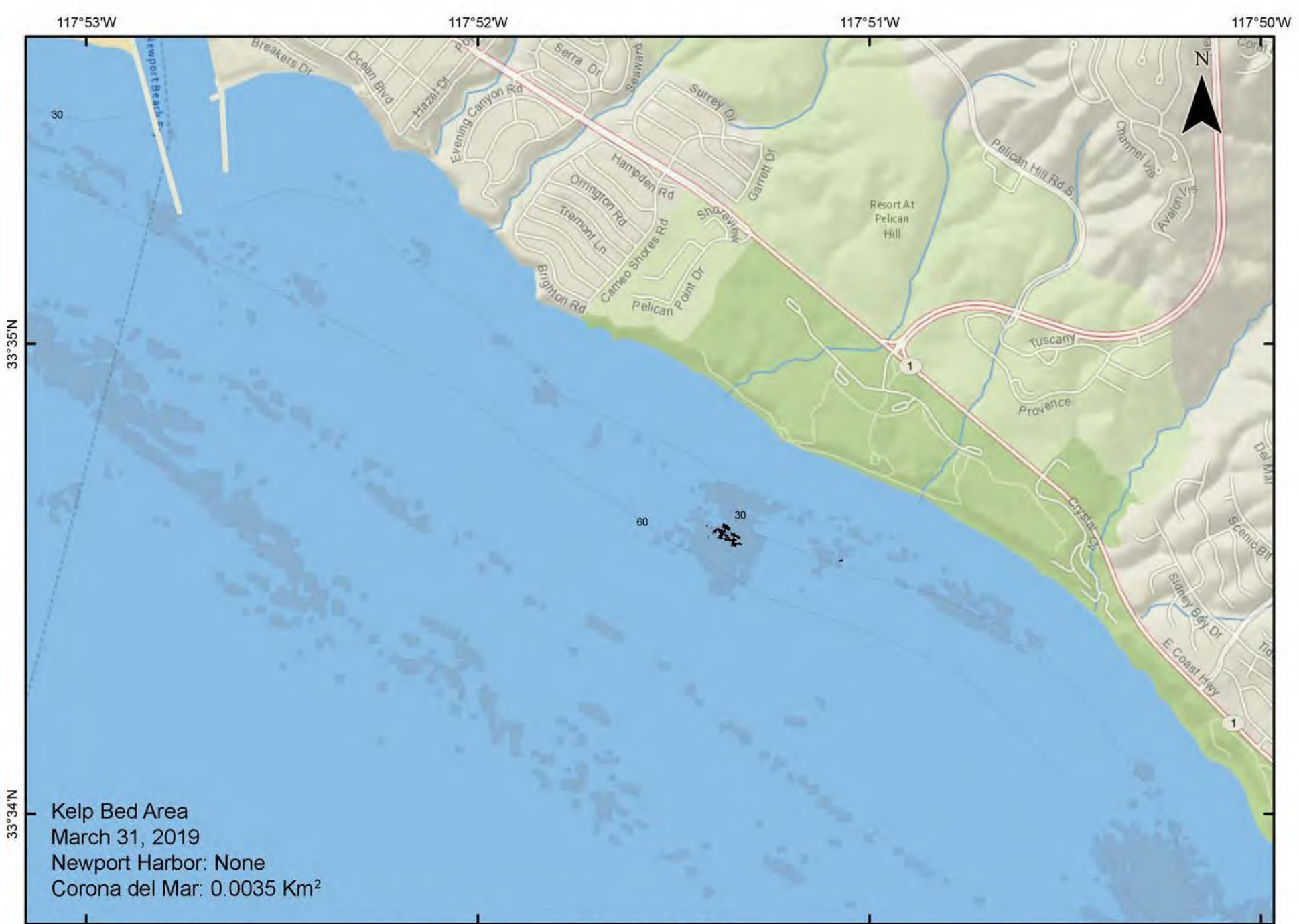
1:24,000



- Depth contours in feet
- Kelp
  - Artificial Reef
  - Discharge Structure
  - Hard Substrate
  - Isobath
  - Kelp Bed Divide

**Appendix A.40  
 Newport Harbor**





1:24,000



- Depth contours in feet
- Kelp
  - Isobath
  - Kelp Bed Divide
  - Artificial Reef
  - Discharge Structure
  - Hard Substrate

**Appendix A.41  
Corona del Mar North**

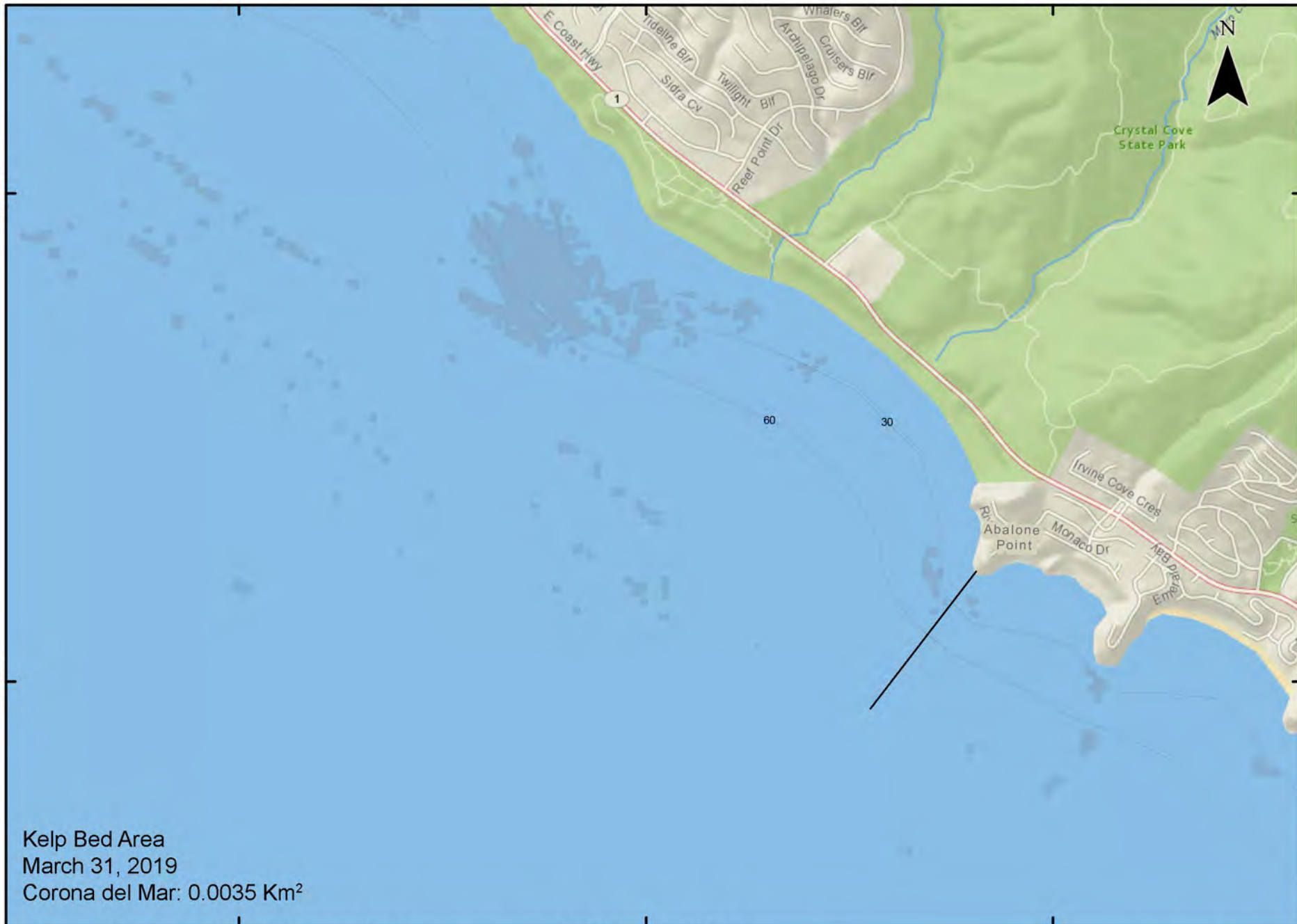
117°51'W

117°50'W

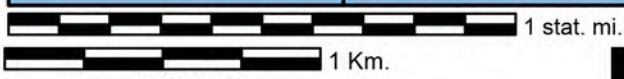
117°49'W

33°34'N

33°33'N









Kelp Bed Area  
 March 31, 2019  
 Corona del Mar: 0.0035 Km<sup>2</sup>



1:24,000



- |   |                 |  |                     |
|---|-----------------|--|---------------------|
|  | Kelp            |  | Artificial Reef     |
|  | Isobath         |  | Discharge Structure |
|  | Kelp Bed Divide |  | Hard Substrate      |

**Appendix A.42**  
**Corona del Mar South**



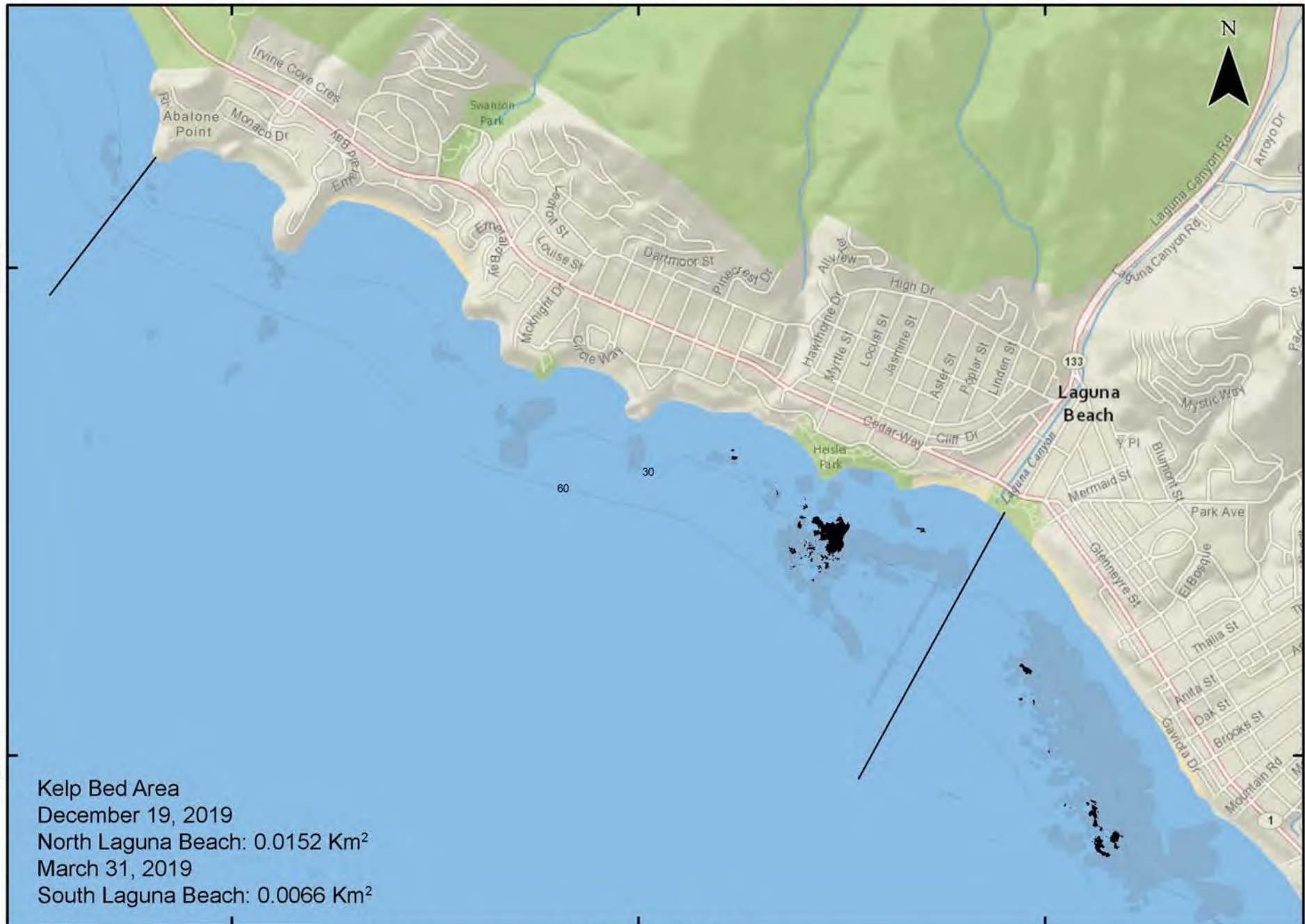
117°49'W

117°48'W

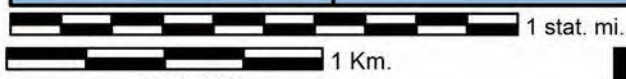
117°47'W

33°33'N

33°32'N









Kelp Bed Area  
 December 19, 2019  
 North Laguna Beach: 0.0152 Km<sup>2</sup>  
 March 31, 2019  
 South Laguna Beach: 0.0066 Km<sup>2</sup>



1:24,000



-  Kelp
-  Artificial Reef
-  Isobath
-  Discharge Structure
-  Kelp Bed Divide
-  Hard Substrate

### Appendix A.43 Laguna North

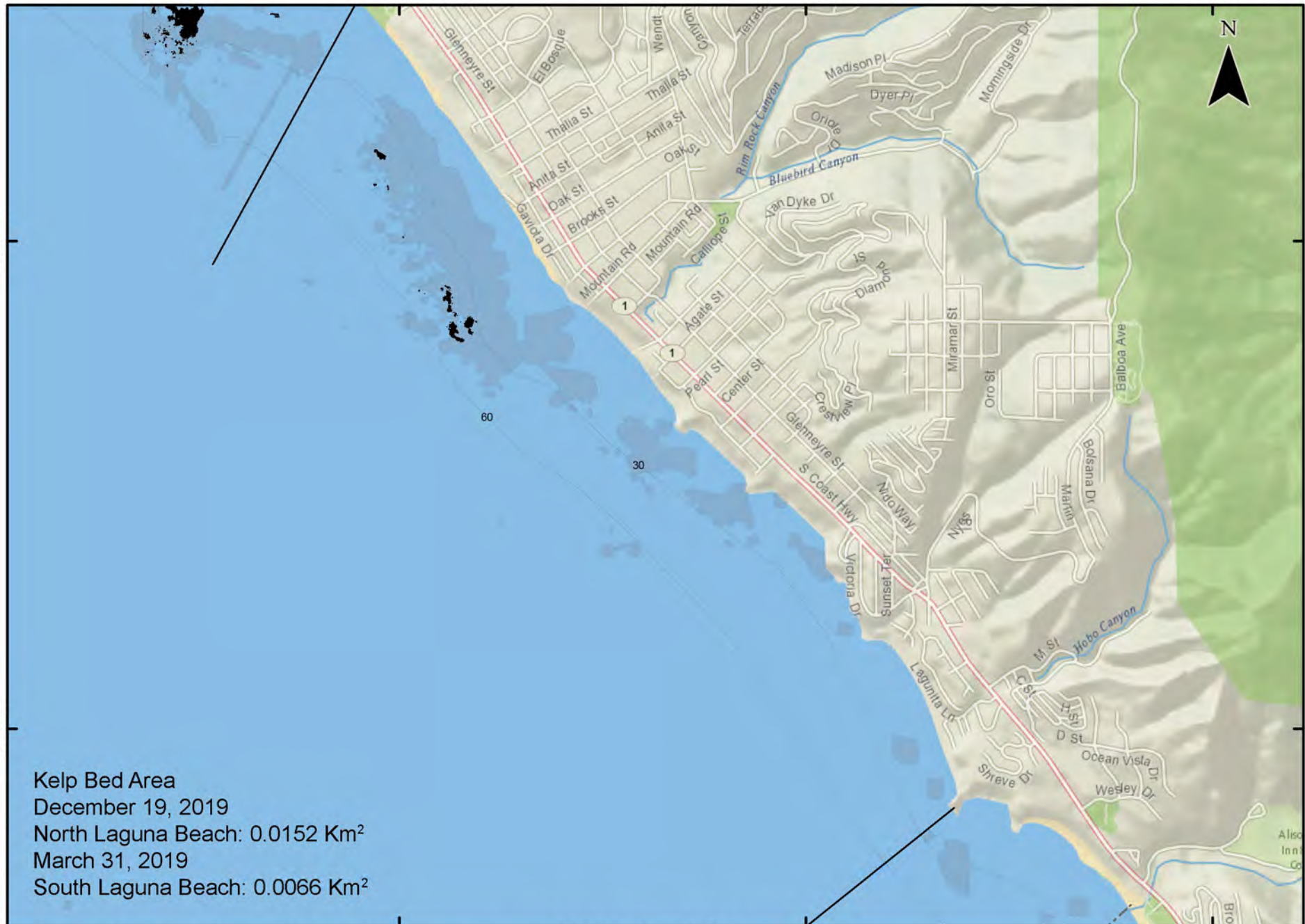
117°47'W

117°46'W

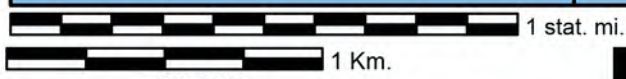
117°45'W

33°32'N

33°31'N



Kelp Bed Area  
 December 19, 2019  
 North Laguna Beach: 0.0152 Km<sup>2</sup>  
 March 31, 2019  
 South Laguna Beach: 0.0066 Km<sup>2</sup>



1:24,000



- Kelp
- Artificial Reef
- Discharge Structure
- Isobath
- Hard Substrate
- Kelp Bed Divide

## Appendix A.44 Laguna South



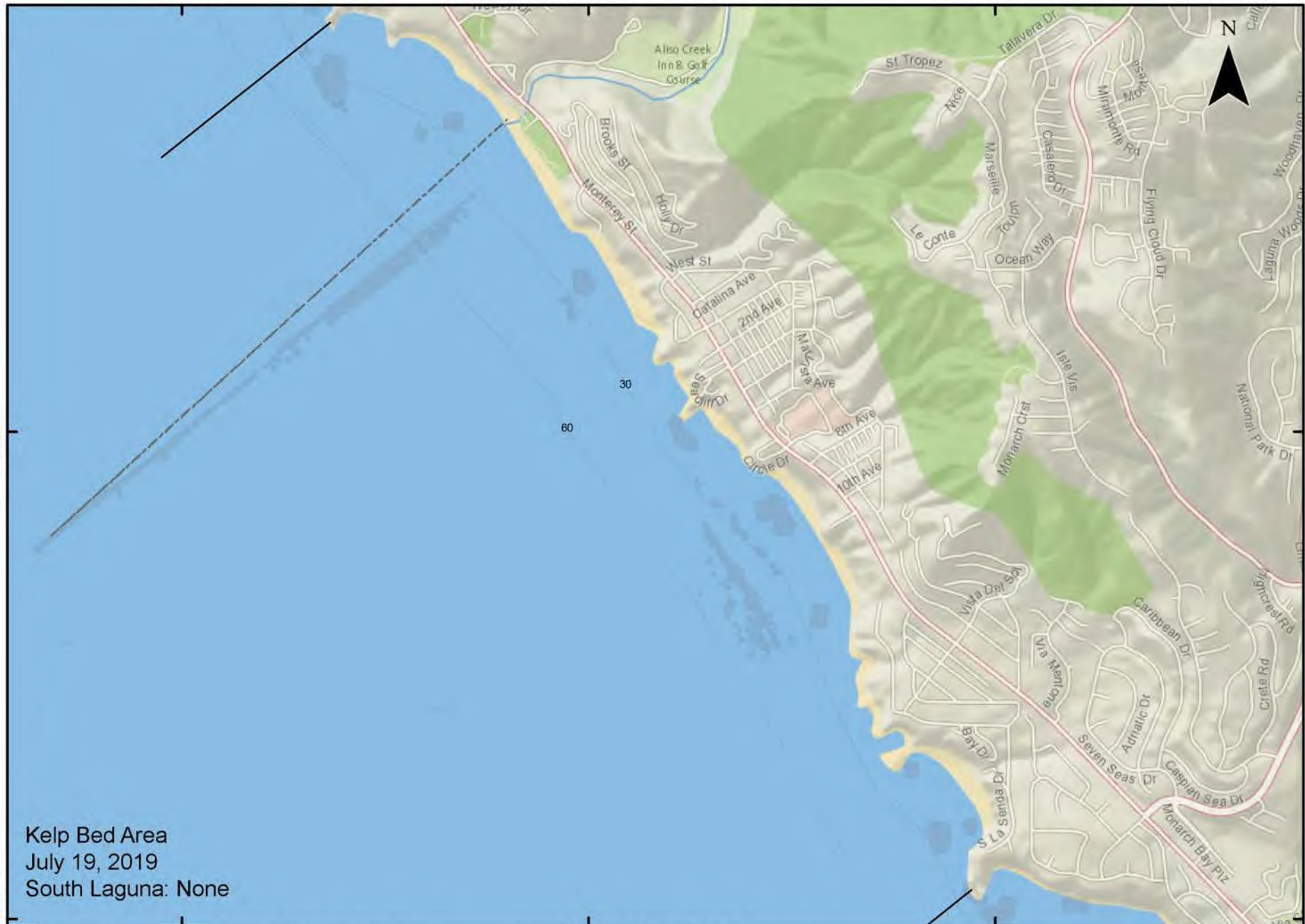
117°46'W

117°45'W

117°44'W

33°30'N

33°29'N









Kelp Bed Area  
July 19, 2019  
South Laguna: None

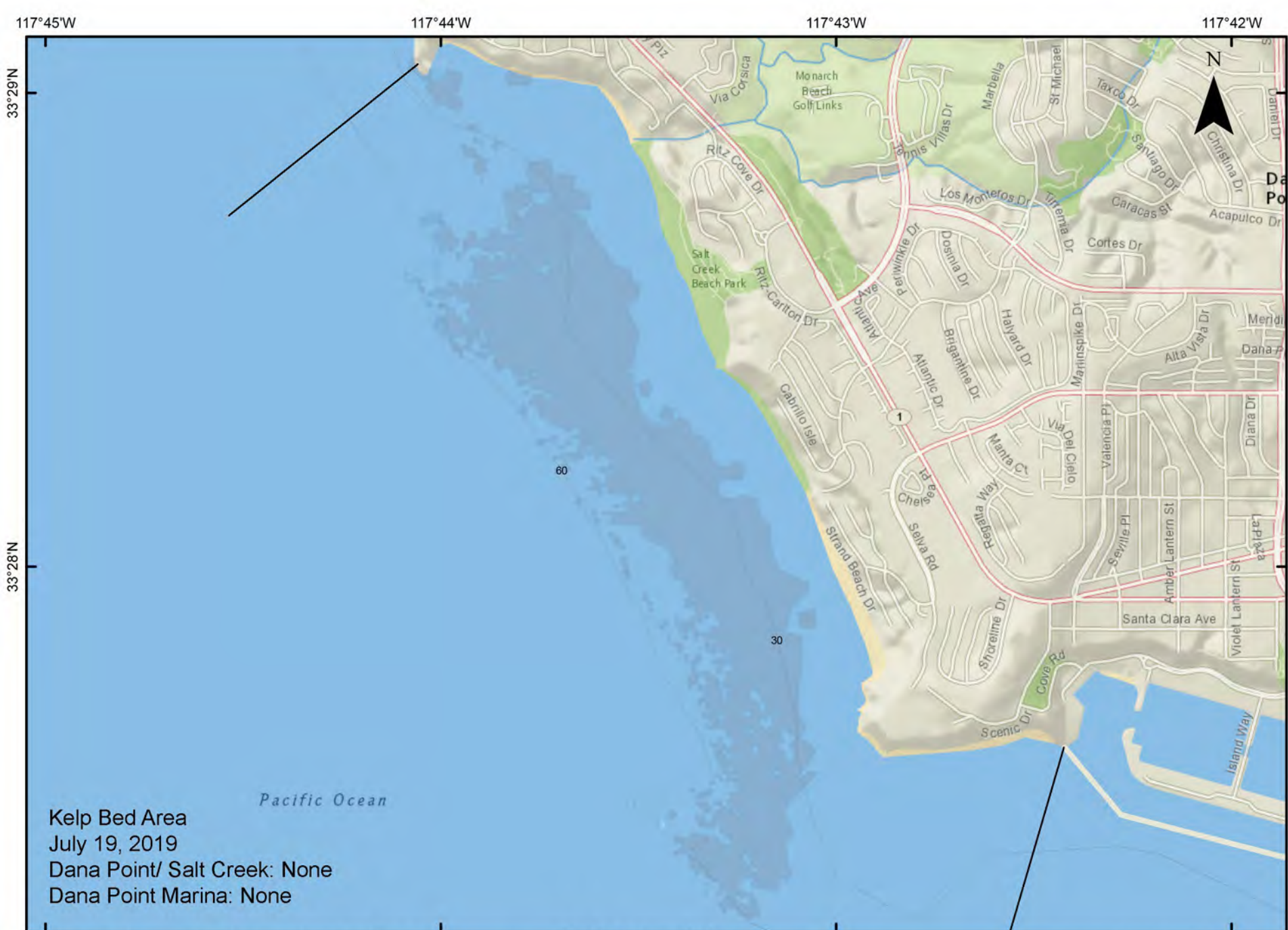


1:24,000

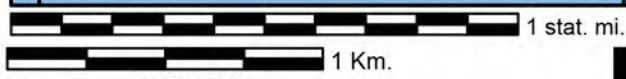


-  Kelp
-  Artificial Reef
-  Isobath
-  Discharge Structure
-  Kelp Bed Divide
-  Hard Substrate

### Appendix A.45 Laguna South



Kelp Bed Area  
 July 19, 2019  
 Dana Point/ Salt Creek: None  
 Dana Point Marina: None



1:24,000



- Depth contours in feet
- Kelp
  - Isobath
  - Kelp Bed Divide
  - Artificial Reef
  - Discharge Structure
  - Hard Substrate

**Appendix A.46**  
**Dana Point/Salt Creek**



117°43'W

117°42'W

117°41'W

33°28'N

33°27'N



Kelp Bed Area  
 July 19, 2019  
 Dana Point/ Salt Creek: None  
 Dana Point Marina: None  
 Capistrano Beach: None



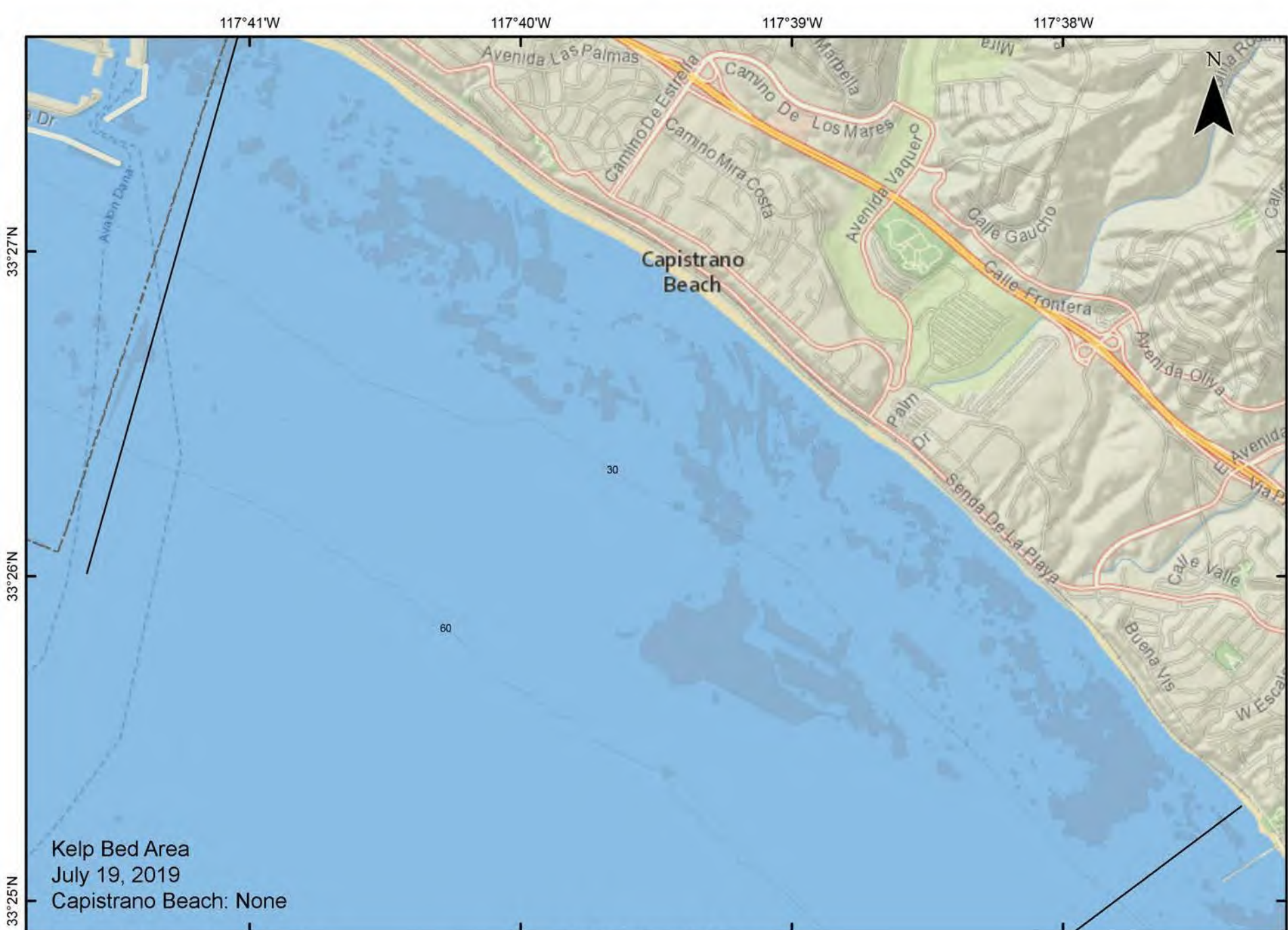
1:24,000



- Kelp
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate

**Appendix A.47**  
**Salt Creek/ Dana Point Marina/**  
**Capistrano Beach**





Kelp Bed Area  
 July 19, 2019  
 Capistrano Beach: None

1 stat. mi.

1 Km.

1:35,000



Depth contours in feet

- Kelp
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate

**Appendix A.48**  
**Capistrano Beach**

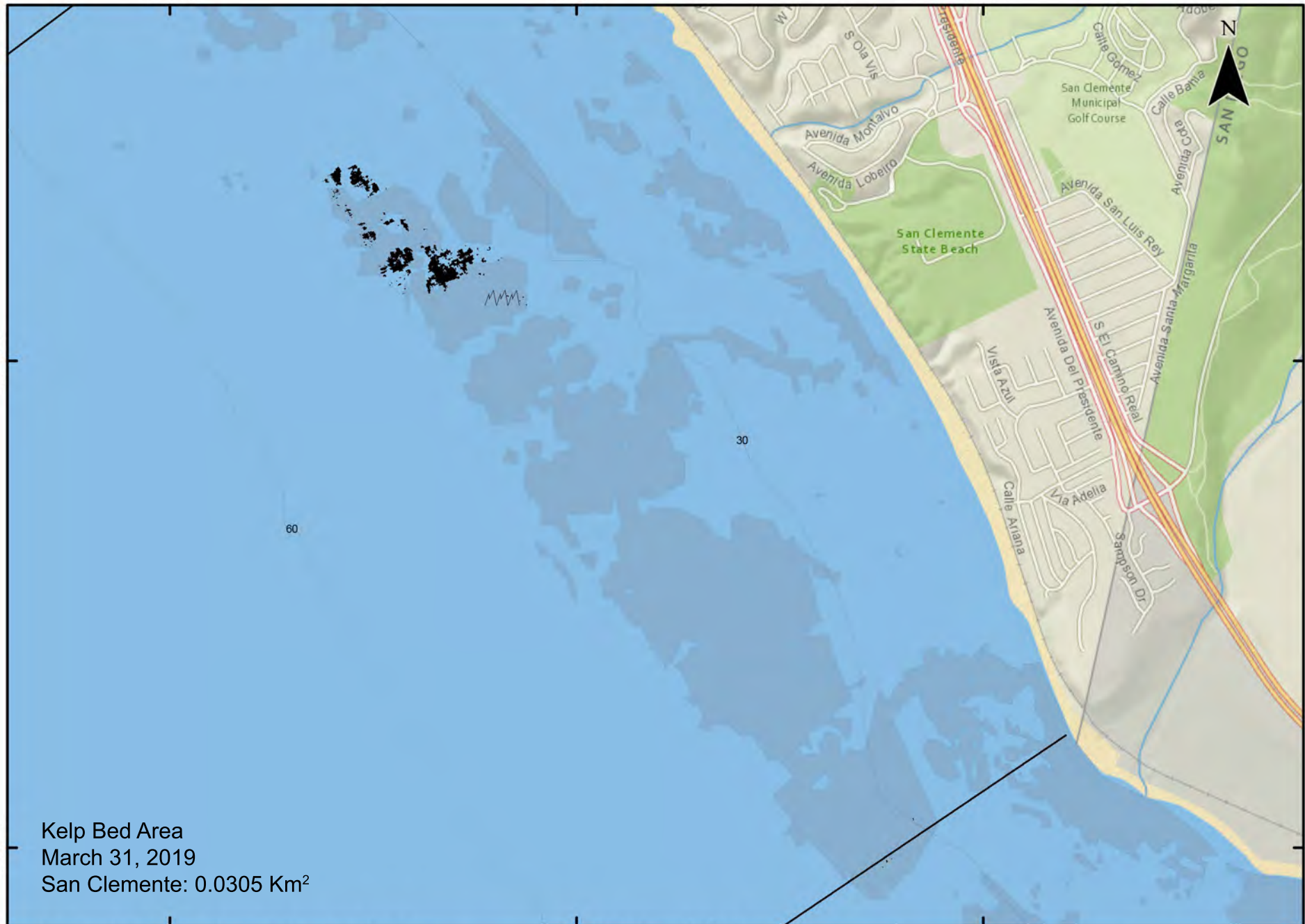
117°38'W

117°37'W

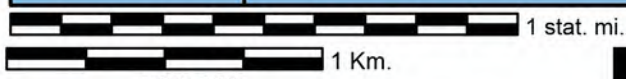
117°36'W

33°24'N

33°23'N



Kelp Bed Area  
 March 31, 2019  
 San Clemente: 0.0305 Km<sup>2</sup>



1:24,000



- Kelp
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate

**Appendix A.49  
 San Clemente**



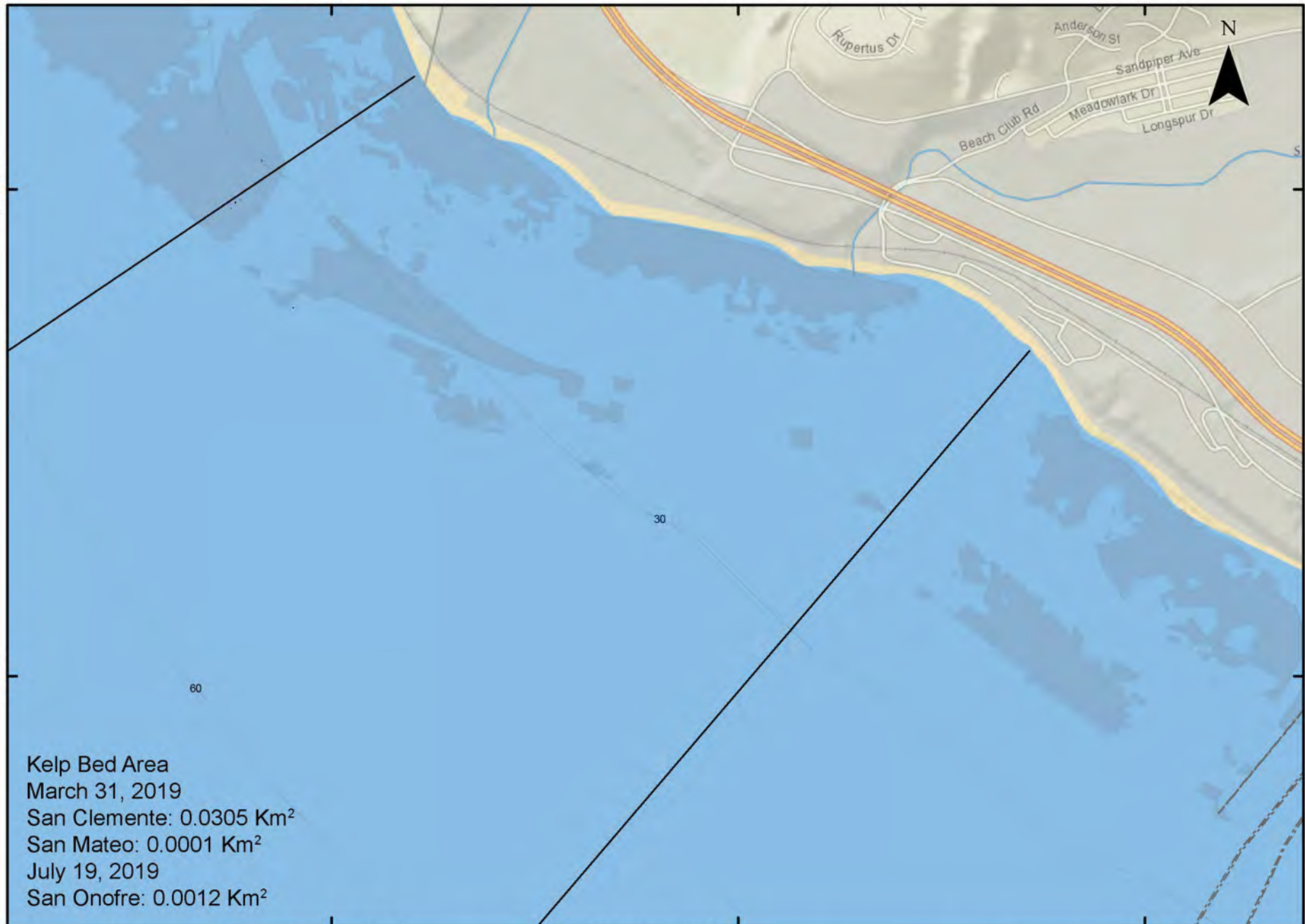
117°36'W

117°35'W

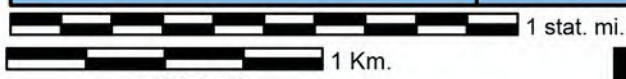
117°34'W

33°23'N

33°22'N



Kelp Bed Area  
 March 31, 2019  
 San Clemente: 0.0305 Km<sup>2</sup>  
 San Mateo: 0.0001 Km<sup>2</sup>  
 July 19, 2019  
 San Onofre: 0.0012 Km<sup>2</sup>



1:24,000

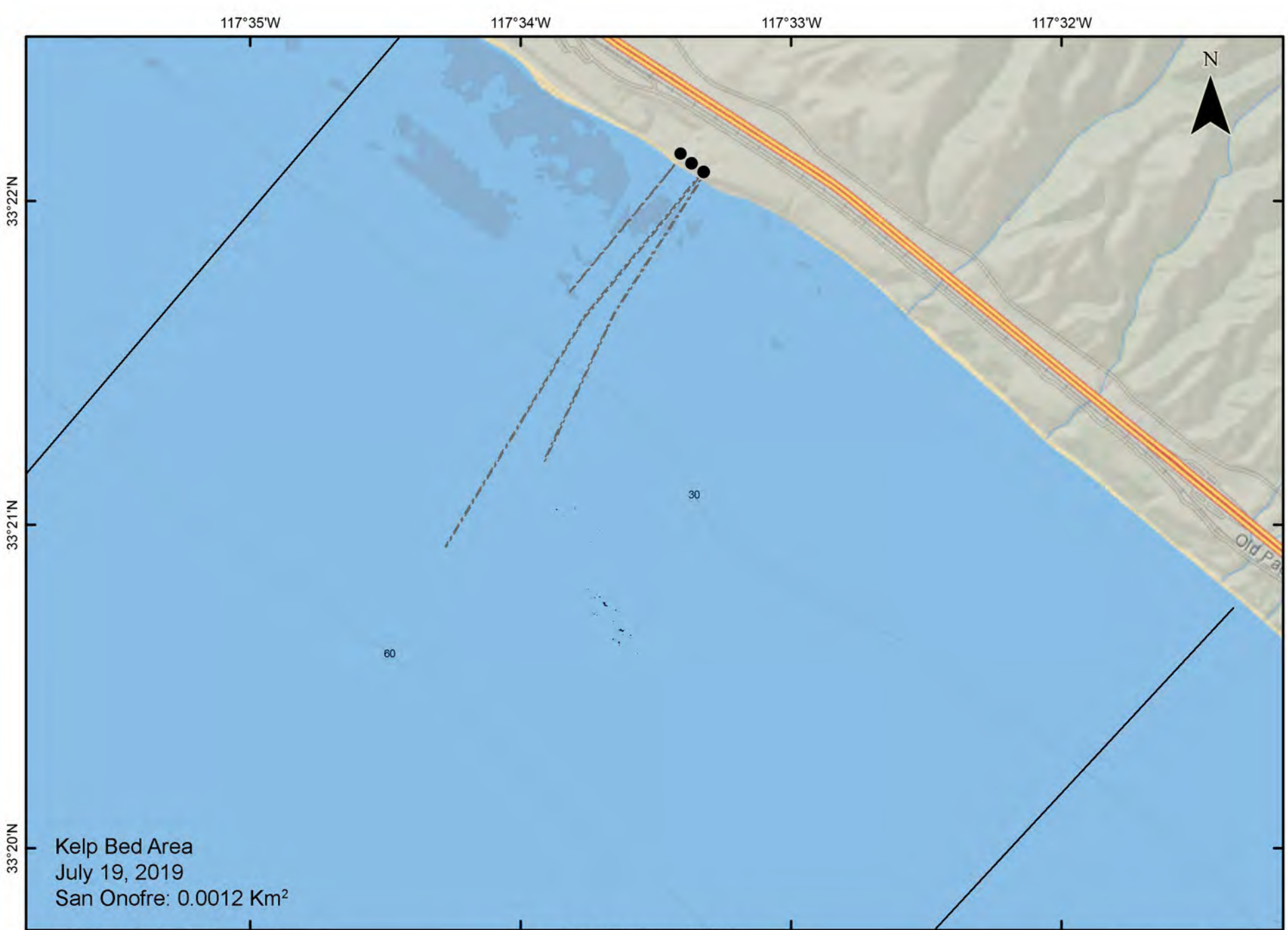


Depth contours in feet

- Kelp
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate

**Appendix A.50**  
**San Clemente/ San Mateo/ San Onofre**





- Kelp
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef



Depth contours in feet



-  Kelp
-  Artificial Reef
-  Isobath
-  Discharge Structure
-  Kelp Bed Divide
-  Hard Substrate

**Appendix A.52  
Pendleton Reef**

117°31'W

117°30'W

117°29'W

117°28'W

33°19'N

33°18'N



Kelp Bed Area  
July 19, 2019  
Horno Canyon: None  
Barn Kelp: None



1:24,000

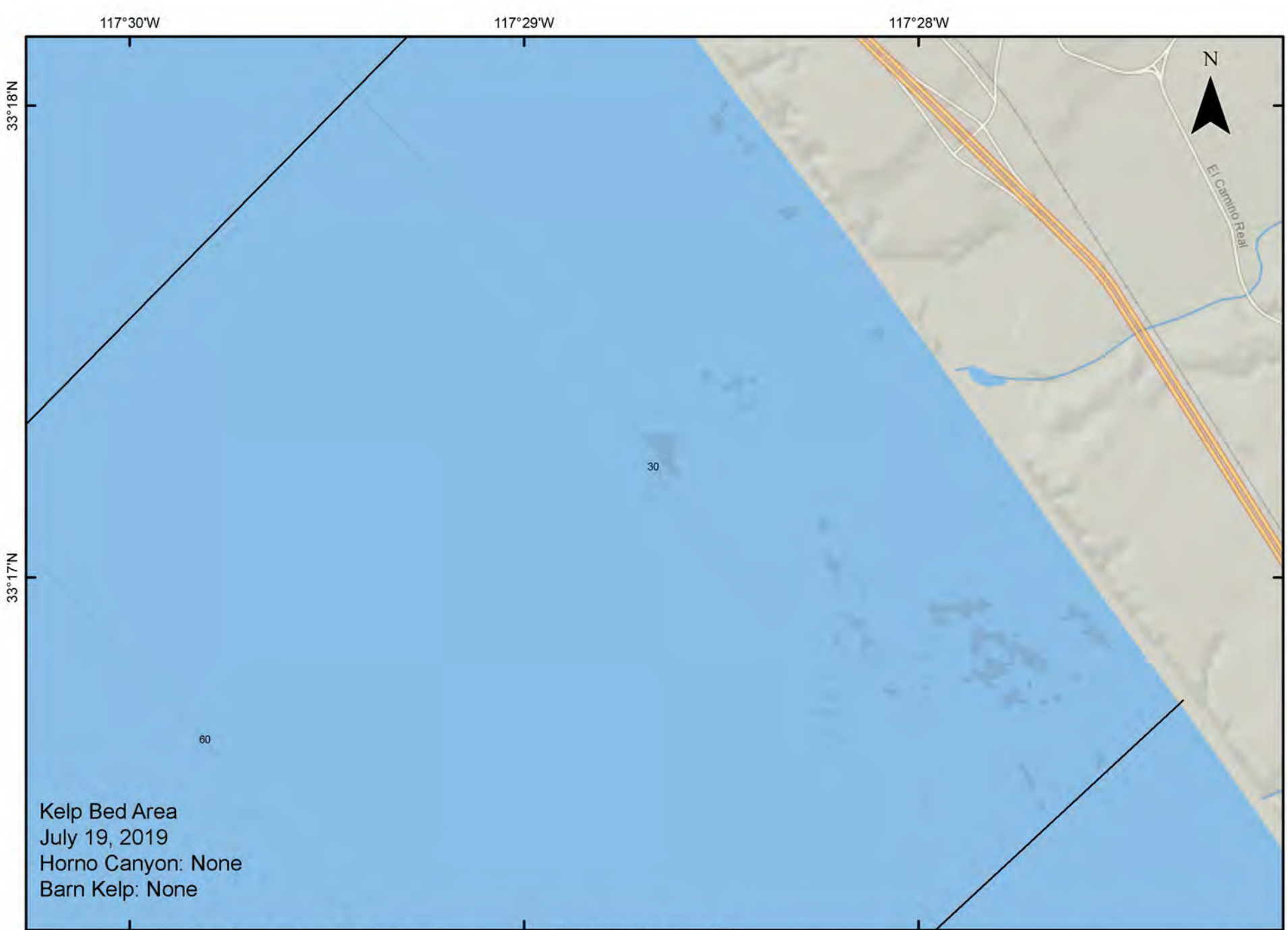


Depth contours in feet

-  Kelp
-  Artificial Reef
-  Isobath
-  Discharge Structure
-  Kelp Bed Divide
-  Hard Substrate

### Appendix A.53 Horno Canyon/ Barn Kelp





Kelp Bed Area  
 July 19, 2019  
 Horno Canyon: None  
 Barn Kelp: None



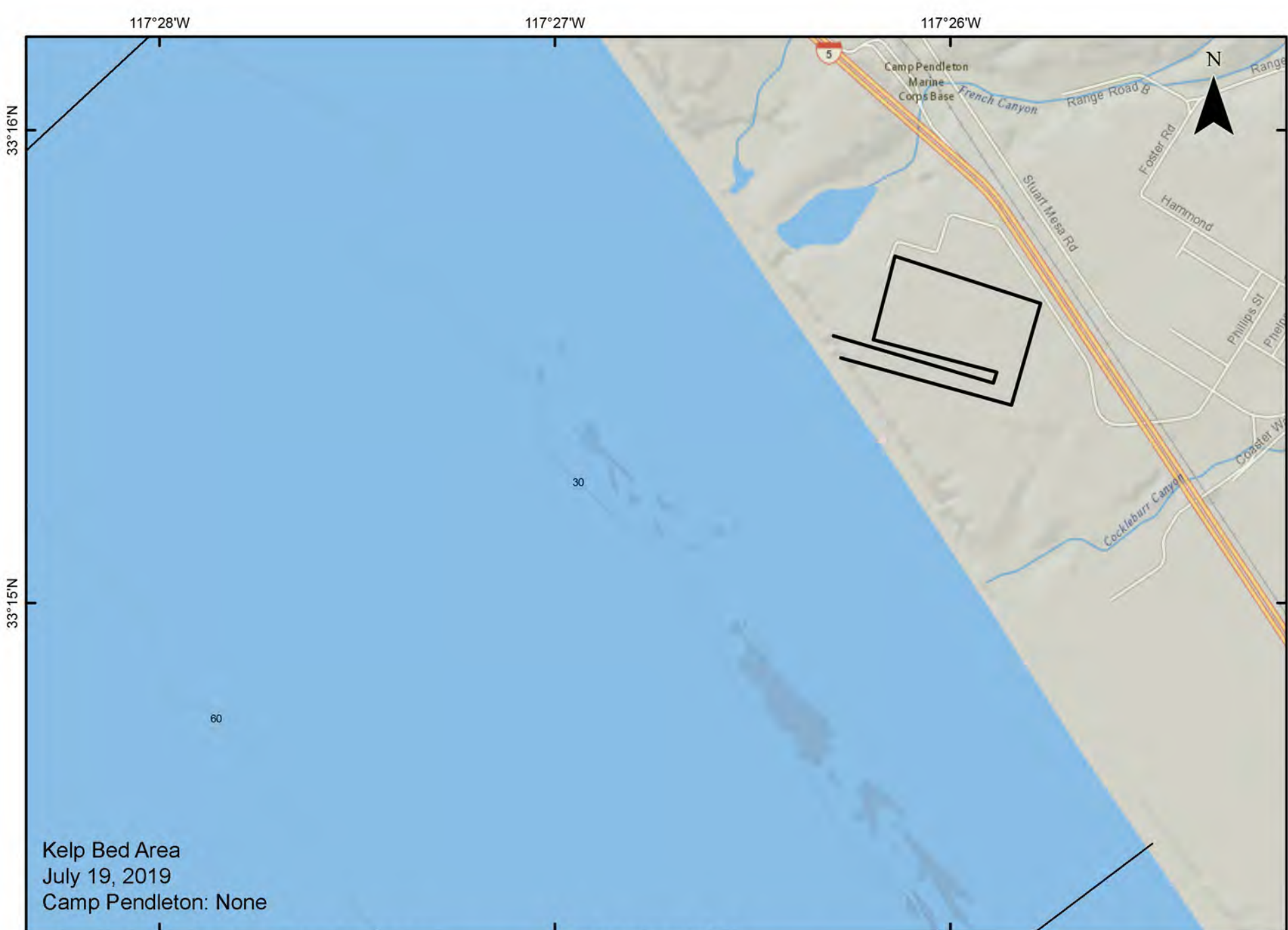
1:24,000



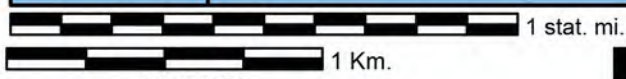
Depth contours in feet

-  Kelp
-  Artificial Reef
-  Isobath
-  Discharge Structure
-  Kelp Bed Divide
-  Hard Substrate

**Appendix A.54**  
**Horno Canyon/ Barn Kelp**



Kelp Bed Area  
 July 19, 2019  
 Camp Pendleton: None



1:24,000



Depth contours in feet

- Kelp
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef

**Appendix A.55**  
**Camp Pendleton**

117°27'W 117°26'W 117°25'W 117°24'W

33°14'N  
33°13'N



Kelp Bed Area  
 July 19, 2019  
 Santa Margarita: None  
 Oceanside Harbor: None



1:24,000



- Depth contours in feet
- Kelp
  - Artificial Reef
  - Isobath
  - Discharge Structure
  - Kelp Bed Divide
  - Hard Substrate

**Appendix A.56**  
**Santa Margarita/ Oceanside Harbor**



117°25'W

117°24'W

33°13'N

33°12'N

33°11'N



Kelp Bed Area  
July 19, 2019  
Oceanside Harbor: None




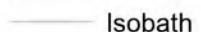




1 stat. mi. Depth contours in feet

1:24,000

### Appendix A.57 Oceanside Harbor and Pier



-  Kelp 2018
-  Artificial Reef
-  Discharge Structure
-  Isobath
-  Kelp Bed Divide
-  Hard Substrate



Kelp Bed Area  
 July 19, 2019  
 Oceanside Harbor: None  
 North Carlsbad: None

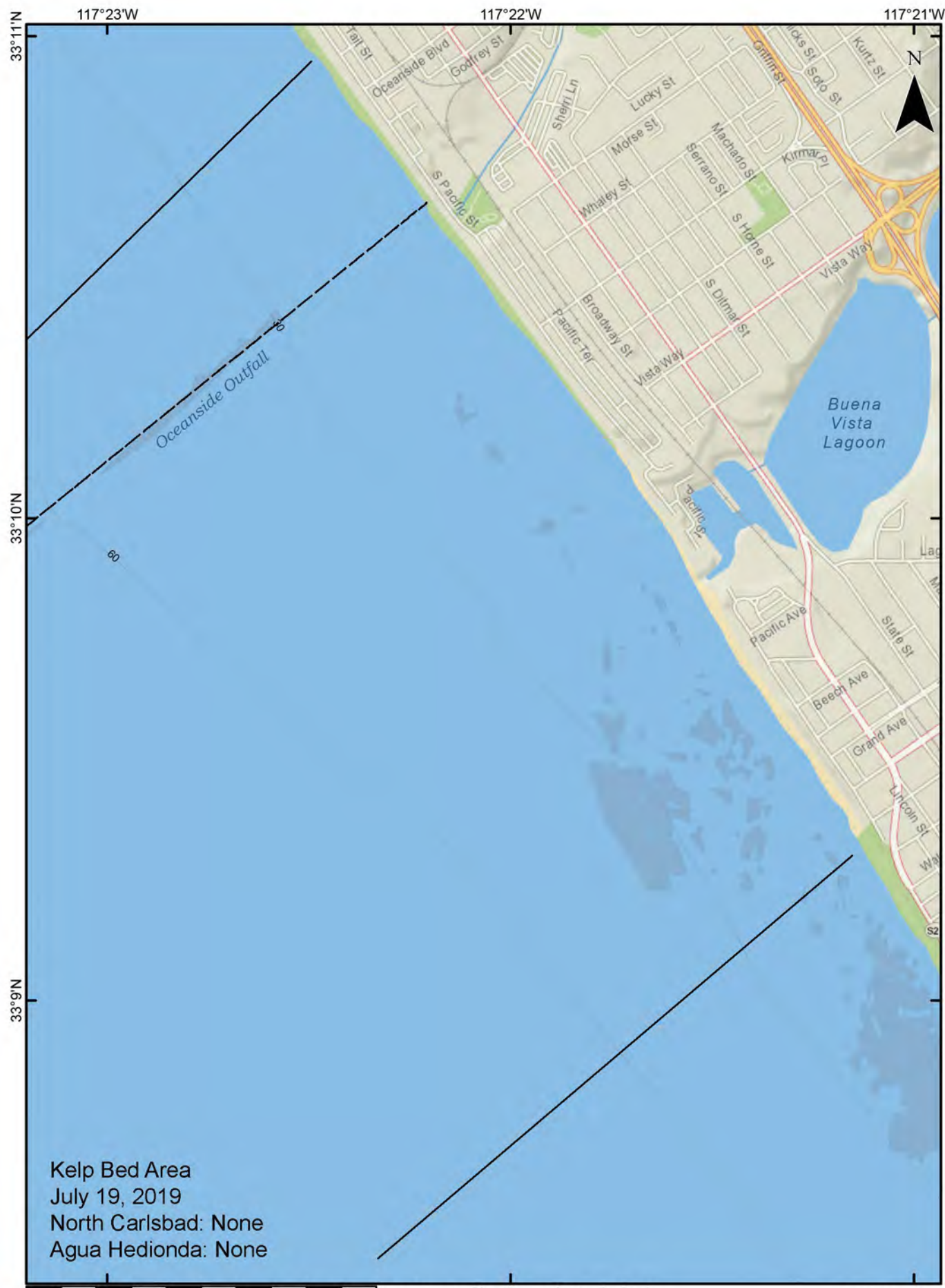


**Appendix A.58**  
**Oceanside Harbor/  
 Pier/ North Carlsbad**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate





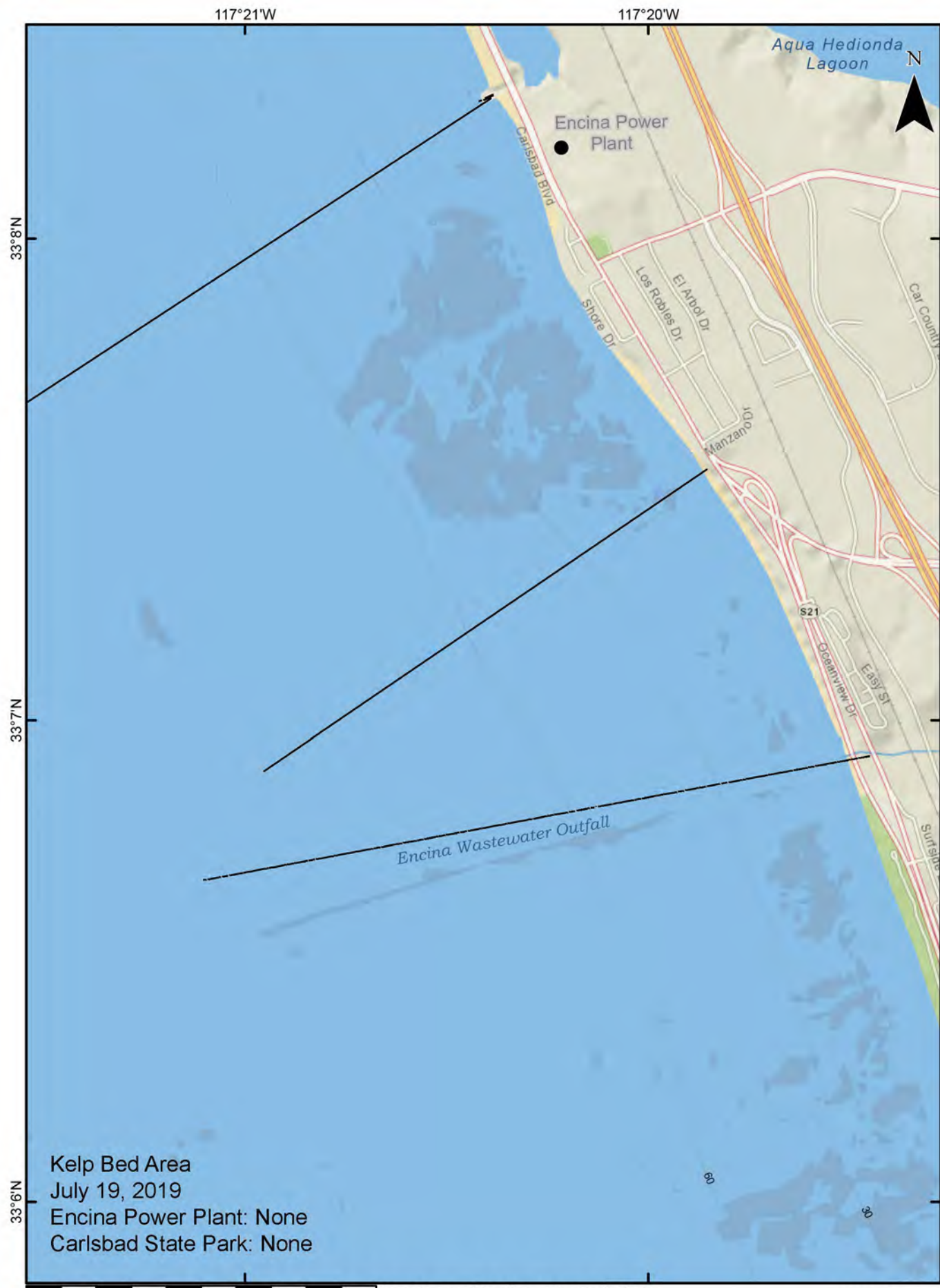
Kelp Bed Area  
 July 19, 2019  
 North Carlsbad: None  
 Agua Hedionda: None

1 stat. mi. Depth contours in feet  
 1 Km. 1:24,000

**Appendix A.59**  
**North Carlsbad/**  
**Buena Vista Lagoon/**  
**Agua Hedionda**



- Kelp 2018
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Hard Substrate



Kelp Bed Area  
 July 19, 2019  
 Encina Power Plant: None  
 Carlsbad State Park: None



**Appendix A.60**  
**Encina Power Plant/**  
**Carlsbad State Park**



- Kelp 2018
- Isobath
- Discharge Structure
- Kelp Bed Divide
- Hard Substrate
- Artificial Reef



117°20'W

117°19'W



33°7'N

33°6'N

Encina Wastewater Outfall

Kelp Bed Area  
July 19, 2019  
Encina Power Plant: None  
Carlsbad State Park: None

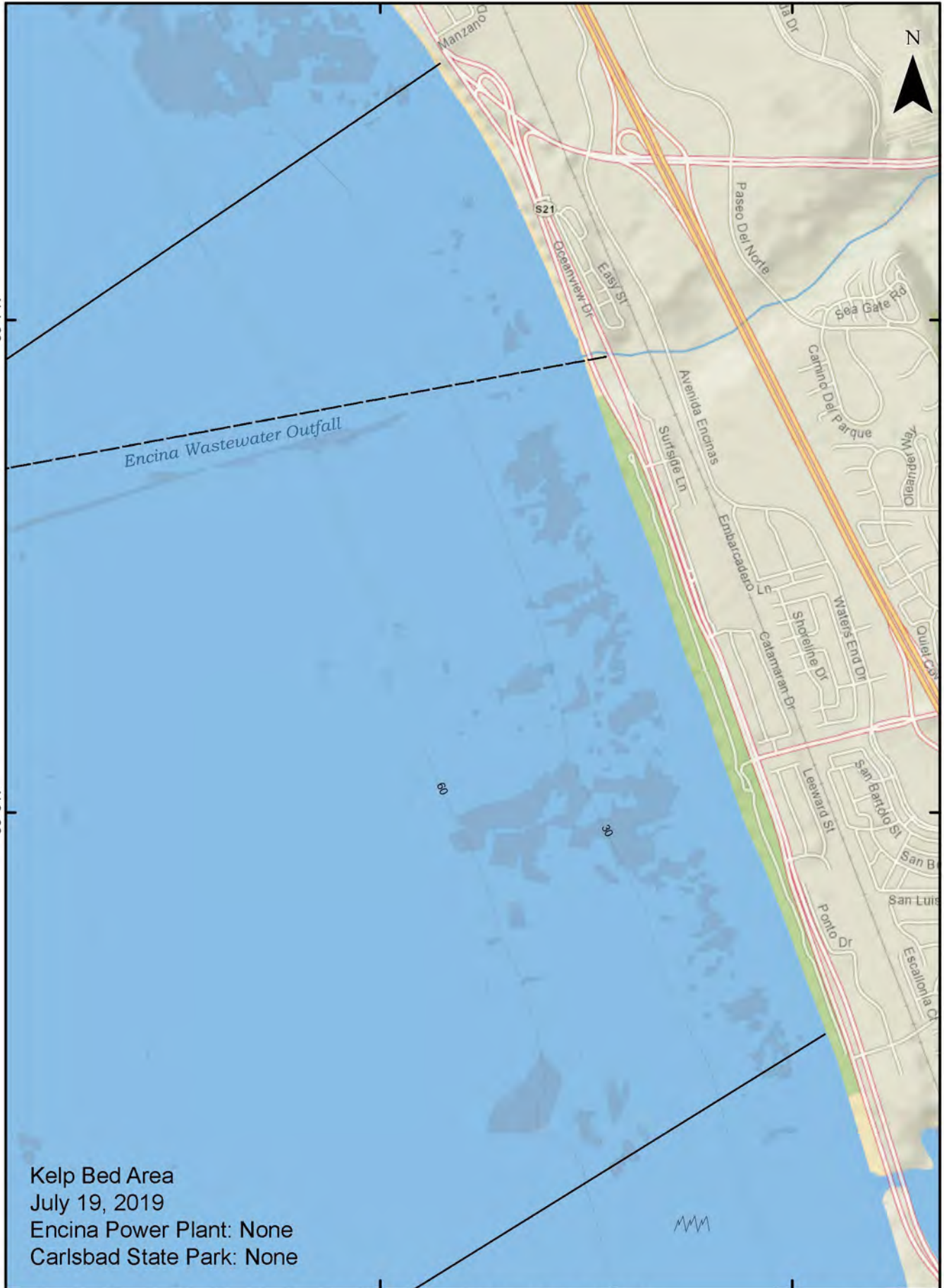


1 stat. mi. Depth contours in feet  
1:24,000

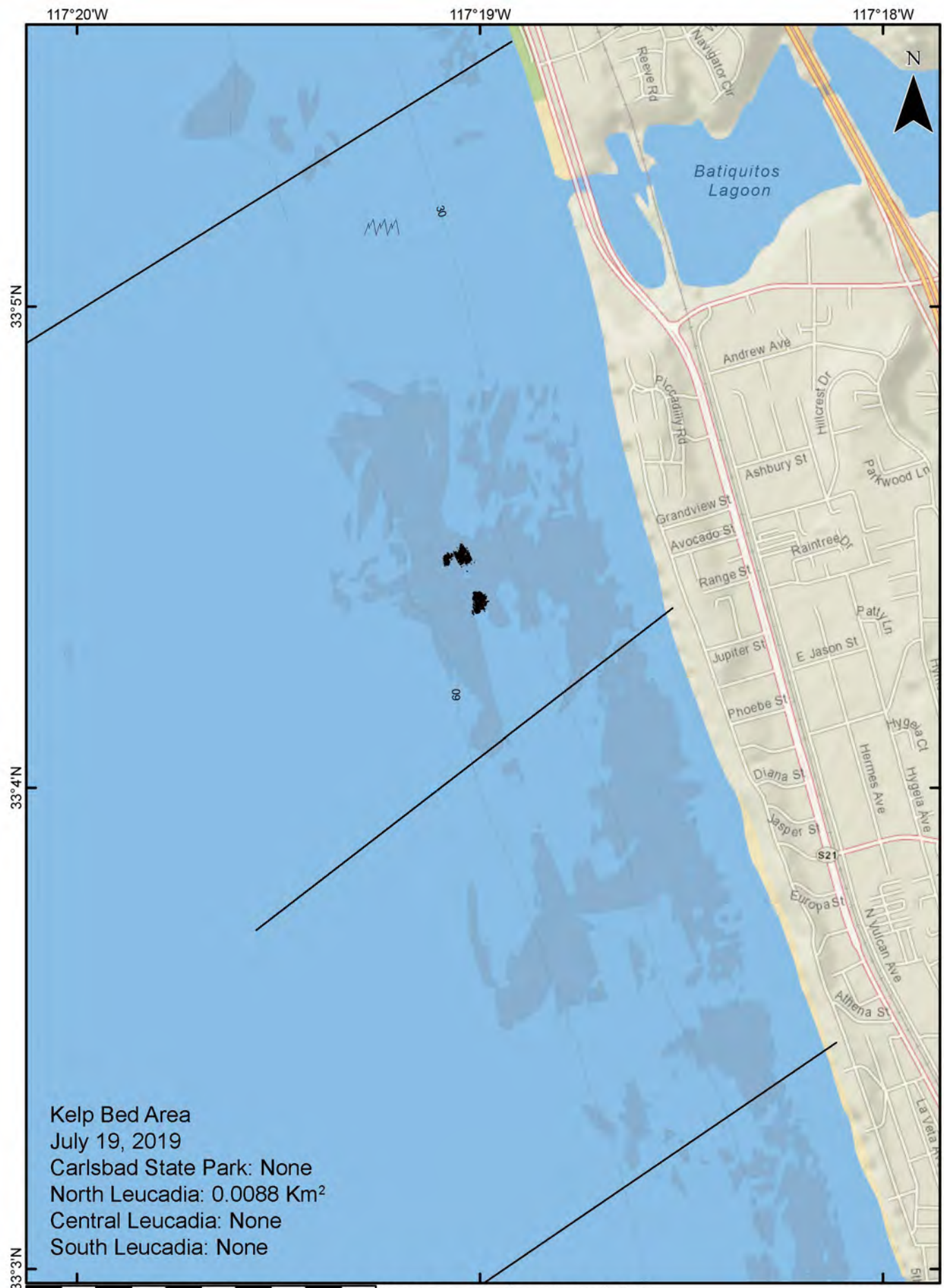
### Appendix A.61 Encina Power Plant/ Carlsbad State Park



- Kelp 2018
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate







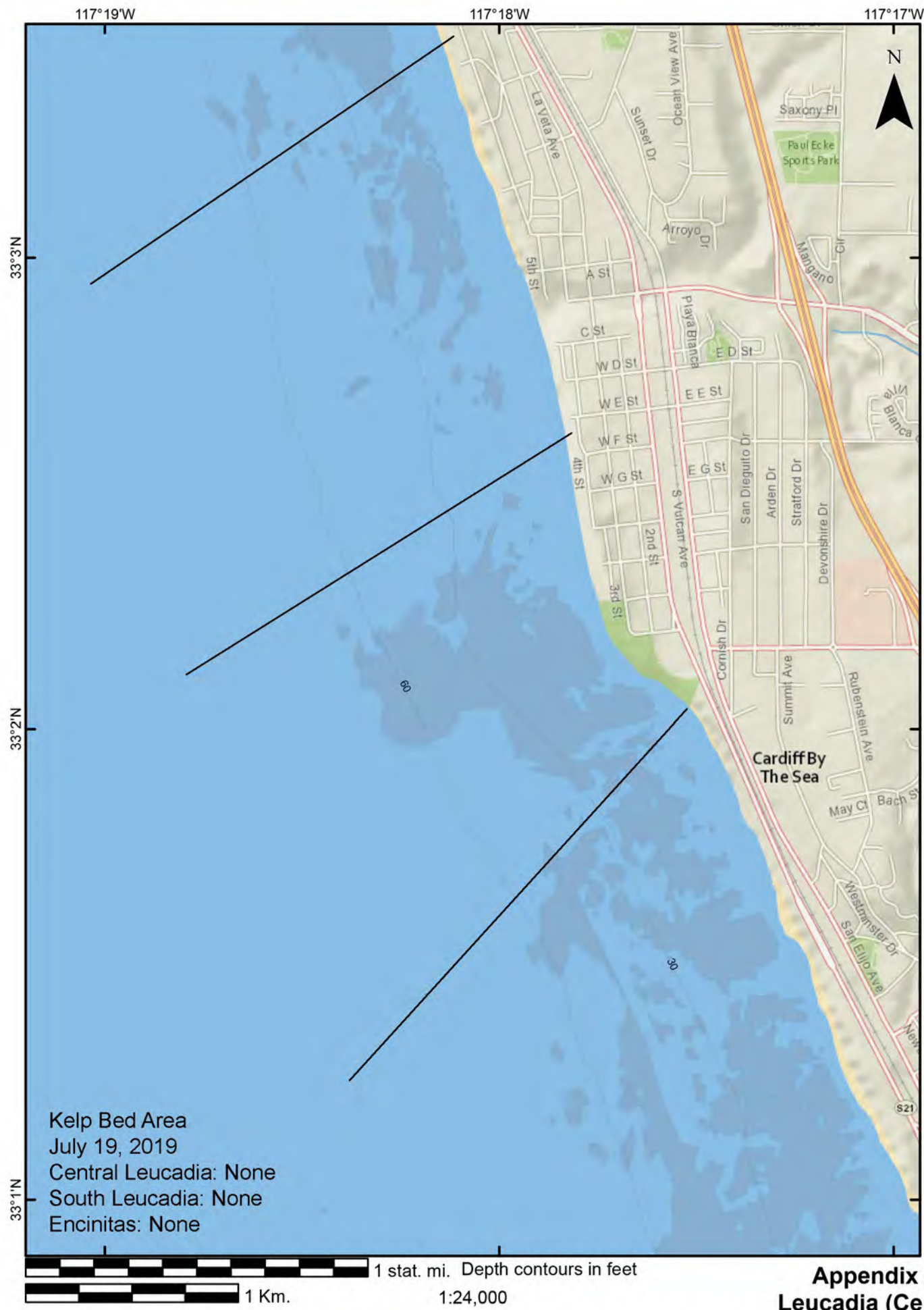
Kelp Bed Area  
 July 19, 2019  
 Carlsbad State Park: None  
 North Leucadia: 0.0088 Km<sup>2</sup>  
 Central Leucadia: None  
 South Leucadia: None

1 stat. mi. Depth contours in feet  
 1 Km. 1:24,000

**Appendix A.62  
 Leucadia (North,  
 Central, South)**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef



**Appendix A.63**  
**Leucadia (Central and South)/**  
**Encinitas/ Cardiff**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate



117°18'W

117°17'W

33°2'N

33°1'N

33°0'N



Cardiff By The Sea

San Elijo Lagoon

San Elijo Lagoon

Kelp Bed Area  
July 19, 2019  
Encinitas: None  
Cardiff: None  
Solana Beach: None



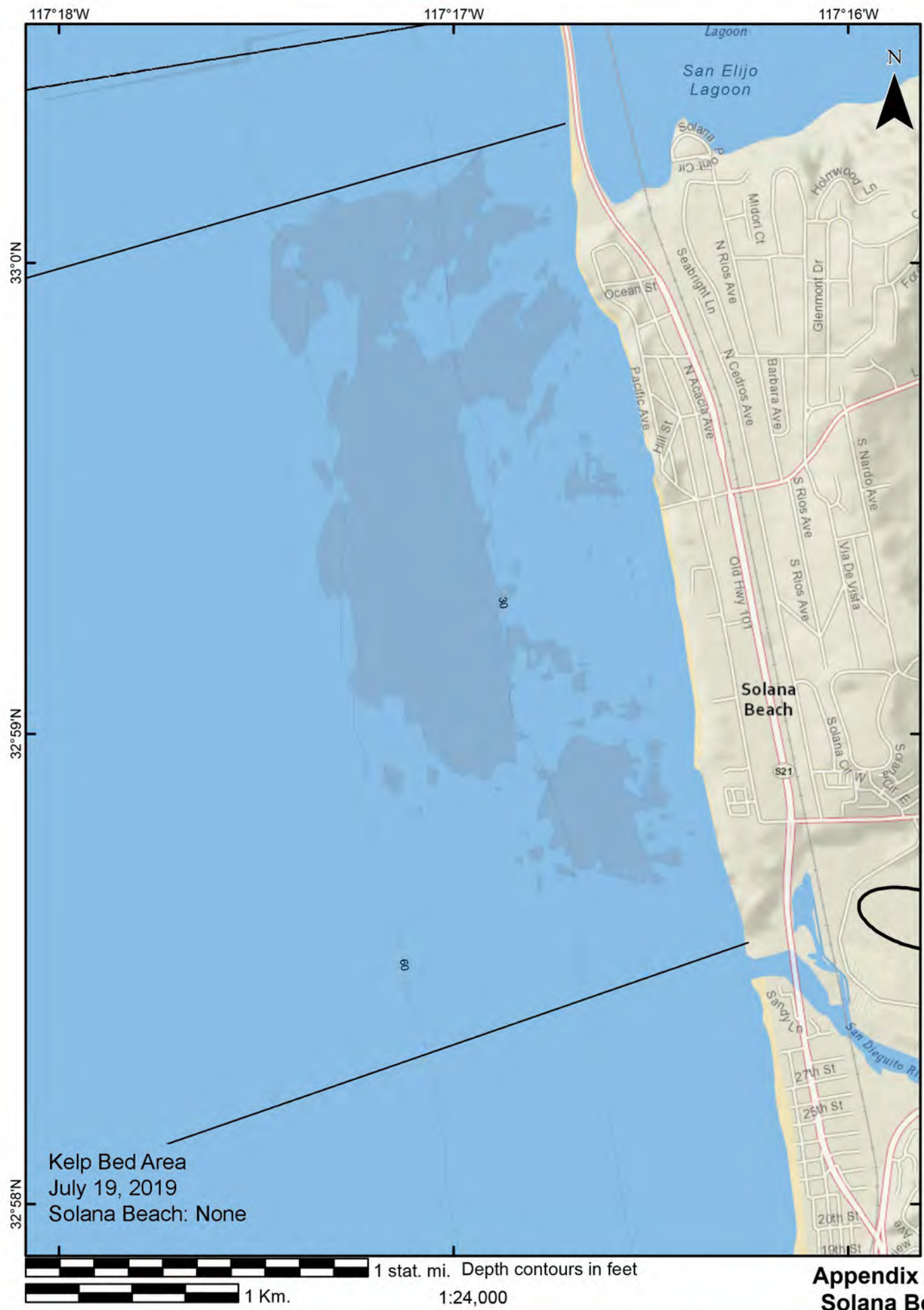
1 stat. mi. Depth contours in feet

1:24,000

### Appendix A.64 Encinitas/ Cardiff/ Solana Beach



- Kelp 2018
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate



Kelp Bed Area  
 July 19, 2019  
 Solana Beach: None







1 stat. mi. Depth contours in feet

1 Km.

1:24,000

**Appendix A.65  
 Solana Beach**

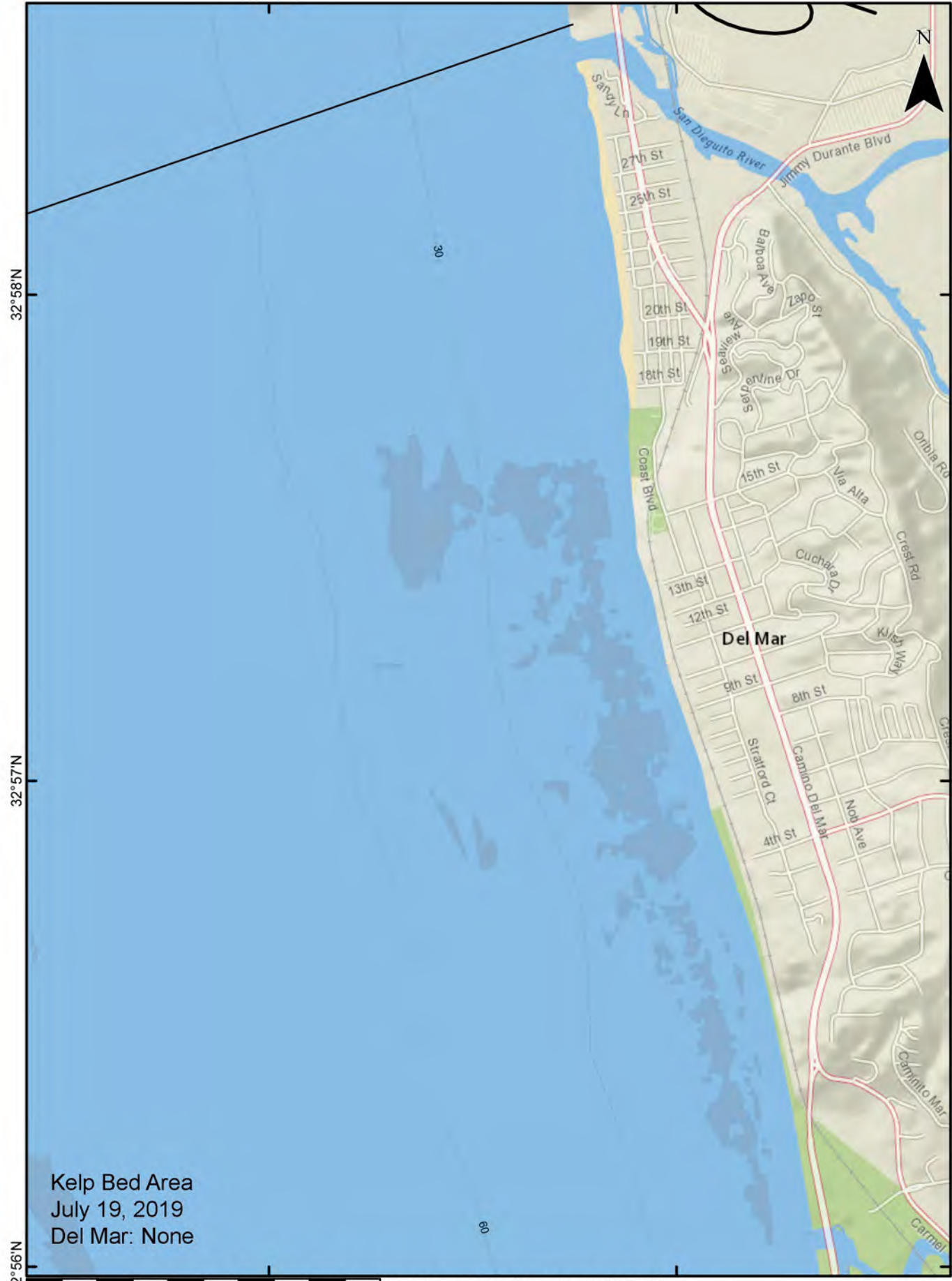


-  Kelp 2018
-  Artificial Reef
-  Discharge Structure
-  Isobath
-  Kelp Bed Divide
-  Hard Substrate



117°17'W





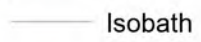


117°16'W



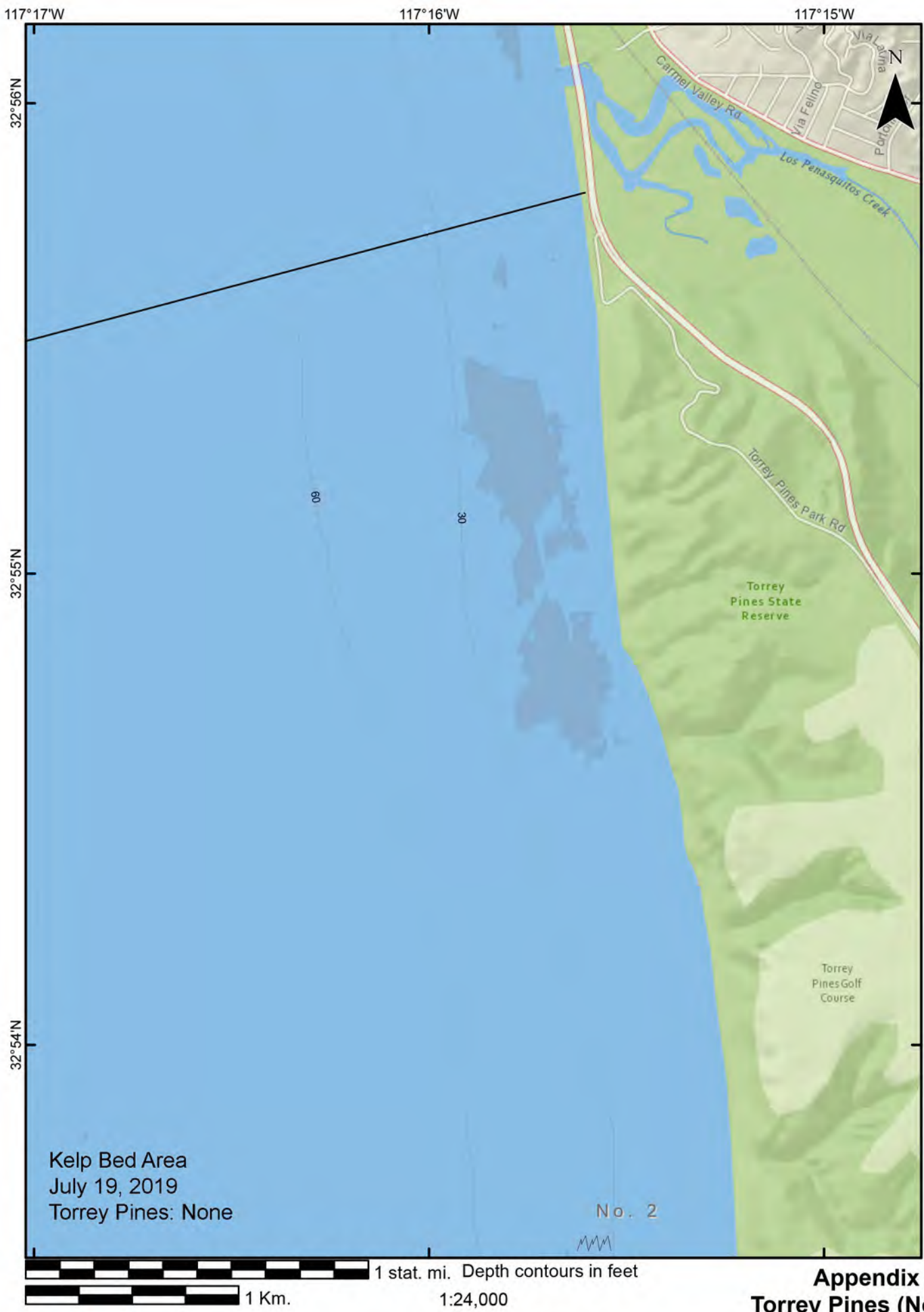
Kelp Bed Area  
 July 19, 2019  
 Del Mar: None

1 stat. mi. Depth contours in feet  
 1 Km. 1:24,000

**Appendix A.66  
 Del Mar**

-   Kelp 2018
-  Artificial Reef
-  Discharge Structure
-  Isobath
-  Kelp Bed Divide
-  Hard Substrate





Kelp Bed Area  
 July 19, 2019  
 Torrey Pines: None

**Appendix A.67  
 Torrey Pines (North)**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef

117°16'W

117°15'W



30

No. 2



Torrey Pines  
Artificial Reefs



No. 1

60

Scripps Pier

Univ. Of  
California  
San Diego

Kelp Bed Area  
July 19, 2019  
Torrey Pines: None  
La Jolla: 1.2270 Km<sup>2</sup>



1 stat. mi. Depth contours in feet

1:24,000

### Appendix A.68 Torrey Pines Reef (South)



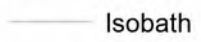
Kelp 2018



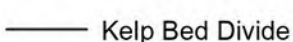
Artificial Reef



Discharge Structure



Isobath



Kelp Bed Divide



Hard Substrate



117°18'W

117°17'W

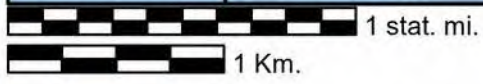
117°16'W



32°51'N  
32°50'N  
32°49'N  
32°48'N



Kelp Bed Area  
July 19, 2019  
La Jolla: 1.2270 Km<sup>2</sup>



Depth contours in feet  
1:35,000

### Appendix A.69 La Jolla



- Kelp 2018
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate



**Appendix A.70**  
**La Jolla/ Mission Bay**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef



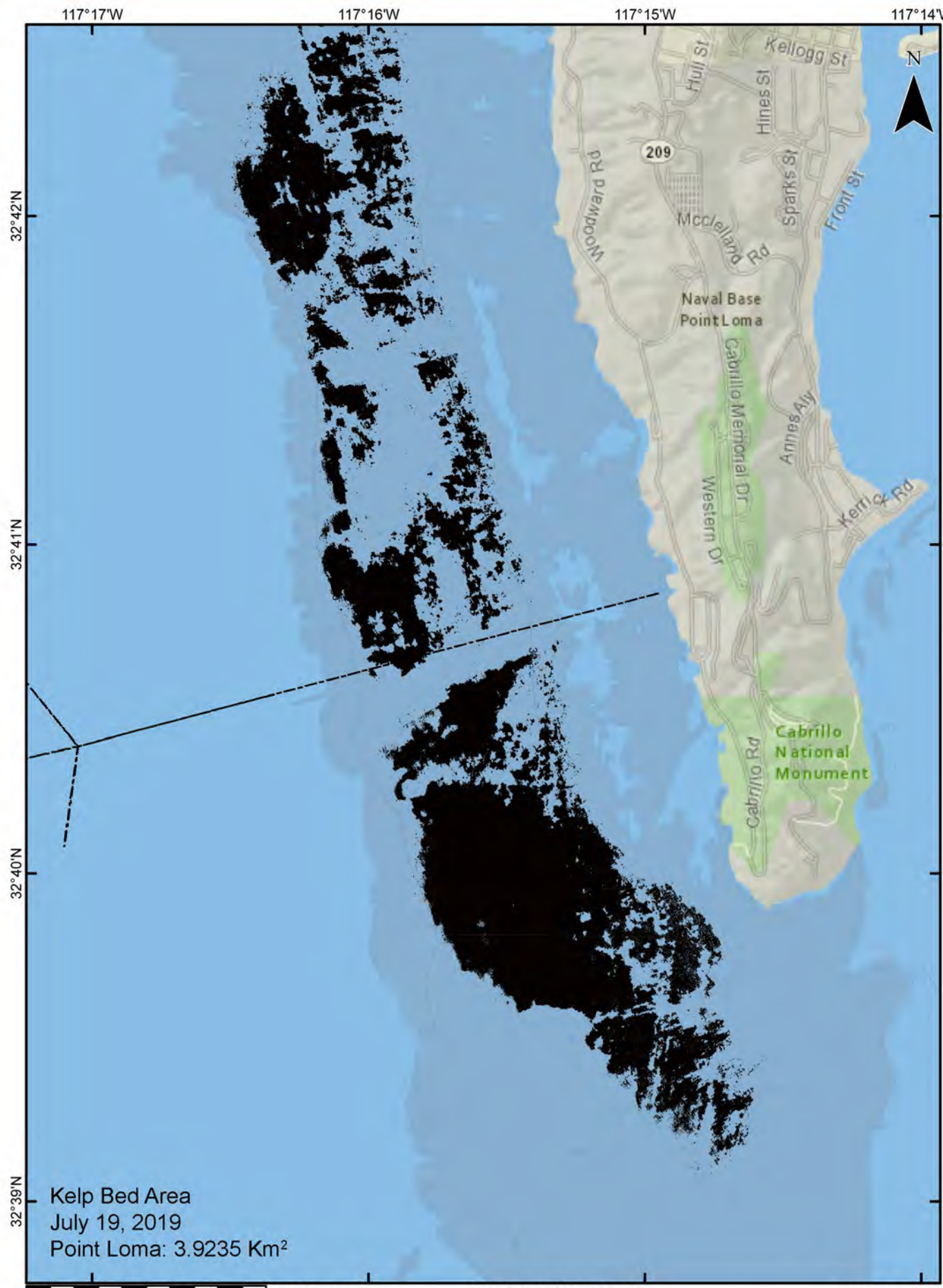


**Appendix A.71  
Point Loma (Sunset  
Cliffs)**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Discharge Structure
- Hard Substrate
- Artificial Reef





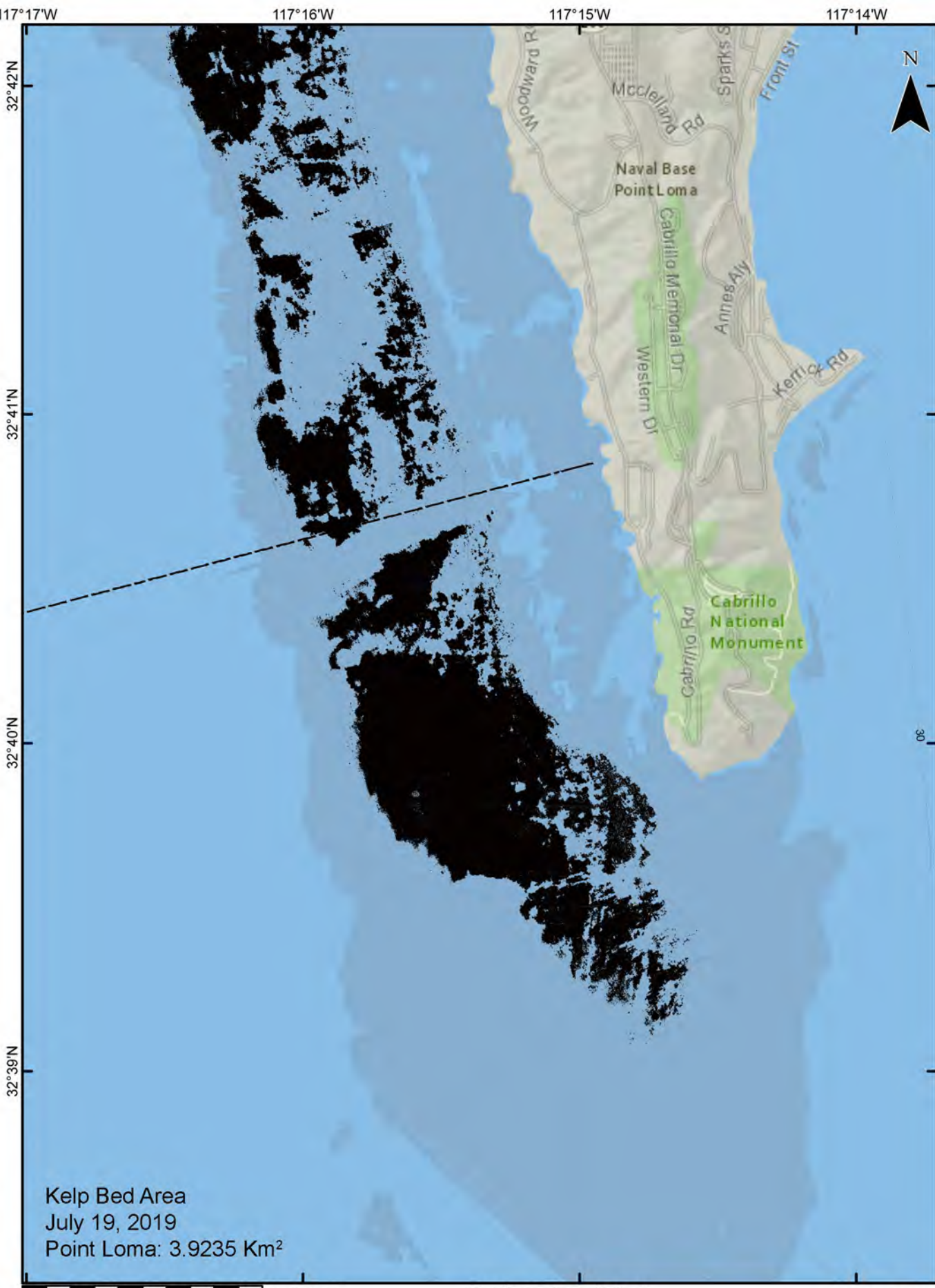
Kelp Bed Area  
 July 19, 2019  
 Point Loma: 3.9235 Km<sup>2</sup>



Depth contours in feet  
 1:35,000

**Appendix A.72  
 Point Loma (end of peninsula)**

- Kelp 2018
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate



Kelp Bed Area  
 July 19, 2019  
 Point Loma: 3.9235 Km<sup>2</sup>



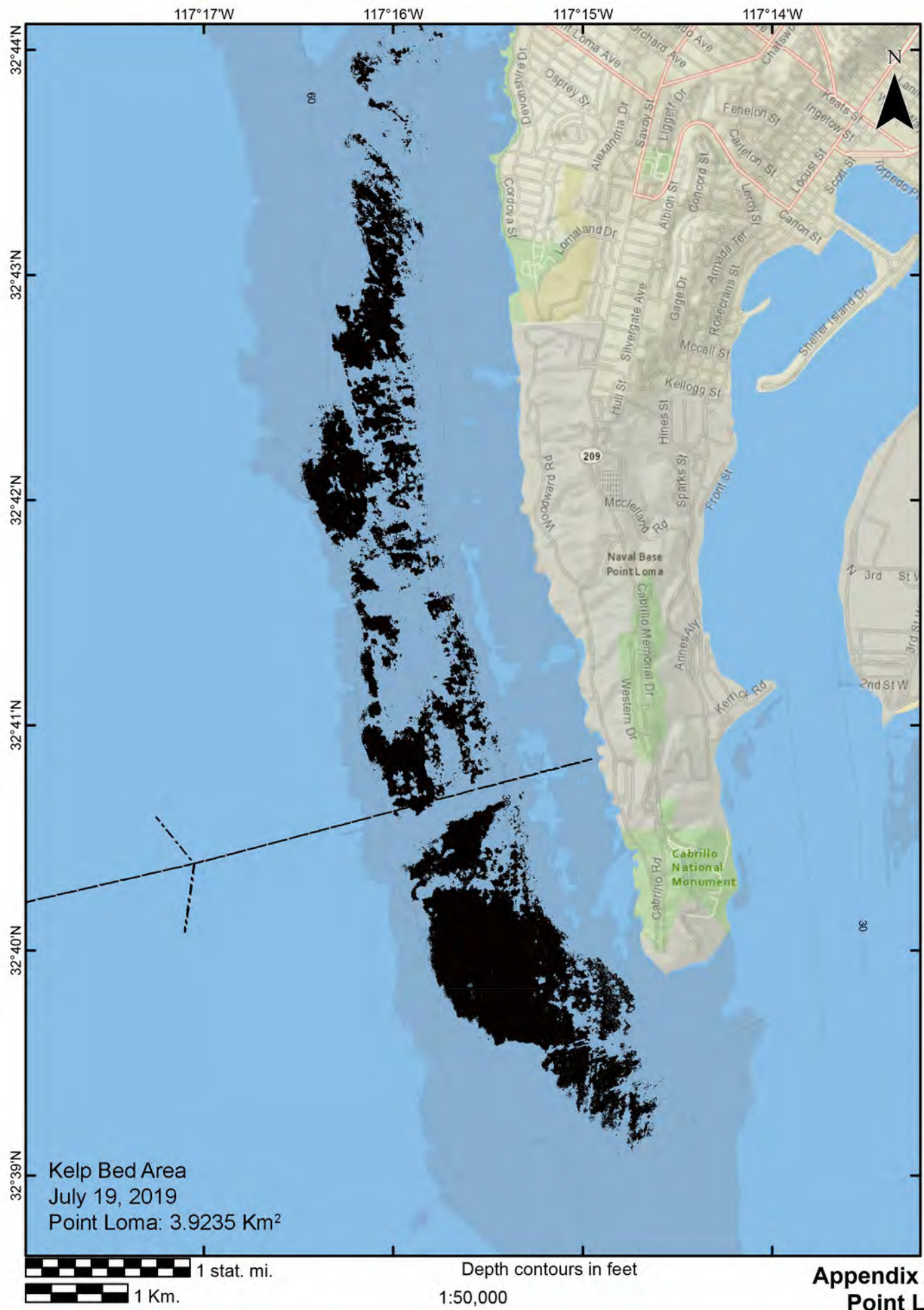
Depth contours in feet  
 1:35,000

**Appendix A.73  
 Point Loma (bay entrance)**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate





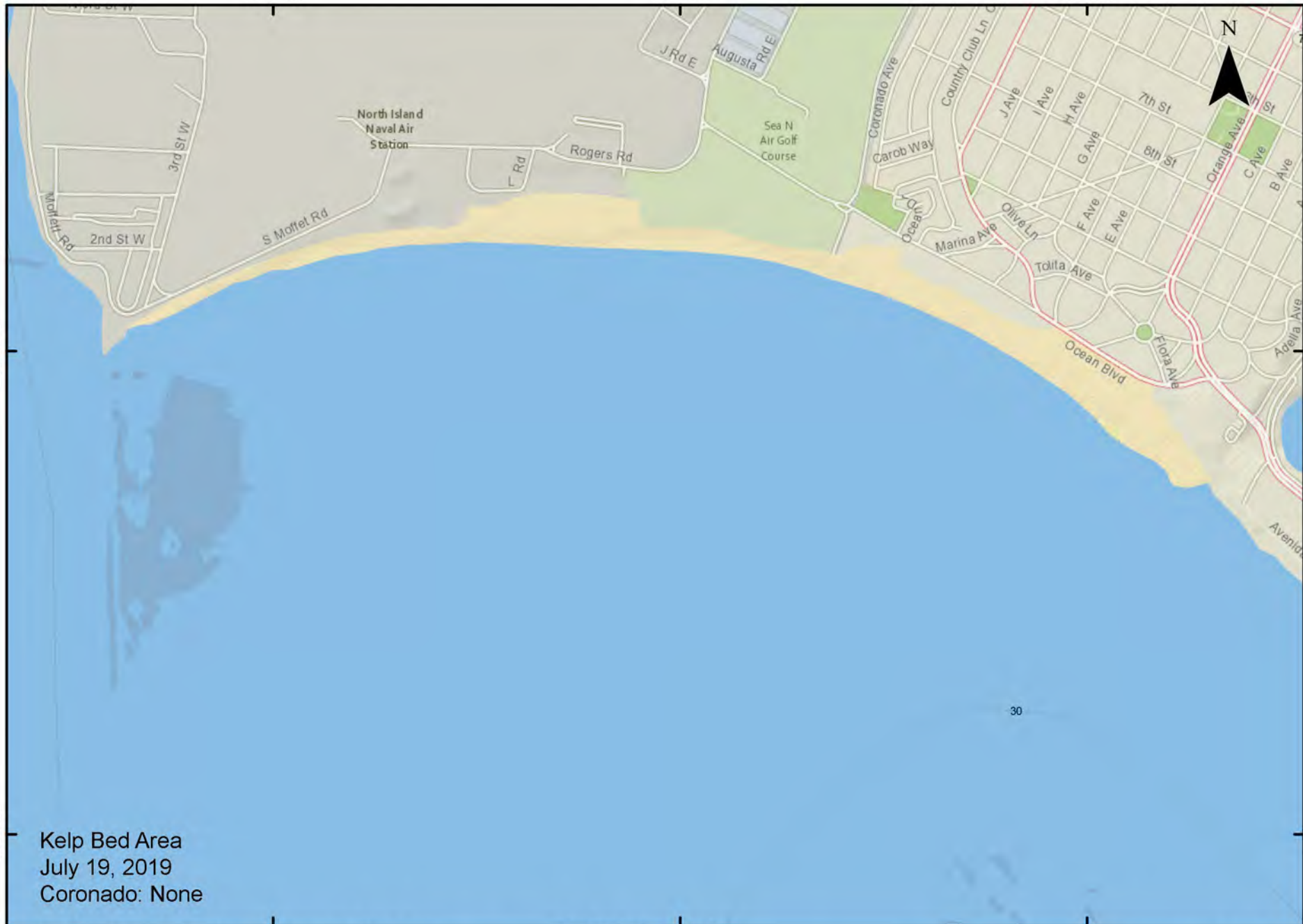
117°13'W

117°12'W

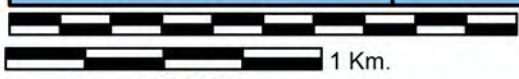
117°11'W

32°41'N

32°40'N



Kelp Bed Area  
 July 19, 2019  
 Coronado: None



1:24,000



- Depth contours in feet
- Kelp
  - Artificial Reef
  - Discharge Structure
  - Isobath
  - Hard Substrate
  - Kelp Bed Divide

**Appendix A.75**  
**Coronado (North Island Naval Air Station)**



117°11'W

117°10'W

N

32°40'N

32°39'N



Kelp Bed Area  
 July 19, 2019  
 Coronado Beach: None



1 stat. mi. Depth contours in feet  
 1:24,000

**Appendix A.76**  
**Coronado Beach/**  
**Silver Strand (North)**



- Kelp 2018
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Discharge Structure
- Hard Substrate





**Appendix A.77**  
**Coronado Beach/**  
**Silver Strand**  
**(Central)**



- Kelp 2018
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Artificial Reef
- Hard Substrate

117°9'W

117°8'W



32°37'N

32°36'N

32°35'N

30

75

Nct's San Diego

Carnation Ave

Ocean Ln

Dahlia Ave




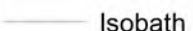
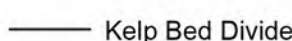

Kelp Bed Area  
July 19, 2019  
Imperial Beach: None



1 stat. mi. Depth contours in feet  
1:24,000

### Appendix A.78 Imperial Beach



-  Kelp 2018
-  Artificial Reef
-  Discharge Structure
-  Isobath
-  Kelp Bed Divide
-  Hard Substrate

117°10'W

117°9'W

117°8'W

32°36'N

32°35'N

32°34'N

32°33'N



Ncts San Diego

3rd St

Daisy Ave  
Evergreen Ave

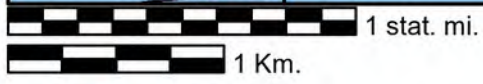
Seacoast Dr

5th St

08

08

Kelp Bed Area  
July 19, 2019  
Imperial Beach: None



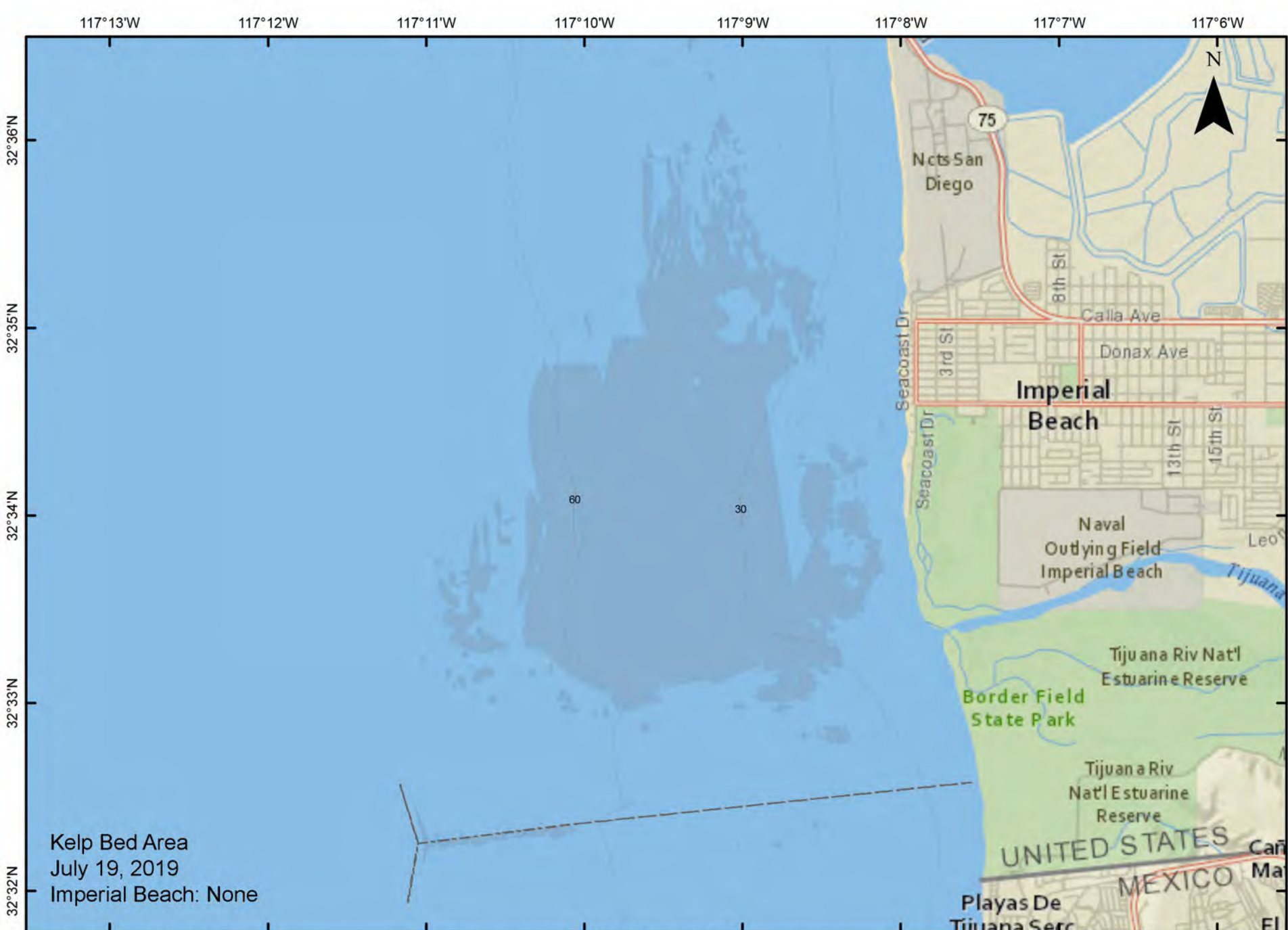
Depth contours in feet  
1:35,000

### Appendix A.79 Imperial Beach



- Kelp 2018
- Artificial Reef
- Discharge Structure
- Isobath
- Kelp Bed Divide
- Hard Substrate





1 stat. mi.

1 Km.  
1:60,000



- Depth contours in feet
- Kelp
  - Isobath
  - Kelp Bed Divide
  - Artificial Reef
  - Discharge Structure
  - Hard Substrate

**Appendix A.80  
Imperial Beach**

## ***APPENDIX B***

Life History of Giant Kelp  
Historical Kelp Surveys  
Crandall's Maps

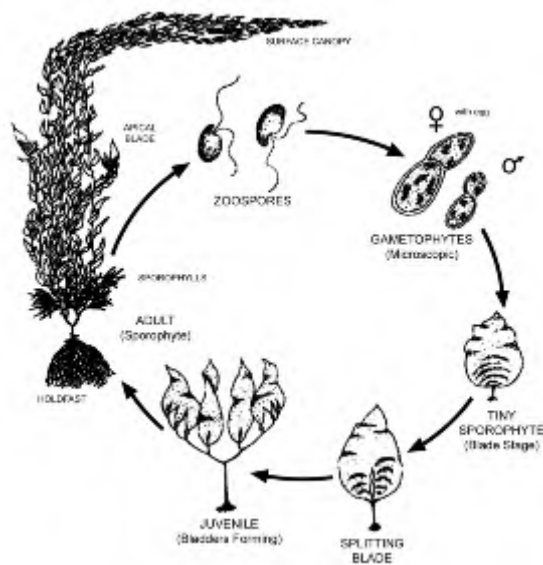
---



## LIFE HISTORY OF GIANT KELP

Kelp consists of a number of species of brown algae, of which 10 are typically found from Point Conception to the Mexican Border (the Southern California Bight [SCB]). Compared to most other algae, kelp species can attain remarkable size and long life span (Kain 1979; Dayton 1985; Reed et al. 2006). Along the central and southern California coast, giant kelp *Macrocystis pyrifera* is the largest species colonizing rocky (and in some cases sandy) subtidal habitats, and is the dominant canopy-forming kelp. Giant kelp is a very important component of coastal and island communities in southern California, providing food and habitat for numerous animals (North 1971; Patton and Harmon 1983; Dayton 1985; Foster and Schiel 1985). Darwin (1860) noted the resemblance of the three-dimensional structure of giant kelp stands to that of terrestrial forests. Because of its imposing physical presence, giant kelp biology and ecology have been the focus of considerable research since the early 1900s. Much effort was expended in the early years deciphering its enigmatic life history (Neushul 1963; North 1971; Dayton 1985; Schiel and Foster 1986; Witman and Dayton 2001; Reed et al. 2006). Giant kelp commonly attains lengths of 15 to 25 m and can be found at depths of 30 m. In conditions of unusually good water clarity, giant kelp may even thrive to depths of 45 m (Dayton et al. 1984).

Giant kelp may form beds wherever suitable substrate occurs, typically on rocky, subtidal reefs (North 1971). Such substrate must be free of continuous sediment intrusion. Giant kelp beds can form in sandy-bottom habitats protected from direct swells where individuals will attach to worm tubes; this occurs along portions of the Santa Barbara coastline (Bedford 2001). Like terrestrial plants, algae undergo photosynthesis and therefore require light energy to generate sugars. For this reason, light availability at depth is an important limiting factor to giant kelp growth. Greater water clarity normally occurs at the offshore islands, and as a result, giant kelp is commonly found growing there in depths exceeding 30 m. Along the mainland coast, high biological productivity, terrestrial inputs and nearshore mixing result in greater turbidity and hence lower light levels. Consequently, giant kelp generally does not commonly grow deeper than 20 m along the coastal shelf, although exceptional conditions off San Diego produce impressively large beds that can grow vigorously beyond 30 m.



**Appendix B.1** Life cycle for giant kelp.

Giant kelp has a complex life cycle and undergoes a heteromorphic alternation of generations, where the phenotypic expression of each generation does not resemble the generation before or after it (Appendix B.1). The stage of giant kelp that is most familiar is the adult canopy-forming diploid sporophyte generation. Sporophyll blades at the base of an adult giant kelp release zoospores, especially in the presence of cold, nutrient-rich waters. These zoospores disperse into the water column and generally settle a short distance from the parent sporophyte (Reed et al. 1988). Within three weeks, the zoospores mature into microscopic male and female gametophytes that in turn produce sperm and eggs. This second generation does not resemble the sporophyte. The life cycle is completed when fertilization of the gametophyte egg develops into the adult sporophyte

stage. Successful completion of the life cycle relies on the persistence of favorable conditions throughout the process.

Giant kelp grows in groups called forests because erect bundles of fronds (stipes and blades) resemble tree trunks, and spreading canopies at the sea surface represent the stems and leaves (Dawson and Foster 1982). *Macrocystis* anchors to rocks (or occasionally in sand) by a holdfast, and new fronds, comprised of stipes and attached blades, grow up to the sea surface at rapid rates. Giant kelp is known as a biological facilitator (Bruno and Bertness 2001), where its three-dimensional structure and the complexity of its holdfast provides substrate, refuge, reduction of physical stress, and a food source for many fishes (Carr 1989) and invertebrates (Duggins et al. 1990). Stands of giant kelp can also affect flow characteristics in the nearshore zone, and enhance recruitment (Duggins et al. 1990), thus increasing animal biomass. For these reasons, giant kelp is also of great importance to sport and commercial fisheries.

## HISTORICAL KELP SURVEYS

Giant kelp bed size and health are known to be highly variable but there has been a downward trend in canopy coverage since the inception of surveying in 1911 (Crandall 1912). In 1911, a mapping expedition of canopy-forming kelps along most of the Pacific coast was conducted to determine the amount of potash (potassium carbonate, an essential ingredient in explosives at the time) potentially available from the kelp. Using rowboats, compass, and sextants to triangulate positions, U.S. Army Captain William Crandall produced one of the most complete surface density kelp maps of the west coast of North America. Using this methodology, all of the existing kelp beds in the Central Region and Region Nine areas were mapped and these measurements have been used to define a baseline for southern California kelp beds (Appendices B.2, B.3, and B.4).

Despite the value of Crandall's maps, the accuracy of his measurements was questioned (Hodder and Mel 1978 [SAI 1978], Neushul 1981). These authors contended that measurement errors might have resulted from using a rowboat and triangulations from shore to compute the bed perimeters, particularly on very large beds such as Palos Verdes, Point Loma, and La Jolla. Although Crandall's ability to accurately triangulate a position was adequate, his measurements of large beds resulted from fewer fixed points and estimation of the area between points. Modern aerial surveys reveal numerous holes and a fair degree of patchiness in such beds. Crandall's estimates did not account for these natural gaps and therefore the 1911 survey probably overestimated the size of these larger beds. Given this ambiguity, Crandall's measurements should be viewed qualitatively rather than as quantitative estimates comparable to aerial survey data taken since the 1920s. However, the data are a very good approximation to use as a baseline. Anecdotal reports from area stakeholders reported by Cameron (1915) indicate kelp beds in 1911 were in fairly poor condition compared to previous years.

Although the historical El Niño Southern Oscillation (ENSO) index suggests that the five years prior to 1911 were favorable to the kelp, the Pacific Decadal Oscillation (PDO) (another environmental metric that has historical data extending back to that period) is in agreement with Cameron's 1915 statement. While the PDO is a poor predictor of oceanographic conditions in the Southern California Bight (Di Lorenzo et al. 2008), it does correlate with sea surface temperature (SST). Therefore, it provides some insight into the local hydrographic conditions at the time. The annual mean PDO was slightly negative between 1909 and 1911, before transitioning to a warm phase from 1912 through 1915. This is suggestive, but not conclusive, of lower nutrient concentrations in 1912–1915 that would result in poor kelp growth. To add further credibility to the premise that beds were larger than current trends would indicate, aerial photos of Palos Verdes kelp beds taken in 1928 (measured by North in 1964) found the area to be more than 10% larger than Crandall reported in 1911.

In 1964, Dr. Wheeler North, working for the State Water Quality Control Board (1964), re-measured Crandall's Palos Verdes charts and found the 2.66 square nautical miles ( $Nm^2$  [9.12  $km^2$ ]) Crandall reported to be very similar to his measurement of 2.42  $Nm^2$ , but North's measurement did not include much of Malaga Cove (that added an additional 0.130  $Nm^2$  of kelp to the Palos Verdes beds), resulting in North's measurement of about 2.55  $Nm^2$  (Appendices B.5-B.11; Crandall Maps).

Due to the large sizes reported by Crandall, Neushul (1981) assumed there was a scaling error, re-measured the maps, and calculated a value that was 10% less than Crandall's original measurement. However, Neushul (1981) wrote that his measurements resulted in

Status of the Kelp Beds – Ventura, Los Angeles, Orange, and San Diego Counties

Appendix B.2 Kelp beds of the California coast as described by Crandall in 1911.

Crandall Sheet (Map in report) No.	Kelp Bed No.	Density	Bed Name 2013	Area Square Nautical Miles	Area Square Statute Miles	Area Square Kilometers
Sheet 52		Medium	Imperial Beach	0.287	0.3801	0.9844
Sheet 18	1	Very Heavy.	Point Loma	5.400	7.1516	18.5226
	2	Very Heavy.	La Jolla	2.300	3.0461	7.8893
Sheet 17	3	Medium	Del Mar	0.240	0.3178	0.8232
		N. Present	No Solana Beach	0.000	0.0000	0.0000
		N. Present	No Cardiff	0.000	0.0000	0.0000
	4	Medium	Encinitas 30% (0.970)	0.291	0.3854	0.9982
	4	Medium	Leucadia 50% (0.970)	0.485	0.6423	1.6636
	4	Medium	Carlsbad St Bch 20%	0.194	0.2569	0.6654
	5	Medium	Encina Power	0.125	0.1655	0.4288
	5	Medium	Agua Hedionda	0.125	0.1655	0.4288
	6	Medium	Carlsbad	0.140	0.1854	0.4802
	7	Medium	Santa Margarita	0.250	0.3311	0.8575
	8	Thin	Barn Kelp	0.370	0.4900	1.2691
	9	Thin	Barn Kelp	0.080	0.1059	0.2744
	10	Thin	Barn Kelp	0.260	0.3443	0.8918
	11	Thin	Horno Canyon	0.050	0.0662	0.1715
	12	Thin	San Onofre	0.110	0.1457	0.3773
	13	Thin	San Onofre	0.130	0.1722	0.4459
	14	Thin	San Onofre	0.060	0.0795	0.2058
	15	Thin	San Mateo	0.360	0.4768	1.2348
Sheet 14, 15, and 16	16	Thin	San Clemente	0.060	0.0795	0.2058
	17	Medium	Capistrano	0.240	0.3178	0.8232
	18	Medium	Doheny	0.220	0.2914	0.7546
	19	Medium	Dana Point/Salt Creek	0.340	0.4503	1.1662
		N. Present	Laguna Beach	0.000	0.0000	0.0000
	20	Medium	Corona Del Mar	0.220	0.2914	0.7546
	21	Medium	Cabrillo to Port Bend	0.760	1.0065	2.6069
	22	Thin	Portuguese Bend	0.100	0.1324	0.3430
	23	Thin	Point Vicente, PV	0.070	0.0927	0.2401
	24	Medium	PV Pt to Flat Rk, PV	1.600	2.1190	5.4882
	25	Medium	Malaga Cove, PV	0.130	0.1722	0.4459
Chart 13	1	Thin	Sunset Beach	0.280	0.3708	0.9604
	2	Thin	Topanga (50%)	0.005	0.0066	0.0172
	2	Thin	Las Tunas (50%)	0.005	0.0066	0.0172
	3	Thin	Big Rock	0.005	0.0066	0.0172
	4	Thin	Las Flores	0.004	0.0053	0.0137
	5	Thin	La Costa	0.006	0.0079	0.0206
		N. Present	Malibu Point	0.000	0.0000	0.0000
	6	Thin	Puerco/Amarillo (10%)	0.100	0.1324	0.3430
	6	Thin	Latigo Canyon (13%)	0.130	0.1722	0.4459
	6	Thin	Escondido Wash (17%)	0.170	0.2251	0.5831
	6	Thin	Paradise Cove (40%)	0.400	0.5297	1.3720
Chart 13	6	Thin	Point Dume (20%)	0.200	0.2649	0.6860
	7	Thin	Lechuza (33%)	0.037	0.0485	0.1255
	7	Thin	Pescador/Piedra (67%)	0.073	0.0971	0.2515
	8	Medium	Nicolas Canyon (33%)	0.367	0.4855	1.2575
	8	Medium	Leo Carrillo (67%)	0.733	0.9712	2.5153
		N. Present	Deer Crk	0.000	0.0000	0.0000
Totals				17.512	23.192	60.068

only slight improvements from what Crandall measured: “The smaller areas obtained by measurements from more recent maps of southern California kelp beds probably reflect both a slight increase in mapping precision over Crandall’s methods, and an actual decrease in size.” In 2004, Crandall’s original maps of Palos Verdes were re-measured by MBC Applied Environmental Sciences (MBC) using computer-aided spatial estimation software (including Malaga Cove), and the resulting area (2.57 Nm<sup>2</sup>) was about 3% smaller but very similar to that reported by Crandall (2.66 Nm<sup>2</sup>). Therefore, the actual sizes of the beds that Crandall

## Status of the Kelp Beds – Ventura, Los Angeles, Orange, and San Diego Counties

---

reported were probably relatively accurate because the areal survey extent and configuration he reported was subsequently confirmed from contemporary charts (Hodder and Mel 1978, Neushul 1981).

Thus, Crandall's kelp bed areas are retained as the baseline estimate, and the total regional area was probably larger from 1928–1934 than the area Crandall measured in 1911. Based on the sizes of the Palos Verdes beds in 1928 (9.912 km<sup>2</sup>) and La Jolla kelp beds in 1934 (8.161 km<sup>2</sup>) from aerial photos that North measured in 1964 (SWQCB 1964), the bed sizes were well above Crandall's measurements of 9.124 km<sup>2</sup> (2.66 Nm<sup>2</sup>) for Palos Verdes (including the bed at Malaga Cove) and 7.889 km<sup>2</sup> (2.3 Nm<sup>2</sup>) for La Jolla. This lends credence to Cameron's comment that kelp harvesters reported that the beds were at minimal levels at the time of Crandall's survey, and suggests even larger losses have occurred over time (Cameron 1915).

The next complete kelp survey of the southern California region was not undertaken until 1955. By that time, the beds in the Central Region had decreased greatly (to 6.750 km<sup>2</sup>), and were only 36% of that recorded in 1911 (18.815 km<sup>2</sup>). Beds in Region Nine were similarly reduced to 40% (16.310 km<sup>2</sup>) of the 1911 total of 41.563 km<sup>2</sup>. The most significant loss during this period was that of Sunset Kelp (offshore of Santa Monica); Sunset Kelp covered almost 1.0 km<sup>2</sup> in 1911, but was very small by 1955. The Sunset kelp bed remained small or completely missing through the intervening years, and the Palos Verdes beds were also small, having decreased sometime after 1945. By 1947, the Palos Verdes beds were only 3.6 km<sup>2</sup>, and further to 1.5 km<sup>2</sup> by 1953. During an aerial survey conducted in 1963, kelp canopies were in very poor condition, with Palos Verdes covering only 0.180 km<sup>2</sup> and the La Jolla and Point Loma beds covering only 0.9 km<sup>2</sup>. Exceptionally good conditions in 1967 resulted in a total of 7.856 km<sup>2</sup> of kelp canopy coverage in the Central Region, but this was only about 42% of the estimate from 1911. Palos Verdes kelp beds south of Point Vicente were missing, but north of Point Vicente, they totaled almost 1.0 km<sup>2</sup>. In Region Nine, similar results were observed in 1967 with the La Jolla/Point Loma kelp beds covering 3.03 km<sup>2</sup> and the total for the region only 4.4 km<sup>2</sup>. La Jolla kelp bed was only about 0.330 km<sup>2</sup> in 1967, and it stayed small until after 1975, when it became a consistently large kelp bed (over 1 km<sup>2</sup>) through most of the next four decades.

Restoration activities began in 1974 by the Kelp Habitat Improvement Project. At that time, the Palos Verdes beds were only 0.015 km<sup>2</sup>. In 1975, after restoration, those beds began increasing and covered 4.6 km<sup>2</sup> during the exceptionally favorable conditions in 1989 (North and Jones 1991). The impetus provided by the 1989 La Niña resulted in almost 6 km<sup>2</sup> of kelp canopy in the Central Region and more than 16 km<sup>2</sup> in Region Nine, but kelp coverage decreased to less than one-third of these totals during the subsequent two decades. In 2009 (Central) and 2008 (Region Nine), favorable conditions again increased canopy totals to about 6.5 km<sup>2</sup> in the Central Region and 18.7 km<sup>2</sup> in Region Nine, larger than they had been since 1967 and 1955, respectively (Appendices B.3 and B.4).



The Imperial Beach kelp bed south of San Diego measured 0.984 km<sup>2</sup> in 1911, and was never again measured to be larger than about 0.727 km<sup>2</sup> for the rest of the century (occurring in 1987, Appendix B.4). However, by the end of 2007, Imperial Beach kelp bed measured 1.493 km<sup>2</sup> (Appendix B.4, MBC 2011b), almost 50% greater than what Crandall measured, lending further credence to Cameron's (1915) statement that beds were in poor condition in 1911 compared to earlier years. It therefore follows that the Palos Verdes, La Jolla, and Point Loma kelp beds of Central and Region Nine prior to 1911 were likely much larger than they are today.

As these measurements indicate, most of the beds remain smaller than those of a century ago. Ongoing surveys attempt to determine what environmental factors have changed in the intervening years to cause such large declines.

**Appendix B.3 Historical canopy coverage of the kelp beds from Laguna Beach to Imperial Beach from 1911 through 2019. Values represent an estimate of coverage utilizing varying methods over the years.**

Kelp Bed	Canopy Area (km <sup>2</sup> )											
	1911	1934	1941	1955*	1959*	1963*	1967	1970	1975	1980	1983	1984
North Laguna Beach	Tr	ND	ND	p	0.160	ND	0.001	0.011	0.003	0.036	0.035	0.025
South Laguna Beach	Tr	ND	ND	p	ND	ND	0.001	0.011	0.003	0.036	0.040	0.028
South Laguna	Tr	ND	ND	p	0.180	0.020	—	0.014	0.008	—	0.004	-
Dana Point-Salt Creek	1.166	ND	ND	p	p	p	0.240	0.077	0.096	0.008	0.013	0.007
Capistrano Beach	1.578	ND	ND	p	p	p	0.080	0.050	0.070	0.020	—	—
<b>Total F&amp;W 9</b>	<b>2.744</b>	—	—	<b>2.020</b>	<b>0.340</b>	<b>0.020</b>	<b>0.322</b>	<b>0.163</b>	<b>0.180</b>	<b>0.100</b>	<b>0.092</b>	<b>0.060</b>
San Clemente	0.206	ND	ND	6.310	3.710	0.010	0.080	0.050	0.070	0.020	—	—
San Mateo Point	1.235	ND	ND	p	p	p	—	0.057	0.140	0.360	0.163	0.045
San Onofre	1.029	ND	ND	p	p	p	—	—	0.300	0.160	0.102	0.031
<b>Total F&amp;W 8</b>	<b>2.470</b>	—	—	<b>6.310</b>	<b>3.710</b>	<b>0.010</b>	<b>0.080</b>	<b>0.107</b>	<b>0.510</b>	<b>0.540</b>	<b>0.265</b>	<b>0.076</b>
Horno Canyon	0.172	ND	ND	ND	ND	ND	—	—	—	—	—	—
Barn Kelp	2.435	ND	ND	1.370	ND	0.130	0.017	0.019	0.160	0.056	—	—
Santa Margarita	0.858	ND	ND	ND	ND	ND	—	—	—	—	—	—
<b>Total F&amp;W 7</b>	<b>3.465</b>	—	—	<b>1.370</b>	—	<b>0.130</b>	<b>0.017</b>	<b>0.019</b>	<b>0.160</b>	<b>0.056</b>	—	—
North Carlsbad	0.480	ND	ND	2.620	2.520	1.180	0.009	0.060	0.100	0.120	—	—
Agua Hedionda	0.429	ND	ND	p	p	p	—	0.006	0.036	0.019	—	0.001
Encina Power Plant	0.429	ND	ND	p	p	p	—	0.025	0.144	0.074	—	0.002
Carlsbad State Beach	0.499	ND	ND	p	p	p	0.032	0.120	0.200	0.078	—	—
<b>Total F&amp;W 6</b>	<b>1.837</b>	—	—	<b>2.620</b>	<b>2.520</b>	<b>1.180</b>	<b>0.041</b>	<b>0.211</b>	<b>0.480</b>	<b>0.291</b>	—	<b>0.003</b>
Leucadia	1.996	ND	ND	p	p	p	0.240	0.440	0.500	0.670	0.001	0.002
Encinitas	0.832	ND	ND	p	p	p	0.065	0.173	0.153	0.228	—	0.016
Cardiff	ND	ND	ND	0.340	0.400	0.160	0.125	0.337	0.297	0.442	0.018	0.021
Solana Beach	ND	ND	ND	p	p	p	0.290	0.490	0.560	0.690	—	0.001
Del Mar	0.823	ND	ND	p	p	p	0.190	0.260	0.190	0.210	—	—
Torrey Pines	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total F&amp;W 5</b>	<b>3.651</b>	—	—	<b>0.340</b>	<b>0.400</b>	<b>0.160</b>	<b>0.910</b>	<b>1.700</b>	<b>1.700</b>	<b>2.240</b>	<b>0.019</b>	<b>0.040</b>
<b>La Jolla F&amp;W 4</b>	<b>7.889</b>	<b>8.161</b>	<b>7.847</b>	<b>1.660</b>	<b>6.490</b>	<b>0.640</b>	<b>0.330</b>	<b>0.290</b>	<b>0.840</b>	<b>1.900</b>	<b>0.032</b>	<b>0.034</b>
<b>Point Loma F&amp;W 3&amp;2</b>	<b>18.523</b>	<b>11.465</b>	<b>8.286</b>	<b>1.990</b>	<b>0.610</b>	<b>0.240</b>	<b>2.700</b>	<b>4.900</b>	<b>3.000</b>	<b>4.200</b>	<b>0.200</b>	<b>0.160</b>
<b>Imperial Beach F&amp;W 1</b>	<b>0.984</b>	<b>ND</b>	<b>ND</b>	<b>ND</b>	<b>ND</b>	<b>ND</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>0.350</b>	<b>—</b>	<b>—</b>
<b>TOTAL</b>	<b>41.563</b>	<b>19.626</b>	<b>16.133</b>	<b>16.310</b>	<b>14.070</b>	<b>2.380</b>	<b>4.400</b>	<b>7.390</b>	<b>6.870</b>	<b>9.327</b>	<b>0.608</b>	<b>0.373</b>

NOTE: \* = Incomplete Data; Tr = Trace <100 m<sup>2</sup> ; ND = No Data; p = part of above value; "—" = 0

red = warm year El Nino; blue = cold year La Nina; black = neutral year

Sources: 1934, 1941 from SWQCB (1964); 1955, 1959, 1963 from Neushul (1981); MBC (2007b-2012b, 2013-2017).

**Appendix B.3 (Cont.).**

Kelp Bed	Canopy Area (km <sup>2</sup> )											
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North Laguna Beach	0.028	0.022	0.028	0.042	0.055	0.034	0.029	—	—	—	—	0.001
South Laguna Beach	0.077	0.041	0.087	0.145	0.264	0.243	0.093	0.056	0.028	—	—	—
South Laguna	—	—	—	0.023	0.041	0.023	0.030	0.009	0.006	0.005	—	—
Dana Point-Salt Creek	0.036	0.031	0.174	0.568	0.878	0.329	0.480	0.184	0.234	0.116	0.076	0.061
Capistrano Beach	—	—	—	0.032	0.233	0.110	0.134	0.148	0.022	—	—	—
<b>Total F&amp;W 9</b>	<b>0.141</b>	<b>0.094</b>	<b>0.289</b>	<b>0.810</b>	<b>1.471</b>	<b>0.739</b>	<b>0.766</b>	<b>0.397</b>	<b>0.290</b>	<b>0.121</b>	<b>0.076</b>	<b>0.062</b>
San Clemente	—	—	0.017	0.124	0.444	0.304	0.243	0.044	0.051	0.010	0.010	0.047
San Mateo Point	0.152	0.077	0.200	0.432	0.870	0.472	0.120	0.103	0.220	0.080	0.010	0.073
San Onofre	0.042	0.053	0.045	0.348	0.638	0.763	0.170	0.053	0.163	0.201	0.096	0.196
<b>Total F&amp;W 8</b>	<b>0.194</b>	<b>0.130</b>	<b>0.262</b>	<b>0.904</b>	<b>1.952</b>	<b>1.539</b>	<b>0.533</b>	<b>0.200</b>	<b>0.434</b>	<b>0.291</b>	<b>0.116</b>	<b>0.316</b>
Horno Canyon	—	—	—	0.006	0.033	0.010	0.018	0.040	—	—	—	—
Barn Kelp	—	—	—	0.008	0.116	0.382	0.262	0.124	0.002	0.010	0.172	0.204
Santa Margarita	—	—	—	—	—	—	0.049	0.009	—	—	—	—
<b>Total F&amp;W 7</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>0.014</b>	<b>0.149</b>	<b>0.392</b>	<b>0.329</b>	<b>0.173</b>	<b>0.002</b>	<b>0.010</b>	<b>0.172</b>	<b>0.204</b>
North Carlsbad	—	—	0.031	0.049	0.096	0.119	0.044	0.004	0.018	0.020	0.008	—
Agua Hedionda	0.011	0.018	0.021	0.032	0.047	0.046	0.016	0.004	0.012	0.004	0.008	0.009
Encina Power Plant	0.024	0.045	0.120	0.161	0.251	0.179	0.083	0.025	0.022	0.011	0.058	0.032
Carlsbad State Beach	0.027	0.018	0.077	0.032	0.049	0.081	0.035	0.008	0.002	0.011	0.025	0.013
<b>Total F&amp;W 6</b>	<b>0.062</b>	<b>0.081</b>	<b>0.249</b>	<b>0.274</b>	<b>0.443</b>	<b>0.425</b>	<b>0.178</b>	<b>0.041</b>	<b>0.054</b>	<b>0.046</b>	<b>0.099</b>	<b>0.054</b>
Leucadia	0.104	0.074	0.426	0.197	0.291	0.341	0.163	0.084	0.035	0.010	0.189	0.087
Encinitas	0.083	0.032	0.177	0.153	0.209	0.241	0.080	0.036	0.037	0.016	0.061	0.023
Cardiff	0.176	0.120	0.340	0.229	0.575	0.468	0.072	0.054	0.034	0.080	0.092	0.026
Solana Beach	0.115	0.120	0.367	0.427	0.488	0.466	0.257	0.053	0.023	0.108	0.134	0.003
Del Mar	0.008	0.021	0.081	0.063	0.104	0.082	0.097	0.006	0.003	0.029	0.082	—
Torrey Pines	—	—	—	Tr	Tr	—	—	—	—	—	—	—
<b>Total F&amp;W 5</b>	<b>0.486</b>	<b>0.367</b>	<b>1.391</b>	<b>1.069</b>	<b>1.667</b>	<b>1.598</b>	<b>0.669</b>	<b>0.233</b>	<b>0.132</b>	<b>0.243</b>	<b>0.558</b>	<b>0.139</b>
<b>La Jolla F&amp;W 4</b>	<b>0.720</b>	<b>0.930</b>	<b>2.369</b>	<b>2.200</b>	<b>4.755</b>	<b>3.632</b>	<b>3.230</b>	<b>1.301</b>	<b>0.681</b>	<b>1.119</b>	<b>0.824</b>	<b>0.371</b>
<b>Point Loma F&amp;W 3&amp;2</b>	<b>1.570</b>	<b>2.100</b>	<b>3.682</b>	<b>2.322</b>	<b>5.842</b>	<b>5.943</b>	<b>4.310</b>	<b>1.153</b>	<b>1.917</b>	<b>3.589</b>	<b>1.134</b>	<b>1.187</b>
<b>Imperial Beach F&amp;W 1</b>	<b>0.058</b>	<b>0.150</b>	<b>0.727</b>	<b>0.067</b>	<b>0.579</b>	<b>0.651</b>	<b>0.370</b>	<b>0.111</b>	<b>0.025</b>	<b>0.108</b>	<b>0.053</b>	<b>0.008</b>
<b>TOTAL</b>	<b>3.173</b>	<b>3.702</b>	<b>8.242</b>	<b>7.593</b>	<b>16.279</b>	<b>14.268</b>	<b>10.015</b>	<b>3.498</b>	<b>3.510</b>	<b>5.419</b>	<b>3.032</b>	<b>2.341</b>

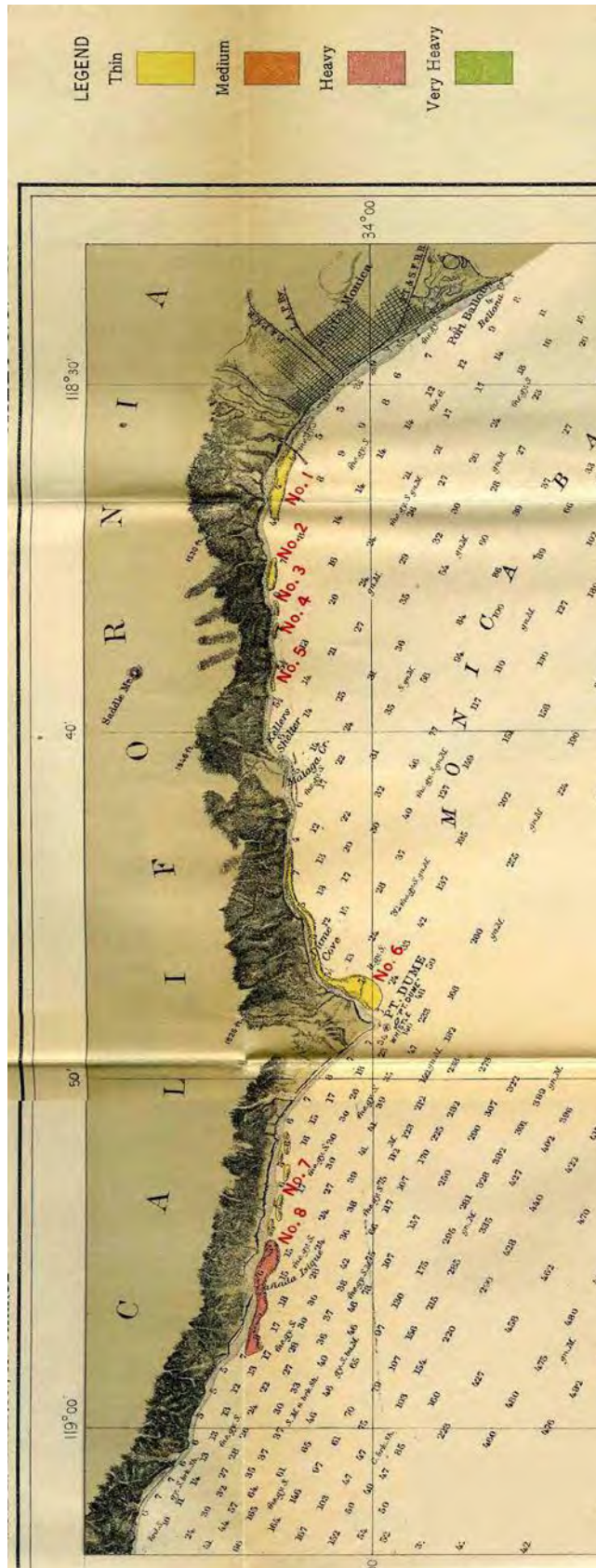
Appendix B.3 (Cont.).

Kelp Bed	Canopy Area (km <sup>2</sup> )											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
North Laguna Beach	—	—	—	—	—	—	0.0004	—	—	—	—	0.002
South Laguna Beach	—	—	—	—	—	0.005	0.0002	0.008	—	—	0.001	0.025
South Laguna	—	—	—	0.003	0.002	<0.001	0.004	0.009	0.003	—	0.004	0.023
Dana Point-Salt Creek	0.034	0.005	0.080	0.170	0.314	0.432	0.303	0.278	0.123	—	0.302	1.068
Capistrano Beach	—	—	<0.001	<0.001	0.044	0.118	0.069	0.008	—	0.011	0.002	0.071
<b>Total F&amp;W 9</b>	<b>0.034</b>	<b>0.005</b>	<b>0.080</b>	<b>0.173</b>	<b>0.359</b>	<b>0.555</b>	<b>0.376</b>	<b>0.303</b>	<b>0.126</b>	<b>0.011</b>	<b>0.309</b>	<b>1.189</b>
San Clemente	—	—	0.006	0.005	0.124	0.316	0.352	0.182	0.178	0.014	0.016	0.203
San Mateo Point	0.098	—	0.051	0.050	0.090	0.155	0.242	0.123	0.258	0.016	0.201	0.487
San Onofre	0.108	<0.001	0.005	0.020	0.041	0.030	0.162	0.109	0.065	—	0.320	0.476
<b>Total F&amp;W 8</b>	<b>0.206</b>	<b>—</b>	<b>0.062</b>	<b>0.075</b>	<b>0.255</b>	<b>0.501</b>	<b>0.755</b>	<b>0.414</b>	<b>0.501</b>	<b>0.030</b>	<b>0.536</b>	<b>1.166</b>
Horno Canyon	—	—	—	0.002	0.034	—	0.001	—	—	—	0.015	0.083
Barn Kelp	0.178	—	0.310	0.375	0.547	0.667	0.492	0.075	0.064	—	0.466	0.858
Santa Margarita	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total F&amp;W 7</b>	<b>0.178</b>	<b>—</b>	<b>0.310</b>	<b>0.377</b>	<b>0.581</b>	<b>0.667</b>	<b>0.494</b>	<b>0.075</b>	<b>0.064</b>	<b>—</b>	<b>0.481</b>	<b>0.941</b>
North Carlsbad	—	0.003	—	—	0.017	0.053	0.017	0.003	0.013	—	0.026	0.108
Agua Hedionda	—	—	—	—	—	<0.001	0.002	0.001	0.008	—	0.016	0.080
Encina Power Plant	0.013	—	—	0.002	0.029	0.097	0.178	0.067	0.001	—	0.081	0.306
Carlsbad State Beach	—	—	—	0.003	0.023	0.047	0.002	0.0001	—	—	0.064	0.121
<b>Total F&amp;W 6</b>	<b>0.013</b>	<b>0.003</b>	<b>—</b>	<b>0.005</b>	<b>0.069</b>	<b>0.197</b>	<b>0.199</b>	<b>0.070</b>	<b>0.023</b>	<b>—</b>	<b>0.187</b>	<b>0.615</b>
Leucadia	0.062	—	0.015	0.090	0.209	0.334	0.185	0.048	0.001	0.016	0.233	0.421
Encinitas	0.048	—	0.029	0.040	0.131	0.153	0.050	0.016	—	0.002	0.205	0.346
Cardiff	0.031	0.016	0.063	0.150	0.309	0.405	0.202	0.045	—	0.004	0.286	0.484
Solana Beach	0.073	0.009	0.091	0.200	0.407	0.488	0.245	0.022	0.093	0.0003	0.457	0.823
Del Mar	Tr	0.004	—	0.006	0.015	0.035	0.030	—	—	—	0.037	0.057
Torrey Pines	—	—	—	—	—	—	—	—	—	0.010	—	0.001
<b>Total F&amp;W 5</b>	<b>0.214</b>	<b>0.029</b>	<b>0.198</b>	<b>0.486</b>	<b>1.071</b>	<b>1.415</b>	<b>0.712</b>	<b>0.131</b>	<b>0.094</b>	<b>0.032</b>	<b>1.218</b>	<b>2.133</b>
<b>La Jolla F&amp;W 4</b>	<b>0.478</b>	<b>0.215</b>	<b>1.146</b>	<b>1.250</b>	<b>2.555</b>	<b>3.366</b>	<b>3.444</b>	<b>1.029</b>	<b>0.873</b>	<b>0.117</b>	<b>2.750</b>	<b>4.145</b>
<b>Point Loma F&amp;W 3&amp;2</b>	<b>2.235</b>	<b>0.295</b>	<b>1.725</b>	<b>3.290</b>	<b>6.574</b>	<b>3.799</b>	<b>4.509</b>	<b>1.924</b>	<b>2.152</b>	<b>1.767</b>	<b>3.616</b>	<b>6.623</b>
<b>Imperial Beach F&amp;W 1</b>	<b>0.027</b>	<b>—</b>	<b>0.019</b>	<b>0.020</b>	<b>0.078</b>	<b>0.210</b>	<b>0.083</b>	<b>0.191</b>	<b>0.400</b>	<b>0.400</b>	<b>1.493</b>	<b>1.895</b>
<b>TOTAL</b>	<b>3.385</b>	<b>0.547</b>	<b>3.540</b>	<b>5.676</b>	<b>11.542</b>	<b>10.710</b>	<b>10.572</b>	<b>4.136</b>	<b>4.233</b>	<b>2.358</b>	<b>10.591</b>	<b>18.706</b>

Appendix B.3 (Cont.).

Kelp Bed	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
North Laguna Beach	0.005	0.093	0.147	0.192	0.142	0.120	0.080	0.074	0.096	0.133	0.015
South Laguna Beach	0.058	0.098	0.221	0.214	0.273	0.165	0.048	0.035	0.032	0.131	0.007
South Laguna	0.017	0.023	0.018	0.017	0.038	0.031	0.016	0.006	0.003	0.048	—
Dana Point-Salt Creek	0.892	0.839	0.442	0.607	0.835	0.528	0.137	0.110	0.133	0.379	—
Capistrano Beach	0.071	0.124	0.010	0.056	0.099	0.034	0.007	0.012	0.0004	0.018	—
<b>Total F&amp;W 9</b>	<b>1.043</b>	<b>1.178</b>	<b>0.838</b>	<b>1.086</b>	<b>1.385</b>	<b>0.879</b>	<b>0.287</b>	<b>0.237</b>	<b>0.264</b>	<b>0.709</b>	<b>0.022</b>
San Clemente	0.210	0.710	0.795	0.874	1.097	0.843	0.343	0.187	0.229	0.335	0.031
San Mateo Point	0.545	0.583	0.203	0.216	0.219	0.199	0.062	0.053	0.033	0.083	0.0001
San Onofre	0.419	0.458	0.127	0.191	0.767	0.584	0.043	0.120	0.087	0.127	0.001
<b>Total F&amp;W 8</b>	<b>1.174</b>	<b>1.750</b>	<b>1.124</b>	<b>1.281</b>	<b>2.083</b>	<b>1.627</b>	<b>0.449</b>	<b>0.359</b>	<b>0.349</b>	<b>0.545</b>	<b>0.032</b>
Horno Canyon	0.018	0.081	—	0.008	0.125	0.055	0.019	0.010	0.011	0.008	—
Barn Kelp	0.926	0.500	0.095	0.442	0.868	0.741	0.085	0.133	0.096	0.092	—
Santa Margarita	—	—	—	—	0.080	—	—	—	—	—	—
<b>Total F&amp;W 7</b>	<b>0.944</b>	<b>0.581</b>	<b>0.095</b>	<b>0.450</b>	<b>1.073</b>	<b>0.795</b>	<b>0.104</b>	<b>0.143</b>	<b>0.107</b>	<b>0.100</b>	<b>0.000</b>
North Carlsbad	0.135	0.078	0.017	0.052	0.125	0.086	0.047	—	0.004	0.038	—
Agua Hedionda	0.092	0.031	0.022	0.046	0.102	0.065	0.016	—	—	—	—
Encina Power Plant	0.215	0.176	0.084	0.216	0.352	0.221	0.159	0.009	0.025	0.045	—
Carlsbad State Beach	0.127	0.069	0.024	0.058	0.178	0.065	0.061	—	0.001	—	—
<b>Total F&amp;W 6</b>	<b>0.569</b>	<b>0.354</b>	<b>0.147</b>	<b>0.372</b>	<b>0.757</b>	<b>0.437</b>	<b>0.282</b>	<b>0.009</b>	<b>0.031</b>	<b>0.083</b>	<b>0.000</b>
Leucadia	0.429	0.215	0.119	0.232	0.541	0.279	0.414	0.033	0.010	0.053	0.009
Encinitas	0.205	0.128	0.124	0.260	0.231	0.112	0.113	0.009	0.003	0.033	—
Cardiff	0.520	0.213	0.395	0.459	0.590	0.299	0.318	0.024	0.003	0.005	—
Solana Beach	0.505	0.328	0.504	0.442	0.606	0.504	0.316	0.138	0.029	0.024	—
Del Mar	0.044	0.038	0.074	0.024	0.056	0.027	0.034	—	—	—	—
Torrey Pines	0.0004	0.003	0.031	0.034	0.081	—	—	—	—	—	—
<b>Total F&amp;W 5</b>	<b>1.703</b>	<b>0.925</b>	<b>1.247</b>	<b>1.452</b>	<b>2.106</b>	<b>1.221</b>	<b>1.195</b>	<b>0.204</b>	<b>0.045</b>	<b>0.114</b>	<b>0.009</b>
<b>La Jolla F&amp;W 4</b>	<b>2.274</b>	<b>2.776</b>	<b>2.565</b>	<b>1.569</b>	<b>4.006</b>	<b>2.790</b>	<b>2.968</b>	<b>0.927</b>	<b>0.694</b>	<b>1.566</b>	<b>1.227</b>
<b>Point Loma F&amp;W 3&amp;2</b>	<b>4.909</b>	<b>3.977</b>	<b>4.212</b>	<b>5.340</b>	<b>5.127</b>	<b>5.121</b>	<b>5.806</b>	<b>3.037</b>	<b>1.787</b>	<b>7.920</b>	<b>3.924</b>
<b>Imperial Beach F&amp;W 1</b>	<b>0.861</b>	<b>0.004</b>	<b>0.152</b>	<b>0.333</b>	<b>0.526</b>	<b>1.183</b>	<b>1.576</b>	<b>0.217</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>TOTAL</b>	<b>13.476</b>	<b>11.545</b>	<b>10.379</b>	<b>11.882</b>	<b>17.064</b>	<b>14.053</b>	<b>12.667</b>	<b>5.134</b>	<b>3.277</b>	<b>11.037</b>	<b>5.213</b>





Appendix B.4 Crandall's 1911 kelp survey Deer Creek to Ballona Creek.

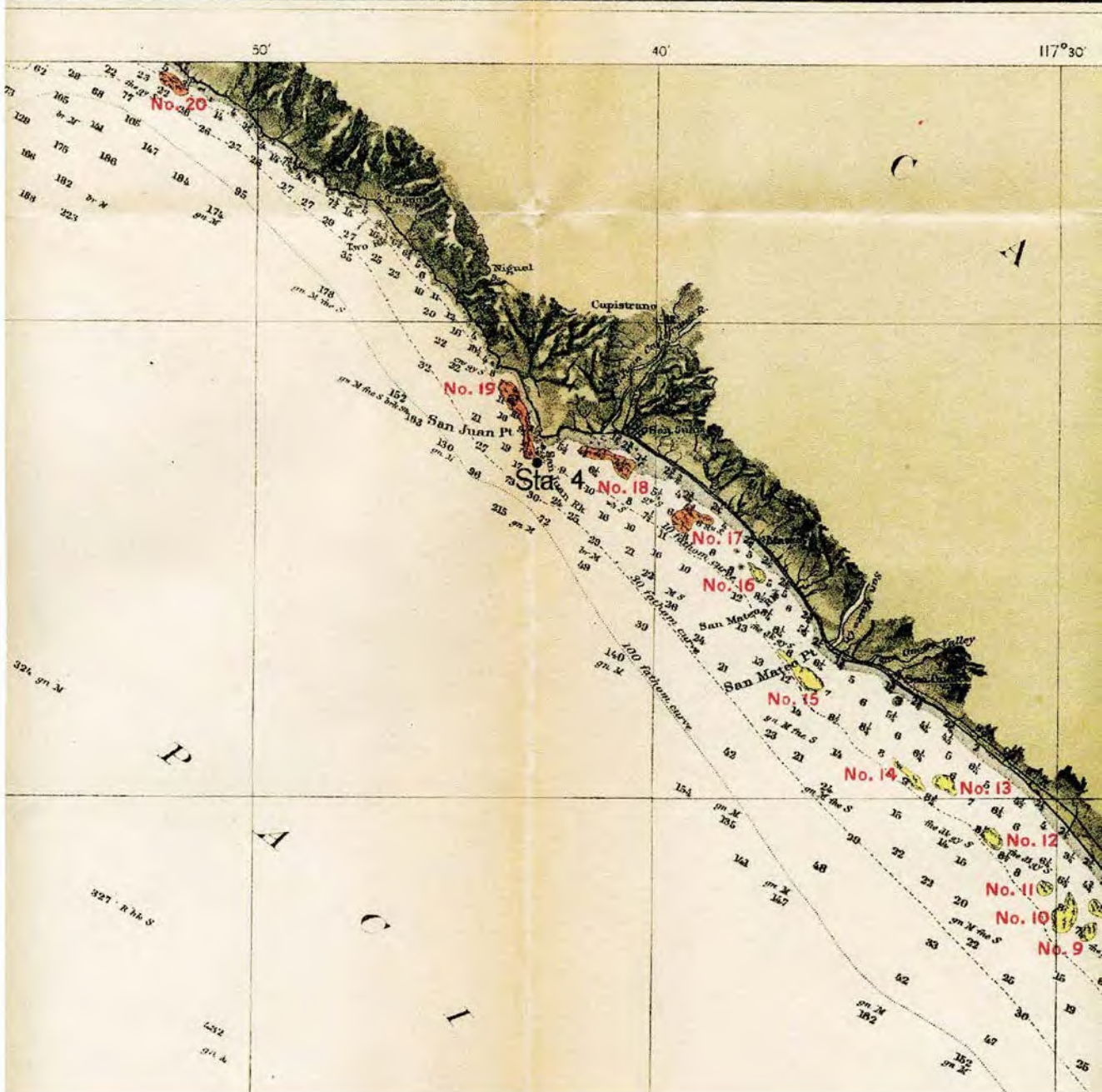


Appendix B.5 Crandall's 1911 kelp survey Palos Verdes to Los Angeles Harbor.

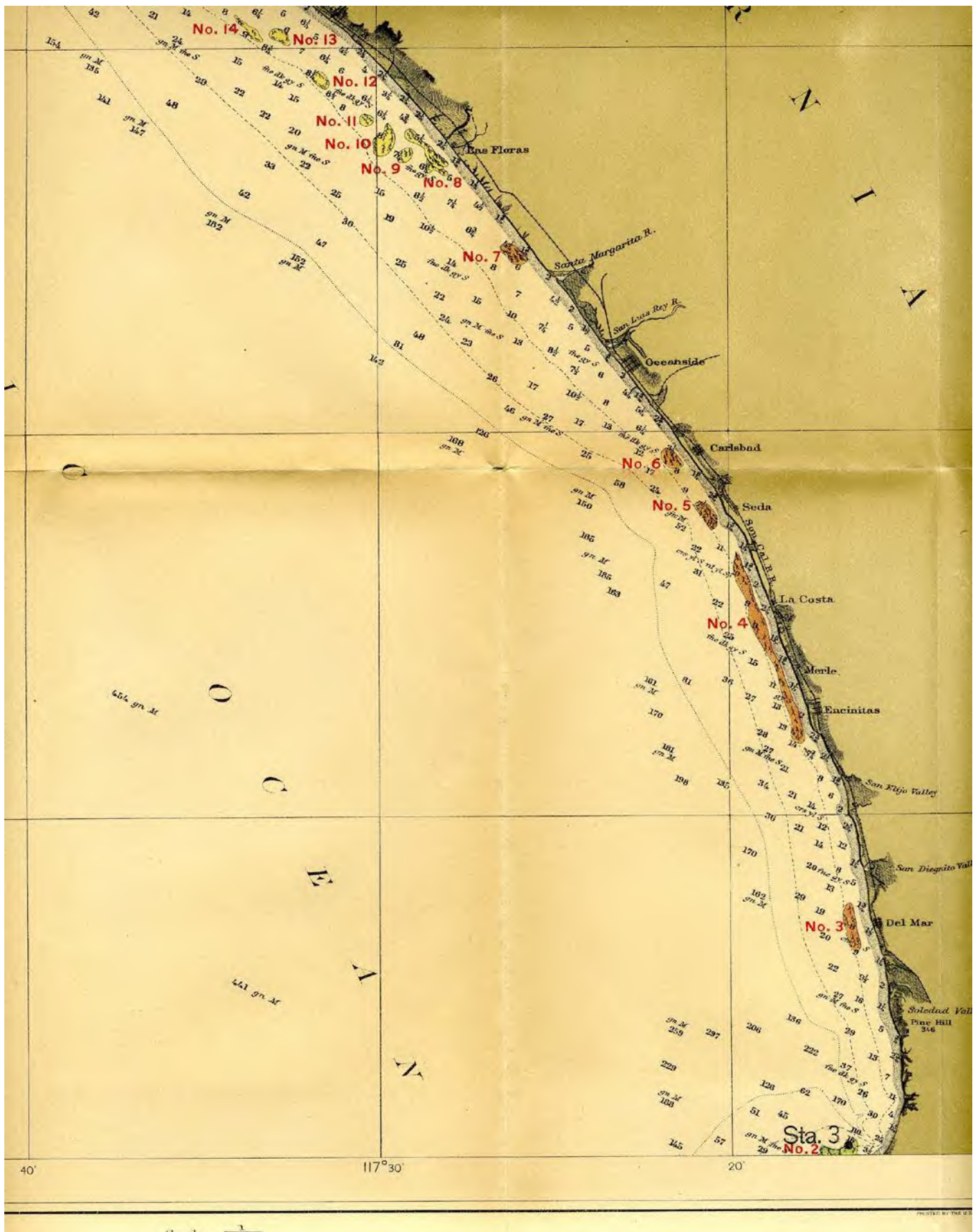


U. S. DEPT. OF AGRICULTURE  
BUREAU OF SOILS  
MILTON WHITNEY, CHIEF  
FRANK K. CAMERON, IN CHARGE

# MAP OF KELP GROVES.



Appendix B.6 Crandall's 1911 kelp bed survey Newport to San Onofre.



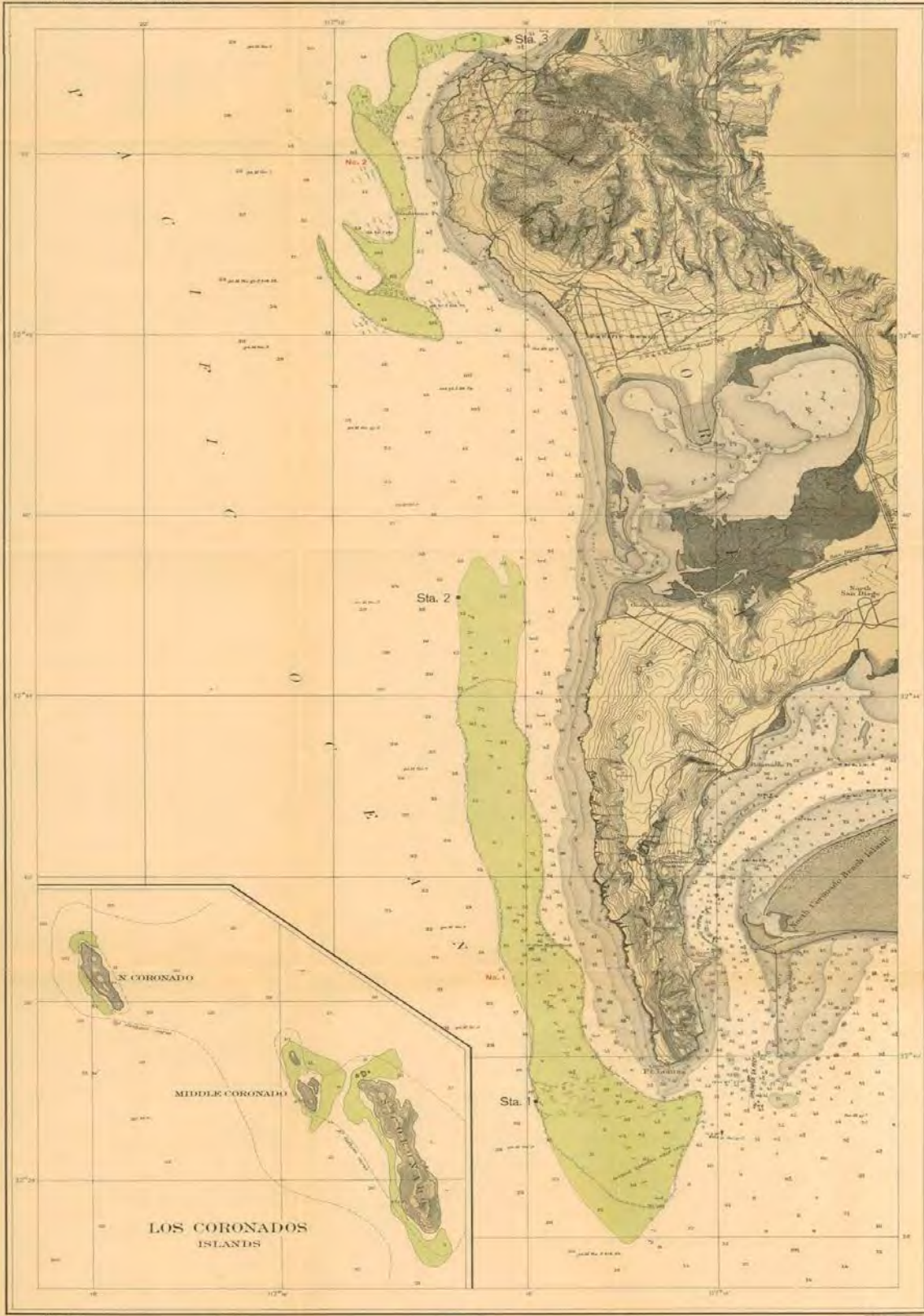
Appendix B.7 Crandall's 1911 kelp bed survey San Onofre to Del Mar.







LEGEND  
Very heavy



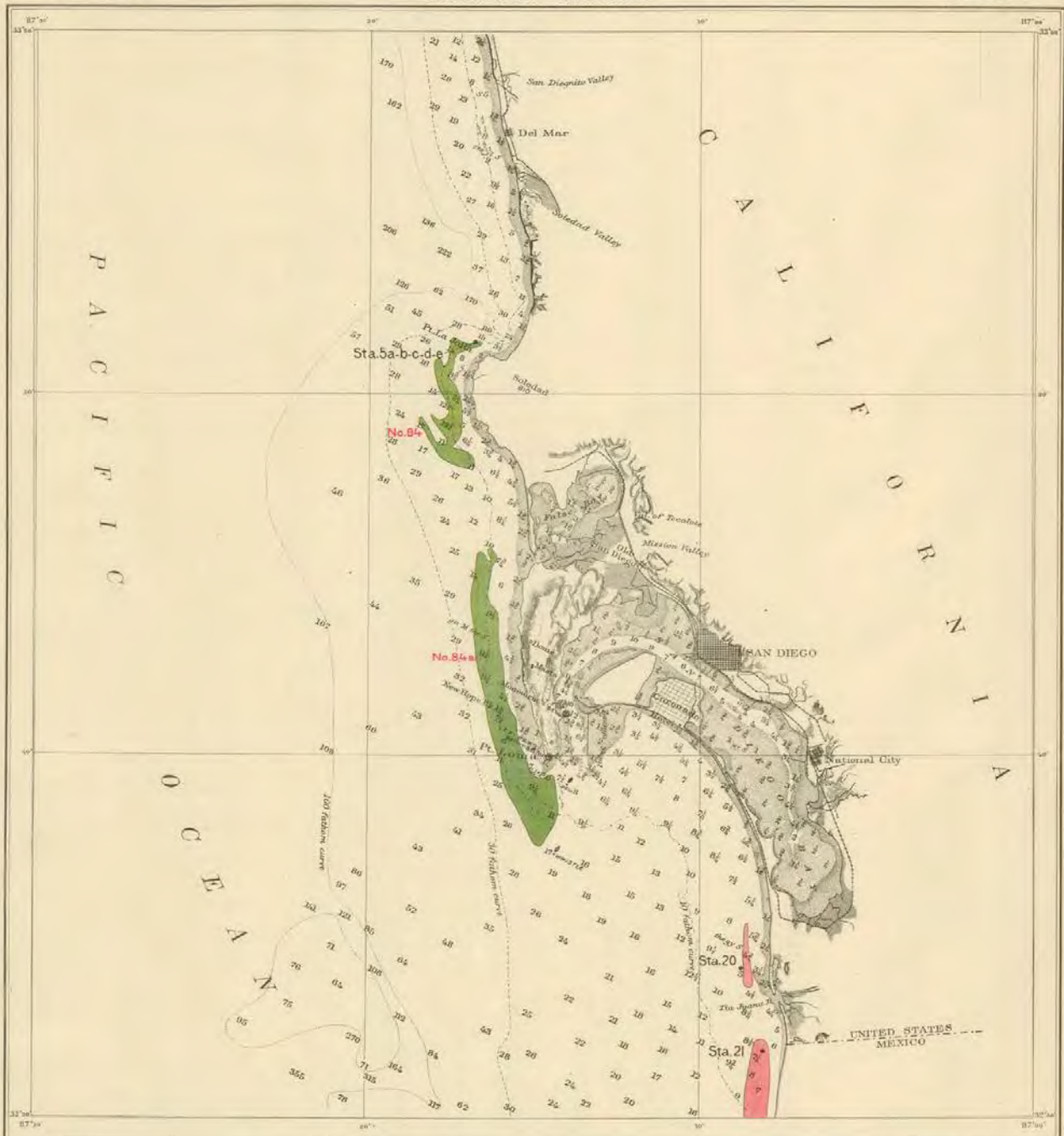
Map made by  
W. C. Campbell

Scale 100 feet  
Horizontal distance only

Sanito Dec. 1901; 622 Cont. 2d Ser.

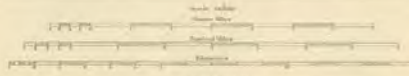
Appendix B.9 Crandall's 1911 kelp bed survey La Jolla to Point Loma.

# KELP MAP PACIFIC COAST - CALIFORNIA



FIELD AND INVESTIGATION  
FRANK S. CANTON, in charge  
Mapped by W. C. Crandall  
1911

Scale 1:50,000  
Vertical Scale 1:100,000



VERTICAL SCALE  
HEIGHT IN FEET  
NOT APPROVED FOR NAVIGATION

LEGEND  
Medium Green  
Dark Green

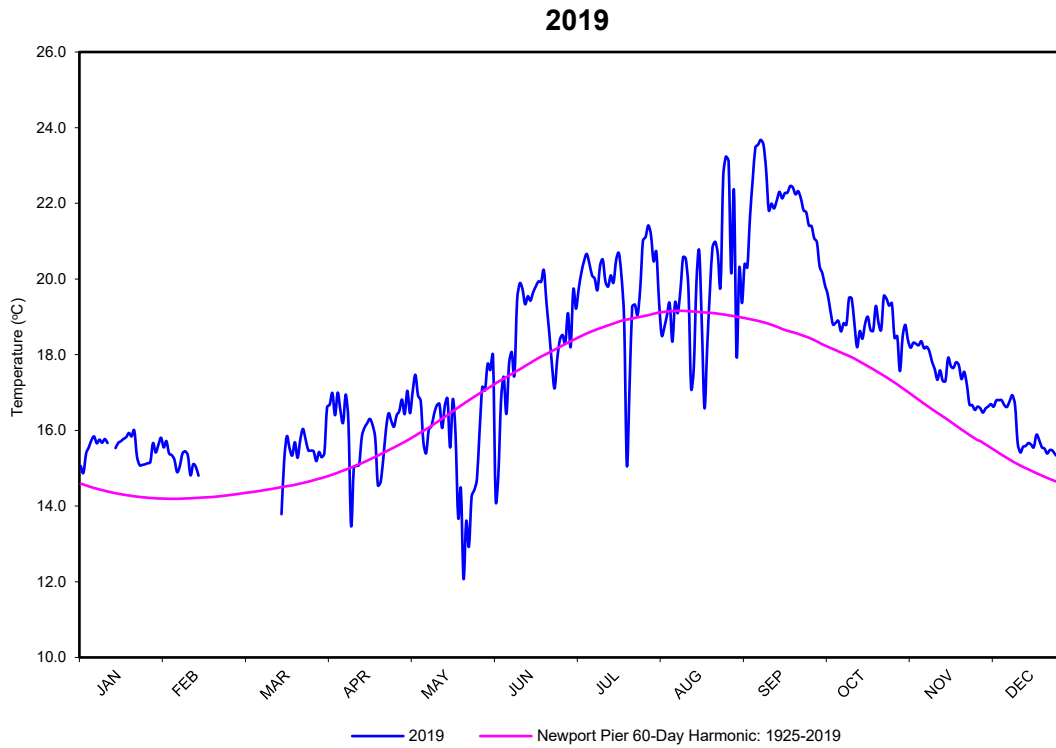
Appendix B.10 Crandall's 1911 kelp bed survey La Jolla to Imperial Beach.

***APPENDIX C***

**Sea Surface Temperatures**

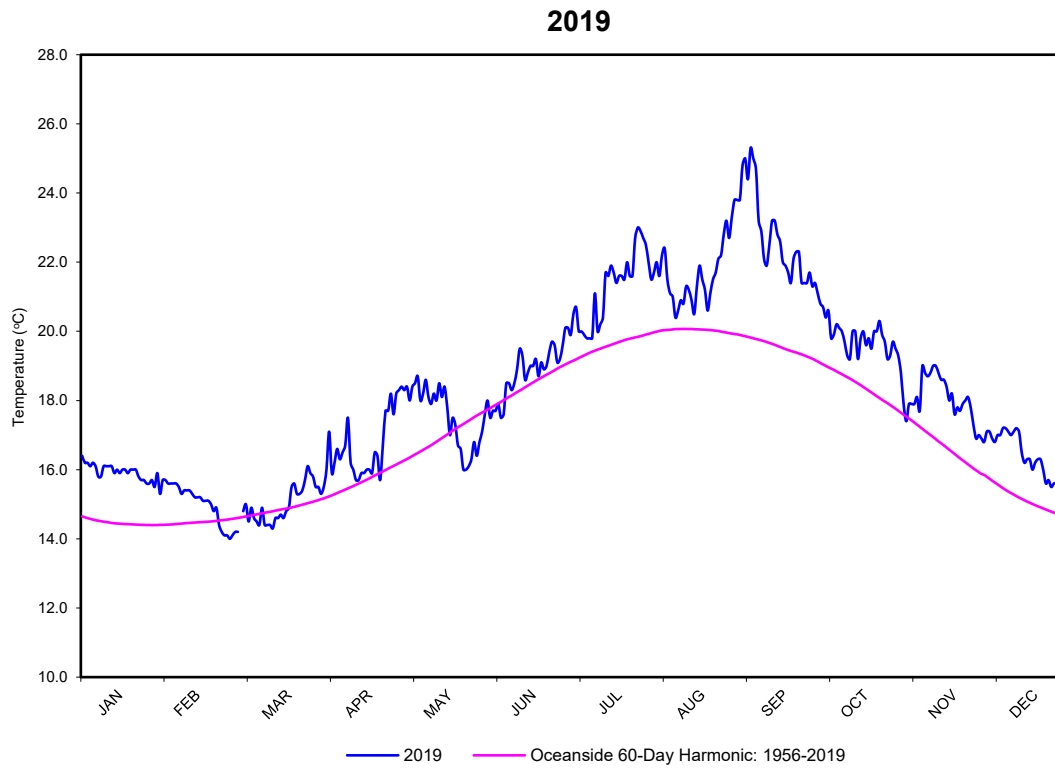
---

# Newport Pier Sea Surface Temperature



**Appendix C.1 Daily sea surface temperatures (SST) at Newport Pier for 2019.**

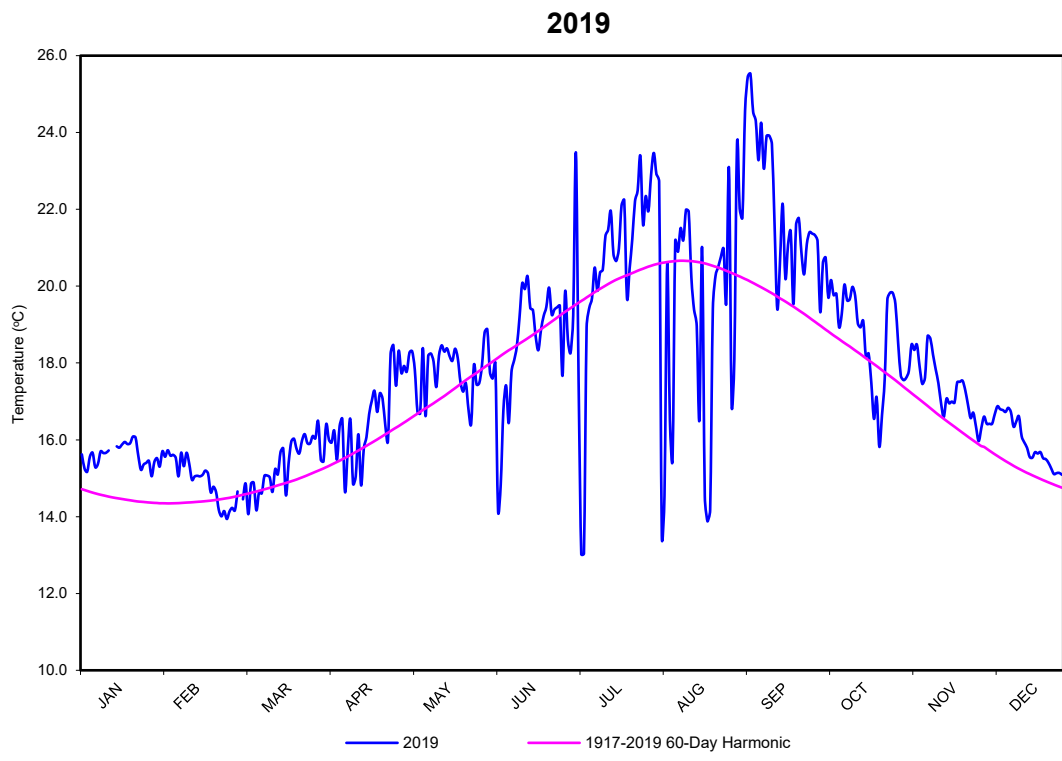
# Oceanside Sea Surface Temperature



**Appendix C.2 Daily sea surface temperatures (SST) at Oceanside for 2019.**

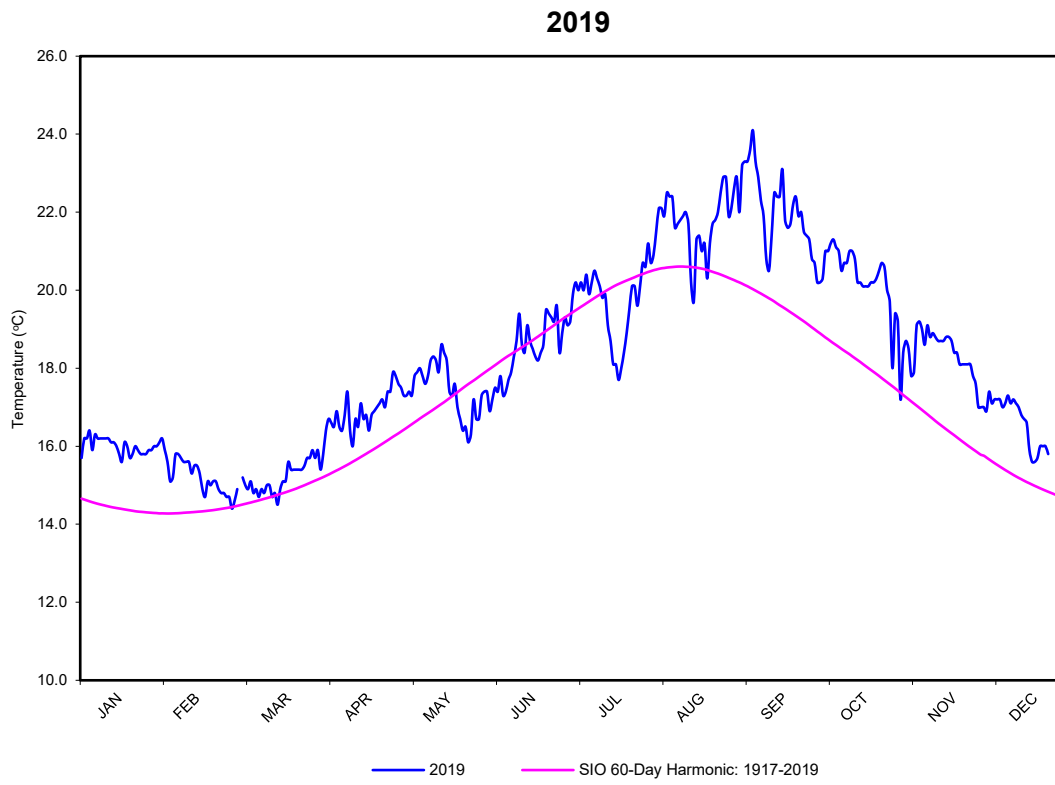


# Scripps Pier Sea Surface Temperature



**Appendix C.3 Daily sea surface temperatures (SST) at Scripps Pier for 2019.**

# Point Loma South Sea Surface Temperature



**Appendix C.4 Daily sea surface temperatures (SST) at Point Loma South for 2019.**

## ***APPENDIX D***

Flight Path  
Flight Data Reports  
Field Data Sheets

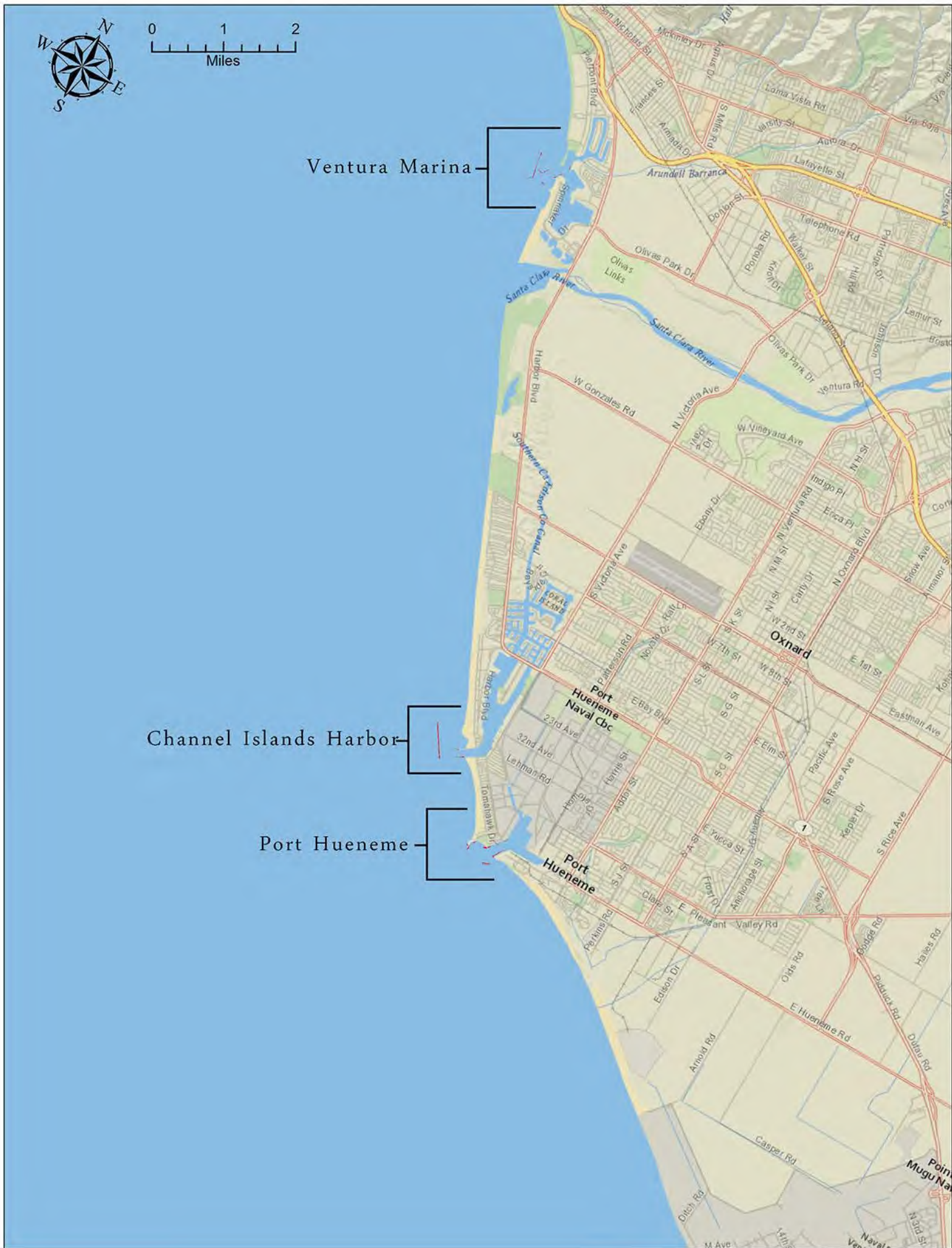
---



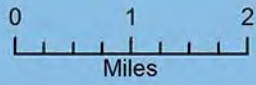
Ventura Marina

Channel Islands Harbor

Port Hueneme







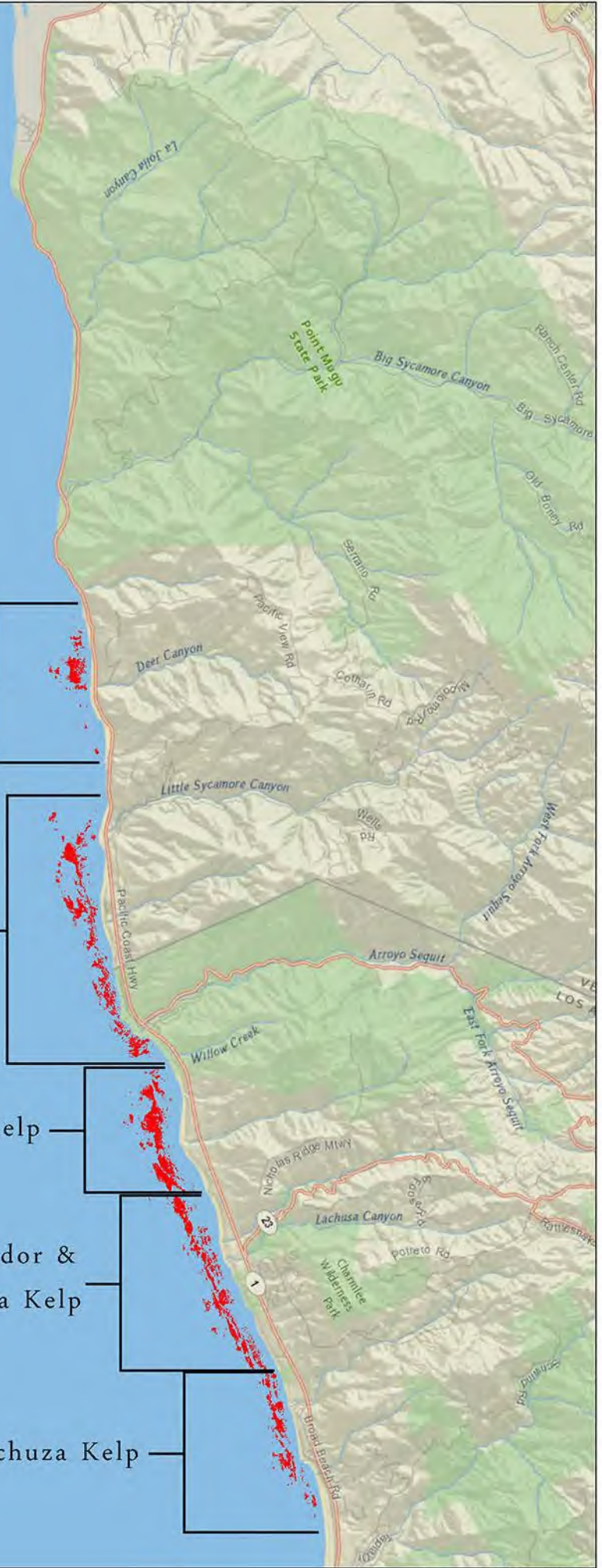
Deer Creek Kelp

Leo Carillo Kelp

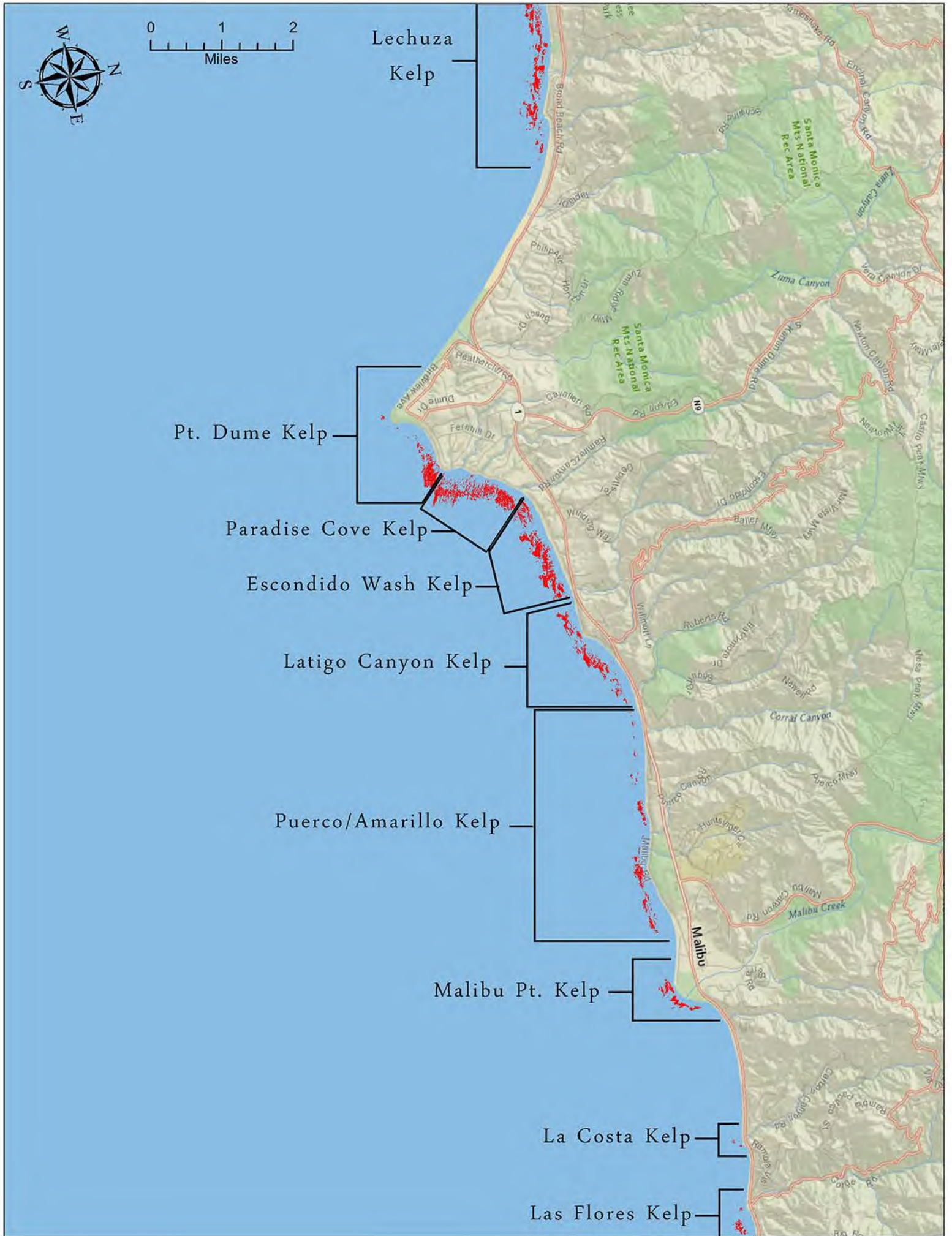
Nicolas Canyon Kelp

El Pescador &  
La Piedra Kelp

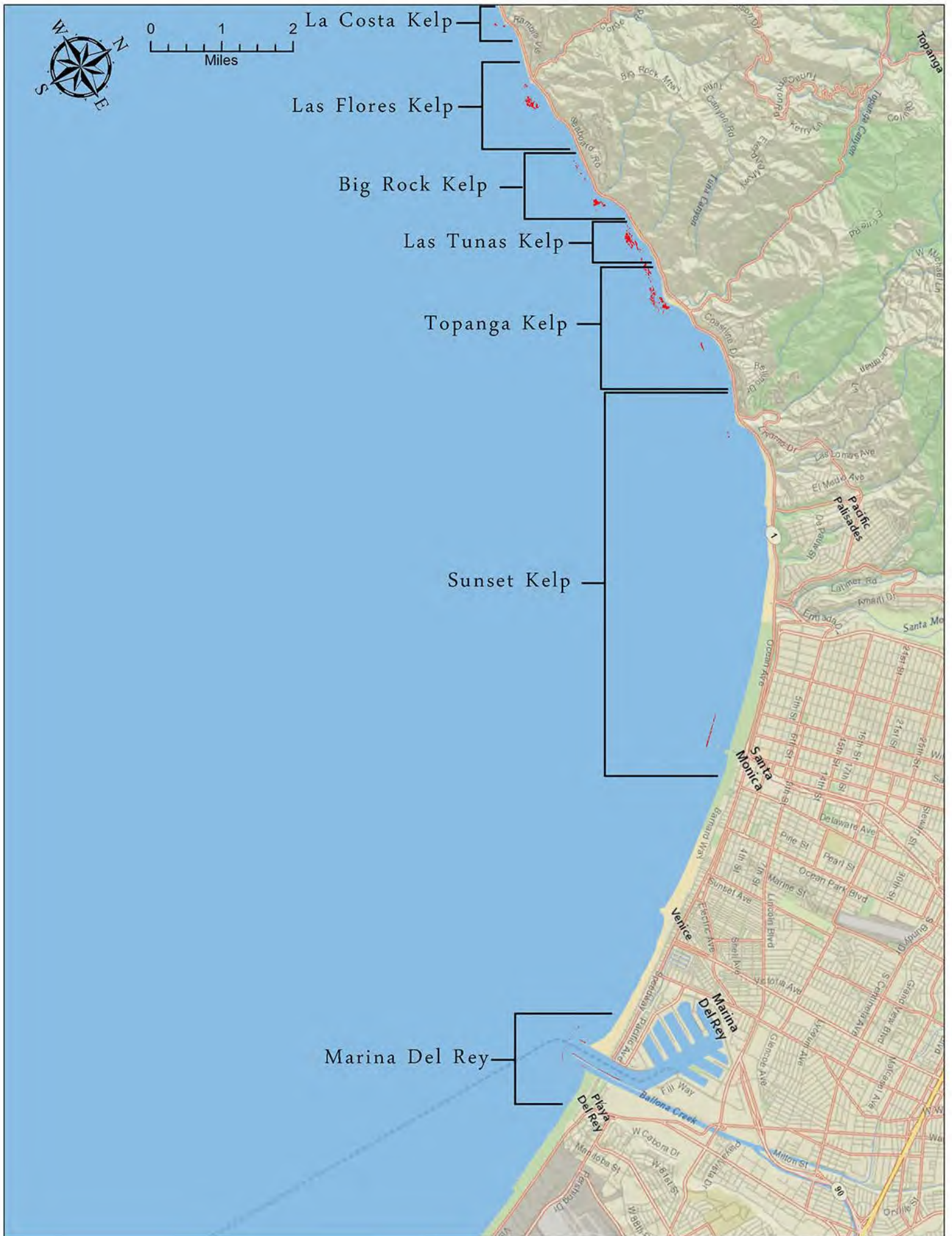
Lechuza Kelp















Marina del Rey

Hyperion Treatment Plant

Scattergood Generating Station

Chevron Refinery

El Segundo Generating Station

King Harbor, Redondo Beach

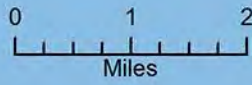






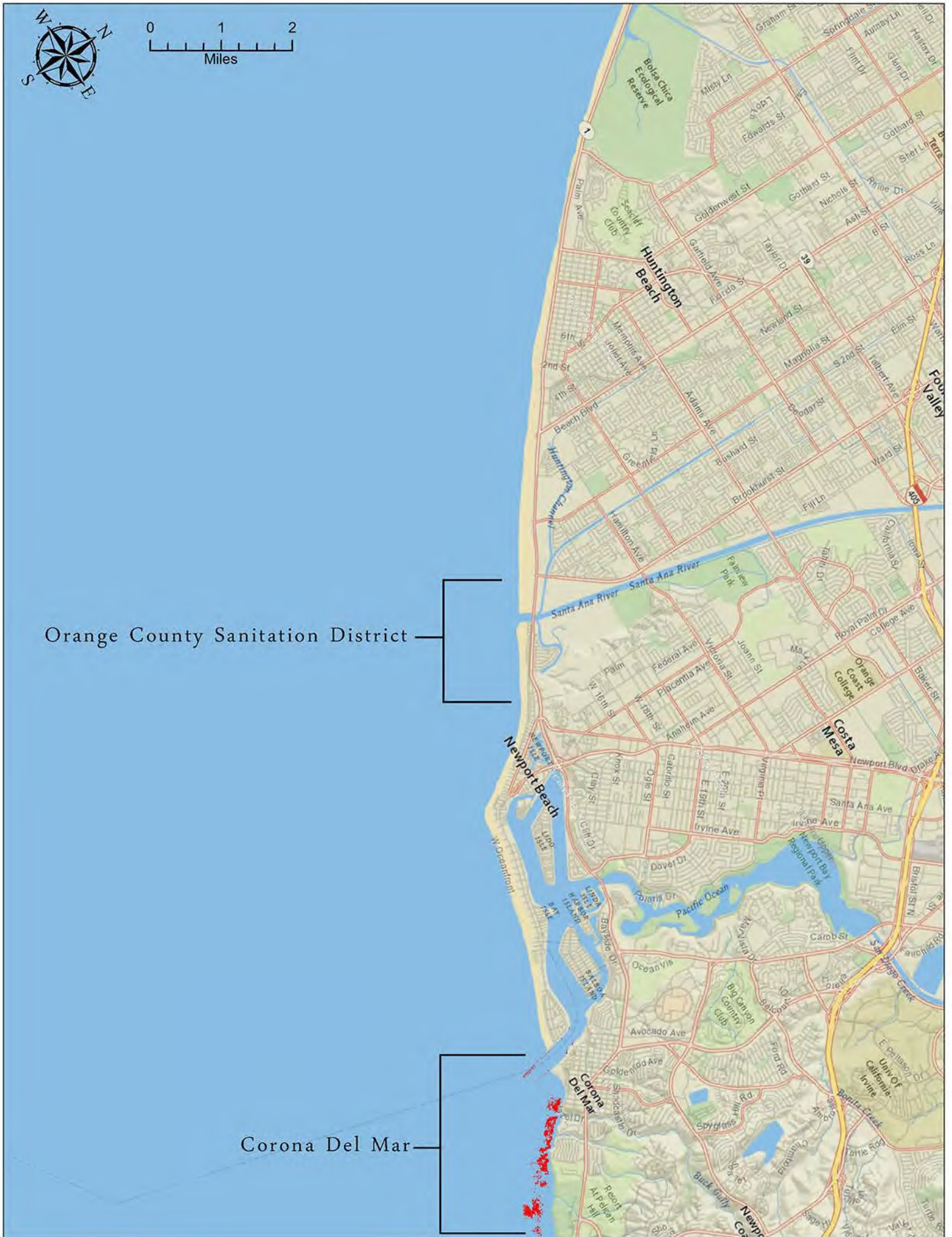




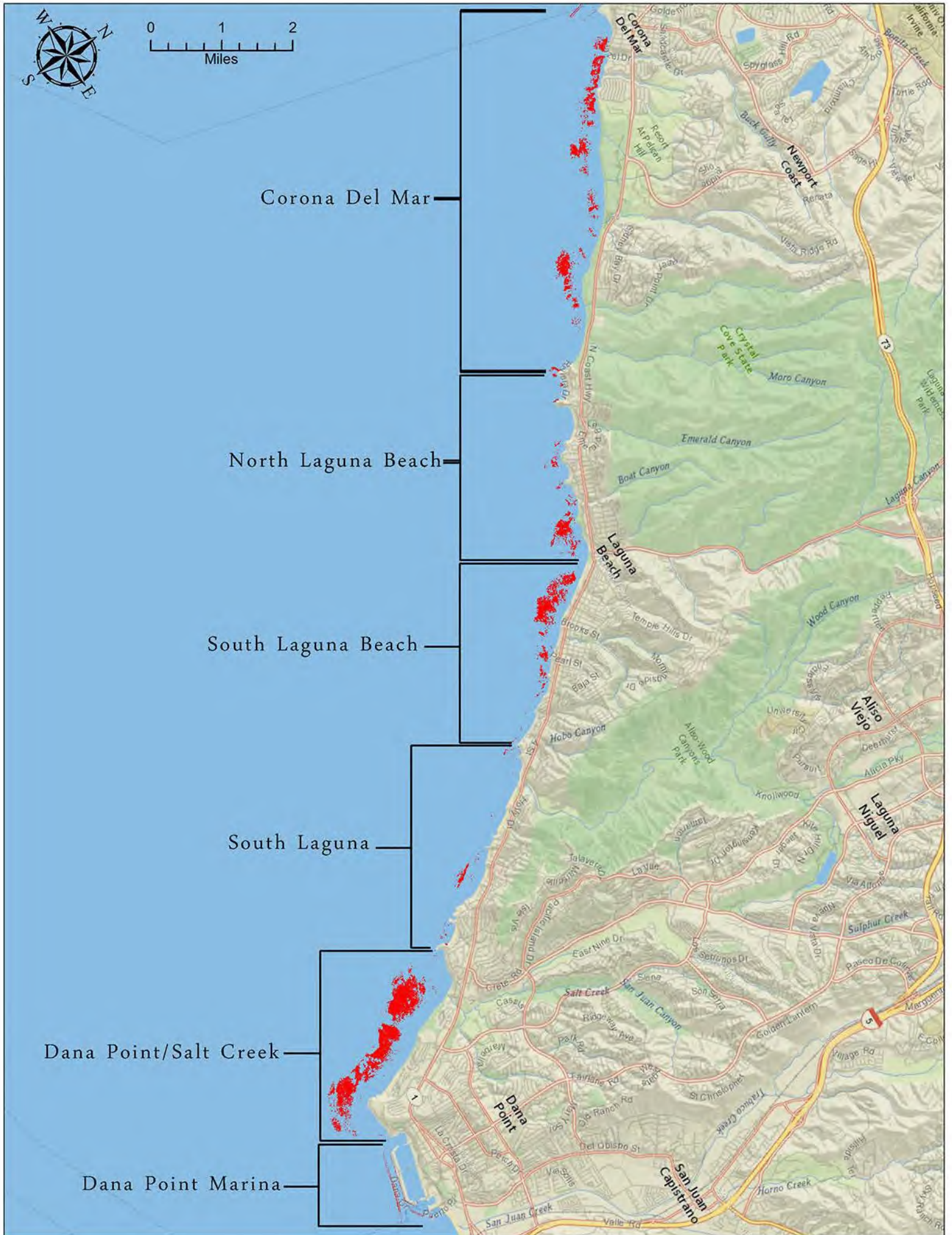


Orange County Sanitation District

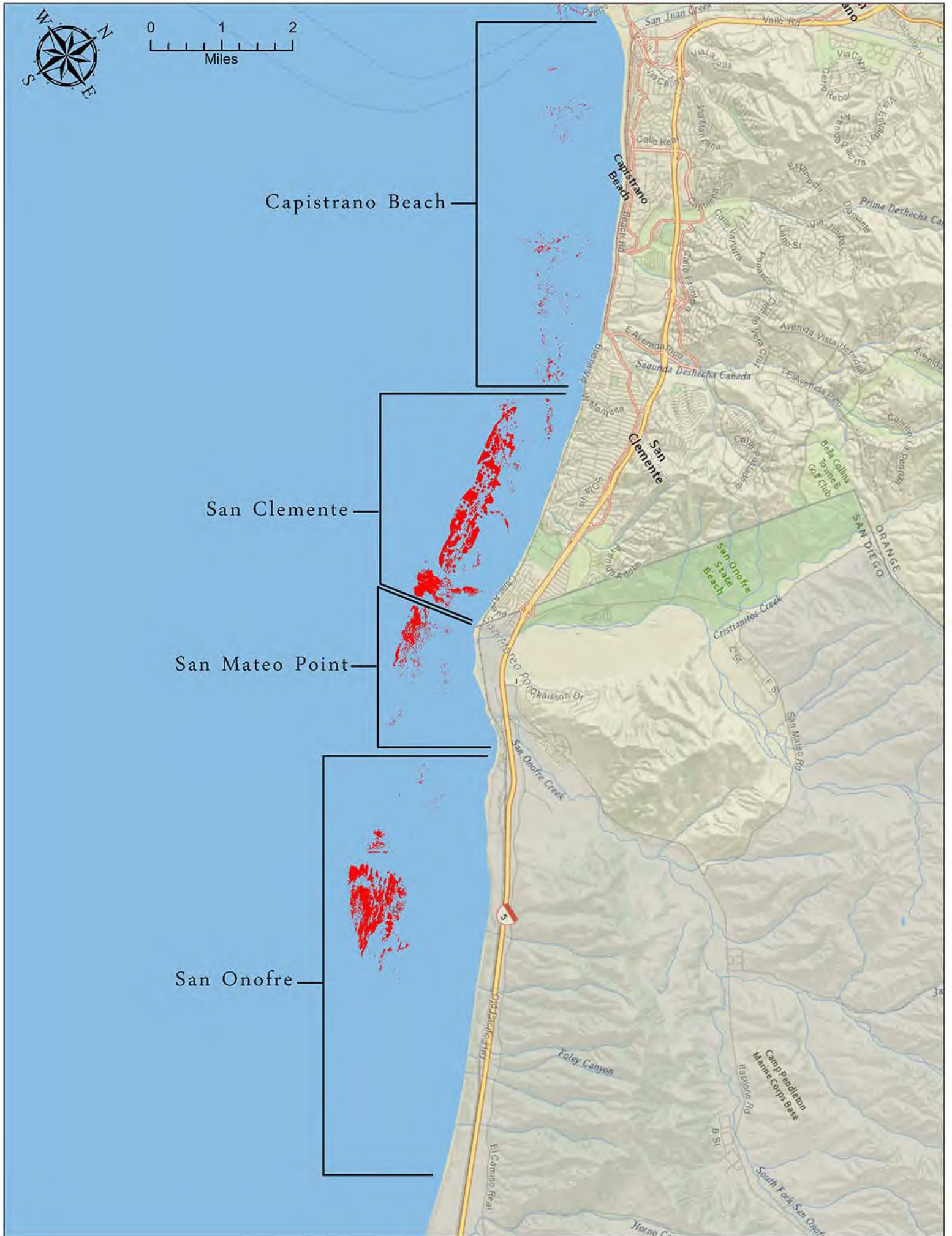
Corona Del Mar









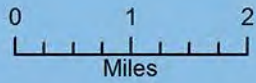


Capistrano Beach

San Clemente

San Mateo Point

San Onofre

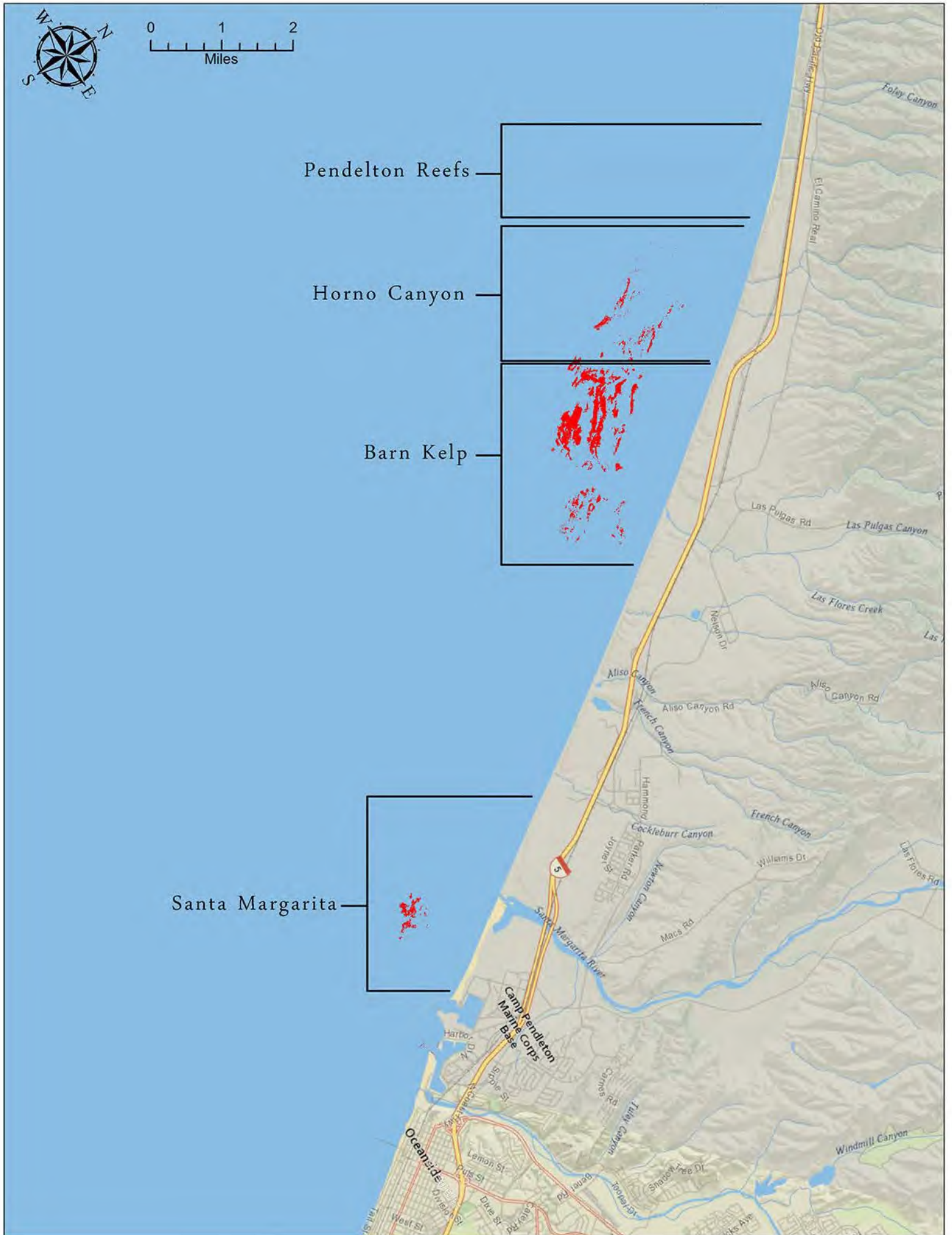


Pendelton Reefs

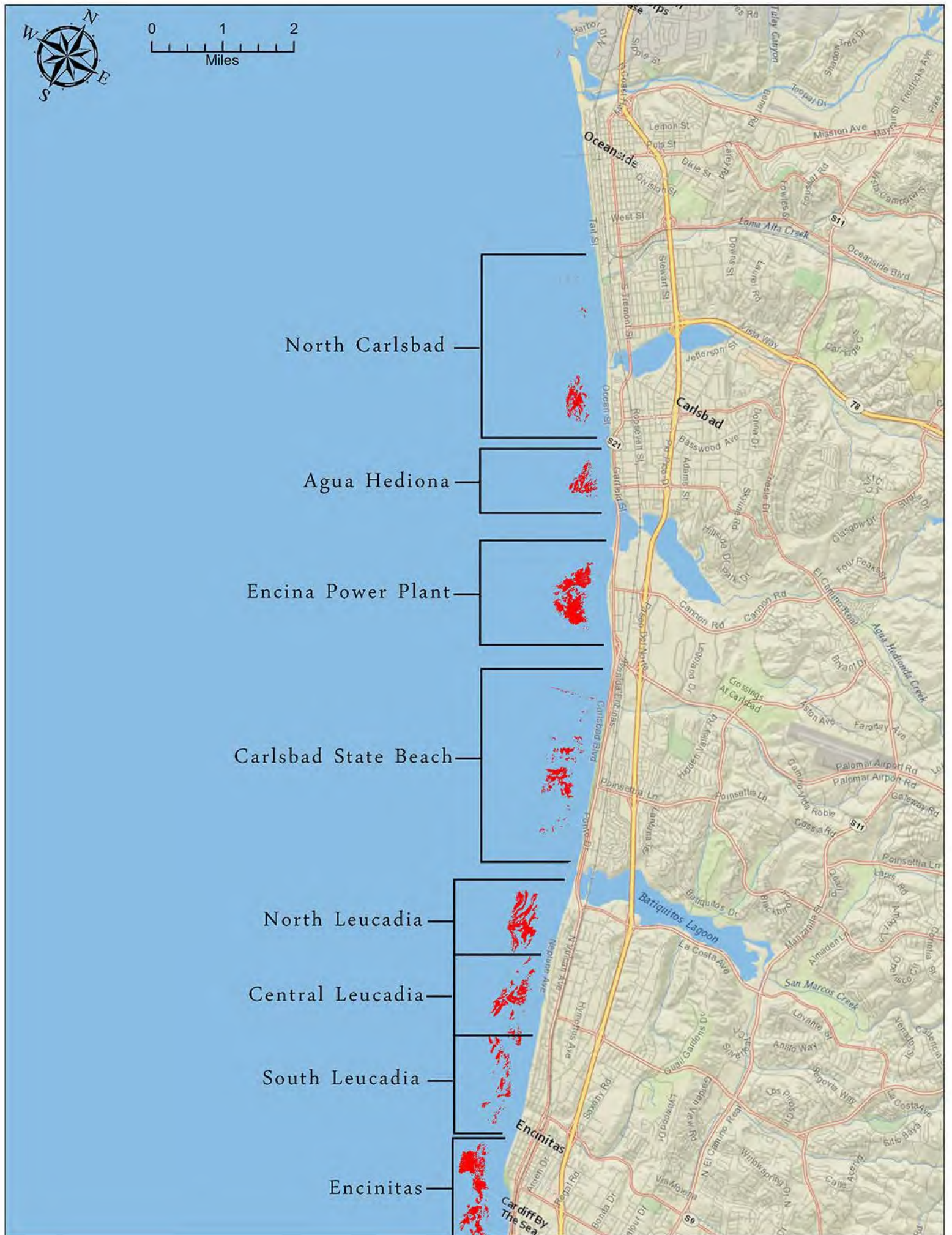
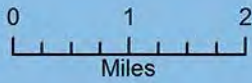
Horno Canyon

Barn Kelp

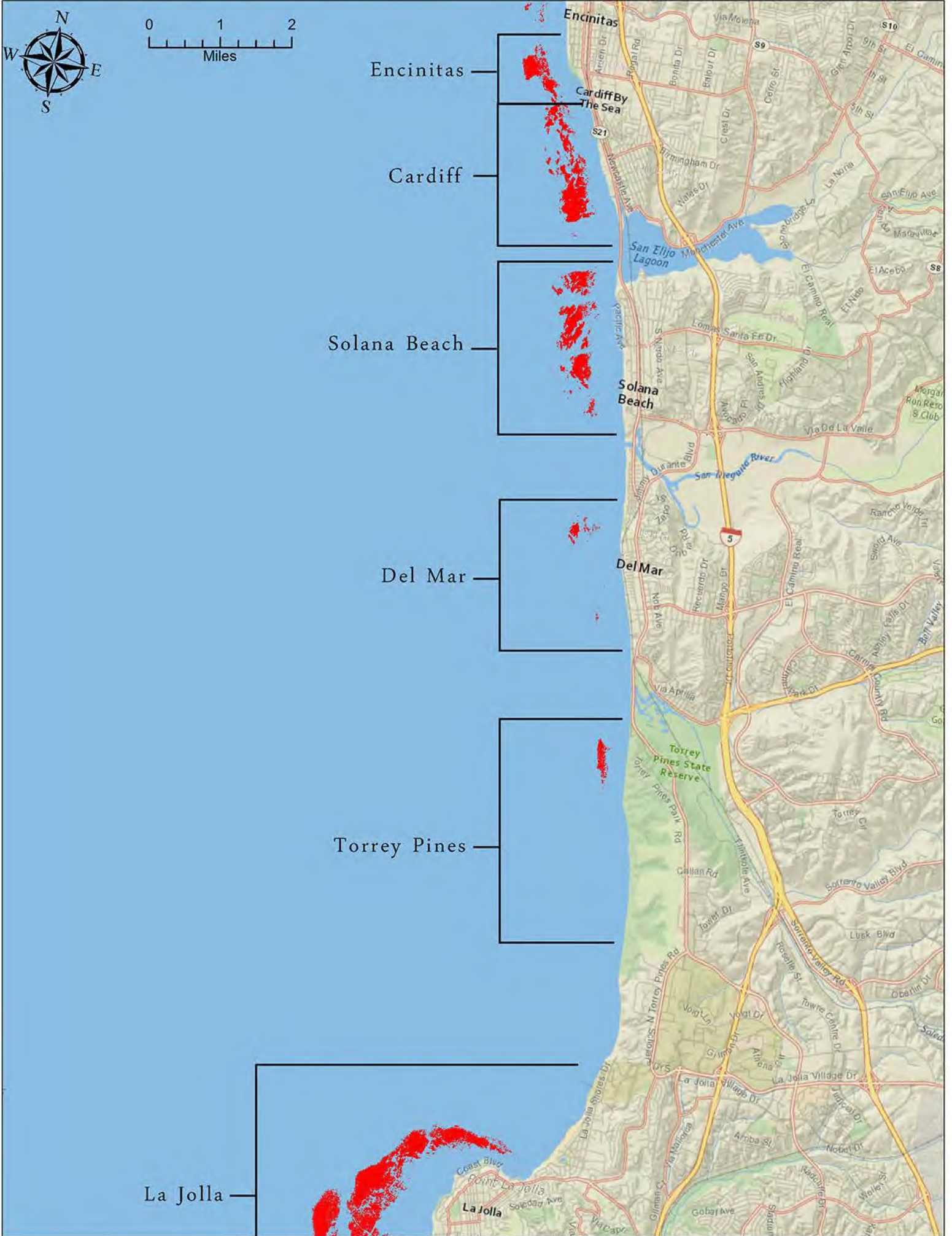
Santa Margarita



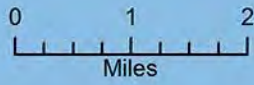






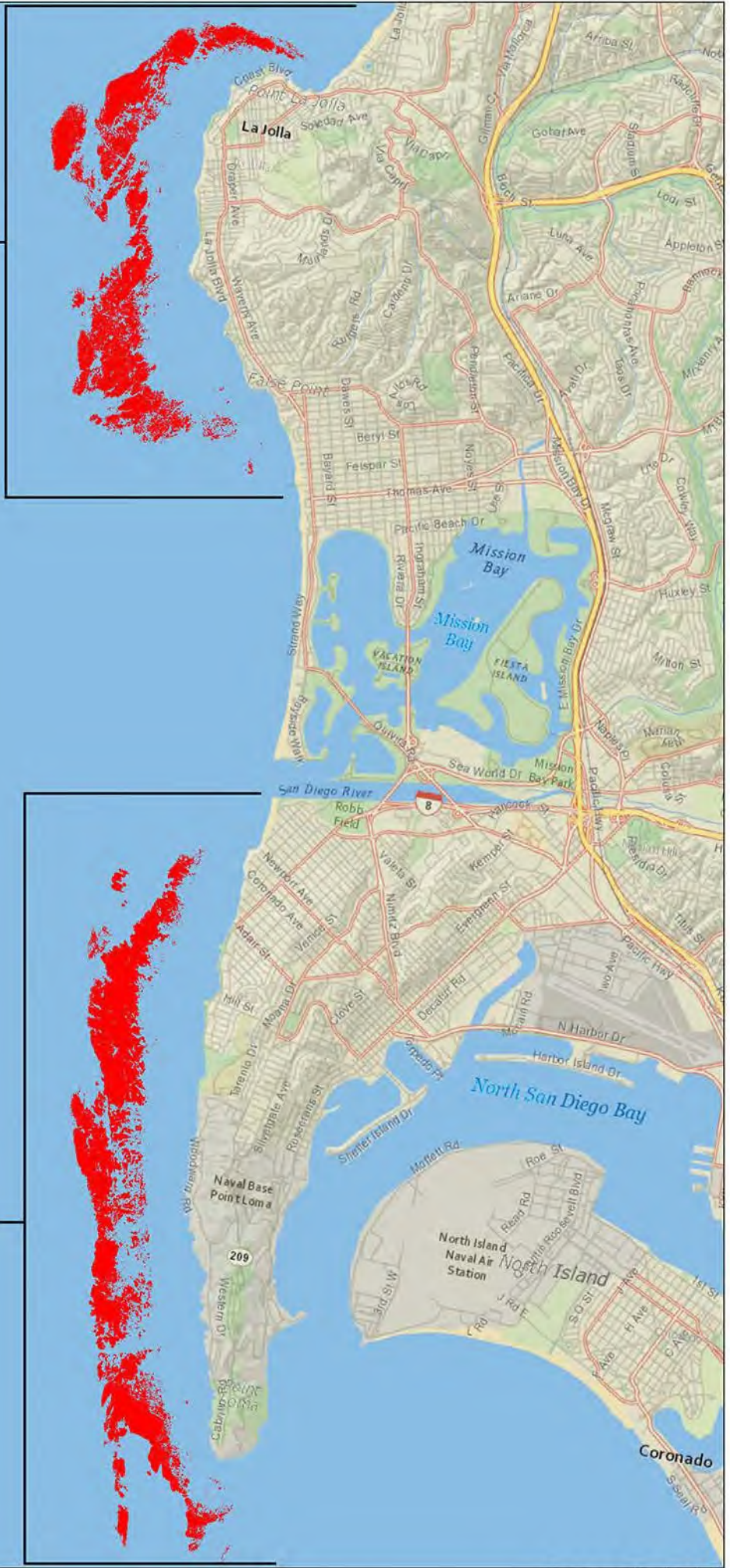




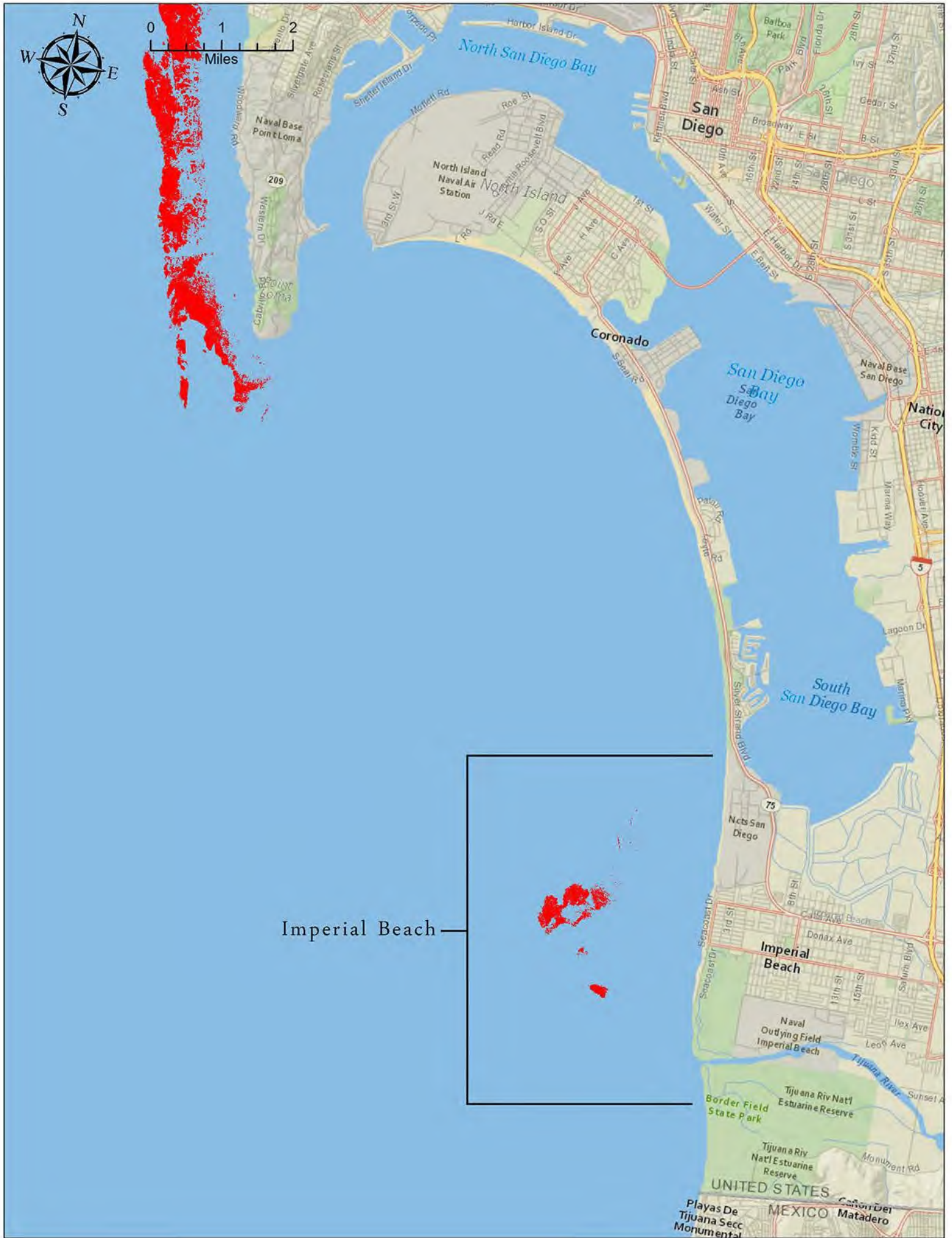


La Jolla

Point Loma







**Ecoscan Resource Data  
Data Acquisition  
Flight Data Report**

Appendix D. 16A. Flight record for  
March 31, 2019

Contracting Agency/Contact		Contract/Order #/Agency File #
Contracting Agency: MBC Applied Environmental Sciences		Contract/Order #:
Division:		Agency File #:
Contact/Title: Shane Beck, Michael Lyons	<b>Calendar</b>	
Address: 3000 Redhill Ave.	Services Ordered: 03/19	
City/State/Zip: Costa Mesa, CA 92626	Data Acquisition Completed: 03/31/19	
Phone 1/Phone 2: (714) 850-4830	Draft Report Materials Due:	
Fax/E-Mail: (714) 850-4840	Final Report Materials Due: 5/19	
Project Title/Target Resource (s)- Survey Range (s)/Survey Data Flow		
Project Title	California Coastal Kelp Resources - Ventura to Imperial Beach - 03/31/19	
Target Resource (s)/ Survey Range (s)	Coastal Kelp Canopies Ventura Harbor to Imperial Beach	
Survey Data Flow	Acquisition Processing Analysis Presentation	Vertical color IR digital imagery of all coastal kelp canopies within the survey range Survey imagery indexed and delivered to MBC for further processing and analysis All survey imagery presented with 8"x10" contact sheets (12 images/per page)

Aerial Resource Survey Flight Data for:		March 31, 2019	
Survey Type	Aircraft/Imagery Data		Associated Conditions
Aerial Transportation/Observation	Aircraft:	Cessna 182	Sky Conditions: Clear
Photographic Film Imagery - 35 mm	Altitude:	13,500' MSL	Sun Angle: > 20 degrees from vertical
Photographic Film Imagery - 70 mm	Speed:	100 kts.	Visibility: 50+ miles
✓ Digital Color/Color Infrared Imagery	Camera:	Nikon D200	Wind: Less than 5 knots
Videography	Lenses:	30mm (see note)	Sea/Swell: 2-4 feet
Radio Telemetry	Film:	Digital Color IR	Time: 1237-1413
Radiometry/Geophysical Measurements	Angle:	Vertical	Tide: 0.2' (+) to 0.1' (+) MLLW
Other 1:	Photo Scale:	As Displayed	Shadow: None
Other 2:	Pilot:	Unsicker	Other:
Other 3:	Photographer:	Van Wagenen	Comments: Excellent Conditions

Range (s) Surveyed	Ventura Harbor to Imperial Beach. Imagery Date Note: Imagery EXIF data shows imagery date as: 3/27/19 and time between 1937 and 2113 PDT. A weak camera data battery caused this error and the correct date and time is as shown above.	
Target Resource Observations	Kelp Canopies	Kelp canopies throughout the range showed significant increases in surface extent from that observed in the December 2018 survey
Imagery Quality/ Comments	Excellent  Lens Note	All surface kelp canopies were photographed within the above range, and the image processing was conducted normally. All of the imagery was judged of excellent quality and was useable for the subsequent mapping and analysis of the kelp resource. 30mm (digital SLR camera) is similiar focal length to 50mm (35mm film SLR camera)

**Ecoscan Resource Data**

143 Browns Valley Rd.  
Watsonville, CA 95076  
(831) 728-5900 (ph./fax)



Signed: \_\_\_\_\_ Bob Van Wagenen, Director

Copy To:



Ecoscan Resource Data  
Data Acquisition  
Flight Data Report

Appendix D. 16B. Flight record for  
July 26, 2019

Contracting Agency/Contact		Contract/Order #/Agency File #
Contracting Agency: MBC Applied Environmental Sciences		Contract/Order #:
Division:		Agency File #:
Contact/Title: Shane Beck, Michael Lyons	<b>Calendar</b>	
Address: 3000 Redhill Ave.	Services Ordered: 6/19	
City/State/Zip: Costa Mesa, CA 92626	Data Acquisition Completed: 07/26/19	
Phone 1/Phone 2: (714) 850-4830	Draft Report Materials Due:	
Fax/E-Mail: (714) 850-4840	Final Report Materials Due: 8/19	
Project Title/Target Resource (s)- Survey Range (s)/Survey Data Flow		
Project Title	<b>California Coastal Kelp Resources - Ventura to Imperial Beach - 07/26/19</b>	
Target Resource (s)/ Survey Range (s)	Coastal Kelp Canopies Ventura Harbor to Imperial Beach	
Survey Data Flow	Acquisition Processing Analysis Presentation	Vertical color IR digital imagery of all coastal kelp canopies within the survey range Survey imagery indexed and delivered to MBC for further processing and analysis All survey imagery presented with 8"x10" contact sheets (12 images/per page)

Aerial Resource Survey Flight Data for:		July 26, 2019	
Survey Type	Aircraft/Imagery Data		Associated Conditions
Aerial Transportation/Observation	Aircraft: Cessna 182	Sky Conditions: Clear	
Photographic Film Imagery - 35 mm	Altitude: 13,500' MSL	Sun Angle: > 20 degrees from vertical	
Photographic Film Imagery - 70 mm	Speed: 100 kts.	Visibility: 50+ miles	
✓ Digital Color/Color Infrared Imagery	Camera: Nikon D200	Wind: Less than 5 knots	
Videography	Lenses: 30mm (see note)	Sea/Swell: 2-4 feet	
Radio Telemetry	Film: Digital Color IR	Time: 1555-1745	
Radiometry/Geophysical Measurements	Angle: Vertical	Tide: 4.7' (+) to 5.1' (+) MLLW	
Other 1:	Photo Scale: As Displayed	Shadow: None	
Other 2:	Pilot: Unsicker	Other:	
Other 3:	Photographer: Van Wagenen	Comments: Excellent Conditions	
Range (s) Surveyed	Ventura Harbor to Imperial Beach. Imagery Date Note: Imagery EXIF data shows imagery date as: 7/7/19 and time between 1320 and 1446 PDT. A faulty camera data battery caused this error, and has been replaced. The correct date and time is as shown above.		
Target Resource Observations	Kelp Canopies	Kelp canopies throughout the range showed a slight increase in surface extent from that observed in the March 2019 survey, especially the range between La Jolla and Point Loma where the increases were more significant.	
Imagery Quality/ Comments	Excellent  Lens Note	All surface kelp canopies were photographed within the above range, and the image processing was conducted normally. All of the imagery was judged of excellent quality and was useable for the subsequent mapping and analysis of the kelp resource. 30mm (digital SLR camera) is similiar focal length to 50mm (35mm film SLR camera)	

**Ecoscan Resource Data**  
143 Browns Valley Rd.  
Watsonville, CA 95076  
(831) 728-5900 (ph./fax)



Signed: \_\_\_\_\_ Bob Van Wagenen, Director

Copy To:



Ecoscan Resource Data  
Data Acquisition  
Flight Data Report

Appendix D. 16C. Flight record for  
September 24, 2019

Contracting Agency/Contact		Contract/Order #/Agency File #
Contracting Agency: MBC Applied Environmental Sciences		Contract/Order #:
Division:		Agency File #:
Contact/Title: Shane Beck, Michael Lyons	<b>Calendar</b>	
Address: 3000 Redhill Ave.	Services Ordered:	9/19
City/State/Zip: Costa Mesa, CA 92626	Data Acquisition Completed:	09/24/19
Phone 1/Phone 2: (714) 850-4830	Draft Report Materials Due:	
Fax/E-Mail: (714) 850-4840	Final Report Materials Due:	10/19
Project Title/Target Resource (s)- Survey Range (s)/Survey Data Flow		
Project Title	<b>California Coastal Kelp Resources - Ventura to Imperial Beach - 09/24/19</b>	
Target Resource (s)/ Survey Range (s)	Coastal Kelp Canopies Newport Harbor to Imperial Beach	
Survey Data Flow	Acquisition	Vertical color IR digital imagery of all coastal kelp canopies within the survey range
	Processing	Survey imagery indexed and delivered to MBC for further processing and analysis
	Analysis Presentation	All survey imagery presented with 8"x10" contact sheets (12 images/per page)

Aerial Resource Survey Flight Data for:		September 24, 2019	
Survey Type	Aircraft/Imagery Data		Associated Conditions
Aerial Transportation/Observation	Aircraft:	Cessna 182	Sky Conditions: Clear
Photographic Film Imagery - 35 mm	Altitude:	13,500' MSL	Sun Angle: > 20 degrees from vertical
Photographic Film Imagery - 70 mm	Speed:	100 kts.	Visibility: 50+ miles
✓ Digital Color/Color Infrared Imagery	Camera:	Nikon D200	Wind: Less than 5 knots
Videography	Lenses:	30mm (see note)	Sea/Swell: 2-4 feet
Radio Telemetry	Film:	Digital Color IR	Time: 1632-1719
Radiometry/Geophysical Measurements	Angle:	Vertical	Tide: 4.9' (+) to 5.2' (+) MLLW
Other 1:	Photo Scale:	As Displayed	Shadow: None
Other 2:	Pilot:	Unsicker	Other:
Other 3:	Photographer:	Van Wagenen	Comments: Excellent Conditions

Range (s) Surveyed	Newport Harbor to Imperial Beach.	
Target Resource Observations	Kelp Canopies	Kelp canopies throughout the range showed a significant decrease in surface extent from that observed in the July 2019 survey. The only kelp observed was that between La Jolla and Point Loma.
Imagery Quality/ Comments	Excellent	All surface kelp canopies were photographed within the above range, and the image processing was conducted normally. All of the imagery was judged of excellent quality and was useable for the subsequent mapping and analysis of the kelp resource.
	Lens Note	30mm (digital SLR camera) is similiar focal length to 50mm (35mm film SLR camera)

**Ecoscan Resource Data**

143 Browns Valley Rd.  
Watsonville, CA 95076  
(831) 728-5900 (ph./fax)



Signed: \_\_\_\_\_ Bob Van Wagenen, Director

Copy To:

**Ecoscan Resource Data  
Data Acquisition  
Flight Data Report**

Appendix D. 16D. Flight record for  
December 12, 2019

Contracting Agency/Contact		Contract/Order #/Agency File #
Contracting Agency: MBC Applied Environmental Sciences		Contract/Order #:
Division:		Agency File #:
Contact/Title: Shane Beck, Michael Lyons	<b>Calendar</b>	
Address: 3000 Redhill Ave.	Services Ordered:	12/19
City/State/Zip: Costa Mesa, CA 92626	Data Acquisition Completed:	12/19/19
Phone 1/Phone 2: (714) 850-4830	Draft Report Materials Due:	
Fax/E-Mail: (714) 850-4840	Final Report Materials Due: 12/19	
Project Title/Target Resource (s)- Survey Range (s)/Survey Data Flow		
Project Title	California Coastal Kelp Resources - Ventura to Imperial Beach - 12/19/19	
Target Resource (s)/ Survey Range (s)	Coastal Kelp Canopies Ventura Harbor to Imperial Beach	
Survey Data Flow	Acquisition Processing Analysis Presentation	Vertical color IR digital imagery of all coastal kelp canopies within the survey range Survey imagery indexed and delivered to MBC for further processing and analysis  All survey imagery presented with 8"x10" contact sheets (12 images/per page)

Aerial Resource Survey Flight Data for:		December 19, 2019	
Survey Type		Aircraft/Imagery Data	Associated Conditions
	Aerial Transportation/Observation	Aircraft: Cessna 182	Sky Conditions: Clear
	Photographic Film Imagery - 35 mm	Altitude: 13,500' MSL	Sun Angle: > 20 degrees from vertical
	Photographic Film Imagery - 70 mm	Speed: 100 kts.	Visibility: 50+ miles
✓	Digital Color/Color Infrared Imagery	Camera: Nikon D200	Wind: Less than 5 knots
	Videography	Lenses: 30mm (see note)	Sea/Swell: 2-4 feet
	Radio Telemetry	Film: Digital Color IR	Time: 1147-1318
	Radiometry/Geophysical Measurements	Angle: Vertical	Tide: 2.6' (+) to 3.3' (+) MLLW
	Other 1:	Photo Scale: As Displayed	Shadow: None
	Other 2:	Pilot: Unsicker	Other:
	Other 3:	Photographer: Van Wagenen	Comments: Excellent Conditions

Range (s) Surveyed	Ventura Harbor to Imperial Beach.	
Target Resource Observations	Kelp Canopies	Kelp canopies throughout the range showed a reduction in surface extent, and the only significant kelp observed was that between La Jolla and Point Loma.
Imagery Quality/ Comments	Excellent  Lens Note	All surface kelp canopies were photographed within the above range, and the image processing was conducted normally. All of the imagery was judged of excellent quality and was useable for the subsequent mapping and analysis of the kelp resource. 30mm (digital SLR camera) is similiar focal length to 50mm (35mm film SLR camera)

**Ecoscan Resource Data**

143 Browns Valley Rd.  
Watsonville, CA 95076  
(831) 728-5900 (ph./fax)



Signed: \_\_\_\_\_ Bob Van Wagenen, Director

Copy To:



## PROJECT FIELD LOG

Client: Region 9 Job No: 14315 Date: 7 Jan 20  
 Work Site: Imp Beh → O'side Personnel: RDM VJS SMC  
 Team Leader: \_\_\_\_\_ Vessel: Scorpacna

Time	Work Related Activities:
0530	Arrive & finish load Plot Sta L/2's on map
0550	Depart MBC
0645	Stop O'side to pick up Wayne
0745	Launch Shelter Island
0840	Imp 3CL 0918 - Pt. Loma S 0945 - Pt. Loma N
1020	La Jolla S. 1115 Torrey Pines 1145 Del Mar
1155	Soj 1220 Encinitas 1230 Encinitas
1235	S Lenc 1245 S Lenc
1325	1355 S Dive N Lenc 1410 - Cars of Park
1435	1458 Dive Encinitas
1520	Aqua Hed 1530 N Carlsbad 1600 Santa Margarita
1625	Arrive at Oceanside
1640	Depart Oceanside
1740	Arrive MBC

Bar YL's La Jolla  
 ESP  
 Simon



## PROJECT FIELD LOG

Client: SONGS Job No: 17562 B Date: 15 JAN 2020  
 Work Site: SONGS Personnel: JJS, CME  
 Team Leader: - Vessel: Scorpaena

Time	Work Related Activities:
0630	Arrive at MBC, mob
0650	Depart MBC
0720	Arrive at Dana Point
0730	Launch Scorpaena
0735	Arrive at Fuel Dock
0820	Depart Fuel Dock
0925	FZS - thermistors
1000	PAR 1010 Barn Kelp 1020 Horno Canyon
1039	C2S - thermistors
1122	C22S - thermistors
1155	A - water
1201	C - "
1207	B - "
1210	San Onofre 1235 San Mateo 1245 San Clemente
1300	Capistrano Beach
1330	Pull scorpaena lunch
1425	Arrive @ MBC, demob
1530	Done.



PROJECT FIELD LOG

Client: R9 Kelp Job No: 14315 Date: 30 Jan 20  
 Work Site: Dana -> Newport Personnel: RHM DJS  
 Team Leader: \_\_\_\_\_ Vessel: Poco loco

Time	Work Related Activities:
0630	Arrive & load
0703	Depart
0730	Arrive Dana Pt 0740 Launch <span style="float: right;">MM51 NHR</span>
0830	Anchor DP Kelp 0913 26m 51' Motored 2 areas w/ scatt'le
-	+ lots submer. lace
1000	S. Lag
1030	Laguna 1054-18min 52'
	N Lag Reef Pt <span style="float: right;">Whither</span>
1300	Corona del Mar
1340	Dock - pulled boat <span style="float: right;">276 hrs</span>
1405	MBC
1500	Finish





PROJECT FIELD LOG

Client: Region 9 Job No: 14315 Date: 7 Jan 20  
 Work Site: Imp Beh → O'side Personnel: RDM VJS SMC  
 Team Leader: \_\_\_\_\_ Vessel: Scorpaena

Time	Work Related Activities:
0530	Arrive & finish load Plot sta L/43 on map
0550	Depart MBC
0645	Stop O'side to pick Wayne
0745	Launch Shelter Island
0810	Imp Beh 0918 - Pt. Loma S 0945 Pt Loma N
1020	La Gulla S. 1115 Tarrey Pines 1145 Del Mar
1155	Sol 1220 Escondido 1230 Encinitas
1235	S. Lenc 1245 S. Lenc
1325	13/53 S Dive N Lenc 1410 - Cars of Park
1433	1458 Dive Encine PP
1520	Aqua Hed 1530 N Carlsbad 1600 Santa Margarita
1625	Arrive at Oceanside
1640	Depart Oceanside
1740	Arrive MBC

Bad YL's La Jolla  
 ESP  
 SIMing

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: 33° 07.517' 117° 20.491'

Date: 7 JAN 2020  
Location: Encina PP  
Time:  
Wind/Direction:  
Current:  
Weather:  
UW Visibility:  
Swell Ht/Period:

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent  
Density  
Tissue color  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease  
Encrustation  
Apical blades  
Sediment on blades  
Remarks

Subsurface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color  
Encrustation  
Disease  
Sediment on blades  
Sinking fronds  
Grazed tissues

Bottom

Tissue color Red - dark yellow  
Encrustation N  
Disease N  
Sediment on blades N  
Sinking fronds N  
Grazed tissues Y  
Sporophyllis  
Juvenile fronds Y  
Holdfasts 6 + 3 = (9)  
Old holdfasts N  
Recruitment Y

Community

Litter 5% coverage  
Turf algae Y - Red  
Turf invert. N  
Shrub algae Y - Red 3 lobster (spiny)  
Large Invert. snail anemone urchins  
Fishes N 2/3 Kellestia  
Disease N 4 Megastrea  
Sed. on rocks Y  
Urchin status III + 3 + 3 2 Purp → Purple urchin = 10  
Dark Purp = 5 + 4 → Red urchin = 7

Bottom characteristics

cobble rock  
shell bottom  
grazed @ mid, not bottom

REMARKS

Beer = 11 = (2)  
Juv = 111 = (3)  
Ad: 1 + (1) + 3 + 11 = (20) = (17)

\* Scattered gorgonians

CONDITION OF MACROCYSTIS BED

Observer: RHM  
Lat/Long: 33° 04.450' 117° 18.964'

Date: 7 JAN 2020  
Location: North Leucadia

TOPSIDE OBSERVATIONS

Kelp Canopy

Low x 50m

Extent

Eporophyll blades w/ jagged edges

Density

Tissue color

% Frond comp.

Senile

Mature

Young

Other

Disease

not carrying spores right now

Encrustation

Apical blades

Sediment on blades

Remarks

LAMINARIA

Depth 35'

Subsurface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color

Encrustation

Disease

Sediment on blades

Sinking fronds

Grazed tissues

Bottom

Tissue color

Encrustation

Disease

Sediment on blades

Sinking fronds

Grazed tissues

Sporophyllis

Juvenile fronds

Holdfasts

Old holdfasts

Recruitment

5m/US

Community

Litter

Turf algae

FLOROSORUM

Turf invert.

Shrub algae

Large Invert.

10 Peter (Laminaria)

Fishes

Disease

Sed. on rocks

Urchin status

Bottom characteristics

Soft rock / Plate rock 90%  
Sand channel 10%

REMARKS

Recruits 11/11 = 4  
Juvenile 1 = 1  
Adult 11 = 11

Mostly Egregia

CONDITION OF MACROCYSTIS BED

Lat Long's incorrect - checked 2 sites @ 1600 + 1615.

SME  
9' 117° 27.249' ???  
S 117° 25.192' ?

Date 7 JAN 2020  
Location Santa Margarita  
Time 1600 / 1615  
Wind/Direction  
Current  
Weather p cloudy  
UW Visibility 10 ft  
Swell Ht/Period 2-3 ft W

Kelp Canopy

Extent None  
Density  
Tissue color  
% Frond comp: \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other  
Disease  
Encrustation  
Apical blades  
Sediment on blades  
Remarks

Depth = 35'

Subsurface None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color  
Encrustation  
Disease  
Sediment on blades  
Sinking fronds  
Grazed tissues

Bottom

Tissue color  
Encrustation  
Disease  
Sediment on blades  
Sinking fronds  
Grazed tissues  
Sporophyllis  
Juvenile fronds  
Holdfasts  
Old holdfasts  
Recruitment

Community

Litter  
Turf algae  
Turf invert.  
Shrub algae  
Large Invert.  
Fishes  
Disease  
Sed. on rocks  
Urchin status

Bottom characteristics

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 33° 09.321' 117° 21.605'

Date 7 JAN 2020

Location North Carlsbad

Time 1530

TOPSIDE OBSERVATIONS

Wind/Direction \_\_\_\_\_

Current \_\_\_\_\_

Weather P. Cloudy

UW Visibility 15 ft.

Swell Ht/Period 2-3 ft w

Kelp Canopy

Extent None

Density \_\_\_\_\_

Tissue color \_\_\_\_\_

% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_

Young \_\_\_\_\_ Other \_\_\_\_\_

Disease \_\_\_\_\_

Encrustation \_\_\_\_\_

Apical blades \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Remarks \_\_\_\_\_

Depth = 43'

Subsurface lots scattered subsurface ~ 10ft tall, patches ~ 10 plants

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Sporophyllis \_\_\_\_\_

Juvenile fronds \_\_\_\_\_

Holdfasts \_\_\_\_\_

Old holdfasts \_\_\_\_\_

Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_

Turf algae \_\_\_\_\_

Turf invert. \_\_\_\_\_

Shrub algae \_\_\_\_\_

Large Invert. \_\_\_\_\_

Fishes \_\_\_\_\_

Disease \_\_\_\_\_

Sed. on rocks \_\_\_\_\_

Urchin status \_\_\_\_\_

Bottom characteristics

REMARKS

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 33° 08.664' 117° 21.119'

Date: 7 JAN 20  
Location: Apua Hd.  
Time: 1520  
Wind/Direction:  
Current:  
Weather: D. cloudy  
UW Visibility: 15 ft.  
Swell Ht/Period: 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None  
Density:  
Tissue color:  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease:  
Encrustation:  
Apical blades:  
Sediment on blades:  
Remarks:

Depth 40'

Subsurface: 10-15 ft. plants on bottom, patch of ~6 plants, 2-3 patches

UNDERWATER OBSERVATIONS

Midwater

Tissue Color:  
Encrustation:  
Disease:  
Sediment on blades:  
Sinking fronds:  
Grazed tissues:

Bottom

Tissue color:  
Encrustation:  
Disease:  
Sediment on blades:  
Sinking fronds:  
Grazed tissues:  
Sporophyllis:  
Juvenile fronds:  
Holdfasts:  
Old holdfasts:  
Recruitment:

Community

Litter:  
Turf algae:  
Turf invert.  
Shrub algae:  
Large Invert.  
Fishes:  
Disease:  
Sed. on rocks:  
Urchin status:

Bottom characteristics

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONDITION OF MACROCYSTIS BED

Observer: RAIM SMF  
Lat/Long: 33° 06.63W 117° 19.56E

Date: 7 JAN 2020  
Location: North Carolina CSP  
Time: 1410  
Wind/Direction: \_\_\_\_\_  
Current: \_\_\_\_\_  
Weather: P. Cloudy  
UW Visibility: 10 ft.  
Swell Ht/Period: 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Subsurface: None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 33° 03.916' 117° 18.650'

Date: 7 JAN 2020  
Location: Central Leucadia  
Time: 1245  
Wind/Direction: 3 W  
Current:  
Weather: p. Cloudy  
UW Visibility: 10'-15'  
Swell Ht/Period: 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: medium-scattered  
Density: 100 m x 30 m  
Tissue color: 50% light  
% Frond comp.: 50% Senile 45% Mature  
Disease: None  
Encrustation: 50%  
Apical blades: 5%  
Sediment on blades: None

5% Young Other

Remarks

Depth 31'

Subsurface apical blades on subsurface, not on canopy

UNDERWATER OBSERVATIONS

Midwater

Tissue Color  
Encrustation  
Disease  
Sediment on blades  
Sinking fronds  
Grazed tissues

Bottom

Tissue color  
Encrustation  
Disease  
Sediment on blades  
Sinking fronds  
Grazed tissues  
Sporophyllis  
Juvenile fronds  
Holdfasts  
Old holdfasts  
Recruitment

Community

Litter  
Turf algae  
Turf invert.  
Shrub algae  
Large Invert.  
Fishes  
Disease  
Sed. on rocks  
Urchin status

Bottom characteristics

REMARKS



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 33°02.979' 117° 10.321'

Date 7 JAN 2020

Location S. Lemaire

Time 1235

Wind/Direction 3 (W)

Current

Weather P. Cloudy

UW Visibility 20 ft.

Swell Ht/Period 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent 30m x 30m

Density medium-scattered

Tissue color 20% light yellow, 70% medium, 10% dark

% Frond comp: 20% Senile 80% Mature 2% Young Other

Disease None

Encrustation 20%

Apical blades 5%

Sediment on blades None

Remarks 1-2 m length fronds Depth: 34'

Subsurface apical tips subsurface

UNDERWATER OBSERVATIONS

Midwater

- Tissue Color
- Encrustation
- Disease
- Sediment on blades
- Sinking fronds
- Grazed tissues

Bottom

- Tissue color
- Encrustation
- Disease
- Sediment on blades
- Sinking fronds
- Grazed tissues
- Sporophyllis
- Juvenile fronds
- Holdfasts
- Old holdfasts
- Recruitment

Community

- Litter
- Turf algae
- Turf invert.
- Shrub algae
- Large Invert.
- Fishes
- Disease
- Sed. on rocks
- Urchin status

Bottom characteristics

REMARKS

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RLM, SME  
Lat/Long: 33°02-314' 117° 18.148'

Date 7 JAN 2020

Location Encinitas

Time 1230

Wind/Direction 3W

Current

Weather P. Cloudy

UW Visibility 10'-15'

Swell Ht/Period 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent 30m wide, 100m long

Density scattered to the north

Tissue color Medium yellow 70%, Dark Yellow 20%, 10% light

% Frond comp. 5% Senile 35% Mature 60% Young Other

Disease None

Encrustation 5%

Apical blades 40%

Sediment on blades

Remarks 23m frond length

Depth: 36'

Subsurface 5-10' algae (kelp) on bottom  
2-3 patches to the surface of 10-40 plants - scattered over 0.35 Miles

UNDERWATER OBSERVATIONS

Midwater

- Tissue Color
- Encrustation
- Disease
- Sediment on blades
- Sinking fronds
- Grazed tissues

Bottom

- Tissue color
- Encrustation
- Disease
- Sediment on blades
- Sinking fronds
- Grazed tissues
- Sporophyllis
- Juvenile fronds
- Holdfasts
- Old holdfasts
- Recruitment

Community

- Litter
- Turf algae
- Turf invert.
- Shrub algae
- Large Invert.
- Fishes
- Disease
- Sed. on rocks
- Urchin status

Bottom characteristics

REMARKS

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: DHM, SME

Lat/Long: \_\_\_\_\_

South: 33° 01.039' 117° 17.385'

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None

Density \_\_\_\_\_

Tissue color \_\_\_\_\_

% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_

Disease \_\_\_\_\_

Encrustation \_\_\_\_\_

Apical blades \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Remarks \_\_\_\_\_

Date 7 JAN 2020

Location Cardiff

Time 1220

Wind/Direction 3 W

Current \_\_\_\_\_

Weather p cloudy

UW Visibility 10 ft.

Swell Ht/Period 2-3 ft. W

Depth: 40'

Subsurface watering ~ 5 ft. tall algae 10'-15' tall for ~ 2-3/10 mile (0.25 mi)  
several scattered breaching surface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Sporophyllis \_\_\_\_\_

Juvenile fronds \_\_\_\_\_

Holdfasts \_\_\_\_\_

Old holdfasts \_\_\_\_\_

Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_

Turf algae \_\_\_\_\_

Turf invert. \_\_\_\_\_

Shrub algae \_\_\_\_\_

Large Invert. \_\_\_\_\_

Fishes \_\_\_\_\_

Disease \_\_\_\_\_

Sed. on rocks \_\_\_\_\_

Urchin status \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

REMARKS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Field Data Sheet**

**CONDITION OF MACROCYSTIS BED**

Observer: RHM, CME  
 Lat/Long: 32° 59.425' 117° 16.960'

South: 32° 59.082' 117° 16.946' 37'

**TOPSIDE OBSERVATIONS**

**Kelp Canopy**

Extent scattered  
 Density \_\_\_\_\_  
 Tissue color 70% dark yellow, 30% light yellow  
 % Frond comp. 30% Senile 70% Mature \_\_\_\_\_  
 Disease None  
 Encrustation 20%  
 Apical blades 2%  
 Sediment on blades None  
 Remarks 2 m length fronds at surface

Date 7 JAN 2020

Location Edana Beach

Time 1155-

Wind/Direction 3W

Current \_\_\_\_\_

Weather p. cloudy

UW Visibility 10-15 ft.

Swell Ht/Period 2-3 ft. W

1% Young \_\_\_\_\_ Other \_\_\_\_\_

Depth 37'

**Subsurface**

scattered @ south end 15-20' tall can't see, 30-35 ft tall can see (50% senile, 50% mature)

**UNDERWATER OBSERVATIONS**

**Midwater**

Tissue Color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_

**Bottom**

Tissue color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_  
 Sporophyllis \_\_\_\_\_  
 Juvenile fronds \_\_\_\_\_  
 Holdfasts \_\_\_\_\_  
 Old holdfasts \_\_\_\_\_  
 Recruitment \_\_\_\_\_

**Community**

Litter \_\_\_\_\_  
 Turf algae \_\_\_\_\_  
 Turf invert. \_\_\_\_\_  
 Shrub algae \_\_\_\_\_  
 Large Invert. \_\_\_\_\_  
 Fishes \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sed. on rocks \_\_\_\_\_  
 Urchin status \_\_\_\_\_

**Bottom characteristics**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**REMARKS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 32° 57.512' 117° 16.539'  
560 537

Date: 7 JAN 2020

Location: Del Mar

Time: 1145

Wind/Direction: 3 kn W

Current:

Weather: P. Cloudy

UW Visibility: 10 ft.

Swell Ht/Period: 2-7 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None

Density:

Tissue color:

% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_

Disease:

Encrustation:

Apical blades:

Sediment on blades:

Remarks:

Depth 37'

Subsurface: 2-3 ft. tall algae on fathometer for 200 m distance

UNDERWATER OBSERVATIONS

Midwater

Tissue Color:

Encrustation:

Disease:

Sediment on blades:

Sinking fronds:

Grazed tissues:

Bottom

Tissue color:

Encrustation:

Disease:

Sediment on blades:

Sinking fronds:

Grazed tissues:

Sporophyllis:

Juvenile fronds:

Holdfasts:

Old holdfasts:

Recruitment:

Community

Litter:

Turf algae:

Turf invert.:

Shrub algae:

Large Invert.:

Fishes:

Disease:

Sed. on rocks:

Urchin status:

Bottom characteristics

REMARKS: 32° 57.590' 117° 16.705'

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 32° 53.561' 117° 15.633'

Date 7 JAN 2020  
Location Torrey Pines  
Time 1115  
Wind/Direction \_\_\_\_\_  
Current \_\_\_\_\_  
Weather P. Cloudy  
UW Visibility 10 ft  
Swell Ht/Period 2-3 ft. W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None  
Density \_\_\_\_\_  
Tissue color \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Apical blades \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Remarks \_\_\_\_\_

Subsurface None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHm, SME  
Lat/Long: 32° 48.922' 117° 17.538' (central)  
32° 48.888' 117° 16.479' (south)

Date 7 Jan 20  
Location La Jolla South  
Time 1020  
Wind/Direction SW  
Current \_\_\_\_\_  
Weather P. Cloudy  
UW Visibility 15-20 ft.  
Swell Ht/Period 2.3ft

TOPSIDE OBSERVATIONS 32° 50.651' 117° 17.026' (North)

Kelp Canopy central = 300 m width (~100 m width)  
100-200m  
Extent 4 km width, continuous south to north end  
Density medium inshore, thick offshore  
Tissue color 60% light yellow, 40% dark yellow  
% Frond comp. 5% Senile 95% Mature \_\_\_\_\_  
Disease None  
Encrustation 60% - 70%  
Apical blades 2-5%  
Sediment on blades None

Remarks 42 ft. scattered plank at surface - none metering subsurface Depth 42' - 70'  
3 m length fronds

Subsurface offshore subsurface kelp ~ 70' depth  
central -> 70% dark yellow, 10% encrusted, 4-5 m frond length, 85% mature, 1% apical, 65-75'

UNDERWATER OBSERVATIONS

**Midwater**  
Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

**Bottom**  
Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

**Community**  
Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

**Bottom characteristics**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM SME  
 Lat/Long: 32° 42.639' 117° 16.307'  
North edge: 32° 43.545' 117° 16.264'  
**TOPSIDE OBSERVATIONS**

Kelp Canopy

Extent ~200m wide, continuous to south  
 Density solid  
 Tissue color 50% dark yellow 50% light yellow  
 % Frond comp. 10% Senile 90% Mature  
 Disease None  
 Encrustation 50%  
 Apical blades 1-2'  
 Sediment on blades None

Remarks

Depth 55ft

Subsurface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_  
 Sporophyllis \_\_\_\_\_  
 Juvenile fronds \_\_\_\_\_  
 Holdfasts \_\_\_\_\_  
 Old holdfasts \_\_\_\_\_  
 Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
 Turf algae \_\_\_\_\_  
 Turf invert. \_\_\_\_\_  
 Shrub algae \_\_\_\_\_  
 Large Invert. \_\_\_\_\_  
 Fishes \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sed. on rocks \_\_\_\_\_  
 Urchin status \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

REMARKS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
 Lat/Long: 32° 39.159' 117° 15.085'  
32° 39.578' 117° 15.630'

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: 200m w x 0.25 mile long *continuous to N*  
 Density: Solid  
 Tissue color: Dark yellow green  
 % Frond comp. 1% Senile 98% Mature \_\_\_\_\_  
 Disease: N  
 Encrustation: 30%  
 Apical blades: 1%  
 Sediment on blades: N

Remarks: Big area scattered @ 0.25 mile long

Subsurface: Just below surface Heavy concentration lots of apical blades visible

Date: 7 Jan 20  
 Location: Pt Loma South  
 Time: 0918  
 Wind/Direction: A  
 Current: \_\_\_\_\_  
 Weather: P. Cloudy  
 UW Visibility: \_\_\_\_\_  
 Swell Ht/Period: 2-3 ft. W

1% Young \_\_\_\_\_ Other 50'

Depth 60'

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Sinking fronds \_\_\_\_\_  
 Grazed tissues \_\_\_\_\_  
 Sporophyllis \_\_\_\_\_  
 Juvenile fronds \_\_\_\_\_  
 Holdfasts \_\_\_\_\_  
 Old holdfasts \_\_\_\_\_  
 Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
 Turf algae \_\_\_\_\_  
 Turf invert. \_\_\_\_\_  
 Shrub algae \_\_\_\_\_  
 Large Invert. \_\_\_\_\_  
 Fishes \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Sed. on rocks \_\_\_\_\_  
 Urchin status \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

REMARKS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHM, SME  
Lat/Long: 32° 34.548' 117° 09.163'

Date: 7 Jan 20  
Location: Imperial Beach  
Time: 0840  
Wind/Direction: 3-5 E  
Current: \_\_\_\_\_  
Weather: Clear sky P. Cloud (10%)  
UW Visibility: \_\_\_\_\_  
Swell Ht/Period: 1-2' W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_

Remarks: No canopy Depth 55'-36'

Subsurface: Hard Bottom - nothing subsurface c. 0.25 diam for circle

UNDERWATER OBSERVATIONS

**Midwater**  
Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

**Bottom**  
Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

**Community**  
Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

**Bottom characteristics**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS: > 2m < 2m

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 19.4166' W 117° 31.643'

Date 15 JAN 20  
Location Pendleton Artificial Reel  
Time 1000  
Wind/Direction 3-5 NW  
Current South  
Weather P. Cloudy  
UW Visibility 10 ft.  
Swell Ht/Period 2-3 W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None  
Density \_\_\_\_\_  
Tissue color \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Apical blades \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Remarks \_\_\_\_\_

Depth: 42'

Subsurface None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 23° 17.132' W 117° 29.376'

Date 15 JAN 20  
Location Barn kelp  
Time 1010  
Wind/Direction 3-5 NW  
Current South  
Weather P. Cloudy  
UW Visibility 10 ft.  
Swell Ht/Period 2-3 W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None  
Density \_\_\_\_\_  
Tissue color \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Apical blades \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Remarks \_\_\_\_\_

Depth: 49'

Subsurface ~ 20 ft. depth → 20-30 ft tall, multiple patches over 1/2 mile

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

Bottom characteristics

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 18.212' W 117° 30.408'

Date: 15 JAN 20  
Location: Horro Canyon  
Time: 1020  
Wind/Direction: 3-5 NW  
Current: South  
Weather: P. Cloudy  
UW Visibility: 10 ft.  
Swell Ht/Period: 2-3 W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: NM  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Depth: 46'

Subsurface: sparse plants - 20-30ft. tall @ Horro Canyon on GPS (HORCYN)  
R9K11 HC -> wrong lat/longs - 2.5 mi N of barn kelp, 0.5 mi S PAR

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 20.588' W 117° 33.509'

Date 15 JAN 20  
Location San Onofre  
Time 12:10  
Wind/Direction 3-5NW  
Current South  
Weather P. Cloudy  
UW Visibility 10 ft.  
Swell Ht/Period 2-3W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None  
Density \_\_\_\_\_  
Tissue color \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Apical blades \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Remarks \_\_\_\_\_

Depth: 4m

Subsurface None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 22.697' W 117° 36.189'

Date: 15 JAN 20  
Location: San Mateo

\* N 33° 22.416' W 117° 35.832'  
TOPSIDE OBSERVATIONS

Time: 12:35  
Wind/Direction: 3-5 NW  
Current: South  
Weather: P. Cloudy  
UW Visibility: 10 ft.  
Swell Ht/Period: 2-3 W

Kelp Canopy

Extent: None  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Depth <sup>47'</sup> ~~42'~~

Subsurface Some scattered plants  
\* scattered plants ~ 20 ft. tall, 1 solid patch, 0.25 mi south of San Mateo Waypoint

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 23.804' W 117° 37.032'

Date 15 JAN 20

Location San Clemente

Time 1245

Wind/Direction P. Windy<sup>SE</sup> 3-5 NW

Current South

Weather P. Cloudy

UW Visibility 10'

Swell Ht/Period 2-3

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent None

Density Scattered

Tissue color Medium = 10% Dark = 95% Light = 5%

% Frond comp. 10 Senile 85 Mature 5 Young \_\_\_\_\_ Other \_\_\_\_\_

Disease NO

Encrustation Yes - 20%

Apical blades 25%

Sediment on blades NO

Remarks Fronds 3m on surface

Depth 46'

- scattered canopy, plants ~ 100 m apart.

Subsurface scattered plants ~ 20-30 ft tall, in patches

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_

Encrustation \_\_\_\_\_

Disease \_\_\_\_\_

Sediment on blades \_\_\_\_\_

Sinking fronds \_\_\_\_\_

Grazed tissues \_\_\_\_\_

Sporophyllis \_\_\_\_\_

Juvenile fronds \_\_\_\_\_

Holdfasts \_\_\_\_\_

Old holdfasts \_\_\_\_\_

Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_

Turf algae \_\_\_\_\_

Turf invert. \_\_\_\_\_

Shrub algae \_\_\_\_\_

Large Invert. \_\_\_\_\_

Fishes \_\_\_\_\_

Disease \_\_\_\_\_

Sed. on rocks \_\_\_\_\_

Urchin status \_\_\_\_\_

Bottom characteristics

REMARKS

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: SME  
Lat/Long: N 33° 25.660' W 117° 38.910'

Date: 15 JAN 20  
Location: Capistrano Beach  
Time: 1300  
Wind/Direction: 3-5 NW  
Current: South  
Weather: p. Cloudy  
UW Visibility: 10 ft.  
Swell Ht/Period: 2-3 W

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: NONE  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Depth: 44'

Subsurface patches ~ 15-25 ft. tall plants, scattered @ 45-35' depth.

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: R. Hu  
Lat/Long: 33° 28.884' 117° 44' 760'

Date: 30 Jan 20  
Location: South Laguna  
Time: 1000 - 1010

TOPSIDE OBSERVATIONS

Wind/Direction: 2-3 NE  
Current: N  
Weather: P. Cloudy  
UW Visibility: \_\_\_\_\_  
Swell Ht/Period: 2-3 WSW

Kelp Canopy

Extent: None  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Subsurface: None

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RMH  
Lat/Long: 33°32.501' 112°47.476'

Date: 30 Jan 20  
Location: N. Laguna  
Time: 12:10  
Wind/Direction: 2-3 NE  
Current: None  
Weather: Mostly Cloudy  
UW Visibility: 15'-20'  
Swell Ht/Period: 2-3 WSW

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: 100m x 150m  
Density: Full-Thick  
Tissue color: Med & Light Yellow  
% Frond comp. 40% Senile 60% Mature 1%  
Disease: N  
Encrustation: N  
Apical blades: Y  
Sediment on blades: N  
Remarks: \_\_\_\_\_  
\_\_\_\_\_

Subsurface: Yes beyond edges of canopy

UNDERWATER OBSERVATIONS

Midwater

Tissue Color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_

Bottom

Tissue color \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Disease \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Sinking fronds \_\_\_\_\_  
Grazed tissues \_\_\_\_\_  
Sporophyllis \_\_\_\_\_  
Juvenile fronds \_\_\_\_\_  
Holdfasts \_\_\_\_\_  
Old holdfasts \_\_\_\_\_  
Recruitment \_\_\_\_\_

Community

Litter \_\_\_\_\_  
Turf algae \_\_\_\_\_  
Turf invert. \_\_\_\_\_  
Shrub algae \_\_\_\_\_  
Large Invert. \_\_\_\_\_  
Fishes \_\_\_\_\_  
Disease \_\_\_\_\_  
Sed. on rocks \_\_\_\_\_  
Urchin status \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RKn  
Lat/Long: 1) 33°33.781' 117° 50.054' Reef Pt.  
2) 33°34.524' 117° 51.365' Whistler Reef

Date: 30 Jan 20  
Location: Reef Pt (Whistler Reef)  
Time: 1220 / 1250  
Wind/Direction: 2-3 NE  
Current: None  
Weather: Mostly Cloudy  
UW Visibility: 30'  
Swell Ht/Period: 2-3 w/s

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None / Few  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Subsurface 1) 3-40m subsurface v. shallow reef  
2) 2-3 @ site; visible is senile; > 50 plants → lots near surface very ragged.

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom

Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community

Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: Rth  
Lat/Long: 33° 35.258' 117° 52.186'

Date: 30 Jan 20  
Location: Corona del Mar  
Time: 1300  
Wind/Direction: 2-3 NE  
Current: None  
Weather: Mostly Cloudy  
UW Visibility: 15'  
Swell Ht/Period: 2-3 WSW

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: None  
Density: \_\_\_\_\_  
Tissue color: \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Apical blades: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Remarks: \_\_\_\_\_

Subsurface: None

UNDERWATER OBSERVATIONS

Midwater  
Tissue Color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_

Bottom  
Tissue color: \_\_\_\_\_  
Encrustation: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sediment on blades: \_\_\_\_\_  
Sinking fronds: \_\_\_\_\_  
Grazed tissues: \_\_\_\_\_  
Sporophyllis: \_\_\_\_\_  
Juvenile fronds: \_\_\_\_\_  
Holdfasts: \_\_\_\_\_  
Old holdfasts: \_\_\_\_\_  
Recruitment: \_\_\_\_\_

Community  
Litter: \_\_\_\_\_  
Turf algae: \_\_\_\_\_  
Turf invert.: \_\_\_\_\_  
Shrub algae: \_\_\_\_\_  
Large Invert.: \_\_\_\_\_  
Fishes: \_\_\_\_\_  
Disease: \_\_\_\_\_  
Sed. on rocks: \_\_\_\_\_  
Urchin status: \_\_\_\_\_

Bottom characteristics  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REMARKS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: R. Hu & DJS  
 Lat/Long: 33° 27.715' 117° 43.283'

Date: 30 Jan 20  
 Location: Dana Point  
 Time: 0800  
 Wind/Direction: 5 East  
 Current: None  
 Weather: P. Cloudy  
 UW Visibility: 20'  
 Swell Ht/Period: 3-4' WSW

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: 0.25 - 0.5 mi  
 Density: Scattered  
 Tissue color: Med-Dark Yellow  
 % Frond comp. 1 Senile 100 Mature 1 Young 1 Other 1  
 Disease: No  
 Encrustation: Yes  
 Apical blades: No  
 Sediment on blades: No  
 Remarks: Fronds @ 2-3 when present

30-35' to 50'

Subsurface: Most metered subsurface 10-15' below Depth range 35 inches to 52' lots

UNDERWATER OBSERVATIONS @ 33° 28.174' 117° 43.495'

Midwater

Tissue Color: Med Yellow  
 Encrustation: Yes  
 Disease: No  
 Sediment on blades: No  
 Sinking fronds: No  
 Grazed tissues: Yes

Bottom

Tissue color: Med Yellow  
 Encrustation: No  
 Disease: No  
 Sediment on blades: No  
 Sinking fronds: No  
 Grazed tissues: Yes  
 Sporophyllis: Yes adults  
 Juvenile fronds: Yes  
 Holdfasts: Yes  
 Old holdfasts: No  
 Recruitment: ? see note 2

Community

Litter: No  
 Turf algae: Sm. Red  
 Turf invert.: 1  
 Shrub algae: Pterogopha legrasia / laminar  
 Large Invert.: 1  
 Fishes: at below  
 Disease: N  
 Sed. on rocks: 1  
 Urchin status: low

Bottom characteristics

Mix 50% Boulder 40 Cobble  
10% sand  
scattered ledge/shelf rock  
S. franciscanus - 6  
Megast - 1  
Kelp Bass - 5-6+  
Haliclurus - 1  
Shepherd - 1

REMARKS

Ad - 2 (two)  
Juv - 2 (two)  
Rec. -

lots laminar/ls recruits  
Dominant bottom algae Pterogopha 2-4/m<sup>2</sup>; @ 1 Laminaria/m<sup>2</sup>

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: RHW  
Lat/Long: 33° 31.887' 117° 46.893'

Date: 30 Jan 20  
Location: Laguna Beach  
Time: 1030  
Wind/Direction: N  
Current: N  
Weather: PCloudy  
UW Visibility: 15-20'  
Swell Ht/Period: 2-3 WSW

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent: 300m x 100m  
Density: Medium  
Tissue color: Med + Dark Yellow  
% Frond comp.: 5% Senile 95% Mature  
Disease: No  
Encrustation: 10%  
Apical blades: No  
Sediment on blades: No  
Remarks: 1-2m length

1% Young Other

Depth 38-55'

Subsurface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color: Med/Light Yel  
Encrustation: No  
Disease: No  
Sediment on blades: Yes  
Sinking fronds: No  
Grazed tissues: Yes

Bottom

Tissue color: Med Yel  
Encrustation: None  
Disease: None  
Sediment on blades: None  
Sinking fronds: None  
Grazed tissues: None  
Sporophyllis: Yes all adults  
Juvenile fronds: Yes  
Holdfasts: Yes  
Old holdfasts: None  
Recruitment: None

Community

Litter: No  
Turf algae: Ceratium  
Turf invert.:  
Shrub algae: Pteropods/Laminaria  
Large Invert.: Megasalanx  
Fishes: Sheepshead, Kelp, and Bass  
Disease:  
Sed. on rocks:  
Urchin status:

3m/s

Bottom characteristics

40% Boulder / 40% Cobble / 10% sand  
Shell Hash - 10%

REMARKS

pa 11 eleven  
Juv - none  
Recr - none



Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: DJS  
 Lat/Long: 33° 27.715' 117° 43.283'

Date 30 JAN 2020  
 Location DANIS POINT  
 Time 0800  
 Wind/Direction 3-4 E  
 Current \_\_\_\_\_  
 Weather Clear, Sunny  
 UW Visibility 20'  
 Swell Ht/Period 3-4 WSW

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent SEE RHMIS DATA  
 Density \_\_\_\_\_  
 Tissue color \_\_\_\_\_  
 % Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
 Disease \_\_\_\_\_  
 Encrustation \_\_\_\_\_  
 Apical blades \_\_\_\_\_  
 Sediment on blades \_\_\_\_\_  
 Remarks \_\_\_\_\_  
 Subsurface \_\_\_\_\_

UNDERWATER OBSERVATIONS @ 33° 28.174' 117° 43.495'

Midwater

Tissue Color Med - light yellow  
 Encrustation None  
 Disease None  
 Sediment on blades None (YES)  
 Sinking fronds None  
 Grazed tissues None (YES)

Community

Litter None  
 Turf algae Reds  
 Turf invert. None  
 Shrub algae Reds  
 Large Invert. Megastrea undosa (4) Kelp (2)  
 Fishes 6 Kelp Bass, 4 Sheephead  
 Disease None  
 Sed. on rocks Light  
 Urchin status None

Bottom

Tissue color Dark (Med). yellow  
 Encrustation None  
 Disease None  
 Sediment on blades None  
 Sinking fronds None  
 Grazed tissues None  
 Sporophyllis Yes, many  
 Juvenile fronds 5  
 Holdfasts 2  
 Old holdfasts 0  
 Recruitment 0

Bottom characteristics

75% Cobble  
15% Boulder  
10% sand  
Laminaria 2%  
Phaeoglossa 80% macro Algae

REMARKS

A 11 (TWD)  
J 0  
R 0

Field Data Sheet

CONDITION OF MACROCYSTIS BED

Observer: DJS  
Lat/Long: \_\_\_\_\_

Date 30 JAN. 2020  
Location LAGUNA (Brooks St.)  
Time 1040

TOPSIDE OBSERVATIONS

Kelp Canopy

Extent SEE RHM's Data  
Density \_\_\_\_\_  
Tissue color \_\_\_\_\_  
% Frond comp. \_\_\_\_\_ Senile \_\_\_\_\_ Mature \_\_\_\_\_ Young \_\_\_\_\_ Other \_\_\_\_\_  
Disease \_\_\_\_\_  
Encrustation \_\_\_\_\_  
Apical blades \_\_\_\_\_  
Sediment on blades \_\_\_\_\_  
Remarks \_\_\_\_\_

Wind/Direction \_\_\_\_\_  
Current \_\_\_\_\_  
Weather \_\_\_\_\_  
UW Visibility \_\_\_\_\_  
Swell Ht./Period \_\_\_\_\_

Subsurface

UNDERWATER OBSERVATIONS

Midwater

Tissue Color Med-light yellow  
Encrustation light  
Disease None  
Sediment on blades None  
Sinking fronds None  
Grazed tissues Slight

Community

Litter Slight red + surfgrass  
Turf algae reds  
Turf invert. \_\_\_\_\_  
Shrub algae pterogophora, laminaria, reds  
Large invert. megabryes undosa, norria horrida?  
Fishes Kelp bass, barred bass, sheephead  
Disease None  
Sed. on rocks yes  
Urchin status S. purpuratus(?), S. franciscanus

Bottom

Tissue color Medium yellow  
Encrustation None  
Disease None  
Sediment on blades None  
Sinking fronds None  
Grazed tissues Very little  
Sporophyllis Yes, many  
Juvenile fronds ?  
Holdfasts 2 holdfasts hollowed, one encrusted  
Old holdfasts None  
Recruitment None

Bottom characteristics

40% boulder  
30% cobble  
30% sand

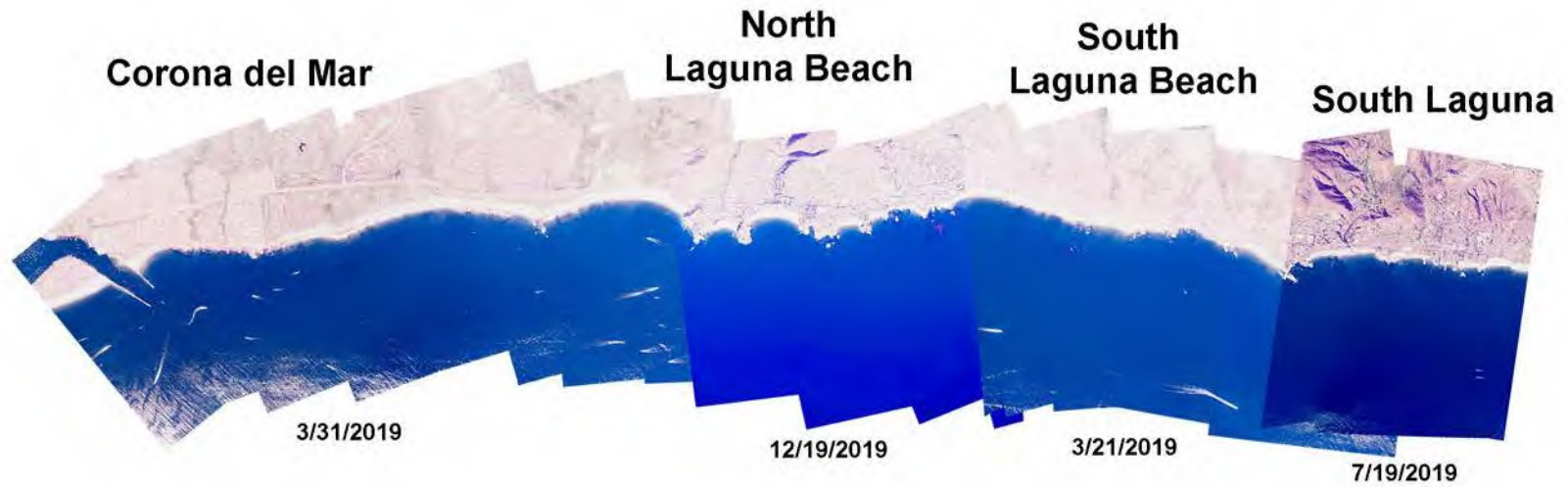
REMARKS

A = 8  
J = 8  
R = 8

***APPENDIX E***

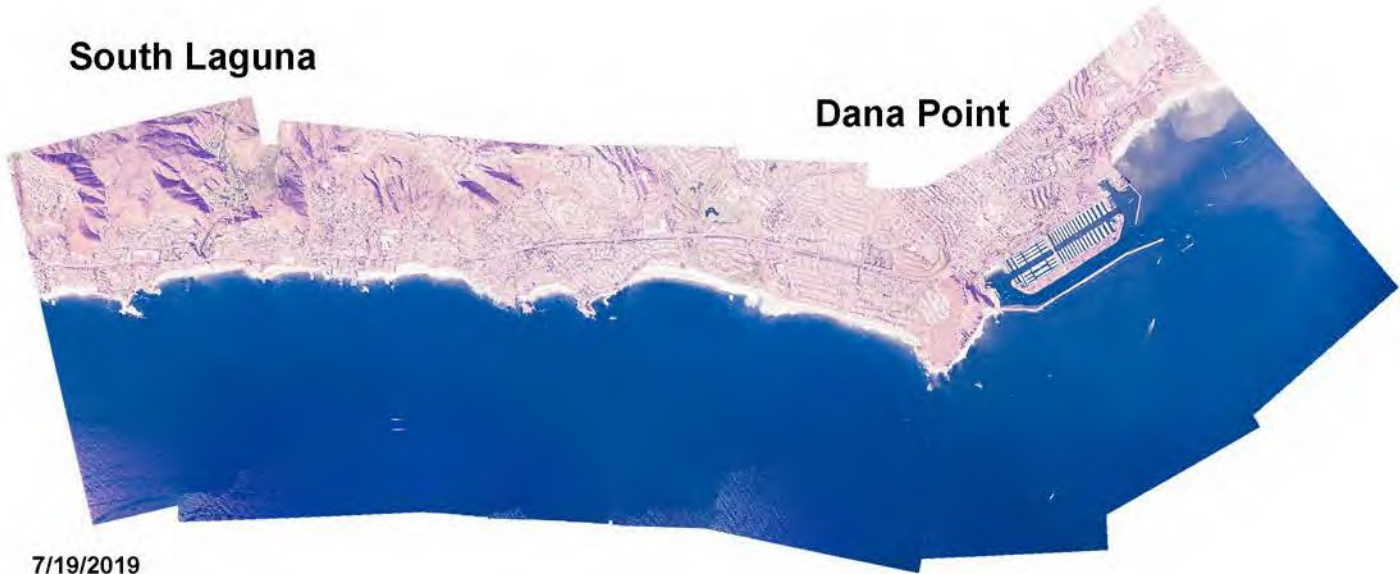
Kelp Canopy Aerial Photographs

---



**South Laguna**

**Dana Point**



7/19/2019

**Capistrano Beach**

**San Clemente**

**San Mateo Point**

**San Onofre**



7/19/2019

3/31/2019

7/19/2019





7/19/2019



7/19/2019

Solana Beach

Del Mar

Torrey Pines

La Jolla

7/19/2019

Pacific Beach

Mission Bay

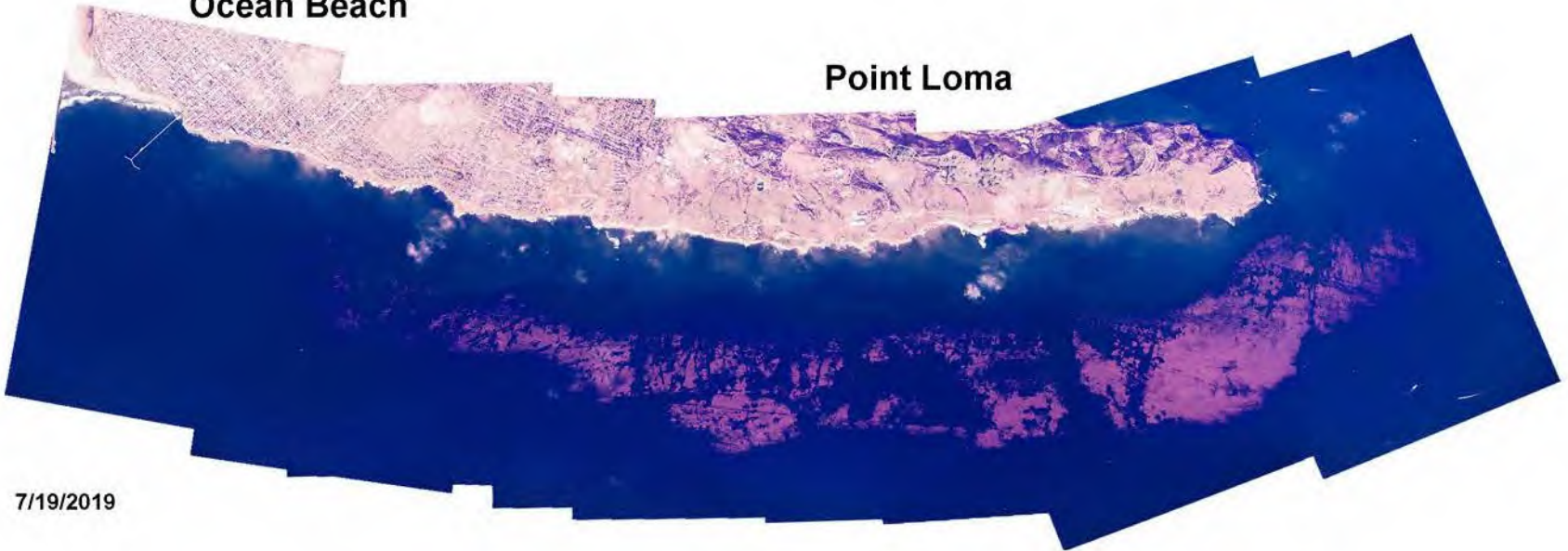
La Jolla

7/19/2019



Ocean Beach

Point Loma



7/19/2019

Silver Strand

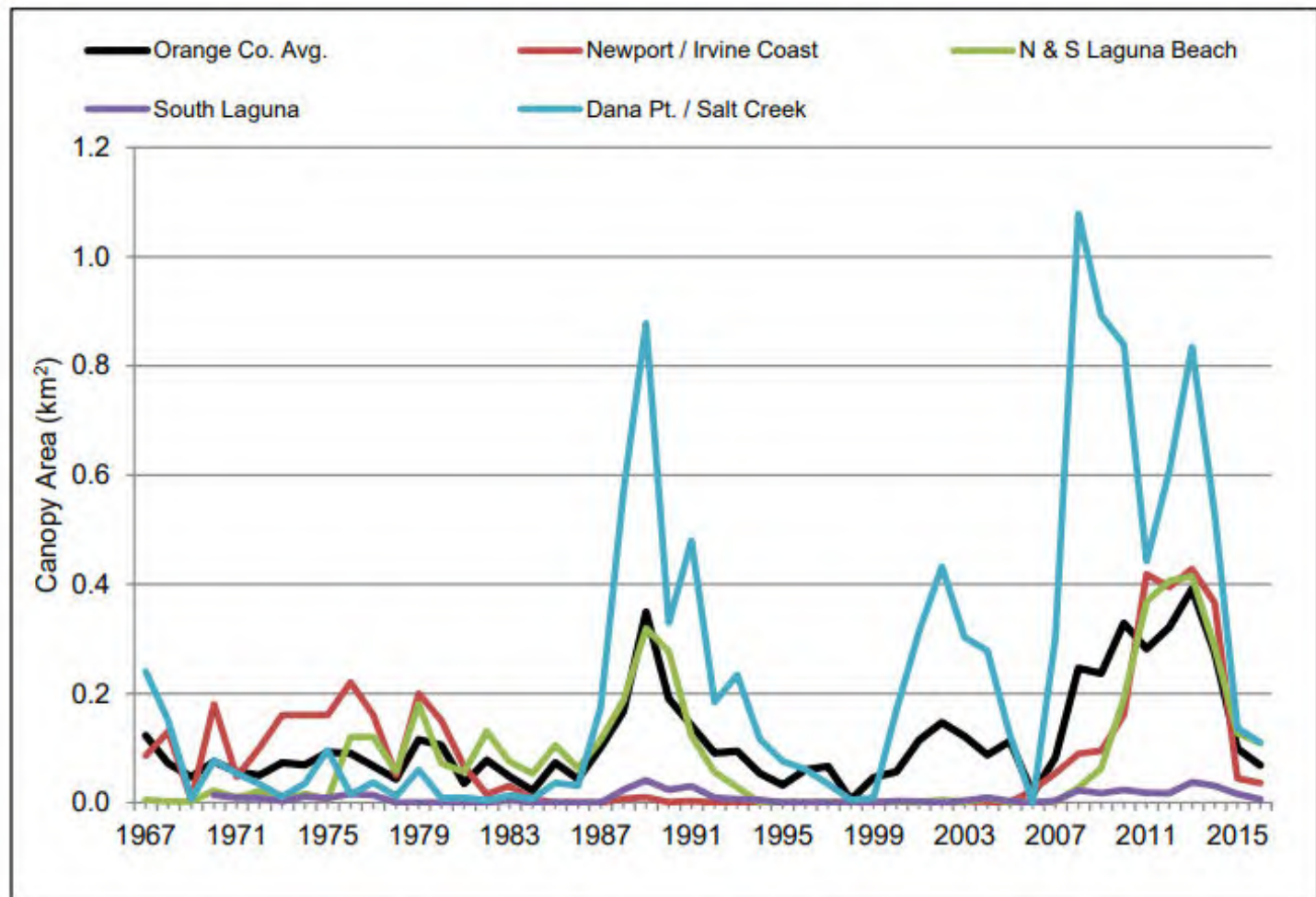
Imperial Beach



Point Loma

7/19/2019

## Status of the Kelp Beds in 2016



**Figure 26. Comparisons between the average Orange County ABAPY and the canopy coverage of the kelp beds from Newport/Irvine Coast to Dana Point/Salt Creek from 1967 through 2016.**





Tim Duong for DanaWharf.com





P.O. BOX 9668  
SOUTH LAGUNA, CA  
92652-7639  
southlaguna.org

August 29, 2023

Commissioners and Staff,

Since 2012, with the implementation of the California Marine Life Protection Act of 1999, Laguna Beach has successfully managed a network of Marine Protected Areas as a statewide model of collaboration and appreciates the support of the Fish & Game Commission in that effort.

On the heels of annexation of South Laguna beaches coming under the purview of the City of Laguna Beach on March 1, 2023, we are requesting an expansion of the “No Take SMCA” provisions to extend throughout all Laguna Beach MPAs. In addition to alignment with Laguna Beach’s commitment to the national “30 x 30 Initiative Plan” to conserve 30% of America's land and waters by 2030, a citywide “No Take” provision will provide enforcement consistency and community equity while protecting South Laguna kelp reefs – key to carbon sequestration, rising sea temperatures and attenuating bluff erosion.

Multiple benefits will accompany extending the Laguna Beach No Take MPA from 7.2 to 7.9 miles: from Aliso Beach and Totuava Cove through Three Arch Bay (TAB) southwest to the Laguna Beach city limit, see attached map. TAB has exceptional nursery beds for marine life in its bays that are not protected under our current MPAs. For this reason, coupled with the decimating impacts of over-fishing in the unprotected SMCA along TAB during the past 10 years, the TAB Community Services District requested in May 2023 that California Fish and Wildlife Commission extend the No Take MPA through “the southernmost point of the city of Laguna Beach – Mussel Cove, also known as Three Arch Bay.”

The Laguna Bluebelt Coalition, Laguna Ocean Foundation through their education and outreach programs, the City of Laguna Beach’s Environmental Sustainability Committee, and the enthusiastic 100% support and collaboration of our City Council and Marine Safety Department have enabled us to be strong watchdogs and local stewards of our MPAs. Together, we have focused on habitat restoration, water-quality education, wildlife and resource protection, and networking.

Laguna Beach’s rocky coastline has been scientifically determined to provide ideal tidepool and kelp forest habitats as a vital genetic linkage for marine life between the Palos Verde Peninsula and La Jolla Cove. No Take MPAs in Laguna Beach have created increased sea life populations, support an expanding variety of ecotourism recreational opportunities, and have proven to be essential to mitigating decades of over-fishing.

Citywide MPA consistency will further improve ocean water quality by reducing harmful greenhouse gas emissions from fishing boats traveling from Dana Point to Laguna Beach.

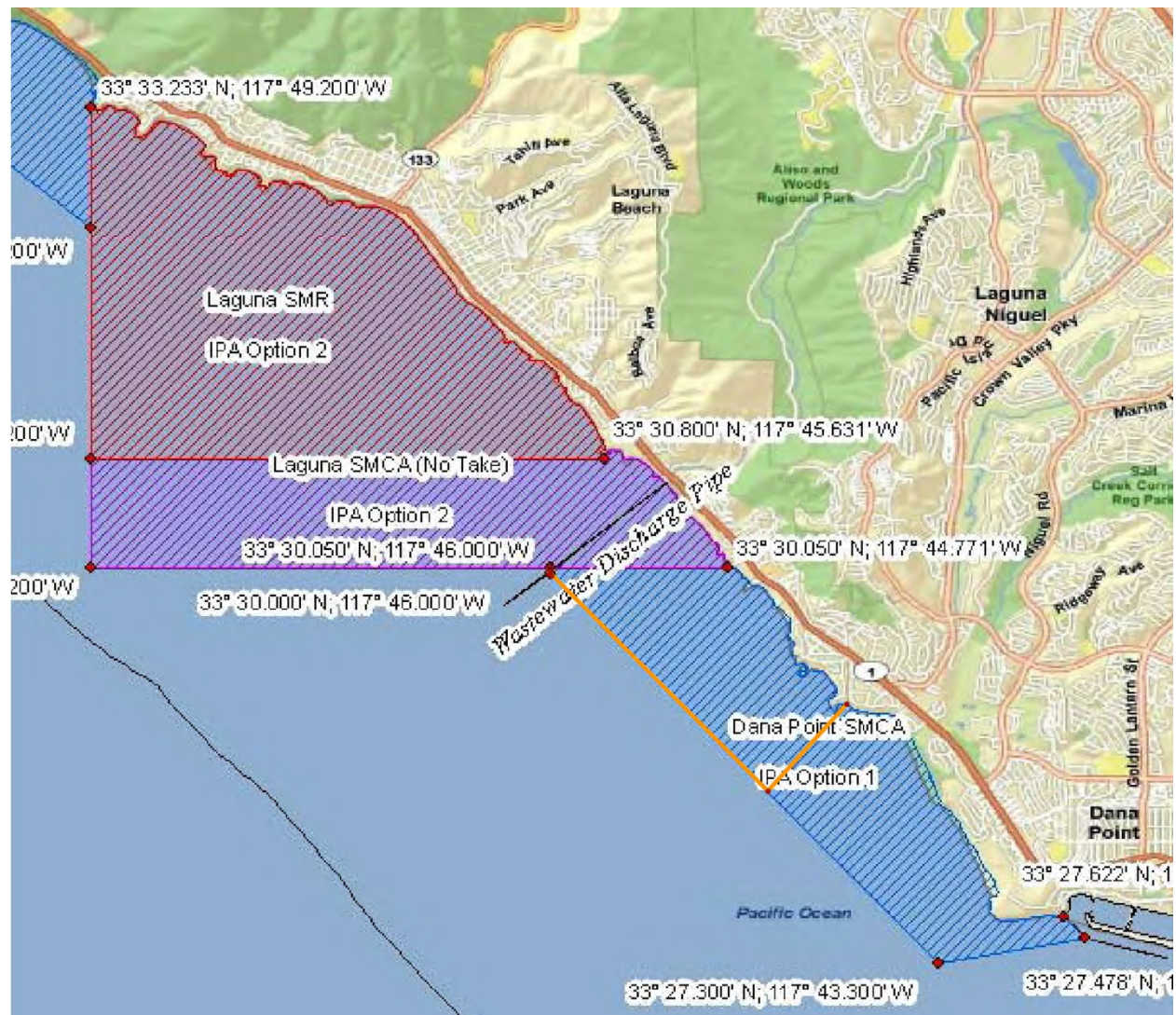
Climate change science recognizes the ocean as key to reversing negative anthropogenic climate impacts.

Thank you for your support of Laguna's Marine Protected Areas and for your consideration of an expansion of the network of No Take MPAs citywide which will increase protections to California's sea life populations and habitat value while benefitting us all.



Greg O'Loughlin, President  
South Laguna Civic Association

*Orange outline indicates the proposed No Take MPA extension to Laguna Beach's southern boundary.*







P.O. Box 1383, Laguna Beach, CA 92652 • [www.LagunaCanyonConservancy.org](http://www.LagunaCanyonConservancy.org)

**November 22, 2023**

California Fish and Wildlife Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
Via email: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

**RE: Support for Extending Laguna Beach's Southern MPA Boundary**

Dear Commissioners,

The Board of Directors of the Laguna Canyon Conservancy (LCC) joins with our local environmental colleagues and organizations in support of extending the Marine Protected Areas at the southern end of Laguna Beach.

LCC believes a revision is vital to ensuring an increase in protection of California's sea life populations and ecosystems, as well as enforcing consistency of rules and regulations, along with community equity. It is also important to achieve the City of Laguna Beach's 30 x 30 contribution to protect 30% of the world's coastal marine areas by 2030.

As stewards of our wilderness, we hope the Commission will support the goals and requests of Laguna Beach's environmental groups to expand the network of No Take MPAs citywide and protect our coastal environment for present and future generations to come. Thank you in advance for making this critical step forward.

Laguna Canyon Conservancy is a non-profit, all-volunteer environmental organization founded in 1988 to Save and Protect Laguna Canyon. LCC members have been involved in expanding the South Coast Wilderness nature reserves of Orange County that now include over 22,000 acres of parks, open space, and marine preserves. For more information, please visit:

[www.LagunaCanyonConservancy.org](http://www.LagunaCanyonConservancy.org)

Sincerely,

Gayle Waite  
President, Laguna Canyon Conservancy

Cc: City Council of Laguna Beach  
Jeremy Frimond, Assistant City Manager

March 9, 2023

California Fish and Wildlife Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)



**RE: Letter of Support for Citywide "No Take"  
Marine Protected Areas (SMR and SMCA) in Laguna Beach, Orange County, California**

Commissioners and Staff,

With the implementation of the California Marine Life Protection Act of 1999, Laguna Beach has successfully managed a network of MPAs as a statewide model of collaboration, education and enforcement. To provide citywide enforcement consistency, the Laguna Bluebelt Coalition requests extending "no take" provisions to include all of Laguna Beach's State Marine Conservation Areas (SMCAs) to the southern City Limits.

Laguna Beach's rocky coastline has been scientifically determined to provide ideal tidepool and kelp forest habitats as a vital genetic linkage for marine life between the Palos Verde Peninsula and La Jolla Cove. The City of Laguna Beach continues to benefit economically and ecologically from Marine Protected Areas with experienced Marine Protection Officers (MPOs), community vigilance, marine life education and comprehensive fishing restrictions.

The South Laguna SMCA is characterized by steep bluffs and compact coves to create a unique coastal ecology with tide pools, deep rocks and kelp forests. Wave action and backwash energy from bluffs surrounded by offshore kelp forests offers a local mixing zone for marine mammal and sealife foraging. Annual migrations of California Gray Whales often use South Laguna Coves as a rest stop for mothers and calves. Laguna Beach's other No Take MPAs have increased sea life populations and currently support a variety of ecotourism recreational opportunities.

While most of Laguna Beach restricts fishing, South Laguna is a designated State Marine Conservation Area allowing recreational and commercial fishing. Daily, concentrated fishing effort in the South Laguna SMCA has unfortunately contributed to over-fishing during the past ten years by recreational fishers and commercial passenger fishing vessels (CPFVs). Expansion of Laguna Beach's MPAs is essential to mitigate decades of regional over-fishing.

Expanding "No Take" provisions for all City MPAs will contribute to the City's commitment to the national "30 x 30 Initiative Plan" to conserve 30% of America's land and waters by 2030. The March 1, 2023 annexation of South Laguna beach areas by the City of Laguna Beach requires "No Take" provisions for the South Laguna SMCA to provide citywide enforcement consistency and community equity.

Climate change science recognizes the ocean as key to reversing negative anthropogenic climate impacts and the City of Laguna Beach is committed to a Climate Action Plan. Citywide MPA enforcement

consistency will improve ocean water quality by reducing harmful greenhouse gas emissions from commercial fishing boats traveling far from Dana Point to fish in South Laguna.

The City Council proudly supports the Marine Protected Areas and City policies encourage expanding marine life refuges.

Thank you for your dedicated efforts to protect California's marine life and for considering our request to extend citywide "No Take" protection for all of Laguna Beach's MPAs.

Mike Beanan  
Laguna Bluebelt Coalition

<https://www.lagunabluebelt.com/>

References:

<https://www.lagunabeachcity.net/home/showpublisheddocument/8148/637406985535730000>

City of Laguna Beach: Tide Pools and Marine Habitats

2A Encourage the expansion of the Marine Life Refuges and the designation of particularly unique or ecologically sensitive coastal areas as Ecological Reserves (such as seal and bird rocks), pursuant to the provisions of the State Department of Fish and Game.





3151 Airway Ave, Suite F-110  
Costa Mesa, CA 92626  
714-850-1965  
[www.coastkeeper.org](http://www.coastkeeper.org)

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for Laguna Bluebelt Coalition Petition to extend the no-take SMCA to the southern boundary of the City of Laguna Beach

Dear President Sklar and Commissioners,

OC Coastkeeper has the mission to protect swimmable, drinkable, fishable water and promote watershed resilience throughout our region. We have been actively working to support and implement Marine Protected Areas since the passage of the Marine Life Protection Act. We support the Laguna Bluebelt Coalition's petition regarding an extension of the Laguna Beach no-take SMCA boundary to the southern border of the city and urge you to approve this proposed boundary change.

Orange County beaches have some of the most beautiful beaches and coves found anywhere in the world. Visitation is high, and therefore the protection offered by the MPAs is vital. Most of the city is protected by the Laguna Beach State Marine Reserve (SMR) and the Laguna Beach no-take State Marine Conservation Area (SMCA). However, there is a stretch of coastline that lies within the city limits that does not receive the same level of protection. Commercial and recreational fishing is permitted in these waters and residents are alarmed by the amount of fishing and the number of lobster traps that they see regularly. This area of the coastline has not been sufficiently studied to get scientific data on the impact of fishing, but local residents that spend substantial time in the water have noted a decrease in fish in the unprotected area.

These coves support vital kelp forest habitat, which is on the decline across the state. The rocky substrate that supports the kelp as well as the fish and invertebrates that utilize the kelp are impacted by lobster traps and anchors. The kelp is still present, but now fails to reach the surface. We must protect this habitat while it still has the ability to come back.

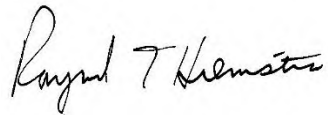
Another concern in this area is the whale migration route. Whales frequently come in close to the shore through Laguna Beach on their migration to and from the calving and breeding grounds in Baja California. During Lobster season, the whales run into a virtual wall of lobster ropes and buoys, which pose a serious threat to entanglement.

Extension of the no take SMCA boundary south will assist enforcement of MPA regulations by making the entire City of Laguna Beach a no take zone. The City of Laguna Beach has recently taken over management of all of the beaches in the city. Until last summer, the County of Orange was in charge of managing all of the beaches south of Aliso Creek. Now that

beach management is consistent throughout the city, the MPA rules should be consistent as well. This will make it easier for the public to identify where they can and can't fish, and for enforcement officers to do their job.

To help MPA enforcement, protect whales, and preserve the remaining kelp beds, we urge the commission **to extend the no-take SMCA boundary to coincide with the southern boundary of the City of Laguna Beach.** We enthusiastically support California's MPA Network and believe the MPAs are working to preserve biodiversity. In the case of Laguna Beach, the MPA extension will enhance the protection of vital ecosystems and create a more consistent and cohesive enforcement policy.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond T. Helmstein". The signature is written in a cursive, flowing style.

Associate Director of Policy and Projects



THREE ARCH BAY  
COMMUNITY SERVICES DISTRICT  
5 BAY DRIVE, LAGUNA BEACH, CALIFORNIA 92651-6780  
(949) 499-4567 FAX: (949) 499-2352

May 1, 2023

**California Fish and Wildlife Commission**

P.O. Box 944209

Sacramento, CA 94244-2090

[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

**RE: Letter of Support for Laguna Beach City-wide Marine Protected Areas including South Laguna, to the Southern Point of Mussel Cove, Orange County, California**

Dear Commissioners,

Since 2012, with the implementation of the California Marine Life Protection Act of 1999, Laguna Beach has successfully managed a network of Marine Protected Areas (MPAs) as a statewide model of collaboration, education and enforcement. To provide marine protection consistently throughout all of Laguna Beach, the Community Services District of Three Arch Bay supports an extension of marine protection via "no take" Marine Conservation Areas (SMCAs) to the point at the end of Mussel Cove, which is the southern border of Laguna Beach, in the community of Three Arch Bay (TAB).

Laguna Beach's rocky coastline has been scientifically determined to provide ideal tidepool and kelp forest habitats as a vital genetic linkage for marine life between the Palos Verde Peninsula and La Jolla Cove. The City of Laguna Beach continues to benefit economically and ecologically from Marine Protected Areas.

Three Arch Bay (TAB), which includes Mussel Cove, in South Laguna's SMCA, is characterized by steep bluffs and compact coves that create a unique coastal ecology with tide pools, deep rocks and kelp forests. Wave action and backwash energy from bluffs surrounded by offshore kelp forests offers a local mixing zone for marine mammal and sea life foraging.

While most of Laguna Beach restricts fishing, the southern end of Laguna Beach was only designated a State Marine Conservation Area, which allows continued recreational and commercial fishing. Unfortunately, the over-fishing during the past ten years by commercial and recreational fishermen, including commercial passenger fishing vessels (CPFVs), has devastated the kelp beds, fish population, and sea life across South Laguna. Expansion of Laguna Beach's MPAs is essential to mitigate decades of regional over-fishing particularly in South Laguna.



Thus, we request that you initiate and vote to provide an extended "no take" Marine Protected Area (SMR and SMCA) Citywide, across Laguna Beach, including South Laguna, to the Southern Point of Mussel Cove, Orange County, California. This would extend the existing marine protections throughout Laguna Beach, including the southernmost point of the city of Laguna Beach – Mussel Cove, also known as Three Arch Bay.

As a community, we are active stewards of our waterways and marine resources, ensuring quality management of our natural resources, and would appreciate the state's support of our efforts by extending the MPA to the Southern end of Laguna Beach.

Thank you,



Gary Rubel  
President  
Three Arch Bay Community Services District

Cc: City of Laguna Beach  
Board Members of the TAB CSD



Tracking Number: (2023-25MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Burton Miller, Catalina MPA Collaborative Co-Chair

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

**2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.**

**3. Overview (Required) - Summarize the proposed changes to regulations: The following proposed changes are regarding MPAs on Catalina Island:**

- a. **Blue Cavern Onshore SMCA.** The proposal is to change the current SMCA (No-Take) purple color coding to match the SMR red color coding for simplicity and reduced confusion for public outreach and education regarding no-take zones. The proposed change received full consensus at the Catalina MPA Collaborative meeting on June 30, 2023 (provided that all current maintenance and access activities remain allowed) and can be found on the MPA Collaborative Vetted Regulation Recommendations document [here](#) in Row 139.
- b. **Casino Point SMCA (1):** The proposal is to remove the allowance for feeding fish. The proposed change received full consensus at the Catalina MPA Collaborative meeting on June 30, 2023 and can be found on the MPA Collaborative Vetted Regulation Recommendations document [here](#) in Row 143.





- c. **Casino Point SMCA (2):** The proposal is to change the current SMCA (No-Take) purple color coding to match the SMR red color coding for simplicity and reduced confusion for public outreach and education regarding no-take zones. The proposed change received full consensus at the Catalina MPA Collaborative meeting on June 30, 2023 and can be found on the MPA Collaborative Vetted Regulation Recommendations document [here](#) in Row 144.
- d. **Long Point SMR:** The proposal is to change the type of boundary from a latitude and longitude line to being a certain, specified distance from shore. To maintain overall size, the northeast corner could be trimmed and fitted to the western edge of the offshore boundary to create a standard distance from shore (in a similar fashion to the Arrow Point to Lion Head SMCA). The proposed change received full consensus at the Catalina MPA Collaborative meeting on June 30, 2023 and can be found on the MPA Collaborative Vetted Regulation Recommendations document [here](#) in Row 141.
- e. **Lover's Cove SMCA:** The proposed change is regarding the Lover's Cove SMCA. The proposal is to remove the allowance for feeding fish. The proposed change received full consensus at the Catalina MPA Collaborative meeting on June 30, 2023 and can be found on the MPA Collaborative Vetted Regulation Recommendations document [here](#) in Row 142.

**4. Rationale (Required) - Describe the problem and the reason for the proposed change:**

- a. **Blue Cavern Onshore SMCA.** MPA Collaborative members witness the use of fishing and use of hoop nets close to shore at Big Fisherman Cove, as well as poaching at Yellowtail Point and Bird Rock. The change in color-coding would create consistency with the red no-take zone labels already in place for the SMR and assist with simplified public outreach and education. As stated above, the color change has consensus from the Catalina MPA Collaborative provided that all current maintenance and access activities remain allowed.
- b. **Casino Point SMCA (1):** The recreational feeding of fish in the SMCA goes against the intent of the MLPA. Fish become acclimated to the availability of food in this particular habitat which affects their behavior. Fish are prone to becoming more aggressive which presents a public safety issue as fish can bite. As stated above and as outlined in the MPA Collaborative Regulation Recommendations document, the recommendation achieved consensus from the Catalina MPA Collaborative.
- c. **Casino Point SMCA (2):** The change in color-coding would create consistency with the red no-take zone labels already in place for the SMR and will assist with simplified public outreach and education. As stated above, the color change has consensus from the Catalina MPA Collaborative.
- d. **Long Point SMR:** Trolling through the MPA occurs and it is a misconception of the fishing community that the MPA only occurs close to shore. The outreach to trollers would be simplified and clarified if the boundary was a specified distance that would not



require advanced navigation techniques such as referencing latitude and longitude. As stated above, the change achieved consensus from the Catalina MPA Collaborative.

- e. **Lover’s Cove SMCA:** The recreational feeding of fish in the SMCA goes against the intent of the MLPA. Fish become acclimated to the availability of food in this particular habitat which affects their behavior. Fish are prone to becoming more aggressive which presents a public safety issue as fish can bite. As stated above and as outlined in the MPA Collaborative Regulation Recommendations document, the recommendation achieved consensus from the Catalina MPA Collaborative.

## SECTION II: Optional Information

- 5. **Date of Petition:** 11/30/2023
- 6. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.
- 7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
  - Amend Title 14 Section(s): [Westlaw regulations](#).
  - Add New Title 14 Section(s): *Click here to enter text.*
  - Repeal Title 14 Section(s): *Click here to enter text.*
- 8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** *Click here to enter text.*  
Or  Not applicable.
- 9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: Although not urgent, the requested changes should be implemented as soon as reasonably practicable.
- 10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: No additional documentation.
- 11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:
  - a. **Blue Cavern Onshore SMCA:** It is not believed that this change will have any economic or fiscal impact.



- b. **Casino Point SMCA (1):** Snorkeling and SCUBA diving are robust recreational activities in the Casino Point SMCA and it is believed that there would not be an impact to these activities, as people will enjoy wildlife viewing whether or not they are able to feed fish.
- c. **Casino Point SMCA (2):** It is not believed that the proposed change would have any economic or fiscal impact.
- d. **Long Point SMR:** It is not believed that there would be an economic or fiscal impact as a result of this change.
- e. **Lover’s Cove SMCA:** Multiple passenger vessels used for tourism purposes sell fish food in the form of “food torpedoes” or other feeding methods. Passengers can purchase the food torpedoes with cash as an upcharge to their wildlife viewing excursion. The fish food torpedo is then triggered by the passenger via button and the food attracts fish to their underwater viewing window. A common line by tour guides is that “the fish you see are larger than others because they are fed all day.” There would be an economic impact in the form of passenger vessels no longer being able to sell this upcharge.

12. **Forms:** If applicable, list any forms to be created, amended or repealed: N/A.

**SECTION 3: FGC Staff Only**

Date received: [Click here to enter text.](#)

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change



Tracking Number: (2023-26MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Lisa Gilfillan

Address: 2120 Jimmy Durante Blvd #106, Del Mar, CA 92014

Telephone number: [REDACTED]

Email address: [lisa@wildcoast.org](mailto:lisa@wildcoast.org)

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

**3. Overview (Required)** - WILDCOAST is an international non-profit that conserves coastal and marine ecosystems and addresses climate change through natural solutions. We often work in partnership with the MPA Collaborative Network and serve as co-chairs for the San Diego MPA Collaborative group. We will reference the Collaborative Network's [Vetted Regulation Recommendations](#) for this petition. Given the complete consensus received within the San Diego MPA Collaborative, we are proposing four changes (one boundary change, and three other changes) across four MPAs. The proposed changes are as follows:

- Line/Row #162- affecting [Swami's SMCA](#): Our Reg recommendation= Shifting the entire shape South (from the lifeguard tower to State/Solana Beach line to cover tidepool on South side)
- Line/Row #160, #164, & #170- affecting [Batiquitos Lagoon No-Take SMCA](#), [San Elijo Lagoon No-Take SMCA](#), & [Famosa Slough No-Take SMCA](#): Our Reg recommendation= changing the purple to red for outreach purposes only, if boundaries remain the same

**4. Rationale (Required) -**



The above proposed recommendations are based on WILDCOAST’s extensive MPA work in San Diego County and also through our collaboration with the MPA Collaborative Network (as a long-standing co-chair for San Diego County). These proposed recommendations came about after a robust discussion with local San Diego stakeholders on June 26, 2023, at the last San Diego MPA Collaborative meeting.

Line/Row #162- Swami’s SMCA: There is a compliance concern here regarding harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is difficult at the southern boundary since it splits two jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what). This proposed change keeps the same size MPA but covers the impacted tidepool area on the Southern boundary. Additionally, the Lifeguard tower would serve as a clear boundary at the North end.

Line/Row #160, #164, & #170- affecting Batiquitos Lagoon No-Take SMCA, San Elijo Lagoon No-Take SMCA, & Famosa Slough No-Take SMCA: The compliance concerns in these locations are all the same- there is confusion amongst the general public around the purple No-Take SMCA designation versus a red SMR. It is therefore easier for the public to understand the regulations when there are fewer designations. It would simplify the rules if all No-Take areas were red for education and outreach purposes. It is anticipated that other MPA Collaborative members will be submitting similar petitions across the South Coast region. Additionally, this change supports Decadal Review Prioritized Recommendation #15.

## SECTION II: Optional Information

5. **Date of Petition:** November 28, 2023
  
6. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.
  
7. **The proposal is to:** (*To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>*)
  - Amend Title 14 Section(s): [Westlaw regulations](#).
  - Add New Title 14 Section(s): Click here to enter text.
  - Repeal Title 14 Section(s): Click here to enter text.
  
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** Click here to enter text.  
Or  Not applicable.
  
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: N/A





- 10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
  - MPA Collaborative Network [Vetted Regulation Recommendations](#)
- 11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: N/A
- 12. **Forms:** If applicable, list any forms to be created, amended or repealed:  
N/A

**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change



Tracking Number: (2023-27MPA)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Azsha Hudson  
Address: 906 Garden Street, Santa Barbara, CA 93101  
Telephone number: 805.963.1622 [REDACTED]  
Email address: [ahudson@environmentaldefensecenter.org](mailto:ahudson@environmentaldefensecenter.org)

**2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code**

**3. Overview (Required) - Summarize the proposed changes to regulations: This petition seeks to reclassify the Anacapa State Marine Conservation Area (SMCA) as a State Marine Reserve (SMR) or at a minimum reclassify the portion of the SMCA from shore to at least 30 meters depth to better protect eelgrass habitat.**

**4. Rationale (Required) - Describe the problem and the reason for the proposed change:**

Numerous state and federal policies underscore the importance of eelgrass as an important yet vulnerable species that provides nursery habitat for fish, reduces coastal erosion, acts as a carbon sink, and increases species diversity by providing three-dimensional structure on sandy bottomed habitats.

Based on a scientific study conducted at the Anacapa SMCA from 2016 to 2019, and a growing body of literature on eelgrass recruitment and ecology, there is compelling evidence that seasonally occurring lobster trapping and anchoring in the SMCA is destroying eelgrass beds that are otherwise thriving in the adjacent Anacapa SMR.

- At Anacapa Island the main threat to eelgrass, as found by the study conducted by Jessica Altstatt, are hard bottomed objects.



- Dive surveys found the transplanted eelgrass meadows at Frenchy’s Cove within Anacapa SMCA to be damaged and greatly reduced. Concurrent interviews with mariners and National Park rangers revealed that Frenchy’s Cove was being fished heavily by spiny lobster fishermen during the two months (November and December) that the brown pelican Special Closure was open.
- Boaters that come to the Channel Islands prefer areas that overlap with eelgrass habitat, leaving the eelgrass susceptible to damage from anchoring.

The limited subset of pelagic fishing methods allowed at the Anacapa SMCA also creates challenges for enforcement by requiring officers to board vessels and confirm compliance on an individual basis. This petition requests Fish and Game Commission (FGC) approval to support the goals of the Marine Life Protection Act (MLPA), align with state and federal policies focused on eelgrass resilience and health, and protect important eelgrass and associated marine life at Anacapa Island.

## SECTION II: Optional Information

**5. Date of Petition: 11/30/2023**

**6. Category of Proposed Change**

Sport Fishing

Commercial Fishing

Hunting

Other, please specify: MPAs, Section 632.

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or*

*<https://govt.westlaw.com/calregs>)*

Amend Title 14 Section(s): [Westlaw regulations.](#)

Add New Title 14 Section(s): Click here to enter text.

Repeal Title 14 Section(s): Click here to enter text.

**8. If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** Click here to enter text.

Or  Not applicable.

**9. Effective date:** If applicable, identify the desired effective date of the regulation.

If the proposed change requires immediate implementation, explain the nature of the emergency:

November 1, 2024

**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

- Petition narrative on eelgrass at Anacapa SMCA: Anacapa-MPA-Petition-Narrative\_FINAL\_2023\_11\_30
- White paper research from Jessica Alstatt: Altstatt\_Eelgrass report\_2021\_03\_01
- Sign on letter for support: Frenchys-Cove-Sign-On\_FINAL\_2023\_11\_29



11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

This petition protects habitat that confers biodiversity and biomass benefits that enhance the health of Anacapa Island and surrounding ecosystems. Eelgrass beds filter nutrients, stabilize sediments, and increase complexity of the substrate and effective habitat for marine life. As demonstrated by numerous reports of lobster traps “fishing the line” of the Anacapa SMR, fishers perceive the nearby fully protected MPA has created a beneficial habitat for lobster trapping. Notably, a recent study on the California spiny lobster fishery determined that the short-term losses from a restrictive MPA is compensated by an over 200% increase in total catch after about 6 years of MPA designation.

This petition would close the Anacapa SMCA to lobster trapping year round and would also prevent anchoring damage from pelagic fishing efforts. While converting this SMCA into an SMR may have short term impacts on recreational and commercial fishing, any such impacts will be offset by the long-term ecosystem wide benefits of protecting eelgrass function at this valuable site.

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#) |

**SECTION 3: FGC Staff Only**

Date received: |11/30/2023 |

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_ |

Meeting date for FGC consideration: \_\_\_\_\_ |

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change

## Petition Narrative

### Overview

This petition seeks to reclassify the Anacapa State Marine Conservation Area (SMCA) as a State Marine Reserve (SMR) or at a minimum reclassify the portion of the SMCA from shore to at least 30 meters depth to better protect eelgrass habitat. Numerous state and federal policies underscore the importance of eelgrass as an important yet vulnerable species that provides nursery habitat for fish, reduces coastal erosion, acts as a carbon sink, and increases species diversity by providing three-dimensional structure on sandy bottomed habitats.

Based on a scientific study conducted at the Anacapa SMCA from 2016 to 2019<sup>1</sup>, and a growing body of literature on eelgrass recruitment and ecology, there is compelling evidence that seasonally occurring lobster trapping and anchoring in the SMCA is destroying eelgrass beds that are otherwise thriving in the adjacent Anacapa SMR.

The limited subset of pelagic fishing methods allowed at the Anacapa SMCA also creates challenges for enforcement by requiring officers to board vessels and confirm compliance on an individual basis. This petition requests Fish and Game Commission (FGC) approval to support the goals of the Marine Life Protection Act (MLPA), align with state and federal policies focused on eelgrass resilience and health, and protect important eelgrass and associated marine life at Anacapa Island.

### Importance of Eelgrass Habitat

Eelgrass, specifically *Zostera marina*, is a marine plant that provides significant ecosystem services in shallow, sandy-bottom habitats. Eelgrass beds support complex food webs, filter nutrients, and improve water quality, stabilize sediments, and serve as important refuge and nurseries for marine vertebrates and invertebrates.<sup>2</sup> Eelgrass beds are typically found from shallow waters down to depths of up to 30 meters (98 feet).<sup>3</sup>

Given its ecological importance, eelgrass habitat restoration and conservation has been identified as a high priority by numerous federal and state policies and planning documents. The National Oceanic and Atmospheric Administration (NOAA) has released several policies related to eelgrass, including the 2014 “California Eelgrass Mitigation Policy and Implementing Guidelines” that emphasize the importance of recovering and sustaining eelgrass across California.<sup>4</sup> Eelgrass is designated as Essential Fish Habitat for various federally managed fish species within the Pacific Coast Groundfish and Pacific Coast Salmon Fisheries Management

---

<sup>1</sup>Jessica Altstatt (2021). Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

<sup>2</sup>Engle, J. M., & Miller, K. A. (2005, November). Distribution and morphology of eelgrass (*Zostera marina* L.) at the California Channel Islands. In *Proceedings of the Sixth California Islands Symposium. Institute for Wildlife Studies, Arcata, CA* (pp. 405-414).

<sup>3</sup> [marinespecies.wildlife.ca.gov/eelgrass/](https://marinespecies.wildlife.ca.gov/eelgrass/)

<sup>4</sup><https://www.fisheries.noaa.gov/resource/document/california-eelgrass-mitigation-policy-and-implementing-guidelines>



Plans and is a habitat area of particular concern for various species within the Pacific Coast Groundfish Fishery Management Plan.<sup>5</sup>

California state policy also recognizes the critical importance of eelgrass; see California Senate Bill 1363 (2016), the Ocean Protection Council (OPC) Strategic Plan (2020-2025) and OPC Ocean Acidification Management Tool (Nielsen et al. 2018), and California Coastal Act sections 30230, 30231. Specifically, the OPC Strategic Plan lists eelgrass preservation and recovery as a priority in its Strategic Plan Target 3.1.4 and aims to protect 15,000 acres of California's eelgrass and create 1,000 new acres by 2025.<sup>6</sup> OPC's Ocean Acidification Action Plan also prioritizes protection and conservation of eelgrass due to its associated carbon storage benefits in sections 4.1.2 and 4.1.3.<sup>7</sup> Globally, eelgrass populations have declined during the past 25 years through a combination of natural and anthropogenic deterioration.<sup>8,9</sup>

While eelgrass restoration efforts have been conducted in the West Coast for over 60 years at significant effort and cost, restoration projects have had mixed success, demonstrating the importance of both protecting existing eelgrass habitat and prioritizing restoration projects that result in successful eelgrass reintroduction.<sup>10</sup>

## Ecological Benefits

There have also been a suite of studies demonstrating both the ecological benefits of eelgrass habitat and of fully protected areas, which include higher abundance of commercially important species and that fully protected areas can better support climate adaptation and resilience than lightly protected areas.<sup>11,12</sup> The Channel Islands are home to some of the greatest biodiversity in California and are a critical habitat for a wide range of commercially, recreationally, and culturally important species. Because healthy eelgrass habitat is both ecologically valuable and limited, protecting areas where it can thrive should be a high priority for the State.

## Anacapa Island Eelgrass: Need for Improved Protection

Eelgrass used to be abundant at multiple sites at Anacapa island until white urchin (*Lytechinus anamesus*) populations increased and locally extirpated eelgrass following the 1983 El Nino.<sup>13</sup>

---

<sup>5</sup><https://www.fisheries.noaa.gov/feature-story/importance-eelgrass>

<sup>6</sup>[https://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf](https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf)

<sup>7</sup> [https://www.opc.ca.gov/webmaster/\\_media\\_library/2018/10/California-OA-Action-Plan-Final.pdf](https://www.opc.ca.gov/webmaster/_media_library/2018/10/California-OA-Action-Plan-Final.pdf)

<sup>8</sup> Short, F.T. and S. Wyllie-Echeverria. 1996. Natural and human-induced disturbance of seagrasses. *Environmental Conservation* 23:17–27.

<sup>9</sup> Hemminga, M.A. and C.M Duarte. 2000. *Seagrass Ecology*. Cambridge University Press, Cambridge, UK, 298 pp.

<sup>10</sup> Melissa Ward and Kathryn Behestri. Lessons learned from over thirty years of eelgrass restoration on the US West Coast. *Ecosphere*, Volume 14, Issue 8, August 2023.

<sup>11</sup> *Front Ecol Environ* 2018; 16(7): 381–387, doi:10.1002/fee.1934

<sup>12</sup> Roberts, C. M., O'Leary, B. C., McCauley, D. J., Cury, P. M., Duarte, C. M., Lubchenco, J., ... & Castilla, J. C. (2017). Marine reserves can mitigate and promote adaptation to climate change. *Proceedings of the National Academy of Sciences*, 114(24), 6167-6175.

<sup>13</sup> Jessica Altstatt, Richard Ambrose, Jay Carroll, James Coyer, Joseph Wible, John Engle "Eelgrass Meadows Return to Frenchy's Cove, Anacapa Island: Recovery Ten Years after Successful Transplantation," *Monographs of the Western North American Naturalist*, 7(1), 500-517, (1 January 2014)

Frenchy's Cove, which is located within the Anacapa SMCA, historically sustained the largest eelgrass meadow around all Anacapa Island. Researchers at Anacapa Island found that there had been no sign of recruitment at Frenchy's Cove since 1991 up until the 2000s when efforts were made to reintroduce eelgrass into the area.<sup>14,15</sup> Transplanting efforts in 2002 restored eelgrass at several sites at Anacapa Island.

In dive surveys conducted by Jessica Altstatt and her team from 2016 to 2019 at transplantation sites at Anacapa Island and other Channel Islands, Anacapa eelgrass sites had 13-14 species of fish recorded, except for Frenchy's Cove (which had no remaining eelgrass), which only reported six species.<sup>16</sup> Similarly, the lowest densities of kelp bass were largely found at the sites with little to no eelgrass; and the lowest number of observed fish species was at the Frenchy's Cove restoration site, over barren sand.<sup>17</sup> These findings underscore that healthy eelgrass beds have been shown to support increased fish biodiversity and enhance marine life and function at sites around Anacapa Island, and the lack of eelgrass is correlated with diminished marine biodiversity and richness.

The eelgrass species at Anacapa Island, *Zostera marina*, is especially vulnerable to disturbance as it grows in soft sediments and can be easily uprooted by activities like trap fishing, which drag along the sandy bottom and disturb vulnerable habitat. Eelgrass beds at Anacapa Island are typically 20-45 feet in depth, and they expand through fragmentation of the stems and through seed dispersal at short distances, meaning that localized protections are important for eelgrass reproduction.<sup>18</sup>

Dive surveys conducted in 2016 and 2019 found the transplanted eelgrass meadows at Frenchy's Cove within Anacapa SMCA to be damaged and greatly reduced.<sup>19</sup> Concurrent interviews with mariners and National Park rangers revealed that Frenchy's Cove was being fished heavily during the two months (November and December) that the brown pelican Special Closure was open.<sup>20</sup> In November 2019, Channel Islands National Marine Sanctuary staff reported at least 100 lobster traps within the Anacapa SMCA, some as shallow as 17 feet, with another 100 traps along the Anacapa SMR boundary line.<sup>21</sup> Fishing block data for the mainland showed that effort

---

<sup>14</sup> Ruckelshaus, M.H. 1996. Estimation of genetic neighborhood parameters from pollen and seed dispersal in the marine angiosperm *Zostera marina* L. *Evolution* 50:856–864.

<sup>15</sup> Reusch, T.B.H., W.T. Stam and J.L. Olsen. 2000. A microsatellite-based estimation of clonal diversity and population subdivision in *Zostera marina*, a marine flowering plant. *Molecular Ecology* 9:127–40.

<sup>16</sup> Jessica Altstatt (2021). *Island Eelgrass (Zostera pacifica): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities*

<sup>17</sup>*Id.*

<sup>18</sup> Olesen, B., Krause-Jensen, D. & Christensen, P.B. Depth-Related Changes in Reproductive Strategy of a Cold-Temperate *Zostera marina* Meadow. *Estuaries and Coasts* 40, 553–563 (2017). <https://doi.org/10.1007/s12237-016-0155-4>

<sup>19</sup> Jessica Altstatt (2021). *Island Eelgrass (Zostera pacifica): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities*

<sup>20</sup>*Id.*

<sup>21</sup>*Id.*

more than doubled within blocks containing fishing areas adjacent to SMRs.<sup>22</sup> Notably, eelgrass continued to thrive within the Anacapa SMR itself, 200 meters to the east of the SMCA.<sup>23</sup>

In the summer and fall of 2016, the research team also marked and reported four abandoned lobster traps within Frenchy's Cove, with one along the boundary with the Anacapa SMR. The other three traps were within a mapped footprint of the eelgrass restoration site within the SMCA, where there was no longer any eelgrass remaining.<sup>24</sup> In a 2019 survey, an abandoned trap was found "ghost fishing" and was filled with live lobsters along the Anacapa SMR boundary.<sup>25</sup>

The impact of lobster trapping and boat anchoring (from lobster trapping, as well as other fishing and recreational sources) within Anacapa SMCA has been to denude transplanted eelgrass beds and prevent ongoing recruitment and growth of this important species and habitat.<sup>26</sup> Disturbing and harming the sandy bottom has a conclusively negative impact on eelgrass survival. Converting this area to an SMR is necessary to protect future eelgrass recovery efforts and all the associated benefits to fish and marine ecosystems.

Notably, the Altstatt paper from 2021 contained the following specific policy recommendation:

Re-classify the shallow soft-sediment bottom within the Frenchy's SMCA as SMR or No Entry (it is already a Special Closure 10 months out of the year). Suitable habitat for eelgrass within Frenchy's Cove only exists within certain hydrodynamic and depth parameters (20'-45'), and over soft bottom not rock. This area historically sustained the largest eelgrass meadow at all of Anacapa Island. Our restoration work showed that eelgrass will rapidly colonize and thrive if anthropogenic disturbance (trapping) were to cease.<sup>27</sup>

### **Impact of Hard Bottom Objects on Shallow Root Eelgrass (*Zostera marina*)**

Eelgrass faces many threats in Southern California, including increased turbidity, dredging, construction, and pollution.<sup>28</sup> At Anacapa Island the main threat to eelgrass, as found by the study conducted by Jessica Altstatt, are hard bottomed objects.<sup>29</sup> Lobster traps are not the only

---

<sup>22</sup> Lenihan, H. S., Gallagher, J. P., Peters, J. R., Stier, A. C., Hofmeister, J. K., & Reed, D. C. (2021). Evidence that spillover from Marine Protected Areas benefits the spiny lobster (*Panulirus interruptus*) fishery in southern California. *Scientific Reports*, 11(1), 2663.

<sup>23</sup> Jessica Altstatt (2021). Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

<sup>24</sup>*Id.*

<sup>25</sup>*Id.*

<sup>26</sup>*Id.*

<sup>27</sup>Jessica Altstatt (2021). Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

<sup>28</sup> Merkel, K.W. 1991. The use of seagrasses in the enhancement, creation, and restoration of marine habitats along the California Coast: Lessons learned from fifteen years of transplants. Technical Advisory Panel presentation to Marine Board, National Research Council Committee on the role of technology in marine habitat protection and enhancement. 20 March 1991. San Francisco, CA.

<sup>29</sup>Jessica Altstatt (2021). Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

object that can reduce transplantation success. A study conducted in Puget Sound on seagrass that has a similar makeup to the eelgrass present in the waters surrounding Anacapa Island looked at the impact of Dungeness crab traps set in an eelgrass bed. It was determined that traps could lead to the destruction of the eelgrass immediately beneath it and create a scour hole that would also be devoid of eelgrass.<sup>30</sup> Recovery of the eelgrass after a few months saw less than 50% recovery, but no further growth was found after eight months.<sup>31</sup>

Anchors are also detrimental to survival and expansion of eelgrass. Boaters that come to the Channel Islands prefer areas that overlap with eelgrass habitat, leaving the eelgrass susceptible to damage from anchoring.<sup>32</sup> In areas that attract boaters there is a cumulative impact from the setting and dragging of the many anchors used over time.<sup>33</sup> Hard bottomed objects resting on top of eelgrass for extended periods cause blades to become broken or abraded, which may disrupt normal blade function.<sup>34</sup> Other impacts to the eelgrass include blades of grass being crushed into the underlying anoxic sediments, likely suffocating the plants and leading to eventual deterioration of above-ground plant, and shading by traps that reduces light availability, thereby inhibiting photosynthetic function.<sup>35</sup>

### **Increasing Enforcement Efficacy**

This petition requests that the Anacapa SMCA be converted to an SMR, removing commercial and recreational lobster fishing and pelagic fishing from the allowable activities. Current regulations for the Anacapa SMCA state the following:

It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of lobster and pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphinfish), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, blue shark, salmon shark, shortfin mako shark, thresher shark, swordfish, tunas, Pacific bonito, and yellowtail) is allowed.<sup>36</sup>

Converting Anacapa SMCA into an SMR will support law enforcement effectiveness as officers will be able to assess compliance from a distance and not required to individually contact, board, and verify each fishing vessel to determine the species and gear being deployed. It is notable that the ocean salmon fishery has closed as of 2023 due to poor fish survival, so removing this species from allowable activities would have no impact on the industry in the near term.

---

<sup>30</sup> June J. , Antonelis K. 2009. Marine Habitat Recovery of Five Derelict Gear Removal Sites in Puget Sound. Natural Resources Consultants, Inc, Seattle, WA. Report for the Northwest Straits Initiative. 19 pp.

<sup>31</sup> *Id.*

<sup>32</sup> <https://www.nps.gov/chis/learn/nature/seagrass-beds.htm>

<sup>33</sup> Santa Barbara Channel Keeper (2009-2010). The Role of Eelgrass Beds as Fish and Invertebrate Habitat. <https://www.sbck.org/wp-content/uploads/2013/06/Eelgrass-Report.pdf>

<sup>34</sup> Uhrin, A. V., Fonseca, M. S., and DiDomenico, G. P. 2005. Effects of spiny lobster on seagrass beds: damage assessment and evaluation of recovery. American Fisheries Society Symposium, 41: 579–588.

<sup>35</sup> *Id.*

<sup>36</sup> <https://wildlife.ca.gov/Conservation/Marine/MPAs/Anacapa-Island>.

## **Socioeconomic Impacts**

This petition protects habitat that confers biodiversity and biomass benefits that enhance the health of Anacapa Island and surrounding ecosystems. Eelgrass beds filter nutrients, stabilize sediments, and increase complexity of the substrate and effective habitat for marine life. As demonstrated by numerous reports of lobster traps “fishing the line” of the Anacapa SMR, fishers perceive the nearby fully protected MPA has created a beneficial habitat for lobster trapping. Notably, a recent study on the California spiny lobster fishery determined that the short-term losses from a restrictive MPA is compensated by an over 200% increase in total catch after about 6 years of MPA designation.<sup>37</sup>

This petition would close the Anacapa SMCA to lobster trapping during the months of November and December and would also prevent anchoring damage from pelagic fishing efforts. While converting this SMCA into an SMR may have short term impacts on recreational and commercial fishing, any such impacts will be offset by the long-term ecosystem wide benefits of protecting eelgrass function at this valuable site.

## **Advancing Goals of the MLPA**

This petition advances MLPA goals 1, 2, 3, and 5.

- Goal 1: Converting the Anacapa SMCA to an SMR will directly “protect the natural diversity and abundance of marine life, and the structure, function and integrity of marine ecosystems” by removing a significant and specific threat to eelgrass – recreational and commercial lobster fishing. In its absence, the 2019 study authors explicitly state: “Our restoration work showed that eelgrass will rapidly colonize and thrive if anthropogenic disturbance (trapping) were to cease.”
- Goal 2: This petition also “sustains, conserves, and protects marine life populations” of both eelgrass and a wide range of marine species that rely on and benefit from eelgrass, as shown by studies indicating higher biodiversity in areas with eelgrass versus the bare sandy bottom that results from lobster trapping and damage from boat anchors. Global research has also shown that fully protected MPAs confer biodiversity and biomass benefits, which further supports the request of this petition.
- Goal 3: Anacapa’s transplanted eelgrass beds are a critical “study opportunity” for understanding how to restore eelgrass in other parts of California and temperate climates. Anacapa Island is an important natural laboratory that has been used by researchers to inform broader eelgrass management efforts since the 1980s. Increasing eelgrass research and recovery is a priority for agencies including OPC and NOAA. The proposed conversion to an SMR can support that important work by helping restore eelgrass beds where they are currently harmed by fishing pressures.

---

<sup>37</sup> Lenihan, H.S., Gallagher, J.P., Peters, J.R. et al. Evidence that spillover from Marine Protected Areas benefits the spiny lobster (*Panulirus interruptus*) fishery in southern California. *Sci Rep* 11, 2663 (2021). <https://doi.org/10.1038/s41598-021-82371-5>



- Goal 5: As the state considers adaptive management of the MPA network, it is important to make decisions that support “effective management measures and adequate enforcement and are based on sound scientific guidelines.” The current allowable activities at the SMCA include take of select pelagic fish, which creates complexity for enforcement officers who must ensure individual compliance with regulations. Commercial and recreational lobster fishing is also allowed; but as described above, recent surveys and studies demonstrate that there is a clear and specific fishing-related threat to eelgrass beds at the Anacapa SMCA, and that converting to an SMR will remove that pressure and allow for ecosystem recovery. Prohibiting these fishing pressures will support enhanced enforcement and align with recently available scientific findings about the significant damage caused by lobster traps and boat anchoring.

### **Alignment with Decadal Management Review**

This petition supports the Decadal Management Review (DMR) recommendation #4: “Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program.” Over the past decade, significant research has been conducted in the Anacapa SMCA and surrounding ecosystems to better understand how policy protections can support eelgrass ecosystem recovery and safeguard this critical species. The DMR report and recommendations also underscore that enhancing MPA enforcement is a continued priority, so creating regulations that facilitate compliance and simplify allowable activities is a clear pathway for addressing this ongoing management goal.

Available data demonstrates that lobster traps and boat anchors in Anacapa SMCA cause significant harm to eelgrass recovery efforts. Eelgrass beds in the nearby Anacapa SMR were healthy, while those in the SMCA were degraded or nonexistent following lobster season. When combined with the benefit of streamlining enforcement by removing piecemeal fishing allowances, this petition clearly responds to the DMR and confers multiple benefits for MPA management.

By approving the conversion of Anacapa SMCA to an SMR, the FGC will integrate the best available science into MPA policy; support the goals of the MLPA; advance federal and state policies advocating for the recovery and protection of eelgrass; and directly support the DMR’s goal of adaptively managing MPAs based on findings from the past decade.

Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition, Health and Extent of Beds and Biological Monitoring of Associated Fish and Invertebrate Communities



March 1, 2021

Jessica Altstatt

# Island Eelgrass (*Zostera pacifica*): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

## Abstract

Eelgrass (*Zostera pacifica*) meadows were present along the northern shores of Anacapa Island prior to the late 1980s, when sea urchin over-grazing led to local extirpation. No natural recruitment occurred over 12 years and in 2002, ~500 eelgrass (*Zostera pacifica*) shoots from two large meadows at Santa Cruz Island (Smugglers, Prisoners) were transplanted to Frenchy's Cove, Anacapa Island. The short-term survivorship and growth of eelgrass at the transplantation site and continuing expansion of eelgrass from the restoration site to the east along Middle Anacapa Island was documented over a 17 year period, along with conditions at naturally occurring beds at Santa Cruz and Santa Rosa islands. Eelgrass bed dynamics and associated fish and invertebrate communities were characterized in 2016 and 2019 and compared with existing conditions within the donor beds and other Channel Islands eelgrass meadows. At Anacapa, eelgrass meadows have persisted longer post-transplantation (2003-2019) than was documented without natural recovery prior to our efforts (1991-2002), and are fully functioning habitat as shown by fish and invertebrate communities, and when compared to natural meadows at Santa Cruz Island.

## Introduction

Seagrasses are flowering plants that have evolved from land plants to live in the ocean, forming lush green underwater meadows. These meadows or beds are an important coastal habitat and support complex food webs, provide refuge for animals, filter out nutrients, and stabilize sediments. Species diversity in seagrass beds can be nearly twice as high as on nearby sandy intertidal and subtidal habitats (Engle et al, unpublished data). Through photosynthesis, seagrass fixes carbon from carbon dioxide dissolved in seawater, and transfers that carbon to the sediments. Growing interest in the potential of seagrass as a 'green carbon' solution to climate change is amplified by recent evidence that subtidal seagrass beds could play a critical role in slowing or reversing the deleterious effects of ocean acidification on marine larval invertebrates and fishes. The focus of most seagrass research has been in intertidal estuaries but submerged beds occurring along the open coast may contribute as much or more value. Thus, the need for up-to-date information on the size, health and habitat function of the major seagrass beds around the Channel Islands and Santa Barbara mainland coast is ever-more relevant and timely.

There are two types of seagrasses found along the California coast- surfgrass and eelgrass. Surfgrass (genus *Phyllospadix*) grows in rocky wave-swept environments while eelgrass (genus *Zostera*) grows in soft sediment found in sheltered coasts, bays and estuaries. *Zostera sp.* was historically abundant in California's shallow inlets but has been especially damaged by coastal development and up to 90% of

its historic range has been lost. DNA analysis has defined two species occurring at the California Channel islands—*Z. marina* and *Z. pacifica* (Coyer *et al.* 2007).

Although both surfgrass and eelgrass are flowering plants and produced seeds, eelgrass is especially vulnerable to disturbance as it grows in soft sediments and can be uprooted. Additionally, eelgrass beds expand through vegetative growth of rhizomes and the chance of long-range dispersal of seeds is very low. Thus, its ability to naturally spread over long distances happens only over a very long time scale. Evidence from genetic studies suggests that the largest eelgrass beds around the Channel Islands are mostly clonal and may be thousands of years old (Coyer *et al.* 2007).

Expeditions of the Channel Islands Research Program (CIRP) in the 1980s and 1990s yielded information on location and size estimates of major eelgrass meadows around the Channel Islands, as well as data on associated fish and invertebrate density (Engle and Miller 2005). These meadows (along with several along the mainland coast) were then re-surveyed in 2007-9 by some of the same research cruise participants.

Up until the mid 1980s, eelgrass had been abundant at multiple Anacapa Island locations from Frenchy's Cove to Cathedral Cove. An unusual recruitment event of the white urchin *Lytechinus anamesus* following the 1983 el Niño led to over-grazing and extirpation of eelgrass from all of Anacapa. In 2002, a trial restoration project was initiated to test whether or not eelgrass recruitment could be 'jump-started' by using vegetative material from nearby Santa Cruz Island. Over ten years, a meadow coalesced, expanded, and spread from within the Anacapa Special Closure and State Marine Conservation Area (SMCA), towards the east into the State Marine Reserve (SMR). The project was deemed a success with eelgrass spreading most of the length of Middle Anacapa Island (Altstatt *et al.* 2014).

Observations and data collected at the restoration site in 2011 and 2012 suggested that something was impacting the soft bottom habitat within Frenchy's Cove. Information gained from mariners and National Park rangers confirmed that the cove was being targeted by trap fishing during the commercial season months of November and December.

MPAs are even more critical for providing resilience and refuge within a changing ocean. Eelgrass habitat, limited by water clarity and exposure, faces very real threats from climate change-related physical disruption from increased wave activity and storm severity. In addition, sea level rise may reduce the resiliency of some beds due to steep shore topography and reflection from waves.

#### *2016-2019 Project Purpose*

We assessed eelgrass condition, density and abundance within major beds at Santa Cruz and Santa Rosa Islands, and along the north side of Anacapa Island that include our restoration site and "downstream" areas of restored meadows (seeded from the restored population). We also gathered information on density and abundance of associated invertebrate and fish species. Information gathered was then compared to that from large-scale, multi-island surveys performed in 1994-1997 (Engle,

CIRP) and in 2007- 2009 (Altstatt, CIRP). Additional opportunistic surveys occurred at various sites between this range of dates.

Anacapa and eastern Santa Cruz island sites were visited in 2016 but survey scope was limited. Enough information was gathered, however, to determine that the commercial lobster trap fishery had severely impacted the epicenter of our restored eelgrass bed within the Anacapa State Marine Conservation Area at Frenchy's Cove. Eelgrass occurring within the neighboring marine reserve was flourishing. This unexpected and very interesting result needs focus, as it has implications for soft-bottom (and other) habitats that fall just outside of marine reserves. In light of the recent years of unprecedented warm water, the health of the beds is unknown and potentially facing dramatic change due to disease, increased predation from recruitment of warmer water species, or physical disruption from increased wave activity during el Niño storms.

We envisioned that the 2019 season of surveys could be the first in a much larger multi-year effort, that will collect information needed to conduct stock assessments for threatened species, the ability of specific seagrass meadows to adapt to changes in sea levels and storm damage due to climate change, and could help address the capacity of eelgrass meadows to buffer changing pH levels.

Primarily, this study was conducted to address the following questions:

- how stable over time are shoot density and meadow extent in naturally occurring eelgrass beds?
- how similar in size and density are the meadows at Anacapa to naturally occurring beds at Santa Cruz and Santa Rosa?
- do the restored eelgrass meadows at Anacapa perform at the same habitat level as naturally occurring beds at Santa Cruz?

Additional questions include:

- does eelgrass extent/coverage/patchiness affect determine fish and invert species richness, abundance?
- do eelgrass beds within Marine Reserves and their associated fish and invertebrates differ from those outside?
- are there implications for management of Marine Protected Areas, and what are the recommendations?



## Methods

### Site Descriptions

We surveyed thirteen island eelgrass meadows between April 24 and July 27 2019. We chose meadows that were known to be temporally stable, and/or that had been sampled repeatedly since the 1990s. One site was at Santa Rosa Island, eight sites at Santa Cruz Island, and four sites at Anacapa Island including the original restoration site within Frenchy's Cove (Figure 1).

We also chose two locations that we suspected may have changed (East Prisoners) or that had been mapped in 2015 (Merkel 2015) that we wanted to ground-truth (East Scorpion). In general, the most protected sites were closest to shore and those sites subject to wave action were deeper and farther offshore. Specific dive locations were chosen with the help of our previous maps and notes to ensure that a full survey could fall within eelgrass meadow rather than sandy plain.

Most sites were visited at least twice; Old Ranch, Eagle Canyon, East Scorpion, and Smugglers, only once.

Divers mapped the western and inner meadow edge at Scorpion, and this data was then provided to the National Park Service (NPS) to assist in their process planning for construction of the new pier. The trackline created by this dive is shown in Figure 2.

### Santa Rosa Island

#### Old Ranch

This expansive eelgrass meadow was not known to CIRP during the 1990s. It is far enough offshore that it escaped detection until we were alerted by a commercial crab fisherman in 2002 who found his traps fouled with eelgrass. Dives occurred in 2002 and 2003 for mapping and general description, but no qualitative surveys were done. We surveyed this bed in August 2008, with additional scouting. Work in Fall 2009 was aborted after one dive as the current was too strong. The 2019 surveys did not reach the outer edge of the mapped eelgrass bed, which we estimated to be another 150-200m to the east, as it was approximately 600m offshore and thus subject to strong currents.

This eelgrass meadow is more than 800 meters long and at least 350m wide. The sediment is white clean sand and meadows occur from 35' to 50' depths. We sampled two sites each ~430m off of the beach.

### Santa Cruz Island

## Prisoners Harbor

Prisoners Harbor is perhaps the most sheltered location on the island, tucked inside a large bight on the north side of the island. The NPS maintains a pier and mooring can in shallow water (~17'). This is a popular location with pleasure boats, especially northwest of the pier. Holes in the eelgrass bed from anchoring are evident in this area. The western headland protects the nearshore habitat from even strong westerly swells. The area is only rarely affected by strong Santa Ana winds that produce steep wind waves from the NE. These meadows are 135m off the beach and 80m off the western headland. The eelgrass bed to the west of the pier extends roughly N-S for hundreds of meters and in to 11' depth inside of the pier. The sediment in the inner harbor is fine and dark. We sampled two areas (~60m apart) in 2019.

In the surveys of the 1990's, it was thought that a separate bed lay 2 km to the east at Cañada del Agua. During our 2009 mapping study, we swam this stretch of coastline and documented that a solid band of eelgrass extends the entire distance. This bed is fairly defined both on the shallow and deep edge. Moving easterly from the pier, the north side of the island becomes more exposed to prevailing swell and current, and the eelgrass meadows are in deeper water.

## East Prisoners

This site is east of the pier off to the first headland. The sediment immediately offshore of the Cañada del Puerto wetlands and creek mouth bears evidence of occasional terrestrial inputs of branches, cobbles and boulders. There has been a narrow canyon carved out from previous heavy flows that is up to 10' deeper than surrounding areas. The creek mouth is closed off from the ocean most of the time but it is evident that when the creek is discharging, eelgrass habitat is affected. In 2001 the eelgrass was described in this area as very patchy (Richards 2001), but was more continuous and uniform when mapped in 2009. It is unknown what the long-term effects of the on-going Cañada del Puerto watershed restoration by NPS will be, although it is possible that the wetlands will prevent the 'flashiness' of previous high water years, and thus could reduce scouring in the nearshore environment.

This area is 110m – 150m offshore.

There are several minor headlands to the east of Prisoners that provide protection from prevailing swell. We sampled three of these areas in 2019. The locations in the eastern lee of these headlands are Eagle Canyon, Cañada del Agua and Aguaje Escondido.

## Eagle Canyon

The only time that we dove here in the past was for mapping in 2009. The eelgrass meadow is 90 meters offshore.

## Cañada del Agua

In 1997, Cañada del Agua meadows were described as isolated and no grass was detected to the east. In 2001, it was noted that this area was the east end of roughly 1.5 km of eelgrass patches and meadows stretching from the Prisoners pier. In 2003 using the ship's fathometer, the bed was estimated at between 1-10 hectares with 0.5 km or less of shoreline. In 2009, during diver surveys it appeared that eelgrass tapered off past the cove and was not continuous to the east.

The eelgrass meadows are 130 meters off the headland and roughly 100 meters wide, centered at 28' depth.

#### Aguaje Escondido

This area was not surveyed in the 1990s, as at that time it was limited to several small patches. In 2003, eelgrass habitat at this location was less 2.5 acres and less than 500 meters of shoreline. It did not appear that the area was contiguous with eelgrass to the west.

During the cruises conducted 2008-09, based on these earlier observations, we did not chose to re-survey or map here. The 2015 NMFS sonar surveys found that this bed had expanded and was now a continuous band with eelgrass to the west.

The eelgrass meadows are 110 meters off of the headland and are up to 250 meters wide.

#### Scorpion

There has been a meadow in this sheltered location as least as far back as 1981 (Engle, personal communication). Grazing by white urchins occurred in the late 1980s and surveys in 1994 found the bed to be 0.1-1 hectare with less than 0.5 km of shoreline. A flash flood in December 1997 caused extreme flooding within Scorpion Canyon, leading to deposition of sediment and debris into the cove, leading to an estimated reduction in eelgrass by 30% or more (Richards, personal communication). In 2001, the eelgrass bed was a series of very dense patches 3-8 meters in diameter. This eelgrass bed is in a heavily used anchorage in front of the National Park island headquarters and popular visitor area. Two mooring balls were placed within Scorpion for use by NPS and concessionaire vessels in the 1990s. Since then, the bed has been a mosaic of meadows with circular open areas resulting from periodic relocation of the NPS mooring anchors and chain, and old anchor scars. Advocacy work in 2007-8 temporarily resulted in NPS suspending the chain off the sea floor by using a sub-surface float. Within a few years, however, the subsurface floats were removed by maintenance staff and the chain once again was on the bottom. This Marine Protected Area will continue to be affected by the chains on the bottom, and routine maintenance of the mooring chain every time the anchors are pulled up and redeployed in a new location, until NPS decides to modify their practices.

This eelgrass meadow is approximately 300 meters long and at least 74 m wide. The bed was mapped as 5.8 acres in 2009.

#### East Scorpion

This site is 500 meters east of Scorpion and is somewhat less protected. We chose to survey this location as it had been mapped as a solid eelgrass meadow (130 x 100 meters) in 2015 (Merkel 2015). The area is 130 meters offshore and 100 meters west of Scorpion Rock.

### Smugglers Cove

Smugglers Cove, at the east end of Santa Cruz Island, is a wide embayment sheltered from prevailing northwest swell. The bay is exposed to long-period south swells which are common during the summer and fall months. During such events, sediments are suspended near shore and the visibility drops to near zero. Smugglers is both the farthest offshore and the deepest bed at Santa Cruz Island. To the south, there are eelgrass meadows closer to Yellowbanks, but that area is even more susceptible to bad visibility due to the fine sediment and much of this eelgrass is interspersed with low-lying rocky reefs.

Based on previous mapping efforts, the Smugglers eelgrass meadow is more than 1,300 meters long and up to 265 meters wide, and nearly 500 meters offshore. occurring from 38'-50' depths

### Anacapa Island

CIRP records of eelgrass at Anacapa in 1979-1981 found extensive eelgrass meadows of 1-10 hectares along the north side of all three islets, and at Cat Rock on the south side of West Anacapa. All the Anacapa beds disappeared in the late 1980's, due to overgrazing by the white urchin, *Lytechinus anamesus* following an extraordinary post- el Niño recruitment event (Engle et al., unpublished data). By 1991 all eelgrass was gone (with the exception of a small patches at Cat Rock and Cathedral Cove, which persisted for a few more years). In April 2003, the entire north side of Anacapa became either a State Marine Reserve or State Marine Conservation Area.

The boundary between the Marine Protected Area (no take, to the east) and the Anacapa Marine Conservation Area (to the west, which allows for take of pelagic fin fish and lobster) runs N-S through Frenchy's Cove. Our two sites straddle this line. There is also a Special Closure to the west of the line for Brown Pelican breeding that closes the area within 1000' of shore to vessel traffic from January through October, but historically it has not been regularly enforced.

### Frenchy's Cove, West Anacapa

Historic beds here in the 1980's ranged from 20-45' depths (Engle and Miller 2008). In 1981 this extremely sheltered location area supported the largest bed at Anacapa. By 1991, the eelgrass had been extirpated and CIRP established a permanent transect to monitor yearly for recovery. In 2001 we developed a trial restoration plan for this location with a site within the Seasonal Pelican Closure in the western part of the cove (Altstatt, 2005, Altstatt et al. 2014) with regular monitoring in subsequent years (with the exception of 2013-2015). In 2009 the bed was mapped as 2.9 acres.

Frenchy's Cove is the most protected area at Anacapa Island, offering moderate protection from NW winds and swell. Inshore of about 20' the sand turns to gravel, cobble and shell hash, which limits the inshore distribution of eelgrass. In deeper water, the parchment tube worm *Chaetopteros* has been common to abundant here, building 'reefs' of tubes at or just under the sediment surface. Offshore to the east, there is a rocky outcrop in 60-75' which is at least 100 meters offshore of the eelgrass bed. In cool water years, there is seasonal recruitment of giant kelp and other brown algae onto worm tubes, pebbles and cobble, but this algae rarely persists year-round. The historic eelgrass bed was 100m from shore.

#### East Frenchy's

This area is just 300 meters to the southeast of the restoration site. Within the first year of restoration planting at Frenchy's, most of the shoots had been dislodged and carried away by water motion. Upon surveying East Frenchys, we found single shoots with new growth, and we realized that these resulted from our work up-current. The eelgrass spread initially from vegetative material that re-rooted, and then from both seed dispersal and vegetative extension of rhizomes. We have monitored growth and spread in to patches here and to the east since 2004.

Current meadows are 90 meters from shore.

#### Keyhole, Middle Anacapa

This location is ~ 1 km to the east from East Frenchy's. In 1980 eelgrass was dominant here at 25' - 40' depths. We first observed single eelgrass shoots here in 2004. Eelgrass meadows are 85 meters from shore.

#### East NPS, Middle Anacapa

In 1982, substantial eelgrass meadows were found here from 30-40'. There was no eelgrass here in 2004 or 2005, but by 2011 and 2012 there were scattered patches in 33' to 40' depths. Eelgrass meadows are 150 meters from shore.

#### Cathedral Cove, East Anacapa (scouting only)

A few small patches of eelgrass persisted here during the urchin over-grazing until 1998. Diver observations through 2012 did not find any remaining eelgrass here. Sonar mapping suggested that sparse eelgrass was present (Merkel 2015).

#### *2019 Survey protocols*

The amount of effort at each site varied, but was designed to collect the minimum information needed for site characterization.



A full survey consisted of the following:

- quantitative fish transect 30m x 2m band
- band transect for large invertebrates and algae 30m x 2m band
- 0.25m<sup>2</sup> quadrats for eelgrass leaf shoot, flowering shoot and seedling density, urchin counts, % cover tubeworms and other sessile invertebrates,
- point-intercept for eelgrass extent and cover along transect line (10cm intervals)

### *General Dive Plan*

All SCUBA activities were approved either by the University of California, Santa Barbara Diving Safety Officer, NOAA scientific diving program, or both. Divers were either NOAA or American Academy of Underwater Scientists (AAUS)-certified and familiar with species identification and survey protocols.

Dive sites were chosen based on our knowledge of preexisting eelgrass bed locations and conditions (Table 1). We planned for one central dive location at the smaller sites and two dive sites at the larger beds (Prisoners, Smugglers, Scorpion, Old Ranch). The anchor was dropped on predetermined GPS coordinates. Transects generally were laid out in cardinal directions (headings of 360, 90, 180 and 270 degrees) starting at the boat's anchor location, resulting in transects that generally ran alongshore, offshore and onshore. A complete survey required two teams of diver buddy-pairs. The first team laid out the tape while doing the fish survey and then conducted band transects and eelgrass extent point intercept survey on way back, leaving the tape in place. The second team scored quadrats and reeled in the tapes. The depth was measured along the transect at each quadrat location.

A typical survey at one dive location would yield four 30m fish transects + up to four extra 30m transects as extensions from the core transects, four 60m<sup>2</sup> bands, and fifteen 0.25m<sup>2</sup> quadrats per core transect for 60 quadrats total.

Although the site locations were chosen generally for the probability that they were within the last known extent of eelgrass, once on the bottom we did not abandon or re-route the transects to choose areas of higher density or extent.

### *Quadrat method*

Quadrats were 0.25m<sup>2</sup> area (0.5m square) and were placed at set locations (every other meter) along the tape, yielding 15 per transect. Counts were conducted within each quadrat for the number of eelgrass turions (shoots), seedlings, and reproductive (flowering) shoots. Divers also searched for urchins and

estimated percent cover of brittlestars and parchment tube worms. Depth was recorded for each quadrat.

### *Point-intercept method*

We performed point-intercept counts every 10cm along each transect in order to estimate how much of the transect fell within an eelgrass patch or meadow. We scored the extent of eelgrass beneath the transect line by assessing the substrate at 10cm intervals along the transect. This yielded a percent of each 30m transect that was either eelgrass bed, bare sand, or other (e.g. worm tubes). These points were tallied and the categories were converted to percentages. For analysis and comparison with previous survey years where detailed point-cover was not consistently recorded for all transects, point-cover was converted to a 1-4 density scale (Orth et al 2021) where 0-10% cover is Very Sparse, 10-40% is Sparse, 40-70% is Moderate, and 70-100% is Dense. This measure gives an idea of the ‘patchiness’ of the eelgrass at a dive location, and potential compatibility with other seagrass studies.

### *Quantitative Fish transects*

The diver performing the fish survey would slowly swim in the designated direction, extending the meter tape until 30 meters was reached. Any fish observed within the 2m wide transect corridor would be recorded. Fish were scored into four size categories: young of the year (YOY), <15cm, 15-30cm, and >30cm. The diver could pause during the count while recording in order not to miss other fish. Divers usually completed the transect within 3-5 minutes. Most surveys included additional fish transects that extended an additional 30m past the end of each main transect, on the same heading.

### *Roving Diver Fish Counts*

We conducted 30-minute roving diver fish counts (CINP Kelp Forest Monitoring Program 1997) to determine indices of species presence, abundance and diversity. Fish species were scored both on the 5-minute time intervals during which they were encountered, and on abundances recorded during the overall 30-minute survey which were scored into four categories (single [1], few [2-10], common [11-100], and many [ $>100$ ]). For analysis, we created a weighted abundance index that combined the ‘Time Interval Code’ and ‘Abundance Code’ (if a species was not tallied the Abundance Code was zero). The index was the  $(TIC/10)*AC$ . This gives more weight to fish seen earlier in the 30-min count, so for example a species with an overall abundance of common (3) seen in the second time interval (9) would have a weighted index of 2.7.

At least one Roving Diver Fish survey was performed at all but two of the dive locations (due to time constraints no Roving Diver Fish surveys were performed at Eagle Canyon or East Scorpion).

### *Band Transects*

The dive team would visually search within 1m bands to each side of the main transect tape and record any major invertebrate or macroalgae encountered, yielding 60m<sup>2</sup> search area per transect. We did not

sample sediments for infauna other than for obvious bivalves, tube anemones and tube worms extending above the surface. Epifauna was only scored if larger taxa (urchins, sea hares, etc).

In addition to the core methodology, notes, photos and video were taken as time allowed.

### *2016 Surveys*

We did an abbreviated suite of diver surveys at six sites in the summer of 2016 (Table 3). This included quantitative fish transects, invertebrate band transects, and quadrats for eelgrass metrics. In addition we scouted and mapped eelgrass along Middle Anacapa and ground-truthed some reports of eelgrass from a 2015 National Marine Fisheries Service-contracted acoustical mapping effort (Merkel 2015).

### *2008-2009 Surveys*

We collected monitoring data at six islands beds during the 2008-09 field seasons, using methods as described above. During the twelve days of these cruises, between four and seven divers participated each day, collecting the following information: 865  $\frac{1}{4}$  m<sup>2</sup> quadrats for shoot density and sessile invertebrates, 200 30m quantitative fish transects, and 133 30m band transects for motile invertebrates.

A total 156 individual dives were performed.

### *1990s Surveys*

Three dedicated soft-bottom survey Channel Islands Research Program multi-day cruises to the northern Channel Islands took place in August of 1994, 1995, and 1997. Surveys targeted known or suspected eelgrass beds to determine areal extents, depth ranges, plant density, and community composition, and were repeated at three core sites (Prisoners, Scorpion, Smugglers) in subsequent years to assess annual and multi-year changes. Surveys included detailed eelgrass meadow infaunal and epibiont surveys, and comparisons with non-eelgrass bed sandy habitats. Results were compiled in a draft report to the California Coastal Commission in 1998 and major findings were published in Engle and Miller 2005. The density, meadow extent, and fish and major invertebrate transect data are used in the current study to determine meadow function and stability over time.

### *Statistical Analysis*

To account for differences in sampling effort, eelgrass abundance was scaled to the same spatial unit across sites and years. Due to challenges with some transects located almost entirely outside of eelgrass meadows, only quadrats with eelgrass present were included in statistical analysis. To address small sample sizes and non-normal distributions, non-parametric statistics, including median, confidence interval, and interquartile range were included. The Kruskal-Wallis test was used as a nonparametric test between two samples (Conover 1999). All statistics and graphing were conducted in R version

4.0.3 (ref), using packages *ggplot2*, using packages *ggplot2*, *PerformanceAnalytics*, *tidyverse*, and *Hmisc*.

## Results

In general, eelgrass meadows at the largest sites appeared unchanged in location or scale, with the expected suite of species present. Highlights and exceptions are noted in the following sections.

### Quadrats Results

A total of 1,095 quadrats were scored during the 2019 study.

#### *Eelgrass Shoot Density*

As the dive locations were not adjusted once underwater, some transects ran through patchy or sparse meadows or across bare sand rather than through a dense bed. We excluded those quadrats that fell onto bare sand outside of meadows from analysis of shoot density. The 2019 mean shoot density for 11 sites is shown in Figure 3 (East Scorpion and Frenchy's are excluded as density was  $\sim 0\%$ ). In general, density ranged from 31 to 65 shoots/m<sup>2</sup>.

Sites grouped by similarity in density. Prisoners (65/m<sup>2</sup>), Eagle Canyon (65/m<sup>2</sup>) and Scorpion (58/m<sup>2</sup>) were the highest in density and not significantly different. The three Anacapa SMR sites were not significantly different from each other in density, with a mean of 46/m<sup>2</sup>. Smugglers and Old Ranch (42/m<sup>2</sup>) were similar, and East Prisoners, Cañada del Agua, and Aguaje Escondido were similar ( $\sim 33$ /m<sup>2</sup>).

#### *Variation in density with depth*

At each site, our design ensured that we scored quadrats along 60m of transect that was parallel to shore at a constant depth, and along 60m of transects that crossed the bed from shallow to deep. Depending on the site, the cross-section transects may have captured the inshore edge of the eelgrass, the offshore edge, both, or neither. Two Anacapa beds, East NPS and Keyhole, are shown in Figure 4. The width of the bed at East NPS was  $\sim 120$ m, while at Keyhole the bed was 68m wide. In both cases, eelgrass shoot density tended to increase in shallower water.

#### *Eelgrass patchiness and extent*

Mean point-intercept and a four-point density scale for eelgrass are summarized in Figures 5 and 6. Old Ranch, Prisoners, Cañada del Agua, Scorpion, Smugglers, Keyhole and East NPS were categorized as mostly or entirely dense meadows. Eagle Canyon, Aguaje Escondido and East Frenchy's were categorized as moderately dense. East Scorpion and East Prisoners were mostly very sparse. Frenchy's was entirely bare sand but categorized as very sparse (0-10% cover).

## *Site Conditions*

Frenchy's, the original restoration site, had no remaining eelgrass meadows and only a couple of single shoots were observed. Across the cove at East Frenchy's, there were good eelgrass meadows to the east but much of the permanent transect line towards the west and close to the marine reserve boundary was denuded. We did observe meadows off the transect in shallower water.

The greatest increase in meadow extent was found at East NPS, where by 2016 there were extensive uniform (100% cover) meadows in 30-40'. Keyhole was slightly less uniform and similar density. There was no significant difference in shoot density between East NPS, Keyhole and East Frenchy's, although East Frenchy's meadows were the most fragmented. All three Anacapa sites had higher shoot density than Smugglers, which was one of the original donor material locations. Smugglers was extremely uniform in meadow extent (100%) but with moderate density (42 shoots/m<sup>2</sup>).

Large bare scars were observed just off the transect corridors at Scorpion, near each of the two mooring anchors, and the mooring cans were no longer held up by sub-surface floats. The NW and inner edge of the bed was similar to previous years. Our tracklines from June 2019 (green) are shown with bed extent mapped by SCUBA in 2009 (purple) and eelgrass delineated by sonar in 2015 (red) in Figure 2. It appears that the bed may have expanded from 2009 to 2015 in all directions, and then contracted by 2019.

The meadows at Aguaje Escondido also expanded from 2009-2019, but were moderately patchy compared to Cañada del Agua. We sampled two locations at each of these sites, and patchiness differed more between the two dive sites at Aguaje Escondido than at Cañada del Agua.

At Eagle Canyon, one of three transects fell entirely on bare sand, but the eelgrass on the other two was the highest mean density observed during the study, 65 shoots/m<sup>2</sup> with a single quadrat at 112/m<sup>2</sup>.

Another big change was that the meadow at East Prisoners (in front of the wetland and canyon mouth) had mostly disappeared and the eelgrass that we did encounter was the lowest mean density of the study- 31/m<sup>2</sup>.

Both Prisoners and Old Ranch at Santa Rosa Island have remained fairly uniform in cover.

Our site-checks at Cathedral Cove on East Anacapa found no evidence of eelgrass returning to this location (ship's fish finder and by SCUBA on 9/20/2016, and by ship's fish finder on 6/20/2019).

## *Flowering and Seedlings*

Eelgrass flowering was detected at varying density within quadrats at nine sites (Figure 7). The greatest densities were found at Keyhole (4/m<sup>2</sup>), Smugglers (2.9/m<sup>2</sup>) and East NPS (1.53/m<sup>2</sup>). Seedlings were found at seven sites, with the highest density at East NPS (1.13/m<sup>2</sup>) and Keyhole (0.6/m<sup>2</sup>). No flowers



or seedlings were found within quadrats at Prisoners Harbor, although developing flowers were documented at the site by photograph in April. Neither flowers nor seedlings were found at Frenchy's, East Scorpion, or East Prisoners.

#### *Other quadrat categories*

The white urchin *Lytechinus* was present in 16% of quadrats at Frenchy's (1.14/m<sup>2</sup>), and a single urchin was found at East Prisoners. Parchment tube worms (mostly *Chaetopterus* sp.) were present in low numbers at all sites but were greatest at predominantly sandy sites (Frenchy's, East Scorpion, East Prisoners). The small red sea cucumber *Pachythione rubra* was found at two sites, Aguaje Escondido and Old Ranch, where they were only in a few of the quadrats but in especially high numbers at Old Ranch.

#### Fish Results

During site visits, sea lions were observed at Anacapa Island (East NPS and East Frenchy's) and harbor seals at Eagle Canyon, Santa Cruz Island.

#### *Quantitative Transects*

We completed 136 quantitative fish transects during the study. Each 30m x2m transect took 4-6 minutes to complete. Data for all transects are summarized in Table 4.

#### *Size*

Fish were generally recorded in 3 size categories (>30cm, 15-30cm, <15 cm), plus young of the year (YOY) but the three sizes have been lumped for density analysis, with the exception of a discussion of kelp bass sizes below.

#### *Species*

39 different species categories were found in total across all transects and all sites (Table 3). Density of the eight most common fish are shown in Figure 6. The two most commonly encountered species were kelp bass, *Paralabrax clathratus*, which were scored at all sites except for Frenchy's and East Frenchy's and in 65% of all transects; and seniorita, *Oxyjulis californica*, which occurred in 40% of all transects. The third most common fish was black perch, *Embiotica jacksonii*, found at six sites and in 20% of all transects.

12 species were only encountered once. 9 of these fish taxa were bottom-dwellers.

#### *YOY species*

Surveys occurred too early in the year to catch many young of the year (YOY) fish. Fall surveys would have captured recent recruitment of typical species such as kelp bass, seniorita, rockfishes and perch. Our surveys found YOYs of 4 categories: kelp bass, unidentified rockfish, black eye goby and giant kelpfish. Of these, giant kelpfish were by far the most common, occurring in 12.5% of all fish transects and at 6 of the 12 sites.

### *Kelp bass*

The size classes of kelp bass found at all sites are shown in Figure 7. Size classes could help distinguish between legal and sub-legal size of kelp bass, a popular recreationally-fished species. However, in 2013 the DFG commission increased the minimum harvest size from 12" (~30cm) to 14" (35.6cm) length over all. We did not change our estimated size categories after this regulation was enacted, but it is not clear whether it would make a difference in results.

The greatest density of kelp bass overall (nearly twice that of other sites) was found at Scorpion. This SMR site had fish of all three size categories plus YOYs, and the largest fraction of small and medium kelp bass at any site. The lowest densities of kelp bass were found at the sites with little to no eelgrass, with the exception of East Frenchy's. A large sea lion was observed there during the monitoring, perhaps contributing to the general lack of fish seen on this particular survey as kelp bass were commonly encountered during the roving diver fish counts on a later date. The largest proportion of legal-sized (or close to legal) kelp bass were found at Keyhole and Scorpion, both within State Marine Reserves.

### *Perch*

We encountered seven species of perch. The most perch and four out of the six most common species were found at Prisoners Harbor. Large schools of shiner perch were present over the transects at Prisoners, accounting for 27% of the total fish observed. Rainbow perch only were found at the two deep sites, Smugglers and Old Ranch. Black perch were at six sites, and white perch at four sites. No perch were seen at the predominantly sand habitat sites (East Frenchy's, Frenchy's, East Scorpion). No YOY perch were observed.

### *Elasmobranchs*

We found three taxa of elasmobranchs along quantitative transects: horn sharks, leopard sharks and bat rays. Horn sharks were scored at East Frenchy's, Scorpion, and Aguaje Escondido; leopard sharks at Aguaje Escondido, Cañada del Agua, and Prisoners. Bay rays were scored at Scorpion, Cañada del Agua, East Prisoners and Old Ranch.

### *Sheephead*

Sheephead were found at seven sites. The greatest density was at Scorpion (0.86/transect). Males were only seen along transects at Scorpion and Cañada del Agua. No YOY sheephead were found.

### *Schooling Fish*

We found three taxa of schooling fish: jack mackerel (two sites), topsmelt (three sites) and barracuda (three sites). All three occurred at both Scorpion and Cañada del Agua.

### *Senorita*

Senorita were the most numerous common fish found and occurred at six sites and all three islands. The greatest number were found at Old Ranch SRI (22/transect).

### *Miscellaneous Fish*

We found ~ a dozen taxa that were represented by single individuals at one or more sites. Scorpion had four of these species. Of note was the orangethroat pikeblenny, a benthic fish that shelters in empty shells or parchment worm tubes. In 1994 the published northern-range limit of this pikeblenny was extended to Frenchy's Cove, Anacapa Island, as reported by CIRP researchers. In April 2019, we found them at two locations on Anacapa (East Frenchy's, Frenchy's), and at East Prisoners, Santa Cruz Island where they were common on and off transects. At Prisoners we scored a moray eel and a white seabass, both unusual for a quantitative transect.

### *Roving Diver Fish Counts*

A total of 33 combined species were recorded from Roving Diver Fish Counts at ten sites (Figure 10). Due to the restricted level of field effort, Roving Diver (RD) counts were not performed at all sites in replicate numbers and no surveys occurred at East Prisoners, Eagle Canyon, or East Scorpion. RD surveys were done in late June and July. A single survey was performed at two sites (Scorpion, Old Ranch), while the rest had 2-4 surveys each. Results shown are the Fish Average Abundance Index averaged for all observations at that site. The Fish Average Abundance Index takes into account the number of a particular fish seen and the time during the dive that the fish is first observed.

Anacapa eelgrass sites had 13-14 species, with the exception of Frenchy's Cove (no eelgrass) which reported 6 species. Santa Cruz sites ranged from 10 (Smugglers) to 17 species at Aguaje Escondido, the most species observed during a RD survey. Old Ranch at Santa Rosa had 8 species. The greatest number of species within an individual single 30 min count were recorded at East Frenchy's. It should be noted that on the day that the quantitative surveys were done at East Frenchy's, there was a sea lion actively swimming through the area and fish were scarce. The lowest number of fish species observed was at the Frenchy's restoration site, over barren sand.

Kelp bass and Senoritas were universal across all sites. Opaleye, the only predominantly herbivorous fish seen, were found at all sites except for Frenchy's and Old Ranch. Sheephead were common within the SMR at Scorpion. They were uncommon along middle Anacapa SMR sites, rare at Northern SCI sites and absent from Prisoners and Old Ranch.

Shiner surfperch are schooling fish. They were common to abundant at Scorpion, Prisoners, and Old Ranch, and rare at East NPS, Aguaje, and Cañada del Agua. Black perch were found at all sites except at Frenchy's. They were common at Smugglers and Prisoners. White perch were only found at the four northern SCI sites, where they ranged from rare to common. Pile perch were found at all sites except at Frenchy's and Smugglers.

Many taxa were only recorded as individuals and/or at one site, or in one survey at a particular site.

These include schooling fish such as yellowtail (Frenchy's), barracuda (Scorpion, Aguaje) and salema (Prisoners). The stand-out was giant sea bass, where two individuals were seen at the end of the fish count at Keyhole, Middle Anacapa Island in June 2019.

Four taxa of flatfish were observed. Three of these were found at only Anacapa sites (halibut, c-o turbot, sand dab), while one fantail sole was observed at Old Ranch.

Four taxa of elasmobranchs were observed during RD counts, with most seen at Prisoners, Cañada del Agua, and Aguaje Escondido. Angel sharks were seen at East NPS and Cañada del Agua.

### *Comparison of Methods*

Both Roving Diver (RD) and Quantitative transects were performed at ten of the thirteen sites. At six of these, RD yielded more species. Because the observer swims throughout the eelgrass meadow during the count, Roving Diver surveys, at 30 minutes in length, may constitute a more comprehensive snapshot of fish assemblages. Transect surveys only record those fish that swim within the transect corridor. The two methods, while distinct, are complementary in describing fish assemblages.

### Fish Species Richness

We calculated fish species richness as the total number of fish taxa seen at a site considering all methods (Figure 8). By far the greatest number of taxa (22) and the most fish per transect (44.43) were found at Scorpion, followed by Cañada del Agua and Aguaje Escondido. Eagle Canyon and East Scorpion had the fewest fish and were the least diverse.

## 2019 Band transects results

### *Invertebrates*

76 individual band transects were counted, for a total of 4,560m<sup>2</sup> of sea floor habitat. 34 different taxa were recorded across all band transects during the study. Most taxa were not found at every site; sites varied in species richness and composition (Table 5).

In general, the major invertebrates found within eelgrass meadows are species that may also be present on bare sandy bottoms or on rocky reefs. This is not surprising, given that rocky reefs are bordered by sand and many of the smaller eelgrass sites are close to rock habitat. The eight most commonly encountered species are shown in Figure 11.

The most numerous animal found at any site was *Pachycerianthus fimbriatus*, a tube-dwelling cerianthid anemone, which was extremely common at the four northern SCR sites from East Prisoners to Aguaje Escondido. The highest mean density occurred at Eagle Canyon with 128/60m<sup>2</sup>, followed by 96/60m<sup>2</sup> at East Prisoners. Surprising, there were only 2/60m<sup>2</sup> at nearby Prisoners Harbor. Low densities occurred elsewhere, and none occurred at Smugglers or Scorpion.

The wavy top snail *Megastraea undosa* was common at all but three sites (East Scorpion, Scorpion and Old Ranch). The greatest density was found at East Frenchy's, at 45 snails/60m<sup>2</sup> transect.

Bivalves were also common at several sites, this category was comprised of at least 3 different genera (*Tresus*, *Zirfaea* and *Panopea*; species not always scored separately and so were lumped for this report). Bivalves were reported at eight out of the thirteen sites.

The sand star *Astropectin armatus* was found at eight study sites, with the greatest density at Frenchy's. The only other star found in our transects was the bat star *Patira miniata*, which was found at Old Ranch and in low abundances at Frenchy's and Aguaje Escondido.

The warty sea cucumber *Parastichopus parvimensis* was found at seven sites, and was the most common at Frenchy's and Eagle Canyon.

Seven taxa of crabs were found (Table 3) but in low numbers. They are shown combined for the category 'all crabs' in Figure 11. No crabs were found at any of the Anacapa sites in 2019.

The only sea urchin found during our surveys was the white urchin *Lytechinus anemesus*, found at Frenchy's at 28.2 per 60m<sup>2</sup> transect (equaling 0.47 per m<sup>2</sup>).

The sea pen *Stylatula* and sea pansy *Renilla* were generally co-occurring. Sea pansies were the most common at Aguaje Escondido and Eagle Canyon.

Brown macroalgae were also scored in band transects (data not shown). Three taxa were found. The invasive *Sargassum horneri* was found at all four Anacapa Island locations, but individuals were very small and were growing on either small rocks or shells. Giant kelp recruits were found at East NPS and at Old Ranch, while *Stephanocystis osmundacea* was found at Smugglers and Prisoners. All brown algae were growing on hard surfaces.

#### *By Site Comparisons of Invertebrates*



We sampled three pairs of sites, that resulted with one a dense eelgrass meadow and the nearby second site mostly or all sand plain. This difference in eelgrass habitat appeared to make a difference in major invertebrate taxa. Prisoners and East Prisoners are 250 meters apart, but only shared four invertebrate species in common. There were nearly twice as many taxa found at East Prisoners than within the dense eelgrass bed within the cove. East Prisoners had been a continuation of the Prisoners meadow tens year prior (the sites are ~ 300 meters apart). It is possible that the sediment grain size and organic content is different between the two sites, due to the river mouth or along-island current patterns, as East Prisoners had very high densities of tube anemones.

Scorpion and East Scorpion, although 500 meters apart only shared rare wavy turban snails in common. The day that Scorpion surveys occurred, there was a lot of drift algae obscuring the bottom for much of the transects. We attempted to move it aside but it made surveys more difficult. We found no evidence that there had been a moderate size eelgrass meadow at East Scorpion. The sediment seemed fairly coarse, with scattered rocks, and the area is more exposed. We have no historical information on an eelgrass bed in this location.

Frenchy's and East Frenchy's, 265 meters apart, shared six species in common, but wavy turbans and bivalves were much more common at East Frenchy's. White urchins *Lytechinus* were only present at Frenchy's, at similar densities to wavy-top snails.

Major invertebrate composition and density were consistent throughout the larger sites that had two sampling locations similarly spaced (Smugglers, 560 meters apart, and Old Ranch, 260 meters apart), and that were moderate or dense eelgrass cover.

### *Invertebrate Species Richness*

Invertebrate species richness at all dive sites is shown in Figure 13. The richest locations were East Prisoners and Aguaje Escondido, followed by Eagle Canyon. These three sites fall within a 1,200 meter stretch of of coastline.

### *Results and discussion of comparison with Reef Check*

Our assumption was that the density and species richness of fish and invertebrates associated with eelgrass would be less than at near-by kelp beds, even when sampled at the coarse scale of this study. We compared our data to that collected by Reef Check, a program that has been monitoring rocky reefs inside and outside of Marine Protected Areas throughout California, including at the Channel Islands, since 2006, and that uses similar methods to those used in this study to score a set list of species. We compared means for several common species from three Reef Check sites (summarized in their Final Report, South Coast MPA Baseline Monitoring Report (data 2011-2014) with one of our nearby eelgrass sites. Kelp bass were three times as dense within Scorpion eelgrass, and four times as dense within Anacapa eelgrass, as on the corresponding rocky reefs. There were 35 times more wavy turban snails in the Anacapa eelgrass than on the rock reef. Overall, though, there were more taxa of major invertebrates on the reefs.

## Data Correlations

We ran a Spearman's rank correlation to create a matrix of meadow extent, fish richness, and invertebrate richness, to examine and test for any relationships (Figure 14). The factors considered were Site ID (from west to east, representing gradient across channel), Meadow Percent (percent cover along transect), Meadow Class (density scale 1-4), Fish Species from Quantitative transects, Fish Species Richness Total, and Invertebrate Species Richness. There was a strong and significant positive correlation between Meadow Percent and Meadow Class, which was expected. There was also a strong positive correlation between Meadow Class and Fish Total Richness, with a weaker positive correlation between Fish Total Richness and Meadow Percent. There was a significant negative relationship between Invertebrate Richness and Meadow Class, and Meadow Percent.

To further examine these correlations, we ran regressions separately for species richness as a function of eelgrass meadow extent (percent cover), for fish and invertebrates (Figure 15). In both cases, there was a significant relationship between species richness and eelgrass meadow extent (positive for fish, negative for invertebrates).

We compared shoot density between six natural beds at Santa Cruz Island and three restored beds at Anacapa Island that resulted from our 2002 restoration effort (Figure 16). There was no significant difference based on overlap of the 95% confidence interval around the median.

We compared species richness between six natural beds at Santa Cruz Island and three restored beds at Anacapa Island that resulted from our 2002 restoration effort, for fish (Figure 17) and invertebrates (Figure 18). In both cases, there was no significant difference (Kruskal-Wallis test) between the mean species richness at restored meadows and natural meadows, even though there was a greater range in diversity at natural beds.

Finally, we compared eelgrass shoot density at six sites across multiple years (Figure 19).

## Discussion

It is clear from our surveys that eelgrass meadows create lush, three-dimensional habitat for a range of other species large and small. The majority of eelgrass meadows at Santa Cruz Island appear to be stable over time in location and scale, even after two years of elevated water temperature from el Niño and marine heatwaves in 2014-2016.

*How stable over time are shoot density and meadow extent in naturally occurring eelgrass beds?*

We compared quadrat data from sites 1-3, 5, 7, 9 in 2019 to 2016, 2008-9, and 1994, 1995, 1997 (Figure 19). Not all sites were sampled at every period. Overall, there was a trend of declining and partially rebounding shoot density, with some sites more severe or significant than others. The most dramatic decline over the period was at Scorpion, where density has declined by two-thirds since 1997, and from a record high of 188 shoots/m<sup>2</sup> in 2001 (data not shown). We also compared eelgrass cover along transects at four Santa Cruz Island sites in 1994, 1995, 1997, 2009 and 2019 (Figure 20). Three of the sites are remarkably stable over time. East Prisoners, although only sampled twice, suffered massive losses of eelgrass habitat in addition to density over ten years. This site is in front of the river mouth at Cañada del Puerto.

*How similar in size and density are the restored meadows at Anacapa to naturally occurring beds at Santa Cruz and Santa Rosa?*

We compared quadrat data from pooled Anacapa sites 11-13 to pooled sites 1, 2, 5, 6, 7, 9 in order to test for differences between eelgrass meadow density (Figure 13). There was no significant difference in density between the two groups.

*Do the restored eelgrass meadows at Anacapa perform at the same habitat level as naturally occurring beds at Santa Cruz?*

To address this question, we compared the fish and invertebrate species richness levels at pooled Anacapa sites 11-13 to pooled SCR sites 2, 5, 6, 7, and 9 (Figures 17 and 18). There was no significant difference between total species richness of either fish or invertebrates between the sites. However, there was a greater range in fish diversity at Santa Cruz sites. The eastern Santa Barbara Channel experiences warmer currents coming up from the south and it is well known that the assemblages of fish and invertebrates are structured by the current regime, with assemblages more similar to southern islands than to the more western islands (as summarized in Aíramé 2003). All of the eelgrass meadows within this study, with the exception of Old Ranch at Santa Rosa (removed from this analysis), fall within the eastern Channel regime and California Province (Hamilton *et al.* 2010), with Prisoners falling a few kilometers to the east of the accepted cold/warm current boundary. It is not too surprising that similar assemblages of fish and invertebrates were found at all sites. However, there were some differences, most noticeable with surf perch. Roving diver surveys found that pile and black perch were present at both islands but more common at Santa Cruz, while white and shiner were almost entirely absent from Anacapa. Our study did not sample for epifauna such as copepods, amphipods, and small mollusks, which are an important part of the food chain especially for fish predators. We hope to do this additional work in the future.

*Do eelgrass beds within reserves and their associated fish and invertebrates differ from those outside?*

We encountered more bat rays at Scorpion than at any other site. Interestingly, there were very few wavy turban snails within transects at Scorpion. At other locations, wavy turban snails are a major herbivore within eelgrass meadows. We have observed remnants of crushed turban snail shells within

bat ray feeding pits at other sites, so it may be that rays can break apart the thick shell of even large turban snails with their stout jaws. Other known predators include seastars, lobsters, and fish such as sheephead and cabezon (mostly likely preying on smaller, younger snails). Scorpion also had the highest abundance of sheephead. Our findings suggest that the protective SMR status at Scorpion has fostered the survival and growth of large predators, allowing eelgrass to be released from grazing pressure.

*Does eelgrass extent/coverage/patchiness affect determine fish and invert species richness, abundance?*

There is evidence from seagrasses world wide that patchiness can affect both recruitment and survival of organisms living within (Bell *et al.* 2001, Healey and Hovel 2004, Lefcheck *et al.* 2016). From the present study, no fish were counted along 18% of the total core transects, and 83% of those transects without fish also had little to no eelgrass cover. We plan to compare species assemblage to eelgrass density categories (dense and moderate areas to sparse and very sparse) but this analysis has not concluded at the time of writing.

*Implications for location of marine protected areas/ fishing boundaries*

During the process of designating reserves in Federal waters around the Channel Islands, it was stated that “The existing State marine zones protect a variety of species of interest, including marine algae, seagrasses, invertebrates, and fishes... Eelgrass and surfgrass beds, which serve important roles as nursery habitat for young invertebrates and fishes, are protected in North Anacapa Island SMCA...” (54 FINAL\_Resources\_FEIS\_4\_13\_07\_v5, CINMS). The decision to create an area open to trap fishing was justified with “All extractive activities and injury to Sanctuary resources would be prohibited in the marine conservation area with the exception of lobster harvest.” At the time of the initial island reserve designation process (2002-04), our eelgrass restoration project was underway but success was uncertain. The fact that the geographic orientation of Frenchy’s Cove allowed for the historic persistence of the largest eelgrass bed throughout all of Anacapa Island, was not considered. There was intense pressure from the fishing industry to keep some part of the north side of Anacapa open, and the resulting boundary line was drawn within Frenchy’s Cove at the separation between North and Middle Anacapa.

The effect of trap fisheries on the benthos has been examined mainly for rocky habitat with most researchers concluding that deployment of traps results in little lasting damage (Shester and Micheli 2011) especially when considering the value of the fishery (SCS 2004). As seagrass systems world-wide are targeted for a variety of trap-caught fishes and invertebrates, there has been interest in determining the environmental cost of fishing over soft-bottom habitat. The effect of trap fishing on two different species of Atlantic seagrass was investigated within the Florida Keys National Marine Sanctuary (Uhrin and Fonseca 2005). A key finding was that the two species within the study, which differed in root and rhizome structure, responded differently to the disturbance. The shallow rooted seagrass was more easily dislodged and slower to recover. Another consequence of frequent

disturbance to seagrass is fragmentation of the bed. If the seagrass cannot respond through vegetative growth to keep up with or outpace the disturbance, then the fragments may continue to shrink until they lose the capacity to function as a cohesive habitat and drop below a sustainable threshold. Studies in the Mediterranean Sea have found that constant anthropomorphic disturbance leads to higher fragmentation of meadows (Montefalcone *et al.* 2010) which has implications for meadow function and recovery.

In California, fishermen are required to raise and service traps at intervals not exceeding 96 hours, weather permitting (FGC § 9004, revised from 72 hours). The trap is hauled, serviced and redeployed while the boat drifts out of gear (Altstatt, personal observation). At the beginning of the season, traps may be pulled and redeployed daily. *Zostera pacifica* is shallow rooted with rhizomes extending only a few centimeters in to the sediment. There is ample evidence of significant damage from vessel anchors, which, like traps, are heavy metal objects that are frequently deployed and redeployed, in all of the Channel Islands eelgrass sites. Based on the total loss of our restoration site within an area that has only recently become heavily fished, and decades of other observations, we surmise that *Z. pacifica* is extremely susceptible to disturbance from trap fishing.

The California Department of Fish and Wildlife acknowledges that the recent increase in commercial fishing effort has raised questions about the... ‘negative consequences on the fishing grounds and associated ecosystems from increased gear usage’ (California Spiny Lobster Fishery Management Plan, April 2016). The Plan states that hard bottom is the primary lobster habitat and that traps are set on the bottom in rocky areas. There does not appear to be any expectation that traps will be set in areas that are not hard bottom, and especially not in sensitive seagrass habitat.

In 2014, we learned from mariners that Frenchy’s Cove was being fished heavily during the two months (November, December) that the brown pelican Special Closure was open. We were unable to return for dive surveys until the summer of 2016, four years after our last survey visit in 2012. In the summer and fall of 2016, we marked and reported 4 abandoned lobster traps within Frenchy’s Cove, with one along the boundary with the SMR. The other three traps were within the 2012 mapped footprint of the eelgrass restoration site, where there was no longer any eelgrass remaining. On November 4 2016, NPS rangers reported “hundreds of traps” within the SMCA. In June 2019, we discovered an abandoned trap “ghost fishing” and filled with live lobsters along the SMR boundary line. In November 2019, CINMS staff reported at least 100 traps along the SMR boundary line, with another 100 to the west further within the SMCA, some as shallow as 17’ (note that DFW prohibits commercial trapping in water depths shallower than 20’). Eelgrass continues to thrive within the SMR, 200 meters to the east.

The marine reserve network at the Channel Islands went in to effect in 2003. Frenchy’s Cove was not traditionally an area targeted by lobster fisherman as nearly all of the shallow bottom substrate is soft rather than rocky (Altstatt, personal observation). However, a network of reserves was establish on the mainland in 2012, excluding fishers from no-take areas and concentrating that effort elsewhere. Fishing block data for the mainland showed that effort more than doubled within blocks containing fishing



areas adjacent to SMRs (Lenihan *et al.* 2021). Visual inspection of the trap marker floats in November 2019 reveal that at least nine different fishermen set traps along the SMR/SMCA boundary and within Frenchy's Cove. Even though California's marine reserve system may be 'an integrated, well-enforced network of no-fishing zones designed to protect productive subtidal rocky reefs that are essential habitat to populations of many target species' (Lenihan *et al.* 2021) it is apparent that the intentional and dramatic increase in fishing effort along all SMR boundaries (regardless of bottom type) has degraded the eelgrass meadow habitat and has extirpated eelgrass from within the Anacapa SMCA. Although we had originally chose a location that we believed to be protected for 10 months out of the year (within the Anacapa Special Closure), the intensity of the fishing effort during the open two months was enough to disturb, and eventually eliminate, the restored eelgrass meadow within the SMCA. This unexpected finding showcases the need and value of marine reserves and has serious implications for habitats that are exposed to trapping. Although our restoration work has restored more than 30 acres of eelgrass meadows, it could have failed had there not been a SMR established adjacent to our original site, and if the implementation of the mainland reserves occurred sooner.

A next step to further understand how fishing has changed around Anacapa after the mainland reserves went in to effect, and the resulting impact to the seafloor, would be to analyze the catch data from reporting block 684 (North Anacapa Island). This information has been requested from the Department of Fish and Wildlife (March 2021).

### *Changing Climatic Regime*

*Zostera* beds at the Channel Islands face increasing threats from multiple stressors, including increasing frequency and severity of storms, as seen by the dramatic change in eelgrass bed size, density and extent at East Prisoners between 2009 and 2019. Factors may have included a combination of big rainfall years and change in hydrological function of Cañada del Puerto following NPS wetland and canyon restoration. There was evidence of scour, evidence of deposition of cobbles and tree limbs into the eelgrass meadow habitat immediately offshore of the canyon mouth as far as 30' depth. Google Earth photo shows extreme turbidity where we had mapped eelgrass in 2009 and where is lacking now. We witnessed a similar event happen at Scorpion in December 1997, where a historic micro-burst created a flood within Scorpion Canyon leading to sediment deposition and loss of more than a third of the eelgrass bed (data not shown).

### *Warm water events*

Multiple large-scale warm water events have occurred during the time frame of our eelgrass monitoring, beginning with the 1983 el Niño. The long-term trend of increasing sea surface temperatures (SST) apparently contribute to the duration and intensity of marine heatwaves events (MHW) (Fumo *et al.* 2020). In 2014 a large MHW event known as 'the Blob' persisted and combined with warming from the 2015-2016 el Niño to create one of the strongest and longest-lasting SST warming events on record (SCCOOS). Indeed, positive temperature anomalies persisted in to 2020.

Depth may not be a refugia from such events as glider data found that the temperature anomaly extended to more than 100m in the water column.

Lab studies have shown that for the sympatric species, *Z. marina*, plants exposed to elevated temperatures (7C above ambient) respond with significantly reduced growth, shoot density, productivity and biomass (Kim *et al.* 2019). The MHW event in Southern California produced long-lasting temperatures elevated 4C above ambient, but similar studies have not been done for *Z. pacifica* nor did the authors test a range of elevated temperatures. Our photos of eelgrass from 2016 clearly show a progression of yellowing in leaves that is more pronounced in September of that year. Yellowing can be related to loss of tissue and chlorophyll and is an indication of overall stress. It has been shown that depth may serve as a refugia (Aoki *et al.* 2020) for intertidal and shallow subtidal *Zostera marina* in Virginia USA, but whether that holds for our much deeper, subtidal *Z. pacifica* when confronted by longer lasting, more extreme MHW events remains unclear.

### *Implications for disease*

Several years of sustained unusually warm water resulting in bleached and yellowish *Z. pacifica* leaves with black spots of disease increasing throughout the summer of 2016 (Plate # 10). Anacapa sites look particularly bad by September, with leaves cropped, black and decomposing. This condition was documented throughout all Santa Cruz major eelgrass meadows to a lesser degree.

As reviewed in Sullivan *et al.* (2017) the risk to seagrasses from disease may be amplified by stressors from climate change. However, the possibility of a genetic component to resiliency to warming waters (Franssen *et al.* 2011) cannot be overlooked, especially at the Channel Islands where large meadows of *Z. pacifica* have likely existed for many thousands of years since diverging from *Z. marina* (Coyer *et al.* 2007).

### *Loss of Blue Carbon*

Arias-Ortiz *et al.* (2018) found that 36% of the largest expanse of Australian seagrass meadows were damaged by a MWH event in 2010/2011, leading to potential massive losses of stored 'blue carbon' from the sediment. In Virginia, documented declines in seagrass density and extent as a result of marine heatwaves led to the loss of stored carbon (Aoki *et al.* 2021). To date, there have been no sediment analyses done in or near eelgrass meadows at the Channel Islands, but the contribution of stored carbon by eelgrass could be significant.

### *Vulnerability to mass recruitment events*

Following the 1982-83 el Niño, white urchins and brittlestars recruited to mid-depth rocky reefs around Anacapa and the eastern end of Santa Cruz. The white urchins also settled on sand, which led to eventual over-grazing of Anacapa eelgrass meadows in the late 1980s. In 1991, urchin density remained high at 60/m<sup>2</sup> at Frenchy's even though the eelgrass was gone, but had declined to 0/ m<sup>2</sup> by the time our restoration began in 2003. Since then, subsequent warm water events have led to migration

or recruitment of warm-water invertebrates such as pelagic red crabs, white urchins and wavy turban snails. All three of these were observed at Anacapa in 2016. Size frequencies of white urchins in 2019 at Frenchy's revealed smaller urchins (compared with historic CIRP data), most likely resulting from the prior wave of recruitment 3-4 years before. Even though urchin densities were the highest at Frenchy's out of all of the 13 sites surveyed in 2019, their numbers were still quite low when compared to the densities that persisted following the late 1980s eelgrass over-grazing event. Other seagrass overgrazing events have been linked to persistent urchin densities greater than  $>22/m^2$  (Rose *et al.* 1999). Recruitment to this area may be tied to small-scale very localized hydrology as white urchin numbers were extremely low only 200 meters away across the cove.

## Recommendations and Conclusions

### *Science*

The scope of the present study was extremely limited, but given the findings, additional work is both warranted and necessary to help resource managers prioritize future conservation measures.

- quantify the contribution of seagrass to carbon storage—perform sediment/CN grain size analysis for all eelgrass bed sites- old beds vs young beds;
- re-survey the 3 main beds at SCR plus ANA sites using detailed survey methods from CIRP 1994-97 cruises to quantify complete ecosystem function of restored beds, and whether main beds are still serving same role as 25 years ago—collect infauna/sediment cores, and perform detailed epifaunal survey at each site;
- primary production and biomass estimates;
- fish surveys in fall to capture recruitment events;
- C-14 analysis of fish and inverts in and out of eelgrass beds to quantify contribution.
- Using finding from this report, and from future work, identify island eelgrass meadows that provide most ecosystem benefit and those that are at highest risk from climate change.

### *Policy*

We recommend specific actions that would have immediate and direct positive impact on eelgrass meadows.

**1. Re-classify the shallow soft-sediment bottom within the Frenchy's SMCA as SMR or No Entry (it is already a Special Closure 10 months out of the year).** Suitable habitat for eelgrass within Frenchy's Cove only exists within certain hydrodynamic and depth parameters (20'-45'), and over soft bottom not rock. This area historically sustained the largest eelgrass meadow at all of Anacapa Island. Our restoration work showed that eelgrass will rapidly colonize and thrive if anthropogenic disturbance (trapping) were to cease.

**2. Act to reduce damage from anchoring and mooring within eelgrass beds, particularly within SMRs (Scorpion).** This is surely the easiest and most cost-effective way to reduce anthropogenic disturbance, especially where it is as well documented as the eelgrass meadow within the Marine Protected Area at Scorpion.

**3. Use adaptive management to protect the meadows providing greatest ecosystem benefit and are at highest risk from climate change, and consider restoration in key locations that may provide refugia from a changing ocean environment.**

The majority of nearshore habitat around the northern Channel Islands is sandy, and yet only a small fraction of that can sustain persistent eelgrass meadows due to exposure, depth and sediment grain size/nutrient content. Eelgrass meadows, like kelpbeds, provide a suite of functions that greatly enhance their value far past that factored only on sea floor extent. Our surveys show that island beds contribute food, shelter and habitat to fish and invertebrate species, this function has been stable over decades at the largest beds, and that restored beds (15+ years post restoration) are providing the same function at Anacapa. This study should serve as justification for more in-depth work to look at long-term food chain biodiversity, nutrient cycling, resiliency to changing climatic factors, and carbon storage. And, as eelgrass is universally valued as Essential Fish Habitat, every effort must be made to protect it both inside and outside of SMRs.

## Acknowledgments

This work was made possible through grants by Resources Legacy Fund and Sea Forward Fund, in partnership with Channel Islands National Marine Sanctuary and the Casselle lab at UC Santa Barbara.

Much thanks to the many 2016 and 2019 field participants, including (in alphabetical order): Julie Bursek, Peter Carlson, Jake Eisaguirre, Lauren Enright, Claire Fackler, Andy Fredell, Ryan Freeman, Ivan Girling, Chris Honeyman, Cheyenne Jarmen, Katie Davis Koehn, Derek Lerma, Libby Mackie, Selena MacMillan, Chris Mobley, Zac Montgomery, Avrey Parsons-Field, Dan Richards, Pike Spector, Dave Witting.

Special thanks to Jill Murray for her help with statistical analyses and figure preparation, and to Mari Cajandig at Channel Islands National Marine Sanctuary for site map preparation.





## List of Figures

1. Site map
2. Trackline of meadow edge at Scorpion
3. Shoot density
4. Comparison of shoot density across depth at two meadows
5. Point-intercept for eelgrass extent
6. Eelgrass extent density scale for all sites
7. Flowering shoot and seedling density
8. Fish transects- 8 most common taxa by site
9. Kelp bass size
10. Roving Diver Fish Surveys summary
11. 2019 fish species richness
12. Invertebrate transects- 8 most common by site
13. 2019 invertebrate species richness
14. Correlation matrix
15. Species richness as a function of meadow extent
16. 2019 shoot density by bed type (restored, natural)
17. 2019 fish richness by bed type (restored, natural)
18. 2019 invertebrate richness by bed type (restored, natural)
19. Shoot density, all years sampled for 6 Santa Cruz Island sites
20. Transect cover, all years, for 4 Santa Cruz Island sites

## List of Tables

1. 2019 study site locations
2. 2016 study site locations
3. summary 2019 table quadrat data
4. summary table 2019 fish band transect data
5. summary table 2019 invertebrate band data
6. fish species richness over all sites, years sampled

## List of Plates

1. Anthropogenic disturbances to eelgrass
2. Natural disturbances to eelgrass meadows
3. Major invertebrates found in eelgrass beds
4. Reproductive phases in *Zostera pacifica*
5. Common fishes in eelgrass
6. Fish reproductive use of eelgrass meadows
7. Mapping and quantifying eelgrass meadows
8. Interesting observations during 2016 and 2019 surveys
9. Commercial trapping at Frenchys
10. Physiological stress in eelgrass following warm water events

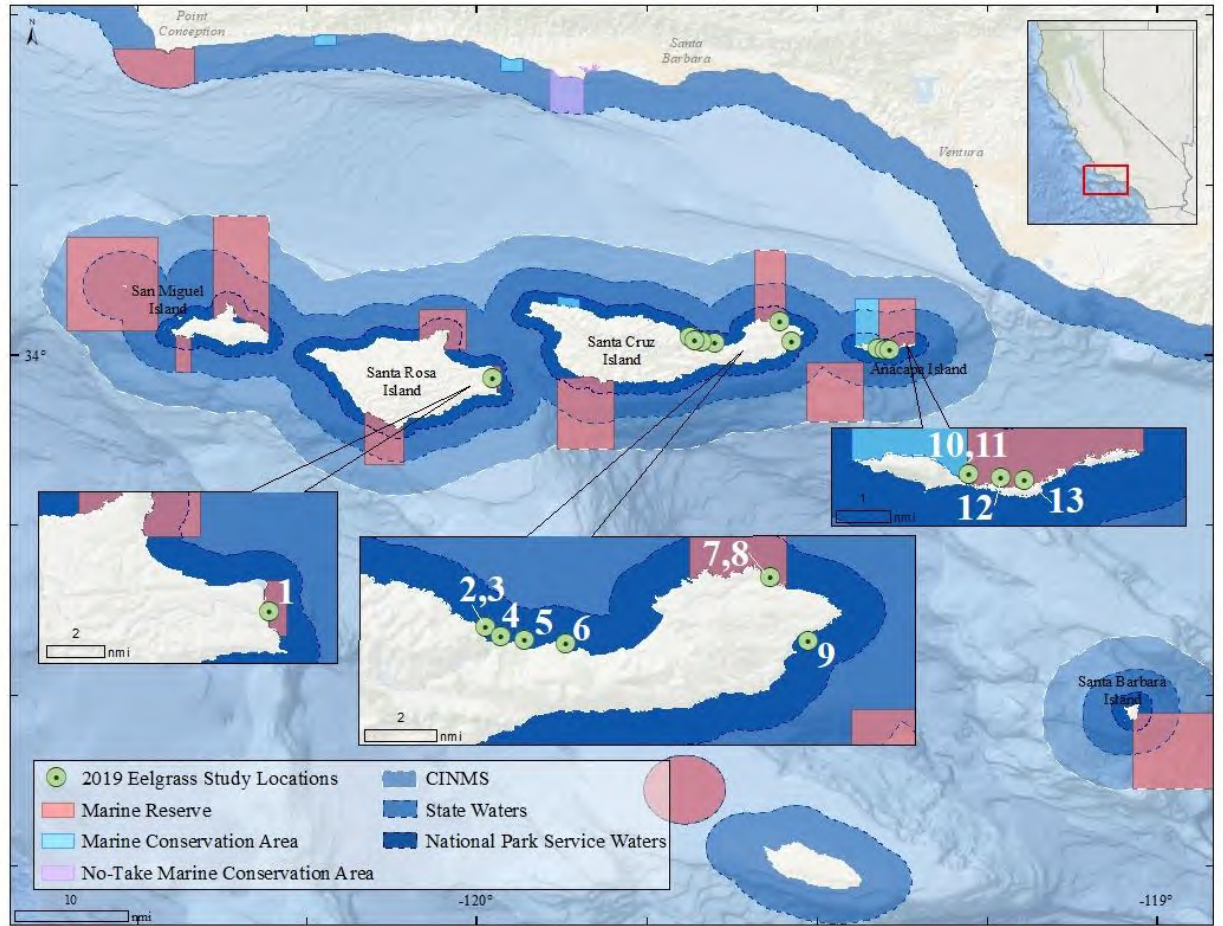


Figure 1. Location of study sites for 2019 eelgrass surveys. Sites are numbered 1-13 from west to east. Numbers refer (in order) to site names: Old Ranch SRO, Prisoners SCR, East Prisoners SCR, Eagle Canyon SCR, Cañada Agua SCR, Aguaje Escondido SCR, Scorpion SCR, East Scorpion SCR, Smugglers SCR, Frenchy's ANA, East Frenchy's ANA, Keyhole ANA, East NPS ANA. SRO= Santa Rosa, SCR= Santa Cruz, ANA= Anacapa. Other known locations of eelgrass not shown.

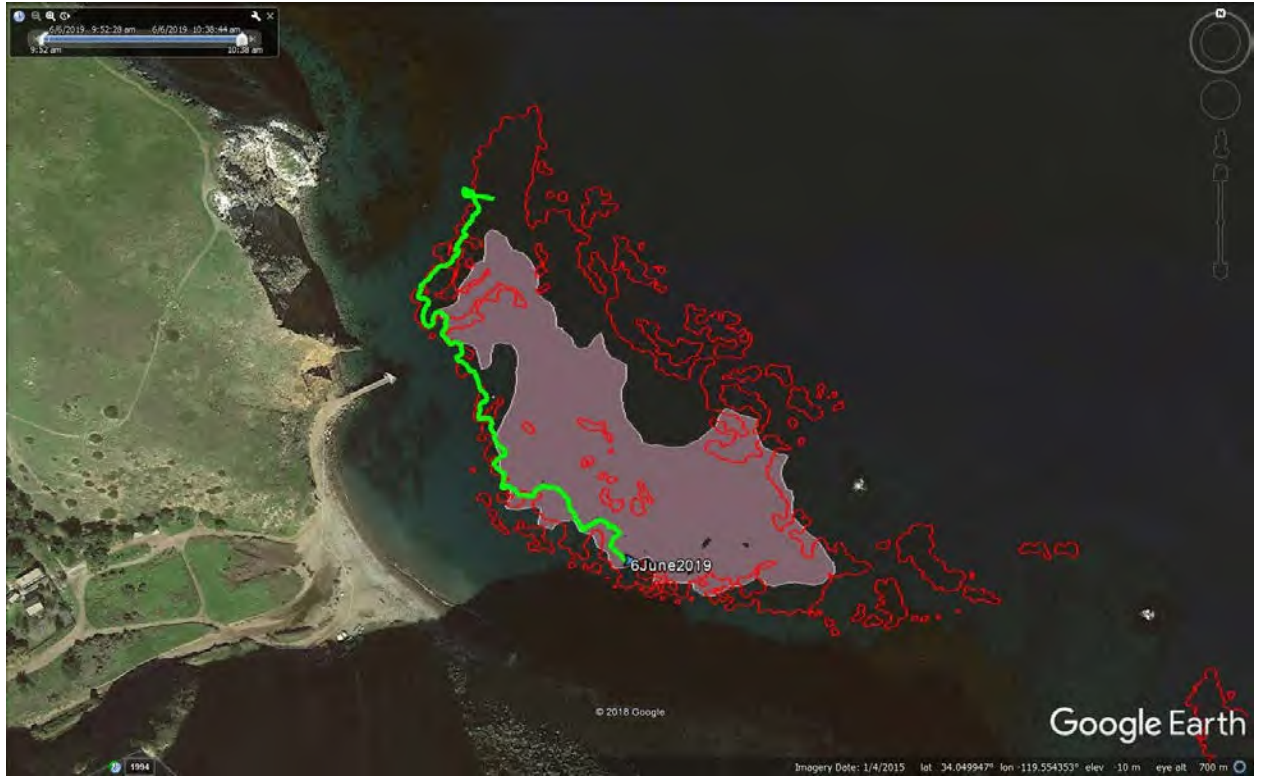


Figure 2. Trackline of meadow edge at Scorpion in June 2019 (green) compared with 2015 sonar mapping (red) and 2009 diver surveyed and mapped area (pink).

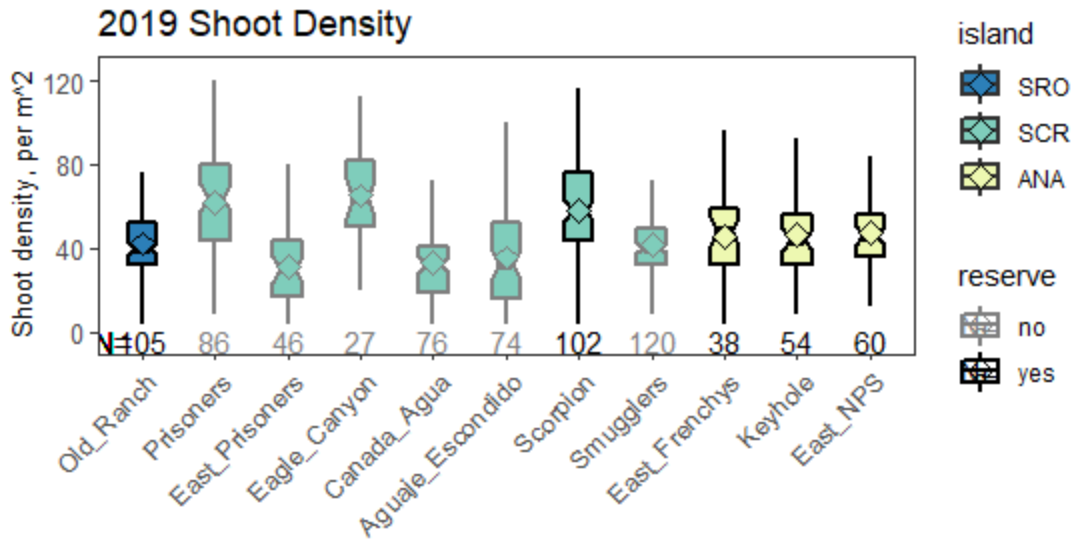


Figure 3. Boxplot of shoot density in quadrats with eelgrass present in 2019. N refers to the number of quadrats with eelgrass present per site. Boxplots are presented as follows: boxes show the interquartile range, whiskers represent the upper and lower quartiles, horizontal lines represent the median, diamonds mark the means, and notches show the 95% confidence interval of the median. Shading denotes island and outline denotes reserve status. Outliers not shown. Frenchys (N=0) and East Scorpion (N=3) not shown.

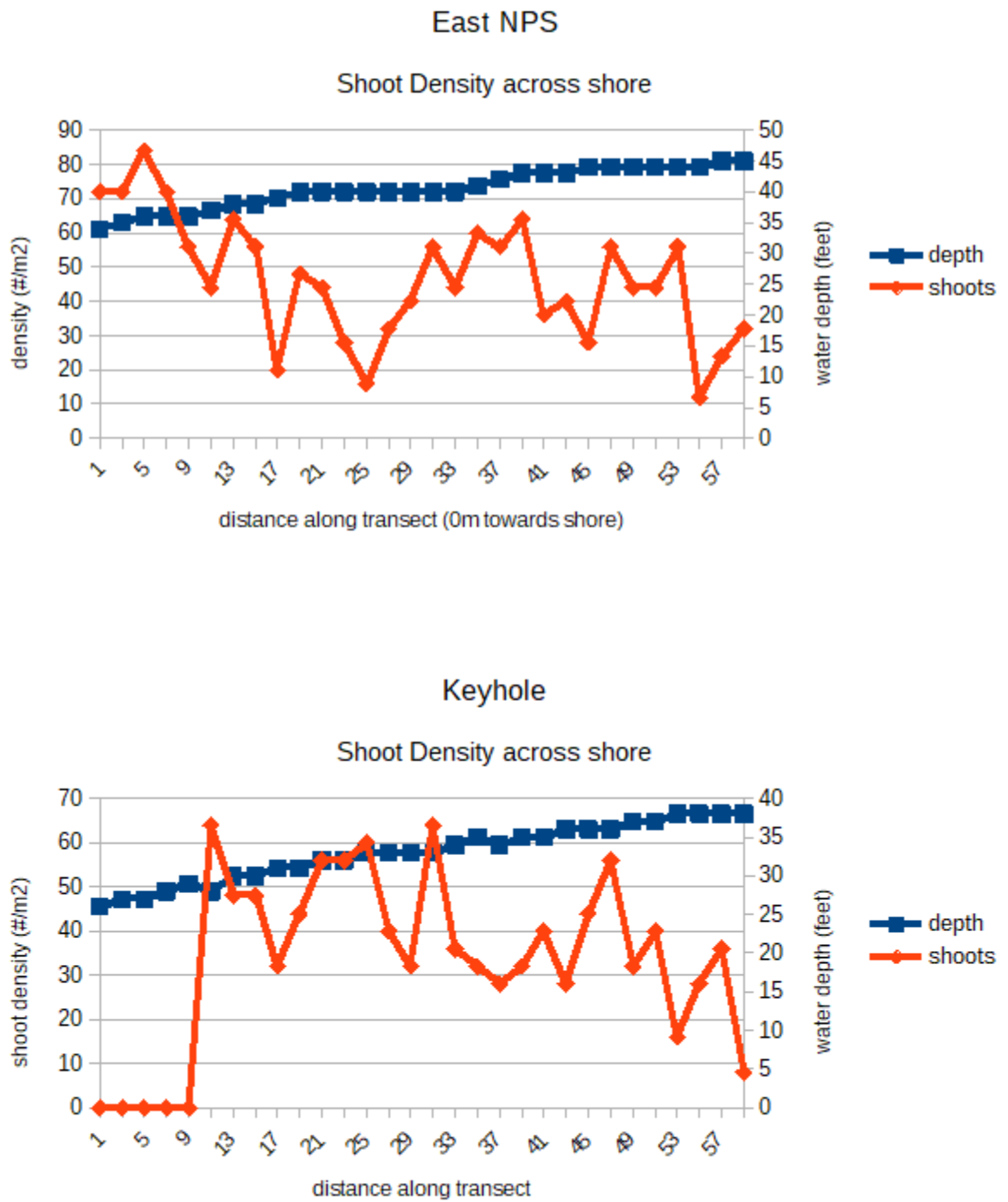


Figure 4. Eelgrass shoot density and depth from across shore (shallow to deep) 60m transects at two Anacapa locations.



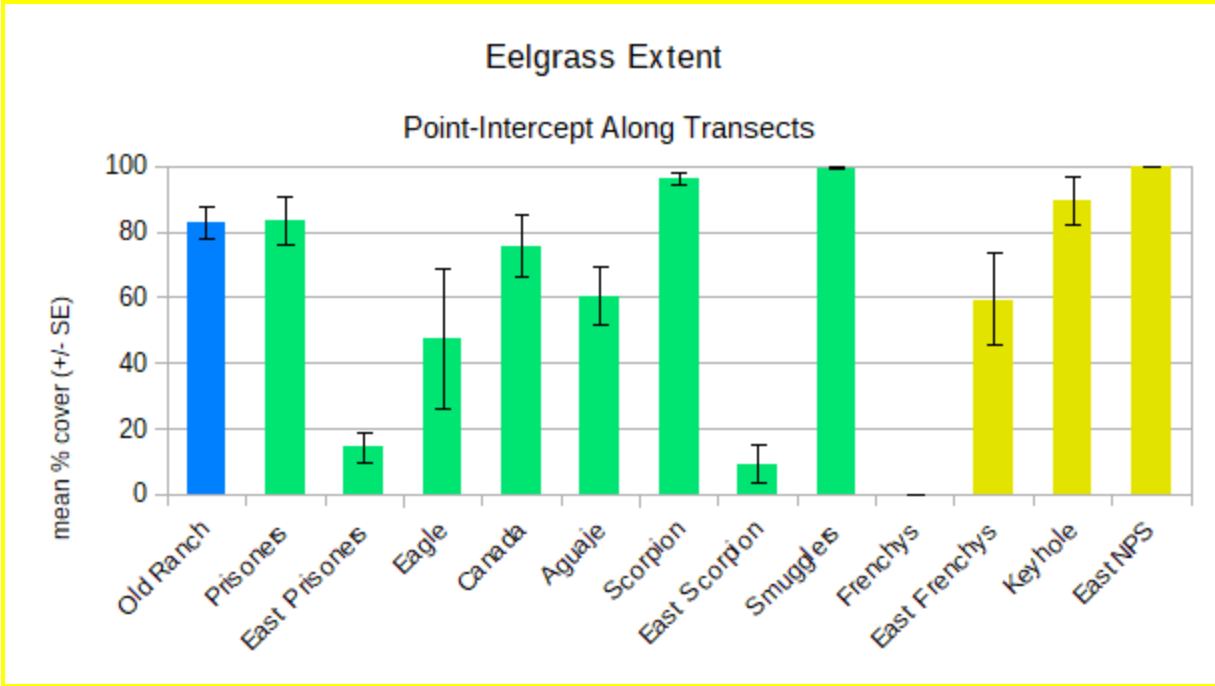


Figure 5. Mean eelgrass cover from point-intercept data for all core transects. Number of transects by site N= 8,7,9,3,5,8,8,4,8,5,4,4,4.

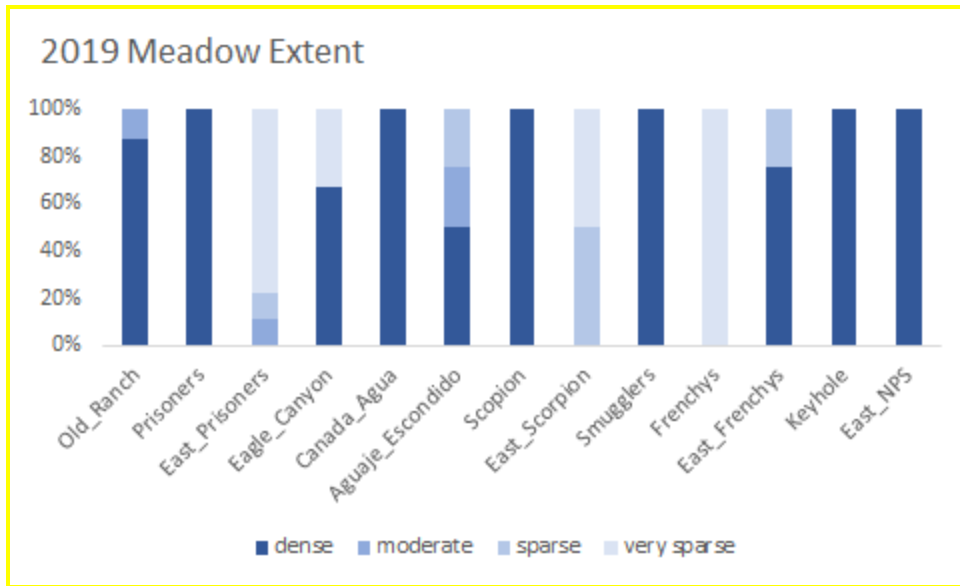


Figure 6. Eelgrass meadow extent as measured by point-intercept along core transects. Percent cover converted to density scale (Very Sparse= 0-10%, Sparse=10-40%, Moderate= 40-70%, Dense = 70-100%. Number of transects by site= 8,7,9,3,5,8,8,4,8,5,4,4,4.

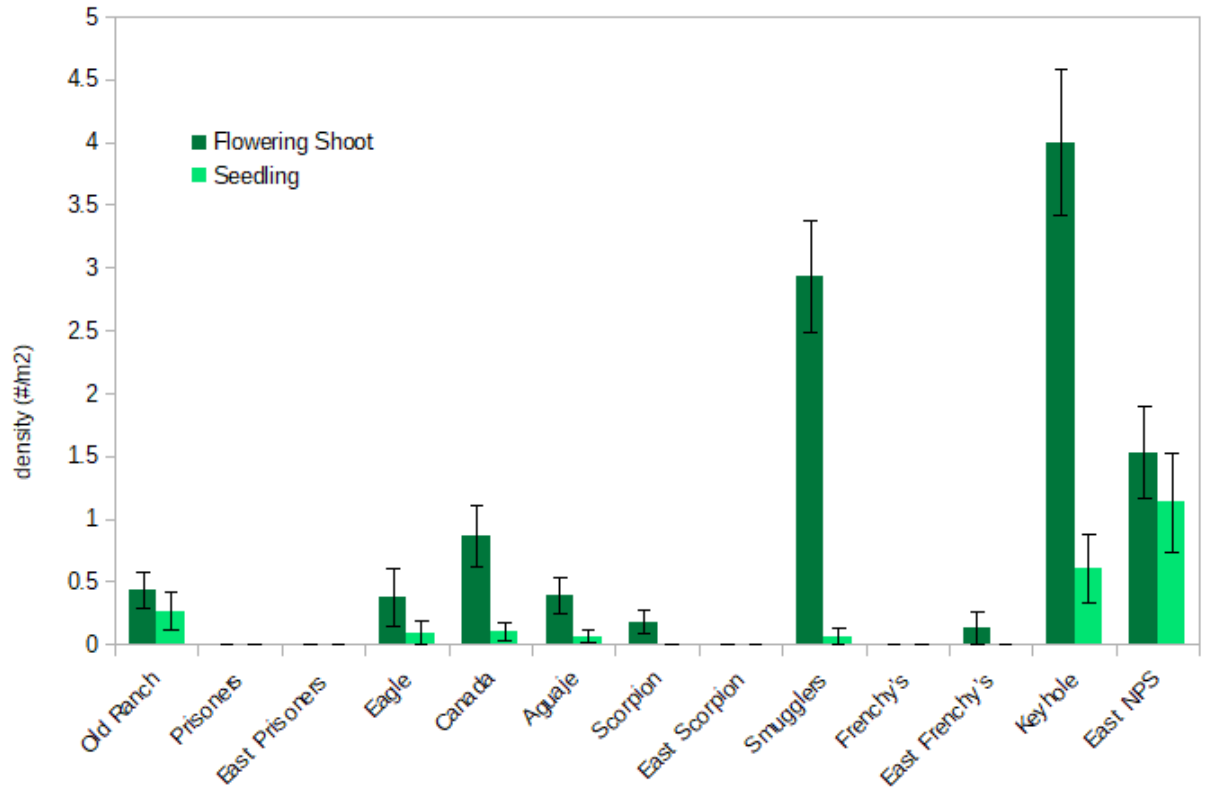


Figure 7. Density (means +/- standard error) of eelgrass flowering shoots and seedlings from quadrat data.

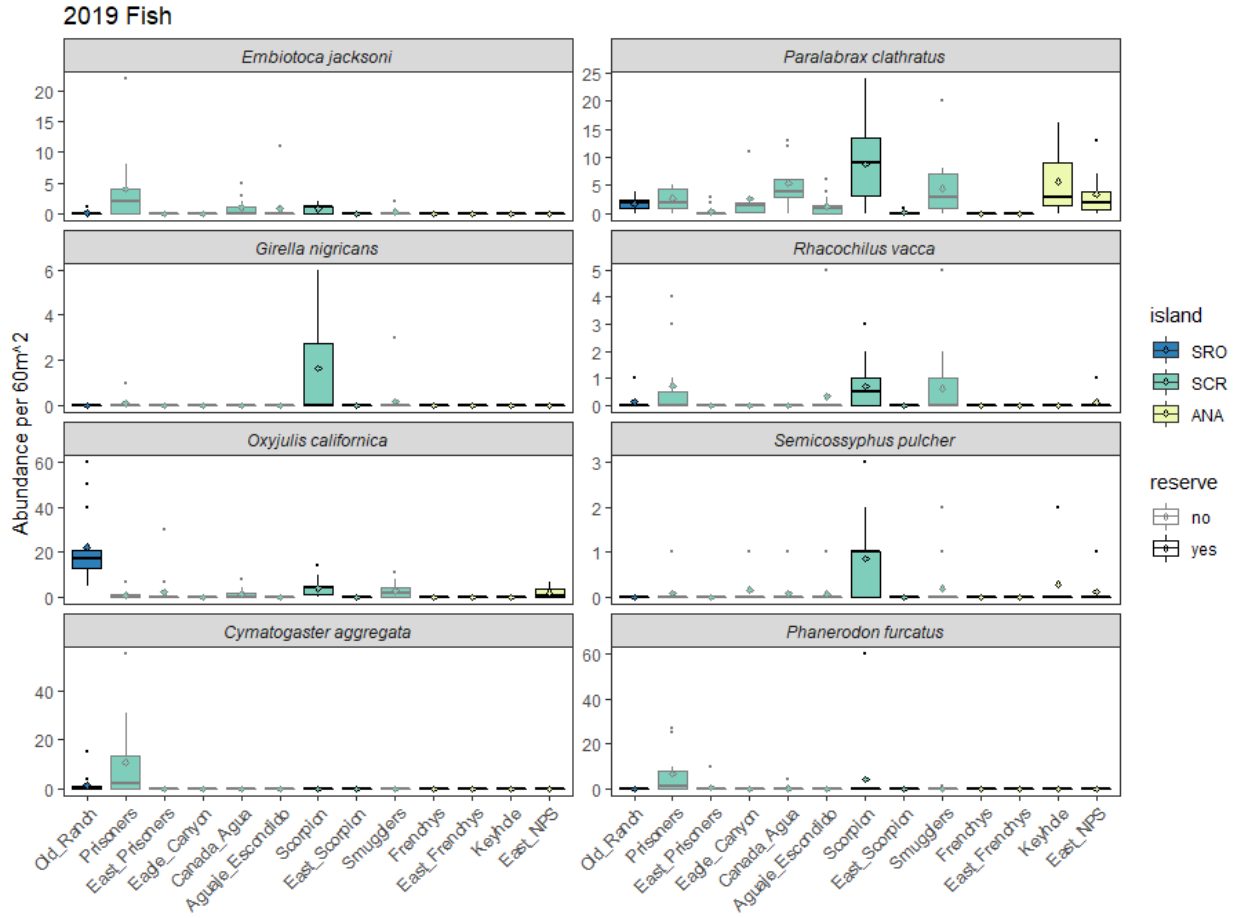


Figure 8. Fish abundance (per 60m<sup>2</sup>) across sites for select taxa in 2019. Bars represent average value of band 60m<sup>2</sup> transects (core plus extra).

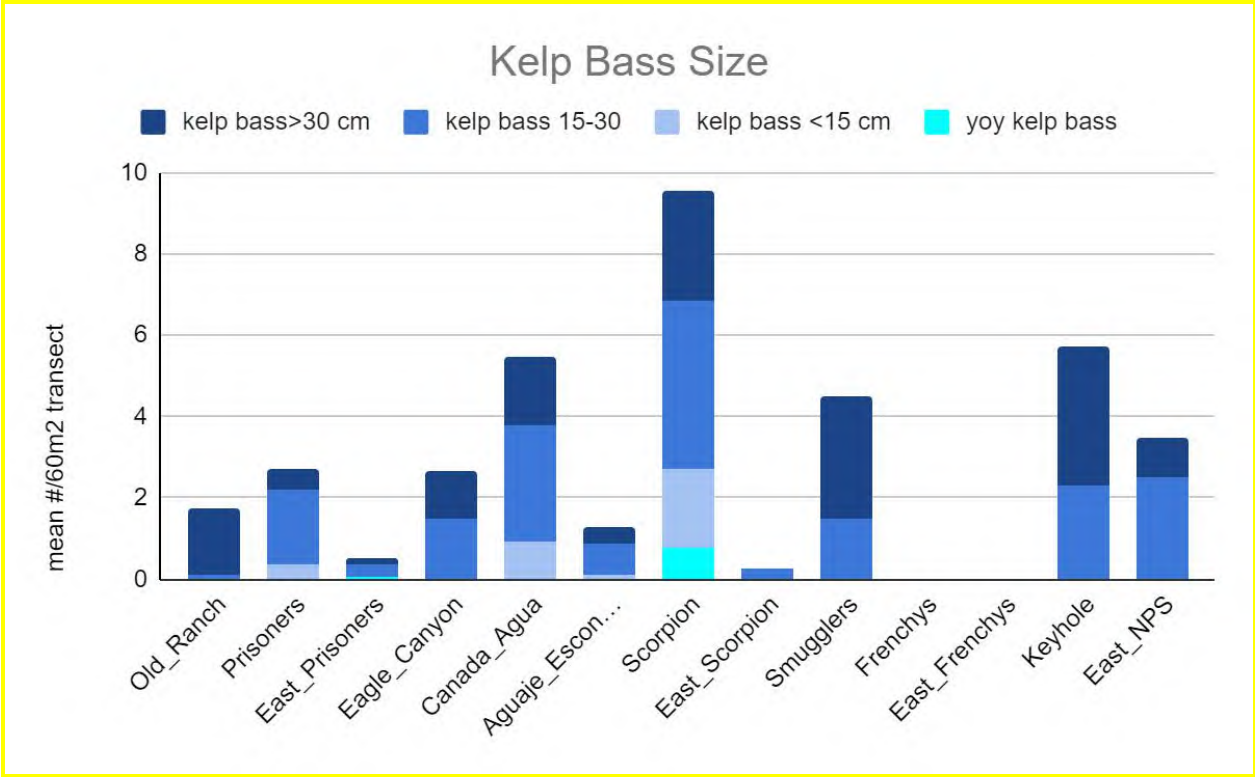


Figure 9. Density of kelp bass by four size classes at all 13 sites. Data are means of quantitative fish transects (core plus extra).



Site	Old_Ranch	Prisoners	Canada_Agua	Aguaje_Escondid	Scorpion	Smugglers	Frenchys	East_Frenchys	Keyhole	East_NPS
angel shark			0.60							1.00
barracuda				1.80	0.90					
bat ray			0.93	1.37	2.00					
black surfperch	1.00	3.00	1.96	1.03	2.00	3.00		1.47	1.10	1.27
blackeye goby							0.70			
blacksmith								1.80		
c-o turbot								1.00	0.90	0.70
fantail sole	0.70									
giant kelpfish		2.53	1.93	2.03	0.50			1.20	1.33	
giant sea bass									0.80	
giant seabass									1.60	
halfmoon			2.05	1.60		0.80		1.80	0.60	1.50
halibut							1.00		1.05	1.20
horn shark		0.50		0.60				0.95		
jack mackerel				2.85						2.60
kelp bass	3.00	3.00	3.20	3.20	3.00	2.90	2.00	2.53	3.50	3.22
leopard shark		1.25	1.80	1.28				0.55		
ocean whitefish					1.00				0.70	
opaleye		1.60	2.10	0.60	1.80	2.00		1.60	0.95	1.30
pile perch	2.00	1.80	2.50	0.85	2.00			1.20	1.65	1.03
rainbow surfperc	2.00					3.00				
rock wrasse		1.00	1.60	1.87	2.00	1.53		1.80	1.55	1.77
rubberlip seaperch			1.60							
salema		2.00								
sand dab							1.80			
sarcastic fringehead							0.00			
sargo					0.60					
senorita	3.00	1.30	1.80	1.67	3.00	4.00		1.00	3.00	3.00
sheephead			0.70	1.40	2.50	1.17		1.80	1.59	1.12
shiner surfperch	3.00	4.00	0.70	1.50	3.60					1.30
topsmelt		3.00			2.70					
tube-snout	0.80			1.00		2.40				
white surfperch		3.00	1.85	1.90	2.70					
yellowtail							2			

Figure 10. Roving Diver Fish Surveys summarized for all sites surveyed by the Average Fish Abundance Index (0-4, with 4 as the most common and seen earliest in the dive). Details are in text.

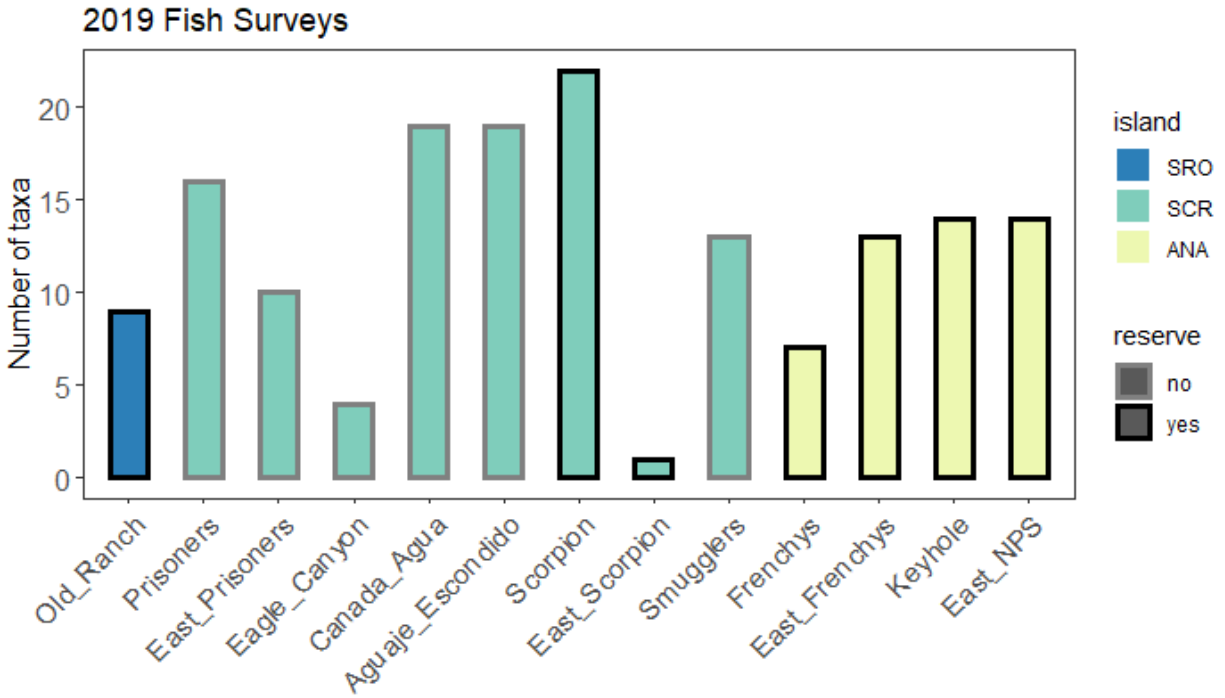


Figure 11. Total Fish Species Richness. Data are for the total number of fish taxa observed at each site (combination of quantitative transects, Roving Diver, and other observations during surveys).

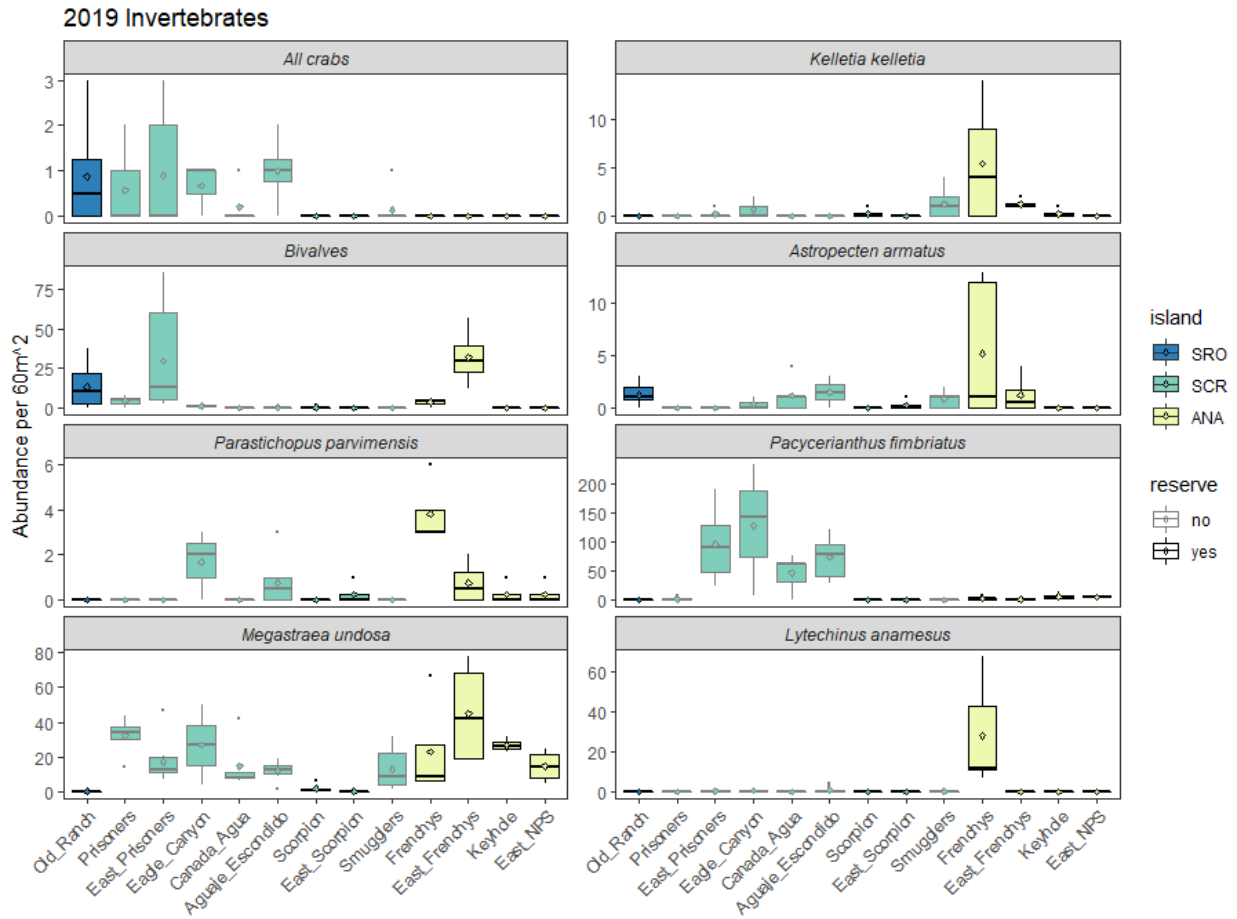


Figure 12. Invertebrate abundance (per 60m<sup>2</sup>) across sites for select taxa in 2019. Bars represent average value of (n=3-15) band 60m<sup>2</sup> transects.

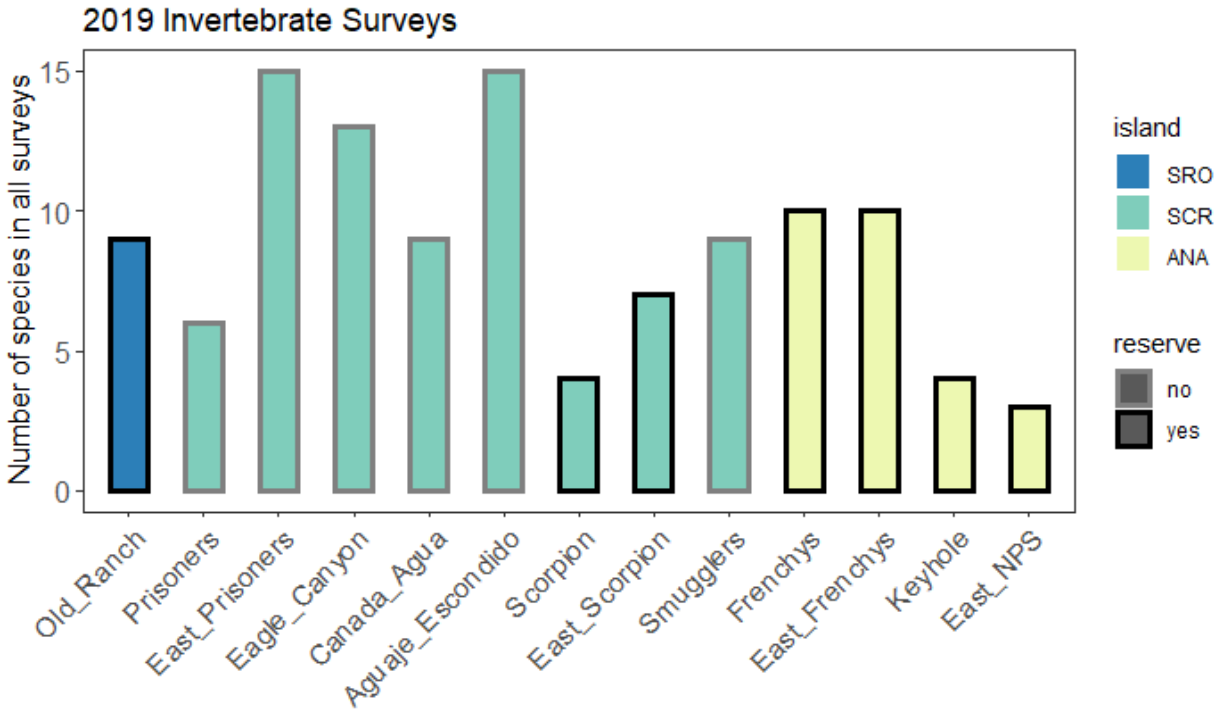


Figure 13. Total Invertebrate Species Richness. Data are for the total number of invertebrate taxa observed at each site along band transects.

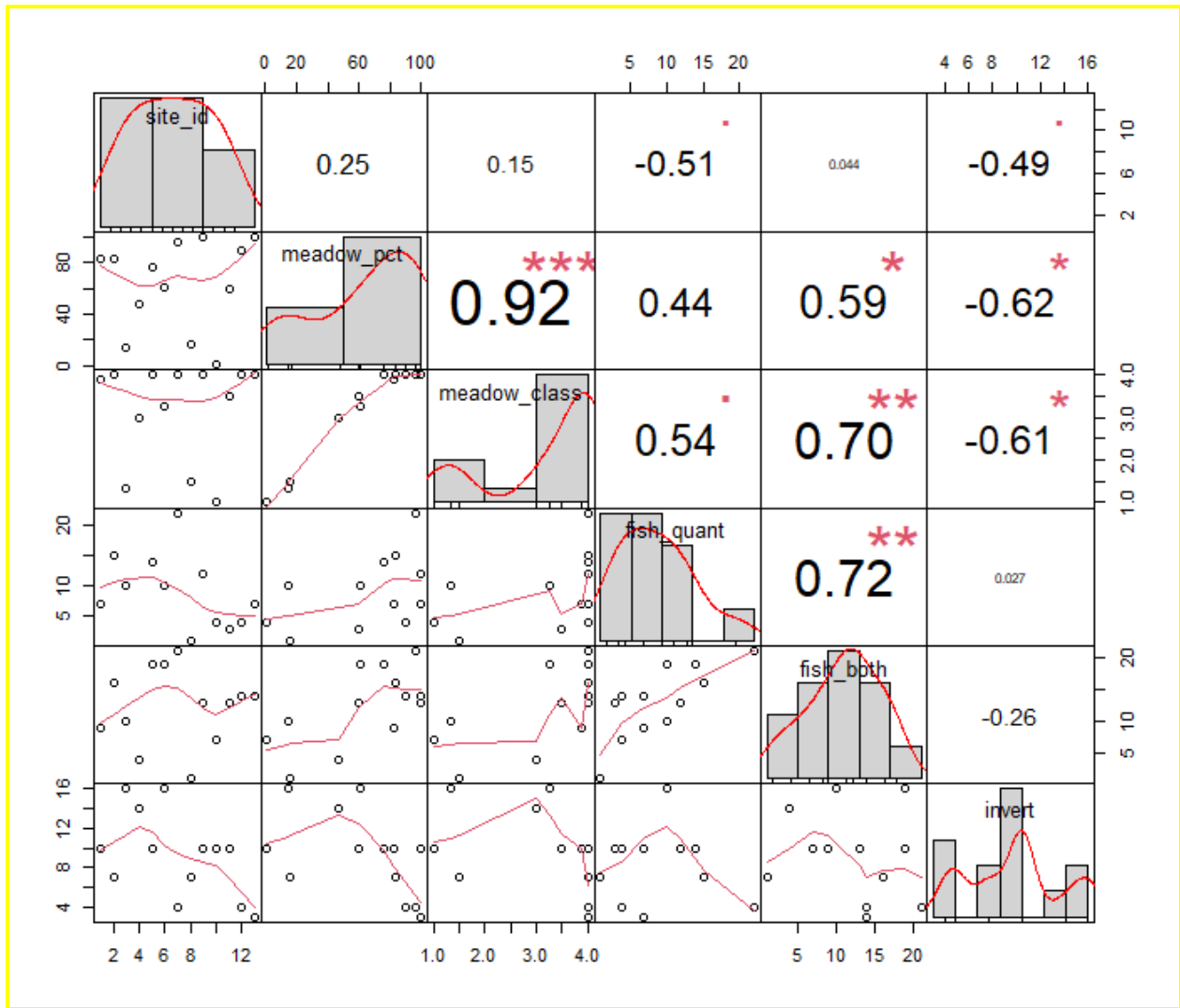


Figure 14. Correlation matrix of meadow extent, fish richness, and invertebrate richness in 2019. Spearman's rank correlation computed due to non-normal distributions and small sample sizes. \*\*\*,  $p < 0.001$ ; \*\*,  $p < 0.01$ ; \*,  $p < 0.05$ ; •  $< 0.1$ ). Red lines represent smoothing of raw data and histograms. Font size in upper panels relates to correlation strength.



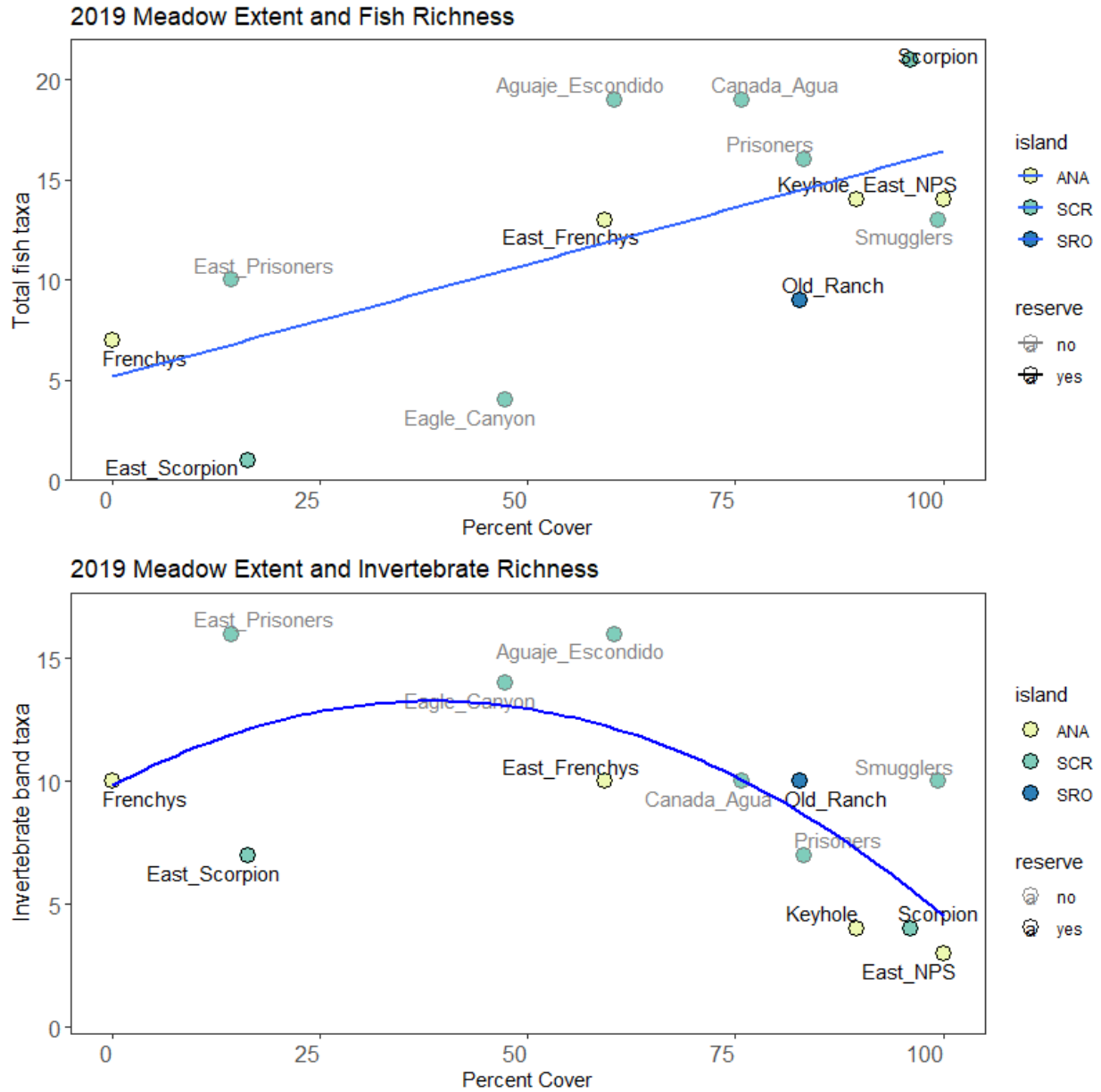


Figure 15. Species richness as a function of eelgrass meadow extent in 2019. Each data point represents averages for each site. Taxa data are total species richness, percent cover data are from point intercept data along transects. Top panel: fish species richness for band and roving diver transects. Line shows fitted linear regression ( $r^2=0.42$ ,  $p=0.01$ ). Bottom panel: invertebrate species richness for band transects. Line represents fitted second order polynomial regression ( $r^2=0.49$ ,  $p=0.03$ ), which explains more variance than a linear regression ( $r^2=0.26$ ,  $p=0.07$ ).

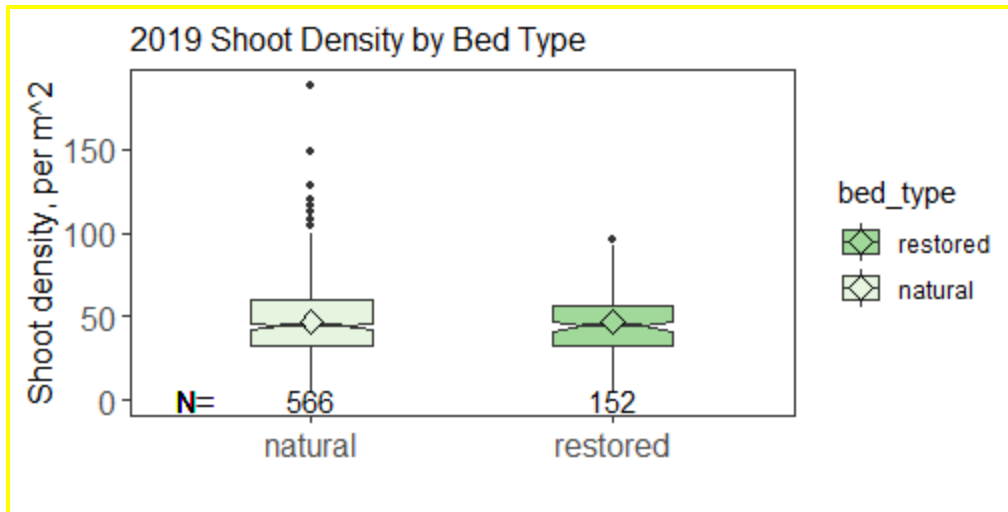


Figure 16. Comparison of shoot density in natural vs restored beds in 2019. Bed types are not significantly different based on overlap of 95% confidence interval around the median.

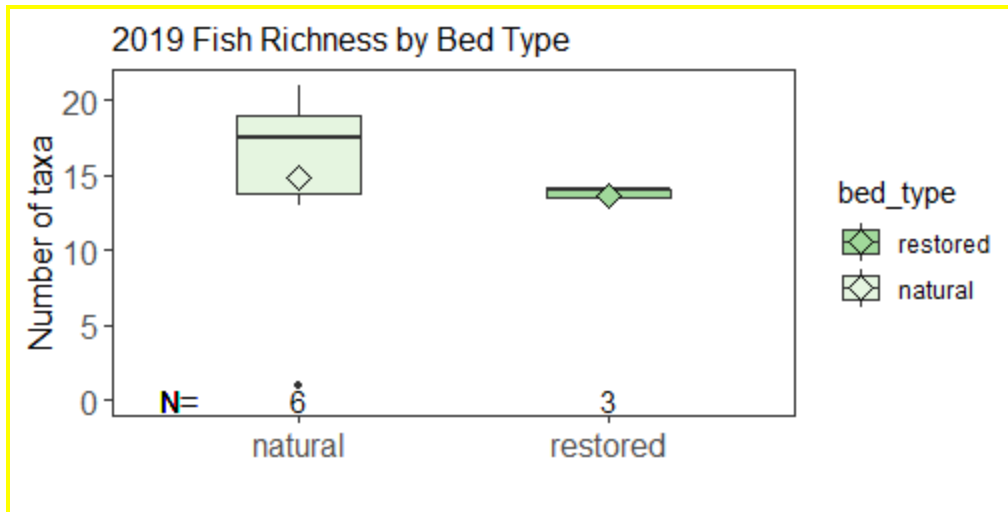


Figure 17. Comparison of fish richness in natural vs restored beds in 2019. Bed types are not significantly different (Kruskal-Wallis test,  $p=0.54$ ). N is the number of sites in each category. Averages are the same, greater range for natural.

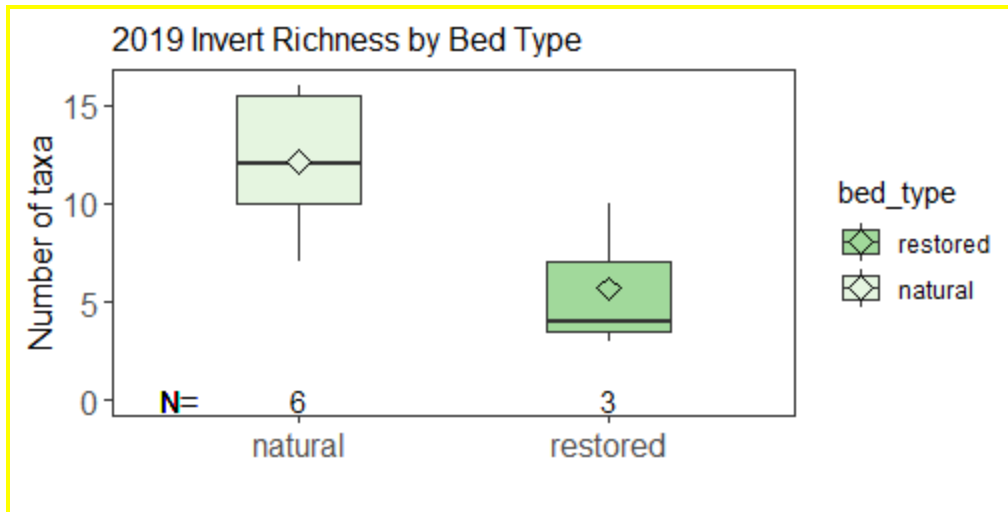


Figure 18. Comparison of invertebrate richness in natural vs restored beds in 2019. Bed types are not significantly different (Kruskal-Wallis test,  $p=0.40$ ). N is the number of sites in each category.

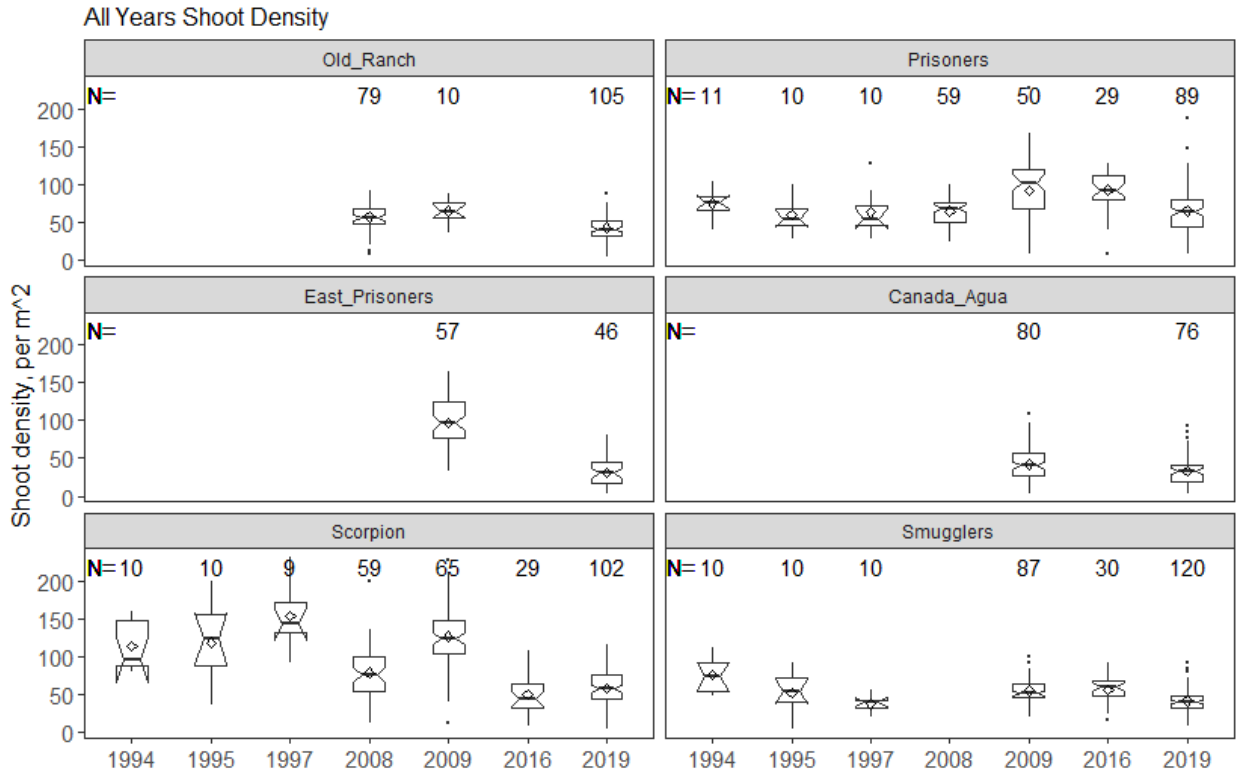


Figure 19. Boxplots of shoot density in quadrats with eelgrass present for sampled years, for select sites. N refers to the number of quadrats with eelgrass per year. For each year: box shows the interquartile range, whiskers represent the upper and lower quartiles, horizontal line represents the median, the diamond marks the mean, dots represent outliers, and notches ascribe the 95% confidence interval of the median.



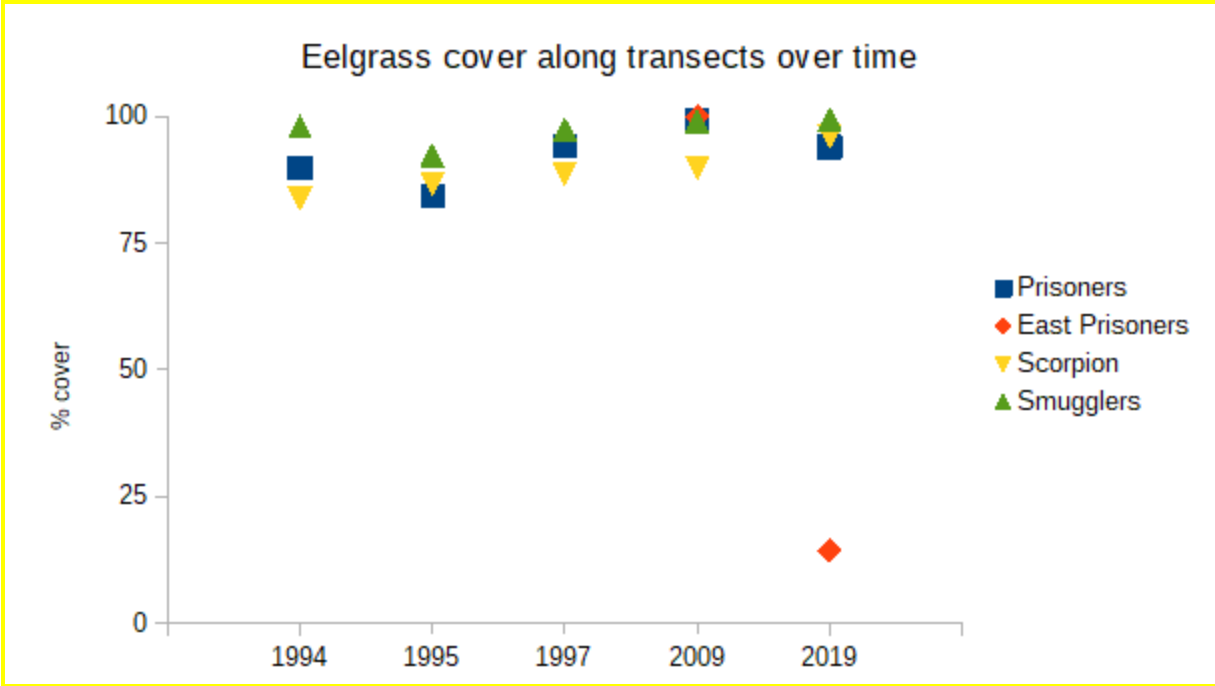


Figure 20. Eelgrass cover along transects at four Santa Cruz Island sites. East Prisoners not sampled in 1994, 1995, and 1997.

<b>Table 1. Channel Islands Eelgrass Meadows 2019 Survey Sites</b>				
<b>Site_name</b>	<b>site_id</b>	<b>Island</b>	<b>General Coordinates</b>	<b>Date Surveyed</b>
Old_Ranch	1	SRO	34.96351 -119.97329	20190624
Prisoners	2	SCR	34.02090 -119.68586	20190424, 20190724
East_Prisoners	3	SCR	34.02087 -119.68201	20190424, 20190509
Eagle_Canyon	4	SCR	34.02033 -119.67372	20190509
Canada_Agua	5	SCR	34.01807 -119.66876	20190606, 20190626, 20190724
Aguaje_Escondido	6	SCR	34.01783 -119.64918	20190606, 20190626, 20190724
Scorpion	7	SCR	34.04970 -119.55496	20190514, 20190606, 20190727
East_Scorpion	8	SCR	34.04772 -119.54955	20190514
Smugglers	9	SCR	34.02076 -119.53563	20190625
Frenchys	10	ANA	34.00918 -119.41086	20190523, 20190620
East_Frenchys	11	ANA	34.00763 -119.40873	20190523, 20190620
Keyhole	12	ANA	34.00736 -119.39976	20190524, 20190620
East_NPS	13	ANA	34.00796 -119.39227	20190524, 20190626

<b>Table 2. Channel Islands Eelgrass Meadows 2016 Survey Sites</b>				
<b>Site_name</b>	<b>site_id</b>	<b>Island</b>	<b>General Coordinates</b>	<b>Date Surveyed</b>
Prisoners	2	SCR	34.02090 -119.68586	20160808
Scorpion	7	SCR	34.04970 -119.55496	20160808
Smugglers	9	SCR	34.02076 -119.53563	20160808, 20160929
Yellowbanks		SCR		20160808
Frenchys	10	ANA	34.00918 -119.41086	20160624, 20160929*
East_Frenchys	11	ANA	34.00763 -119.40873	20160701, 20160929*
Keyhole	12	ANA	34.00736 -119.39976	20160920*, 20160628*
East_NPS	13	ANA	34.00796 -119.39227	20160920*, 20160628*
Cathedral Cove		ANA		20160920*









Anthropogenic disturbances to eelgrass. CW from UL: Mooring anchor and chain in 2016 and 2019 (Scorpion SCR); small vessel anchor (East NPS ANA); debris from land (Scorpion SCR); fishing gear (Frenchys ANA); sunken vessel (Keyhole ANA).





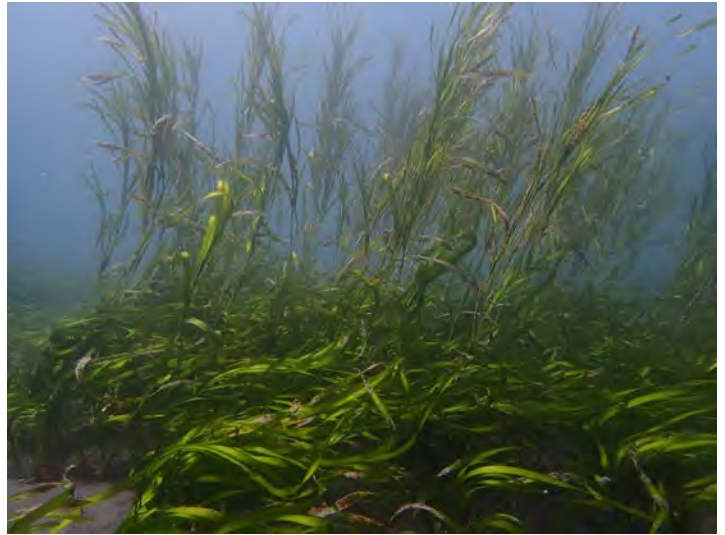
Natural disturbances to eelgrass meadows. CW from UL: Bat ray feeding pits (Scorpion SCR); urchin grazing (Eagle Canyon SCR); wavy turban snail grazing (Smugglers SCR); invertebrate mobbing (*Pachythione rubra* Old Ranch SRO); sea hare mass spawning (Aguaje Escondido SCR); disease (East Frenchys ANA).





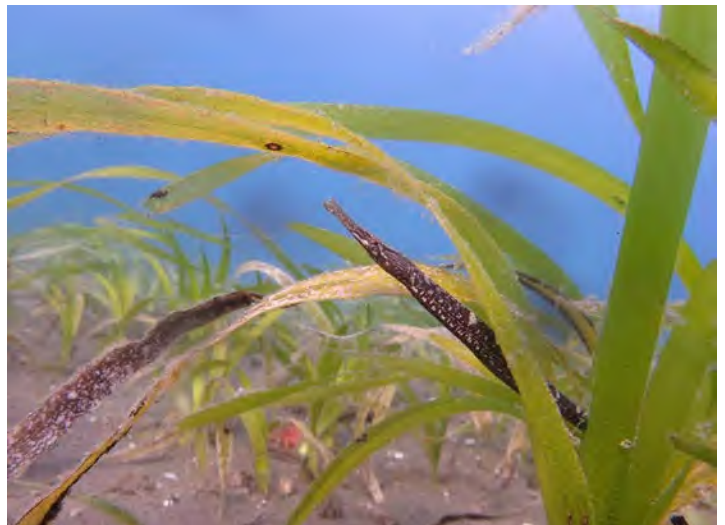
Major invertebrates found in eelgrass beds. CW from UL: Sea cucumber (Prisoners SCR); Cancer crabs (Prisoners SCR); sand star (East Frenchys ANA); lobster (Frenchys ANA); sand tube anemone (Canada Agua SCR); clam (Aguaje Escondido SCR).





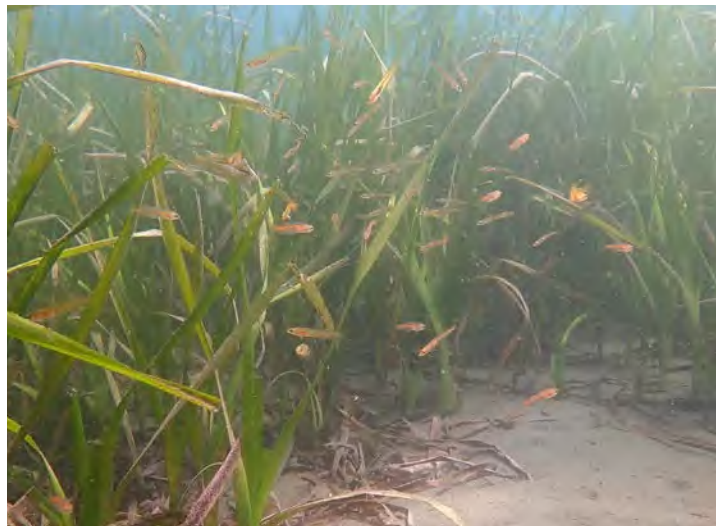
Reproductive phases in *Zostera pacifica*. CW from UL: New reproductive shoots developing in late spring (Keyhole ANA; and at East Frenchys ANA); close-up of an open spathe with male flowers (Prisoners SCR); ripening seeds (Aguaje Escondido SCR); a seedling (Canada Agua SCR); senescing reproductive shoot in late July (Prisoners SCR).





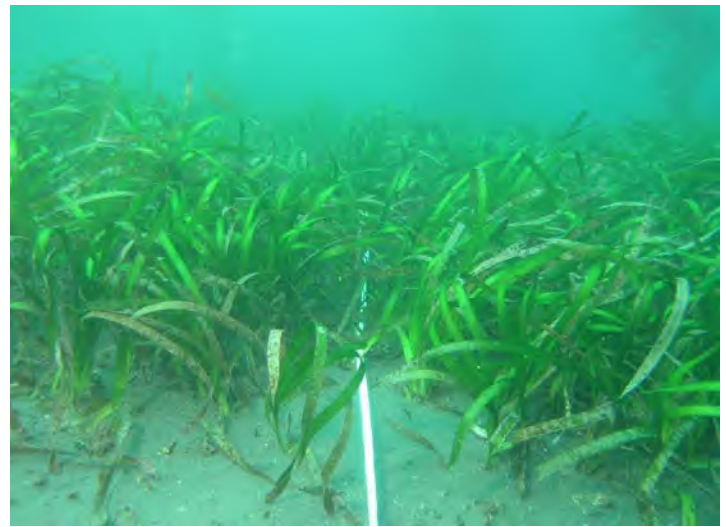
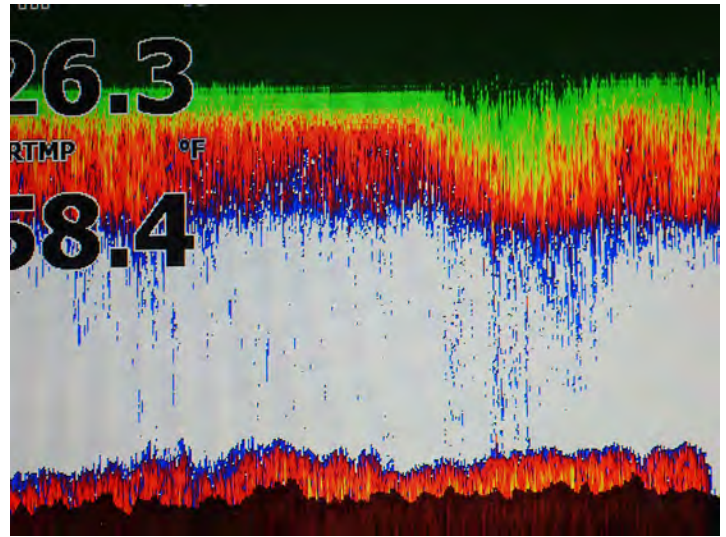
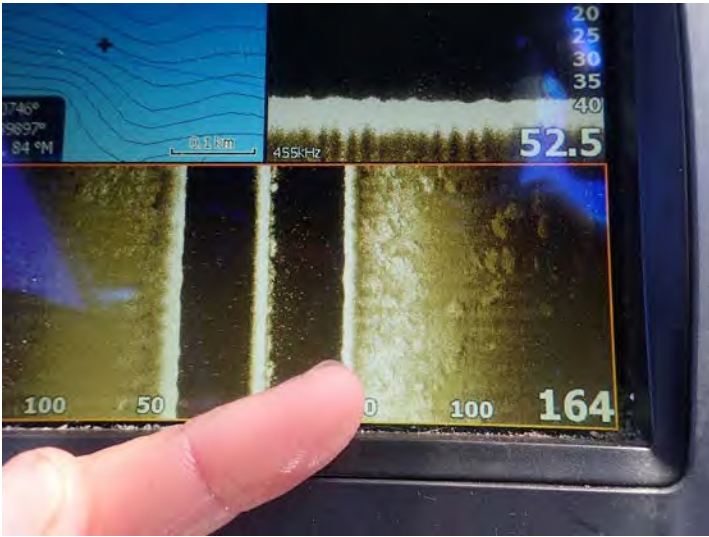
Common fishes in eelgrass. CW from UL: White and pile perch (Scorpion SCR); rainbow and black perch (Smugglers SCR); sheephead (Scorpion SCR); bay pipefish (East Frenchys ANA); kelp bass (Keyhole ANA); halibut (East NPS ANA).





Fish reproductive use of eelgrass meadows. CW from UL: Black perch exhibiting courtship behavior; juvenile horn shark (both East Frenchys ANA); young of the year (YOY) giant kelpfish (Canada Agua SCR); gravid shiner perch (Scorpion SCR); topsmelt eggs on eelgrass (Frenchys ANA) kelp bass YOY recruit (Frenchys ANA).





Mapping and quantifying eelgrass meadows. CW from UL: Eelgrass along Middle Anacapa imaged on ship's sounder (2016); imaged on fish finder (2019); Frenchys restoration transect within MCA (2006); and same restoration transect in 2019; control transect at East Frenchys within MPA (2019); diver mapping patch along same control transect in 2009.





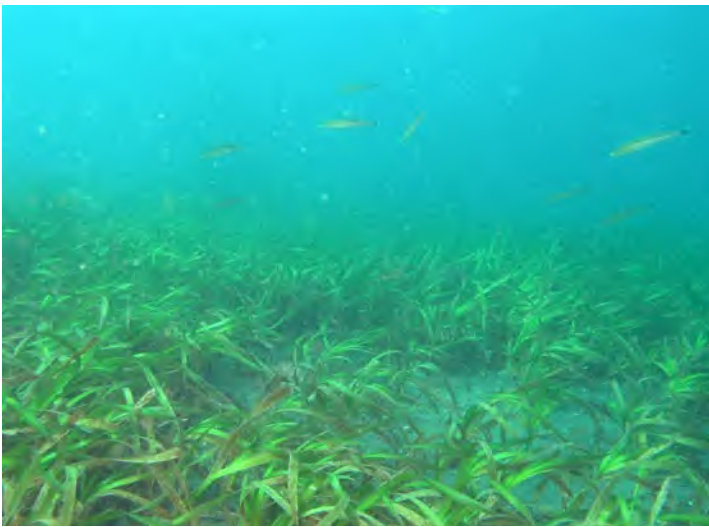
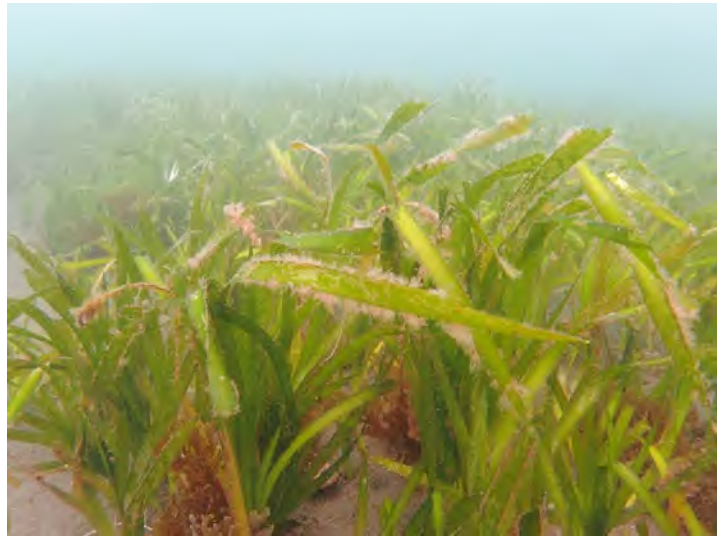
Interesting observations during 2016 and 2019 surveys. CW from UL: Giant sea bass (2019 East Frenchys ANA); moray eel (2019 Prisoners SCR); sea sweet potato (2016 Prisoners SCR), pelagic red crab (2016 East Frenchys ANA); juvenile white seabass (2019 Prisoners SCR); black sea hare (2016 East Frenchys ANA, the largest of all sea slug species).





Commercial trapping at Frenchys. Top row: Lobster floats November 2016 on the MPA/MCA boundary (left) and in the MCA (right); Middle row: November 2019 on the MPA/MCA boundary, facing north (left), December 2020 looking south in to the cove along the boundary , > 2 dozen visible (right); Bottom row: abandoned trap within MPA September 2016 (left); abandoned trap on the restoration transect (diver touching marker stake) in MCA September 2016.





Physiological stress in eelgrass following warm-water events, compared to cooler years. Top row L and R: Eelgrass in late June 2019 (cooler) and late June 2016, el Nino (both East Frenchys ANA); Center and bottom rows: left, mid- September 2007 (cold) and right, 2016, el Nino (both at East Frenchys ANA).



November 30, 2023

Eric Sklar, President  
California Fish and Game Commission  
715 P Street, 16th Floor  
Sacramento, CA 95814

**Re: Decadal Management Review Marine Protected Areas Petition Process:  
Anacap SMCA at Anacapa Island**

Dear President Sklar and Honorable Commissioners:

The undersigned organizations have decades of combined experience and interest working on Marine Protected Area (“MPA”) management, research, compliance, outreach, and education efforts. We submit this letter to support the submission of an MPA petition for the Anacapa State Marine Conservation Area (“SMCA”) as a part of the Decadal Management Review (“DMR”) process. This petition seeks to reclassify the Anacapa SMCA as a State Marine Reserve (“SMR”) or at a minimum reclassify the portion of the SMCA from shore to at least 30 meters depth to better protect eelgrass habitat.

The DMR is a momentous step in adaptive and community-based conservation. We commend the California Fish and Game Commission, California Department of Fish and Wildlife, and California Ocean Protection Council for the enormous effort undertaken to



complete this first 10-year review. The MPA Network was designed to function as an ecological network to ensure the protection of California's diverse coastal ecosystems. Eelgrass meadows are one of the many habitats protected by MPAs. The eelgrass found in California and at Anacapa Island is *Zostera marina*. This subspecies of eelgrass used to be abundant at multiple sites at Anacapa Island until white urchin (*Lytechinus anemexus*) populations increased and invaded the area following the 1983 El Niño. Transplantation efforts at Anacapa Island have had some success, however the shift of spiny lobster trapping to soft bottom habitat has led to a decline in the transplanted eelgrass population at Frenchy's Cove.

### **Anacapa Island Historic Eelgrass Cover**

Eelgrass plays an important role in many marine systems like species survival, reducing coastal erosion, acting as a carbon sink, etc. Globally eelgrass populations have declined during the past 25 years through a combination of natural and anthropogenic deterioration. By 1995, only 2 small eelgrass patches were present at East Anacapa Island, and both disappeared by 1999. Past research at Anacapa Island found that there had been no sign of recruitment at Frenchy's Cove since 1991 up until the 2000s when efforts were made to reintroduce eelgrass into the area. The annual surveys conducted from 1991 to 2001 at Frenchy's Cove revealed no eelgrass seedlings, adult plants, or drift material, underlining the limited long-distance dispersal capabilities of this species.

### **Impacts to Anacapa SMCA Eelgrass Meadows**

Follow up surveys in 2014 and 2016, after the transplantation effort in the early 2000s, found the transplanted eelgrass meadows at the Anacapa SMCA to be damaged and greatly reduced. Information gained from mariners and National Park rangers revealed that Frenchy's Cove was being fished heavily during the two months (November, December) that the brown pelican Special Closure was open. Fishing block data for the mainland showed that effort more than doubled within blocks containing fishing areas adjacent to SMRs. Notably, eelgrass continues to thrive within the Anacapa SMR, 200 meters to the east.

Before the shift in fishing efforts for spiny lobster, in 2012 the research team responsible for the transplantation in the early 2000s found additional patches 200 meters to the east of the transplant site and scattered shoots were observed at the west end of East Anacapa Island. The unintended differences in usage of the SMCA and SMR showed that eelgrass will rapidly colonize and thrive if anthropogenic disturbance (i.e., trapping) were to cease.

The impact of fishing for spiny lobster during the two months allowed is destroying the eelgrass meadows. Research shows that recruitment of new eelgrass is a long process, but it is possible when the ideal habitat is left undisturbed. Currently the SMCA allows for recreational take of spiny lobster and pelagic finfish and commercial take of spiny lobster. The Brown Pelican special closure allows for lobster traps in November and December. We ask that the SMCA be reclassified as a SMR or reclassifying the portion of the SMCA from shore to at least 30 meters depth.

November 30, 2023

**Decadal Management Review Marine Protected Areas Petition Process: Anacapa SMCA at Anacapa Island**

Page 3 of 3

## **Conclusion**

We celebrate the success of the MPA network in a time when ocean conservation wins are more important than ever. While we rely on oceans to contribute to many of our societal needs, from food to energy, we must remain committed to protection of our shared resources, not only for future generations but also for the intrinsic value of a thriving ocean. This petition to reclassify the Anacapa SMCA as an SMR or reclassifying the portion of the SMCA from shore to at least 30 meters depth will allow Anacapa Island to recover its historic eelgrass meadow.

Thank you for your consideration of the MPA petition. If you have any questions, please contact Azsha Hudson, [ahudson@environmentaldefensecenter.org](mailto:ahudson@environmentaldefensecenter.org).

Sincerely,

Azsha Hudson, Marine Conservation Analyst  
Environmental Defense Center

Richard Smalldon, Director  
Santa Barbara Museum of Natural History, Sea Center

Robert Mazurek, Executive Director  
California Marine Sanctuary Foundation

Tomas Valadez, California Policy Associate  
Azul

Elizabeth Purcell, Policy and Communications Intern  
Turtle Island Restoration Network

Ted Morton, Executive Director  
Santa Barbara Channel Keeper

Jim Taylor, Group Chair  
Sierra Club, Santa Barbara – Ventura

Robert Vergara, Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Ashley Eagle-Gibbs, Interim Executive Director & Legal and Policy Director  
Environmental Action Committee of West Marin (EAC)



Tracking Number: (2023-28MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission’s authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Lisa Suatoni, National Resources Defense Council

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

**2. Rulemaking Authority (Required) - Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.**

**3. Overview (Required) - We propose the designation of a new State Marine Reserve in the waters around Point Sal, Central California to 1) protect this rich and productive ecosystem and biodiversity found within, 2) protect an important larval retention zone and enhance the connectivity dynamics within the region, and 3) enhance the climate resilience of the broader state MPA network.**

The proposed area aligns with state MPA design and feasibility guidelines provided by CDFW, and is bounded by the mean high tide line, the 3 nm state waters boundary, and straight lines connecting the following points in the order listed:

- 34.880667518 N lat. 120.726433061 W long. (SW corner)
- 34.929894739 N lat. 120.727488272 W long (NW corner)
- 34.930008197 N lat. 120.666597401 W long. (NE corner)
- 34.880979714 N lat. 120.639473286 W long. (SE corner)

We propose regulations aligned with current State Marine Reserves: *“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.”*



However, we recommend that the state consult with local Indigenous communities and Tribes before designation, to determine whether a State Marine Conservation Area with exemptions for cultural and subsistence use of relevant Indigenous communities and Tribes in the area is warranted.

- 4. Rationale (Required)** - Located in Santa Barbara County, Point Sal is an ecologically rich and relatively remote promontory along the coastline that supports a diverse marine ecosystem and provides critical habitat for seabirds and marine mammals alike. The nutrient-rich waters found at this site allow for a diversity of ocean life to thrive here, with kelp beds, rich tidepools, and productive waters that support humpback whales, gray whales, a variety of sea lions and seals, sea otters, and a biologically important feeding area for endangered blue whales nearby. Offshore, Lion Rock is a significant roosting site for seabirds like the Brown pelican and Brandt's cormorant, and also acts as a relatively undisturbed haul out for sea lions, seals, and other pinnipeds, underlining the area's conservation value for these animals as the California coastline becomes increasingly developed. In addition, the leeward waters of Point Sal act as a larval retention zone, which are known to be highly beneficial areas for recruitment of fish and invertebrate larvae in wind-driven upwelling zones while promoting the biodiversity of the surrounding ecosystem. Historically, Point Sal also holds cultural significance for the Chumash people, with evidence of their occupation as recently as 250 years ago and as far back as 4,800 years ago; Chumash artifacts are visible throughout Point Sal, and analyses of burial sites from the area demonstrate the rich cultural ties to the traditional stewards of this land.

Protecting the waters of Point Sal aligns strongly with the goals set by the California Marine Life Protection Act (MLPA), especially with regards to the protection of natural biodiversity found in relatively undisturbed marine ecosystems. Given the remote nature of Point Sal, its relative lack of human disturbance, and increasing threats to the California MPAs found nearby, there is an urgent need to protect the ecological merits and maximize the biological benefits that Point Sal provides to the marine species that inhabit the area and to the broader Central California region. As development of the state's coastline and seascape progresses, protecting these untouched areas will add to the resilience of the MPA network by providing refugia for marine life from encroaching threats. Furthermore, designating an MPA in the proposed area will improve recreational, educational, and study opportunities at Point Sal and support equitable access to coastal resources moving forward into the future.

See Petition Narrative for full rationale.

## **SECTION II: Optional Information**

- 5. Date of Petition:** 11/30/2023
- 6. Category of Proposed Change**
- Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.



7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
- Amend Title 14 Section(s): [Westlaw regulations](#).
- Add New Title 14 Section(s): [Click here to enter text](#).
- Repeal Title 14 Section(s): [Click here to enter text](#).
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Or  Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency:
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
- a. Proposed Point Sal SMR petition narrative
  - b. Figure 1 - Proposed Point Sal SMR habitat map
  - c. Appendix A - Climate-smart MPA design guidelines met by proposed Point Sal SMR
  - d. Appendix B - Proposed Point Sal SMR letter of support
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

Current fishing in the proposed area is limited, likely due to its considerable distance from nearest port areas of Morro Bay and Santa Barbara. The proposed Point Sal MPA overlaps with 14% of California fishing block 631, and 11% of California fishing block 632. According to the Marine Fisheries Data Explorer, annual landings reported from these blocks over a ten year period from 2012 to 2022 were an average of 231,460 lbs by weight and \$678,632 by value per year. This represents just 0.11% of the landings by weight, and 1.1% of landings by value, reported for the Central Coast region over the same 10 year period. For this reason, and due to the relatively small proposed size of the MPA, we believe the establishment of an SMR in this area would have minimal economic impact to commercial fisheries.

Our request to CDFW for recreational fishing data from this area was being processed at time of submission; we will evaluate the potential impact to recreational fishers and submit it to the state following receipt of the requested data.

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

### SECTION 3: FGC Staff Only

Date received: 11/30/2023





FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change

**Petition to Designate a New State Marine Reserve at Point Sal, Central California**  
PETITION NARRATIVE

Point Sal is located in Santa Barbara County, California, roughly 50 miles (80 kilometers) to the northwest of Point Conception. The nearest city to Point Sal is Guadalupe, located about six miles to the northeast, and Vandenberg Space Force Base is located to the south. Known for its scenic beauty, rugged cliffs, and stunning ocean views, Point Sal is a relatively remote and undeveloped area along California's coastline. Its waters are home to rich biodiversity, productive oceanographic features, and intact food webs that are worth protecting. This petition calls for the designation of a new State Marine Reserve or State Marine Conservation Area allowing for cultural and subsistence use by Tribes and Indigenous communities in this area, to advance the goals of California's network of marine protected areas (MPAs) in the face of climate change and threats from increased human activities and threats in the future.

Goals

The overall goals of this new MPA are to 1) protect this rich and productive ecosystem and the biodiversity found within, 2) to protect this larval retention zone and the connectivity dynamics within the region, and 3) to enhance the climate resilience of the broader state MPA network.

Proposed boundaries

In keeping with state MPA design and feasibility guidelines provided by CDFW, the proposed area is bounded by the mean high tide line and straight lines connecting the following points in the order listed:

- a. 34.880667518 N lat. 120.726433061 W long. (SW corner)
- b. 34.929894739 N lat. 120.727488272 W long. (NW corner)
- c. 34.930008197 N lat. 120.666597401 W long. (NE corner)
- d. 34.880979714 N lat. 120.639473286 W long. (SE corner)

The proposed boundaries were drawn to align with visible landmarks and natural geographies as much as possible, with the northern boundary beginning at Mussel Point, and the southern boundary drawn at the end of Brown's Beach. The eastern boundary aligns with the mean high tide line, and the western boundary extends out to the edge of state waters as recommended by state feasibility guidelines.

The proposed area is 14.22 square miles with an alongshore span of 3.2 miles, which meets the state's minimum size guidelines and design recommendations. The proposed area is located 19 miles alongshore from Point Buchon SMR/SMCA, the nearest MPA to the north, which meets the state's minimum spacing recommendations, and 6.5 miles from Vandenberg SMR, the nearest MPA to the south.

## Ecological significance of the area

The coastal waters around Point Sal in California support a diverse and dynamic marine ecosystem. The rocky coast is home to abundant and rich tidepools. The kelp beds found in waters leeward of the point provide habitat for endangered Southern sea otters and many other kelp-associated species. The rocks and coastal habitats around the point provide critical roosting and foraging habitats for multiple species of seabirds. State waters surrounding the point are home to a variety of feeding and migrating marine mammals, including bottlenose and common dolphins, harbor porpoises, humpback and gray whales, California sea lions, harbor seals, elephant seals, and Steller sea lions.<sup>1</sup>

An analysis of species, habitats, threats, and existing protections within the California Current found that the waters around Point Sal are among the top 5% in conservation value in the California Current.<sup>2</sup> Notably, the area remained within the top 5% regardless of whether conservation value was being measured utilizing the species richness index or the rarity index, with a significant portion of these areas falling into the top 2%. This region of California is also well-known as a marine biogeographic 'transitional zone' for ocean and coastal biota. Many species reach the southern or northern limits of their ranges here, making it an important biogeographic boundary along California's coast.<sup>3</sup>

The nutrient-rich waters in this region support a productive food web. Upwelling, where nutrient-rich deep waters rise to the surface, enhances primary productivity, providing ample food resources for a variety of marine organisms, from plankton to larger predators. A krill hotspot<sup>4</sup> and Biologically Important Area (BIA) for blue whale foraging are located just outside the proposed area,<sup>5</sup> indicating that these waters are productive enough to support feeding blue whales, which ingest up to 16 tons of krill per day.<sup>6</sup> The state waters within the proposed area are home to several other BIAs for marine mammal species, including a BIA for humpback whale foraging, a BIA for migrating gray whales, and BIA for resident harbor porpoises.<sup>7</sup>

---

<sup>1</sup> Condor Environmental Planning Services, "Point Sal Reserve Revised Management Plan" (Santa Barbara County Parks Department, July 2002), <https://ryono.net/pointsal/ptsalreserve.pdf>.

<sup>2</sup> Nathan Elliott et al., "Assessment of Marine Protected Areas in the California Current" (Petaluma, CA: Point Blue, June 5, 2020), [https://www.pointblue.org/wp-content/uploads/2020/09/MPA-Assessment\\_Final.pdf](https://www.pointblue.org/wp-content/uploads/2020/09/MPA-Assessment_Final.pdf).

<sup>3</sup> Ronald S. Burton, "Intraspecific Phylogeography Across the Point Conception Biogeographic Boundary," *Evolution* 52, no. 3 (June 1998): 734–45, <https://doi.org/10.1111/j.1558-5646.1998.tb03698.x>.

<sup>4</sup> Jarrod A. Santora et al., "Mesoscale structure and oceanographic determinants of krill hotspots in the California Current: Implications for trophic transfer and conservation," *Progress in Oceanography* 91, no. 4 (December 2011): 397–409, <https://doi.org/10.1016/j.pocean.2011.04.002>

<sup>5</sup> National Oceanic and Atmospheric Administration, "Biologically Important Area Map," Web map, Cetacean & Sound Mapping, accessed November 20, 2023, <https://cetsound.noaa.gov/biologically-important-area-map>.

<sup>6</sup> Matthew S. Savoca et al., "Baleen Whale Prey Consumption Based on High-Resolution Foraging Measurements," *Nature* 599, no. 7883 (November 2021): 85–90, <https://doi.org/10.1038/s41586-021-03991-5>.

<sup>7</sup> NOAA, "Biologically Important Area Map."

### *Lion Rock haul out and roosting site*

Lion Rock, located off the southern coast of Point Sal, is an important haul out site for sea lions and other marine mammals. As many as 883 sea lions have been observed on the rock on a single day, and the site is also occasionally used by Steller sea lions and elephant seals.<sup>8</sup> Haulouts are critical to the behavioral cycles of foraging, resting, and breeding for pinnipeds. However, these species are highly sensitive to visual and auditory disturbance and will leave haulouts when they become stressed – even abandoning them permanently, if disturbances occur frequently. Undisturbed haulouts are thus necessary for the protection of these species. Given Point Sal’s remote location, Lion Rock currently experiences little to no human-caused disturbance<sup>9</sup> and may be one of the few remaining undisturbed haulouts along the busy California coastline – making it especially important for the conservation of these marine mammals.

Lion Rock is also an important roosting site and breeding site for many seabird species. Roosting is a vital behavior for seabirds, providing essential rest, social interaction, protection, and nesting opportunities, thereby enhancing their energy conservation, reproductive success, and overall well-being in the dynamic marine environment. Seabirds like cormorants do not have oil-producing glands to help their feathers repel water, making roosting especially critical for these species to dry after foraging. Thousands of cormorants have been observed roosting on Lion Rock,<sup>10</sup> and it is also a roost site of significant importance for Brown Pelicans, which until recently were listed as endangered species.<sup>11</sup> Finally, Lion Rock is a breeding site of growing importance for Brandt’s cormorants, with as many as 14 breeding pairs observed on the rock in recent years.<sup>12</sup>

### Connectivity and larval retention zone

Although wind-driven upwelling is a vital source of nutrients for California ecosystems, this large-scale offshore transport of coastal ocean water poses a significant challenge to larval stages of marine organisms that must recruit to coastal environments. Headlands, such as found at Point Sal, can help to mitigate this effect by slowing down or recirculating ocean currents, and research has shown waters on the leeward sides of coastal promontories or headlands provide refuge for fish and invertebrate larvae against offshore transport during

---

<sup>8</sup> NMFS, NOAA, and Department of Commerce. Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Weapons Testing at Vandenberg Air Force Base; California. 87 FR 762 (Jan. 6, 2022). Available at <https://www.federalregister.gov/documents/2022/01/06/2022-00032/takes-of-marine-mammals-incident-to-specified-activities-taking-marine-mammals-incident-to>.

<sup>9</sup> Dan Robinette, Sara Acosta, and Julie Howar, “Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network” (Petaluma, CA: PRBO Conservation Science, November 15, 2012).

<sup>10</sup> Condor Environmental Planning Services, “Point Sal Reserve Revised Management Plan.”

<sup>11</sup> Dan Robinette and Julie Lanser, “Brown Pelican Roost Utilization Along the Coastal Margin of Vandenberg Air Force Base, 2004” (Stinson Beach, CA: PRBO Conservation Science, May 3, 2006).

<sup>12</sup> Robinette, Acosta, and Howar, “Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network.”

upwelling events.<sup>13</sup> These “larval retention zones” are critical for enhanced recruitment, and help to ensure that adult populations are supplied with larvae in recruitment-limited upwelling regions.<sup>14</sup> Larval retention zones also serve as biological hotspots, where upwelling delivers nutrients that then fuel phytoplankton growth and support marine food webs. This effect has been shown even for small headlands like Point Sal (e.g., Bodega Headland).<sup>15</sup>

Point Sal’s leeward waters are known to serve as a larval retention zone in this stretch of the Central Coast. One study used seabird foraging rates as a proxy for juvenile fish recruitment to explore whether seabird foraging and geographic indicators can be used to identify larval retention zones, in order to help inform MPA network spatial design.<sup>16</sup> The findings show that both long and short headlands—including Point Sal—lead to higher juvenile fish abundance, and that coastal orientation was an important determinant of juvenile fish abundance. Pelagic cormorant foraging rates were also found to be higher at south-facing coasts like Point Sal’s compared to other coastal orientations. This is due to weaker offshore advection caused by coastal upwelling along south-facing coasts, and eddies forming in the lee of the south-facing coasts of embayments.<sup>17</sup>

This biological evidence for local retention zones is supported by physical oceanography data. Multiple studies of oceanographic currents in the area show that within the Santa Barbara Channel, ocean currents primarily run from east to west.<sup>18</sup> Just north of Point Conception there is strong seasonal equatorward flow heading south. Around the area of Point Sal, the interaction of these westward and southward surface currents cause convergence.<sup>19</sup> Additionally, the region experiences episodic periods of wind relaxation in the spring, leading to less vigorous upwelling with important biological consequences for larval retention and surface productivity.<sup>20</sup>

---

<sup>13</sup> Amber J. Mace and Steven G. Morgan, “Larval Accumulation in the Lee of a Small Headland: Implications for the Design of Marine Reserves,” *Marine Ecology Progress Series* 318 (August 3, 2006): 19–29, <https://doi.org/10.3354/meps318019>.

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*

<sup>16</sup> Dan Robinette, Nadav Nur, and Jaime Jahncke, “Spatial Patterns in Nearshore Juvenile Fish Abundance Throughout the California Network of Marine Protected Areas as Revealed by Seabird Foraging Rates,” *California Cooperative Oceanic Fisheries Investigations* 60 (2019).

<sup>17</sup> *Ibid.*

<sup>18</sup> Clinton D. Winant, Edward P. Dever, and Myrl C. Hendershott, “Characteristic Patterns of Shelf Circulation at the Boundary between Central and Southern California,” *Journal of Geophysical Research: Oceans* 108, no. C2 (2003), <https://doi.org/10.1029/2001JC001302>.

<sup>19</sup> Sutara H. Suanda et al., “Wind Relaxation and a Coastal Buoyant Plume North of Pt. Conception, CA: Observations, Simulations, and Scalings,” *Journal of Geophysical Research: Oceans* 121, no. 10 (2016): 7455–75, <https://doi.org/10.1002/2016JC011919>.

<sup>20</sup> Louis W. Botsford et al., “Effects of Variable Winds on Biological Productivity on Continental Shelves in Coastal Upwelling Systems,” *Deep Sea Research Part II: Topical Studies in Oceanography*, The Role of Wind-Driven Flow in Shelf Productivity, 53, no. 25 (December 1, 2006): 3116–40, <https://doi.org/10.1016/j.dsr2.2006.07.011>.



## Historical and cultural use

Point Sal holds significant cultural and historical ties to the Chumash people, who have inhabited the region for thousands of years. There is abundant evidence of Chumash occupation of Point Sal as recently as 250 years ago and as far back as 4,800 years ago. Rock rings where homes once stood, grinding stones, and other Chumash artifacts are easily visible.<sup>21</sup> Human remains found at Chumash burial sites indicate that the diet of ancient peoples living at Point Sal was high in marine protein, demonstrating the strong link between coastal peoples and marine resources.<sup>22</sup> Protecting the marine waters and coastal resources of Point Sal would help to recognize its value as a cultural heritage site that still contributes to the identity and sense of place for many of the tribal people of Central California today.

## Habitat

Since the creation of the California MPA network, a new dataset that allows for detailed delineation of the habitat categories used in the design of the MPA network for all California state waters has been completed and made available through the California State Mapping Program (CSMP). Using this dataset, we characterized the habitat types present in the area proposed for protection around Point Sal (Figure 1).<sup>23</sup>

The proposed area is characterized by a large amount of sandy bottom, with some rocky substrate south of the point and in the northeast portion of the area (8.3% shallow (0-30m) rocky bottom, 41.9% shallow sandy bottom, 1.2% deeper (30-100m) rocky bottom, and 48.6% deeper sandy bottom). Kelp beds are present on the shallow rocky bottom substrate (personal communications, Dan Robinette), supporting numerous marine species like rockfish and sea otters.<sup>24</sup>

Adding this area to the California state MPA network would increase the number of replicate sites for these four important habitat types, as recommended by the science-based guidelines for the MLPA planning process and recent peer-reviewed guidelines for the design of climate-smart MPA networks.<sup>25</sup>

---

<sup>21</sup> Bureau of Land Management, "Point Sal," Visit Point Sal, accessed November 20, 2023, <https://www.blm.gov/visit/point-sal>.

<sup>22</sup> Theresa M. Schober and J. Eldon Molto, "Marine Resource Consumption in Ancient California," *Pacific Coast Archaeological Society Quarterly* 45, no. 1 & 2 (n.d.): 31–47.

<sup>23</sup> California State University, Monterey Bay, Seafloor Mapping Lab. 2014. California Seafloor Mapping Project - Undersea Imagery Archive 2007-2014. <https://csumb.edu/undersea/seafloor-maps> Accessed 2023.

<sup>24</sup> Condor Environmental Planning Services, "Point Sal Reserve Revised Management Plan."

<sup>25</sup> Nur Arafah-Dalmau et al., "Integrating Climate Adaptation and Transboundary Management: Guidelines for Designing Climate-Smart Marine Protected Areas," *One Earth* 6, no. 11 (November 17, 2023): 1523–41, <https://doi.org/10.1016/j.oneear.2023.10.002>.

## Land-sea connection

Coastal marine ecosystems are influenced by both ocean- and land-based activities. Conservation efforts focused on addressing ocean-based threats alone are often compromised by land-based impacts that affect coastal ecosystems, such as nutrient runoff, organic and inorganic pollutants, and the direct impacts associated with high levels of human traffic and visitation.<sup>26</sup> Planning for and designating MPAs that are linked with terrestrial reserves or adjacent to areas with little to no human impact can therefore considerably improve MPA conservation outcomes.<sup>27</sup> The proposed SMR is adjacent to Point Sal State Beach, which currently protects approximately 80 acres and includes just over 1 1/2 miles of ocean frontage. Due to its remote location, and possibly these terrestrial protections, Point Sal's terrestrial habitats remain relatively undisturbed and free of negative human impacts,<sup>28</sup> making the waters around Point Sal a particularly valuable area to protect.

## Access and recreation

The coastline of the proposed SMR is currently accessible through Point Sal State Beach and Point Sal Trail. Recreational activities at Point Sal State Beach include fishing, beach combing, hiking, nature study, photography, picnicking, and sunbathing.

In 1998, heavy rains destroyed Point Sal Road in several places, which was the main access road for Point Sal State Beach. The road was closed until May 2008, when Air Force and County officials announced they had reached an interim agreement to provide access. They have since been “coordinating to place informational signs, fix fences and repair washed-out sections of the County road”, though progress has been extremely slow. The road remains closed, although according to California's State Parks Department, efforts to develop a long-term access plan to Point Sal State Beach are ongoing.<sup>29</sup>

Point Sal State Beach is currently best accessed via Point Sal Trail, which is located at the end of Brown Road. This moderately challenging trail is approximately 12 miles round trip to the beach and back,<sup>30</sup> and is open year-round. It provides unparalleled access to untouched coastal wilderness, traversing astonishingly beautiful coastal habitats such as dunes, chaparral, windswept bluffs, and rocky cliffs. The trail is described as “a very popular area for hiking”.<sup>31</sup>

---

<sup>26</sup> David M. Stoms et al., “Integrated Coastal Reserve Planning: Making the Land–Sea Connection,” *Frontiers in Ecology and the Environment* 3, no. 8 (2005): 429–36, [https://doi.org/10.1890/1540-9295\(2005\)003\[0429:ICRPMT\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2005)003[0429:ICRPMT]2.0.CO;2).

<sup>27</sup> Arafah-Dalmau et al., “Integrating Climate Adaptation and Transboundary Management.”

<sup>28</sup> Robinette, Acosta, and Howar, “Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network.”

<sup>29</sup> California State Parks, “Point Sal SB,” CA State Parks, accessed November 20, 2023, <https://www.parks.ca.gov/>.

<sup>30</sup> County of Santa Barbara California, “Point Sal,” County of Santa Barbara Parks, accessed November 20, 2023, <https://www.countyofsb.org/900/Point-Sal>.

<sup>31</sup> All Trails, “Point Sal Overlook,” Travel Website, AllTrails.com, accessed November 20, 2023, <https://www.alltrails.com/trail/us/california/point-sal-overlook>.

By making the ocean more productive and resilient to climate change, stronger marine protections like the proposed Point Sal SMR can enhance shore-based recreation. When combined with efforts to increase access and connect more people to nature, additional state MPAs can give those from marginalized communities more equitable access to the ocean's resources and benefits. California's MPAs have been shown to increase the biomass of fishery-targeted species and promote "spillover" into nearby coastal areas, benefitting nearby fishing grounds.<sup>32</sup> The California Environmental Protection Agency identifies the adjacent city of Guadalupe as "disadvantaged" under CA Senate Bill 535, and their synthesis of environmental and socioeconomic indicators further reveals that Guadalupe – alongside Santa Maria and Lompoc – are underprivileged communities that experience significant cumulative impacts from pollution.<sup>33</sup> Given these communities' close proximity to Point Sal, implementing an SMR at the proposed site could enhance access for disadvantaged populations to valuable coastal resources and fishing opportunities. In addition to the designation of a new Point Sal SMR, we urge the state to redouble its efforts to provide access to Point Sal State Beach by reopening Point Sal Road.

### Socioeconomic impacts

Current fishing in the proposed area is limited, likely due to its considerable distance from nearest port areas of Morro Bay and Santa Barbara. The proposed Point Sal MPA overlaps with 14% of California fishing block 631, and 11% of California fishing block 632. According to the Marine Fisheries Data Explorer, annual landings reported from these blocks over a ten year period from 2012 to 2022 were an average of 231,460 lbs by weight and \$678,632 by value per year.<sup>34</sup> This represents just 0.11% of the landings by weight, and 1.1% of landings by value, reported for the Central Coast region over the same 10 year period.<sup>35,36</sup> For this reason, and due to the relatively small proposed size of the MPA, we believe the establishment of an SMR in this area would have minimal economic impact to commercial fisheries.

Our request to CDFW for recreational fishing data from this area was being processed at time of submission; we will evaluate the potential impact to recreational fishers and submit it to the state following receipt of the requested data.

---

<sup>32</sup> Hunter S. Lenihan et al., "Increasing Spillover Enhances Southern California Spiny Lobster Catch along Marine Reserve Borders," *Ecosphere* 13, no. 6 (2022): e4110, <https://doi.org/10.1002/ecs2.4110>.

<sup>33</sup> OEHHA, "CalEnviroScreen 4.0," Text, CA.Gov, September 20, 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>; OEHHA, "Final Designation of Disadvantaged Communities Pursuant to Senate Bill 535" (CalEPA, May 2022).

<sup>34</sup> Assuming equal distribution of effort and value across all years. Because smaller timescales resulted in confidential data outputs from the Marine Fisheries Data Explorer, we aggregated 10 years of landings data from both blocks to calculate average annual landings data. However, the state should look into the confidential data to find more detailed estimates of fisheries landings from this area.

<sup>35</sup> We defined the Central Coast region as all fishing blocks from Point Ano Nuevo to Point Conception: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=144496&inline>

<sup>36</sup> California Department of Fish and Wildlife, "Marine Fisheries Data Explorer," database, MFDE, accessed November 21, 2023, <https://wildlife.ca.gov/Conservation/Marine/Data-Management-Research/MFDE>.

## Historical context

During the MLPA planning process, a large SMR around Point Sal was proposed in External Proposed MPA Package AC. The proposed SMR was 21.92 mi<sup>2</sup>, with an alongshore span of 6.1 miles and depth range of 0-192 feet. Based upon a review of the historical documents provided by the Fish & Game Commission in October 2023, it is not clear why the state chose not to designate this proposed SMR at that time.

## Future stressors may compromise California's coastal waters and nearby MPAs

There is increasing pressure to develop resources in and otherwise utilize California's coastal waters. For example, as efforts intensify to mitigate and adapt to climate change, the state is investing in offshore wind and desalination plants. Interest in ocean-based carbon dioxide removal (CDR) is growing, and aquaculture activities are proliferating. Scientists warn that a rising wave of ocean industrialization, such as underway in California's waters, will pose additional strain on marine biodiversity.<sup>37</sup>

MPAs along the central coast of California will likely experience these types of stressors in the coming decade. Vandenberg SMR, located 17 km to the south of this proposed area, and the Point Buchon SMR/SMCA complex, located 50 km to the north, are both sited near potential future offshore wind development projects. The proposed California Demonstration Project (CADEMO) seeks to place four floating offshore wind turbines in state waters just outside the boundaries of Vandenberg SMR, and would deliver power via a subsea cable traveling under the seafloor to an onshore cable landing site at Vandenberg Space Force Base. The Morro Bay Wind Energy Area is located in federal waters just outside Point Buchon SMCA, and two leases have recently been issued to commercial wind developers to begin planning for offshore wind development. Offshore wind construction and operations are expected to impact the marine environment through increased ocean noise, collisions with turbines, entanglements, the introduction of electromagnetic fields, alterations to existing habitats and hydrodynamics, and the possible release of contaminants.<sup>38</sup> While the state of California is working closely with developers and the federal government to minimize the environmental impacts of these projects as much as possible, it stands to reason that the region, including Vandenberg SMR and the Point Buchon SMR/SMCA complex, will experience some level of adverse impact related to the development of heavily industrialized renewable energy projects.

In addition, Point Buchon SMR/SMCA is located just north of the Diablo Canyon Power Plant, which uses seawater for its once-through cooling process. The plant's intake pipes draw in more than 2.5 billion gallons of water per day. This large and continuous seawater withdrawal is estimated to kill roughly 1.5 billion fish in early life stages each year, as creatures are sucked

---

<sup>37</sup> Douglas J. McCauley et al., "Marine Defaunation: Animal Loss in the Global Ocean," *Science* 347, no. 6219 (January 16, 2015): 1255641, <https://doi.org/10.1126/science.1255641>.

<sup>38</sup> NOAA Fisheries, "Offshore Wind Energy: Protecting Marine Life," Protecting Marine Life, National, accessed November 20, 2023, <https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life>.

into the cooling systems or become impinged against the screens on the open-water pipes.<sup>39</sup> The cooling water is also discharged back into the ocean water at a warmer temperature, which can cause additional harm to kelp, fish, and other marine life in the area.<sup>40</sup> While Diablo Canyon's intake is not directly within the Point Buchon SMR/SMCA cluster, the area of source water being drawn into the plant likely overlaps with the MPA boundaries and has the potential to withdraw marine life out of the protected area.

As the increase of local stressors are likely to strain resources in the Vandenberg and Point Buchon MPAs, a new MPA at Point Sal could help to protect similar habitat not subject to these local stressors, adding a helpful replicate MPA to serve as an insurance policy for the region's MPA network.

### Climate resilient MPA networks

Changing ocean conditions, such as warming temperatures, acidification, and reduced oxygen, combined with increasing crowding, and pressure on our ecosystems, will compound local stressors mentioned above – putting California's spectacular marine biodiversity at elevated risk. MPAs are increasingly recognized as an important ocean-climate solution. Fully protected MPAs can allow for disturbed and degraded areas to recover, and also promote and retain complex, intact food webs and ecosystems that are better at resisting future stressors.<sup>41</sup> A recent meta-analysis of more than 22,000 peer-reviewed studies spanning more than 200 MPAs around the world demonstrated that marine reserves can significantly enhance carbon sequestration, coastal protection, biodiversity, and the reproductive capacity of marine organisms as well as fishers' catch and income.<sup>42</sup>

Further, when designed with climate resilience in mind, MPA networks can provide greater resilience than single MPAs on their own.<sup>43</sup> A new analysis focused on the California Bight has identified 21 actionable guidelines for the design of climate-smart MPA networks across large geographies and international boundaries.<sup>44</sup> The designation of a new MPA at Point Sal would meet or help to advance at least 11 of these climate-smart MPA design guidelines ([Appendix A](#)). Specifically, a new MPA at Point Sal would help to increase habitat representation and

---

<sup>39</sup> Mackenzie Shuman, "How California's Last Remaining Nuclear Power Plant Transformed Marine Life off the Coast," *San Luis Obispo Tribune*, March 25, 2022, <https://www.sanluisobispo.com/news/local/environment/article258804173.html>.

<sup>40</sup> Ibid.

<sup>41</sup> Lewis A.K. Barnett, Marissa L. Baskett, and Louis W. Botsford, "Quantifying the Potential for Marine Reserves or Harvest Reductions to Buffer Temporal Mismatches Caused by Climate Change," *Canadian Journal of Fisheries and Aquatic Sciences* 72, no. 3 (March 2015): 376–89, <https://doi.org/10.1139/cjfas-2014-0243>; Lewis A. K. Barnett and Marissa L. Baskett, "Marine Reserves Can Enhance Ecological Resilience," ed. Peter Mumby, *Ecology Letters* 18, no. 12 (December 2015): 1301–10, <https://doi.org/10.1111/ele.12524>; Callum M. Roberts et al., "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change," *Proceedings of the National Academy of Sciences* 114, no. 24 (June 13, 2017): 6167–75, <https://doi.org/10.1073/pnas.1701262114>.

<sup>42</sup> Juliette Jacquemont et al., "Ocean Conservation Boosts Climate Change Mitigation and Adaptation," *One Earth* 5, no. 10 (October 2022): 1126–38, <https://doi.org/10.1016/j.oneear.2022.09.002>.

<sup>43</sup> Roberts et al., "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change."

<sup>44</sup> Arafeh-Dalmau et al., "Integrating Climate Adaptation and Transboundary Management."



replication; protect critical and unique areas relevant to the life histories of important California species; incorporate and enhance connectivity across the broader MPA network; provide permanent protections better suited for the maintenance of ecosystem function and resilience at relevant timescales for climate resilience, and; enhance the MPA network's protections for healthy and relatively undisturbed habitats ([Appendix A](#)). In the face of increasing impacts related to climate change, it is critical that the state adaptively manage its MPA network with climate resilience in mind.

#### Relevance to MLPA Goals and DMR Recommendations

This proposed Point Sal SMR contributes directly to MLPA Goals 1, 2, 3, and 6 ([California Marine Life Protection Act](#)). Protecting the rich biodiversity, relatively undisturbed habitats, and important larval retention zone found in the relatively undisturbed waters around Point Sal would help to protect the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance.

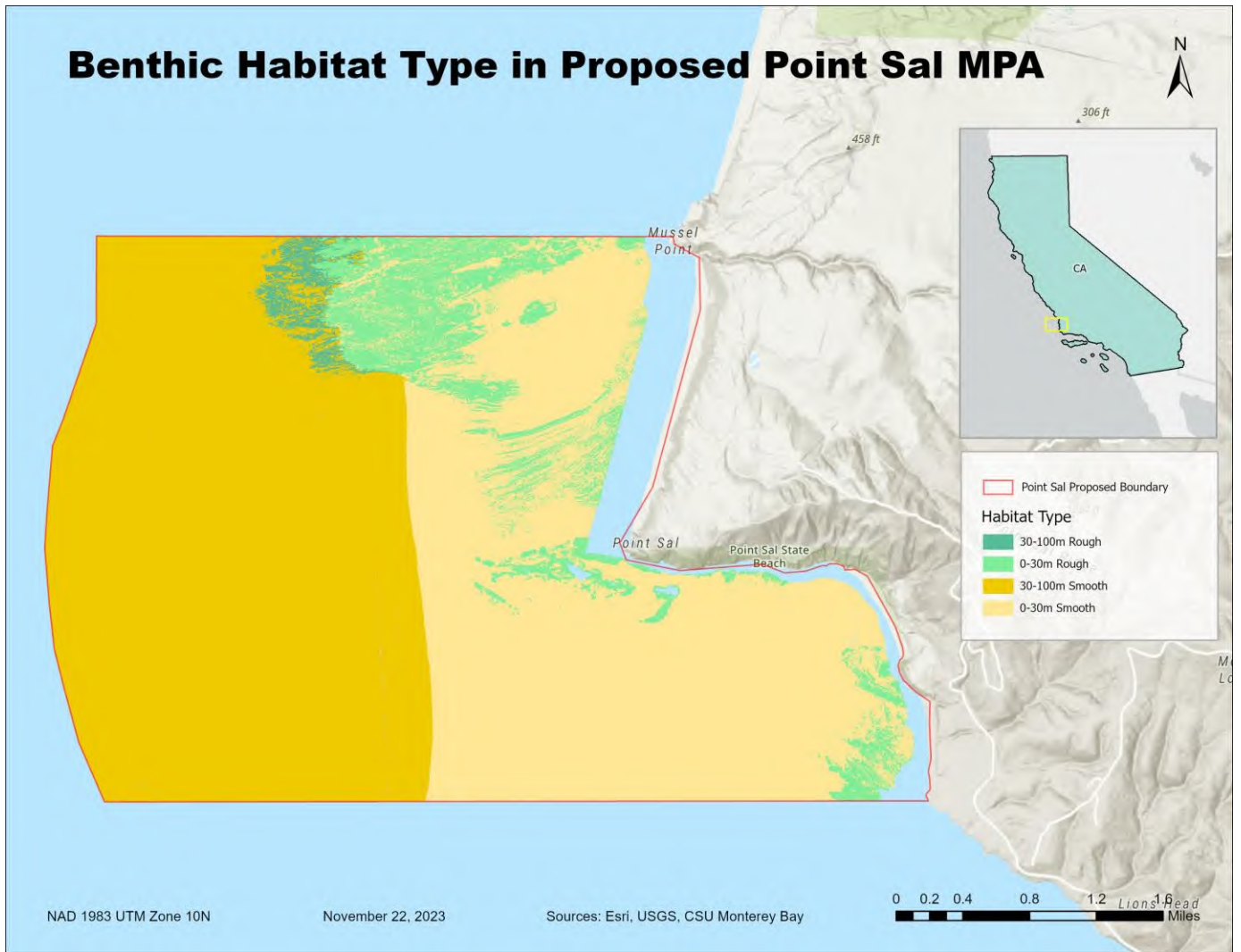
In addition, this petition helps to advance DMR Recommendation 4.b.) "Identify and utilize best science-based approaches to inform potential changes to the MPA Network in order to enhance Network performance." New and groundbreaking peer-reviewed guidelines for the design of climate-smart MPA networks have recently been developed, and the proposed MPA at Point Sal aligns strongly with these guidelines.<sup>45</sup> We recommend the state consider these guidelines for the review and implementation of additional proposals to enhance and expand California's MPA network.

We must pass on a healthier ocean for future generations to experience, benefit from, and enjoy. California has the opportunity now to protect the conservation legacy of our iconic coastal state, including its rich and diverse marine wildlife. We urge the state to designate a new MPA at Point Sal to enhance the protection and climate resilience of our coastal and ocean resources, for the benefit of current and future generations of Californians.

---

<sup>45</sup> Ibid.

# Benthic Habitat Type in Proposed Point Sal MPA



**Appendix A - Climate-smart MPA guidelines identified by Arafah-Dalmau et al. 2023 met or advanced by the proposed Point Sal MPA**

Category	Specific guideline ( <i>with California Bight-specific guideline in italics</i> )	Rationale
Habitat representation and replication	1. Represent at least 30% of each habitat type in each biogeographic subregion. Ensure representation of the variation in biodiversity across geographic gradients. Habitat representation targets should consider habitat rarity and vulnerability, and fishing pressure and management outside reserves. <i>Habitat types include intertidal, subtidal, biogenic (e.g., kelp forests, seagrass beds), and deep-sea habitats.</i>	Pt. Sal protections would increase representation and replication of nearly all habitat types along the central coast of California, including intertidal, subtidal, kelp forests, deep and shallow rocky bottom, and deep and shallow sandy plains. If designated as described in this petition, the new Point Sal MPA would contribute 36 square miles, or 0.68%, toward California's goal to protect 30% of coastal waters by 2030, and increase MPA coverage in the Central Coast ahead of potential large-scale disturbances to the region related to offshore wind development.
	3. Represent at least three examples of each habitat type in widely separated reserves to reduce the chance that they will all be impacted by a large-scale disturbance.	
	4. Represent habitats used by focal species for ecosystem resilience.	Protections would increase representation and coverage of kelp forest habitat used by sea otters, an important and iconic California predator that contributes to ecosystem resilience.
Protecting critical and unique areas	5. Protect critical areas in the life history of focal species in marine reserves. Critical areas include spawning, nesting, or breeding areas, nursery habitats (e.g., estuaries and seagrass beds), and resting and feeding areas.	Pt. Sal proposal would protect larval retention zone for commercially important fish and invert species, a biologically important area (BIA) for feeding humpback whales, a BIA for migrating gray whales, roosting habitat for the Brown pelican (endangered until only recently), Brandt's cormorants, and other seabirds, an important haul-out for resting and breeding pinnipeds, and protections for kelp beds which are critically important for endangered Southern sea otters and many other important California marine species.
	7. Protect areas with special and unique biodiversity in marine reserves. Protect special and unique features including areas with remaining populations of rare species, protected species, unique habitats, healthy habitats, high species richness, and endemic species.	Pt. Sal is a remote and relatively untouched area. Proposal would protect special and unique features such as healthy habitats far from human impacts.
Incorporating connectivity	10. Consider movement patterns of adult and juvenile organisms when determining the size of marine reserves.	This proposal meets the state of California's minimum size guidelines, which took connectivity dynamics and the

**Appendix A - Climate-smart MPA guidelines identified by Arafah-Dalmau et al. 2023 met or advanced by the proposed Point Sal MPA**

	<i>Ensure marine reserves extend from intertidal to deeper habitats.</i>	movement patterns of species with small home ranges into account for design. Proposed MPA extends from shallow intertidal to deeper habitats, up to a depth of 100m.
	11. Consider transboundary larval dispersal to replenish populations within marine reserves and in adjacent areas, enhance metapopulation persistence, and support fisheries in adjacent areas. Consider larval dispersal distances for transboundary management. <i>Marine reserves should be separated by no more than 25–100 km to ensure connectivity of species with short dispersal distances (e.g., abalone)</i>	The Pt. Sal proposal meets the minimum spacing guidelines provided here. California’s system of MPAs was designed as an interconnected network, with MPAs alternately serving as sources and sinks for marine life. These meta-dynamics are expected to buffer natural and human-caused fluctuations in populations of marine species. The addition of a new strongly protected MPA in this region of the coast could strengthen the network dynamics in this region, allowing ecosystems to resist and adapt to changing ocean conditions and recover from disaster events.
	13. Consider changes in larval duration and habitat availability due to changes in climate and ocean chemistry. <i>Simulations suggest that a decrease in planktonic larval duration and giant kelp availability due to climate change will weaken the number and geographic scale of connections, decreasing transboundary connectivity and increasing isolation.</i>	Pt. Sal contains a larval retention zone in the leeward waters south of the point. Larval retention zones are especially important for larval recruitment in wind-driven upwelling areas, and may provide critical recruitment hotspots should larval duration and connectivity decrease overall.
	14. Facilitate range shifts of species driven by climate change. Distribute reserves across geographic, latitudinal, and depth gradients to facilitate the latitudinal and depth shifts of species in response to climate change	Pt. Sal lies within an important transitional zone for marine and coastal biota. Many species reach the southern or northern limits of their ranges here, making it an important biogeographic boundary along California’s coast. As temperatures warm and southern species shift their range northward, protections will help to facilitate range shifts.
Allowing time for recovery	15. Establish marine reserves for the long term (>25 years), preferably permanently, to allow populations of focal species to recover and replenish adjacent areas and maintain ecosystem functioning and resilience.	California’s MPAs are permanent.
Minimizing and avoiding local threats	20. Establish marine reserves in areas with lower levels of cumulative threats for each biogeographic region.	Pt. Sal is a remote and relatively untouched area. Proposal would protect special and unique features such as healthy habitats far from human impacts.



November 30, 2023

Eric Sklar, President  
California Fish and Game Commission  
715 P Street, 16th Floor  
Sacramento, CA 95814

Re: **Decadal Management Review Marine Protected Areas Petition Process:  
Point Sal, CA**

Dear President Sklar and Honorable Commissioners:

Thank you for the opportunity to submit recommendations for the adaptive management of California's Marine Protected Area (MPA) network as part of the Decadal Management Review process. The undersigned organizations strongly support the designation of a new State Marine Reserve or a State Marine Conservation Area with exceptions for cultural and subsistence take by local Indigenous communities and/or Tribes around Point Sal.

Located in Santa Barbara County, Point Sal is an ecologically rich and relatively remote promontory along the coastline that supports a diverse marine ecosystem and provides critical habitat for seabirds and marine mammals alike. The nutrient-rich waters found at this site allow for a diversity of ocean life to thrive here, with kelp beds, rich tidepools, and productive waters that support humpback whales, gray whales, a variety of sea lions and seals, sea otters, and a biologically important feeding area for endangered blue whales nearby. Offshore, Lion Rock is a significant roosting site for seabirds like the recently endangered Brown pelican, and also acts as an undisturbed haul out for sea lions, seals, and other pinnipeds, underlining the area's conservation value for these animals as the California coastline becomes increasingly developed. In addition, the leeward waters of Point Sal act as a larval retention zone, which are highly



beneficial areas for enhancing the recruitment of fish and invertebrate offspring in upwelling zones while promoting the biodiversity of the surrounding ecosystem. Historically, Point Sal also holds cultural significance for the Chumash people, with evidence of their occupation being as recent as 250 years ago and as far back as 4,800 years ago. Chumash artifacts are visible throughout Point Sal, and analyses of burial sites from the area demonstrate the rich cultural ties to the traditional stewards of this land.

Protecting the waters of Point Sal aligns strongly with the goals set by the California Marine Life Protection Act (MLPA), especially with regards to the protection of natural biodiversity found in relatively undisturbed marine ecosystems. Given the remote nature of Point Sal, its relative lack of human disturbance, and increasing threats to the California MPAs found nearby, there is an urgent need to protect the ecological merits and maximize the biological benefits that Point Sal provides to the marine species that inhabit the area and to the broader Central California region. As development of the state's coastline and seascape progresses, protecting these untouched areas will add to the resilience of the MPA network by providing refugia for marine life from encroaching threats. Furthermore, designating an MPA in the proposed area will improve recreational, educational, and study opportunities at Point Sal and support equitable access to coastal resources moving forward into the future.

We commend the continued work of the Commission to advance the conservation of our state's valuable and unique marine resources. Designating a protected area at Point Sal will further bolster the strength of California's MPA network, advance the goals of the MLPA, and safeguard our coastal ecosystems against future stressors such as climate change. Thank you for your consideration of this petition and the opportunity to contribute our input on this historic process.

Sincerely,

Dennis Arguelles  
Southern California Director  
National Parks Conservation Association

Steve Bardwell  
President  
Morongo Basin Conservation Association

Andrew Christie  
Chapter Director  
Sierra Club Santa Lucia Chapter

Joe Connett  
Member  
Sierra Club Santa Barbara-Ventura Chapter

Laura Deehan  
State Director  
Environment California Research and Policy Center

Rikki Eriksen  
Director of Marine Spatial Ecology  
California Marine Sanctuary Foundation

Pamela Flick  
California Program Director  
Defenders of Wildlife

Pamela Heatherington  
Board of Directors  
Environmental Center of San Diego

Azsha Hudson  
Marine Conservation Analyst  
Environmental Defense Center

Susan Jordan  
Executive Director  
California Coastal Protection Network

Sharon Musa  
Urban to Wild Los Angeles Program Manager  
The Wilderness Society

Manuel Oliva  
Chief Executive Officer  
Point Blue Conservation

Robin Pelc  
Principal Scientist  
SeaChange Scientific Consulting, LLC

Teresa Romero  
President  
Native Coast Action Network

Dan Silver  
Executive Director  
Endangered Habitats League

Tomas Valadez  
California Policy Associate  
Azul

Robert Vergara  
Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Erin Woolley  
Senior Policy Strategist  
Sierra Club California



Tracking Number: (2023-29MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Lisa Suatoni

Address: Natural Resources Defense Council [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

Co-sponsors: Sam Cohen - Santa Ynez Band of Chumash Indians, Azsha Hudson - Environmental Defense Center

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.**

### **3. Overview (Required) – The attached document describes a proposal for an additional California-Chumash co-management SMCA in the south coast region to be named Mishopshno, following the ancestral Chumash village located in the area. The proposed MPA would prohibit the injury, damage, take, or possession of all living, geological, or cultural marine resources; and allow for enhanced access to the shoreline and marine resources for traditional, ceremonial, cultural, and subsistence purposes for the federally recognized tribe of the Santa Ynez Band of Chumash Indians, who will work to extend access to other non-federally recognized Chumash people.**

The proposed area aligns with state MPA design and feasibility guidelines provided by CDFW, and is bounded by the mean high tide line, the 3 nm state waters boundary, and straight lines connecting the following points in the order listed:

- 34.365392908 N lat. 119.6000000 W long. (SW corner)
- 34.419698650 N lat. 119.6000000 W long. (NW corner)
- 34.393513965 N lat. 119.525777354 W long. (NE corner)
- 34.336952256 N lat. 119.525777354 W long. (SE corner)



4. **Rationale (Required)** - Describe the problem and the reason for the proposed change: The intent of the SMCA is to 1) help meet the science guidelines for spacing between protected habitats, promoting connectivity in the network and representation of habitat types, 2) protect habitat attractive to marine wildlife, such as juvenile white sharks, and 3) allow enhanced access to the shoreline and marine resources for traditional, ceremonial, cultural, and subsistence purposes for the federally recognized tribe of the Santa Ynez Band of Chumash Indians, who will work to extend access to other non-federally recognized Chumash people. See attached documentation for further details.

## SECTION II: Optional Information

5. **Date of Petition:** 11/30/2023
6. **Category of Proposed Change**
- Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
- Amend Title 14 Section(s): [Westlaw Regulations](#)
  - Add New Title 14 Section(s): [Click here to enter text.](#)
  - Repeal Title 14 Section(s): [Click here to enter text.](#)
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**
- Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: At the discretion of the Commission.
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: See attached.
- a. Proposed Mishopshno SMCA petition narrative
  - b. Appendix A – Expanded synthesis of juvenile white shark aggregation at proposed Mishopshno SMCA
  - c. Appendix B – Proposed Mishopshno SMCA letter of support
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: Unknown. However, this region is a popular fishing spot for spiny lobster and preventing take in the region may not be welcomed by recreational fishers in the area. Yet, research has shown an increase in lobster populations within MPAs and a resulting increase in lobster catch in neighboring zones. Recent work found that a 35% reduction in fishing area was compensated for by a 225% increase in total catch after 6-years, demonstrating local scale trade-offs provided benefits to fisheries.





12. **Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#)

**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number

## **Overview**

The intent of this MPA is to 1) help meet the science guidelines for spacing between protected habitats, promoting connectivity in the network and representation of habitat types, 2) protect habitat attractive to marine wildlife, such as juvenile white sharks, and 3) allow enhanced access to the shoreline and marine resources for traditional, ceremonial, cultural, and subsistence purposes for the federally recognized tribe of the Santa Ynez Band of Chumash Indians, who will work to extend access to other non-federally recognized Chumash people.

We propose a new SMCA named for a prominent Chumash coastal village that was historically proximate to the marine area to be protected – Mishopshno. This village was an important coastal site in the ancestral lands of the diverse Chumash people. It was the site of boatbuilding and a close connection to the marine environment. It was described by members of the Portolá expedition who encountered the town on August 17, 1769 as “...at the very edge of the sea a large village or very regular town here at this point, appearing at a distance as though it were a shipyard, because at the moment they were building a canoe that still had its topmost plank lacking from it (dubbed by soldiers La Carpinteria, the Carpenter Shop).”<sup>1</sup> The canoes described here were Tomol, Chumash watercraft built using sophisticated techniques for production of wooden planks and waterproofing with specialized local clay.<sup>2</sup>

Designation of a new Tribal MPA supports recent California and federal initiatives. To ensure 30% of state waters are fully protected by 2030 and to foster Tribal co-management, this petition proposes this additional Tribal co-management SMCA for the South Coast Region.<sup>3</sup> *This petition is co-sponsored by the federally recognized Santa Ynez Band of Chumash Indians, the Natural Resources Defense Council, and Environmental Defense Center.*

## **Rationale**

### **1. Habitat, Spacing, & Connectivity**

The MPA Network was designed to function as an ecological network to ensure the protection of California’s diverse coastal ecosystems.<sup>4</sup> During the design and planning phase, a science advisory team identified the key metrics needed to achieve this connectivity, including MPA size, spacing, and key habitat representation and replication.<sup>5 6</sup> Currently, mainland coastal MPAs in the Santa Barbara region, Campus Point and Point Dume, are approximately 64 nautical miles (nm) apart, 10 nm further than the recommended maximum MPA spacing distance of 54 nm to ensure ecological connectivity (Figure 1). This proposal aims to address that gap by adding a protected area around what is now called Carpinteria, CA and is the ancestral home of the Santa Ynez band of the Chumash Indians.

---

<sup>1</sup> “Chapter 4: Historic Chumash Settlements on the Mainland Coast,” in *The Chumash World at European Contact: Power, Trade, and Feasting Among Complex Hunter-Gatherers*, by Lynn H. Gamble, 2011.

<sup>2</sup> John Peabody Harrington et al., *TOMOL: Chumash Watercraft as Described in the Ethnographic Notes of John P. Harrington*, Ballena Press Anthropological Papers ; No. 9 (Socorro, N.M.: Ballena Press, 1978).

<sup>3</sup> McGinnis, M.V. and R. Cordero. Tribal Marine Protected Areas: Protecting Maritime Ways and Tribal Practices. A White Paper produced by the Wishtoyo Foundation. 2004.

<sup>4</sup> California Department of Fish and Wildlife, “California’s Marine Protected Area Network Decadal Management Review,” 2022, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=209209&inline>.

<sup>5</sup> California Department of Fish & Wildlife, Master Plan for MPAs. 2008, 2016

<sup>6</sup> Emily Saarman et al., “The Role of Science in Supporting Marine Protected Area Network Planning and Design in California,” *Ocean & Coastal Management* 74 (March 1, 2013): 45–56, <https://doi.org/10.1016/j.ocecoaman.2012.08.021>.



Figure 1: Map of southern California MPAs with the proposed SMCA near Carpinteria (to be called Mishopshno) shown in red. Distance between two existing MPAs at Campus Point and Point Dume (6.2nm) is indicated. This distance is greater than the maximum suggested spacing to ensure ecological connectivity. Mishopshno was one of the many Chumash villages in the region at the time of European colonization.

Carpinteria, initially proposed to be the site for an MPA in the original planning stages for the network, lies on the mainland coast north of the Channel Islands.<sup>7</sup> Within a relatively small area, the

proposed region includes rocky reef, rocky intertidal, sandy habitats, sandy beaches, kelp forests, and surfgrass beds.<sup>6</sup> Associated with these habitat features are higher trophic level species including halibut, lobster, grunion, nearshore sharks and rays, and multiple harbor seal haulouts.<sup>6</sup> Research shows that MPAs with diversity of habitat types and depths facilitate increased connectivity among habitats.<sup>8</sup>

The proposed SMCA would include Carpinteria Salt Marsh Reserve, which protects a critically important Southern California estuary. The marsh lies adjacent to a sandy beach, subtidal rocky reef, and kelp beds enabling exchange of nutrients and a regional nursery for halibut and other marine and estuarine fish, which supports a productive nearshore marine ecosystem.<sup>9</sup> Carpinteria Reef, which would also be within the SMCA's boundaries, is a large area of rocky reef and kelp bed. The reef supports one of the more abundant marine life communities and persistent kelp beds in Santa Barbara County.<sup>10</sup>

Ecological connectivity modeling has advanced since the initial Network design process and has confirmed that the system is generally functioning as a network with high MPA to MPA connectivity that varies by habitat type.<sup>11</sup> Model outputs show that rocky intertidal, kelp forest,

<sup>7</sup> California MLPA South Coast Study Region, Description of Marine Protected Areas (MPAs) in Revised External MPA Proposal C (Round 2) Created May 14, 2009.

<sup>8</sup> Mark H. Carr et al., "The Central Importance of Ecological Spatial Connectivity to Effective Coastal Marine Protected Areas and to Meeting the Challenges of Climate Change in the Marine Environment," *Aquatic Conservation: Marine and Freshwater Ecosystems* 27, no. S1 (2017): 6–29, <https://doi.org/10.1002/aqc.2800>; Charlotte R. Hopkins et al., "Evaluating Whether MPA Management Measures Meet Ecological Principles for Effective Biodiversity Protection," *Acta Oecologica* 108 (October 1, 2020): 103625, <https://doi.org/10.1016/j.actao.2020.103625>.

<sup>9</sup> "Carpinteria Salt Marsh Reserve," July 9, 2015, <https://ucnrs.org/reserves/carpinteria-salt-marsh-reserve/>.

<sup>10</sup> Levenbach, Stuart. "Community-wide ramifications of an associational refuge on shallow rocky reefs." *Ecology* 89.10 (2008): 2819-2828.

<sup>11</sup> California Department of Fish and Wildlife, "California's Marine Protected Area Network Decadal Management Review."

and mid-depth rocky reef habitats inside MPAs provide more larvae to each other, as well as to areas outside MPAs, compared to non-MPA sites.<sup>12</sup> The habitat within the proposed Mishopshno site includes these representative habitat types and would thus contribute an additional node to the network thereby further increasing MPA-MPA connectivity. The south coast MPAs protect a lower proportion of rocky intertidal habitat than other regions.<sup>13</sup> Incorporation of the Mishopshno SMCA would expand the representation of rocky intertidal and rocky reef habitat in the region.

MPAs are particularly important as sources for kelp forests, which are a foundational species and present in the Mishopshno proposed boundaries.<sup>14</sup> The demographic connectivity of kelp patches is highly influenced by oceanography. In the region of Carpinteria and the Santa Barbara Channel, high resolution data on circulation and current patterns show that 1) there is rapid transport of water and associated larvae and propagules nearshore (within 1km of shore) which moves from east to west<sup>15</sup> and 2) the dominant current structure does not create strong connectivity from the Channel Island MPAs to the mainland.<sup>16</sup> Thus, proper spacing of mainland MPAs is needed to support connectivity for kelp and associated species.

Southern coast MPAs are likely to experience many warming events in the coming years. Inclusion of a diversity of upwelling regimes and habitat types in the network, such as those in the mainland and Channel Island MPAs, is thought to offer additional insurance against changing conditions.<sup>13,16</sup> As a general matter, ensuring proper spacing, placement, and consequently connectivity of southern mainland MPAs is increasingly important in light of climate change.

## **2. Habitat attractive to White Sharks (see Appendix A for further detail)**

The habitat distribution for the northeast Pacific population of white sharks is broad, spanning from Baja California to a point northwest in the Bering Sea off the Aleutian Islands.<sup>17</sup> However, research suggests that juveniles of this population are utilizing a more narrow band of coastal waters for nursery habitat, stretching from the Southern California Bight to Baja.<sup>18</sup> Spatial data of white shark movements show that in areas off Carpinteria, CA, juvenile white sharks (JWS) form aggregations for periods of weeks to months.<sup>19</sup> These spatial patterns suggest that this habitat attracts JWS, frequently serving as an important white shark nursery, and thus warrants additional protections given the iconic status and vulnerability of the species.

---

<sup>12</sup> California Department of Fish and Wildlife, "Decadal Management Review Appendix B: Science Guidance," January 2023, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=207752&inline>.

<sup>13</sup> Jennifer E. Caselle et al., "A Synthesis of Ecological and Social Outcomes from the California MPA Network (NCEAS Working Group Final Report)," text/xml (California Ocean Protection Council Data Repository, 2022), <https://doi.org/10.25494/P6430V.c>

<sup>14</sup> California Department of Fish and Wildlife, "DMR Appendix B," 8.

<sup>15</sup> Daniel P. Dauhajre, James C. McWilliams, and Lionel Renault, "Nearshore Lagrangian Connectivity: Submesoscale Influence and Resolution Sensitivity," *Journal of Geophysical Research: Oceans* 124, no. 7 (July 2019): 5180–5204, <https://doi.org/10.1029/2019JC014943>; S. Mitarai et al., "Quantifying Connectivity in the Coastal Ocean with Application to the Southern California Bight," *Journal of Geophysical Research: Oceans* 114, no. C10 (2009), <https://doi.org/10.1029/2008JC005166>.

<sup>16</sup> Shelby L. Ziegler et al., "Marine Protected Areas, Marine Heatwaves, and the Resilience of Nearshore Fish Communities," *Scientific Reports* 13, no. 1 (January 25, 2023): 1405, <https://doi.org/10.1038/s41598-023-28507-1>.

<sup>17</sup> Office of National Marine Sanctuary, "White Shark Conservation, White Shark Stewardship Project," Government Website, Greater Farallones National Marine Sanctuary, accessed November 17, 2023, [https://farallones.noaa.gov/eco/sharks/sharks\\_conservation.html](https://farallones.noaa.gov/eco/sharks/sharks_conservation.html).

<sup>18</sup> <https://www.frontiersin.org/articles/10.3389/fmars.2021.645142/full>

<sup>19</sup> James M. Anderson et al., "Interannual nearshore habitat use of young of the year white sharks off Southern California." *Frontiers in Marine Science* 8 (2021): 238.; Emily Spurgeon et al., "Quantifying Thermal Cues That Initiate Mass Emigrations in Juvenile White Sharks," *Scientific Reports* 12, no. 1 (November 18, 2022): 19874, <https://doi.org/10.1038/s41598-022-24377-1>.

White sharks are listed under Appendix II of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES).<sup>20</sup> The species is slow to reach reproductive maturity and produces only a small number of young each year, making it vulnerable to human stressors.<sup>21</sup> Research conducted in the Southern California Bight has found that fisheries bycatch is likely the main source of mortality for JWS.<sup>22</sup> Another factor threatening white sharks is a warming climate and ocean that has led to many species' historic distribution changing. Changes in aggregation spots could place JWS young of the year in areas with greater threats from predation and human interactions.

Juvenile white sharks inhabit a narrow habitat range, choosing shallow habitats (< 1000 m deep) close to land (< 30 km of the shoreline) in waters ranging from 14 to 24°C.<sup>23</sup> They can form aggregations at these ideal locations and display a high degree of residency.<sup>24</sup> Historically, Southern California was a suitable habitat eight months of the year, while coastal habitats in Baja California were suitable year-round.<sup>25</sup> Recent research shows that the average observed white shark density in Carpinteria increased significantly across three years beginning in 2019.<sup>26</sup> Utilizing detection data, a study found a JWS hot spot at Padaro Beach in Carpinteria in the months from May to December in 2020.<sup>27</sup> In this study, the tagged individuals were observed across a stretch of coastline from Loon Point south to Carpinteria State Beach.<sup>28</sup> Padaro Beach was classified as an ideal JWS aggregation spot due to its sandy beach with a rocky reef adjacent to an estuary inlet and low wave energy compared to many of the other nursery habitats available.<sup>29</sup> Although it was previously believed that JWS do not show site fidelity, there is growing evidence that the Southern California Bight is a region of primary nursery habitat, with specific “hotspots” like Carpinteria beach attracting fairly stable aggregations, and that the suitability of the habitat has been increasing relative to areas further south as a result of climate change.

## **Conclusion**

Recent research emphasizes that 1) mainland MPAs are unlikely to be well connected to Channel Island MPAs, 2) habitat types represented in the proposed Mishopshno MPA would contribute to connectivity and representation in the Network, and 3) decreasing spacing between mainland MPAs would increase ecological connectivity with direct impact on conservation success. Research focused on JWS has shown the waters off Carpinteria are a frequent hotspot for juvenile white sharks, offering specific habitat features that support this critical life stage. Finally, designation of the proposed MPA would add a Tribal MPA in the

---

<sup>20</sup> Office of National Marine Sanctuary, “White Shark Conservation, White Shark Stewardship Project,” Government Website, Greater Farallones National Marine Sanctuary, accessed November 17, 2023, [https://farallones.noaa.gov/eco/sharks/sharks\\_conservation.html](https://farallones.noaa.gov/eco/sharks/sharks_conservation.html).

<sup>21</sup> Ibid.

<sup>22</sup> John F. Benson et al., “Juvenile Survival, Competing Risks, and Spatial Variation in Mortality Risk of a Marine Apex Predator,” ed. Andre Punt, *Journal of Applied Ecology* 55, no. 6 (November 2018): 2888–97, <https://doi.org/10.1111/1365-2664.13158>.

<sup>23</sup> White, et al. Quantifying habitat selection and variability in habitat suitability for juvenile white sharks.

<sup>24</sup> Lyons, et al. The degree and result of gillnet fishery interactions with juvenile white sharks in southern California.

<sup>25</sup> Ibid.

<sup>26</sup> John K. Parsons, “Using Unoccupied Aerial Vehicles to Uncover Patterns of Density, Size Structure, and Distribution of White Sharks (Carcharodon Carcharias) at a Southern California Coastal Aggregation Site” (UC Santa Barbara, 2022), <https://escholarship.org/uc/item/2f74m5fz>.

<sup>27</sup> Spurgeon, E., Anderson, J.M., Liu, Y. et al. Quantifying thermal cues that initiate mass emigrations in juvenile white sharks. *Sci Rep* 12, 19874 (2022). <https://doi.org/10.1038/s41598-022-24377-1>

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.



region, strengthening the role of the Tribes in co-management, monitoring, and marine education activities.

### **Boundary Description**



Northern boundary is located at the 119.60 W longitudinal line extending from the shore at Summerland, north of Loon Point out to the 3 nm state boundary. The southern boundary of the proposed MPA lies at the northern end of Carpinteria State Beach.

Area: 67.85 km<sup>2</sup>

Shore adjacent distance: 9.75km

MPA coordinates:

1. 34.365392908 N lat. 119.6000000 W long. (SW corner)
2. 34.419698650 N lat. 119.6000000 W long. (NW corner)
3. 34.393513965 N lat. 119.525777354 W long. (NE corner)
4. 34.336952256 N lat. 119.525777354 W long. (SE corner)

### **Suggested Regulations**

This petition proposes an SMCA for the region north of Carpinteria State Beach outlined above. Take of all living, geological, or cultural marine resources is prohibited except:

1. The following federally recognized tribe is exempt from the area and take regulations found in subsection 632(b)(9) of these regulations and shall comply with all other existing regulations and statutes:

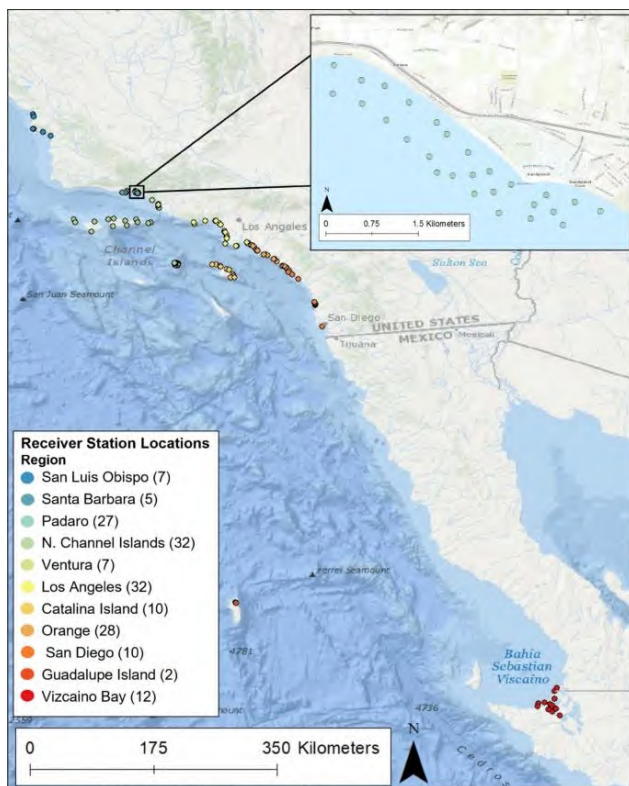
The federally recognized tribe of the Santa Ynez Band of Chumash Indians.

Within the proposed SMCA, the Chumash would be allowed to fish with the use of hand-based equipment. The proposed exemptions would be consistent with allowing tribal take exemptions as currently defined in Title 14, §632(a)(11), which identify how a member of a federally recognized tribe may be authorized to take living marine resources from an MPA with site-specific take restrictions. Members taking living marine resources under this provision are subject to current seasonal, bag, possession, gear and size limits in existing Fish and Game Code statutes and regulations of the Commission, except otherwise provided for in Title 14, §632(b).

2. Scientific research pursuant to the MLPA regulations for SMCAs. (14 C.F.R. section 632(a)(1)(C).

## Appendix A – Expanded synthesis of juvenile white shark aggregation at proposed Mishopshno SMCA

The habitat distribution for the northeast Pacific population of white sharks is broad, spanning from Baja California to a point northwest in the Bering Sea off the Aleutian Islands.<sup>1</sup> However, research suggests that juveniles of this population are utilizing a more narrow band of coastal waters for nursery habitat, stretching from the Southern California Bight to Baja.<sup>2</sup> In particular, spatial data of white shark movement show that in areas off Carpinteria, California, juvenile white sharks (JWS) form aggregations for periods of weeks to months.<sup>3</sup> These spatial patterns suggest that this region is serving as an important white shark nursery and thus warrants additional protections for this iconic and vulnerable species.



The locations of acoustic receivers along the California and Mexican coastline. Each color represents a region where (n) receivers are located. The inset map shows the higher density receiver array at Padaro Beach, CA. Map was produced using ArcMap™ version 10.8.1 with the “Ocean” basemap.

<https://www.arcgis.com/home/item.html?id=5ae9e138a17842688b0b79283a4353f6>.<sup>4</sup>

<sup>1</sup>“White Shark Conservation, White Shark Stewardship Project | Greater Farallones National Marine Sanctuary,” accessed November 30, 2023, [https://farallones.noaa.gov/eco/sharks/sharks\\_conservation.html](https://farallones.noaa.gov/eco/sharks/sharks_conservation.html).

<sup>2</sup>James M. Anderson et al., “Interannual Nearshore Habitat Use of Young of the Year White Sharks Off Southern California,” *Frontiers in Marine Science* 8 (2021), <https://www.frontiersin.org/articles/10.3389/fmars.2021.645142>.

<sup>3</sup>Emily Spurgeon et al., “Quantifying Thermal Cues That Initiate Mass Emigrations in Juvenile White Sharks,” *Scientific Reports* 12, no. 1 (November 18, 2022): 19874, <https://doi.org/10.1038/s41598-022-24377-1>.

<sup>4</sup>Spurgeon, E., Anderson, J.M., Liu, Y. et al. Quantifying thermal cues that initiate mass emigrations in juvenile white sharks. *Sci Rep* 12, 19874 (2022). <https://doi.org/10.1038/s41598-022-24377-1>

White Sharks are listed under Appendix II of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES).<sup>5</sup> The species is slow to reach reproductive maturity and produces only a small number of young each year, making it vulnerable to human stressors.<sup>6</sup> One of the largest threats to white shark survival rates is the impact from fisheries as bycatch. Many studies have indicated white sharks are caught as bycatch from fisheries in the northeastern Pacific.<sup>7</sup> Research conducted in the Southern California Bight has shown that fisheries bycatch is the main source of mortality for JWS in this region.<sup>8</sup> Juvenile survival rate is critical to the growth of white shark populations.<sup>9</sup> Another factor threatening white sharks is a warming climate and ocean that has led to many species' historic distribution changing. Juvenile white sharks have a narrow temperature range that they inhabit, and known aggregation spots are no longer viable or preferred due to changing oceans.<sup>10</sup> Changes in aggregation spots could place JWS and young of the year (YOY) in areas with greater threats from predation and human interactions.

Habitat selection differs greatly between adult and juvenile white sharks, which can be explained by differences in diet, size, and temperature preferences. Young white sharks can be classified into three classes: neonate, YOY, and juvenile. Newborn white sharks are about 4-5 feet in size and JWS range from 6-9 feet. Compared to an adult white shark, whose size ranges from 10-20 feet, YOY and JWS likely lack sufficient body mass and thermal inertia required to maintain a warmer body temperature.<sup>11</sup> This may indicate a sensitivity to temperature lending some explanation for YOY and JWS near-shore habitat preference. Adult white sharks travel further from coastal areas and make deeper dives compared to JWS.<sup>12</sup> Juvenile white sharks (JWS) choose shallow habitats (< 1000 m deep) close to land (< 30 km of the shoreline) in waters ranging from 14 to 24°C.<sup>13</sup> They can form aggregations at these ideal locations and display a high degree of residency.<sup>14</sup>

---

<sup>5</sup> "White Shark Conservation, White Shark Stewardship Project | Greater Farallones National Marine Sanctuary."

<sup>6</sup> Ibid.

<sup>7</sup> Kady Lyons et al., "The Degree and Result of Gillnet Fishery Interactions with Juvenile White Sharks in Southern California Assessed by Fishery-Independent and -Dependent Methods," *Fisheries Research* 147 (October 1, 2013): 370–80, <https://doi.org/10.1016/j.fishres.2013.07.009>; "Status Review of the Northeastern Pacific Population of White Sharks (*Carcharodon Carcharias*) under the Endangered Species Act," accessed November 30, 2023, <https://repository.library.noaa.gov/view/noaa/17705>.

<sup>8</sup> John F. Benson et al., "Juvenile Survival, Competing Risks, and Spatial Variation in Mortality Risk of a Marine Apex Predator," *Journal of Applied Ecology* 55, no. 6 (2018): 2888–97, <https://doi.org/10.1111/1365-2664.13158>.

<sup>9</sup> Enric Cortés, "Incorporating Uncertainty into Demographic Modeling: Application to Shark Populations and Their Conservation," *Conservation Biology* 16, no. 4 (2002): 1048–62, <https://doi.org/10.1046/j.1523-1739.2002.00423.x>.

<sup>10</sup> Bowlby, H. D., Dicken, M. L., Towner, A. V., Waries, S., Rogers, T., & Kock, A. (2023). Decline or shifting distribution? A first regional trend assessment for white sharks (*Carcharodon carcharias*) in South Africa. *Ecological Indicators*, 154, 110720.

<sup>11</sup> Dewar, H., Domeier, M. & Nasby-Lucas, N. Insights into young of the year white shark, *Carcharodon carcharias*, behavior in the Southern California Bight. *Environ. Biol. Fishes* <https://doi.org/10.1023/B:EBFI.0000029343.54027.6a.pdf> (2004).

<sup>12</sup> Hoyos-Padilla, E.M., Klimley, A.P., Galván-Magaña, F. et al. Contrasts in the movements and habitat use of juvenile and adult white sharks (*Carcharodon carcharias*) at Guadalupe Island, Mexico. *Anim Biotelemetry* 4, 14 (2016). <https://doi.org/10.1186/s40317-016-0106-7>

<sup>13</sup> White, et al. Quantifying habitat selection and variability in habitat suitability for juvenile white sharks.

<sup>14</sup> Lyons, et al. The degree and result of gillnet fishery interactions with juvenile white sharks in southern California.

Young of year and juvenile white sharks have been observed to reside in California waters during the summer months and migrate south to Baja during the winter months.<sup>15</sup> However, anecdotal evidence suggests that the distribution and/or migratory patterns of JWSs may be shifting northward – with more individuals staying in southern California throughout the entire year.<sup>16</sup>

Recent research shows that the average observed white shark density in the Carpinteria area increased significantly across three years beginning in 2019.<sup>17</sup> Utilizing detection data, a study found a JWS hot spot at Padaro Beach off Carpinteria in the months from May to December in 2020.<sup>18</sup> In this study, the tagged individuals were observed across approximately a 5.5 km stretch of coastline from the area of Loon Point south to Carpinteria State Beach.<sup>19</sup> Padaro Beach was classified as an ideal JWS aggregation spot due to its sandy beach with a rocky reef adjacent to an estuary inlet and is considered to have low wave energy compared to many of the other nursery habitats available.<sup>20</sup>

Historically, Southern California was a suitable habitat eight months of the year, while coastal habitats in Baja California were suitable year-round.<sup>21</sup> A warming climate and ocean has redefined the oceanographic conditions of the Southern California Bight. Point Conception is defined as a terrestrial headland that sharply separates the warmer waters of the southern California Bight from the northern remnant of the California Current Ecosystem. From 2014 to 2020, the mean position of this oceanographic demarcation moved 240 km north of Point Conception to 36.3° N.<sup>22</sup> Current climate projections for the future indicate this shift will likely become stable.<sup>23</sup> This area is known to have different species assemblages due to the significant temperature difference between the two currents, with habitat composition also reflecting this. Scientists anticipate that a shift in the boundary of current temperatures will lead to a shift in distribution and presence of adult and juvenile white sharks, potentially making the Southern California Bight even more important to successful white shark recruitment.

Juvenile aggregation spots generally provide an appropriate food supply, ideal physical conditions, and reduced predation for immature individuals, thereby increasing survival rates compared to other habitats.<sup>24</sup> There is growing evidence that the Southern California Bight is

---

<sup>15</sup> Weng, K., O'Sullivan, J., Lowe, C., Winkler, C., Blasius, M., Loke-Smith, K., et al. (2012). "Back to the wild," in *Global Perspectives on the Biology and Life History of the White Shark*, ed. M. Domeier (Boca Raton, FL: CRC Press), 419–446. doi: 10.1201/b11532-32

<sup>16</sup> Spurgeon, E., Anderson, J.M., Liu, Y. et al. Quantifying thermal cues that initiate mass emigrations in juvenile white sharks. *Sci Rep* 12, 19874 (2022). <https://doi.org/10.1038/s41598-022-24377-1>

<sup>17</sup> John K. Parsons, "Using Unoccupied Aerial Vehicles to Uncover Patterns of Density, Size Structure, and Distribution of White Sharks (*Carcharodon Carcharias*) at a Southern California Coastal Aggregation Site" (UC Santa Barbara, 2022), <https://escholarship.org/uc/item/2f74m5fz>.

<sup>18</sup> Spurgeon, E., Anderson, J.M., Liu, Y. et al. Quantifying thermal cues that initiate mass emigrations in juvenile white sharks. *Sci Rep* 12, 19874 (2022). <https://doi.org/10.1038/s41598-022-24377-1>

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Kisei R. Tanaka et al., "North Pacific Warming Shifts the Juvenile Range of a Marine Apex Predator," *Scientific Reports* 11, no. 1 (February 9, 2021): 3373, <https://doi.org/10.1038/s41598-021-82424-9>.

<sup>23</sup> Jie Cao et al., "A Novel Spatiotemporal Stock Assessment Framework to Better Address Fine-Scale Species Distributions: Development and Simulation Testing," *Fish and Fisheries* 21, no. 2 (2020): 350–67, <https://doi.org/10.1111/faf.12433>.

<sup>24</sup> Michelle R. Heupel, John K. Carlson, and Colin A. Simpfendorfer, "Shark Nursery Areas: Concepts, Definition, Characterization and Assumptions," *Marine Ecology Progress Series* 337 (May 14, 2007):

becoming an increasingly important habitat for juvenile white sharks, with specific locations like the Carpentaria beach being especially suitable, attracting fairly stable aggregations.

Recent research focused on JWS has shown they have site loyalty to the Carpinteria area, and specific habitat needs that are present in the Carpinteria waters. An additional MPA in this area would offer further insurance against the impacts of anthropogenic disturbance, reducing bycatch risk in the face of warming water temperatures and changing habitat suitability.





November 30, 2023

Eric Sklar, President  
California Fish and Game Commission  
715 P Street, 16th Floor  
Sacramento, CA 95814

**Re: Decadal Management Review Marine Protected Areas Petition Process:  
Carpinteria, CA**

Dear President Sklar and Honorable Commissioners:

Thank you for the opportunity to submit recommendations for the adaptive management of California's Marine Protected Area (MPA) network as part of the Decadal Management Review (DMR) process. The undersigned organizations submit this letter in strong support of the designation of a new State Marine Conservation Area (SMCA) in Carpinteria beginning at Loon Point to the western end of Carpinteria State Beach.

Proposed as an MPA site in the initial Marine Life Protection Act (MLPA) planning process, Carpinteria, lies on the mainland coast north of the Channel Islands. Carpinteria holds deep cultural significance for the Chumash people, whose territory once spanned from Malibu to Paso Robles. Given the rich cultural ties that the traditional stewards of this land and waters have to this day, we support naming the SMCA after a Chumash coastal village from the region – Mishopshno. In addition, we support regulations that allow access to the shoreline and marine resources for traditional, ceremonial, cultural, and subsistence purposes for the Chumash, within proposed SMCA boundaries.

The Carpinteria area is ecologically rich and diverse. Carpinteria Reef supports one of the more abundant marine life communities and persistent kelp beds in Santa Barbara County. The Carpinteria Reef and Salt Marsh are biologically linked with crucial exchange of nutrients and extensive interaction between marine and estuarine organisms. The Carpinteria Salt Marsh Reserve protects a critically important Southern California estuary and serves as an important

regional nursery for halibut and other marine and estuarine fish. Carpinteria is also an important habitat for the north Pacific population of white sharks. Recent research has shown that juvenile white sharks (JWS) have site loyalty to Carpinteria and specific habitat needs that are present in the Carpinteria waters. Padaro Beach, located within the proposed SMCA boundaries, can be classified as an ideal JWS aggregation spot due to its sandy beach with a rocky reef adjacent to an estuary inlet and low wave energy compared to many of the other nursery habitats available. White sharks are slow to reach reproductive maturity and produce only a small number of young each year, making them highly susceptible to the threats of fishing and other human activities. Designating an SMCA that restricts commercial and recreational fishing in this location will reduce threats faced by this keystone species and help reach California's goal to protect and grow the white shark population.

In addition, the Carpinteria Reef is recognized as one of the most popular recreational diving and kayaking destinations in Santa Barbara County. There are also extensive community outreach efforts in place at both the Salt Marsh and the State Beach, including an on-site interpretative center, teaching amphitheater, and nature trail. As well as extensive ongoing research and educational activities like University courses, monthly bird surveys, habitat restoration and removal of invasive exotic plants, frequent local school visits, weekly docent tours, and field trips by the Santa Barbara Museum of Natural History.

Protecting Carpinteria's waters will not only improve recreational, educational, and research opportunities for the local community but also help ensure the overall MPA network remains a viable and useful tool to ensure coastal ecosystem conservation. Currently, the closest coastal MPAs to the Santa Barbara region are Campus Point SMCA and Point Dume State Marine Reserve (SMR). These are 64 nautical miles apart—10 nautical miles further than the recommended distance (27-54 nautical miles) identified by the science advisory team to ensure network ecological connectivity. Creating this MPA will protect critical nearshore shallow and intertidal habitats and help meet the science guidelines for spacing between protected habitats and representation of habitat types. Furthermore, we believe this petition strongly aligns with the goals set by the California Marine Life Protection Act (MLPA).

Our organizations celebrate the success of the MPA network and the Commission's continued work to protect our state's biodiversity at a time when ocean conservation wins are more important than ever. Thank you for the opportunity to express our strong support for this proposal that aims to fill a current gap in network design to improve ecological connectivity throughout the region, provide additional resilience in the face of climate change, and protect a critical marine habitat.

Sincerely,

Dennis Arguelles  
Southern California Director  
National Parks Conservation Association

Steve Bardwell  
President  
Morongo Basin Conservation Association

Joe Connett  
Member  
Sierra Club Santa Barbara-Ventura Chapter

Laura Deehan  
State Director  
Environment California Research and Policy Center

Rikki Eriksen  
Director of Marine Spatial Ecology  
California Marine Sanctuary Foundation

Pamela Flick  
California Program Director  
Defenders of Wildlife

Pamela Heatherington  
Board of Directors  
Environmental Center of San Diego

Azsha Hudson  
Marine Conservation Analyst  
Environmental Defense Center

Susan Jordan  
Executive Director  
California Coastal Protection Network

Ted Morton  
Executive Director  
Santa Barbara Channelkeeper

Kristie Orosco  
Tribal Partnerships Senior Manager  
The Wilderness Society

Robin Pelc  
Principal Scientist  
SeaChange Scientific Consulting, LLC

Harry Rabin  
Founder, Reef Guardians  
Program Director, Heal the Ocean

Teresa Romero  
President  
Native Coast Action Network

Dan Silver  
Executive Director  
Endangered Habitats League

Tomas Valadez  
California Policy Associate  
Azul

Robert Vergara  
Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Erin Woolley  
Senior Policy Strategist  
Sierra Club California

Tracking Number: (2023-30MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

### **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

**1. Person or organization requesting the change (Required)**

Name of primary contact person: Robert Jamgochian

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

**2. Rule making Authority:** Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

**3. Overview** - In Big River SMCA make the proposed changes in regulations: CCR, T14, Section 29.80(c). Gear Restrictions for Recreational Take of Saltwater Crustaceans part (b)(1). Change gear restrictions to allow only Type A hoop nets that are collapsible and eliminate the hoop net Type B option - rigid frame - from general provisions.

(6) Trap Limits: (A) Reduce the number of set traps to 5 from ten.

CCR, T14 Section 29.85 - crabs. (2) Open Season (b) Dungeness crabs (Cancer magister): Part (3) Limit: Reduce from 10 crab per person to 5 per person

**Rationale** - The Mendocino MPA Collaborative Vetted Regulations Recommend that data on Big River SMCA crab fishery is needed to determine whether current crab take allowances and methods are allowing a vigorous and sustainable population.

1. Big River Estuary SMCA serves as important nursery for many recreationally and commercially harvested fishery species. Dungeness crab are the largest macro invertebrate in Big River Estuary and play an important role in the health of the ecosystem. They are keystone species providing food for seals, otters, Blue Herons, and numerous fish. Their larvae are planktonic and provide food for numerous filter feeders that live in the muddy sandy bottoms of Big River Estuary. Crabs nutrient cycle, reclaim and help purify the water helping to maintain the overall vitality of the estuary.





2. A decline in the crab population effects the entire estuary ecosystem.
3. There have been no biometric studies done to assess the population dynamics of Dungeness crabs in Big River Estuary. It is prudent to reduce the take now before numbers are unsustainable - rather than let the outdated 10 bag limit/10 traps per person continue
4. The size of the MPA Estuary is quite small - 2-6 meters deep only 30 meters wide which makes it very easy to take crab
5. The number of people crabbing has increased exponentially in the last 5 years putting unsustainable toll on the crab population.
6. Warden enforcement is minimal

**SECTION II: Optional Information**

4. **Date of Petition: 11/30/2023**
5. **Category of Proposed Change**
  - Sport Fishing
  - Commercial Fishing
  - Hunting
  - X Other, please specify:MPAs, Section 632
6. **The proposal is to:** Amend CCR, T14, Section 29.80(c) and CCR, T14 Section 29.85
7. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Not applicable.
8. **Effective date:** ASAP
9. **Supporting documentation:** See attached North Coast MPA Collaborative Vetted Regulation Recommendations (Mendocino Big River SMCA section)
10. **Economic or Fiscal Impacts:** Big River Estuary SMCA serves as important nursery for many recreationally and commercially harvested fishery species. Dungeness crab population would be sustained bringing fishing license monies to DFW. Health of estuary would be improved through the presence of the Dungeness, adding to the vitality of species such as Salmonids, rockfish and others that use the estuary as a rearing ground and rookery.
11. **Forms:** If applicable, list any forms to be created, amended or repealed:



**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Onshore and offshore hook and line fishing, collecting sand crabs as bait, kayak fishers, violations from boaters registered in both CA and OR	Remove allowance for surf smelt by dip net or Hawaiian type throw net; Change to No-Take SMCA with Tribal exemption for Tolowa Dee-ni'	Yes	Smelt is culturally important species to Tolowa and No Take designation will be clearer to public, reducing violations	Signs being vandalized, ripped out. Outreach to gain compliance needed (Guardian Watchmen)	Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Take Allowance Change	Yes, from SMCA to No-Take SMCA with Tribal exemption
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Elk Valley Rancheria is interested in exploring the possibility of being included in exempt status	Add Elk Valley Rancheria to exempt Tribes if requested by Tribal Council	Yes	Elk Valley Rancheria has ancestral ties to the area				Take Allowance Change	
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Boundary is in Oregon	Change northern boundary to align with recognized California/Oregon state line	Yes	Original boundary used a mapping system that does not align with on-the-ground state line.		Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Boundary Change	
Del Norte	<a href="#">Point St. George Offshore Reef SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Elk Valley and Tolowa Dee-ni' exempt		No change	Yes						
Del Norte	<a href="#">Sea Lion Rock Special Closure</a>	300'	No data	No change	Yes						
Del Norte	<a href="#">Castle Rock Special Closure</a>	300'	Poke poling at Preston Island and Battery Point and Hook Finger Point during extremely low tides. Kayaks near closure	No change	Yes						
Del Norte	<a href="#">False Klamath Rock Special Closure</a>	300' from 3/1-8/31	Low flyovers by US Coast Guard helicopter. Kayaks near closure, kaking kelp. Dogs off leash	No change	Yes		Signs needed at Wilson Creek. Potential site for CoastSnap to crowdsource changes around rock				
Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt	Hook and line fishing and take of sand crabs regularly occur, especially at southern boundary Gold Bluffs beach traditional smelt camp Track amount of surf smelt taken (25 lbs current limit). Hawaiian Type throw net inappropriate	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor Surf smelt as a part of state monitoring plan.			Language Change	
Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt		Recommend implementing limits on commercial take of surf smelt	Yes	Culturally important species				Take Allowance Change	
Humboldt	<a href="#">Reading Rock SMR</a>	No Take	Drifting commercial crab pots	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Humboldt	<a href="#">Samoa SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Wiyot exempt	Difficult to determine boundaries	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor recreational and commercial (through landing/block reports) take of salmon by troll and surf smelt by dip net and assess effect on population; Signs with you are here map at Mad River			Language Change	
Humboldt	<a href="#">South Humboldt Bay SMRMA</a>	No Take except waterfowl may be taken. Wiyot exempt	Invasive grasses, loss of eelgrass, general threats to habitat. Non Tribal members clamming. Difficult to identify boundaries within South Humboldt Bay	Determine reason it does not extend to southern water's edge and extend if no reason	Yes	Clearer for outreach purposes to say from southern end of bay to 2nd hunter pull out	Direct enforcement to look for unlawful clamming			Boundary Change	
Humboldt	<a href="#">Sugarloaf Island Special Closure</a>	300'		No change	Yes						
Humboldt	<a href="#">South Cape Mendocino SMR</a>	No Take	Minimal patrol	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by LED				
Humboldt	<a href="#">Steamboat Rock Special Closure</a>	300' 3/1-8/31	Confusion on when it is open to swim out to and when it is closed	No change	Yes		Sign that highlights special closure and closure dates				
Humboldt	<a href="#">Mattole Canyon SMR</a>	No Take	Minimal patrol. Some commercial crab pots observed during USCG flyover	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by law enforcement division				
Humboldt	<a href="#">Sea Lion Gulch SMR</a>	No Take	Backpackers harvest mussels along entire Lost Coast Trail; people getting too close to new elephant seal colony. No cell connectivity to determine boundaries of MPA	Move southern boundary south to Cooskie Creek	BLM support but need fisher input	Creek is more identifiable feature for land based outreach to fishers hiking the Lost Coast Trail				Boundary Change	
Humboldt	<a href="#">Big Flat SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Multiple Tribes exempt	Backpackers harvest mussels along entire Lost Coast Trail; surf fishing occurs at Miller Flat. No cell connectivity to determine boundaries of MPA	No change	Yes		More outreach needed for fishers hiking lost coast. Include more detailed information in BLM Lost Coast map				
Mendocino	<a href="#">Double Cone Rock SMCA</a>	Rec take of salmon by trolling; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Unknown. Limited patrol. Report of excessive urchin and need for grazer suppression.	Reassess restoration policy in SMCA's impacted by climate change/kelp loss	Yes	Loss of kelp habitat needs to be addressed in this SMCA	Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Vizcaino Rock Special Closure</a>	300' 3/1-8/31		No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Mendocino	<a href="#">Ten Mile SMR</a>	No Take	Primary concern is shore-based fishing (rod and reel at seaside creek beach). Recreational fishers take rockfish and lingcod, crab pots "walk themselves" into MPA at southern boundary. Dogs off leash.	No change	Yes		OK/boundary sign needed at northern boundary. Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Beach SMCA</a>	Rec take of Dungeness crab by trap, hoop net or hand. Commercial take of Dungeness crab by trap. Many Tribes exempt	Unlawful take of fish (rockfish, lingcod); dogs off leash in snowy plover habitat. Potential sand dump site south side of Ten Mile Beach	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Estuary SMCA</a>	Waterfowl may be taken. Many Tribes exempt	Limited access for fishers	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">MacKerricher SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Multiple violations occur daily since closest to Fort Bragg city center (general fish and game code violations). North boundary (Laguna Point) hotspot for intertidal take	Add protection for intertidal zone, per State Parks, in support for protection of the resource and ease of enforcement/outreach	Many in support but no full consensus	There are limited areas in the county to lawfully take intertidal animals such as mussels, turban snails, limpets, etc.	More enforcement support needed due to limited State Parks personnel. Focus on tidepool education. Intertidal specific take signs are needed	State Parks pending review		Take Allowance Change	
Mendocino	<a href="#">Point Cabrillo SMR</a>	No Take	Lighthouse sees lots of boats fishing offshore of Frolic Cove on northern end of Point Cabrillo SMR or inside	No change	Yes		OK boundary signs would be beneficial on both boundaries for kayak fishing				
Mendocino	<a href="#">Russian Gulch SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	General fish and game code violations	No change	Yes						
Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Increased use for swimming and recreation has led to safety concerns, including close calls between swimmers and hunters. Swimmers mixing with motorized boats may lead to accidents	Hunting should be prohibited due to high public use/public safety issues, per State Parks	Yes	Community reported incidents of near misses between hunters/boaters and swimmers		State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Can MPA restrict motorized vessels if not ecological reserve?	Restrict all motorized vessels with allowance for public safety, per State Parks	Yes, with clarification that motorized vessels are only restricted going east (up river)	West access from launch should be allowed for boaters going out to ocean	Data on crab fishery is needed to determine whether allowance is sustainable. Need clear signage restricting snare traps. Pick up after dog signs needed	State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Van Damme SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Overtake and take of undersize fish	No change	Yes						
Mendocino	<a href="#">Navarro River Estuary SMCA</a>	Rec take of salmonoids by hook and line. Many Tribes exempt. Waterfowl may be taken	People illegally breach sandbar (but outside MPA?)	No change	Yes						
Mendocino	<a href="#">Point Arena SMR</a>	No Take	Fishing in SMR reported by lighthouse manager	No change	Yes		OK boundary signs needed				
Mendocino	<a href="#">Point Arena SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear		No change	Yes						



County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Mendocino	<a href="#">Sea Lion Cove</a>	Rec and commercial take of finfish	Urchin barrens	Reassess restoration policy in SMCAs impacted by climate change/kelp loss	Yes		Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Saunders Reef SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear and urchin	Citations issued for people diving and taking at Schooner Gulch; illegal shore fishing from Hearn Gulch	No change	Yes		Additional enforcement personnel/efforts are needed				
Sonoma	<a href="#">Del Mar Landing SMR</a>	No Take	Fishing at north end	No change	Yes		Trail pamphlets with MPA information				
Sonoma	<a href="#">Stewarts Point SMR</a>	No Take	Poaching at 3 mile line. Difficult for fishers to determine where 3 mile line is and difficult to enforce from land	Allow for trolling of salmon. Change to SMCA?	No. Discussed with no strong opposition but more info needed	Impact to commercial salmon fishing can be addressed with minimal impact to other resources	More signage needed at public access points			Take Allowance Change	Yes, would change SMR to SMCA. No consensus
Sonoma	<a href="#">Stewarts Point SMCA</a>	Rec take from shore only of marine aquatic plants other than sea palm, marine invertebrates, finfish by hook and line, surf smelt by beach net, species authorized by hand-held dip net	Tribal based MPA	Prohibit all take and add Kashia Pomo to Tribal exemptions to make affirmative rights of Tribal Members re: collection, harvesting, and research	Yes	MPA is only accessed by Kashia Tribal members from shore (owned by Tribe) so would be same protection while acknowledging Tribal rights				Take Allowance Change	Yes, change from SMCA to No-Take SMCA with Tribal exemption
Sonoma	<a href="#">Salt Point SMCA</a>	Recreational take of abalone and finfish allowed	Take of abalone during closure; poaching of intertidal species. Confusion regarding intertidal take	No change	Yes		Needs more signage on collecting/take of shellfish and other non finfish				
Sonoma	<a href="#">Gerstle Cove SMR</a>	No Take	Excessive intertidal take. Rec fishers fishing the line	No change	Yes		Need for good tidepooler rules signs to address harmful tidepooling				
Sonoma	<a href="#">Russian River SMRMA</a>	No take except waterfowl may be taken	Marine mammal disturbance occurring. County of Sonoma needs to conduct restoration work as part of management plan	Allow for restoration work in SMRMA	Yes	Restoration will not impact haul out sites, marine mammals or birds				Other	
Sonoma	<a href="#">Russian River SMCA</a>	Rec take of Dungeness crab by trap, and surf smelt by hand-held dip net or beach net. Commercial take of Dungeness crab by trap	Illegal onshore and offshore fishing; seal disturbance "seal selfies" near Goat Rock. Trash/dogs off leash	No change	Yes		More outreach for out of town fishers/permanent signage				
Sonoma	<a href="#">Bodega Head SMR</a>	No Take	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes	Would require new outreach					
Sonoma/Marin	<a href="#">Bodega Head SMCA</a>	Rec take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net. Commercial take of pelagic finfish by troll fishing gear and round haul net, Dungeness crab by trap, and market squid by round haul net	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Sonoma/Marin	<a href="#">Estero Americano SMRMA</a>	No take except waterfowl may be taken	Confusion as to boundary "high tide line" and who manages strip of beach between ocean and estuary that is often closed; Difficulty identifying eastern boundary. No way to see boundary from shore	No change	Yes		More signs needed at access points here to address compliance concerns				
Marin	<a href="#">Estero de San Antonio SMRMA</a>	No take except waterfowl may be taken	Some take (animal remains) and illegal fishing	No change	Yes						
Marin	<a href="#">Point Reyes SMR</a>	No take	Sand dollar and fossil take, rod and reel fishing from vessels, party boats troll for salmon; violations are limited offshore	No change	Yes		Signage and more enforcement needed, especially at Drakes Beach and Coast Guard Station. Consolidated mixed messaging signs, with dog information.				
Marin	<a href="#">Point Reyes SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Commercial crabbers set coonstripe shrimp traps on top of crab traps; Boundaries in MPA cluster hard to identify; NPS jurisdiction limited to 0.25 miles.	No change	Yes						
Marin	<a href="#">Point Reyes Headlands Special Closure</a>	No access from mean high tide line to a distance of 1000 feet seaward	Recreational vessels fishing in summer; Disturbance spiked in 2020; USFW continues to monitor this area	No change at this time	Yes	Might need to revisit making adjustments in the future if data shows changes/increases in disturbance					
Marin	<a href="#">Estero de Limantour SMR</a>	No take	Difficult to determine boundary between SMR and Drakes Estero SMCA makes enforcement difficult. There are suspicions that poaching of clams occurs in the SMR from people on kayaks from Drakes Estero	Extend SMR designation all the way into Drakes Estero	Yes	NPS in support of expanding SMR because federally designated wilderness, major harbor seal haul out, and critical nursery habitat for leopard shark and bay rays		EAC Marin with NPS letter of support		Boundary Change	
Marin	<a href="#">Drakes Estero SMCA</a>	The recreational take of clams is allowed	Difficult to determine boundary line between Drakes Estero SMCA and Estero de Limantour SMR leading to poaching. Cows accessing/pooping from NPS ranch leased land	Prohibit clamming in Drakes Estero SMCA. Merge with Estero de Limantour SMR.	Yes	SMCA designation was originally due to oyster farm that is no longer there. NPS in support of making into a SMR due to federally designated wilderness area	Give people direction/outreach materials on where they CAN clam safely	EAC Marin with NPS letter of support		Take Allowance Change	Yes, change from SMCA to SMR
Marin	<a href="#">Point Resistance Rock Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels. USFW monitoring area.	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach					
Marin	<a href="#">Double Point/Stormy Stack Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels and surfers, who enter harbor seal rookery. Increased visitation due to people hiking to Alamere Falls	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach and don't want to extend to shore to allow shore access	Put signs with regulations and text about importance of special closure at trailhead; more outreach to boaters about special closures needed				

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Difficult to enforce and outreach about why you can take finfish but not invertebrates. Beach Watch data at this site for 30 years show slight decrease in activities in last 10 years, but take of invertebrates has been observed, and the Greater Farallones National Marine Sanctuary Superintendent has provided information about the need to consider additional conservation measures at Duxbury Reef. Maria Brown (NMS) submitted a letter saying Duxbury Reef would benefit from increased protection of unique and important habitat of entire reef (largest shale reef in N. America). EAC MPA Watch data shows increased activities, including take and poaching incidents.	Change to SMR because of difficulty of interpretation and enforcement. Extend southern boundary further out to sea (south) and northern boundary to Double Point to fully cover reef	No	No agreement on extending boundaries to cover the reef and changing to SMR. More research needed on benefits of changing existing ribbon from SMCA to SMR; Might be important fishing access point for public	More signs needed and more support for onsite education and enforcement from CDFW to agate beach and land-side terrestrial Duxbury	EAC Marin		Take Allowance Change	Yes, would change SMCA to SMR. No consensus
Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Heavy use and impacts, intertidal take – buckets and tools (e. g., crow bars, tire jacks) used to take black turban snails and purple urchin that are nestled into cracks. People need to break the reef to get to purple urchin	Potential compromise would be to add specific tidepool protections, similar to OC	TBD	NMS would like to continue conversation to explore potential compromises	Research other tidepool docent programs in MPAs with mixed use of allowed fishing/tidepool protections			Language Change	
San Francisco	<a href="#">North Farallon Islands SMR</a>	No Take	Commercial crab case here	No change	Yes	More data needed for this MPA cluster	Increase CDFW LED patrols during peak months. Need for CCFRP program here				
San Francisco	<a href="#">North Farallon Islands Special Closure</a>	No vessel shall be operated or anchored at any time from the mean high tide line to a distance of 1000 feet seaward of the mean lower low tide line of any shoreline of North Farallon Island, or to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of the remaining three southern islets		No change	Yes						
San Francisco	<a href="#">Southeast Farallon Islands SMR</a>	No Take	Small recreational boats. A number of encroachments occur into SMR during better weather months	No change	Yes		Increase patrols from LED and consider M2 radar at this location				
San Francisco	<a href="#">Southeast Farallon Islands SMCA</a>	Recreational take of salmon by trolling and commercial take of salmon by troll fishing gear	Salmon fishers use salmon gear to fish for halibut	No change	Yes						

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Francisco	<a href="#">Southeast Farallon Islands Special Closure</a>	Closed 300 feet seaward year-round, except Fisherman's Bay to East Landing, southeastern tip of the island and southeastern side of Saddle (Seal) Rock, which is closed from December 1 through September 14. 5 mile per hour speed limit 1000 ft seaward of mean lower low tide of any shoreline. Exhaust system requirements for commercial dive boats	Boats cut across the special closure	No change	Yes	Predates MLPA process, careful consideration went into crafting special closure regulations					
San Mateo	<a href="#">Egg (Devil's Slide) Rock to Devil's Slide Special Closure</a>	A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of any of the three rocks comprising Egg (Devil's Slide) Rock; Transit in between the rock and the mainland between these points is prohibited at any time.	Reported violations include fishing boats inside boundaries and low flying aircraft/drones	Change name to "Devil's Slide Special Closure"	Yes	Egg rock is no longer a name used/recognized locally. Devil's Slide is more appropriate and simpler for outreach				Language Change	
San Mateo	<a href="#">Montara SMR</a>	No Take	A top cited MPA in Central Coast, highest in San Mateo; fishing offshore and tidepool take; Difficulty interpreting southern boundary	Move Montara SMR onshore southern boundary to current Pillar Point SMCA southern boundary (north end of Maverick's Beach), then extending out to current offshore southern SMR boundary point	Yes	Easier for enforcement and makes SMR boundaries consistent with Fitzgerald Marine Reserve boundaries				Boundary Change	
San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net. Dungeness crab by trap, and market squid by round haul net is allowed.	Unclear boundary leads to poaching in intertidal. Difficult for local law enforcement to ensure compliance of tidepool take regulations due to high volume of consumptive visitors	Extend southern SMCA boundary further south to edge of harbor jetty, extending out to existing offshore southern point. Onshore northern boundary would be same as Montara SMR onshore southern boundary	Yes	Would cover entire reef in MPA for ease of allied agency outreach and enforcement.				Boundary Change	
San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net. Dungeness crab by trap, and market squid by round haul net is allowed.		Change regulations to allow for recreational hook and line take of finfish from shore and take of mussels, crabs, snails and seaweeds for equity and access purposes	Yes	Allowing for shore based hook and line and some intertidal take maintains access for consumptive users while applying some protection for a heavily impacted habitat				Take Allowance Change	
San Mateo/Santa Cruz	<a href="#">Año Nuevo SMR</a>	No Take	Unlawful take of snails; fishing; wildlife disturbance. Boats driving squid out of MPA. Confusion because sign at top of trail to Greyhound Rock says fishing beach but must go left at bottom to legally fish	Move southern boundary line to have whole of Greyhound Rock in SMR	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Clearer boundary makes enforcement easier	Ensure sign with map at bottom of trail. Utilize social/digital/traditional media for public outreach	State Parks pending review		Boundary Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Take of mussels at southern boundary Confusion with Año Nuevo SMR boundary/whether fishing is allowed at Greyhound Rock Split between 2 counties	Move northern boundary line to have whole of Greyhound Rock outside of SMCA and in SMR; Move southern boundary south to beginning of Scott Creek bridge	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Reef should be fully protected or fully open. Preference to cover reef but either way will have clearer boundary for outreach/enforcement. Move of southern boundary would cover reef to address intertidal impacts	Need for sign with map at Scotts Creek	State Parks pending review		Boundary Change	
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Confusing regulations	Replace comma with semi-colon in regulations after "giant kelp by hand harvest only", or otherwise edit	Yes	Clearer language needed to clarify you are not required to catch salmon and squid by hand harvest only		State Parks pending review		Language Change	Section 100 change
Santa Cruz	<a href="#">Natural Bridges SMR</a>	No Take	Hard to identify boundaries; safety concerns with fishers and swimmers at Natural Bridges State Park beach	Shift both boundaries south to more identifiable features (4 mile point and Natural Bridge)	Yes	State Parks would like SMR to cover the beach at Natural Bridges SP for public safety reasons	Need for interpretive signs with maps/good tidepooler rules, why MPAs, etc.	State Parks pending review		Boundary Change	
Santa Cruz	<a href="#">Soquel Canyon SMCA</a>	Rec and commercial take of pelagic finfish	Split between 2 counties	No change	Yes						
Monterey	<a href="#">Elkhorn Slough SMR</a>	No Take	Fishing occurs regularly at Kirby Park pier/dock, was originally built for fishers with disabilities with SFRA grant. Inconsistent enforcement.	Move northern boundary south of Kirby Park pier/dock. Shift entire MPA to maintain size	Yes, at both Santa Cruz and Monterey Collaborative meetings	Opens fishing area as originally intended to limit poaching; supports increased enforcement presence in area	If Kirby is open, must be concerted cross-jurisdictional effort to enforce shore waste of fish/debris and other F&G Code violations. Need for good fishing practices outreach	Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550 (a)].	Difficult to determine where SMR/SMCA boundary is (i.e., where kayak fishers can no longer fish).	Move SMR line to bird watching platform (eastern side)	Yes, at both Santa Cruz and Monterey Collaborative meetings	Bird watching platform provides a clear boundary for shore and kayak fishers and would maintain size of SMR with shift off Kirby		Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550 (a)].	Clamming disturbs sea otter rafts. Huge amounts of trash (fishing receptacles full)	Removing allowance for clamming to address impact to otters and human health considerations	Maybe?	Need more info on impact to recreational clambers and safety of consuming clams	Need for more trash receptacles/removal	Elkhorn Slough Foundation		Take Allowance Change	
Monterey	<a href="#">Moro Cojo Slough State Marine Reserve</a>	No take	Some access on eastern end. Agricultural influence. Elkhorn Slough NERR in support of no change	No change	Yes						
Monterey/Santa Cruz	<a href="#">Soquel Canyon State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially illegally set crab traps (commercial) and rockfish take (recreational). Whale disturbance. More impact due to depth restrictions lifted	No change	Yes						
Monterey	<a href="#">Portuguese Ledge State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially rockfish take (recreational). Whale disturbance	No change	Yes						



County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	Fishing debris from Coast Guard pier. Abalone and other intertidal poaching at breakwater	Explore regulations to limit fishing gear loss from Coast Guard pier (such as requiring use of breakaway leaders or no braided line)	Yes	Fishing gear loss impacts wildlife, habitat, and safety of divers due to entanglement	Partner with MBNMS on outreach of litter/derelict fishing gear			Language Change	
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR and join with Lovers Point-Julia Platt SMR	Maybe	No strong opposition but no fishing reps present		Giant Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand		Allow restoration/urchin culling without requiring SCP	No	May lead to destruction of healthy urchins		Giant Giant Kelp Restoration Project (G2KR) - applies to Ed Ricketts, PG Gardens, and Carmel Bay SMCAs, and will include suggestion for buoys on sites		Other	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take	Fishing off Lovers Point rocks, undersize and immature fish, spearfishers and fishing boats catch halibut, illegal tidepool take; confusion around northern boundary line	Move southern boundary line so Lovers Point is either all in or all out (with preference for all in reserve)	No	Disagreement about where to move line	Boundary marker or fishing/no fishing arrow sign needed if boundary doesn't change			Boundary Change	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take		Move southern boundary to end of Lovers Point, splitting point equally in half	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Spearfishing violations, especially from kayaks and dinghies; illegal take of scallops and crustaceans; undersize and immature fish taken Point Pinos is key oystercatcher nesting habitat	Move both boundary lines so Lovers Point and Point Pinos are all out of SMCA and in SMRs because both are key oystercatcher nesting sites	No	Rock outcropping and buoy at Point Pinos (southern boundary) are currently good boundary indicators for boaters				Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand		Move northern boundary to end of Lovers Point	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point and Point Pinos			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR, join with Lovers Point SMR	Maybe	No strong opposition but no fishing reps present		Giant Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR
Monterey	<a href="#">Asilomar State Marine Reserve</a>	No Take	Onshore and offshore fishing common, hook and line from nooks and crannies; harmful tidepooling, tidepool take; wildlife disturbance common Northern boundary at Point Pinos is confusing, splits rocks in half	No change	Yes		Fishing/No Fishing arrow signs needed at Point Pinos				
Monterey	<a href="#">Carmel Pinnacles State Marine Reserve</a>	No Take	Offshore violations common	No change	Yes						
Monterey	<a href="#">Carmel Bay State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Intertidal take common, including abalone and mussels. Golf balls go into MPA and are not collected. Some kelp take at Stillwater Cove	No change	Yes		Work with Pebble Beach on reducing golf ball litter either through requiring biodegradable balls at key holes or ensuring balls are collected by divers				
Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take	Take occurs. Boundaries are confusing	No change	Yes						
Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take		Allow restoration/urchin culling	No	Difficult for enforcement/interpretation in no-take area		Giant Giant Kelp Restoration Project (G2KR)		Other	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Monterey	<a href="#">Point Lobos State Marine Conservation Area</a>	Recreational take of salmon and albacore and the commercial take of salmon, albacore, and spot prawn is allowed		No change	Yes						
Monterey	<a href="#">Point Sur State Marine Reserve</a>	No Take	Violations common between SMR and SMCA, southern corner is hard to enforce. Abalone case reported	Encompass the whole coastline of Point Sur in MPA	No	Keep boundaries as is				Boundary Change	
Monterey	<a href="#">Point Sur State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore		Add bluefin tuna to list of species allowed for take	No	Lessens protection				Take Allowance Change	
Monterey	<a href="#">Big Creek State Marine Reserve</a>	No Take	L-shape of SMR within SMCA is confusing	No change	Yes						
Monterey	<a href="#">Big Creek State Marine Conservation Area</a>	Recreational take of salmon and albacore. Commercial take of salmon, albacore and spot prawn	Potential unlawful fishing off Marine Lab	No change	Yes						
San Luis Obispo	<a href="#">Piedras Blancas State Marine Reserve</a>	No take	Missing signs. Onshore fishing violations (poaching mussels at Point Sierra Nevada). Wildlife disturbance. Extreme angle makes kayak fishers look like they are fishing in SMR	No change	Yes		Use boundary images on signs to help reference angle at pullout.				
San Luis Obispo	<a href="#">Piedras Blancas State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore	Occasional poaching observed. Fishing for rockfish. No albacore, limited salmon observed by fishers/wardens	No change	Yes						
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Harmful tidepooling occurring throughout MPA. Difficult to message good tidepooler rules without designated protections	Add tidepool protection language similar to Crystal Cove and Dana Point SMCA	Yes	Would make it easier to message about responsible tidepooling and reduce inadvertent take	Tools for existing SP tidepool docent program needed here, such as Natural Bridges State Park tidepool cart	State Parks pending review; Environment California?		Take Allowance Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching by kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection and cover some kelp habitat	Yes	May be some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	No commercial take allowed but there is an existing kelp lease?	Remove kelp lease 209 OR clarify that lease holder cannot harvest within Cambria SMCA	Yes	Commercial harvest of kelp is incompatible with MPA regulations that allow recreational take only		Environment California?		Other	
San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching of kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection	Yes	May be some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease		Prohibit commercial take of giant kelp and bull kelp with valid lease and change to an SMR	Yes	Original intent was a reserve but there was existing kelp lease. Current lease holder is fine with relinquishing/ disallowing take of kelp		Environment California?		Take Allowance Change	Yes, would change from SMCA to SMR

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Poaching occurs at southern side that does not allow take of finfish. Line is confusing and unclear on maps and outreach materials. Illegal invertebrate take (e.g., sea stars at jetty, ghost shrimp at Windy Cove). Signs needed at blue pier	Shift no fishing boundary 150 yds north to public access at Pasadena Park (between Santa Ysabel and Baywood Way)	Yes	Makes it easier for county to manage and educate more accurately about fishing/no fishing line	Signs needed, especially at Blue Pier. County can install sign at Pasadena Park			Boundary Change	
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Hunting "within" a bird sanctuary (City of Morro Bay) is confusing, safety concerns for paddlers with increased visitors who are unaware hunting is allowed. Concern about safety issues around hunting around neighborhoods. Trampling of plants occur on shoreline in Baywood Park.	No change to regulations at this time	Yes	Important hunting area. Confusion should be addressed through outreach	Overlay hunting map on SMRMA for outreach purposes. Mixed message signs/more education needed about estuary impacts/erosion: "tread lightly" in Los Osos				
San Luis Obispo	<a href="#">Morro Bay State Marine Reserve</a>	No Take	Some hunting violations, hugging line; Boardwalks work to protect birds! Might be good to have one at Baywood Park at 1st Street	No change (reluctantly)	Yes	Some desire to extend SMR west and into bottom part of bay beneath Baywood Peninsula but do not want to impede on aquaculture	More education and outreach needed				
San Luis Obispo	<a href="#">Point Buchon State Marine Reserve</a>	No Take	Regular poaching offshore, trolling, and stopping to drop a line in water. Busiest MPA in SLO, most violations observed/cited	Move northern boundary to actual Point Buchon	Yes	Clearer boundary for fishers coming from Port San Luis	Boundary marker needed here. Make "flagpole" more visible (hang flag?) if boundary doesn't change	State Parks pending review		Boundary Change	
San Luis Obispo	<a href="#">Point Buchon State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore allowed	Regular poaching, rockfish and lingcod, maybe some squid boats?	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take	Vandenberg Space Force Base (VSFB) allows active-duty officers, their dependents/families, and guests to fish off Vandenberg. Leads to confusion since officially a no-take area. Regulations should match take allowed. Petition has been submitted by City of Lompoc to allow shore fishing at Surf Beach	Change designation to SMCA that allows hook and line for finfish from shore only	Yes	Would increase actual protection due to past 5 Base Commanders' decision to allow all legal take on base and would address equity concerns by allowing access for non-military at Surf Beach		Greg Helms to propose intertidal ribbon		Take Allowance Change	Yes, would change from SMR to SMCA
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take		Reevaluate MOA with VSFB that is being interpreted as allowing for full military recreational take in a no-take SMR	No, not needed if designation is changed to SMCA	Vandenberg conservation officer will enforce updated take regs on military personnel				Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Point Conception SMR</a>	No Take	Recent groundfish case. Difficult for enforcement to access from land through Dangermond Preserve. M2 radar at Pt. Conception shows a lot of boating activity, may be surf related	No change	Yes		Provide continued support for M2 radar with ground truthing and continued coordination/info sharing between agencies				

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Kashtayit SMCA</a>	Rec take of finfish, invertebrates (except rock scallops and mussels) and giant kelp by hand harvest. Santa Ynez band of Chumash exempt	Illegal and dangerous access down the bluffs on Gaviota. Fishing without a license. Access issues for pier fishers with Gaviota pier closed. Difficult to interpret regulations	Reword regulations for clarity of outreach: "Recreational take of finfish, invertebrates, and giant kelp allowed"	Yes	Simpler regulations will make outreach easier, increasing compliance, with minimal impacts to the resources	Have FGC/State push for pier repair at Gaviota Pier (SB County/State Parks) for safety/access reasons	State Parks pending review/Greg Helms		Language Change	Section 100 change
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Naples SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of giant kelp by hand or mechanical harvest. Santa Ynez Band of Chumash exempt	Hook and line fishing and access issues occur here, and most days there are at least two vehicles for fishing or surfing parked near Naples. Impact to hook and line fishers	Add hook and line to allowed method of take	No	Numbers/impact/level of take different between hook and line and spearfishing. Would drastically reduce protection				Take Allowance Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Campus Point No-Take SMCA</a>	No Take	Onshore and offshore hook and line fishing continues to be observed	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take	Trespassing (e.g., illegal swimming, dogs). People occasionally use nets to fish here and/or fish off bridges at the finger boundaries of the slough. Dumping of sediment still occurs in Goleta Bay	Consider water quality designation for Goleta Bay	Yes	Goleta Bay is between two MPAs and there is a need to address impacts of sediment dumping to subsistence fishers off Goleta Pier		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms		Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Richardson Rock SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">San Miguel Island Special Closure</a>	Allowance for sea urchin divers between Castle Rock and Judith Rock SMR western boundary (Point Bennet) between 3/15-4/30 and 10/1-12/15.	Commercial urchin poaching. Purpose to reduce disturbance to pinniped populations. Is closure still necessary? Point Bennet has one of the largest pinniped (six species) rookeries on the West Coast of North America	Reevaluate need for special closure (SC); Clean up language to address confusion between 300 yards describing SC and 100 yards keeping boats from whole Island 102 A.1.(a)	Yes		M2 radar at NMFS marine mammal station	Greg Helms		Language Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Harris Point SFMR</a>	No Take	CDFW sees some fishers that are taking from shore, although it is not common	No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Judith Rock SFMR</a>	No Take		No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Carrington Point SMR</a>	No Take	Confusing angle relative to pier	No change	Yes	NPS outreach on angle has been good	More permanent boundary markers/signage is needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Skunk Point SMR</a>	No Take	Difficult to determine how far offshore boats are (in or out)	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">South Point SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Painted Cave SMCA</a>	Rec take of spiny lobster and pelagic finfish	People are taking non-pelagic fish species, rockfish, California sheephead, and live fish	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Gull Island SFMR</a>	No Take		Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Scorpion SFMR</a>	No Take	Fishing/take in little coves at eastern boundaries. Lobster traps	No change	Yes		More on-island enforcement presence needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/31	Brown pelican area makes it difficult for Island Packers and others to land legally at Frenchy's	Add exemption to allow access/landing Frenchy's Cove	Yes	Intent was to allow landing at Frenchy's Cove but aligning brown pelican closure with SMR/SMCA boundary closed off access to safe landing		Greg Helms		Allowed Activity Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/32	Depth hard to enforce due to sheer drop off from island	Reassess need for Special Closure and consider removing if not justified	Yes	May only need brown pelican closure rather than full island special closure to protect seabirds		Greg Helms		Allowed Activity Change	Yes, would remove special closure
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMCA</a>	Rec take of spiny lobster and pelagic finfish. Commercial take of spiny lobster. Santa Ynez Band of Chumash exempt	Confusion regarding what "pelagic" means may lead to unlawful take	No change	Yes		Outreach needed around pelagics				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMR</a>	No Take	Violations for unlawful take	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Footprint SFMR</a>	No Take	Lots of violations. Boats drift in because they cannot anchor	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Begg Rock SMR</a>	No Take	The MPA violations here are commercial and come from experienced mariners	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Santa Barbara Island SFMR</a>	No Take	Osborne Bank. CPFV/commercial lobster poaching. Overlapping jurisdictions	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed	M2 radar needed to monitor remote MPA			Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt	Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of Swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	State Parks pending review; Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMR</a>	No Take	Angle of eastern boundary is confusing/extends due west and is close to shore	No change	Yes		Use of surveyed boundary images in outreach can help address confusion with eastern boundary at Paradise Cove				
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Frequent noncompliance with MPAs and limited enforcement	No change	Yes		Additional enforcement personnel/efforts are needed				



County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Confusion of significance of purple designation	Keep allowance for maintenance but change color from purple to red for ease of public interpretation	Yes	Easier to explain "no take" if consistent with red SMR				Other	
Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat	Harmful tidepooling impacts/take from tidepools. Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Catalina Island)	<a href="#">Arrow Point to Lion Head Point SMCA</a>	All rec and commercial take allowed. Take of invertebrates prohibited	Poaching lobster and abalone. Hoop nets. Difficult to identify 1,000 feet from shore at Indian/Endemic Rock	No change	Yes		Need for a locally managed (research) buoy to mark 1,000 feet point				
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Onshore No-Take SMCA</a>	No Take. No anchor area in original refuge boundaries	Fishing/using hoop nets close to shore at Big Fisherman Cove. Poaching at Yellowtail Point and Bird Rock; Confusion around no anchor zone	Change purple to red for outreach purposes	Yes, only if all current maintenance/access activities are still allowed	Easier to explain "no take" if consistent with red SMR	Need for some boundary marker at Yellowtail Point. MPA Watch transect would help identify use/compliance issues here			Other	
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Offshore SMCA</a>	Rec take of pelagic finfish by hook and line and spearfishing and white seabass by spearfishing and market squid by hand held dip net. Commercial take of pelagic finfish by hook and line and swordfish by harpoon	Take via illegal gear types	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Long Point SMR</a>	No Take	Trolling through MPA occurs. Misconception that MPA is only close to shore. Rental boats go past Long Point and fish	Make a distance from shore rather than lat/long for ease of outreach. Cut off corner and flip and move west (offshore) to maintain size	Yes	Clearer outreach to trollers to stay certain distance from shore, IF maintains size				Boundary Change	
Los Angeles (Catalina Island)	<a href="#">Lover's Cove SMCA</a>	Rec take by hook and line from the Cabrillo Mole is allowed. Feeding fish allowed	Fishing from shore at the ramp near the Mole. Angle is difficult at eastern boundary. Food torpedoes are shot from tourist subs to attract fish to windows	Remove allowance for feeding of fish	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite				Allowed Activity Change	
Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed	Boundaries don't match dive park buoys. Feeding fish may be incompatible use. 40-50' depth at MPA line.	Remove allowance for feeding of fish.	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite	Might need to utilize a weaning off process for fish used to being fed			Allowed Activity Change	
Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed		Change purple to red for outreach purposes for outreach	Yes	Easier to explain "no take" if consistent with red SMR				Other	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Los Angeles (Catalina Island)	<a href="#">Farnsworth Onshore SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; marline, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	More difficult to assess whether poaching is occurring on the backside. Challenging/confusing for fishers	No change	Yes		More outreach to fishers needed on why deep habitat/fish are protected here				
Los Angeles (Catalina Island)	<a href="#">Farnsworth Offshore SMCA</a>	Rec take of pelagic finfish by hook and line or by spearfishing; white seabass by spearfishing; marlin, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	CPFVs (party boats) are seen illegally fishing in Farnsworth Offshore SMCA, moving out if they see the CDFW patrol boat approaching. Regs restricting take of rockfish can be confusing for fishers/challenging to prove rockfish on board was taken outside	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Cat Harbor SMCA</a>	Rec take of finfish by hook and line or by spearfishing, market squid by hook and line, and spiny lobster and sea urchin. Commercial take of sea cucumbers by diving only and spiny lobster and sea urchin. Aquaculture of finfish	Some take of undersized fish	No change	Yes						
Orange	<a href="#">Bolsa Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Confusion between Bolsa Bay and Bolsa Chica Basin MPAs	Potentially combine Bolsa Bay with Bolsa Chica Basin MPAs?	No	State Lands requirement to have fishing				Boundary Change	Yes, would change from SMCA to SMR. No consensus
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Water management infrastructure is failing - needs management and repairs. Shoaling and potential closing of inlet - need cost effective alternative to dredging and \$ to implement. Could ultimately change boundaries of MPAs	MPA should cover all waters in ecological reserve. Move northeastern boundary to Graham	Yes	Makes enforcement easier so CDFW can cite for unlawful fishing using 632 instead of no trespassing		OC Coastkeeper	Wendy Berube	Boundary Change	
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Confusion between Bolsa Bay and Bolsa Chica Basin MPA regulations and whether take is allowed. Bridge inconsistency	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Upper Newport Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Ecological Reserve and MPA overlapping jurisdiction. Fishing from floats by PCH bridge and using gill nets at Jamboree Bridge; kayak fishing	No change	Yes		Harbor and estuary signs needed at Newport Dunes. Additional enforcement personnel/efforts are needed				
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat	Harmful tidepooling and undersized lobster. Nighttime poaching. Angle is difficult at southern boundary	Better define tidepool definition to encompass rocky intertidal habitat	Yes	"Area encompassing the rocky pools" is confusing, makes it sounds like it is only the pools, not intertidal zone when dry	Night vision for State Parks officers to address nighttime poaching	State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat		Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Laguna Beach SMR</a>	No Take	Poaching in gated/private communities; angle is difficult at northern boundary	No change	Yes		More enforcement needed in private community. Bring back community scientist/anglers (i.e., CCFRP) to OC				
Orange	<a href="#">Laguna Beach No-Take SMCA</a>	No Take. Maintenance allowed	Angle is difficult at southern boundary	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR	Produce map that has layer that shows allowed maintenance/artificial structures and scientific take	OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected	Fishing without a license. Night poaching at 3 Arch. Take of limpets at north end. Shift in fishing pressure. Angle is difficult at southern boundary. Harmful tidepooling	Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected		Better define tidepool definition to encompass rocky intertidal habitat or utilize a different term.	Yes	Tidepools are specific to pools but intertidal habitats protected can be free of pools in some cases. "Area encompassing the rocky pools" is unclear whether all rocky intertidal habitat is included here.		OC Coastkeeper	Wendy Berube	Language Change	
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve regulations west of 5 and MPA regulations east of 5	Expand SMCA west of I-5 bridge to encompass all of ecological reserve	No	Expands MPA size, unclear on impacts to recreational fishing				Boundary Change	
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change to blue SMCA with designated fishing areas	Maybe	If does not reduce fishing opportunities under I-5 and 101 bridges, or lessen existing protections				Take Allowance Change	Yes, would change from No-Take SMCA to SMCA
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes if boundaries remain the same	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish	Harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is hard at southern boundary since it splits 2 jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what.)	Move southern boundary to jurisdictional boundary between State Parks and City of Solana Beach for full tidepool protection of reef	No	Increases size of MPA, reducing fishing access, and may impact take of halibut				Boundary Change	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish		Shift entire shape south (lifeguard tower to state/Solana Beach line to cover tidepool on south side)	Yes	Compromise. Keeps same size MPA but covers impacted tidepool area on southern boundary. Lifeguard tower clear boundary at north end		State Parks pending review; Wildcoast		Boundary Change	

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
San Diego	<a href="#">San Elijo Lagoon No Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Lots of people fishing at entrance to San Elijo lagoon under bridge and in channel	Move boundary to west side of the bridge (prohibiting fishing under the bridge) as long as accommodations are allowed for dredging	Yes	Signs are currently posted on west side of bridge to prohibit people from entering the San Elijo Lagoon. Makes outreach clearer		State Parks pending review; Wildcoast		Boundary Change	
San Diego	<a href="#">San Elijo Lagoon No Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">San Dieguito Lagoon SMCA</a>	Rec take of finfish by hook and line from shore. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve boundaries and regulations and MPA boundaries and regulations. Speculation that extent of water has changed since restoration. Original intent of 632 was to align with 630 in overlapping waters. Non-MPA areas are more restrictive which leads to confusion	Have MPA cover all water within ecological reserve.	Need more information	Check with Joint Power authority because would lessen protections if SMCA (that allows fishing) is expanded to all state waters	Sea level rise impacts should be considered			Boundary Change	
San Diego	<a href="#">San Diego-Scripps Coastal SMCA</a>	Rec take of coastal pelagic species, except market squid, by hook and line only	Harmful tidepooling. People using gear types for fishing for species other than coastal pelagics but gear type cannot assume intent. Makes enforcement difficult. Also safety concerns with surf casters into high use swim/surf area	Add, "except from shore" to prohibit surf hook and line	Yes	Surf fishing from shore causes safety concerns (hooks getting caught on surfers/swimmers). Still allows kayakers to fish for bait fish on way out, which was original intent				Take Allowance Change	
San Diego	<a href="#">Matlahuayl SMR</a>	No Take	Harmful tidepooling. Kayak fishing. Caves are being defaced/graffitied	Add place name (La Jolla) to traditional Kumeyaay name (Matlahuayl)	No	Keep Kumeyaay name only for Tribal acknowledgement. Would also add confusion between other La Jolla MPAs	More focused patrols on caves in La Jolla to address littering/defacement of MPA			Language Change	
San Diego	<a href="#">South La Jolla SMR</a>	No Take	Most highly cited MPA. Poaching of lobster and offshore fishing. Harmful tidepooling. Challenges of parking and access (coastline related challenges due to sea level rise, climate disturbance)	No change	Yes	Focus on local management/outreach/enforcement	Need for more focus on tidepools (outreach/enforcement). More staff for allied agencies to help enforce. Encourage city to maintain safe accessways and deal with coastal erosion problems. More education on marine mammal disturbance				
San Diego	<a href="#">South La Jolla SMCA</a>	Rec take of pelagic finfish by hook and line only		No change	Yes						
San Diego	<a href="#">Famosa Slough No Take SMCA</a>	No Take	Homeless encampments. Construction run-off. Dogs and cats disturbing birds	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Cabrillo SMR</a>	No Take	Harmful tidepooling. Offshore boats but NPS unable to contact other than through megaphone	Work with Kumeyaay to rename MPA to traditional Kumeyaay name	Yes	Kumeyaay name exists for this location. Need to confirm spelling	Additional enforcement personnel/efforts are needed			Language Change	
San Diego	<a href="#">Tijuana River Estuary SMCA</a>	Rec take of coastal pelagic species, except market squid, by hand held dip net. Commercial take of coastal pelagics, except market squid by round haul net	Difficult take regulations to interpret in the field and take by hand held dip net not really occurring, per Imperial Beach lifeguards	No change							



Tracking Number: (2023-31MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

*Name of primary contact person:* Ashley Eagle-Gibbs, Environmental Action Committee of West Marin (EAC)

*Address:* 65 3rd St Suite 12, Point Reyes Station, CA 94956

*Telephone number:* (415) 663-9312

*Email address:* [ashley@eacmarin.org](mailto:ashley@eacmarin.org)

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:** Authorities cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

### **3. Overview (Required) - EAC requests the Commission subsume Drakes Estero State Marine Conservation Area (SMCA) into Estero de Limantour State Marine Reserve (SMR) to create a single SMR for Estero de Limantour and Drakes Estero.**

Applying an SMR designation to the area currently known as Drakes Estero SMCA is consistent with the original goals of the Marine Life Protection Act (MLPA) including goals 1, 2, 3, and 4 related to preserving natural diversity, sustaining marine life populations, protecting marine habitats for their intrinsic value, and improving recreational and educational opportunities while minimizing human disturbance. This change would also make state regulation consistent with federal regulation of Drakes Estero, and it is supported by regional partners including consensus at the August 24, 2023 Golden Gate Collaborative meeting.<sup>1</sup> This would remove the allowance for recreational clamming.

<sup>1</sup> See rows 50-51, <https://docs.google.com/spreadsheets/d/1Eu1efULiHZ2bazdKM5IK5UKzsIEluHEU9k9HdR1oudo/edit#gid=0>





**4. Rationale (Required) - Describe the problem and the reason for the proposed change:**

From a review of the historical documents, in 2008, the Integrated Preferred Alternative presented by the Blue Ribbon Task Force stated “if at any time it becomes feasible to create an SMR at Drakes Estero, this proposal recommends doing so.”<sup>2</sup> Today, it is feasible and appropriate to create an SMR in the area currently designated as Drakes Estero SMCA.

The Estero is one of the last fully intact wetlands in the state of California and is a biologically rich estuary that consists of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

Drakes Estero SMCA was established at a time when a commercial aquaculture operation was in business. Historic aquaculture operations have damaged some of the eelgrass habitat in Drakes Estero, and it is also known that human activity has already destroyed 90 percent eelgrass habitat statewide. The commercial operator closed in 2012, and the offshore and onshore infrastructure has been removed. The existence of commercial aquaculture at the time of the designation left a legacy of two separate Marine Protected Areas (MPAs) with differing designations within one body of water, leading to inconsistency.

The biologically rich habitat of Drakes Estero is very sensitive to disturbance and is ecologically contiguous with the neighboring Estero de Limantour SMR. The arbitrary boundary separation between Drakes Estero SMCA and Estero de Limantour SMR causes confusion and harms the SMR. This is because 14 CCR § 632(b)(47)(B) currently allows for the recreational take of clams in Drakes Estero SMCA. EAC’s Marin MPA Watch monitoring data (a program in partnership with the Point Reyes National Seashore and the California Academy of Sciences) shows that people leaving the boat launch on kayaks or canoes at Drakes Estero with buckets is not uncommon. It is unknown where they are headed, but it is also difficult for clambers to determine the boundary line between Drakes Estero SMCA and Estero de Limantour SMR, because they are located in the same body of water. This leads to individuals who wish to take clams in Drakes Estero SMCA to sometimes take clams in Estero de Limantour SMR. This is despite 14 CCR § 632(b)(46)(A) prohibiting any take in the Estero de Limantour SMR.

Further, the entirety of Drakes Estero was designated as Marine Wilderness in 2012 following the closure of the commercial operation in its waters. The Marine Wilderness Area stretches across Drakes Estero SMCA and into Estero de Limantour SMR. Wilderness areas are expected to receive the highest levels of protection from human activity.<sup>3</sup> Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive restoration project (\$4 million) in the waters of Drakes Estero to remove the aquaculture infrastructure, thereby allowing eelgrass to recover.<sup>4</sup>

---

<sup>2</sup> Copies of the historic documents were obtained via the MPA Collaborative Network team from the Fish and Game Commission, see p. 13 of [https://drive.google.com/file/d/15PQ-D1sPJ94dnUBy8o\\_tBAHgkP96YcY6/view?usp=sharing](https://drive.google.com/file/d/15PQ-D1sPJ94dnUBy8o_tBAHgkP96YcY6/view?usp=sharing) & p. 5 of [https://drive.google.com/file/d/132etwbkrP5zkNhsBqn\\_mxAJVtWk8e69a/view?usp=sharing](https://drive.google.com/file/d/132etwbkrP5zkNhsBqn_mxAJVtWk8e69a/view?usp=sharing).

<sup>3</sup> Public Law 94-544 § 4(a).

<sup>4</sup> <https://www.pressdemocrat.com/article/news/oyster-racks-pulled-in-cleanup-of-drakes-estero/> and see also National Park Service letter, November 14, 2022, Attachment 2.



The National Park Service is in support of merging Drakes Estero SMCA and Estero de Limantour into a unified State Marine Reserve because the entire area contains a federally designated wilderness area (see November 14, 2022 letter, attachment 2).

During the [Golden Gate MPA Collaborative meeting on August 24, 2023](#), consensus between meeting participants in support of this proposal was also achieved.<sup>5</sup>

## SECTION II: Optional Information

5. **Date of Petition:** 11/30/23
6. **Category of Proposed Change**
- Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPA Section 632.
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
- Amend Title 14 Section(s): 632(b)(46); 632(b)(47).
  - Add New Title 14 Section(s):
  - Repeal Title 14 Section(s):
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  Not applicable.
9. **Effective date:** *If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: As soon as possible.*
10. **Supporting documentation:** *Identify and attach to the petition any information supporting the proposal including data, reports and other documents:*  
See index and attachments including letters of support from the National Park Service, Marin County Supervisor Dennis Rodoni, and Dr. Sarah Allen, as well as previously submitted EAC letters. We may further supplement this petition as additional information becomes available.
11. **Economic or Fiscal Impacts:** *Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:*

Fiscal impacts from this proposed change are expected to be minimal but could include lost recreational take opportunities, as well as costs associated with updating signage and outreach materials.

<sup>5</sup> Rows 50-51, <https://docs.google.com/spreadsheets/d/1Eu1efUliHZ2bazdKM5IK5UKzsIEluHEU9k9HdR1oudo/edit#gid=0>



12. **Forms:** *If applicable, list any forms to be created, amended or repealed: N/A*

**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_
- Granted for consideration of regulation change

Tracking Number

Index of Attachments Submitted re. Drakes Estero Petition by EAC, November 30, 2023

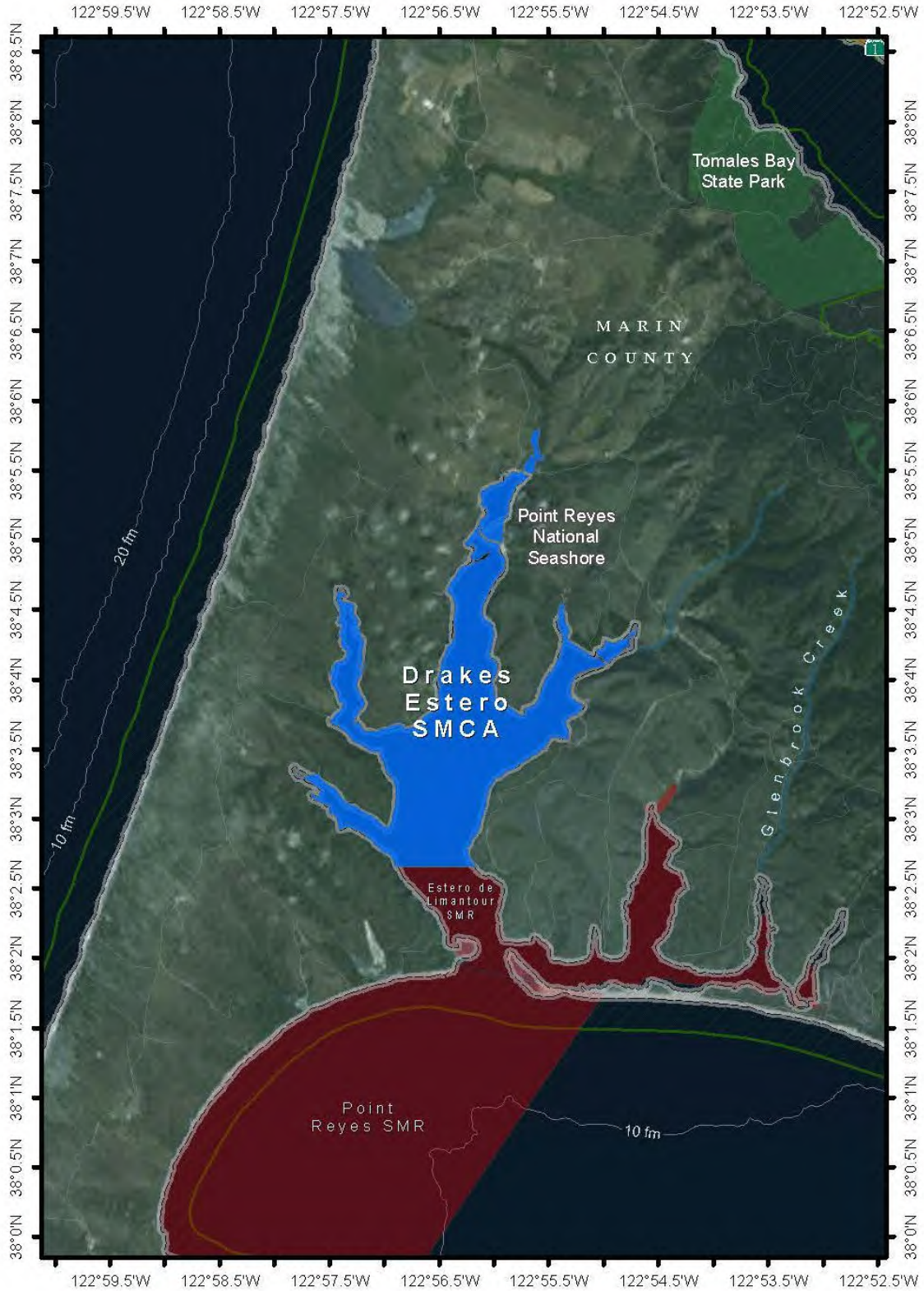
Attachment #	Date	Sender/Preparer	Description	Previously Submitted to FGC	FGC Meeting Document Link
1	11/30/23	Prepared by Environmental Action Committee of West Marin (EAC)	Map Attached to EAC's Petition re. Drakes Estero (1 page)	No	N/A
2	7/5/2023	EAC including attached letter from the National Park Service	EAC Comments to Fish and Game Commission re. MRC Agenda Item 5: MPA DMR Petition for Modification of Duxbury Reef and Drakes Estero MPAs including attachment (1) <b>EAC April 6, 2023, comments to Fish and Game Commission including EAC March 13, 2023 letter and November 14, 2022 letter from National Park Service</b>	Yes (Comment 7 to July MRC meeting documents, pp. 78-97 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
3	11/30/23	Prepared by Environmental Action Committee of West Marin (EAC)	Summary of MPA Watch Camera Data at Drakes Estero July 16 - Aug 16, 2022 (4 pages)	No	N/A
4	11/21/23	Marin County Supervisor Dennis Rodoni	Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Drakes Estero (2 pages)	No	N/A
5	11/25/23	Sarah G. Allen, PhD, Retired Senior Science Advisor National Park Service	Decadal Review Recommendations for the California North Central Marine Protected Areas (3 pages)	Yes	N/A - Was submitted 11/25/23
6	11/29/23	NGOs	Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Drakes Estero (2 pages)	No	N/A

# **ATTACHMENT 1**



# Attachment 1

Figure 1: Map Attached to EAC's Petition re. Drakes Estero  
Prepared for Submission November 30, 2023  
Sourced from historic documents



# **ATTACHMENT 2**



July 5, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Sent via Email: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

#### **Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

#### **Staff and Consultants**

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

Re. Fish and Game Commission MRC Agenda Item 5: MPA DMR  
Petition for Modification of Duxbury Reef and Drakes Estero MPAs

Dear President Sklar and Honorable Commissioners,

The Environmental Action Committee of West Marin (EAC) has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We submit this letter to request that the letter we previously addressed to the Fish and Game Commission (Commission) in support of the MPA decadal management review (DMR), submitted on April 6, 2023, also be considered a petition to the Commission pursuant to California Fish & Game Code Section 2861(a), for addition to and modification of the MPAs at Duxbury Reef and Drakes Estero. A copy of that letter is enclosed herewith. This request is being made to ensure we are compliant with any additional procedures that are entailed in the presentation to the Commission of a "petition" as contemplated in Fish and Game Code Section 2861(a), which might not have been satisfied by the April 6 DMR comment letter submittal.

Furthermore, this letter also serves as a comment on the MPA DMR (Marine Resources Committee Agenda Item 5) for the July 20th meeting. We commend the Commission for the vision of the draft prioritized recommendations dated June 12, 2023. We thank the Department of Fish and Wildlife (Department) for their hard work on this prioritization, and we generally agree with the prioritization and timelines.

As an overall comment related to the prioritization, we urge the Commission to institutionalize climate-cognizant adaptive management to ensure that management of the MPA network can respond to sea-level rise and other climate changes. We also hope that the Commission will broadly embrace recommendation 4 and support changes to the MPA network and management program. We were pleased to see that recommendation 4 was identified as a near-term priority.

As requested in our prior comments, specifically, we petition for the Commission to recommend the following additions to and modifications of the

Drakes Estero State Marine Conservation Area (SMCA) and the Duxbury Reef SMCA, as currently described in California Code of Regulations Title 14, Section 632(b)(47) and (50), respectively:

1. Change the designation of Drakes Estero SMCA to a “State Marine Reserve” as described in California Code of Regulations (CCR) Title 14 § 632(a)(1)(A).
2. Change the designation of the Duxbury Reef SMCA to a “State Marine Reserve.”
3. Extend the southern boundary of the Duxbury MPA to the most southerly tip of Duxbury Reef exposed at mean lower low water, that is, to a point at approximately 37 deg. 53.1315' N. lat, 122 deg. 41.7549' W. long.
4. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure as described in CCR Title 14 § 632(b)(49).

We also request that: (1) the letter to the Commission dated April 15, 2023, from the Greater Farallones and Cordell Bank National Marine Sanctuaries (copy enclosed) be made a part of the record in support of this petition; and (2) that EAC and others be allowed to submit further written evidence and testimony in support of this petition.

Please advise us if there is any further step(s) that should be taken by EAC and/or others to present a “petition” to the Commission pursuant to California Fish & Game Code Section 2861(a). Finally, please do not hesitate to ask for any further information that the Commission believes will assist it in addressing this petition.

We also request that the Commission clarify the process of public engagement regarding the DMR going forward. A more streamlined and intuitive comment and petition system would allow for easier public engagement and would further the justice, equity, diversity, and inclusivity goals of the Commission. Clarity would be especially helpful regarding what type of regulation changes could be considered in the DMR and what types would require their own petition.

While we understand that this may be forthcoming, it would also be helpful to have clarity related to the focus of future meetings and the Department and Commission’s proposed work plan with some additional specificity related to how the public and stakeholders can participate most effectively.

Thank you for your consideration of our comments and all your work on the DMR process. We look forward to continuing to engage including review of the staff report and participation at the July 20th meeting.

Sincerely,



Ashley Eagle-Gibbs  
Legal & Policy Director

cc: Susan Ashcraft, Marine Advisor, Fish and Game Commission  
Becky Ota, Marine Habitat Conservation Program Manager, Department of Fish and Wildlife

Attachments: (1) EAC April 6, 2023, comments to Fish and Game Commission  
(2) Greater Farallones and Cordell Bank National Marine Sanctuaries April 15, 2023, comments to Fish and Game Commission





ESTABLISHED 1971

## Board of Directors

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

## Staff and Consultants

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

April 6, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re. Agenda Item 25. Marine protected areas decadal management review

Dear President Sklar and Honorable Commissioners,

The Environmental Action Committee of West Marin (EAC) has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We submitted written comments dated March 13th in advance of the Fish and Game Commission (Commission) Marine Resources Committee (MRC) meeting (attached to this letter), as well as providing oral comments at the March 16th MRC meeting related to the decadal management review. We appreciated the hybrid meeting format, which allowed us to participate remotely.

We submit this follow up letter with locally specific boundary and designation change requests to the full Commission to facilitate discussion at the April meeting. Related to our previously submitted requests (March 13 and 16), we highlight our key requests here for discussion and prioritization at the April meeting:

- 1) Request evaluation of Drakes Estero State Marine Conservation Area (SMCA) for a designation change to a State Marine Reserve,
- 2) Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area, and



- 3) Request a science-based analysis to review a northern extension of the Duxbury Reef SMCA to Double Point Special Closure based on increased visitation by the public to the Area of Special Biological Significance.

This letter and our prior letter are also supported by prior written comments submitted by the National Park Service dated (November 14, 2022, also attached).

As a final request, we would like to gain clarity on the process for boundary and designation changes.

- 1) Specifically, is it necessary to submit a formal petition related to these aforementioned requests and correspondence? It was not entirely clear at the March MRC meeting whether a petition is required or if the Department of Fish and Wildlife is able to recommend adaptive management strategies based on the Decadal Review and submitted comments. We respectfully request clarification to facilitate effective public participation in this process.

Thank you for your dedication to adaptive management, and we look forward to the April Commission meeting and more collaboration on the adaptive management prioritization and recommendations as we approach the July MRC meeting.

Sincerely,



Morgan Patton, Executive Director



Ashley Eagle-Gibbs, Legal and Policy Director



March 13, 2023

Fish and Game Commission Marine Resources Committee  
California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

**Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

**Staff and Consultants**

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

Re. MRC Agenda Item 9: Marine Protected Areas (MPA) Decadal Management Review

Dear President Sklar and Commissioner Murray,

The Environmental Action Committee of West Marin has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We continue our support for the network as members of the Golden Gate MPA Collaborative Network, collecting human-use activity data through our local MPA Watch program, Marin MPA Watch, with partners at the Point Reyes National Seashore, and we have created a team of local volunteers who provide outreach and education as intertidal docents at Duxbury Reef State Marine Conservation Area (SMCA).

Thank you for this opportunity to submit comments on the MPA Decadal Review. We want to thank the Department of Fish and Wildlife (CDFW) and Fish and Game Commission staff and partners for the momentous achievement related to the completion of the Decadal Review and accompanying report. The report highlights the effectiveness and importance of our state's unique and precedent setting MPA network.

Before our specific comments, we would like to note that due to the flooding in Monterey County, our team is unable to travel to the in-person meetings, including the Decadal Management Review Forum. We are grateful the Marine

Resources Committee meetings will have the opportunity for hybrid participation and the Monterey County emergency highlights the continued need for hybrid meetings to ensure broad-based public engagement opportunities in the future. We look forward to viewing the Decadal Management Review Forum online and we are disappointed we will not be able to ask questions or contribute to the discussion in person.

In general, we are supportive of many of the recommendations and future steps outlined in Chapter 6; however, we have included some specific comments related to our geographic area in coastal Marin County for additional consideration. We have organized our comments by the MPA Network Performance categories noted in Chapter 6.

### **1. MPA Network Design / Boundaries and MPA Designation Changes**

We have included three specific requests below related to designation and boundary changes with additional discussion following.

**Request 1: Include condition and use change data for MPAs to provide an assessment of changed conditions (i.e. on-shore and offshore activities and uses) that would inform the need for adapting the MPA Network Design that would include boundaries and designation changes that are in alignment with today's conditions and circumstances.**

**Request 2: Request evaluation of Drakes Estero State Marine Conservation Area for a designation change to a State Marine Reserve.**

**Request 3: Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area.**

The Decadal Review needs to include a reference of site conditions of the 124 MPAs from the date of MPA designation compared to current-day conditions that include changes in surrounding on-shore or offshore commercial/recreational consumptive and non-consumptive uses, and visitation data. This information would be beneficial when analyzing information for boundary and designation changes based on changed conditions. We highlight two Marin County examples below:

#### *Example 1: Drakes Estero State Marine Conservation Area*

Drakes Estero State Marine Conservation Area (SMCA) was established at a time when a commercial aquaculture operation was in business. The commercial operator closed in 2012, and offshore and on-shore infrastructure has been removed. Drakes Estero was designated as Marine Wilderness in 2012 following the

closure of the commercial operation in its waters. Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive restoration project (\$4 million) in the waters of Drakes Estero. The Estero is one of the last fully intact wetlands in the state of California, is an Area of Special Biological Significance, and a biologically rich estuary that consists of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

On November 14, 2022, the Point Reyes National Seashore<sup>1</sup> submitted a letter to Dr. Craig Shuman, California Department of Fish and Wildlife Marine Region Manager, and to Samantha Murray, Fish and Game Commissioner, that supports a MPA designation change of Drakes Estero from a SMCA to State Marine Reserve (SMR) for the below reasons:

*2010 designation as SMCA relied on presence of commercial aquaculture operation. DOI authorization of commercial aquaculture ended in 2012, and operations ceased in 2014. Area is now Congressionally Designated Wilderness, \$4m estuary restoration completed in 2017. Recreational take of shellfish appears to be very rare, requires long kayak trips in wilderness area with no cell service and limited emergency response. Increased protections for eelgrass, estuarine biodiversity, and marine wilderness. If converted to an SMR, join Estero de Limantour into a single SMR for naming and outreach purposes.*

*Example 2: Duxbury Reef SMCA*

Duxbury Reef SMCA was established at a time when visitation to this area was very low and not many people were visiting the intertidal area. However, visitation to this MPA has been steadily and significantly increasing as previously unknown trails and beaches of Point Reyes National Seashore have begun to attract visitors to locations such as Alamere Falls. Since 2017, MPA Watch volunteers documented approximately a 70 percent increase in visitation to Duxbury Reef that continued to increase in 2020 and 2021 during the pandemic.

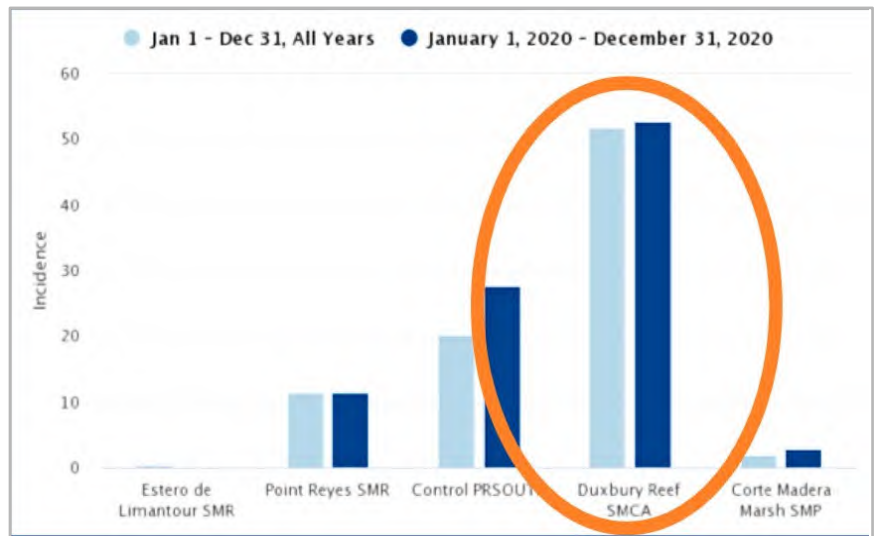


Figure 1. MPA Watch Recreational and Consumptive Activity 2014-2020 and 2020

<sup>1</sup> Letter from Point Reyes National Seashore to California Department of Fish and Wildlife, November 14, 2022

A comparison of the MPA visitation trends across all designated MPAs in coastal Marin County, Duxbury has the highest overall visitation count of all MPA Watch transects in Marin, the smallest area, and is a highly sensitive intertidal habitat.

Our MPA Watch 2020 Annual Report notes the rise in visitation in 2020:

*This MPA [Duxbury Reef State Marine Conservation Area] recorded a use rate of 29.4 activities per mile surveyed. This is an increase of 79% compared to the prior year. 11% of the observations in the MPA are on-shore consumptive. 305 incidents of hand collection of biota in the intertidal were observed in the months of June, July, and August 2020 (emphasis added). Duxbury Reef SMR has the highest use count [66%] of all MPAs surveyed by Marin MPA Watch ... in one of the smallest survey areas. Duxbury Reef is a sensitive intertidal habitat where human impacts (trampling and collecting) may have long-term negative impacts to habitat and species.*

In 2022, we established the Duxbury Docent program in partnership with Marin County Parks and Open Space which provides visitor education and collects MPA Watch human-use data. On the ground, our docents are engaging with the public and have first-hand experience in the confusion of the designation of the MPA that is leading to unintended compliance issues at this location. Specifically, we summarized below our docent experiences while interacting with visitors,

*The allowance of finfish fishing from shore and notice about the allowance of abalone take at Duxbury generates confusion in the community and among visitors about what is and is not allowed.*

At Duxbury Reef SMCA, our experience on the ground is that the permitted allowance of recreational finfish and abalone from shore is confusing to the public, and with increased visitation since 2017 this tends to lead to non-compliance that may be hindering the goals of the MLPA at this site.

The inclusion of community science data on human use, activities, and visitation data from overlapping jurisdictions, like the Point Reyes National Seashore in coastal Marin County, would provide a wealth of data that could assist in informing the adaptive management strategies of the MPA Network.

This would be especially beneficial when analyzing information for boundary and designation changes that would provide up-to-date information on changing conditions that would ensure the management of the MPAs are meeting the goals of the Marine Life Protection Act (MLPA)'s six goals<sup>2</sup>.

---

<sup>2</sup> MLPA Goals: Protect the natural diversity and abundance of marine life, and the structure, function and integrity of marine ecosystems. 1) Help sustain, conserve and protect marine life populations, including those of economic value, and rebuild those that are depleted. 2) Improve recreational, educational and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity. 3) Protect marine natural heritage, including protection of representative and unique marine life habitats in CA waters for their intrinsic values. 4) Ensure California's MPAs have



## 2. Regulatory and Framework Review / MPA Network Design:

### **Request 4: Need for inclusion of biological and environmental condition status, community science data, and ecological habitat mapping when analyzing a need for MPA designation and boundary changes.**

We support Recommendation #4 and request as part of the identification of science-based approaches to inform analysis that biological and environmental conditions, ecological habitat maps, and environmental designations (like Marine Wilderness, Areas of Special Biological Significance, etc.) are included.

We provide two examples below, Duxbury Reef and Double Point, related to immediately connected habitat areas excluded from MPA boundaries.

#### *Example 1: Duxbury Reef SMCA*

The current MPA boundaries of Duxbury Reef SMCA fail to encompass the entire reef that is exposed at a low tide. At low tide, people can walk to the portion that is outside the MPA, making it fully accessible. Figure 2 highlights the area that is part of the intertidal ecological habitat area but has been excluded from the MPA boundary.

In addition, the regulations state that the MPA seaward boundary is 1,000 feet from the seaward of mean, low, low tide, but the MPA boundary designation includes 1,000 feet from high tide. This language is ambiguous and confusing to the public.

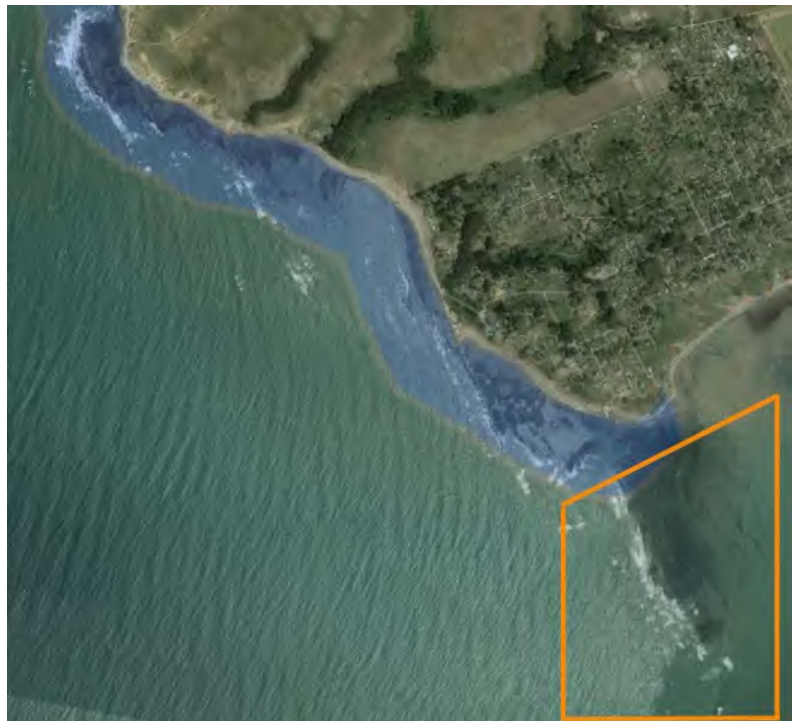


Figure 2.

Overlay of Duxbury Reef SMCA with an orange outline of the portion of the reef that is exposed at low tide that is not currently included in the MPA. A southern boundary extension of Duxbury Reef is needed to fully connect the ecological habitat area and reduce confusion for the public on what activities are allowed.

---

clearly defined objectives, effective management measures and adequate enforcement and are based on sound scientific guidelines. 5) Ensure the State's MPAs are designed and managed, to the extent possible, as a network.

*Example 2: Double Point*

North of Duxbury Reef SMCA is a Special Closure Area (Double Point) that is ecologically significant and connected to Duxbury Reef. In the November 2022 letter from Point Reyes National Seashore, they note there are concerns about the protection of seabirds, marine mammals, and concerns with kayaking disturbances of harbor seals. A long-established harbor seal monitoring program by Point Reyes National Seashore at this location includes datasets on harbor seal pupping and movements. At the time the Special Closure was established, there was little human activity and disturbance in this area until about 2017 when hiking to Alamere Falls became very popular.

A science-based analysis to review whether it would make sense to extend the Duxbury Reef MPA further north to the Special Closure should be considered with data provided by the Point Reyes National Seashore on the presence of marine mammals and disturbance events. A review of this type would inform whether there is a need to extend the Duxbury MPA boundary north or expand the Double Point Special Closure, which we think is likely warranted based on our current understanding and available data.

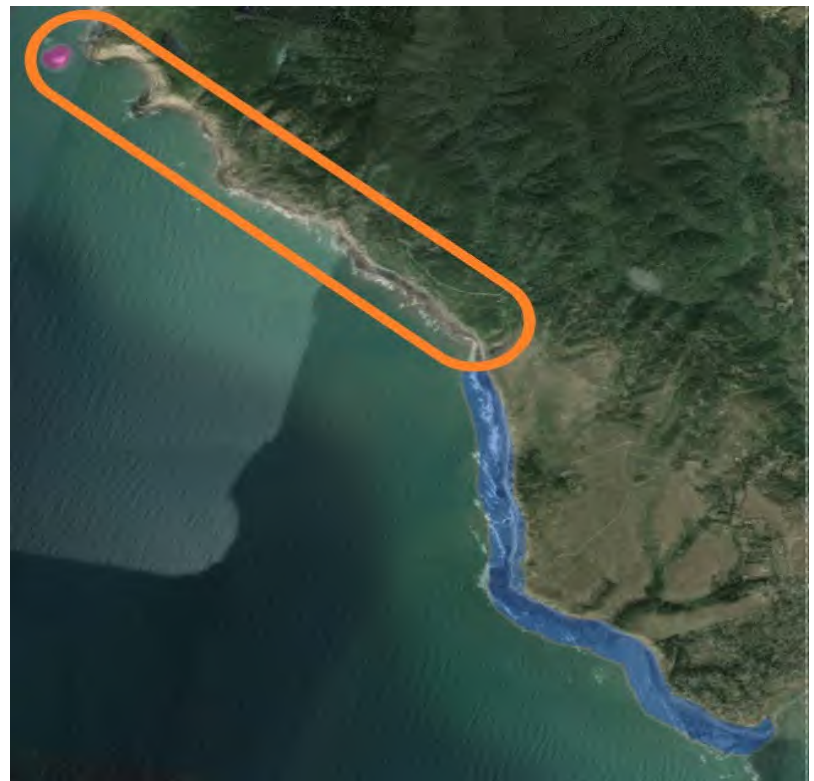


Figure 3. Image of Double Point Special Closure and Duxbury Reef SMCA boundary. The orange highlight indicates the area outside of the MPA network that is interconnected and includes an additional Area of Special Biological Significance (cove near Double Point closure).

### 3. Enforcement and Compliance:

**Request 5: Need for enforcement volunteer programs in rural areas, specifically an extension of CDFW-trained enforcement volunteers piloted in 2020 at Pillar Point due to the high visitation and poaching incidents.**

Duxbury Reef SMCA is located within a nexus of overlapping jurisdictional authority, including the CDFW, Greater Farallones National Marine Sanctuary, Point Reyes National Seashore, and Marin County Parks and Open Space. However, the only agencies who can issue citations in the areas where most people visit at Duxbury Reef are the CDFW and the Marin County Sheriff.

Duxbury Reef SMCA is a rural location with limited signage and a lack of cellular service. Prior to 2022 and the creation of our program, there was no established outreach and education program for visitors to learn about the intertidal environment and limited oversight from regulatory agencies to ensure compliance with MPA regulations.

MPAs, like Duxbury Reef SMCA, need additional resources to enhance outreach and educational efforts, otherwise, the area becomes an MPA only in name and is not meeting MLPA goals.

Since 2014, the MPA Watch program has collected human-use data including potential violation data that is not reflected in the public enforcement violation data. Specifically, the MPA Watch and Duxbury Docent programs have collected data on increased visitation prior to the noted influx of visitation due to the pandemic in 2020:

*Since 2017, MPA Watch volunteers documented approximately a 70 percent increase in visitation to Duxbury Reef, and in 2020, more than 300 observations of hand-collection of biota were documented at Duxbury Reef over a three-month period along with a 79 percent increase in visitation compared to 2019.*

*In 2022, the Duxbury Docent program completed 65 shifts. Docents engaged with more than 1,000 members of the public and successfully deterred 37 potential consumptive use violations (hand-collection of biota) during those shifts through outreach and education.*

While establishing the Duxbury Docent program is an important step, additional resources are needed from CDFW to help meet the goals of the MLPA at this MPA. For example, establishing a partnership program like the pilot program of CDFW-trained outreach volunteers at Pillar Point in 2020 would benefit the Duxbury Docent program as a partnership to improve outreach, education, and MPA regulatory compliance.

#### **4. Enforcement and Compliance:**

##### **Request 6: Need for transparency in violation tracking and numbers of visits by wardens to specific MPAs.**

It would be beneficial to the public to have a quarterly report available that lists the number of cited violations at each MPA and the number of visits by CDFW wardens to that location. This information would assist with reconciling the community science data collected by programs like MPA Watch with the enforcement data. This would assist with finding compliance and enforcement gaps and subsequently allocating resources for increased capacity, or establishing community partnerships for outreach and educational programs in the future.

#### **5. Outreach and Education:**

##### **Request 7: Need for up-to-date signage that incorporates information/access to seasonal fishing regulations.**

Throughout the MPAs located in coastal Marin County, signage continues to be a challenge. Locations within the Point Reyes National Seashore sometimes include signage that an area is an MPA and closed to fishing and collecting, while other locations include do not have signage. If there are other pressing public noticing requirements like during the pandemic, MPA signage was removed and replaced.

As CDFW analyzes what is useful for MPA signage and effectiveness related to compliance and education, it would be helpful to include options for the public to obtain up-to-date information using QR codes, including current fishing regulations and definitions. This is especially important in areas where there are overlapping jurisdictional responsibilities and within SMCAs where regulations may differ on what is allowed or not allowed. Specifically, as noted previously by our Duxbury Docent program volunteers,

*Signage is not kept up to date to reflect specific closures and hyperlinks to Fish and Game Code is not included for visitors to reference and look up current regulations.*

In general, much of the public is not up to date on the fishing seasons or what fisheries are open or closed, and the lack of information at access points creates confusion. Information for outreach and education also needs to be designed for the average recreational MPA visitor, and special signage for intertidal areas should be shared collaboratively throughout the state with intertidal groups to standardize messaging.

## **6. Tribal Coordination:**

### **Request 8: Need for pathways to increased tribal coordination and inclusion.**

We recommend increased and meaningful tribal engagement and co-management across all aspects of the MPA network including community science, building tribal capacity, improved coordination, and outreach and inclusion of all tribes, federal and non-federally recognized tribes.

## **7. Climate Resilience and Adaptation:**

### **Request 9: Need to develop pathways to integrate with California's 30x30 Initiative, climate resilience, and adaptation goals.**

We are actively engaged in coastal resiliency planning and the state's 30x30 implementation. Related to 30x30, we hope to continue the dialogue around how our MPA network intersects with California's 30x30 goals. Careful coordination is required between all these goals and planning processes to ensure the best outcome.

The Fish and Game Commission should work towards climate-resilient MPAs through an equitable, science-based process that is adaptive and includes additional monitoring metrics, connecting to the state's long-term monitoring goals. Our MPAs must be climate ready. It is important that the CDFW and the Fish and Game Commission consider the need for our MPA network to adapt to sea level rise, as wetland and public trust boundaries shift. The MPAs can also serve as important climate refugia sites.

## **8. Public Engagement and Timeline:**

### **Request 10: Outline the opportunities for public engagement and timeline for consideration of incorporation of public comments on the Decadal Review.**

We are grateful for the opportunity to comment on the Decadal Review but would like clarification from CDFW and the Fish and Game Commission on the recommended pathways to ensure that concerns raised in this comment letter are considered for inclusion in the adaptive management plans.

We also raise specific boundary and designation change requests that are localized to our geographic region and clarification on how those items will be considered and if it is appropriate as part of this process or would need to be raised independently of the Decadal Review.



## Summary of Requests

**Request 1: Include condition and use change data for MPAs to provide an assessment of changed conditions (i.e. on-shore and offshore activities and uses) that would inform the need for adapting the MPA Network Design that would include boundaries and designation changes that are in alignment with today's conditions and circumstances.**

**Request 2: Request evaluation of Drakes Estero State Marine Conservation Area for a designation change to a State Marine Reserve.**

**Request 3: Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area.**

**Request 4: Need for inclusion of biological and environmental condition status, community science data, and ecological habitat mapping when analyzing a need for MPA designation and boundary changes.**

**Request 5: Need for enforcement volunteer programs in rural areas, specifically an extension of CDFW-trained enforcement volunteers piloted in 2020 at Pillar Point due to the high visitation and poaching incidents.**

**Request 6: Need for transparency in violation tracking and numbers of visits by wardens to specific MPAs.**

**Request 7: Need for up-to-date signage that incorporates information/access to seasonal fishing regulations.**

**Request 8: Need for pathways to increased tribal coordination and inclusion.**

**Request 9: Need to develop pathways to integrate with California's 30x30 Initiative, climate resilience, and adaptation goals.**

**Request 10: Outline the opportunities for public engagement and timeline for consideration of incorporation of public comments on the Decadal Review.**

## Conclusion

Thank you for the opportunity to comment on the Decadal Review and for your consideration of our comments. We look forward to additional dialogue in the coming months as the public can comprehensively engage and participate in the pathways forward that will inform the future adaptive management decisions that help to ensure an inclusive, responsive, and resilient MPA Network.

Sincerely,

A handwritten signature in black ink, appearing to read 'MP', with a long horizontal flourish extending to the right.

Morgan Patton  
Executive Director  
Environmental Action Committee of West Marin

cc: Susan Ashcraft, Senior Environmental Scientist and Marine Advisor, California Fish and Game Commission; Melissa A. Miller-Henson, Executive Director, California Fish and Game Commission; Becky Ota, Marine Habitat Conservation Program Manager, California Department of Fish and Wildlife; Craig Shuman, Marine Region Manager, California Department of Fish and Wildlife; and Dennis Rodoni, Marin County Supervisor District 4



# United States Department of the Interior



NATIONAL PARK SERVICE  
Point Reyes National Seashore  
1 Bear Valley Road  
Point Reyes Station, CA 94956  
Department of the Interior Region 10

IN REPLY REFER TO:

L7617

November 14, 2022

Craig Shuman, Marine Region Manager, CDFW

[craig.shuman@wildlife.ca.org](mailto:craig.shuman@wildlife.ca.org)

Samantha Murray, President, California Fish and Game Commission

[samanthamurrayfgc@gmail.com](mailto:samanthamurrayfgc@gmail.com)

Dear Mr. Shuman and President Murray:

The National Park Service (NPS) strongly supports the continued science-based and stakeholder driven designation and management of the most significant biodiversity focused Marin Protected Area (MPA) network in the United States. We anticipate the 10-year review will strengthen and reinforce the unparalleled benefits to protecting California's unique ecologically and economically important and irreplaceable marine biodiversity.

The NPS participated in the 2008 – 2009 stakeholder working groups recommending proposed Network of MPAs for the North-Central Coast. Since that time, NPS continues to support and conduct protection, education, monitoring, and research in the four State MPAs that overlap with the boundaries of Point Reyes National Seashore: Estero de Limantour State SMR, Drakes Estero SMCA, the Point Reyes SMR, and Duxbury Reef SMCA. Similarly, we also protect and monitor seabird and marine mammal populations in the three special closures within park boundaries: Point Reyes Headlands, Point Resistance Rock, and Double Point/Stormy Stack. We are proud to help protect and monitor these MPAs that both stakeholder subgroups overwhelmingly concurred on the Commission enacted MPA designations along the Marin County coastline.

The biodiversity protections established by these seven MPAs within the boundaries of Point Reyes National Seashore are key components in the NPS mission to “...*preserve unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.*” Importantly, the majority of Point Reyes National Seashore's outer coast out to ¼ mile from shore is Congressionally designated as Potential Wilderness, which restricts commercial activities (including commercial fishing) and motorized equipment (including motorboats). These federal marine wilderness areas overlap partially or entirely with all seven State MPAs in Marin County.

Our continued support and engagement with the State MPA designations is summarized below where NPS, in collaboration with many partners, conducts ecological restoration, ecological monitoring, human use monitoring, research, protection, and education.

**Table 1: Summary of National Park Service programs and projects in the seven State MPAs that overlap with NPS waters at Point Reyes National Seashore.**

<b>State MPA</b>	<b>Ecological Restoration</b>	<b>Ecological Monitoring</b>	<b>Human Use Monitoring</b>	<b>Research</b>	<b>Education</b>	<b>Protection</b>
Drakes Estero SMCA	X	X	X	X	X	X
Estero de Limantour SMR				X	X	X
Point Reyes SMR	X	X	X	X	X	X
Duxbury Reef SMCA		X	X	X	X	X
Point Reyes Headlands Special Closure		X	X	X	X	X
Point Resistance Rock Special Closure		X	X		X	X
Double Point/Stormy Stack Special Closure		X	X	X	X	X

Recent and ongoing NPS investments in these State MPAs include:

- \$4m restoration of the Drakes Estero SMCA in 2016-2017 removing 3.6m lbs. of aquaculture debris and continued annual monitoring of eelgrass restoration.
- Annual harbor seal and/or elephant seal monitoring in all the MPAs (except Estero de Limantour).
- NPS Visitor and Resource Protection patrol and response at all MPA sites, including vessel response and coordination with Marin County Sheriff and CDFW game wardens.
- NPS rocky intertidal monitoring at the Duxbury Reef SMCA as well as additional reference sites throughout the park
- NPS and Partner Rocky Intertidal habitat mapping for oil spill response and climate change tracking.
- Ashy Storm-Petrel Monitoring at the Double Point/Stormy Stack Special Closure
- Logistical support for USFWS Seabird Monitoring at five of the seven MPAs.
- \$250,000 in funding to match OPC funded ROV fish and invertebrate surveys at the Point Reyes Headlands SMR (via UCSD).
- Funding to supplement and support seafloor habitat mapping between Tomales Point and Duxbury Reef to support the MPA stakeholder working groups and science teams (via Moss Landing Marine Lab).
- Funding supporting UC Davis research developing MPA larval dispersal models (Botsford Lab) in the Point Reyes region used by the MPA Science advisory Team.
- Endangered Black Abalone Restoration research (with UCSC) at the Point Reyes SMR and Point Reyes Headlands Special Closure.
- Hosting regular joint law enforcement trainings on MPA law, science, policy, and emerging issues.
- Co-development and support for of an MPA Watch program for Marin County that covers all the MPAs.

- Advising on an MPA-intertidal docent program at Duxbury Reef SMCA.
- MPA science, policy, and protection education at NPS visitor centers, interpretive programs and media.

NPS scientists, interpreters, law enforcement and partners regularly work and perform outreach, research and monitoring in these seven State MPAs. Based on our intimate long-term understanding of these areas and to continue support for the NPS Mission and Federal wilderness policies, we respectfully submit our MPA designation recommendations in Table 2 as CDFW and the Commission undergoes the 10-Year MPA review.

**Table 2: National Park Service’s State MPA recommendations for MPA 10-year review.**

State MPA	NPS Recommendation	Rationale
Drakes Estero SMCA	Convert from SMCA to SMR	2010 designation as SMCA relied on presence of commercial aquaculture operation. DOI authorization of commercial aquaculture ended in 2012, and operations ceased in 2014.  Area is now Congressionally Designated Wilderness, \$4m estuary restoration completed in 2017. Recreational take of shellfish appears to be very rare, requires long kayak trips in wilderness area with no cell service and limited emergency response. Increased protections for eelgrass, estuarine biodiversity, and marine wilderness.  If converted to an SMR, join with Estero de Limantour into a single SMR for naming and outreach purposes.
Estero de Limantour SMR	No Change/or merge with proposed Drakes Estero SMR	Protection of eelgrass and estuarine biodiversity.
Point Reyes SMR	No Change	Continued protection of marine biodiversity, including Seabirds, Marine Mammals, Black Abalone
Duxbury Reef SMCA	Continue as SMCA or Convert to SMR	NPS staff observe periodic illegal take of invertebrates after 12 years despite SMCA status. Full SMR status would clarify regulations and ease enforcement/education needs. Premier site for intertidal and ocean education in Marin County. NPS and UCSC long-term intertidal monitoring sites.
Point Reyes Headlands Special Closure	No Change	Protection of Seabirds, Marine Mammals, Black Abalone
Point Resistance Rock Special Closure	No Change	Protection of Seabirds. NPS has concerns about boating and kayaking disturbances. However, these are generally due to the public not following existing regulations.
Double Point/Stormy Stack Special Closure	No Change	Protection of Seabirds, Marine Mammals. NPS has concerns about boating and kayaking disturbances. However, these are generally due to the public not following existing regulations. NPS continues to monitor harbor seals outside the special closure for disturbance events.



Please contact NPS Cooperative Ecosystems Studies Unit Science Advisor Ben Becker at [ben\\_becker@nps.gov](mailto:ben_becker@nps.gov) if you would like any additional supporting information on NPS MPA support activities or our MPA recommendations.

Sincerely,

Anne Altman  
Acting Superintendent

# **ATTACHMENT 3**

**Attachment 3**

**Prepared for Submission November 30, 2023 with EAC's Petition re. Drakes Estero**

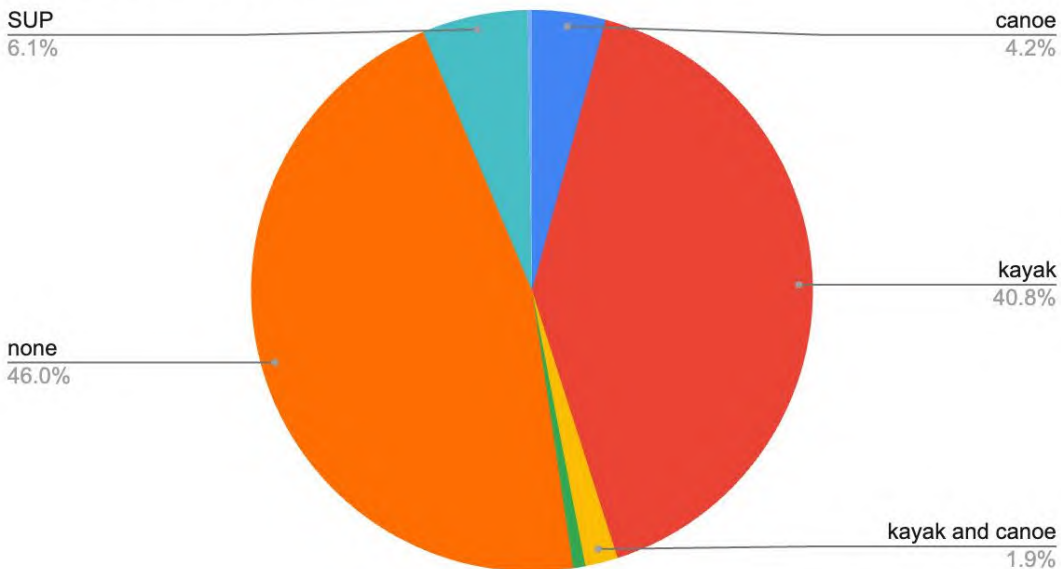
**Summary of MPA Watch Camera Data at Drakes Estero  
July 16 - Aug 16, 2022**

Drakes Estero is a destination for harvest and collection by visitors. Environmental Action Committee of West Marin installed wildlife cameras (Plotwatcher Pro) at Drakes Estero as part of the Marin MPA Watch program, in order to assess the usage of the boat launch and activity in the Estero. Between July 16th and August 16th of 2022, camera data was analyzed and recorded, providing counts of boat and recreational usage and are reported here as follows. A number of the boat observations included people bringing buckets and coolers, returning again on consecutive days. Buckets, together with coolers are indicative of use for harvest and collection of marine life, rather than pure recreation. Clamming is currently allowed by MPA regulations in the SMCA, but we are unable to see whether they enter the SMR for clamming and how the people conduct their activities because of the remote setting. Drakes Estero is now a Marine Wilderness, but was not so when the MPA was created.

**426 Uses Observed In One Month, July 16 - August 16, 2022:**

Kayak	174
Canoe	18
SUP	26
No boat	196
Kayak and Canoe	8
Kayak and SUP	3
Wind Surf	1

**Count of Boat Type**



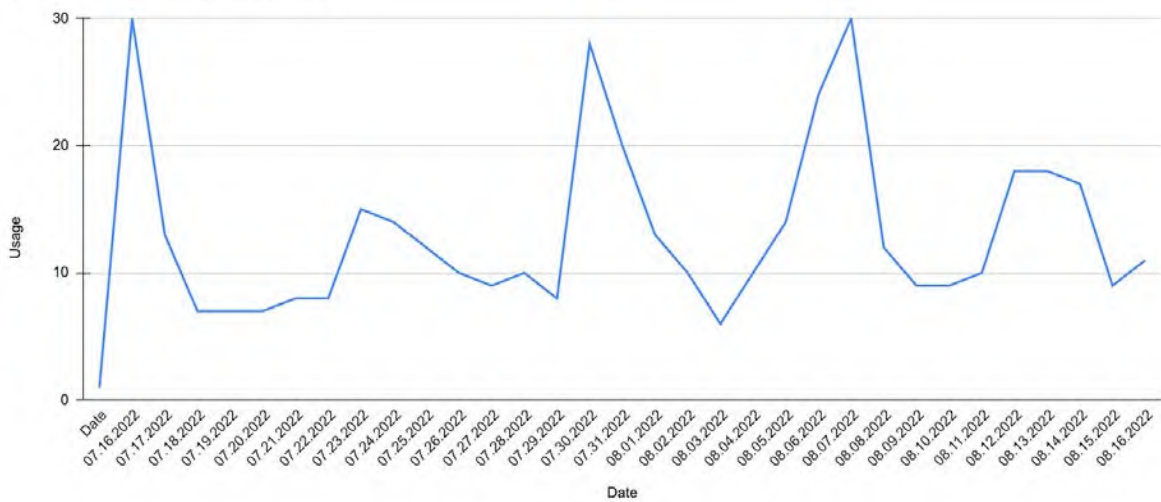
**468 Boats Observed Using the Boat Launch In Total:**

(some parties leaving and launching are the same on the same day, but each were counted here as distinct observations.)

- 220 launching
- 224 leaving
- 5 N/A

**196 Recreation Visitors (not using boats)**

Boat Launch Usage Frequency



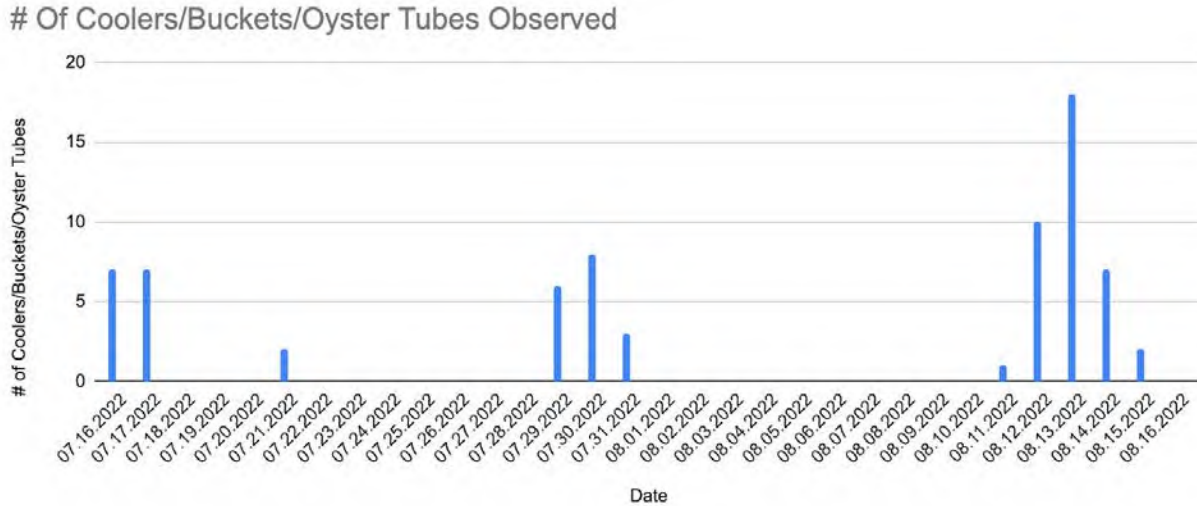
**Possible Harvesting occurs in Drakes Estero as evidenced by presence of buckets and coolers.** They would be potentially poaching if they harvested in the SMR portion of Drakes Estero or if they harvest anything other than clams in the SMCA.:

**44 Boats Observed With Use of Buckets/Coolers/Oyster tubes:**

Kayak	23
Kayak and Canoe	18
Canoe	3
None	1

- 35 boats counted leaving the Estero
- 9 counted launching

## Roughly 74 buckets/coolers/oyster tubes observed



**11 days of potential harvesting observed out of 31 days = 35.5%**

**23 potential harvesting observations among 426 uses of boat ramp = 5.4%**

### Multiple of the same groups reported:

- Multiple occurrences of large white SUV and minivan group with buckets/coolers (raises a question of whether it could be small scale commercial activity)
- Same group of 2/3 green canoes and yellow/blue kayaks
- Two occurrences of possibly small, motored boats

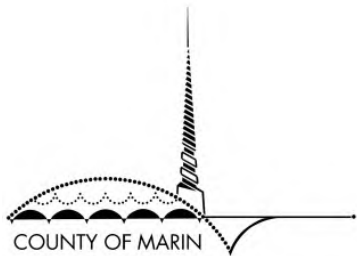
Mostly every two weeks for a couple days in a row, the majority of buckets and coolers were observed during the presence of large groups. These groups usually had 2-4 cars with kayaks and canoes. They appear to be repeated visitations by the same groups, most likely 2-3 different groups with common occurrences of the same boats, cars and gear. Most buckets and activity observed was leaving the boat launch, and frequently the camera never caught the arrival of the cars/boats using these buckets to the boat launch. This implies a very early start, before 6:00 am when the camera is set to begin recording photos each day. Most incidents occurred between 6:00-8:00 am for launches and 10:00 am -1:00 pm for leaving the boat ramp. The scale and pattern of the incidents and the frequency of events in one month appears significant. The Estero had high visitation (426 occurrences of Boat Launch use), and while the percent of possible harvesting in the Estero is low when comparing the overall launch usage, there were 11 days when buckets and coolers were present resulting in a 35.5% frequency of days where potential harvesting is occurring.



Screenshot example of camera data review showing people exiting Drakes Estero with buckets. Captured on July 30, 2022, at Drakes Estero Boat Launch.



# **ATTACHMENT 4**



Marin County Civic Center  
3501 Civic Center Drive  
Suite 329  
San Rafael, CA 94903  
415 473 7331 T  
415 473 3645 F  
415 473 6172 TTY  
DRodoni@marincounty.org  
www.marincounty.org/bos

November 21, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Drakes Estero**

Dear President Sklar and Commissioner Murray,

I am pleased to extend my support for the Environmental Action Committee of West Marin's Petition to the Fish and Game Commission for a regulation change at Drakes Estero State Marine Conservation Area (Drakes Estero SMCA).

Drakes Estero contains one of the last fully intact wetlands in the state of California and is a biologically rich estuary consisting of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

Currently, in Drakes Estero, it is lawful to harvest clams recreationally. To more effectively protect Drakes Estero's biologically rich marine life for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" (e.g., harvest, disturbance, and collection) to Drakes Estero's habitat and species, we urge the California Fish and Game Commission to modify the existing SMCA regulation by changing the designation of Drakes Estero from SMCA to State Marine Reserve (SMR) as described in California Code of Regulations (CCR) Title 14 § 632(a)(1)(A), in which no take is allowed.

Drakes Estero SMCA was established in 2010 when a commercial aquaculture operation was in business. As referenced in the National Park Service support letter, the 2010 designation as SMCA relied on the presence of commercial aquaculture operations. Department of Interior authorization of commercial aquaculture ended in 2012, and operations ceased in 2014. Drakes Estero was designated as Marine Wilderness in 2012. Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive restoration project in the waters of Drakes Estero.

My office strongly supports efforts to align regulations across jurisdictions to protect resources that align agency enforcement, education, and public safety initiatives for the general public.

My office enthusiastically supports California's Marine Protected Area (MPA) Network and its goals for increasing MPA awareness and understanding, facilitating MPA regulatory compliance, supporting enforcement, and encouraging informed enjoyment and stewardship of MPAs.

Sincerely,

A handwritten signature in black ink, reading "Dennis Rodoni", enclosed in a light gray rectangular box.

Dennis Rodoni  
Marin County Supervisor, District 4

# **ATTACHMENT 5**



November 25, 2023

To:

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244  
[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

From:

Sarah G. Allen, PhD  
[REDACTED]  
[REDACTED]  
[REDACTED]

Re: Decadal Review Recommendations for the California North Central Marine Protected Areas

Dear President Sklar and Honorable Commissioners:

The California Marine Life Protection Act has been a model for other states and countries on how to establish a network of MPAs and provide protection to critical species and ecosystems that are fundamental to the biodiversity and economic health of California. Designation also involves periodic reevaluation and adaptive management of the sites. You are currently reviewing the North Central Coast Marine Protected Areas (MPAs) for the first decadal evaluation, and I wish to comment on and contribute to your review. For 50 years, I have studied marine life in California with an emphasis on marine birds and mammals, and was a scientist on the Scientific Advisory Team with expertise in marine mammals during the initial selection of sites within the North Central Coast Region. Twenty-six of those years, I was employed with the U.S. National Park Service as an ecologist and later as Science Program Lead for the Pacific West Region. During that time, I served on numerous federal/state collaborative committees and working groups, including, but not limited to, representative for the National Park Service on the staff committee for the California Biodiversity Council and for the nascent Parks and Protected Areas working group. While still working with and since retiring from the National Park Service in 2019, I have continued to study marine birds and mammals throughout the region, and am co-author of the University of California Press *Field Guide on Marine Mammals of the Pacific*.

My recommendations based on professional experience and continued study of pinniped and seabird colonies are as follows:

1. **Expand all Special Closure Areas** in the North Central Coast Region from 300 ft. to 1000 ft. to provide better protection for nesting seabirds including at North and Southeast Farallon Islands, Point Reyes Headlands, Point Resistance Rock, Double Point/Stormy Stack, and Egg Rock. From my years of studying nesting seabirds, I have noted that birds may begin reacting to boats as far as 1000 ft. away by head bobbing, and will leave eggs and chicks at shorter distances. Additionally, during surveys over the past several years, I have directly observed fishing boats disturbing nesting seabirds beyond 300 ft. at Double Point/Stormy Stack, and violating the 300 ft. buffer. When disturbing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls, and a single disturbance can affect the productivity for an entire nesting season if seabirds do not return.

**2. Expand the Duxbury Reef MPA north** to include the Double Point/Stormy Stack Special Closure. The marine ecosystems of this area are exceptional as documented in its designation as an Area of Special Biological Significance (see Chan 1979). Double Point is home to one of the largest harbor seal (*Phoca vitulina*) breeding colonies in the state of California and to a significant seabird nesting site on Stormy Stack and the adjacent mainland cliffs. Ashy Storm Petrels (*Hydrobates homochroa*) a species of Conservation Concern in California, nest at this site, one of only a few breeding sites in the state. Black Oystercatchers (*Haematopus bachmani*), also nest there and are designated by the California Audubon Society as a Climate Endangered species because of their vulnerability to sea level rise. Other significant seabirds include >1000 Common Murres (*Uria aalge*), hundreds of cormorants, and tens of Pigeon Guillemots (*Cepphus Columba*), an indicator species of MPA recovery because of their delimited foraging/nesting habitat. Additionally, several hundred Brown Pelicans (*Pelecanus occidentalis*) roost at the site during the year.

Current protections of Stormy Stack and Double Point are insufficient. During surveys over the past several years, I have observed commercial party and recreational fishing boats violating the 300 ft. buffer and also disturbing nesting seabirds even beyond 300 ft. Fishing party boats on occasion produce noise through loud speakers as they circle around the area, which disturbs seabirds and seals at distances greater than 300 ft. By flushing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls. One disturbance can affect the productivity for an entire breeding season if seabirds do not return to lay another egg.

**3. Expand the Duxbury Reef MPA south** to include the southern extension of Duxbury Reef that currently is not protected from people walking over and harvesting invertebrates and algae. There is a small but significant harbor seal colony on the southern extension of the reef that serves as a way station for seals to rest while traveling north to Point Reyes from San Francisco Bay and out to the Farallon Islands (Green et al. 2006). The seals are present consistently year round, and every year several pups occur there.

**4. Elevate the expanded Duxbury-Double Point MPA to State Marine Reserve.** The sensitivity and biological diversity of both Duxbury Reef and Double Point/Stormy Stack deserve full Marine Reserve status, as described in above points 1-3. Current marine reserves in California protect only approximately 9% of the state waters from harvest. The area has a long scientific history documenting biodiversity and significance, and consequently, is a good candidate for elevating to full reserve status (Chan 1979). Recently, the College of Marin broke ground to rebuild the historical Bolinas Field Station, which will continue and expand on the long history of scientific research about the coastal ecology of the area.

**4. Combine Drakes Estero SMCA with the Estero de Limantour State Marine Reserve** in order to extend reserve status protection to the middle and upper reaches of Drakes Estero. Drakes and Limantour esteros form a complex of tidal sand bars where harbor seals give birth and rest onshore year round, and is one of the largest concentrations of seals in California (Codde & Allen 2015). Recreational take of clams is the only activity allowed in this SMCA. Currently under this designation, seals are regularly disturbed by recreational clam diggers who come by kayak to dig for clams on the sand bars where the seals haul out. These sandbars are inaccessible to people on foot from the mainland and are only exposed and accessible to the seals during medium to low tides. During the harbor seal pupping season (March 1-June 30), non-motor boat access in the estero is restricted by Point Reyes National Seashore regulations, and restricted to all motor boats year round because Drakes Estero is within federally designated Wilderness. Nevertheless, there is no restriction to non-motor boats after June 30 when seals are hauling out to molt their fur. The molt (June-August) is energetically costly to the seals, requiring longer times to rest

onshore. The National Park Service supported conversion from SMCA to SMR to California Fish and Game Commission in a detailed letter dated November 14, 2022.

5. **Create a Special Closure** of 1000 ft. at Northwest Cape Rocks, north of Fort Ross. These rocks have significant seabird nesting colonies and have one of the few Steller sea lion (*Eumetopias jubatus*) breeding colonies in the state (<https://www.fortross.org/animals/steller-sea-lion>). Steller sea lions were delisted from the federal endangered species list several years ago; however, the California sub-population continues to decline with an estimate of only around 2,000 (NOAA Stock Assessment 2020). The site was proposed for MPA and Special Closure designation when I was an advisor on the Science Advisory Team, but was not included at that time. Since then, the Steller sea lion colony has continued to decline at this location and state-wide.

California has been able to rebuild some of the unique and critically significant coastal ecosystems over the past decade through the establishment of an MPA network. Nevertheless, only 16% of state waters are designated as MPAs and there are only 14 Special Closures statewide. The 30x30 California Initiative advocates for 30% of the state be protected by 2030. Increasing the number and areal extent of MPAs in state waters will be a positive action to meet the goals of the initiative and a prudent management strategy to meet the immense challenges from changes in climate that already are harming California's marine resources.

Thank you for your service to protect the exceptional resources of California.

Sincerely,



Sarah G. Allen, PhD  
Retired Senior Science Advisor  
National Park Service



cc: Ashley Eagle-Gibbs, Environmental Action Committee of West Marin

## References

Chan, G. 1979. California Marine Waters Areas of Special Biological Significance Reconnaissance survey reports. Double Point and Duxbury Reef. California State Water Resources Control Board. Water Quality Monitoring Report No. 79-14 and 15.

Green, D.E., Grigg, E., Allen, S., & Markowitz, H. 2006. Monitoring the potential impact of the seismic retrofit construction activities at the Richmond-San Rafael Bridge on harbor seals (*Phoca vitulina*): May 1, 1998 – December 31, 2004. Final Report, IHA 11/19/03-11/18/04. 100pp.

Codde, S. & S. Allen. 2015. Pacific harbor seal (*Phoca vitulina richardsi*) monitoring at Point Reyes National Seashore and Golden Gate National Recreation Area: 2013 annual report. Natural Resource Report NPS/SFAN/NRR—2015/919. National Park Service, Fort Collins, Colorado.

# **ATTACHMENT 6**



CALIFORNIA  
ACADEMY OF  
SCIENCES



Resource Renewal Institute  
40 Years. Innovation for a Sustainable Future.



November 29, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Drakes Estero

Dear President Sklar and Commissioner Murray,

The undersigned organizations submit these comments in support of EAC's petition regarding changes to the regulations for Drakes Estero State Marine Conservation Area (SMCA). The undersigned organizations are committed to coastal protection and the marine protected area (MPA) network.

Drakes Estero contains one of the last fully intact wetlands in the state of California, is a biologically rich estuary that consists of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

Currently, in Drakes Estero, it is lawful to recreationally harvest clams. To more effectively protect Drakes Estero's biologically rich marine life for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" (e.g., harvest, disturbance, and collection) to Drakes Estero's habitat and species, we urge the California Fish and Game Commission to modify the existing SMCA regulation by **changing the designation of Drakes Estero from SMCA to State Marine Reserve (SMR)** as described in California Code of Regulations (CCR) Title 14 § 632(a)(1)(A), in which no take is allowed.<sup>1</sup>

Drakes Estero SMCA was established in 2010 at a time when a commercial aquaculture operation was in business. As referenced in the National Park Service support letter, the 2010 designation as SMCA relied on the presence of commercial aquaculture operations. Department of Interior authorization of commercial aquaculture ended in 2012, and operations ceased in 2014. Drakes Estero was designated as Marine Wilderness in 2012. Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive restoration project in the waters of Drakes Estero.

The SMCA regulations at Drakes Estero allow for the harvest of clams. Currently, recreational take of

---

<sup>1</sup> Protection of Resources in MPAs and MMAs, as defined in Public Resources Code Section 36710: (A) State Marine Reserves: In a state marine reserve, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a scientific collecting permit issued by the department pursuant to Section 650 or specific authorization from the commission for research, restoration, or monitoring purposes.



shellfish sometimes occurs, though it requires long kayak trips in the wilderness area with no cell service and limited emergency response. Because the commercial aquaculture no longer exists, stronger protection afforded by establishing it as an SMR would align with its pristine condition and its connectivity with adjacent Estero de Limantour SMR and Point Reyes SMR and would protect the highly sensitive estuarine ecosystem, including extensive harbor seal pupping and haul out areas.

We enthusiastically support California’s MPA Network. In the case of Drakes Estero, we assert that strengthened protection is urgently needed to preserve the estuary’s marine life and habitat for future generations.

Sincerely,

Chance Cutrano Director of Programs Resource Renewal Institute	Laura Deehan State Director Environment California Research and Policy Center
Neal Desai Senior Program Director, Pacific Region National Parks Conservation Association	Suzanne Hume Educational Director & Founder CleanEarth4Kids.org
Megan Isadore Executive Director River Otter Ecology Project	Scott D. Sampson, Ph.D. Executive Director California Academy of Sciences
Terri Thomas President Marin Conservation League	Tomas Valadez CA Policy Associate Azul
Robert Vergara Roger Arliner Young (RAY) Ocean Conservation Fellow Natural Resources Defense Council	



Tracking Number: (2023-32MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

*Name of primary contact person:* Ashley Eagle-Gibbs, Environmental Action Committee of West Marin (EAC)

*Address:* 65 3rd St Suite 12, Point Reyes Station, CA 94956

*Telephone number:* (415) 663-9312

*Email address:* [ashley@eacmarin.org](mailto:ashley@eacmarin.org)

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:** Authorities cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

### **3. Overview (Required) - EAC requests the Commission change the status of Duxbury Reef from a State Marine Conservation Area (SMCA) to a State Marine Reserve (SMR) because of documented difficulty of interpretation and enforcement of current regulations and the resulting large incidence of take. In addition, declines have been observed in marine life abundance and biodiversity. EAC also requests the Commission extend the southern boundary further south and the northern boundary to Double Point Special Closure to increase habitat protections to fully cover the entirety of the contiguous reef habitat.**

Applying an SMR designation to the area currently known as Duxbury Reef SMCA and expanding that new SMR north and south so as to encompass the entirety of the Duxbury Reef habitat is consistent with the original goals of the Marine Life Protection Act (MLPA) including goals 1, 2, 3, and 4 related to preserving natural diversity, sustaining marine life populations, protecting marine habitats for their intrinsic value, and improving recreational and educational



opportunities while minimizing human disturbance.<sup>1</sup> It is also supported by regional partners including the Greater Farallones and Cordell Bank National Marine Sanctuaries.

4. **Rationale (Required)** - *Describe the problem and the reason for the proposed change:*

Duxbury Reef is the largest shale reef in California, and one of the largest in North America. The extensive tidepool network hosts a rich diversity and abundance of marine species, many of which are sheltered in numerous holes and crevices made possible because of the relatively soft shale that composes it. Invertebrates, algae, fish, and visiting land, shore, and seabirds thrive and feed there, and are interconnected with highly productive rocky and kelp habitats just offshore. Unfortunately, the entire habitat of Duxbury Reef is not actually within the current boundaries of the Duxbury Reef SMCA. In 2008, there was a proposal to create the Double Point SMCA which would include more of the Duxbury Reef habitat north of the current Duxbury Reef SMCA. Double Point SMCA was never created, leaving that critical habitat outside of any Marine Protected Area (MPA). Today, ongoing observations of take and current federal designations of the areas around the Duxbury Reef habitat demonstrate that protections provided by the MPLA for the entirety of the Duxbury Reef habitat must be reconsidered. In that goal, EAC would like to make three requests regarding Duxbury Reef SMCA.

Three parts of this request include:

1. **Change SMCA to SMR:** Current regulation 14 CCR § 632(b)(50)(B) allows for the recreational take of finfish from shore and abalone when allowed by the California Department of Fish and Wildlife (CDFW) (currently the abalone fishery is closed until 2026).

A) Current regulations cause confusion and result in more take than the regulations allow. In other words, the allowance of some take at Duxbury Reef is confusing to many visitors and results in a high count of take violations. People are confused about why you can take finfish and abalone, but not other invertebrates or algae. Most people also do not read the existing signs. Confusion is generated especially when visitors see people fishing from shore by hook and line or with the poke pole and bucket used to fish monkeyface eel (*Cebidichthys violaceus*) in the tidepools. In addition, Duxbury Docents<sup>2</sup> have observed fisher people collecting mussels from the reef to use as bait for fishing. According to feedback provided during the August 24, 2023 Golden Gate Collaborative meeting, damage to the reef also results when people have been observed using crowbars and tire jacks to take purple sea urchins (*Strongylocentrotus purpuratus*),<sup>3</sup> which have nested in holes they have carved in the rock.

B) Increased visitation and violations: Marin MPA Watch data shows significantly greater visitation and potential violations relative to other monitored MPA sites in Marin County, including take and potential poaching incidents. The rate of visitation and potential poaching increased significantly since 2017. Visitation declined somewhat after the

<sup>1</sup> <https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA>

<sup>2</sup> In collaboration with Marin County Parks and Open Space, EAC runs a docent program at Duxbury Reef.

<sup>3</sup> See row 55, <https://docs.google.com/spreadsheets/d/1Eu1efUliHZ2bazdKM51K5UKzsIEluHEU9k9HdR1oudo/edit#gid=0>



COVID pandemic emergency but remains elevated and potential poaching incidents remain high.

C) Loss of diversity and biomass: Professionals, local community members, and visitors have commented that they have noticed a loss in diversity and number of organisms at Duxbury Reef in the past 10 years, especially the area that is most heavily visited. Partly this is due to an increase in visitation, but the harvest of organisms is a contributor to loss that adds undue stress on a vulnerable reef community.

To protect this highly vulnerable and biologically rich intertidal community, also designated as an Area of Special Biological Significance, it is of vital importance that the designation for Duxbury Reef should change to State Marine Reserve, where all take is prohibited. This will reduce confusion, make educating visitors easier and compliance easier for visitors, and will better protect marine life. Damage to the marine populations is compounded by increasing threats due to climate change and the loss of habitat from sea level rise, which together are creating changed ocean conditions since the MPA was first designated.

2. **Expand the boundaries:** The current boundaries of Duxbury Reef SMCA defined by 14 CCR § 632(b)(50)(A) do not cover the entirety of the Duxbury Reef habitat.

A) **Expand MPA south:** Duxbury Reef habitat extends south of the MPA boundary into an intertidal area that is not currently protected by the MPA. People access this area at very low tide, or by boat. Fisher people can fish near the intertidal reef and collectors can walk back through the protected part of the reef with their buckets of collected marine life, causing an enforcement challenge. There is also a regular, daily harbor seal haul out on this southern section of the reef. It has been reported that boaters (fishers, collectors, and recreational) have been observed in this area flushing harbor seals into the water from their haul-out resting site. This southern extension area is contiguous and ecologically connected with the Duxbury Reef MPA habitat. Many rocky intertidal species move about on the reef at high tide, especially young larval stages that repopulate areas on different parts of the reef. Equal protection of the entire reef habitat is of vital importance to the ecological health of Duxbury Reef.

B) **Expand MPA north:** The reef ecosystem also extends north of the current MPA boundary and includes rocky intertidal areas and some bluff-faced sandy beach areas north to Double Point Cove. Double Point Cove is designated as an Area of Special Biological Significance and is a harbor seal haul-out and pupping site. It is also adjacent to the Stormy Stack Special Closure on the north end of the cove, which prohibits access within 300 feet around the rock island. According to individual reports, boaters, including some fishing, have been observed close to the bird colony on Stormy Stack, and flushing the harbor seals at their haul outs at the south rock and in the Double Point Cove. This area is currently unprotected by the MPA network, yet is ecologically sensitive and continuous with sensitive reef and beach habitat that is currently protected. Incorporating this northern section ensures that this unique reef habitat is fully protected in its entirety from take and disturbance to marine mammals, seabirds, intertidal, and subtidal species. In the past, there was a proposal to create an MPA



between the current Double Point Special Closure and the current Duxbury Reef SMCA. The MPA would have satisfied goals 1, 2, 3, and 5 of the MLPA. An MPA in this area would specifically protect diverse areas in close proximity to each other, protect critical habitat that species of economic value rely upon, ensure minimal human disturbance occurs in sensitive habitats, and utilize scientific guidelines in the *California MLPA Master Plan for Marine Protected Areas*.

As the largest intertidal shale reef in North America, with abundant and diverse marine life, Duxbury Reef deserves the additional attention of the Commission and increased protection against ongoing take and poaching activity. This type of rocky intertidal habitat is rare. This is especially critical in consideration of the combined impacts of dramatically increased visitation, ocean acidification, and sea level rise which will increasingly impact the biodiversity of the reef.

This proposal was discussed at the [Golden Gate MPA Collaborative meeting on August 24, 2023<sup>4</sup>](#), although a consensus was not reached. Key use concerns raised included those discussed above, as well as support from the Superintendent of the Greater Farallones and Cordell Bank National Marine Sanctuaries, which is included in Attachment 3.

**SECTION II: Optional Information**

5. **Date of Petition:** 11/30/23

6. **Category of Proposed Change**

Sport Fishing

Commercial Fishing

Hunting

Other, please specify: MPA Section 632.

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

Amend Title 14 Section(s): 632(b)(50).

Add New Title 14 Section(s):

Repeal Title 14 Section(s):

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  Not applicable.

9. **Effective date:** *If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:* As soon as possible.

10. **Supporting documentation:** *Identify and attach to the petition any information supporting the proposal including data, reports and other documents:* Numerous letters from community members and experts including Maria Brown, Greater Farallones and Cordell Bank National Marine Sanctuaries Superintendent, have provided significant information about the need to

<sup>4</sup> See rows 54-55, <https://docs.google.com/spreadsheets/d/1Eu1efUliHZ2bazdKM5IK5UKzsIEluHEU9k9HdR1oudo/edit#gid=0>





consider additional conservation measures at Duxbury Reef. Information in these letters explains how Duxbury Reef would benefit from increased protection of the unique and important habitat of the entire reef. See the following index of attachments which includes maps, letters of support, Marin MPA Watch data, and previously submitted EAC letters. We may further supplement this petition as additional information becomes available.

- 11. **Economic or Fiscal Impacts:** *Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:* Known impacts from the three proposed changes (designation change, extension south, and extension north) may result in fewer people able to harvest food (fish and invertebrates, commercially and recreationally) on the intertidal reef and beach, and offshore of Duxbury Reef. However, currently, the Wilderness Act prohibits recreational and commercial motorboats and all commercial enterprises within ¼ mile of the Phillip Burton Wilderness Area (16 U.S.C. sec. 1133(c); Point Reyes National Seashore, “Superintendent’s Compendium”), which includes the area offshore of the entire extent of the requested northern extension of the Duxbury MPA. Therefore, the economic impact of the northern extension may be relatively minor, as there are existing complementary regulations. The proposed MPA change to SMR and expansion north including the cove at Double Point would serve to strengthen the protections on the state level, making them consistent with federal protections. The additional layer of protection to the extension area under California state law would, as a consequence of being under the MPA umbrella, have the benefit of the information on take limitations reaching more people as it would then be available through the state’s MPA outreach publications. We believe that this would significantly enhance compliance even with current protections as enforcement resources and abilities are currently limited.

Additionally, there will be an additional cost to CDFW to update the official signage at Agate Beach Marin County Park which hosts the access trail and parking lot for Duxbury Reef, as well as costs for updated outreach publications.

- 12. **Forms:** *If applicable, list any forms to be created, amended or repealed:* N/A

**SECTION 3: FGC Staff Only**

Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC



State of California – Fish and Game Commission

**PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE**

FGC 1 (Rev 06/19) Page 6 of 6

- Denied - same as petition \_\_\_\_\_  
Tracking Number
- Granted for consideration of regulation change

Index of Attachments Submitted re. Duxbury Reef Petition by EAC, November 30, 2023

Attachment #	Date	Sender/Preparer	Description	Previously Submitted to FGC	FGC Meeting Document Link
1	11/30/23	Prepared by Environmental Action Committee of West Marin (EAC)	Maps depicting ASBS and proposed changes (4 pages)	No	N/A
2	11/30/23	Prepared by EAC	Summarized data from mpawatch.org Marin MPA Watch (3 pages)	No	N/A
3	7/5/2023	EAC including attached letters from Greater Farallones and Cordell Bank National Marine Sanctuaries and National Park Service	EAC Comments to Fish and Game Commission re. MRC Agenda Item 5: MPA DMR Petition for Modification of Duxbury Reef and Drakes Estero MPAs including attachments 1 + 2 ((1) <b>EAC April 6, 2023, comments to Fish and Game Commission including EAC March 13, 2023 letter and November 14, 2022 letter from National Park Service</b>  (2) <b>Greater Farallones and Cordell Bank National Marine Sanctuaries April 15, 2023, comments to Fish and Game Commission</b> )	Yes (Comment 7 to July MRC meeting documents, pp. 78-101 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
4	11/21/23	Marin County Supervisor Dennis Rodoni	Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Duxbury Reef (2 pages)	No	N/A
5	November 2023	Max Korton, Marin County Parks	Support for Environmental Action Committee's Petition for Regulation Change at Duxbury Reef (2 pages)	Unsure	N/A
6	11/25/23	Sarah G. Allen, PhD, Retired Senior Science Advisor National Park Service	Decadal Review Recommendations for the California North Central Marine Protected Areas (3 pages)	Yes	N/A - Was submitted 11/25/23
7	11/29/23	Josh Churchman	Petition for Modification of Duxbury Reef Marine Protected Area (2 pages)	Yes	N/A - Was submitted 11/29/23

Index of Attachments Submitted re. Duxbury Reef Petition by EAC, November 30, 2023

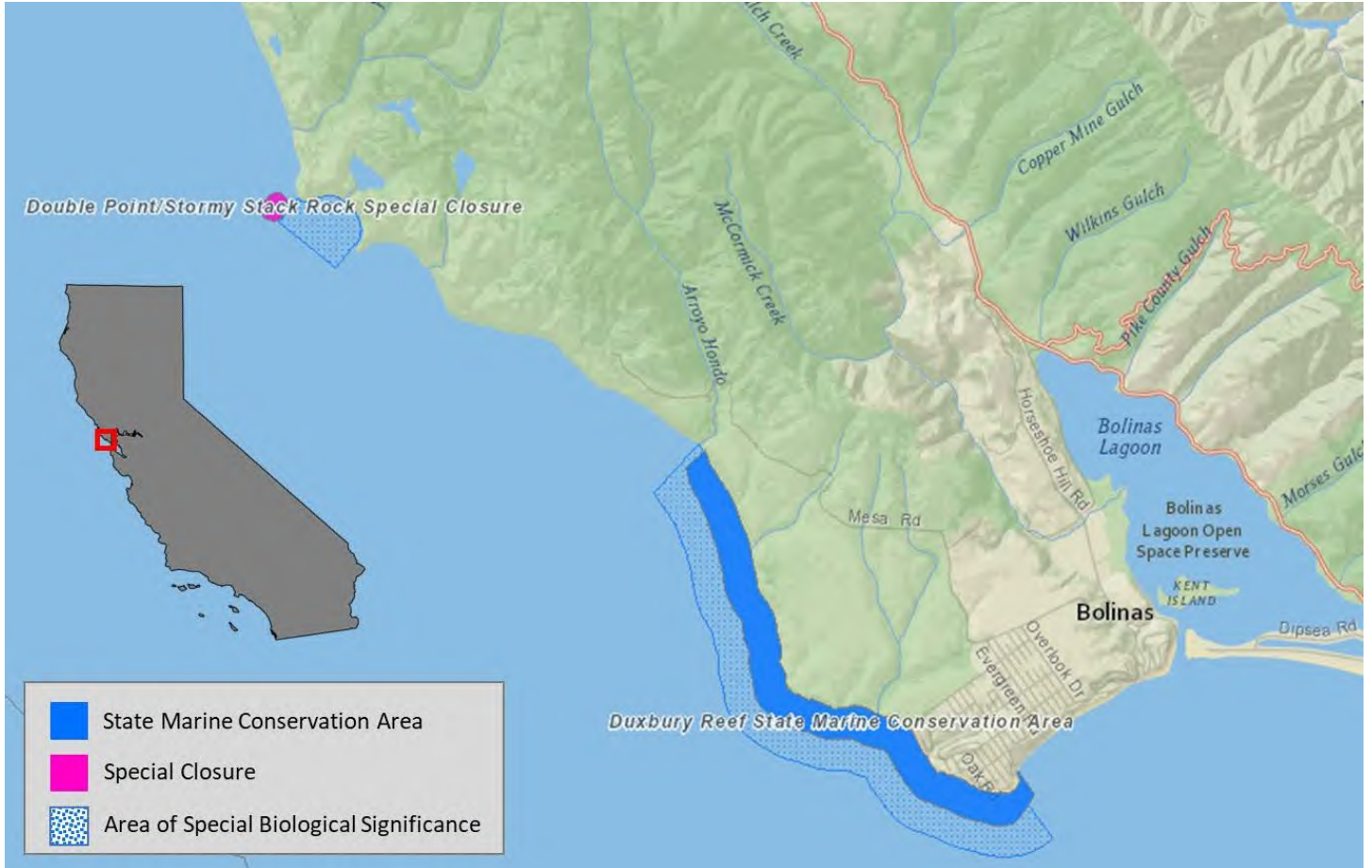
Attachment #	Date	Sender/Preparer	Description	Previously Submitted to FGC	FGC Meeting Document Link
8	11/29/23	NGOs	Support for Environmental Action Committee's Petition for Regulation Change at Duxbury Reef (2 pages)	No	N/A
9	7/3/23	Kent Khtikian	Petition for Modification of Duxbury Reef Marine Protected Area (4 pages)	Yes (Comment 1 to July MRC meeting documents, pp. 33-36 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
10	7/3/23	Joe Mueller, College of Marin	Petition for Modification of Duxbury Reef Marine Protected Area (3 pages)	Yes (Comment 1 to July MRC meeting documents, pp. 37-39 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
11	7/6/23	Lily Rosenman	Petition for Modification of Duxbury Reef Marine Protected Area (2 pages)	Yes (Comment 1 to July MRC meeting documents, pp. 40-41 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
12	7/5/23	Bridget Bartholome	Petition for Modification of Duxbury Reef Marine Protected Area (3 pages)	Yes (Comment 1 to July MRC meeting documents, pp. 42-44 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
13	7/6/23	Laura Lee Miller	Petition for Modification of Duxbury Reef Marine Protected Area (3 pages)	Yes (Comment 1 to July MRC meeting documents, pp. 45-47 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
14	7/1/23	150 individuals	Group letter supporting Duxbury Reef petition (30 pages)	Yes but it appears that only one page of the thirty pages was included (Comment 1 to July MRC meeting documents, p. 48 of meeting documents)	<a href="https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline">https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213546&amp;inline</a>
15	7/6/23	Courtney Barend	Petition for Modification of Duxbury Reef Marine Protected Area (2 pages)	I believe this was submitted to FGC, but I do not see it in the July packet.	N/A
16	11/30/23	Jeffrey R. Boehm, The Marine Mammal Center	Petition for modification of Duxbury Reef Marine Protected Area	Yes	N/A - Submitted 11/30/23

# **ATTACHMENT 1**



## Attachment 1

Figure 1: First Map Attached to EAC's Petition re. Duxbury Reef  
Prepared for Submission November 30, 2023.  
California Department of Fish & Wildlife Marine Region Map  
Sourced from CDFW<sup>1</sup>



*Description:* Map showing current boundaries of Duxbury Reef SMCA, Double Point Special Closure Area, and designated Areas of Special Biological Significance.

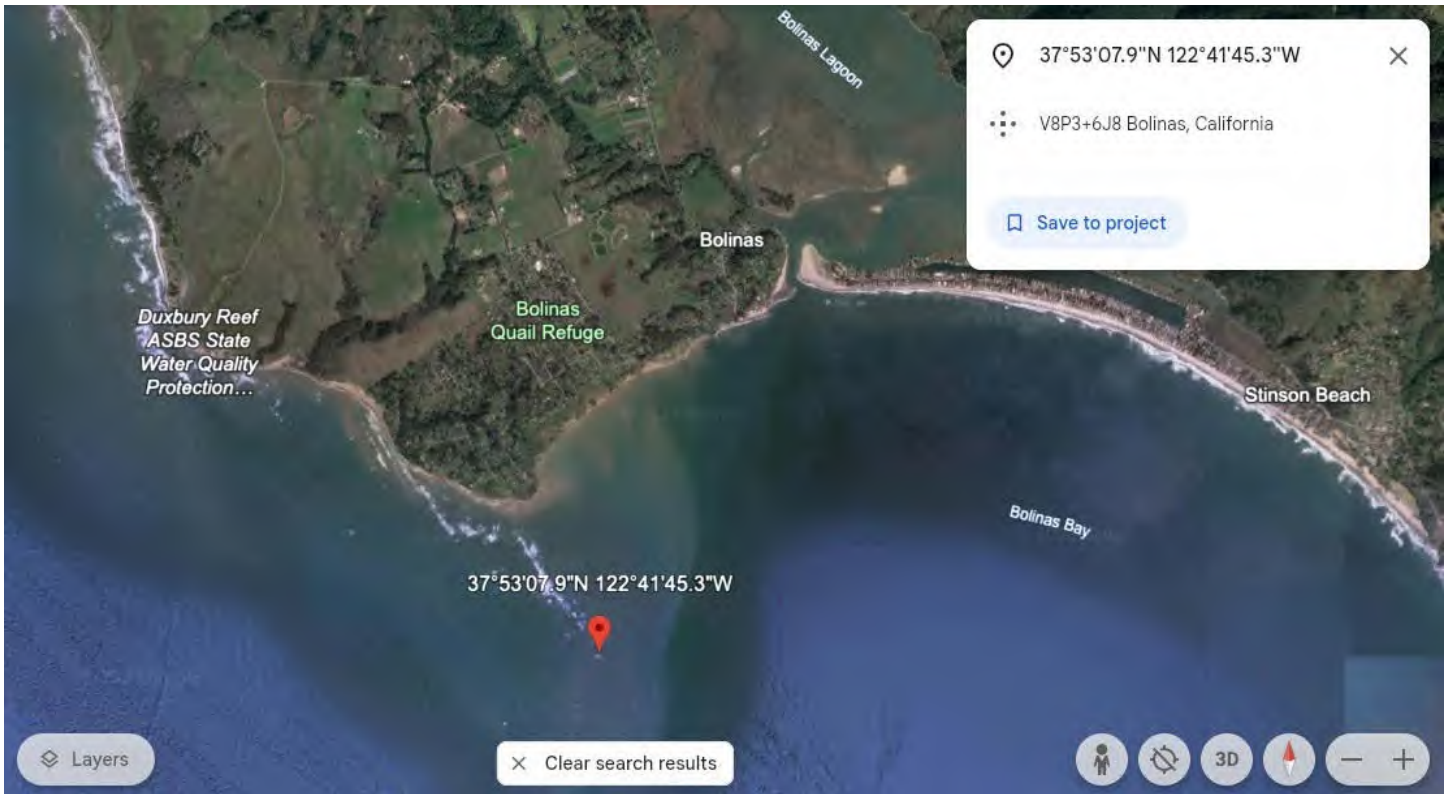
<sup>1</sup> <https://cdfwmarine.wordpress.com/tag/stormy-stack-rock/>

Figure 2: Second Map Attached to EAC's Petition re. Duxbury Reef  
Prepared for Submission November 30, 2023, also submitted in EAC's March 13, 2023 letter to FGC



*Description:* Overlay of Duxbury Reef SMCA with an orange outline of the portion of the reef that is exposed at low tide that is not currently included in the MPA. A southern boundary extension of Duxbury Reef is needed to fully connect the ecological habitat area, protect vulnerable species, and reduce confusion for the public on what activities are allowed. The orange overlay shows the approximate location of our southern boundary extension request.

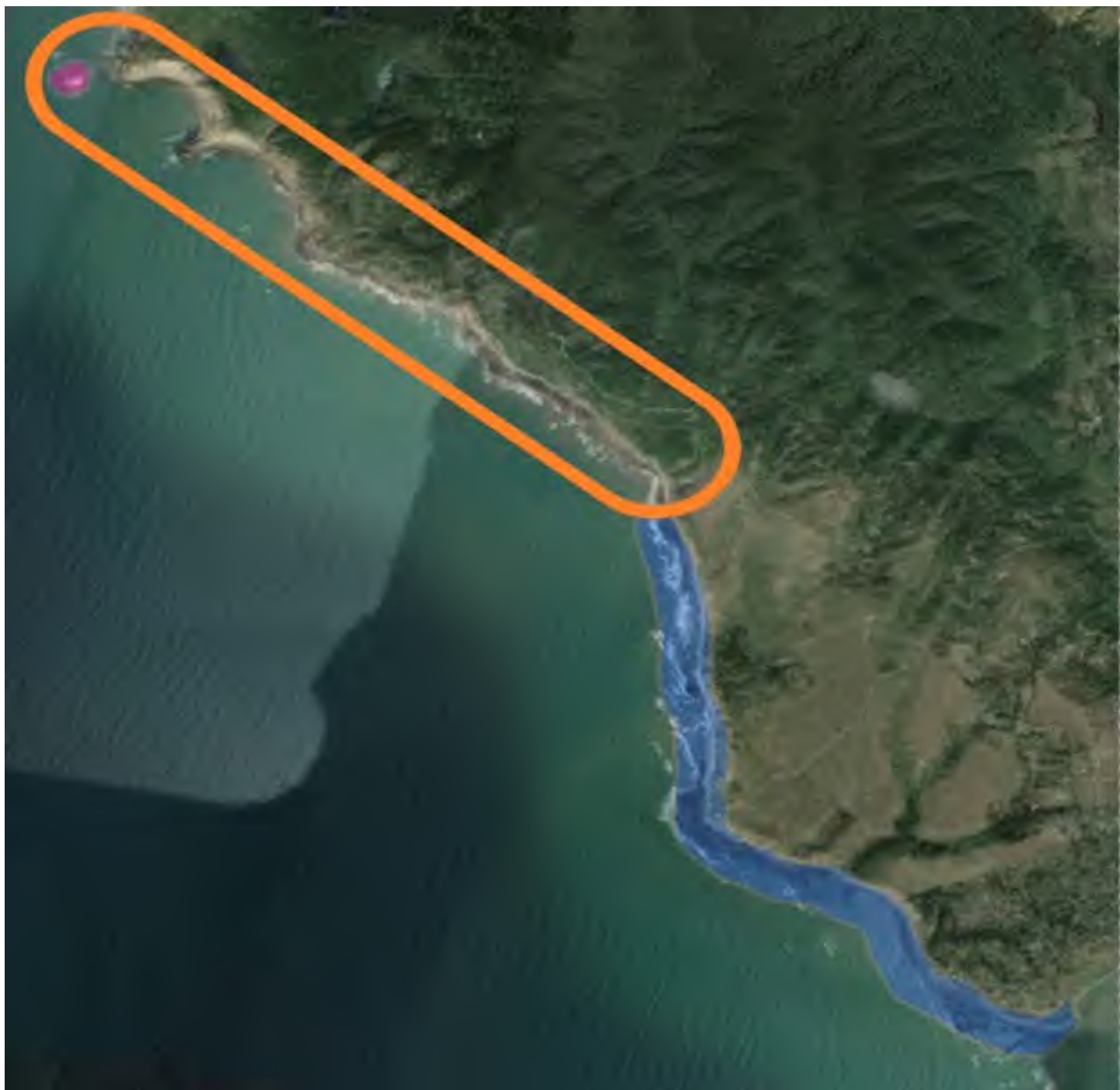
Figure 3: Third Map Attached to EAC's Petition re. Duxbury Reef  
Prepared for Submission November 30, 2023.  
Satellite map of Duxbury Reef SMCA Southern Boundary  
Sourced from Google Maps



*Description:* Coordinate of southernmost point of the intertidal Duxbury Reef habitat.



Figure 4: Fourth Map Attached to EAC's Petition re. Duxbury Reef  
Prepared for Submission November 30, 2023, also submitted in EAC's March 13, 2023 letter to FGC



*Description:* Image of Double Point Special Closure and Duxbury Reef SMCA boundary. The orange highlight indicates the area outside of the MPA network that is interconnected and includes an additional Area of Special Biological Significance (cove near Double Point closure highlighted in pink). The blue area is the current Duxbury Reef SMCA. The orange overlay shows the approximate location of our northern boundary extension request.

# **ATTACHMENT 2**



**Attachment 2**  
**Prepared for Submission November 30, 2023 with EAC's Petition**

**Data From Marin MPA Watch (mpawatch.org)**

The following tables and graphs were downloaded from the MPA Watch (mpawatch.org) data portal, which holds all the statewide data for MPA Watch surveys. The portal automatically generates tables and graphs for managers to use in their yearly reports. The tables were generated from Marin MPA Watch survey sites in Marin County, which is administered by the Environmental Action Committee of West Marin in partnership with Point Reyes National Seashore and California Academy of Sciences.

**Count of Potential Violations from Marin MPA Watch**

**2019 Compared with All Years (since 2014)**

MPA	January 1 December 31 All Years	January 1, 2019 through December 31, 2019
Estero de Limantour SMR	4	2
Point Reyes SMR	38	10
Control PRSOUTH	0	0
Duxbury Reef SMCA	1,273	40
Corte Madera Marsh SMP	18	0
<b>All MPAs Combined</b>	<b>1,333</b>	<b>52</b>

**2020 Compared with All Years (since 2014)**

MPA	January 1 December 31 All Years	January 1, 2020 through December 31, 2020
Estero de Limantour SMR	4	0
Point Reyes SMR	38	2
Control PRSOUTH	0	0
Duxbury Reef SMCA	1,273	299
Corte Madera Marsh SMP	18	0
<b>All MPAs Combined</b>	<b>1,333</b>	<b>301</b>

**2021 Compared with All Years (since 2014)**

MPA	January 1 December 31 All Years	January 1, 2021 through December 31, 2021
Estero de Limantour SMR	4	0
Point Reyes SMR	38	0
Control PRSOUTH	0	0
Duxbury Reef SMCA	1,273	126
Corte Madera Marsh SMP	18	9
<b>All MPAs Combined</b>	<b>1,333</b>	<b>135</b>

## 2022 Compared with All Years

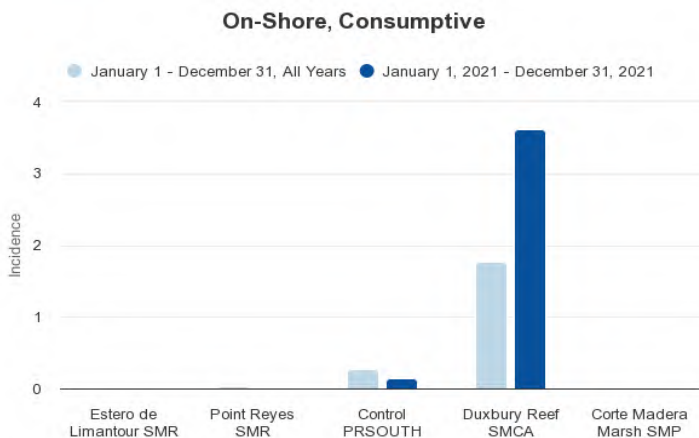
MPA	January 1 December 31 All Years	January 1, 2022 through December 31, 2022
Estero de Limantour SMR	4	0
Point Reyes SMR	38	6
Control PRSOUTH	0	0
Duxbury Reef SMCA	1,273	188
Corte Madera Marsh SMP	18	3
All MPAs Combined	1,333	197

In both 2021 and 2022, Duxbury Reef counts of potential violations (termed “potential” because violations observed by MPA Watch volunteers have not been investigated and confirmed by the California Department of Fish and Wildlife (CDFW)) are much greater than any of the other survey locations covered by Marin MPA Watch. The violations consist of hand collection of marine life for removal, but can also include picking up/collecting for temporary observations (e.g. kids with buckets). Violations also include fishing by boat within 1,000 feet offshore, however, this is much less common than hand collection. Fishing by hook and line from shore is allowed in the MPA.

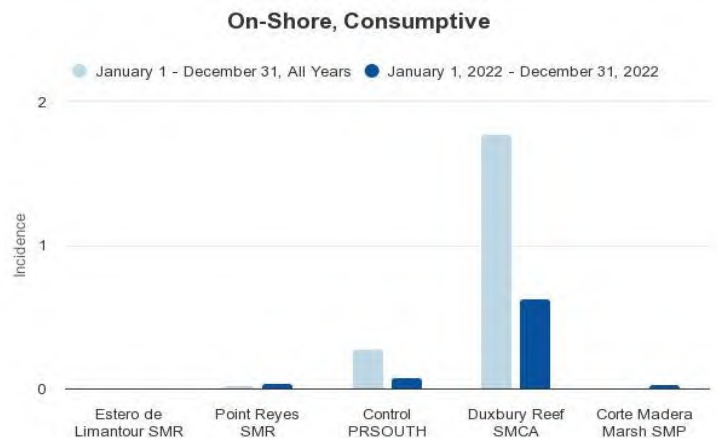
## Incidence of Consumptive Uses

Consumptive uses and visitation rate at Duxbury Reef are significantly greater than the other Marin MPA Watch survey sites. On-shore Consumptive uses include hand collection and fishing from shore with hook and line which is allowed in the SMCA. However, much more frequent at Duxbury Reef are hand collection activities, which are a violation of the regulations.

### 2021 Compared with All Years



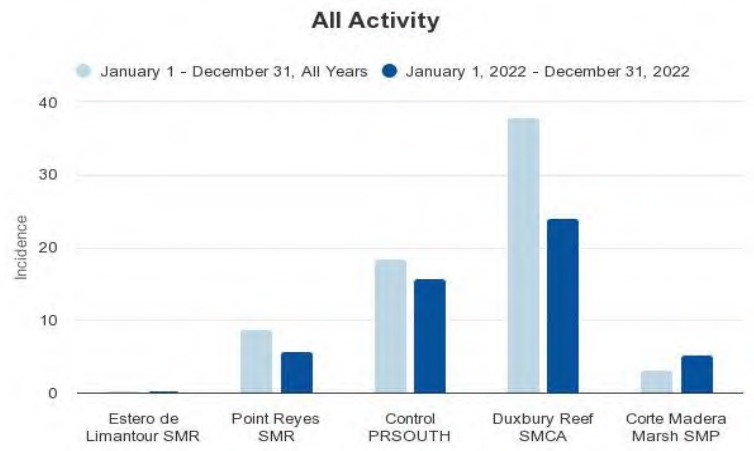
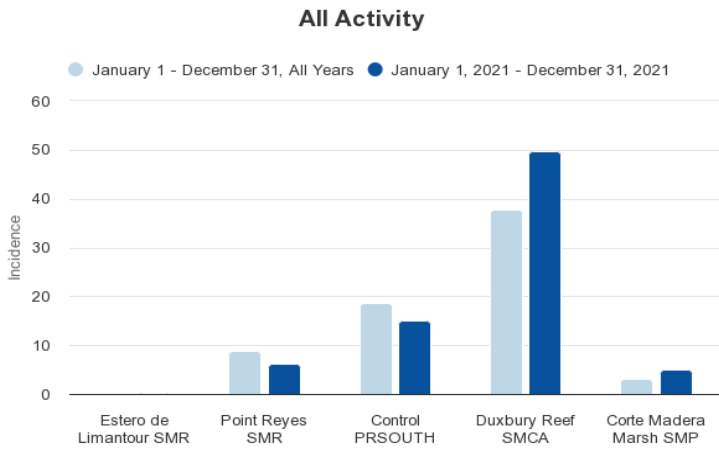
### 2022 Compared with All Years



# Visitation Rate

## 2021 Activity Compared with All Years

## 2022 Activity Compared with All Years



# **ATTACHMENT 3**



July 5, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Sent via Email: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

#### **Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

#### **Staff and Consultants**

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

Re. Fish and Game Commission MRC Agenda Item 5: MPA DMR  
Petition for Modification of Duxbury Reef and Drakes Estero MPAs

Dear President Sklar and Honorable Commissioners,

The Environmental Action Committee of West Marin (EAC) has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We submit this letter to request that the letter we previously addressed to the Fish and Game Commission (Commission) in support of the MPA decadal management review (DMR), submitted on April 6, 2023, also be considered a petition to the Commission pursuant to California Fish & Game Code Section 2861(a), for addition to and modification of the MPAs at Duxbury Reef and Drakes Estero. A copy of that letter is enclosed herewith. This request is being made to ensure we are compliant with any additional procedures that are entailed in the presentation to the Commission of a "petition" as contemplated in Fish and Game Code Section 2861(a), which might not have been satisfied by the April 6 DMR comment letter submittal.

Furthermore, this letter also serves as a comment on the MPA DMR (Marine Resources Committee Agenda Item 5) for the July 20th meeting. We commend the Commission for the vision of the draft prioritized recommendations dated June 12, 2023. We thank the Department of Fish and Wildlife (Department) for their hard work on this prioritization, and we generally agree with the prioritization and timelines.

As an overall comment related to the prioritization, we urge the Commission to institutionalize climate-cognizant adaptive management to ensure that management of the MPA network can respond to sea-level rise and other climate changes. We also hope that the Commission will broadly embrace recommendation 4 and support changes to the MPA network and management program. We were pleased to see that recommendation 4 was identified as a near-term priority.

As requested in our prior comments, specifically, we petition for the Commission to recommend the following additions to and modifications of the



Drakes Estero State Marine Conservation Area (SMCA) and the Duxbury Reef SMCA, as currently described in California Code of Regulations Title 14, Section 632(b)(47) and (50), respectively:

1. Change the designation of Drakes Estero SMCA to a “State Marine Reserve” as described in California Code of Regulations (CCR) Title 14 § 632(a)(1)(A).
2. Change the designation of the Duxbury Reef SMCA to a “State Marine Reserve.”
3. Extend the southern boundary of the Duxbury MPA to the most southerly tip of Duxbury Reef exposed at mean lower low water, that is, to a point at approximately 37 deg. 53.1315' N. lat, 122 deg. 41.7549' W. long.
4. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure as described in CCR Title 14 § 632(b)(49).

We also request that: (1) the letter to the Commission dated April 15, 2023, from the Greater Farallones and Cordell Bank National Marine Sanctuaries (copy enclosed) be made a part of the record in support of this petition; and (2) that EAC and others be allowed to submit further written evidence and testimony in support of this petition.

Please advise us if there is any further step(s) that should be taken by EAC and/or others to present a “petition” to the Commission pursuant to California Fish & Game Code Section 2861(a). Finally, please do not hesitate to ask for any further information that the Commission believes will assist it in addressing this petition.

We also request that the Commission clarify the process of public engagement regarding the DMR going forward. A more streamlined and intuitive comment and petition system would allow for easier public engagement and would further the justice, equity, diversity, and inclusivity goals of the Commission. Clarity would be especially helpful regarding what type of regulation changes could be considered in the DMR and what types would require their own petition.

While we understand that this may be forthcoming, it would also be helpful to have clarity related to the focus of future meetings and the Department and Commission’s proposed work plan with some additional specificity related to how the public and stakeholders can participate most effectively.

Thank you for your consideration of our comments and all your work on the DMR process. We look forward to continuing to engage including review of the staff report and participation at the July 20th meeting.

Sincerely,



Ashley Eagle-Gibbs  
Legal & Policy Director

cc: Susan Ashcraft, Marine Advisor, Fish and Game Commission  
Becky Ota, Marine Habitat Conservation Program Manager, Department of Fish and Wildlife

Attachments: (1) EAC April 6, 2023, comments to Fish and Game Commission  
(2) Greater Farallones and Cordell Bank National Marine Sanctuaries April 15, 2023, comments to Fish and Game Commission



ESTABLISHED 1971

## Board of Directors

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

## Staff and Consultants

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

April 6, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re. Agenda Item 25. Marine protected areas decadal management review

Dear President Sklar and Honorable Commissioners,

The Environmental Action Committee of West Marin (EAC) has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We submitted written comments dated March 13th in advance of the Fish and Game Commission (Commission) Marine Resources Committee (MRC) meeting (attached to this letter), as well as providing oral comments at the March 16th MRC meeting related to the decadal management review. We appreciated the hybrid meeting format, which allowed us to participate remotely.

We submit this follow up letter with locally specific boundary and designation change requests to the full Commission to facilitate discussion at the April meeting. Related to our previously submitted requests (March 13 and 16), we highlight our key requests here for discussion and prioritization at the April meeting:

- 1) Request evaluation of Drakes Estero State Marine Conservation Area (SMCA) for a designation change to a State Marine Reserve,
- 2) Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area, and

- 3) Request a science-based analysis to review a northern extension of the Duxbury Reef SMCA to Double Point Special Closure based on increased visitation by the public to the Area of Special Biological Significance.

This letter and our prior letter are also supported by prior written comments submitted by the National Park Service dated (November 14, 2022, also attached).

As a final request, we would like to gain clarity on the process for boundary and designation changes.

- 1) Specifically, is it necessary to submit a formal petition related to these aforementioned requests and correspondence? It was not entirely clear at the March MRC meeting whether a petition is required or if the Department of Fish and Wildlife is able to recommend adaptive management strategies based on the Decadal Review and submitted comments. We respectfully request clarification to facilitate effective public participation in this process.

Thank you for your dedication to adaptive management, and we look forward to the April Commission meeting and more collaboration on the adaptive management prioritization and recommendations as we approach the July MRC meeting.

Sincerely,



Morgan Patton, Executive Director



Ashley Eagle-Gibbs, Legal and Policy Director



March 13, 2023

Fish and Game Commission Marine Resources Committee  
California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

#### **Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

#### **Staff and Consultants**

Morgan Patton  
*Executive Director*

Ashley Eagle-Gibbs, Esq.  
*Legal and Policy Director*

Leslie Adler-Ivanbrook  
*Program Director*

Jessica Reynolds Taylor  
*Development Director*

Grace Milstein  
*Communications Associate*

Patricia Wimpfheimer  
*Bookkeeper*

Re. MRC Agenda Item 9: Marine Protected Areas (MPA) Decadal Management Review

Dear President Sklar and Commissioner Murray,

The Environmental Action Committee of West Marin has been working to protect the unique lands, waters, and biodiversity of coastal Marin County since 1971. We are deeply committed to California's marine protected area (MPA) network and have been actively supporting MPAs through outreach, education, and community science activities since the first regional stakeholder meetings that would eventually establish the network of 124 MPAs.

We continue our support for the network as members of the Golden Gate MPA Collaborative Network, collecting human-use activity data through our local MPA Watch program, Marin MPA Watch, with partners at the Point Reyes National Seashore, and we have created a team of local volunteers who provide outreach and education as intertidal docents at Duxbury Reef State Marine Conservation Area (SMCA).

Thank you for this opportunity to submit comments on the MPA Decadal Review. We want to thank the Department of Fish and Wildlife (CDFW) and Fish and Game Commission staff and partners for the momentous achievement related to the completion of the Decadal Review and accompanying report. The report highlights the effectiveness and importance of our state's unique and precedent setting MPA network.

Before our specific comments, we would like to note that due to the flooding in Monterey County, our team is unable to travel to the in-person meetings, including the Decadal Management Review Forum. We are grateful the Marine

Resources Committee meetings will have the opportunity for hybrid participation and the Monterey County emergency highlights the continued need for hybrid meetings to ensure broad-based public engagement opportunities in the future. We look forward to viewing the Decadal Management Review Forum online and we are disappointed we will not be able to ask questions or contribute to the discussion in person.

In general, we are supportive of many of the recommendations and future steps outlined in Chapter 6; however, we have included some specific comments related to our geographic area in coastal Marin County for additional consideration. We have organized our comments by the MPA Network Performance categories noted in Chapter 6.

### **1. MPA Network Design / Boundaries and MPA Designation Changes**

We have included three specific requests below related to designation and boundary changes with additional discussion following.

**Request 1: Include condition and use change data for MPAs to provide an assessment of changed conditions (i.e. on-shore and offshore activities and uses) that would inform the need for adapting the MPA Network Design that would include boundaries and designation changes that are in alignment with today's conditions and circumstances.**

**Request 2: Request evaluation of Drakes Estero State Marine Conservation Area for a designation change to a State Marine Reserve.**

**Request 3: Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area.**

The Decadal Review needs to include a reference of site conditions of the 124 MPAs from the date of MPA designation compared to current-day conditions that include changes in surrounding on-shore or offshore commercial/recreational consumptive and non-consumptive uses, and visitation data. This information would be beneficial when analyzing information for boundary and designation changes based on changed conditions. We highlight two Marin County examples below:

#### *Example 1: Drakes Estero State Marine Conservation Area*

Drakes Estero State Marine Conservation Area (SMCA) was established at a time when a commercial aquaculture operation was in business. The commercial operator closed in 2012, and offshore and on-shore infrastructure has been removed. Drakes Estero was designated as Marine Wilderness in 2012 following the



closure of the commercial operation in its waters. Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive restoration project (\$4 million) in the waters of Drakes Estero. The Estero is one of the last fully intact wetlands in the state of California, is an Area of Special Biological Significance, and a biologically rich estuary that consists of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

On November 14, 2022, the Point Reyes National Seashore<sup>1</sup> submitted a letter to Dr. Craig Shuman, California Department of Fish and Wildlife Marine Region Manager, and to Samantha Murray, Fish and Game Commissioner, that supports a MPA designation change of Drakes Estero from a SMCA to State Marine Reserve (SMR) for the below reasons:

*2010 designation as SMCA relied on presence of commercial aquaculture operation. DOI authorization of commercial aquaculture ended in 2012, and operations ceased in 2014. Area is now Congressionally Designated Wilderness, \$4m estuary restoration completed in 2017. Recreational take of shellfish appears to be very rare, requires long kayak trips in wilderness area with no cell service and limited emergency response. Increased protections for eelgrass, estuarine biodiversity, and marine wilderness. If converted to an SMR, join Estero de Limantour into a single SMR for naming and outreach purposes.*

*Example 2: Duxbury Reef SMCA*

Duxbury Reef SMCA was established at a time when visitation to this area was very low and not many people were visiting the intertidal area. However, visitation to this MPA has been steadily and significantly increasing as previously unknown trails and beaches of Point Reyes National Seashore have begun to attract visitors to locations such as Alamere Falls.

Since 2017, MPA Watch volunteers documented approximately a 70 percent increase in visitation to Duxbury Reef that continued to increase in 2020 and 2021 during the pandemic.

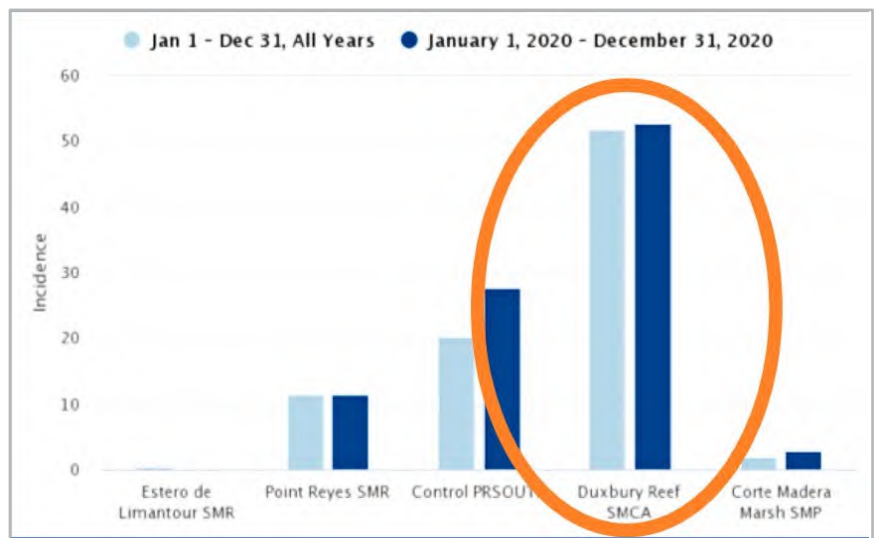


Figure 1. MPA Watch Recreational and Consumptive Activity 2014-2020 and 2020

<sup>1</sup> Letter from Point Reyes National Seashore to California Department of Fish and Wildlife, November 14, 2022

A comparison of the MPA visitation trends across all designated MPAs in coastal Marin County, Duxbury has the highest overall visitation count of all MPA Watch transects in Marin, the smallest area, and is a highly sensitive intertidal habitat.

Our MPA Watch 2020 Annual Report notes the rise in visitation in 2020:

*This MPA [Duxbury Reef State Marine Conservation Area] recorded a use rate of 29.4 activities per mile surveyed. This is an increase of 79% compared to the prior year. 11% of the observations in the MPA are on-shore consumptive. 305 incidents of hand collection of biota in the intertidal were observed in the months of June, July, and August 2020 (emphasis added). Duxbury Reef SMR has the highest use count [66%] of all MPAs surveyed by Marin MPA Watch ... in one of the smallest survey areas. Duxbury Reef is a sensitive intertidal habitat where human impacts (trampling and collecting) may have long-term negative impacts to habitat and species.*

In 2022, we established the Duxbury Docent program in partnership with Marin County Parks and Open Space which provides visitor education and collects MPA Watch human-use data. On the ground, our docents are engaging with the public and have first-hand experience in the confusion of the designation of the MPA that is leading to unintended compliance issues at this location. Specifically, we summarized below our docent experiences while interacting with visitors,

*The allowance of finfish fishing from shore and notice about the allowance of abalone take at Duxbury generates confusion in the community and among visitors about what is and is not allowed.*

At Duxbury Reef SMCA, our experience on the ground is that the permitted allowance of recreational finfish and abalone from shore is confusing to the public, and with increased visitation since 2017 this tends to lead to non-compliance that may be hindering the goals of the MLPA at this site.

The inclusion of community science data on human use, activities, and visitation data from overlapping jurisdictions, like the Point Reyes National Seashore in coastal Marin County, would provide a wealth of data that could assist in informing the adaptive management strategies of the MPA Network.

This would be especially beneficial when analyzing information for boundary and designation changes that would provide up-to-date information on changing conditions that would ensure the management of the MPAs are meeting the goals of the Marine Life Protection Act (MLPA)'s six goals<sup>2</sup>.

---

<sup>2</sup> MLPA Goals: Protect the natural diversity and abundance of marine life, and the structure, function and integrity of marine ecosystems. 1) Help sustain, conserve and protect marine life populations, including those of economic value, and rebuild those that are depleted. 2) Improve recreational, educational and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity. 3) Protect marine natural heritage, including protection of representative and unique marine life habitats in CA waters for their intrinsic values. 4) Ensure California's MPAs have

## 2. Regulatory and Framework Review / MPA Network Design:

### **Request 4: Need for inclusion of biological and environmental condition status, community science data, and ecological habitat mapping when analyzing a need for MPA designation and boundary changes.**

We support Recommendation #4 and request as part of the identification of science-based approaches to inform analysis that biological and environmental conditions, ecological habitat maps, and environmental designations (like Marine Wilderness, Areas of Special Biological Significance, etc.) are included.

We provide two examples below, Duxbury Reef and Double Point, related to immediately connected habitat areas excluded from MPA boundaries.

#### *Example 1: Duxbury Reef SMCA*

The current MPA boundaries of Duxbury Reef SMCA fail to encompass the entire reef that is exposed at a low tide. At low tide, people can walk to the portion that is outside the MPA, making it fully accessible. Figure 2 highlights the area that is part of the intertidal ecological habitat area but has been excluded from the MPA boundary.

In addition, the regulations state that the MPA seaward boundary is 1,000 feet from the seaward of mean, low, low tide, but the MPA boundary designation includes 1,000 feet from high tide. This language is ambiguous and confusing to the public.



Figure 2.

Overlay of Duxbury Reef SMCA with an orange outline of the portion of the reef that is exposed at low tide that is not currently included in the MPA. A southern boundary extension of Duxbury Reef is needed to fully connect the ecological habitat area and reduce confusion for the public on what activities are allowed.

---

clearly defined objectives, effective management measures and adequate enforcement and are based on sound scientific guidelines. 5) Ensure the State's MPAs are designed and managed, to the extent possible, as a network.

*Example 2: Double Point*

North of Duxbury Reef SMCA is a Special Closure Area (Double Point) that is ecologically significant and connected to Duxbury Reef. In the November 2022 letter from Point Reyes National Seashore, they note there are concerns about the protection of seabirds, marine mammals, and concerns with kayaking disturbances of harbor seals. A long-established harbor seal monitoring program by Point Reyes National Seashore at this location includes datasets on harbor seal pupping and movements. At the time the Special Closure was established, there was little human activity and disturbance in this area until about 2017 when hiking to Alamere Falls became very popular.

A science-based analysis to review whether it would make sense to extend the Duxbury Reef MPA further north to the Special Closure should be considered with data provided by the Point Reyes National Seashore on the presence of marine mammals and disturbance events. A review of this type would inform whether there is a need to extend the Duxbury MPA boundary north or expand the Double Point Special Closure, which we think is likely warranted based on our current understanding and available data.

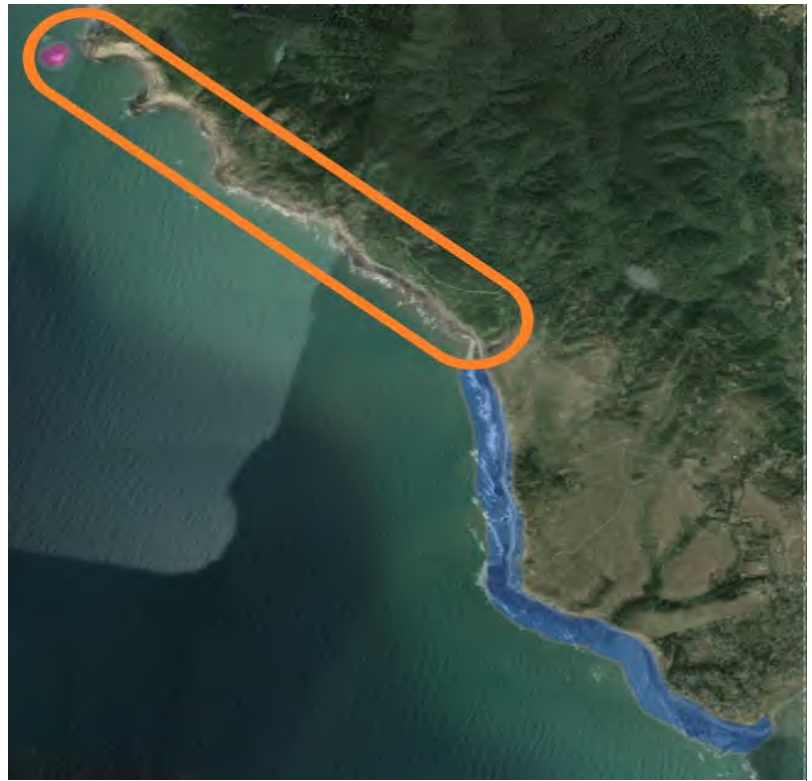


Figure 3. Image of Double Point Special Closure and Duxbury Reef SMCA boundary. The orange highlight indicates the area outside of the MPA network that is interconnected and includes an additional Area of Special Biological Significance (cove near Double Point closure).

### 3. Enforcement and Compliance:

**Request 5: Need for enforcement volunteer programs in rural areas, specifically an extension of CDFW-trained enforcement volunteers piloted in 2020 at Pillar Point due to the high visitation and poaching incidents.**

Duxbury Reef SMCA is located within a nexus of overlapping jurisdictional authority, including the CDFW, Greater Farallones National Marine Sanctuary, Point Reyes National Seashore, and Marin County Parks and Open Space. However, the only agencies who can issue citations in the areas where most people visit at Duxbury Reef are the CDFW and the Marin County Sheriff.

Duxbury Reef SMCA is a rural location with limited signage and a lack of cellular service. Prior to 2022 and the creation of our program, there was no established outreach and education program for visitors to learn about the intertidal environment and limited oversight from regulatory agencies to ensure compliance with MPA regulations.

MPAs, like Duxbury Reef SMCA, need additional resources to enhance outreach and educational efforts, otherwise, the area becomes an MPA only in name and is not meeting MLPA goals.

Since 2014, the MPA Watch program has collected human-use data including potential violation data that is not reflected in the public enforcement violation data. Specifically, the MPA Watch and Duxbury Docent programs have collected data on increased visitation prior to the noted influx of visitation due to the pandemic in 2020:

*Since 2017, MPA Watch volunteers documented approximately a 70 percent increase in visitation to Duxbury Reef, and in 2020, more than 300 observations of hand-collection of biota were documented at Duxbury Reef over a three-month period along with a 79 percent increase in visitation compared to 2019.*

*In 2022, the Duxbury Docent program completed 65 shifts. Docents engaged with more than 1,000 members of the public and successfully deterred 37 potential consumptive use violations (hand-collection of biota) during those shifts through outreach and education.*

While establishing the Duxbury Docent program is an important step, additional resources are needed from CDFW to help meet the goals of the MLPA at this MPA. For example, establishing a partnership program like the pilot program of CDFW-trained outreach volunteers at Pillar Point in 2020 would benefit the Duxbury Docent program as a partnership to improve outreach, education, and MPA regulatory compliance.



#### **4. Enforcement and Compliance:**

##### **Request 6: Need for transparency in violation tracking and numbers of visits by wardens to specific MPAs.**

It would be beneficial to the public to have a quarterly report available that lists the number of cited violations at each MPA and the number of visits by CDFW wardens to that location. This information would assist with reconciling the community science data collected by programs like MPA Watch with the enforcement data. This would assist with finding compliance and enforcement gaps and subsequently allocating resources for increased capacity, or establishing community partnerships for outreach and educational programs in the future.

#### **5. Outreach and Education:**

##### **Request 7: Need for up-to-date signage that incorporates information/access to seasonal fishing regulations.**

Throughout the MPAs located in coastal Marin County, signage continues to be a challenge. Locations within the Point Reyes National Seashore sometimes include signage that an area is an MPA and closed to fishing and collecting, while other locations include do not have signage. If there are other pressing public noticing requirements like during the pandemic, MPA signage was removed and replaced.

As CDFW analyzes what is useful for MPA signage and effectiveness related to compliance and education, it would be helpful to include options for the public to obtain up-to-date information using QR codes, including current fishing regulations and definitions. This is especially important in areas where there are overlapping jurisdictional responsibilities and within SMCAs where regulations may differ on what is allowed or not allowed. Specifically, as noted previously by our Duxbury Docent program volunteers,

*Signage is not kept up to date to reflect specific closures and hyperlinks to Fish and Game Code is not included for visitors to reference and look up current regulations.*

In general, much of the public is not up to date on the fishing seasons or what fisheries are open or closed, and the lack of information at access points creates confusion. Information for outreach and education also needs to be designed for the average recreational MPA visitor, and special signage for intertidal areas should be shared collaboratively throughout the state with intertidal groups to standardize messaging.

## **6. Tribal Coordination:**

### **Request 8: Need for pathways to increased tribal coordination and inclusion.**

We recommend increased and meaningful tribal engagement and co-management across all aspects of the MPA network including community science, building tribal capacity, improved coordination, and outreach and inclusion of all tribes, federal and non-federally recognized tribes.

## **7. Climate Resilience and Adaptation:**

### **Request 9: Need to develop pathways to integrate with California's 30x30 Initiative, climate resilience, and adaptation goals.**

We are actively engaged in coastal resiliency planning and the state's 30x30 implementation. Related to 30x30, we hope to continue the dialogue around how our MPA network intersects with California's 30x30 goals. Careful coordination is required between all these goals and planning processes to ensure the best outcome.

The Fish and Game Commission should work towards climate-resilient MPAs through an equitable, science-based process that is adaptive and includes additional monitoring metrics, connecting to the state's long-term monitoring goals. Our MPAs must be climate ready. It is important that the CDFW and the Fish and Game Commission consider the need for our MPA network to adapt to sea level rise, as wetland and public trust boundaries shift. The MPAs can also serve as important climate refugia sites.

## **8. Public Engagement and Timeline:**

### **Request 10: Outline the opportunities for public engagement and timeline for consideration of incorporation of public comments on the Decadal Review.**

We are grateful for the opportunity to comment on the Decadal Review but would like clarification from CDFW and the Fish and Game Commission on the recommended pathways to ensure that concerns raised in this comment letter are considered for inclusion in the adaptive management plans.

We also raise specific boundary and designation change requests that are localized to our geographic region and clarification on how those items will be considered and if it is appropriate as part of this process or would need to be raised independently of the Decadal Review.

## Summary of Requests

**Request 1: Include condition and use change data for MPAs to provide an assessment of changed conditions (i.e. on-shore and offshore activities and uses) that would inform the need for adapting the MPA Network Design that would include boundaries and designation changes that are in alignment with today's conditions and circumstances.**

**Request 2: Request evaluation of Drakes Estero State Marine Conservation Area for a designation change to a State Marine Reserve.**

**Request 3: Request evaluation of Duxbury Reef State Marine Conservation Area for a designation change to a State Marine Reserve and extension of the southern boundary to fully encompass the reef habitat area.**

**Request 4: Need for inclusion of biological and environmental condition status, community science data, and ecological habitat mapping when analyzing a need for MPA designation and boundary changes.**

**Request 5: Need for enforcement volunteer programs in rural areas, specifically an extension of CDFW-trained enforcement volunteers piloted in 2020 at Pillar Point due to the high visitation and poaching incidents.**

**Request 6: Need for transparency in violation tracking and numbers of visits by wardens to specific MPAs.**

**Request 7: Need for up-to-date signage that incorporates information/access to seasonal fishing regulations.**

**Request 8: Need for pathways to increased tribal coordination and inclusion.**

**Request 9: Need to develop pathways to integrate with California's 30x30 Initiative, climate resilience, and adaptation goals.**

**Request 10: Outline the opportunities for public engagement and timeline for consideration of incorporation of public comments on the Decadal Review.**

## Conclusion

Thank you for the opportunity to comment on the Decadal Review and for your consideration of our comments. We look forward to additional dialogue in the coming months as the public can comprehensively engage and participate in the pathways forward that will inform the future adaptive management decisions that help to ensure an inclusive, responsive, and resilient MPA Network.

Sincerely,

A handwritten signature in black ink, appearing to read 'MP', with a long horizontal flourish extending to the right.

Morgan Patton  
Executive Director  
Environmental Action Committee of West Marin

cc: Susan Ashcraft, Senior Environmental Scientist and Marine Advisor, California Fish and Game Commission; Melissa A. Miller-Henson, Executive Director, California Fish and Game Commission; Becky Ota, Marine Habitat Conservation Program Manager, California Department of Fish and Wildlife; Craig Shuman, Marine Region Manager, California Department of Fish and Wildlife; and Dennis Rodoni, Marin County Supervisor District 4



# United States Department of the Interior



NATIONAL PARK SERVICE  
Point Reyes National Seashore  
1 Bear Valley Road  
Point Reyes Station, CA 94956  
Department of the Interior Region 10

IN REPLY REFER TO:

L7617

November 14, 2022

Craig Shuman, Marine Region Manager, CDFW

[REDACTED]  
Samantha Murray, President, California Fish and Game Commission  
[REDACTED]

Dear Mr. Shuman and President Murray:

The National Park Service (NPS) strongly supports the continued science-based and stakeholder driven designation and management of the most significant biodiversity focused Marin Protected Area (MPA) network in the United States. We anticipate the 10-year review will strengthen and reinforce the unparalleled benefits to protecting California's unique ecologically and economically important and irreplaceable marine biodiversity.

The NPS participated in the 2008 – 2009 stakeholder working groups recommending proposed Network of MPAs for the North-Central Coast. Since that time, NPS continues to support and conduct protection, education, monitoring, and research in the four State MPAs that overlap with the boundaries of Point Reyes National Seashore: Estero de Limantour State SMR, Drakes Estero SMCA, the Point Reyes SMR, and Duxbury Reef SMCA. Similarly, we also protect and monitor seabird and marine mammal populations in the three special closures within park boundaries: Point Reyes Headlands, Point Resistance Rock, and Double Point/Stormy Stack. We are proud to help protect and monitor these MPAs that both stakeholder subgroups overwhelmingly concurred on the Commission enacted MPA designations along the Marin County coastline.

The biodiversity protections established by these seven MPAs within the boundaries of Point Reyes National Seashore are key components in the NPS mission to “...*preserve unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.*” Importantly, the majority of Point Reyes National Seashore's outer coast out to ¼ mile from shore is Congressionally designated as Potential Wilderness, which restricts commercial activities (including commercial fishing) and motorized equipment (including motorboats). These federal marine wilderness areas overlap partially or entirely with all seven State MPAs in Marin County.

Our continued support and engagement with the State MPA designations is summarized below where NPS, in collaboration with many partners, conducts ecological restoration, ecological monitoring, human use monitoring, research, protection, and education.



**Table 1: Summary of National Park Service programs and projects in the seven State MPAs that overlap with NPS waters at Point Reyes National Seashore.**

<b>State MPA</b>	<b>Ecological Restoration</b>	<b>Ecological Monitoring</b>	<b>Human Use Monitoring</b>	<b>Research</b>	<b>Education</b>	<b>Protection</b>
Drakes Estero SMCA	X	X	X	X	X	X
Estero de Limantour SMR				X	X	X
Point Reyes SMR	X	X	X	X	X	X
Duxbury Reef SMCA		X	X	X	X	X
Point Reyes Headlands Special Closure		X	X	X	X	X
Point Resistance Rock Special Closure		X	X		X	X
Double Point/Stormy Stack Special Closure		X	X	X	X	X

Recent and ongoing NPS investments in these State MPAs include:

- \$4m restoration of the Drakes Estero SMCA in 2016-2017 removing 3.6m lbs. of aquaculture debris and continued annual monitoring of eelgrass restoration.
- Annual harbor seal and/or elephant seal monitoring in all the MPAs (except Estero de Limantour).
- NPS Visitor and Resource Protection patrol and response at all MPA sites, including vessel response and coordination with Marin County Sheriff and CDFW game wardens.
- NPS rocky intertidal monitoring at the Duxbury Reef SMCA as well as additional reference sites throughout the park
- NPS and Partner Rocky Intertidal habitat mapping for oil spill response and climate change tracking.
- Ashy Storm-Petrel Monitoring at the Double Point/Stormy Stack Special Closure
- Logistical support for USFWS Seabird Monitoring at five of the seven MPAs.
- \$250,000 in funding to match OPC funded ROV fish and invertebrate surveys at the Point Reyes Headlands SMR (via UCSD).
- Funding to supplement and support seafloor habitat mapping between Tomales Point and Duxbury Reef to support the MPA stakeholder working groups and science teams (via Moss Landing Marine Lab).
- Funding supporting UC Davis research developing MPA larval dispersal models (Botsford Lab) in the Point Reyes region used by the MPA Science advisory Team.
- Endangered Black Abalone Restoration research (with UCSC) at the Point Reyes SMR and Point Reyes Headlands Special Closure.
- Hosting regular joint law enforcement trainings on MPA law, science, policy, and emerging issues.
- Co-development and support for of an MPA Watch program for Marin County that covers all the MPAs.

- Advising on an MPA-intertidal docent program at Duxbury Reef SMCA.
- MPA science, policy, and protection education at NPS visitor centers, interpretive programs and media.

NPS scientists, interpreters, law enforcement and partners regularly work and perform outreach, research and monitoring in these seven State MPAs. Based on our intimate long-term understanding of these areas and to continue support for the NPS Mission and Federal wilderness policies, we respectfully submit our MPA designation recommendations in Table 2 as CDFW and the Commission undergoes the 10-Year MPA review.

**Table 2: National Park Service’s State MPA recommendations for MPA 10-year review.**

State MPA	NPS Recommendation	Rationale
Drakes Estero SMCA	Convert from SMCA to SMR	2010 designation as SMCA relied on presence of commercial aquaculture operation. DOI authorization of commercial aquaculture ended in 2012, and operations ceased in 2014.  Area is now Congressionally Designated Wilderness, \$4m estuary restoration completed in 2017. Recreational take of shellfish appears to be very rare, requires long kayak trips in wilderness area with no cell service and limited emergency response. Increased protections for eelgrass, estuarine biodiversity, and marine wilderness.  If converted to an SMR, join with Estero de Limantour into a single SMR for naming and outreach purposes.
Estero de Limantour SMR	No Change/or merge with proposed Drakes Estero SMR	Protection of eelgrass and estuarine biodiversity.
Point Reyes SMR	No Change	Continued protection of marine biodiversity, including Seabirds, Marine Mammals, Black Abalone
Duxbury Reef SMCA	Continue as SMCA or Convert to SMR	NPS staff observe periodic illegal take of invertebrates after 12 years despite SMCA status. Full SMR status would clarify regulations and ease enforcement/education needs. Premier site for intertidal and ocean education in Marin County. NPS and UCSC long-term intertidal monitoring sites.
Point Reyes Headlands Special Closure	No Change	Protection of Seabirds, Marine Mammals, Black Abalone
Point Resistance Rock Special Closure	No Change	Protection of Seabirds. NPS has concerns about boating and kayaking disturbances. However, these are generally due to the public not following existing regulations.
Double Point/Stormy Stack Special Closure	No Change	Protection of Seabirds, Marine Mammals. NPS has concerns about boating and kayaking disturbances. However, these are generally due to the public not following existing regulations. NPS continues to monitor harbor seals outside the special closure for disturbance events.

Please contact NPS Cooperative Ecosystems Studies Unit Science Advisor Ben Becker at [ben\\_becker@nps.gov](mailto:ben_becker@nps.gov) if you would like any additional supporting information on NPS MPA support activities or our MPA recommendations.

Sincerely,

Anne Altman  
Acting Superintendent



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL OCEAN SERVICE  
**Greater Farallones and Cordell Bank**  
**National Marine Sanctuaries**

991 Marine Drive, The Presidio, San Francisco, CA 94129

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
***Sent Via Email:*** fgc@fgc.ca.gov

April 15, 2023

**RE: Adaptive Management of California's Marine Protected Area Network**

Dear President Sklar and Members of the Fish and Game Commission:

Greater Farallones National Marine Sanctuary (sanctuary) includes the state waters designated between Marin County and Point Arena. In addition, Greater Farallones National Marine Sanctuary staff (GFNMS) manage the northern portion of the Monterey Bay National Marine Sanctuary between Año Nuevo and Marin County. As such, GFNMS' management area aligns with the California Marine Life Protection Act (MLPA) North Central California Region providing an opportunity for shared management of the waters overlapping 25 state MPAs and 6 special closures. Since the designation of these protected areas, we have worked to support the statewide network through education, outreach, enforcement, and research. We look forward to continuing to work together to protect these nationally important marine areas, and appreciate the opportunity to provide comments to the Commission on adaptive management of the statewide MPA network.

This letter is intended to share information about the importance of Duxbury Reef, the need to consider additional conservation measures to effectively protect it, and to support a community-based process to recommend enhanced protections at Duxbury Reef State Marine Conservation Area.

**The Importance of Duxbury Reef**

Duxbury Reef is a place of special significance to California's coast. Its shale reef ecosystem is the largest in California, and supports over 100 species of invertebrates and marine plants. Accessible tidepools are frequently used to teach the next generation of marine scientists how to monitor ecosystem health and to engage the public in responsible wildlife watching. Since 2000, Duxbury has been a survey site of GFNMS and Greater Farallones Association's LIMPETS program, in which Bay Area students conduct intertidal monitoring of the reef. For many, Duxbury is their first experience visiting a marine protected area. In addition to its state and federal protections, Duxbury is part of the Golden Gate Biosphere Network, a United Nations' World Network of Biosphere Reserves established as sites of excellence. At less than three quarters of a square mile in area, it is one of the smallest MPAs in the statewide network.

## The Need to Consider Additional Conservation Measures at Duxbury Reef

With rising sea levels intertidal animals need the space and time to adapt and build resilience to climate change. Duxbury Reef, an easy-to-access, popular coastal location in the Bay Area, is highly impacted by increased visitation. The impacts of increased visitation since its designation as an SMCA in 2010 have been well documented by agencies and partner organizations. Preliminary findings from the GFNMS Condition Report, an assessment of the health of the sanctuary over the last 10 years, revealed that Duxbury is the most easily accessed reef within the sanctuary. Although visitor use occurs at multiple rocky reef locations throughout the sanctuary, documented trampling and collecting of intertidal species at Duxbury reef makes it the location of highest concern for intertidal impacts in the sanctuary. These activities can cause long-term negative impacts to sanctuary habitat and species and reduce the resilience of species to adapt to changing ocean conditions.

The 2020 MPA Community Compliance Forum Report<sup>1</sup> offers details about illegal collections at Duxbury. Community members observed visitors using buckets, small nets and tools to collect reef animals including purple urchins and turban snails. They also expressed concern about increased visitation and impacts to tidepools from trampling, moving rocks for viewing, and crushing animals.

Data from Marin MPA Watch supports observations about increased visitation and illegal take. Marin MPA Watch has conducted surveys at Duxbury Reef since 2013 documenting significant increases in visitation, as well as human impacts to the reef. In recent annual reports, they noted the following use patterns at Duxbury<sup>2</sup>:

- In spite of being the smallest MPA, Duxbury has the highest use count (visitation) of all MPAs surveyed in 2022, accounting for 49% of total human activities in Marin MPA Watch locations.
- 16 observations were made of illegal hand collection of biota in 2022, as well as 62 observations of hand collection of biota in 2021.
- 305 incidents of hand collection of biota in the intertidal were observed in the months of June, July, and August 2020.

Duxbury's SMCA designation allows for certain kinds of take, which may confuse visitors that are not familiar with the regulations. Current regulations allow for "recreational take of finfish from shore and abalone", which is an unusually broad definition for an SMCA. Most SMCA designations include specific gear types (e.g. hook and line, dip net), but at Duxbury, the lack of specificity implies all gear types used to target finfish from shore, including hook and line, poke poles, and other gear are permissible. Poke poles used to target eels on the reef are a common

---

<sup>1</sup> Golden Gate Compliance Forum Report, 2020. see <https://www.mpacollaborative.org/goldengate/>

<sup>2</sup> MPA Watch Regional Report, Marin County, 2022 and 2020.



sight and are permitted under current regulations. Seeing legal take of finfish by various gear types occurring on a busy day may cause uninformed visitors to Duxbury to think that other forms of collection are legal. This confusion may be resulting in illegal take, which has been frequently observed on the reef by MPA Watch volunteers and docents.

Another potential source of confusion amongst coastal visitors may be from the allowed take at the southernmost extent of Duxbury Reef, which is unprotected by the current SMCA. This southern boundary area is accessible at low tide via the main parking lot, as well as a goat trail accessed at the end of Ocean Boulevard and Maple Road in Bolinas. Since collection is allowed at this part of the reef, unfamiliar visitors may see legal take occurring and assume that it is allowed on all areas of the reef.

### **Community Input on Adaptive Management of MPAs**

GFNMS supports a community-based approach to recommending additional conservation tools to ensure the Duxbury Reef ecosystem thrives and is offering to help support such an effort. GFNMS is offering to propose to our Sanctuary Advisory Council (SAC) a GFNMS-CDFW working group composed of community members and science experts to recommend conservation measures and tools to address concerns about the health of Duxbury Reef. A joint working group of GFNMS and CDFW could provide a meaningful forum for community members and scientists to discuss and propose adaptive management recommendations to ensure a healthy State and Federal MPA.

Community-led processes to manage and protect our ocean are a valuable way to achieve community support, which in turn can promote better compliance. GFNMS is committed to attending future meetings of the Fish and Game Commission and Marine Resources Committee for our shared areas in which adaptive management of MPAs will be discussed and will participate in community processes that the state chooses to undertake in our region.

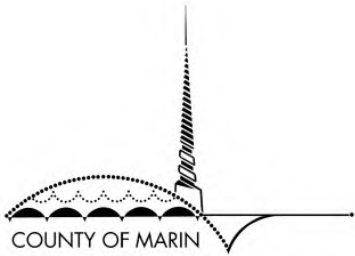
Thank you in advance for considering a Duxbury Reef community process whether led through GFNMS, CDFW, or a NGO to ensure that our shared resources thrive.

Sincerely,

A handwritten signature in black ink that reads "Maria Brown". The signature is written in a cursive, flowing style.

Maria Brown, Superintendent  
Greater Farallones and Cordell Bank National Marine Sanctuaries

# **ATTACHMENT 4**



Marin County Civic Center  
3501 Civic Center Drive  
Suite 329  
San Rafael, CA 94903  
415 473 7331 T  
415 473 3645 F  
415 473 6172 TTY  
DRodoni@marincounty.org  
www.marincounty.org/bos

November 21, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Support for Environmental Action Committee (EAC) Petition to the California Fish and Game Commission for regulation change at Duxbury Reef**

Dear President Sklar and Commissioner Murray,

I am pleased to extend my support for the Environmental Action Committee of West Marin's Petition to the Fish and Game Commission for a regulation change at Duxbury Reef State Marine Conservation Area (Duxbury SMCA).

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of invertebrates, marine algae, plants, associated finfish, and avian species. Its broad, flat slope affords easy access to rocky intertidal tidepool for the general public and as an outdoor classroom for students.

Currently, Duxbury Reef SMCA is only open for recreational finfish fishing and closed to any hand collection of biota. Over the last several years, my office has been made aware of compliance and regulation issues related to confusion on what is allowed and not allowed at Duxbury Reef based on the MPA regulatory designation and the mapping that does not include the southern portion of the reef that is exposed at low tide. In addition, concerns have been received about the northern boundary public visitation increases near Double Point and Stormy Stack where regulations are inconsistent with the southern intertidal areas.

My office strongly supports efforts to align regulations across jurisdictions to protect resources that align agency enforcement, education, and public safety initiatives for the public.

To reduce public confusion about what is allowed and not allowed at this location, we support the petition to adaptively manage regulations at Duxbury Reef and support the request to modify the existing Duxbury Reef SMCA regulations with the following changes proposed by EAC:

1. Change the Duxbury Reef SMCA designation to State Marine Reserve (SMR),
2. Extend the southern boundary of the Duxbury MPA to the most southerly tip of Duxbury Reef exposed at mean lower low water.
3. Extend the northern boundary of the Duxbury Reef MPA protections to the Double Point/Stormy Stack Special Closure to protect contiguous, more pristine reef habitat to the north, which is ecologically connected to the current SMCA, but which is at risk of being degraded.

My office enthusiastically supports California's Marine Protected Area (MPA) Network and its goals for increasing MPA awareness and understanding, facilitating MPA regulatory compliance, supporting enforcement, and encouraging informed enjoyment and stewardship of MPAs.

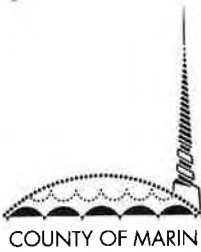
Sincerely,

A handwritten signature in black ink, reading "Dennis Rodoni", enclosed in a light gray rectangular box.

Dennis Rodoni  
Marin County Supervisor, District 4

# **ATTACHMENT 5**





MARIN COUNTY  
PARKS  
PRESERVATION • RECREATION



OPEN SPACE DISTRICT  
REGIONAL PARKS & PATHWAYS  
COMMUNITY PARKS  
LANDSCAPE SERVICES

Max Korten  
DIRECTOR AND  
GENERAL MANAGER

Marin County Civic Center  
3501 Civic Center Drive  
Suite 260  
San Rafael, CA 94903  
415 473 6387 T  
415 473 3795 F  
415 473 2495 TTY  
[www.marincountyparks.org](http://www.marincountyparks.org)

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for Environmental Action Committee's Petition for Regulation Change at Duxbury Reef

Dear President Sklar and Commissioner Murray,

Marin County Parks submits these comments in support of the Environmental Action Committee of West Marin (EAC)'s petition regarding changes to the regulations for the Duxbury Reef State Marine Conservation Area (SMCA). Marin County Parks is committed to coastal protection, the marine protected area (MPA) network, and the state's 30x30 goals.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of invertebrates, marine algae, and plants, plus associated fin fish and avian species. Its broad, flat slope affords easy access to rocky intertidal tidepools which are visited by many people throughout the year and used as outdoor classrooms for students from primary school to the university level. On some days, there can be hundreds of visitors at Duxbury Reef, including many visitors from other states and countries.

To help preserve the ecosystem of Duxbury Reef for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" to Duxbury Reef's vulnerable intertidal habitat and species, we urge the California Fish and Game Commission to modify the existing Duxbury Reef SMCA regulations with the following changes proposed by EAC:

1. **Change the Duxbury Reef SMCA designation to State Marine Reserve (SMR)** in which no take would be allowed, to more fully protect vulnerable marine species at risk of impacts from take. This would eliminate the existing public confusion and enforcement challenge related to the current allowance of some take. Redesignating Duxbury to an SMR is of vital importance.
2. **Extend the southern boundary of the Duxbury MPA** to the most southerly tip of Duxbury Reef exposed at mean lower low water. That is, protect the whole reef to a point at approximately 37° 53.1315' N. latitude, 122° 41.7549' W. longitude, to include the southern reef area which is contiguous with the rest of the MPA, and ecologically sensitive yet currently unprotected.

- 3. Extend the northern boundary of the Duxbury Reef MPA** protections to the Double Point/Stormy Stack Special Closure as described in CCR Title 14 § 632(b)(49) to protect contiguous, more pristine reef habitat to the north which is ecologically connected to the current SMCA, but which is at risk of being degraded.

We support California's MPA Network. In the case of Duxbury Reef, we assert that these changes would help to preserve the reef's biodiverse marine life for future generations, reduce public confusion about allowable take, protect the southern and northern sections of the reef habitat, all in combination with changing ocean and climate conditions including sea level rise that add further stress on sensitive marine creatures and alter the habitat.

Sincerely,



Max Korten  
Director and General Manager  
Marin County Parks

# **ATTACHMENT 6**

November 25, 2023

To:

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244  
[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

From:

Sarah G. Allen, PhD  
[REDACTED]  
Inverness, CA 94937  
[REDACTED]

Re: Decadal Review Recommendations for the California North Central Marine Protected Areas

Dear President Sklar and Honorable Commissioners:

The California Marine Life Protection Act has been a model for other states and countries on how to establish a network of MPAs and provide protection to critical species and ecosystems that are fundamental to the biodiversity and economic health of California. Designation also involves periodic reevaluation and adaptive management of the sites. You are currently reviewing the North Central Coast Marine Protected Areas (MPAs) for the first decadal evaluation, and I wish to comment on and contribute to your review. For 50 years, I have studied marine life in California with an emphasis on marine birds and mammals, and was a scientist on the Scientific Advisory Team with expertise in marine mammals during the initial selection of sites within the North Central Coast Region. Twenty-six of those years, I was employed with the U.S. National Park Service as an ecologist and later as Science Program Lead for the Pacific West Region. During that time, I served on numerous federal/state collaborative committees and working groups, including, but not limited to, representative for the National Park Service on the staff committee for the California Biodiversity Council and for the nascent Parks and Protected Areas working group. While still working with and since retiring from the National Park Service in 2019, I have continued to study marine birds and mammals throughout the region, and am co-author of the University of California Press *Field Guide on Marine Mammals of the Pacific*.

My recommendations based on professional experience and continued study of pinniped and seabird colonies are as follows:

1. **Expand all Special Closure Areas** in the North Central Coast Region from 300 ft. to 1000 ft. to provide better protection for nesting seabirds including at North and Southeast Farallon Islands, Point Reyes Headlands, Point Resistance Rock, Double Point/Stormy Stack, and Egg Rock. From my years of studying nesting seabirds, I have noted that birds may begin reacting to boats as far as 1000 ft. away by head bobbing, and will leave eggs and chicks at shorter distances. Additionally, during surveys over the past several years, I have directly observed fishing boats disturbing nesting seabirds beyond 300 ft. at Double Point/Stormy Stack, and violating the 300 ft. buffer. When disturbing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls, and a single disturbance can affect the productivity for an entire nesting season if seabirds do not return.

**2. Expand the Duxbury Reef MPA north** to include the Double Point/Stormy Stack Special Closure. The marine ecosystems of this area are exceptional as documented in its designation as an Area of Special Biological Significance (see Chan 1979). Double Point is home to one of the largest harbor seal (*Phoca vitulina*) breeding colonies in the state of California and to a significant seabird nesting site on Stormy Stack and the adjacent mainland cliffs. Ashy Storm Petrels (*Hydrobates homochroa*) a species of Conservation Concern in California, nest at this site, one of only a few breeding sites in the state. Black Oystercatchers (*Haematopus bachmani*), also nest there and are designated by the California Audubon Society as a Climate Endangered species because of their vulnerability to sea level rise. Other significant seabirds include >1000 Common Murres (*Uria aalge*), hundreds of cormorants, and tens of Pigeon Guillemots (*Cepphus Columba*), an indicator species of MPA recovery because of their delimited foraging/nesting habitat. Additionally, several hundred Brown Pelicans (*Pelecanus occidentalis*) roost at the site during the year.

Current protections of Stormy Stack and Double Point are insufficient. During surveys over the past several years, I have observed commercial party and recreational fishing boats violating the 300 ft. buffer and also disturbing nesting seabirds even beyond 300 ft. Fishing party boats on occasion produce noise through loud speakers as they circle around the area, which disturbs seabirds and seals at distances greater than 300 ft. By flushing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls. One disturbance can affect the productivity for an entire breeding season if seabirds do not return to lay another egg.

**3. Expand the Duxbury Reef MPA south** to include the southern extension of Duxbury Reef that currently is not protected from people walking over and harvesting invertebrates and algae. There is a small but significant harbor seal colony on the southern extension of the reef that serves as a way station for seals to rest while traveling north to Point Reyes from San Francisco Bay and out to the Farallon Islands (Green et al. 2006). The seals are present consistently year round, and every year several pups occur there.

**4. Elevate the expanded Duxbury-Double Point MPA to State Marine Reserve.** The sensitivity and biological diversity of both Duxbury Reef and Double Point/Stormy Stack deserve full Marine Reserve status, as described in above points 1-3. Current marine reserves in California protect only approximately 9% of the state waters from harvest. The area has a long scientific history documenting biodiversity and significance, and consequently, is a good candidate for elevating to full reserve status (Chan 1979). Recently, the College of Marin broke ground to rebuild the historical Bolinas Field Station, which will continue and expand on the long history of scientific research about the coastal ecology of the area.

**4. Combine Drakes Estero SMCA with the Estero de Limantour State Marine Reserve** in order to extend reserve status protection to the middle and upper reaches of Drakes Estero. Drakes and Limantour esteros form a complex of tidal sand bars where harbor seals give birth and rest onshore year round, and is one of the largest concentrations of seals in California (Codde & Allen 2015). Recreational take of clams is the only activity allowed in this SMCA. Currently under this designation, seals are regularly disturbed by recreational clam diggers who come by kayak to dig for clams on the sand bars where the seals haul out. These sandbars are inaccessible to people on foot from the mainland and are only exposed and accessible to the seals during medium to low tides. During the harbor seal pupping season (March 1-June 30), non-motor boat access in the estero is restricted by Point Reyes National Seashore regulations, and restricted to all motor boats year round because Drakes Estero is within federally designated Wilderness. Nevertheless, there is no restriction to non-motor boats after June 30 when seals are hauling out to molt their fur. The molt (June-August) is energetically costly to the seals, requiring longer times to rest



onshore. The National Park Service supported conversion from SMCA to SMR to California Fish and Game Commission in a detailed letter dated November 14, 2022.

5. **Create a Special Closure** of 1000 ft. at Northwest Cape Rocks, north of Fort Ross. These rocks have significant seabird nesting colonies and have one of the few Steller sea lion (*Eumetopias jubatus*) breeding colonies in the state (<https://www.fortross.org/animals/steller-sea-lion>). Steller sea lions were delisted from the federal endangered species list several years ago; however, the California sub-population continues to decline with an estimate of only around 2,000 (NOAA Stock Assessment 2020). The site was proposed for MPA and Special Closure designation when I was an advisor on the Science Advisory Team, but was not included at that time. Since then, the Steller sea lion colony has continued to decline at this location and state-wide.

California has been able to rebuild some of the unique and critically significant coastal ecosystems over the past decade through the establishment of an MPA network. Nevertheless, only 16% of state waters are designated as MPAs and there are only 14 Special Closures statewide. The 30x30 California Initiative advocates for 30% of the state be protected by 2030. Increasing the number and areal extent of MPAs in state waters will be a positive action to meet the goals of the initiative and a prudent management strategy to meet the immense challenges from changes in climate that already are harming California's marine resources.

Thank you for your service to protect the exceptional resources of California.

Sincerely,



Sarah G. Allen, PhD  
Retired Senior Science Advisor  
National Park Service



cc: Ashley Eagle-Gibbs, Environmental Action Committee of West Marin

## References

Chan, G. 1979. California Marine Waters Areas of Special Biological Significance Reconnaissance survey reports. Double Point and Duxbury Reef. California State Water Resources Control Board. Water Quality Monitoring Report No. 79-14 and 15.

Green, D.E., Grigg, E., Allen, S., & Markowitz, H. 2006. Monitoring the potential impact of the seismic retrofit construction activities at the Richmond-San Rafael Bridge on harbor seals (*Phoca vitulina*): May 1, 1998 – December 31, 2004. Final Report, IHA 11/19/03-11/18/04. 100pp.

Codde, S. & S. Allen. 2015. Pacific harbor seal (*Phoca vitulina richardsi*) monitoring at Point Reyes National Seashore and Golden Gate National Recreation Area: 2013 annual report. Natural Resource Report NPS/SFAN/NRR—2015/919. National Park Service, Fort Collins, Colorado.

# **ATTACHMENT 7**

Josh Churchman

email:

telephone:

November 29, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area.

**My experience/background relevant to this matter.**

I am a fisherman in Bolinas for sixty seven years. I started as a sport fisherman and progressed into commercial fishing as I got older. I am now and have been a member of the Bolinas Rod & Boat Club for fifty years and I was a stakeholder on the long and painful road to forming MPA's along our coast.

For the enjoyment, education and inspiration of current and future generations, and to minimize the negative impacts of the ever increasing number of visitors to Duxbury Reef's intertidal habitat, all three of the following additions and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") which EAC has requested should be approved by the Commission.

**1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".**

Designating the entirety of the Duxbury MPA as a State Marine Reserve is upon us. It is time for us to prohibit all taking of anything, including all fishing from shore (except under a scientific collecting permit for authorized research, restoration or monitoring).

**2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water (the "Southern Reef Extension")**

I understand that the Southern Reef Extension is at this time outside of and unprotected

by the current MPA boundaries. This part of the reef should be included in the new boundaries.

**3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point (the “Northern Reef Extension”)**

I understand that the Northern Reef Extension is outside of and unprotected by the current SMCA. It is my understanding that this unprotected area commences at the North boundary of the current SMCA, roughly at the outfall of Arroyo Hondo Creek, and would extend to the northern point of Double Point. This is a much more abundant reef area and should have been included long ago.

**No New Exclusions of Offshore Commercial Fishing**

Finally, I wish to clearly state that while I am strongly in favor of providing full protection as a State Marine Reserve to the entire Duxbury intertidal reef, I am concerned that a thousand foot outer boundary is excessively punitive to the Bolinas fishing community. If the regulations would exclude the taking of Salmon and Halibut, or the outer boundary could be moved in to three hundred feet it would still protect the intertidal zone and not adversely impact the local fishermen as dramatically. Salmon and Halibut are “ pelagic” and they do not influence the health of the reef in any significant way. However, there are times when both congregate along that shoreline and in very close to the beach.

**Summary**

I think it is time to exercise “adaptive management”. Increase the intertidal protections and, at the same time, protect the future of a healthy Bolinas fishing community.  
Respectfully submitted,

  
Josh Churchman

cc. Kent Khtikian



# **ATTACHMENT 8**





CALIFORNIA  
ACADEMY OF  
SCIENCES



Resource Renewal Institute  
40 Years. Innovation for a Sustainable Future.



November 29, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Support for Environmental Action Committee's Petition for Regulation Change at Duxbury Reef

Dear President Sklar and Commissioner Murray,

The undersigned organizations submit these comments in support of the Environmental Action Committee of West Marin (EAC)'s petition regarding changes to the regulations for the Duxbury Reef State Marine Conservation Area (SMCA). The undersigned organizations are committed to coastal protection, the marine protected area (MPA) network, and the state's 30x30 goals.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of invertebrates, marine algae, and plants, plus associated finfish and avian species. Its broad, flat slope affords easy access to rocky intertidal tidepools which are visited by many people throughout the year, and used as outdoor classrooms for students from primary school to the university level. On some days, there can be hundreds of visitors at Duxbury Reef, including many visitors from other states and countries.

To help preserve the ecosystem of Duxbury Reef for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" to Duxbury Reef's vulnerable intertidal habitat and species, we urge the California Fish and Game Commission to modify the existing Duxbury Reef SMCA regulations with the following changes proposed by EAC:

1. **Change the Duxbury Reef SMCA designation to State Marine Reserve (SMR)** in which no take would be allowed, to more fully protect vulnerable marine species at risk of impacts from take. This would eliminate the existing public confusion and enforcement challenge related to the current allowance of some take. Redesignating Duxbury to an SMR is of vital importance.
2. **Extend the southern boundary of the Duxbury MPA** to the most southerly tip of Duxbury Reef exposed at mean lower low water. That is, protect the whole reef to a point at approximately 37° 53.1315' N. latitude, 122° 41.7549' W. longitude, to include the southern reef area which is contiguous with the rest of the MPA, and ecologically sensitive yet currently unprotected.
3. **Extend the northern boundary of the Duxbury Reef MPA** protections to the Double Point/Stormy Stack Special Closure as described in CCR Title 14 § 632(b)(49) to protect contiguous, more pristine reef habitat to the north which is ecologically connected to the current SMCA, but which is at risk of being degraded.

We enthusiastically support California’s MPA Network. In the case of Duxbury Reef, we assert that strengthened protections are urgently needed to preserve the reef’s biodiverse marine life for future generations, considering public confusion about allowable take, as well as the lack of any protection of the southern and northern sections of the reef habitat, all in combination with changing ocean and climate conditions including sea level rise that add further stress on sensitive marine creatures and alter the habitat.

Sincerely,

Chance Cutrano Director of Programs Resource Renewal Institute	Laura Deehan State Director Environment California Research and Policy Center
Neal Desai Senior Program Director, Pacific Region National Parks Conservation Association	Suzanne Hume Educational Director & Founder CleanEarth4Kids.org
Megan Isadore Executive Director River Otter Ecology Project	Scott D. Sampson, Ph.D. Executive Director California Academy of Sciences
Terri Thomas President Marin Conservation League	Tomas Valadez CA Policy Associate Azul
Robert Vergara Roger Arliner Young (RAY) Ocean Conservation Fellow Natural Resources Defense Council	

# **ATTACHMENT 9**

Kent Khtikian

email: [REDACTED]

telephone: [REDACTED]

July 3, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") should be approved by the Commission.

**1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".<sup>1</sup>**

Designating the entirety of the Duxbury MPA as a State Marine Reserve is imperative, whether or not the boundaries of the current MPA re expanded as urged below.

I have observed a very large increase in the visitation to the Duxbury MPA over the course of the last 12 years. (The increase over the prior 35 years was not nearly as large in absolute numbers; indeed, the increase during that prior 35 year period was hardly noticeable.) I have also observed that there is now, as compared to 12 years ago, a corresponding large increase in both commercial and recreational collection. This includes collection of fauna and flora, for consumption as well as for non-consumption purposes. When speaking with visitors, who have

---

<sup>1</sup> I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected. I am a retired attorney and I have read and am familiar with all sections of the Marine Life Protection Act (Fish & Game § 2850 et seq.) and the regulations promulgated thereunder (14 C.C.R. §632).



been engaged in non-consumptive, casual or recreational collecting, I have consistently heard confusion about what is or is not allowed within the current SMCA. Visitors see legal taking occurring within the current SMCA and assume that taking of anything is allowed. In addition, when permitted taking is observed, the ability of docents to protect the SMCA from not only recreational collecting, but also to minimize the usually unintended negative impacts of trampling, moving rocks for viewing, and temporarily removing animals from tide pools (this causes injury as the animal may have been in a location where it's food was present, or where it was tending eggs, or where it had a required or preferred exposure to or protection from tidal currents and wave shock<sup>2</sup>). Visitors compare, rationalize and measure their own trampling, invertebrate handling or collecting, and rock-overturning activity against the permitted taking. Simply put, continuing to permit some taking from Duxbury undermines the realization of the Commission's proscription that "it is unlawful to injure, damage, take, or possess any living ... marine resource"(14 C.C.R. § 632(a)(1)) that is not otherwise excepted from taking in the Duxbury SMCA.

**2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water (the "Southern Reef Extension")**

a. Direct Impacts on the Southern Reef Extension. The Southern Reef Extension is outside of and unprotected by the current SMCA. This unprotected area constitute about 5/6's of that portion of Duxbury Reef extending off the southern tip of the Bolinas peninsula. It is accessible at low tide from 3 points: the Agate Beach County parking lot; the Bolinas beach boat ramps at the ends of Brighton Road and Wharf Roads; and, a "local" trail down the bluff on the southern point of the Bolinas mesa. While the Southern Reef Extension does not have as many visitors as other parts of Duxbury Reef, it is an area on which I have observed an increasing number of incidents of collecting. The Southern Reef Extension has many species not found on, or rarer on, those portions of Duxbury that are more heavily visited. Its relatively pristine state is at risk of being degraded. Many of the species I have seen on the Southern Reef Extension have always been, or are now, absent or comparatively relatively rare on those parts of the SMCA most heavily visited by humans (for example, *Lissothuria nutriens* (Dwarf Sea Cucumber), *Nuttallina californica* (Nuttall's Chiton), *Mopalia ciliata* (Hairy Chiton), *Oligocottus snyderi* (Fluffy Sculpin) a number of species of nudibranch such as *Diaulua sandiegensis* (Ring-spotted Dorid) and *Dendrodoris albopunctata* (Salted Dorid). Other species I have seen on the Southern Reef Extension are now relatively rare, but had once been more numerous, on the more frequently visited part of the reef - within the current SMCA - due to collecting/poaching of that species itself (e.g. *Lottia gigantea* (Owl Limpet)) or loss from the trampling, handling or collecting of what a species (e.g. *Octopus dofleini* and *Octopus rubescens*) feeds on. Finally I have observed since the early 1980's, at roughly the midpoint of the Southern Reef Extension, a continuous colony of *Phoca vitulina* (Harbor Seals) that is easily flushed into the water by approaching humans.

---

<sup>2</sup> I would be happy to testify as to specific impacts of these kinds on specific species.



b. Impacts on the Existing SMCA. In addition to the direct impacts on the unprotected Southern Reef Extension itself, the collection in the Southern Reef Extension has at least two negative impacts on the intertidal habitat of the current SMCA. First, visitors unfamiliar with the existence of the SMCA or, if knowing it exists, unfamiliar with its boundaries see legal taking occurring on the unprotected Southern Reef Extension, where there is no limitation to only the taking of finfish, and assume that broader taking (e.g. taking bivalves for bait, collecting invertebrates, harvesting algae) is allowed in the area within the current SMCA. Second, it negatively impacts the complex and rich ecosystem of the entire reef by removing from the less visited areas (the Northern & Southern Reef Extensions) those species that could otherwise repopulate the more heavily visited areas (the current SMCA).

**3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point (the “Northern Reef Extension”)**

The Northern Reef Extension is outside of and unprotected by the current SMCA. This unprotected area commences at the North boundary of the current SMCA (roughly the outfall of Arroyo Hondo Creek) and would extend to the northern point of Double Point. It is accessible from 6 points: the Agate Beach County parking lot (at low tide); two trails down from the Commonwealth area; a trail down from a small parking area on Mesa Road North of Point Blue’s Palomarin Field Station; a trail that commences about 200 yards North of the Palomarin trailhead (branching off the Coast Trail); and, at low tide from the beach from Alamere Falls. The number of visitors at the Palomarin trailhead has increased many-fold. Ten years ago it was rare to have more than 15 cars in the trailhead parking lot on a Saturday or Sunday during the Summer; now parking fills that lot at any time of the year, and often extends down Mesa road - on occasion nearly to Point Blue’s field station. The Northern Reef Extension has many species not found on, or now rarer on, those portions of Duxbury that are more heavily visited. Its relatively pristine state is at risk of being degraded. Perhaps the most memorable (to me) two species I have seen in the Northern Reef Extension, but not in the SMCA, are *Anarrhichthys ocellatus* (Wolf Eel), and *Scorpaenichthys marmoratus* (Giant Marbled Sculpin or Giant Sculpin) protecting its eggs, a species I have seen in the intertidal area only twice in over 30 years in tidepools which was protecting eggs and potentially could be easily captured. Obviously, like the collecting activity in the Southern Reef Extension, that same activity in the unprotected Northern Reef Extension, negatively impacts the complex and rich ecosystem of the entire reef.

**My experience/background relevant to this matter.**

I was a part-time resident of Bolinas from 1976 to 1985. From 1986 to the present I have continuously been a full-time resident of Bolinas. During that period I have observed Duxbury Reef, keeping field and laboratory notes of my observations over that time. I am a rocky shores naturalist, trained as part of the rocky shores partnership between California Academy of Sciences and the Gulf of the Farallones National Marine Sanctuary, and in marine biology course work at the College of Marin (as examples). Two days a month for over 3 years I was a volunteer docent at the California Academy of Sciences, specializing in marine invertebrates.



Each year for the past 10 years I have performed surveys of intertidal invertebrates in the more untouched areas of the Marin Coast (4 sites including one on Duxbury Reef) and Alcatraz Island as part of the Multi-Agency Rocky Intertidal Network (MARINe ). For 8 years I surveyed and tagged pinnipeds in Pt. Reyes National Seashore. I participated in MPA Watch from 2013 to 2021. I have spent over 100 hours a year docenting at Duxbury Reef, including taking school groups on the reef from primary school to college classes, over the past 12 years. In 2022 I created the docent program on Duxbury Reef in partnership with EAC, I taught the docent volunteers the biology and the identification of species found on Duxbury, and trained them in docenting protocols. I was previously named volunteer of the year by the National Park Service, by the Greater Farallones National Marine Sanctuary, and by EAC. I am also a member of the Bolinas Rod & Boat Club.

### Summary

Duxbury Reef's side-shelf shale reef supports a complex and rich ecosystem. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level and for recreation. On some days there are 100s of visitors to Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

In order to preserve without further impairment, and to correct harm that has been previously done to, the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations all three of the above-described additions to and modifications of the Duxbury Reef State Marine Conservation Area proposed should be approved by the Commission.

Respectfully submitted,



Kent Khtikian

cc. Morgan Patton, EAC

# **ATTACHMENT 10**

Date: July 3, 2023

To: California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

From: Joe Mueller  
College of Marin  
Dept. of Life and Earth Sciences  
835 College Ave  
Kentfield, CA 94904

Re: **Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023 regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve the ecological integrity of the Communities of Duxbury Reef for the recreational use, education and scientific modeling opportunities of current and future generations and to minimize the damaging impacts of visitors to Duxbury Reef's rocky intertidal communities all three of the following additions to and revisions of the Duxbury Reef State Marine Conservation Area ("SMCA") should be approved by the Commission.

**My experience/background relevant to this matter.**

As a Professor of Marine Biology at College of Marin for 33 years I have been studying Duxbury Reef and leading marine biology field trips to the reef for all of these years. I have been part of conducting invertebrate population assays on the reef since 1985. Recently I have led a research project to follow through on invertebrate studies that have been monitoring biodiversity trends since the early 1970s.

**1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".<sup>1</sup>**

Designating the entirety of the Duxbury MPA as a State Marine Reserve is of vital importance,

---

<sup>1</sup> I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected.



July 3, 2023

whether or not the boundaries of the current MPA are expanded as urged below. Over my 33 years of teaching college level courses on Duxbury Reef I have observed a significantly large increase in the visitation to the Duxbury MPA over the course of the last 12 years or so. Additionally, I have observed that there is a corresponding significant increase in both commercial and recreational collecting/fishing as compared to 12 or so years ago. This includes collecting of both invertebrates, vertebrates and algae for food as well as for general collecting purposes. Most importantly I've notice a precipitous drop and reef invertebrate diversity and biomass. It is in my professional opinion that continuing to permit some taking from Duxbury undermines the realization of the Commission's proscription that "it is unlawful to injure, damage, take, or possess any living ... marine resource"(14 C.C.R. § 632(a)(1)) that is not otherwise excepted from taking in the Duxbury SMCA.

## **2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water (the "Southern Reef Extension")**

a. Direct Impacts on the Southern Reef Extension. The Southern Reef Extension is outside of and unprotected by the current SMCA. This unprotected area constitutes about 5/6's of that portion of Duxbury Reef extending off the southern tip of the Bolinas peninsula. It is accessible at low tide from 3 points: the Agate Beach County parking lot; the Bolinas beach boat ramps at the ends of Brighton Road and Wharf Roads; and, a "local" trail down the bluff on the southern point of the Bolinas mesa. While the Southern Reef Extension does not have as many visitors as other parts of Duxbury Reef, it is an area on which I have observed an increasing number of incidents of collecting over the last few years. The Southern Reef Extension has a significantly higher biodiversity than those regions of Duxbury that are more heavily visited due to easier access. This is due to the diverse microhabitats found in this area as well as other abiotic variables. The reef's relatively pristine state is at risk of being degraded. If needed I would be happy to provide your office with a list of invertebrate and vertebrate species historically found within the Southern Reef Extension that are now, absent or comparatively rare on those parts of the SMCA most heavily visited. Other species I have seen on the Southern Reef Extension are now relatively rare, but had been more numerous in the past, on the more frequently visited part of the reef - within the current SMCA - due to collecting/poaching of that species, e.g. *Lottia gigantea* or most likely loss from the trampling, handling or collecting of what some species (e.g. *Octopus dofleini* and *Octopus rubescens*) feed on. I have also observed colonies of Harbor Seals that are easily frightened into the water by approaching humans in this area.

b. Impacts on the Existing SMCA. In addition to the direct impacts on the unprotected Southern Reef Extension, the collection in the Southern Reef Extension has at least two negative impacts on the intertidal habitat of the current SMCA. First, visitors unfamiliar with the existence of the SMCA or, if knowing it exists, unfamiliar with its boundaries see legal taking occurring on the unprotected Southern Reef Extension, where there is no limitation to only the taking of finfish, and assume that broader taking (e.g. taking bivalves for bait, collecting invertebrates, harvesting algae) is allowed in the area within the current SMCA. Second, it negatively impacts the



July 3, 2023

complex and rich ecosystem of the entire reef by removing from the less visited areas (the Northern & Southern Reef Extensions) those species that could otherwise repopulate the more heavily visited areas (the current SMCA).

**3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point (the “Northern Reef Extension”)**

The Northern Reef Extension is outside of and unprotected by the current SMCA. This unprotected area commences at the North boundary of the current SMCA (roughly the outfall of Arroyo Hondo Creek) and would extend to the northern point of Double Point. It is accessible from 6 points: the Agate Beach County parking lot (at low tide); two trails down from the Commonweal area; a trail down from a small parking area on Mesa Road North of Point Blue’s Palomarin Field Station. I’m told by expert National Park staff that there has been a significant increase in visitation and is due to social media. The Northern Reef Extension has a richer biodiversity than areas of Duxbury that are more heavily visited. Its relatively pristine state is at risk of being degraded. As you’re aware, the collecting activity in the Southern Reef Extension is the same activity in the unprotected Northern Reef Extension and negatively impacts the complex and rich ecological communities of the entire reef system

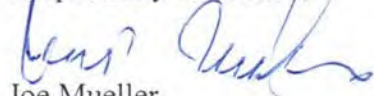
**Summary**

Duxbury Reef’s side-shelf shale reef supports complex and rich ecological communities. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level as well as for recreation. On many days I have counted more than 150 visitors using Duxbury Reef, that have come to explore the rocky intertidal community.

In order to preserve without further damage, and to allow the reef to heal so it can provide enjoyment, education and inspiration for current and future generations I strongly recommend that all three of the above-described additions to and revisions of the Duxbury Reef State Marine Conservation Area proposed should be approved by the Commission.

Please feel free to contact me for any clarification or questions. [jmueller@marin.edu](mailto:jmueller@marin.edu)

Respectfully submitted,



Joe Mueller  
Professor of Marine Biology  
College of Marin  
Kentfield, CA 94904  
[jmueller@marin.edu](mailto:jmueller@marin.edu)

cc. Morgan Patton, EAC

# **ATTACHMENT 11**

Lily Rosenman

email: 

July 6, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin (“EAC”) regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef’s intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area (“SMCA”) should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a “State Marine Reserve”.<sup>1</sup>
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water.
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

**Rationale for my support of the above actions.**

My comments below are premised upon my following experience. I have continuously been a full-time resident of Bolinas since 2021. Since moving to Bolinas I have spent many hours on Duxbury Reef. I am currently taking classes at the College of Marin to obtain a Natural History Certificate and have completed 4 of the 7 courses for that certification. I completed the docent training class for the Duxbury Reef docent program in January 2022. I have been an active docent on Duxbury Reef since January 2022, and I have spent many hours on the reef as a docent. I have been visiting and exploring Duxbury reef since the 1980s, and the experiences

---

<sup>11</sup> I understand that a designation as a “State Marine Reserve” will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected.



tidepooling there throughout my childhood have directly influenced my current path to learning more about Ecology and Marine Biology.


As a docent I have talked to visitors who were engaged in casual, recreational collecting. From numerous interactions with visitors, it is apparent that visitors often feel that their own activity of turning over rocks, walking through tide pools, or recreational collecting is less harmful than whatever fishing that they either see occurring on the reef or they read as being permitted on the signage in the Agate Beach parking lot.

When fishermen are in the SMCA, I am too uncomfortable as a volunteer docent, to try to stop - or even dissuade - fishermen from using mussels as bait or from removing other invertebrates either for consumption or for bait.

If Duxbury was designated as a State Marine Reserve, there would be no question that the taking or possessing is not permitted. Nor would there be permitted taking occurring, against which visitors could compare, rationalize and justify their own trampling, invertebrate handling, and rock-overturning activity.

I have also observed that there are large parts of Duxbury Reef, both to the North and South of the boundaries of the current area designated as the Duxbury Reef State Marine Conservation Area which are increasingly visited. Those areas are outside of the Duxbury marine protected area. Consequently, there is no attempt to dissuade or even report harmful conduct in the parts of the reef which are now relatively pristine. The risk of the degradation of those areas would be reduced by expanding the boundaries of Duxbury marine protected area to include them and by designating the entirety as a State Marine Reserve. Moreover, unless someone was posted out beyond the current boundaries of the SMCA (and there are not enough volunteers to do that), it is impossible to tell if people who are walking back from more remote parts of the reef to the County's Agate Beach parking area who are carrying buckets, collected the contents of those buckets inside the current boundaries of the Duxbury SMCA or in those larger unprotected areas of Duxbury Reef outside of its current protected boundaries.

Sincerely,

A handwritten signature in black ink that reads "Lily Rosenman". The signature is fluid and cursive, with a long horizontal flourish at the end.

Lily Rosenman

cc. Morgan Patton, EAC

# **ATTACHMENT 12**



Bridget Bartholome

email: [REDACTED]

telephone: [REDACTED]

July 5, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023 regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".<sup>1</sup>
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water.
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

**Rationale for my support of the above actions.**

---

<sup>1</sup> I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected.



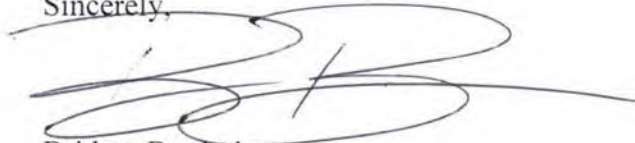
My comments below are premised upon my following experience. I have continuously been a full-time resident of Bolinas since 2006. Since moving to Bolinas I have spent many hours on Duxbury Reef. I am currently taking classes at the College of Marin to obtain a Natural History Certificate and have completed 6 of the 7 classes for that certification. I took the docent training class for the Duxbury Reef docent program in January 2022 and I have been continually participating in that program on Duxbury Reef since that date. I was also resident choreographer for Bolinas Bay Performing Arts 2014-2020, and taking young people to the reef to learn and explore was an integral part of our production of "The Little Mermaid". I have also been a member of the Bolinas Rod and Boat Club since 2020. For the past year I have also been assisting in performing invertebrate surveys in several areas within the current Duxbury SMCA.

I have observed a very large increase in the visitation to the Duxbury SMCA over the course of the last 7 years. As a docent I have talked to visitors who were engaged in casual, recreational collecting. On those occasions when others on the reef were fishing, the visitors would ask me why fishing with lines and hooks, or with poke poles, was permitted, but taking other animals (bivalves, snails, urchins) from the reef, or turning over rocks, or splashing through tide pools (and, for example, potentially destroying egg deposits or crushing juvenile crabs taking refuge in tide pools when the tide retreats) was prohibited. Docents are volunteers, and are present on the reef for only a small percentage of the time. It is apparent to me that despite the signs in the Agate Beach parking lot, many people believe that their activity is less impactful than the taking by others that is permitted. In addition, when people are walking back from one of the more distant parts of Duxbury's protected area to the County's Agate Beach parking lot carrying fishing rods and buckets, it is very uncomfortable for docents to try to peer in the buckets to determine if they are carrying off anything other than finfish or abalone; indeed, it is uncomfortable to the point that the observation is rarely attempted. Consequently, if Duxbury was designated as a State Marine Reserve, there would be no question that the taking or possessing is not permitted. Nor would there be permitted taking occurring, against which visitors could compare, rationalize and justify their own trampling, invertebrate handling, and rock-overturning activity.

I have also observed that there are large parts of Duxbury Reef, both to the North and South of the boundaries of the current area designated as the Duxbury Reef State Marine Conservation Area which are increasingly visited. Those areas are outside of the Duxbury marine protected area. Consequently, there is no attempt to dissuade or even report harmful conduct in the parts of the reef which are now relatively pristine. The risk of the degradation of those areas would be reduced by expanding the boundaries of Duxbury marine protected area to include them and by designating the entirety as a State Marine Reserve. Moreover, unless someone was posted out beyond the current boundaries of the SMCA (and there are not enough volunteers to do that), it is impossible to tell if people who are walking back from more remote parts of the reef to the County's Agate Beach parking area who are carrying buckets, collected the contents of those buckets inside the current boundaries of the Duxbury SMCA or in those larger unprotected areas of Duxbury Reef outside of its current protected boundaries.

California Fish and Game Commission  
July 5, 2023

Sincerely,

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Bridget Bartholome

cc. Morgan Patton, EAC

# **ATTACHMENT 13**



Laura Lee Miller

July 6, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".<sup>1</sup>
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water.
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

**Rationale for my support of the above actions.**

My comments below are premised upon my following experience. I have continuously been a full-time resident of Bolinas since 2001, and am a lifelong resident of Marin County. Since moving to Bolinas I have spent many hours on Duxbury Reef. In both Bolinas waters and Tomales Bay, as a Red Cross certified swimming instructor I have taught open water safety

---

<sup>1</sup> I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected.



California Fish and Game Commission  
July 6, 2023

skills, for both West Marin Community Services and Bolinas Stinson School. I received a naturalist certificate from the College of Marin after completing 12 courses, including marine biology. I have volunteered at the Point Blue Conservation Marine Lab, specializing in krill ID from Cordell Bank surveys. I took the docent training class for the Duxbury Reef docent program in January 2022 and I have been continually participating in that program on Duxbury Reef since that date. I have spent many hours on the reef as a docent since January 2022. For the past 3 years I have also been performing invertebrate surveys in several areas within the current Duxbury SMCA. I am also an active member of the Bolinas Rod and Boat Club.

I have observed a very large increase in the visitation to the Duxbury SMCA over the course of the last 20 years but especially the past 4 years. As a docent I have talked to visitors who were engaged in casual, recreational collecting. From numerous interactions with visitors, it is apparent that visitors often feel that their own activity of turning over rocks, walking through tide pools, or recreational collecting is less harmful than whatever fishing that they either see occurring on the reef or they read as being permitted on the signage in the Agate Beach parking lot. They are almost always confused by this mix of regulations, with some species allowed to be collected and or consumed, and others not.

I have also noticed the disappearance of long-lived invertebrate species from those parts of the Duxbury SMCA frequented by fishermen, from which there is a good fishing access to the surf, for example owl limpets, which are edible. It is very awkward, in fact uncomfortable as a volunteer, to try to peer in a fisherman's bucket(s) to determine if they are carrying off anything other than finfish, or to try to dissuade them from using mussels as bait or from removing other invertebrates either for consumption or for bait.

In sum, if Duxbury was designated as a State Marine Reserve, there would be no question that the taking or possessing is not permitted. Nor would there be permitted take occurring, against which visitors could compare, rationalize and justify their own trampling, invertebrate handling, and rock-overturning activity.

I have also observed that there are large parts of Duxbury Reef, both to the North and South of the boundaries of the current area designated as the Duxbury Reef State Marine Conservation Area which are increasingly visited. Those areas are outside of the Duxbury marine protected area. Consequently, there is no attempt to dissuade or even report harmful conduct in the parts of the reef which are now relatively pristine. The risk of the degradation of those areas would be reduced by expanding the boundaries of Duxbury marine protected area to include them and by designating the entirety as a State Marine Reserve. Moreover, unless someone was posted out beyond the current boundaries of the SMCA (and there are not enough volunteers to do that), it is impossible to tell if people who are walking back from more remote parts of the reef to the County's Agate Beach parking area who are carrying buckets, collected the contents of those buckets inside the current boundaries of the Duxbury SMCA or in those larger unprotected areas of Duxbury Reef outside of its current protected boundaries.

California Fish and Game Commission  
July 6, 2023

Thank you for considering these critical designation and boundary recommendations for Duxbury Reef, to the benefit of all our west coast fisheries and wildlife.

A handwritten signature in black ink that reads "Laura Lee Miller". The signature is written in a cursive style with a large, prominent "L" and "M".

Laura Lee Miller

cc. Morgan Patton, EAC

# **ATTACHMENT 14**



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

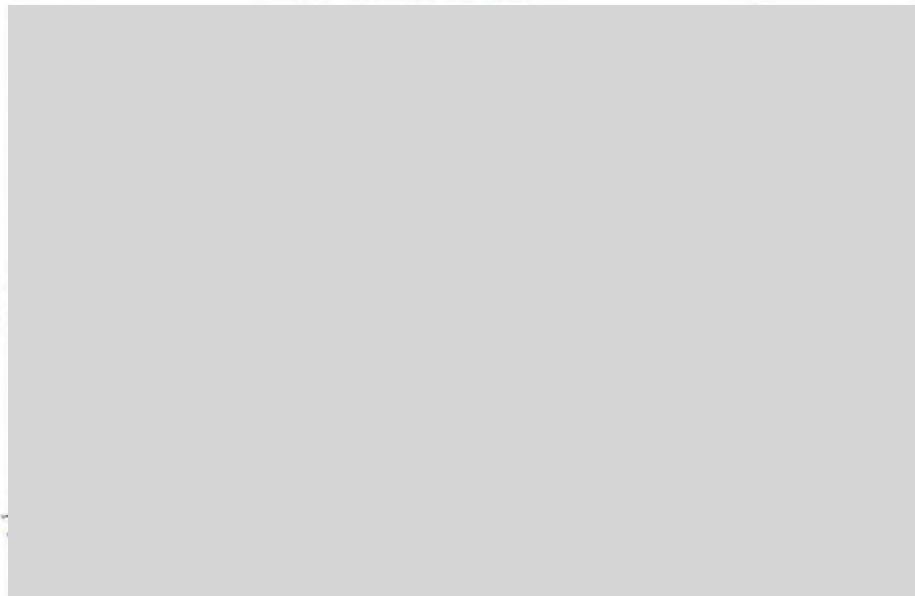
We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Kelly Cardoso  
Kelly Green  
Nik Bertulis  
Noah Dailey  
John Gravis



Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Kimberly Charles

George Turner

Mills Turner

THOMAS J BRAUN

Nancy Torrey  
Braun





Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

LINDA MEISER  
Kathy McNAMARA  
Jennifer MacPhail  
Catherine McPhail  
Giampiero Canallo



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Michael Light

Brooke Mareschau

Kimmy Haines

Dale Polissar

John Hutchinson



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Karen Morabito

CHARITAN MORABITO

Arona Jade GADE

Sam Brady

[Signature]



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Patricia Potovsky

Sylvia Potovsky

Jean Potovsky

Shannon McKillop-Har

Carl Marabito



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Vanessa Marcotte

Apollo Burton

TODD D. SMITH

Mike Ludett

Pam Faboy



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.

2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water

3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

PAULETTE BILGART

Gregory Shelley

Dante Filippetto

Sothea Teng

ANNE LAUFMAN

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Joy Conway

Scott Keels

Jenny Vande

Luca Puskulito

Liam Gislason



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Terry Comiccia

Pavati Zero

Michael Tar

Monty Bond

Alison Wells

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

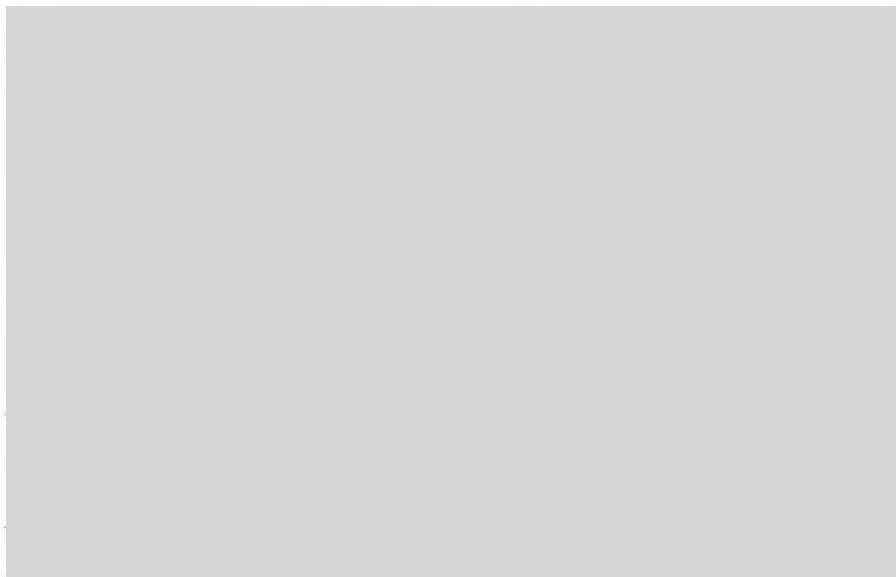
Bruce Lowry

Jennifer Pfeiffer

Sandy Diecks

Ann Sands

Sabrina Lodner  
Laura Lewis





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

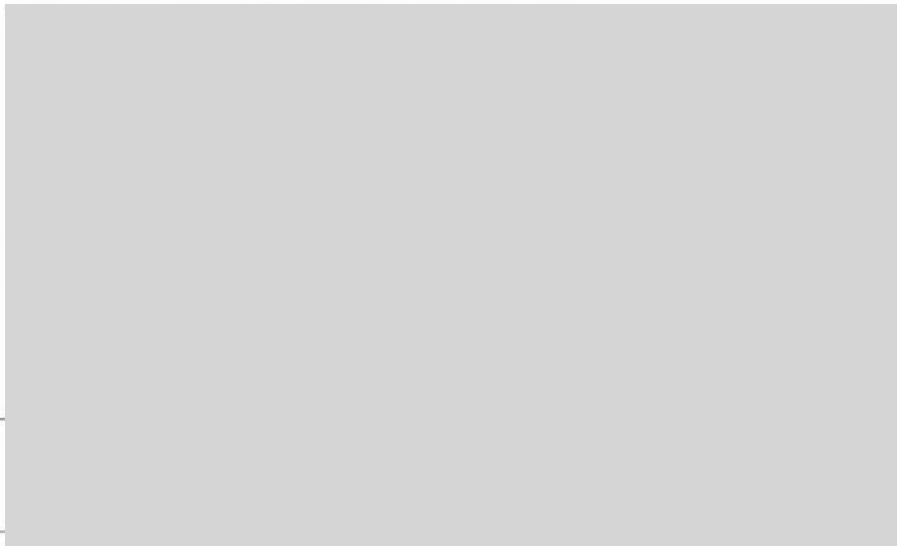
We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Loa Kelley  
Karen Penas  
Christine Trzeta  
Cheryl Ruggiero  
EMILY OZEK





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Bonnie M. Jones

Lisa Herbert

Chris Brahm

Marc Szwedler-Corn

Clayton Ferrari

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

ZOE GALLATE

Alex Gorbunov

Jennifer Brahm

Tim Murray

NICK ROGUE



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of invertebrates and marine plants. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area proposed by EAC should be approved by the Commission.

1. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
2. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.
3. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".

Name

Residence Address

Steve Howell

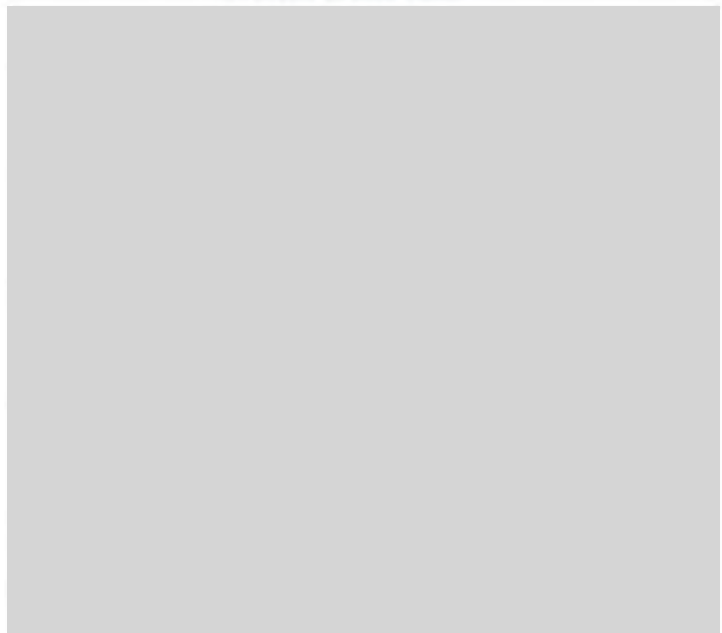
Sam Scott

Milk BAKER

Mackenzie Price

Will Scott

Keith Rosenthal



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Pegan Brooke

David J. Moritz

Wilmer Laufman

Douglas GURAVICH

Matthew [Signature]



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Eustache de Saint Phalle

Maggie Richardson

TREVOR RICHARDSON

Sergio Pineda

Elena Sanchez-Corea



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Dominic Cacciatore

MARIA Elena Gutierrez

Daniel Gutierrez

Dahyana Otero

ERIN O'REILLY

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

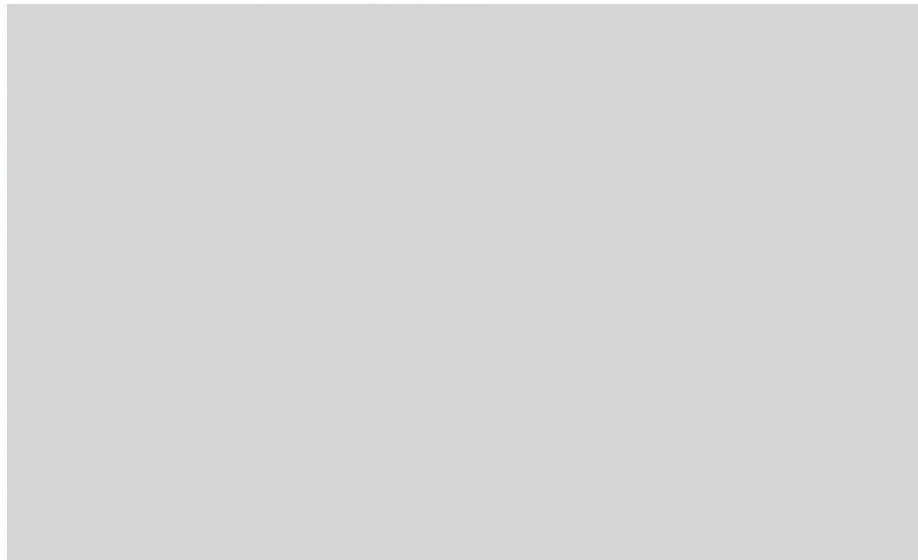
KEVIN LEAKE

Meg Simonds

Ed Chiezza

Ralph Cimicci

Kylee Wadleigh



19/30



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

DAVID POTOVSKY

Diana Sottile

Sew Parkeman

Alessia Potovsky

Carl Gardner

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.

2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water

3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

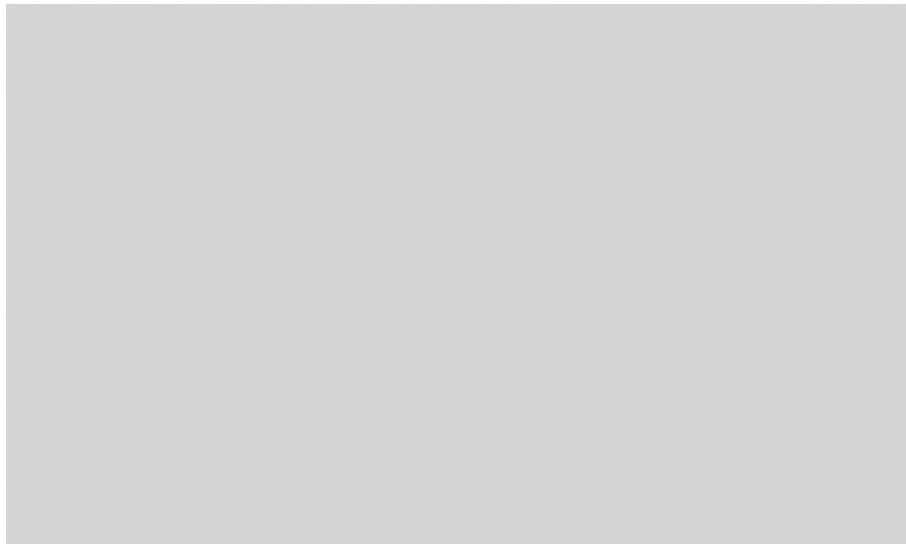
Dawn Balestreni

Ramona Zeno

Kathy Harris

Clare Harrison

James Harrison





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

CHERYL MOTHERSHEAD

STEVE MOTHERSHEAD

Jenny Jacob

Mike Jacob

Haley Winter



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Allen Deek

[Signature]

Mark C. B.

Cliff Stanton

Kate Bays, MD

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Wendy Jaffe

Eric Riden

Louise Yu

Annex Kress

Phil Lochner

24/30



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.

2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water

3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Elle Cooley

Simon Barrad

GAIL REITANO

Kevin Hunter

Cathy Sanchez-Cbr

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.

2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water

3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Antonio Medina

Barbara Szwarczewski

Carol Fagan

Lewis Stringer

Lakshmi Karva



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.

2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water

3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

Jesse Puller

JawbKline

Sam Blake

Patil Butler

Don Smith



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

John Lum

Scott Palmer

Susan Glavin

Maureen Marshall

Laurie MacPhail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

J. Zeno

Lee Mear

Richard Keenan

ALLISON EVANS

Ann Vitke





Re: Fish and Game Marine Resources Committee Agenda Item 5: MPA DMR  
Petition for modification of Duxbury Reef Marine Protected Area

Dear President Sklar and Honorable Commissioners,

This is submitted to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") dated April 6, 2023.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of marine invertebrates, vertebrates and flora. Its tidal pools are easy to access and are frequently used as outdoor classrooms for students from primary school to the university level. On some days there are 100s of visitors at Duxbury Reef, including many visitors from other States and countries, for tide pool exploration and wildlife watching.

We believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of collecting to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve". I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring.
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

Name

Residence Address

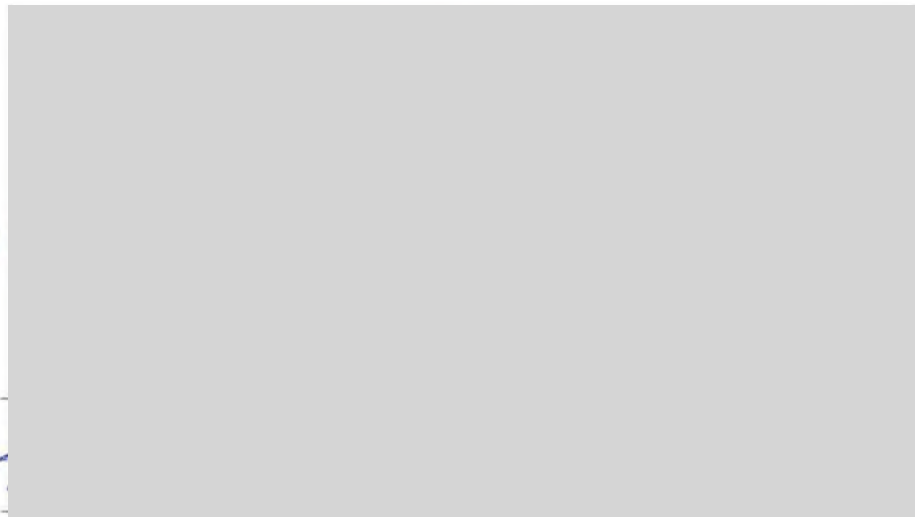
VINCENT FRANKOVSKY

Paul Helzer

Rokas Armona

Covey Black

Robert Dill



# **ATTACHMENT 15**

Courtney Barend

July 6, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area.

For the reasons stated below, I believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") should be approved by the Commission.

1. Change the designation of the Duxbury Reef State Marine Conservation Area to a "State Marine Reserve".<sup>1</sup>
2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water.
3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point.

**Rationale for my support of the above actions.**

My comments below are premised upon my following experience. I have continuously been a full-time resident of Bolinas since 2020. Since moving to Bolinas I have spent many hours on Duxbury Reef. I am currently taking classes at the College of Marin for an associate's degree in Natural Sciences and have obtained a Natural History Certificate. I completed the docent training class for the Duxbury Reef docent program in January 2022. I have been an active docent on Duxbury Reef since January 2022, and I have spent many hours on the reef as a docent. I am currently employed as an intern with California Academy of Sciences as a Marine Mammal Intern and have been regularly assisting them with the collection of marine mammal

---

<sup>1</sup> I understand that a designation as a "State Marine Reserve" will prohibit all taking, damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit or authorized research, restoration or monitoring, whereas in a SMCA some species are unprotected.



California Fish and Game Commission  
July 6, 2023

2

specimens that have been found deceased on the beaches in some of these MPA zones. I have previously worked with the National Park Service as well as the Monterey Bay Aquarium helping to educate the public in various ways about conservation of sensitive ecological systems.

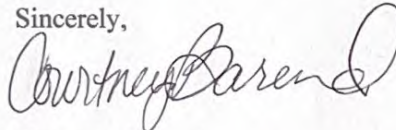
As a docent I have talked to visitors who were engaged in casual, recreational collecting. From numerous interactions with visitors, it is apparent that visitors often feel that their own activity of turning over rocks, walking through tide pools, or recreational collecting is less harmful than whatever fishing that they either see occurring on the reef or they read as being permitted on the signage in the Agate Beach parking lot.

When fishermen are in the SMCA, I am too uncomfortable as a volunteer docent, to try to stop - or even dissuade - fishermen from using mussels as bait or from removing other invertebrates either for consumption or for bait.

If Duxbury was designated as a State Marine Reserve, there would be no question that the taking of or possessing is not permitted. Nor would there be permitted taking occurring, against which visitors could compare, rationalize and justify their own trampling, invertebrate handling, and rock-overturning activity.

I have also observed that there are large parts of Duxbury Reef, both to the North and South of the boundaries of the current area designated as the Duxbury Reef State Marine Conservation Area which are visited. Those areas are outside of the Duxbury marine protected area. Consequently, there is no attempt to dissuade or even report harmful conduct in the parts of the reef which are now relatively pristine. The risk of the degradation of those areas would be reduced by expanding the boundaries of Duxbury marine protected area to include them and by designating the entirety as a State Marine Reserve. Moreover, unless someone was posted out beyond the current boundaries of the SMCA (and there are not enough volunteers to do that), it is impossible to tell if people who are walking back from more remote parts of the reef to the County's Agate Beach parking area who are carrying buckets, collected the contents of those buckets inside the current boundaries of the Duxbury SMCA or in those larger unprotected areas of Duxbury Reef outside of its current protected boundaries.

Sincerely,



Courtney Barend

cc. Morgan Patton, EAC

# **ATTACHMENT 16**



November 30, 2023

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing on behalf of The Marine Mammal Center (the Center) in support of the petition submitted by the Environmental Action Committee of West Marin (EAC) regarding the Duxbury Reef Marine Protected Area.

As the world's largest marine mammal teaching hospital, the central mission of the Center is to advance global ocean conservation through marine mammal rescue, scientific research and education. The Center's federally authorized response operations includes over 600 miles of California's coast from Mendocino to San Luis Obispo counties, as well as in Hawai'i, from the main Hawaiian Islands, northwest through the entire archipelago.

In California, one of the three primary marine mammal species the Center responds to is the harbor seal (*Phoca vitulina*). Harbor seal females are attentive to their pups for several weeks after birth but are easily startled or flushed from their birthing sites, leading to abandonment of their pups. This occurs many times each birthing season throughout our range, and is a risk across the Point Reyes peninsula, including the shoreline of Duxbury Reef.

In light of the risk to harbor seals, and concern for the health of the reef, in general, and for the reasons stated below, the Center believes that to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations, and to minimize the negative impacts of visitors to its intertidal habitat and species, all three of the requests of EAC regarding the Duxbury Reef State Marine Conservation Area (SMCA) should be approved by the Commission.

**1. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure (the "Northern Reef Extension")**

The proposed Northern Reef Extension commences at the North boundary of the current

SMCA, roughly at the outfall of Arroyo Hondo Creek, and would extend to the northern point of Double Point, to take in all of the Double Point cove and to include the Stormy Stack Special Closure. Double Point is the home of one of the largest breeding colonies of harbor seals in California. The cove, the large rock off of the south point and the tide pools at Double Point are used for birthing, nursing and raising pups by harbor seals. Harbor seals are easily flushed by recreational and commercial boats approaching these seal haul outs. Unfortunately, the special closure area currently protects only the area within 300 feet of Stormy Stack (the rock formation off of the northern tip of Double Point). However, the parts of the Double Point cove most frequented by harbor seals are well outside of that 300 foot Stormy Stack special closure zone.

## **2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water (the “Southern Reef Extension”)**

The Southern Reef Extension is at this time outside of and unprotected by the current SMCA. I understand that this unprotected area constitutes about 5/6's of that portion of Duxbury Reef extending off the southern tip of the Bolinas peninsula.

On the Southern Reef Extension there is a harbor seal haul out which has been used year-round by harbor seals for decades as both a resting haul out for both adults and pups and as a minor birthing location. In addition, the intertidal area in the Southern Reef Extension is truly exceptional and there is currently no law protecting its invertebrates and algae from harvesting or casual collecting, thus encouraging foot traffic disruptive to harbor seals.

## **3. Change the designation of the Duxbury Reef State Marine Conservation Area to a “State Marine Reserve.”**

Designating the entirety of the Duxbury MPA as a State Marine Reserve is imperative, whether or not the boundaries of the current MPA are expanded as urged above. A designation of Duxbury Reef as a “State Marine Reserve” will prohibit all taking (including all fishing from shore), damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit for authorized research, restoration or monitoring. Under Duxbury’s current designation as a State Marine Conservation Area fishing from shore is permitted and some species are unprotected. Again, this encourages greater foot traffic, disrupting harbor seals and leading to resource damage and depletion.

Within the current Duxbury SMCA there is a harbor seal haul out which has been used daily in moderate and low tides by harbor seals for many decades. It is a haul out that is disturbed by visitors to the reef during low tides. Although shore-based fishing from Duxbury is reported to have become less popular over the years, harbor seal flushing in the current SMCA is nevertheless usually the consequence of shore-based fishermen venturing out to the further areas of the current designation. Prohibiting shore-based fishing, I believe, would substantially reduce disturbance to that harbor seal haul out. In addition, the elimination of shore-based fishing from the entire reef would remove a source of confusion on the part of visiting casual visitors as to the propriety of their own trampling, invertebrate handling or collecting, and rock-overturning activity, as they currently witness these actions while be guided to act otherwise.

We believe that designating an expanded Duxbury MPA as a State Marine Reserve will serve the objectives of California's 30x30 Initiative and place under protection California's largest intertidal reef ecosystem, its resident marine mammals and other sensitive marine resources that are under pressure from multiple sources.

Thank you for your consideration of these points.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Boehm". The signature is fluid and cursive, with a large initial "B" and a long horizontal stroke at the end.

Jeffrey R. Boehm, DVM, ACAW  
Chief External Relations Officer

cc. Ashley Eagle-Gibbs, Environmental Action Committee of West Marin

---

**Sausalito** 2000 Bunker Road, Fort Cronkhite, CA 94965 • P 415.289.SEAL • F 415.289.7333 • [MarineMammalCenter.org](http://MarineMammalCenter.org)

**Ke Kai Ola**  
73-4460 Queen Ka'ahumanu Hwy, Ste 112  
Kailua-Kona, HI 96740  
P 808.987.0765

**Monterey Bay**  
PO Box 778  
Moss Landing, CA 95039  
P 831.633.6298 • F 831.633.5927

**San Luis Obispo**  
1385 Main Street  
Morro Bay, CA, 93442  
P 805.771.8300 • F 805.771.8304

**Anchor Bay-Fort Bragg**  
P 415.289.SEAL



November 25, 2023

To:

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244  
[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

From:

Sarah G. Allen, PhD  
P.O. Box 527  
Inverness, CA 94937  
[sallen520@gmail.com](mailto:sallen520@gmail.com)

Re: Decadal Review Recommendations for the California North Central Marine Protected Areas

Dear President Sklar and Honorable Commissioners:

The California Marine Life Protection Act has been a model for other states and countries on how to establish a network of MPAs and provide protection to critical species and ecosystems that are fundamental to the biodiversity and economic health of California. Designation also involves periodic reevaluation and adaptive management of the sites. You are currently reviewing the North Central Coast Marine Protected Areas (MPAs) for the first decadal evaluation, and I wish to comment on and contribute to your review. For 50 years, I have studied marine life in California with an emphasis on marine birds and mammals, and was a scientist on the Scientific Advisory Team with expertise in marine mammals during the initial selection of sites within the North Central Coast Region. Twenty-six of those years, I was employed with the U.S. National Park Service as an ecologist and later as Science Program Lead for the Pacific West Region. During that time, I served on numerous federal/state collaborative committees and working groups, including, but not limited to, representative for the National Park Service on the staff committee for the California Biodiversity Council and for the nascent Parks and Protected Areas working group. While still working with and since retiring from the National Park Service in 2019, I have continued to study marine birds and mammals throughout the region, and am co-author of the University of California Press *Field Guide on Marine Mammals of the Pacific*.

My recommendations based on professional experience and continued study of pinniped and seabird colonies are as follows:

1. **Expand all Special Closure Areas** in the North Central Coast Region from 300 ft. to 1000 ft. to provide better protection for nesting seabirds including at North and Southeast Farallon Islands, Point Reyes Headlands, Point Resistance Rock, Double Point/Stormy Stack, and Egg Rock. From my years of studying nesting seabirds, I have noted that birds may begin reacting to boats as far as 1000 ft. away by head bobbing, and will leave eggs and chicks at shorter distances. Additionally, during surveys over the past several years, I have directly observed fishing boats disturbing nesting seabirds beyond 300 ft. at Double Point/Stormy Stack, and violating the 300 ft. buffer. When disturbing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls, and a single disturbance can affect the productivity for an entire nesting season if seabirds do not return.

**2. Expand the Duxbury Reef MPA north** to include the Double Point/Stormy Stack Special Closure. The marine ecosystems of this area are exceptional as documented in its designation as an Area of Special Biological Significance (see Chan 1979). Double Point is home to one of the largest harbor seal (*Phoca vitulina*) breeding colonies in the state of California and to a significant seabird nesting site on Stormy Stack and the adjacent mainland cliffs. Ashy Storm Petrels (*Hydrobates homochroa*) a species of Conservation Concern in California, nest at this site, one of only a few breeding sites in the state. Black Oystercatchers (*Haematopus bachmani*), also nest there and are designated by the California Audubon Society as a Climate Endangered species because of their vulnerability to sea level rise. Other significant seabirds include >1000 Common Murres (*Uria aalge*), hundreds of cormorants, and tens of Pigeon Guillemots (*Cepphus Columba*), an indicator species of MPA recovery because of their delimited foraging/nesting habitat. Additionally, several hundred Brown Pelicans (*Pelecanus occidentalis*) roost at the site during the year.

Current protections of Stormy Stack and Double Point are insufficient. During surveys over the past several years, I have observed commercial party and recreational fishing boats violating the 300 ft. buffer and also disturbing nesting seabirds even beyond 300 ft. Fishing party boats on occasion produce noise through loud speakers as they circle around the area, which disturbs seabirds and seals at distances greater than 300 ft. By flushing nesting seabirds, boats expose eggs and chicks to predators such as ravens and gulls. One disturbance can affect the productivity for an entire breeding season if seabirds do not return to lay another egg.

**3. Expand the Duxbury Reef MPA south** to include the southern extension of Duxbury Reef that currently is not protected from people walking over and harvesting invertebrates and algae. There is a small but significant harbor seal colony on the southern extension of the reef that serves as a way station for seals to rest while traveling north to Point Reyes from San Francisco Bay and out to the Farallon Islands (Green et al. 2006). The seals are present consistently year round, and every year several pups occur there.

**4. Elevate the expanded Duxbury-Double Point MPA to State Marine Reserve.** The sensitivity and biological diversity of both Duxbury Reef and Double Point/Stormy Stack deserve full Marine Reserve status, as described in above points 1-3. Current marine reserves in California protect only approximately 9% of the state waters from harvest. The area has a long scientific history documenting biodiversity and significance, and consequently, is a good candidate for elevating to full reserve status (Chan 1979). Recently, the College of Marin broke ground to rebuild the historical Bolinas Field Station, which will continue and expand on the long history of scientific research about the coastal ecology of the area.

**4. Combine Drakes Estero SMCA with the Estero de Limantour State Marine Reserve** in order to extend reserve status protection to the middle and upper reaches of Drakes Estero. Drakes and Limantour esteros form a complex of tidal sand bars where harbor seals give birth and rest onshore year round, and is one of the largest concentrations of seals in California (Codde & Allen 2015). Recreational take of clams is the only activity allowed in this SMCA. Currently under this designation, seals are regularly disturbed by recreational clam diggers who come by kayak to dig for clams on the sand bars where the seals haul out. These sandbars are inaccessible to people on foot from the mainland and are only exposed and accessible to the seals during medium to low tides. During the harbor seal pupping season (March 1-June 30), non-motor boat access in the estero is restricted by Point Reyes National Seashore regulations, and restricted to all motor boats year round because Drakes Estero is within federally designated Wilderness. Nevertheless, there is no restriction to non-motor boats after June 30 when seals are hauling out to molt their fur. The molt (June-August) is energetically costly to the seals, requiring longer times to rest

onshore. The National Park Service supported conversion from SMCA to SMR to California Fish and Game Commission in a detailed letter dated November 14, 2022.

**5. Create a Special Closure** of 1000 ft. at Northwest Cape Rocks, north of Fort Ross. These rocks have significant seabird nesting colonies and have one of the few Steller sea lion (*Eumetopias jubatus*) breeding colonies in the state (<https://www.fortross.org/animals/steller-sea-lion>). Steller sea lions were delisted from the federal endangered species list several years ago; however, the California sub-population continues to decline with an estimate of only around 2,000 (NOAA Stock Assessment 2020). The site was proposed for MPA and Special Closure designation when I was an advisor on the Science Advisory Team, but was not included at that time. Since then, the Steller sea lion colony has continued to decline at this location and state-wide.

California has been able to rebuild some of the unique and critically significant coastal ecosystems over the past decade through the establishment of an MPA network. Nevertheless, only 16% of state waters are designated as MPAs and there are only 14 Special Closures statewide. The 30x30 California Initiative advocates for 30% of the state be protected by 2030. Increasing the number and areal extent of MPAs in state waters will be a positive action to meet the goals of the initiative and a prudent management strategy to meet the immense challenges from changes in climate that already are harming California's marine resources.

Thank you for your service to protect the exceptional resources of California.

Sincerely,



Sarah G. Allen, PhD  
Retired Senior Science Advisor  
National Park Service  
[Sallen520@gmail.com](mailto:Sallen520@gmail.com)

cc: Ashley Eagle-Gibbs, Environmental Action Committee of West Marin

## References

- Chan, G. 1979. California Marine Waters Areas of Special Biological Significance Reconnaissance survey reports. Double Point and Duxbury Reef. California State Water Resources Control Board. Water Quality Monitoring Report No. 79-14 and 15.
- Green, D.E., Grigg, E., Allen, S., & Markowitz, H. 2006. Monitoring the potential impact of the seismic retrofit construction activities at the Richmond-San Rafael Bridge on harbor seals (*Phoca vitulina*): May 1, 1998 – December 31, 2004. Final Report, IHA 11/19/03-11/18/04. 100pp.
- Codde, S. & S. Allen. 2015. Pacific harbor seal (*Phoca vitulina richardsi*) monitoring at Point Reyes National Seashore and Golden Gate National Recreation Area: 2013 annual report. Natural Resource Report NPS/SFAN/NRR—2015/919. National Park Service, Fort Collins, Colorado.



Tracking Number: (2023-33MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

- 1. Person or organization requesting the change: Environment California Research and Policy Center and Azul**  
Name of primary contact person: Laura Deehan, Environment California  
Address: 3435 Wilshire Blvd., Suite 385, Los Angeles, CA, 90010  
Telephone number: (415) 420-4710  
Email address: [Ideehan@environmentcalifornia.org](mailto:Ideehan@environmentcalifornia.org)
- 2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.
- 3. Overview (Required)** - This joint petition from Environment California and Azul requests minor or modest expansions for 6 state MPAs and the designation of one new State Marine Park in order to enhance protections for California's kelp forests – a critical ecosystem and habitat type that provides myriad benefits for both human and marine communities, and which has experienced significant declines in the last decade due to natural and human-related causes. In particular, the regulation changes put forth in this petition seek to enhance protections for resilient, stable, and persistent kelp forest patches as identified by recent analyses and peer-reviewed research. Proposed boundary and regulation changes include (see Table 1):
  - i. Cabrillo SMR - expand westward and northward by 15.2 sq mi
  - ii. Point Dume SMCA - expand westward by 4.6 sq mi
  - iii. South Point SMR - expand westward by 26.3 sq mi
  - iv. Gull Island SMR - expand northward by 1.8 sq mi
  - v. Point Conception SMR - expand eastward by 14.6 sq mi
  - vi. Natural Bridges SMR - expand southward by 13.7 sq mi
  - vii. Pleasure Point, Santa Cruz - designate 3.2 sq mi as a new State Marine Reserve



4. **Rationale (Required)** - The state of California has experienced significant losses of its kelp forest cover since the designation of the MPA network. While we could not know which areas would persist in the face of extreme threats at the time the MPA network was originally established, new data and research has since helped to identify kelp beds that have persisted and are most resilient in the face of climatic and other disturbances. Enhancing protections for the state's most resilient, stable, and persistent kelp forest patches now will allow us to preserve what we have left, and increase our chances of restoration in the future. Removing, to the extent possible, direct human impacts on these resilient kelp forests that are potential climatic refuges will not only help these areas persist, but will also enhance the state's restoration efforts for other kelp forests in decline. By focusing resources on the immediate protection of already identified important areas with outsized conservation benefits, the state can advance the goals of the Marine Life Protection Act, advance the new 30x30 target, and take a cost-effective approach to kelp restoration by protecting the natural regeneration potential of kelp forest ecosystems statewide.

See Petition Narrative attached for comprehensive rationale and methods behind site selection.

Primary contacts:

Laura Deehan, Environment California, (415) 420-4710, [ldeehan@environmentcalifornia.org](mailto:ldeehan@environmentcalifornia.org)  
Marcela Gutiérrez-Graudiņš, Azul, [mar@azul.org](mailto:mar@azul.org)

## SECTION II: Optional Information

5. **Date of Petition:** 11/29/23
6. **Category of Proposed Change**
- Sport Fishing
  - Commercial Fishing
  - Hunting
  - Other, please specify: MPAs, Section 632.
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
- Amend Title 14 Section(s): [Westlaw regulations](#).
  - Add New Title 14 Section(s): *Click here to enter text.*
  - Repeal Title 14 Section(s): *Click here to enter text.*
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** *Click here to enter text.*  
Or  Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: As soon as is practicable for the State of California.





10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
- Petition Narrative
  - Appendix A - Highly persistent kelp beds and “medium priority” restoration sites warranting protection with expanded California MPAs, as identified by Ospina-Giraldo et al. 2023 and Arafeh-Dalmau et al. 2021
  - Table 1 - Proposed Boundary and Regulation Changes
  - Appendix B - Letters of support:
    - Petitioner's letter of support
    - Joint letter from Drs. Nur Arafeh-Dalmau, Fiorenza Micheli, Kyle Cavanaugh, Dawn Murray, and Carolina Olguin-Jacobson
    - Letter from Dr. Tom Bell, Woods Hole Oceanographic Institute
    - Letter from Hannah Nevins, Santa Cruz seabird biologist
    - Joint letter from 27 scientists, researchers, and educators
    - Letter from Assemblymember Dawn Addis, 30th District
    - Letter from Fred Keeley, Mayor of Santa Cruz
    - Joint letter from 21 NGOs
    - Letter from Environmental Action signed by 2,487 member of the public
    - Letter signed by 214 CALPIRG students
    - Letter from 4 California college student leaders
    - Petition signed by over 7,000 members of the public
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

Enhanced, long-term protection of highly resilient kelp forest areas will bolster the diverse stakeholders, interests and industries that benefit from our coastal marine resources. Low-impact, non-consumptive recreational activities such as diving, snorkeling, and surfing will be unaffected - and even enhanced - by expanded MPAs, which will also provide enhanced research and education opportunities. Short-term impacts to recreational and commercial fishermen will be outweighed by larger benefits in the future, as has been demonstrated here in California and around the world ([Bucaram et al. 2018](#), [Medoff et al 2022](#)). For example, an analysis of CDFW fisheries data found that regional and statewide fishery landings and values do not appear to have been negatively impacted by MPAs ([Murray and Hee 2019](#)), and an analysis of California spiny lobster fishery found that short-term losses were compensated for by a 225% increase in total catch after 6 years of MPA designation ([Lenihan et al. 2021](#)).

12. **Forms:** If applicable, list any forms to be created, amended or repealed:

### SECTION 3: FGC Staff Only

Date received: [Click here to enter text.](#)

FGC staff action:

- Accept - complete
- Reject - incomplete



Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

Denied by FGC

Denied - same as petition \_\_\_\_\_

Tracking Number

Granted for consideration of regulation change

**Petition to Modify the CA Marine Protected Area Network  
to Enhance Protections for California's Most Resilient Kelp Forests**

Joint Submission by Environment California and Azul

**PETITION NARRATIVE**

Overview

California has experienced severe losses of its kelp forests since the designation of its statewide MPA network. At the time the MPA network was established, we could not know which kelp beds would be most resilient in the face of climate-related threats. However, in light of new data and research identifying the location of the state's persistent and stable kelp beds, adaptive management of the MPA network to better protect these kelp areas is therefore of critical importance.

This petition seeks to strengthen the statewide MPA network's protections for California's most resilient, stable, and persistent kelp forest patches – preserving what we have left now, to increase our chances of successful restoration in the future. Removing, to the extent possible, direct human impacts on these resilient kelp forests that are potential climatic refuges will not only help these areas persist, but will also enhance the state's restoration efforts for other kelp forests in decline. These efforts will also benefit kelp-forest dependent species, such as endangered Southern sea otters and threatened species of abalone. By focusing resources on the immediate protection of already identified important areas with outsized conservation benefits, the state can advance the goals of the Marine Life Protection Act, advance the new 30x30 target, and take a cost-effective approach to kelp restoration by protecting the natural regeneration potential of kelp forest ecosystems statewide.

Importance and decline of California's kelp forests

California's kelp forests provide numerous and invaluable ecological and environmental benefits. These underwater ecosystems serve as critical nurseries for a wide variety of marine species, providing shelter and food for numerous fish, invertebrates, and marine mammals, including the endangered Southern sea otter. Kelp acts as a natural water filter, as it absorbs excess nutrients and helps maintain water quality by reducing the risk of harmful algal blooms. Kelp forests may also play a role in carbon sequestration, capturing atmospheric carbon dioxide and helping to mitigate climate change. In addition to their ecological importance, kelp forests offer enormous cultural and economic benefits to California. They hold enormous cultural and economic significance for many of the Tribes and Indigenous communities that call California's coastal waters home. They support thriving commercial and recreational fisheries, contributing to the state's economy. The beauty and biodiversity of these forests attract tourists and divers, bolstering the state's tourism industry. Moreover, kelp can act as a buffer against coastal erosion, protecting shorelines from the damaging impacts of storms and waves.

However, kelp forests in California have experienced a significant decline in recent years due to a combination of natural and human-induced factors. One of the most important drivers of this decline is the warming of ocean waters, which has been linked to climate change. Sustained elevated sea temperatures known as "marine heatwaves" have caused significant stress to kelp populations, leading to widespread loss of kelp stands, increased susceptibility of key urchin predators to disease, and exploding populations of herbivorous sea urchins. The recent 2014-2016 marine heatwave left California's kelp forests decimated, with over 90% of bull kelp reported lost in Northern California and significant losses reported across the state (Bell et al. 2023, Arafeh-Dalmau et al. 2023). Human activities have also played a role in the degradation of kelp forests. Overfishing and removal of key predators like sea otters, predatory fishes, California spiny lobster, rock crab, and sea stars have disrupted food webs and resulted in trophic cascades in these ecosystems, allowing herbivorous species to graze on kelp unchecked. Additionally, coastal development, pollution, and nutrient runoff degrade water quality and promote the growth of invasive species that outcompete native kelp. The loss of kelp cover across the state has widespread economic and ecological impacts, has led to the closure of the recreational red abalone fishery in Northern California and has hindered Southern sea otter population expansion, as great white shark bite mortalities increase where kelp cover has declined at the northern and southern edges of this iconic species' range (Nicholson et al. 2018, Moxley et al. 2019).

The decline of California's kelp forests since the time the MPA network was completed seriously threatens the state's marine biodiversity, fisheries, and overall ecological health and undermines the goals of the Marine Life Protection Act. This adaptive management review cycle is critically timed to respond to kelp loss. It is vital to increase protections immediately to confer as much resilience as possible to future disruptions.

#### MPAs and kelp forest conservation

Around the world, MPAs have been found to enhance the overall health and resilience of ocean ecosystems (Edgar et al. 2014, Jacquemont et al. 2022), and to promote long-term kelp forest stability (Peleg et al. 2023). By providing long-term protections for predator species within their boundaries - such as southern sea otters, California spiny lobster, rock crabs, wolf eels, and predatory fishes like California sheephead - MPAs help to regulate local populations of kelp consumers, thereby having cascading positive impacts on kelp growth and persistence (Eisaguirre et al. 2020, Kawamata & Taino 2021, House & Allen 2022, Heineke et al. 2023). Promoting intact food webs and natural ecological processes can also help to improve overall resilience in the face of other natural and man-made stressors that MPAs cannot directly mitigate, such as warming ocean temperatures and nutrient runoff (Roberts et al. 2017, Arafeh-Dalmau et al. 2023). Noting these benefits and abilities, the California MLPA specifically identified kelp forests as one of the habitats requiring greater protection ([MLPA Section 2856\(a\)\(2\)\(A\)](#)).

We have seen the benefits of long-term protection of California's kelp forests. The Decadal Management Review of the statewide MPA network found that, while kelp species across the

state experienced large-scale declines during the 2014-2016 marine heatwave, “overall, kelp canopy was more stable and appeared to be more resilient inside MPAs” (CA MPA DMR 2022). The South Coast region’s kelp forests, in particular – where fishing pressure was highest before the implementation of the MLPA – seem to have benefited from protections, with increases in California sheephead and California spiny lobster within MPAs thought to help facilitate grazer suppression and lead to more stable giant kelp abundance during and after the marine heatwave (DMR Kelp Forest Technical Report 2021).

MPAs can also serve as a complementary management measure for kelp restoration. While California’s MPAs were not explicitly designed with the restoration of kelp forests in mind, MPAs in general are considered a form of indirect kelp restoration due to their ability to promote intact food webs through reduced fishing pressure, which in turn helps to reduce kelp grazing pressure, as described above (Hopf et al. 2022). In addition, stable kelp forests help to promote natural regeneration of nearby areas, by providing a supply of propagules to recovering populations close by (Arafeh-Dalmau et al. 2021, Giraldo-Ospina et al. 2023). A recent global synthesis of kelp restoration found that the most successful restoration projects are those located near existing stable kelp forests (Eger et al. 2022). MPAs that protect these stable kelp forests can help to promote their continued persistence by removing extractive or destructive activities, and potentially further boost kelp restoration efforts by promoting healthy predator populations that “spillover” into nearby areas (e.g. Lenihan et al. 2021), helping to reduce grazer pressure in a broader area (Kawamata & Taino 2021). Harnessing the power of these dense, stable, and resilient kelp beds for the natural regeneration of nearby areas using area-based protection can also free up much-needed resources needed for intensive, direct restoration efforts elsewhere.

Based on this new and growing scientific evidence base, the state should protect more of California’s most stable and resilient kelp forests now, in order to enhance the conservation benefits and ability of our statewide MPA network to meet the goals of the MLPA while giving kelp restoration efforts a leg up in the future.

### Identifying resilient kelp forests in California

Since the creation of California’s MPA network, new research has emerged utilizing satellite and in-situ data over a decades-long year timescale to identify the kelp forests exhibiting higher levels of persistence and stability in California.

A multi-institution team of researchers used satellite data to provide high-resolution maps of the most persistent giant kelp and bull kelp patches in California during the last 35 to 38 years (Arafeh-Dalmau et al. 2021, Arafeh-Dalmau et al. 2023). Importantly, these studies analyzed the extent to which highly persistent kelp patches are protected within the state’s MPA network, and found that these important kelp forest areas are currently not adequately protected among regions. Only 20.9 % of the most highly persistent giant kelp forests in Central California, 8.4% in Southern California, and less than 1% in Northern California are fully protected in MPAs (Arafeh-Dalmau et al. 2021). Bull kelp is even less well protected – only 3.4% of the the most



highly persistent bull kelp forests in Northern Central California, and 0.1% of those in Northern California are fully protected in MPAs (Arafeh-Dalmau et al. 2023). The authors of these studies recommend increasing protections for these important and highly persistent kelp forest areas.

In addition, the Ocean Protection Council recently funded the development of an ecologically-focused, spatially explicit prioritization tool to identify priority kelp restoration sites in California waters (Giraldo-Ospina et al. 2023). Notably, this research used in-situ data as well as satellite imagery to determine the stability and current status of kelp forests across California's coastline, making the resulting prioritization index particularly robust. Of particular importance to this petition, the tool identifies kelp beds that have been historically stable, that persisted or bounced back quickly during the 2014-2016 marine heatwave, and that are currently doing well compared to other kelp forests – namely, the most stable and resilient kelp forest areas in state waters. Characterized as “medium priority” restoration sites – that is, historically stable kelp beds that are currently in good condition – these areas have a large potential for enhancing the natural regeneration and/or successful restoration actions of nearby kelp beds. The authors suggest potential actions: “Monitor these sites for triggers that may warrant intervention; Defend these sites from current or future threats; and Study these sites to understand the mechanisms of resistance to the marine heatwave.”

In light of these new studies, and in line with the site classifications put forth by Giraldo-Ospina et.al, we strongly recommend the state take action to protect as much of these newly-identified, stable, highly resilient kelp forest patches as possible with well-protected MPAs in the coming years. Protecting these iconic, dense kelp beds is one of California's best shots at preserving – and eventually restoring – our critically important kelp forest ecosystems quickly and cost-effectively.

#### Proposed areas for additional or enhanced MPA protections

Using spatially-explicit data detailing where highly persistent kelp beds and “medium priority” restoration sites overlap, as outlined by Arafeh-Dalmau et al. 2021, 2023, and Giraldo-Ospina et al. 2023, we identified areas where additional protections are necessary to promote the continued persistence and stability of California's healthiest kelp forests (see Table 1).

Preference was given to areas already within or adjacent to existing California MPAs, recognizing the substantial scientific and stakeholder input involved in creating the original network through the MLPA process, and in order to adhere as much as possible to the original intent and science-based spacing guidelines provided by the SAT during the creation of the network. We recommend reducing spacing between MPAs in some places is necessary to increase the representation of these highly persistent and resilient kelp beds that have a greater chance of persisting into the future in our state MPA network. We also encourage the state to consider whether there are other areas of highly persistent and resilient kelp not included in this proposal that would be good candidates for new or expanded MPA protections.

To develop the proposal further, we collected information through interviews and other personal

communications with scientists including Dr. Anita Giraldo-Ospina and Dr. Nur Arafah Dalmau, who graciously provided data, assisted with the interpretation of results to identify the recommended areas, and reviewed the proposal for accuracy. We also gathered expert input and data from individuals, local community groups, MPA Collaborative Network members, conservation organizations, and more. While their cooperation should not be taken as an endorsement, we greatly appreciate the information and guidance provided by these individuals which contributed to the overall accuracy and scientific validity of this proposal.

We did not focus on “high priority” restoration sites identified by Giraldo-Ospina et al. 2023, in order to avoid proposing MPA protections for areas that may require more intensive, direct restoration methods, such as grazer suppression activities, that are not currently permitted within MPA boundaries. However, we urge the state to consider what, if any, direct restoration activities might be compatible with different MPA designations within the state’s network (e.g. line 20 of the [MPA Collaborative Network’s Vetted Regulation Recommendations](#)), recognizing that the impacts of climate change may still degrade some kelp beds within MPAs in the future, and proactive restoration efforts may be warranted.

Finally, it should be noted that, while the general location and specific boundaries for proposed areas are listed in Table 1, we are happy to work with State and its partners to define the proposed areas and boundaries in more detail, keeping in mind CDFW MPA design guidelines and the state’s interest in taking a holistic approach for reviewing petitions and enhancing the network to meet the statewide 30x30 goal.

### Socioeconomic impacts

Enhanced, long-term protection of highly resilient kelp forest areas will bolster the diverse stakeholders, interests and industries that benefit from our coastal marine resources. Low-impact, non-consumptive recreational activities such as diving, snorkeling, and surfing will be unaffected – and even enhanced – by expanded MPAs, which will also provide enhanced research and education opportunities. Short-term impacts to recreational and commercial fishermen will be outweighed by larger benefits in the future, as has been demonstrated here in California and around the world (Bucaram et al. 2018, Lenihan et al. 2021, Medoff et al. 2022). For example, an analysis of CDFW fisheries data found that regional and statewide fishery landings and values do not appear to have been negatively impacted by MPAs (Murray and Hee 2019), and an analysis of California spiny lobster fishery found that any short-term losses were compensated for by a 225% increase in total catch after 6 years of MPA designation (Lenihan et al. 2021).

### Relevance to MLPA Goals and DMR Recommendations

Enhancing the protection of kelp forests in California aligns strongly with Goals 1, 2, 3, and 4 of the California MLPA. By safeguarding California’s most resilient and stable kelp forests, as detailed in this petition, we will preserve critical habitat for a diverse range of marine species, from endangered sea otters to commercially valuable fish species. Kelp forests play a crucial

role in the recovery and sustainability of marine life populations, as they serve as nurseries and refuges for many species, including those targeted by fisheries. These vibrant ecosystems also offer intrinsic value by supporting biodiversity and exceptional natural beauty, and their recreational and scientific use and enjoyment make them vital for the public ([MLPA Section 2856\(a\)\(2\)\(A\)](#)).

In addition, the regulation and boundary changes proposed by this petition specifically advance DMR Recommendation #4 - "Apply what is learned from the DMR to support proposed changes to the MPA Network and Management Program". The DMR found that California MPAs helped to promote kelp forest resilience and recovery during and after the severe 2014-2016 marine heatwave. In the face of increasing climate impacts and as we struggle to recover from recent kelp forest declines across the state, expanding the MPA network in key, targeted areas can help to ensure the continued persistence of our remaining, most resilient kelp forests.

#### Relevance to Broader State Processes, Policies, and Goals

We applaud the actions that the State of California has already taken to respond to the severe declines in kelp forest cover across the state, including recent commercial kelp harvest closures in Northern California, annual harvest limits in Northern California, and the initiation of a statewide Kelp Restoration and Management Plan. We strongly support taking a whole-ocean approach to ensuring sustainable and effective management of kelp in our state waters ([Crowfoot et al. Objective 3.2](#)).

The MPA changes proposed in this petition complement the state's ongoing kelp restoration and management work. They will also help to reduce the state's costs associated with kelp restoration – harnessing the ability of well-protected, resilient kelp beds to promote the natural regeneration of nearby areas, allowing the state to direct more of its much-needed resources and funding for intensive restoration efforts in harder-hit areas with little kelp cover left.

Finally, this petition aligns strongly with the statewide goal set by both Governor Newsom and the legislature to conserve 30% of our coastal waters by 2030. If implemented in its entirety, the actions proposed in this petition will see an additional ~1.5% of state waters protected in highly- to fully-protected areas, while helping the network to better achieve the goals set forth in the MLPA.

## Bibliography

- Arafeh-Dalmau, Nur, et al. "Southward Decrease in the Protection of Persistent Giant Kelp Forests in the Northeast Pacific." *Communications Earth & Environment*, vol. 2, no. 1, 2021, pp. 1-7, <https://doi.org/10.1038/s43247-021-00177-9>.
- Arafeh-Dalmau, Nur, et al. "Integrating climate adaptation and transboundary management: Guidelines for designing climate-smart marine protected areas." *One Earth*, vol. 6, no. 11, 26 Oct. 2023, pp. 1523–1541, <https://doi.org/10.1016/j.oneear.2023.10.002>.
- Bell, Tom W., et al. "Kelpwatch: A New Visualization and Analysis Tool to Explore Kelp Canopy Dynamics Reveals Variable Response to and Recovery from Marine Heatwaves." *PLOS ONE*, vol. 18, no. 3, 2023, p. e0271477, <https://doi.org/10.1371/journal.pone.0271477>.
- Bucaram, Santiago J., et al. "Assessing Fishing Effects inside and outside an MPA: The Impact of the Galapagos Marine Reserve on the Industrial Pelagic Tuna Fisheries during the First Decade of Operation." *Marine Policy*, vol. 87, 2018, pp. 212-225, <https://doi.org/10.1016/j.marpol.2017.10.002>.
- California Department of Fish and Wildlife. California's Marine Protected Area Network Decadal Management Review. 2022
- Carr, Mark H., et al. California Sea Grant, 2021, *Monitoring and Evaluation of Kelp Forest Ecosystems in the MLPA Marine Protected Area Network*, [https://caseagrants.ucsd.edu/sites/default/files/Kelp%20Forest%20Technical%20Report%20Narrative\\_v2.pdf](https://caseagrants.ucsd.edu/sites/default/files/Kelp%20Forest%20Technical%20Report%20Narrative_v2.pdf).
- Crowfoot, Wade, et al. California Ocean Protection Council, *Strategic Plan to Protect California's Coast and Ocean 2020-2025*, [https://opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf](https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf).
- Eger, Aaron M., et al. "Global Kelp Forest Restoration: Past Lessons, Present Status, and Future Directions." *Biological Reviews*, vol. 97, no. 4, 2022, pp. 1449-1475, <https://doi.org/10.1111/brv.12850>.
- Edgar, Graham J., et al. "Global Conservation Outcomes Depend on Marine Protected Areas with Five Key Features." *Nature*, vol. 506, no. 7487, 2014, pp. 216-220, <https://doi.org/10.1038/nature13022>.
- Eisaguirre, Jacob H., et al. "Trophic Redundancy and Predator Size Class Structure Drive Differences in Kelp Forest Ecosystem Dynamics." *Ecology*, vol. 101, no. 5, 2020, p. e02993, <https://doi.org/10.1002/ecy.2993>.
- Giraldo-Ospina., et al. "Where, when and how? A Guide to Kelp Restoration in California Using

Spatio-temporal Models of Kelp Dynamics. A report to California Seagrant and California Ocean Protection Council. 2023. 72pp.

Heineke, Marcella R., et al. "Harnessing Trophic Cascades to Improve Foundation Species Restoration: A Meta-analysis." *Ecosphere*, vol. 14, no. 10, 2023, p. e4675, <https://doi.org/10.1002/ecs2.4675>.

Hopf, Jess K., et al. "No-take Marine Protected Areas Enhance the Benefits of Kelp-forest Restoration for Fish but Not Fisheries." *Ecology Letters*, vol. 25, no. 7, 2022, pp. 1665-1675, <https://doi.org/10.1111/ele.14023>.

House, Parker H., and Larry G. Allen. "Differences in trophic and community structure of kelp forest fishes inside and outside of three long-standing mpas in the Southern California bight." *Bulletin, Southern California Academy of Sciences*, vol. 121, no. 1, 23 June 2022, <https://doi.org/10.3160/0038-3872-121.1.1>.

Jacquemont, Juliette, et al. "Ocean conservation boosts climate change mitigation and adaptation." *One Earth*, vol. 5, no. 10, 2022, pp. 1126–1138, <https://doi.org/10.1016/j.oneear.2022.09.002>.

Kawamata, Shigeru, and Seiya Taino. "Trophic Cascade in a Marine Protected Area with Artificial Reefs: Spiny Lobster Predation Mitigates Urchin Barrens." *Ecological Applications*, vol. 31, no. 6, 2021, p. e02364, <https://doi.org/10.1002/eap.2364>.

Lenihan, Hunter S., et al. "Evidence That Spillover from Marine Protected Areas Benefits the Spiny Lobster (*Panulirus Interruptus*) Fishery in Southern California." *Scientific Reports*, vol. 11, no. 1, 2021, pp. 1-9, <https://doi.org/10.1038/s41598-021-82371-5>.

Marine Life Protection Act. January 1, 2001. Stat. 1999.

Medoff, Sarah, et al. "Spillover Benefits from the World's Largest Fully Protected MPA." *Science*, 2022, <https://doi.org/abn0098>.

Moxley, Jerry H., et al. "Non-Trophic Impacts from White Sharks Complicate Population Recovery for Sea Otters." *Ecology and Evolution*, vol. 9, no. 11, 2019, pp. 6378-6388, <https://doi.org/10.1002/ece3.5209>.

Murray, Samantha, and Tyler T. Hee. "A Rising Tide: California's Ongoing Commitment to Monitoring, Managing and Enforcing Its Marine Protected Areas." *Ocean & Coastal Management*, vol. 182, 2019, p. 104920, <https://doi.org/10.1016/j.ocecoaman.2019.104920>.

Nicholson, Teri E., et al. "Gaps in Kelp Cover May Threaten the Recovery of California Sea Otters." *Ecography*, vol. 41, no. 11, 2018, pp. 1751-1762, <https://doi.org/10.1111/ecog>.



03561.

Peleg, Ohad, et al. "Long-term Marine Protection Enhances Kelp Forest Ecosystem Stability." *Ecological Applications*, vol. 33, no. 7, 2023, p. e2895, <https://doi.org/10.1002/eap.2895>.

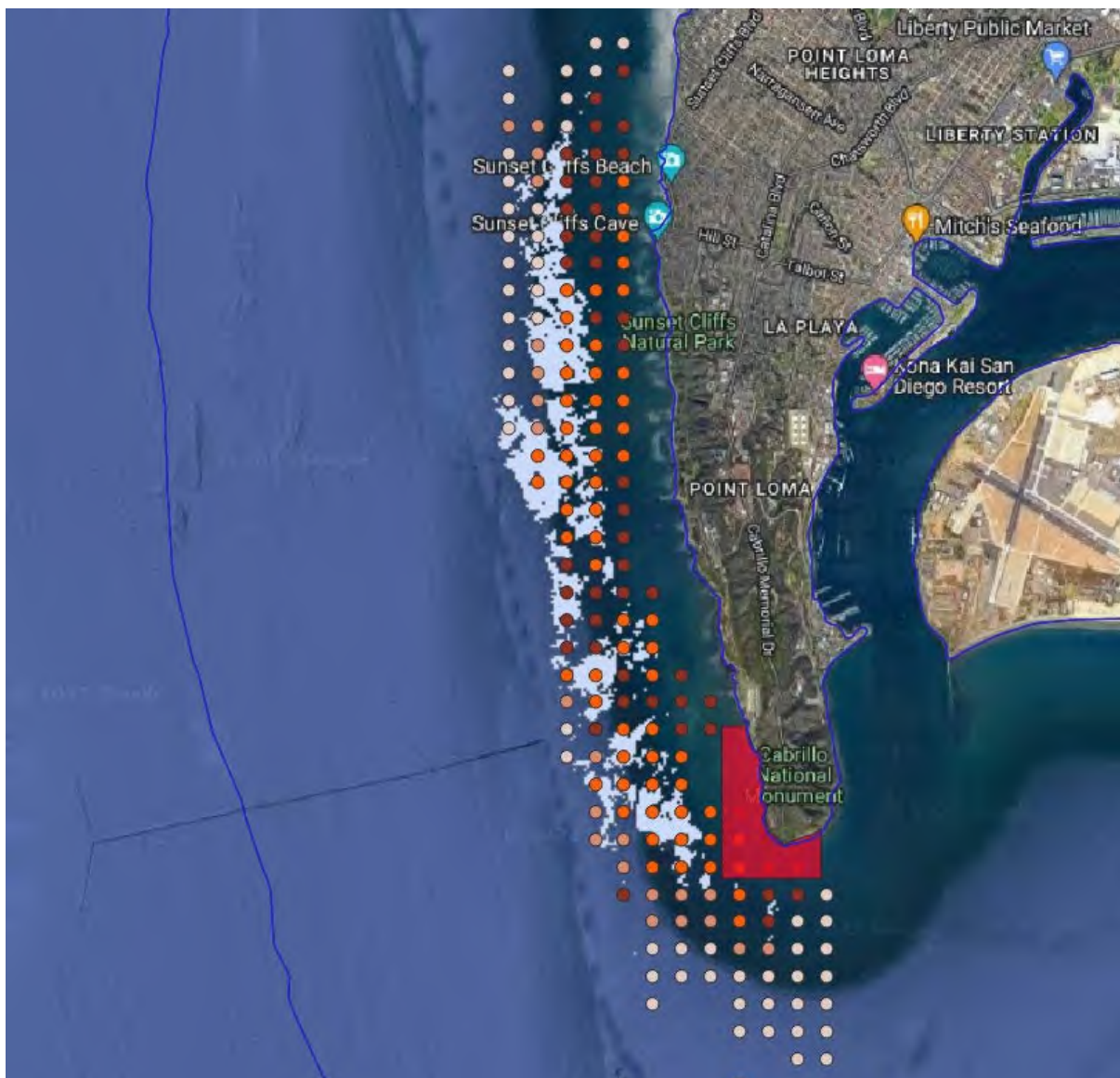
Roberts, Callum M., et al. "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change." *Proceedings of the National Academy of Sciences*, vol. 114, no. 24, 2017, pp. 6167-6175, <https://doi.org/10.1073/pnas.1701262114>.

**Appendix A**  
**Distribution of Highly Persistent Kelp Beds Near State MPAs Proposed for Expansion**

Highly persistent kelp beds identified by Arafeh-Dalmau et al. 2021 are depicted by light blue pixels. Priority kelp restoration sites characterized by Ospina-Giraldo et al. 2023 are shown using colored circles. “High priority” restoration sites are dark red, “medium priority” sites are bright orange, and “low” and “very low” priority sites are light and very light gray.

Existing California MPAs are denoted by red, purple, or blue polygons, and the 3 nm state waters limit is shown as a blue line.

Cabrillo SMR



# Point Dume SMCA

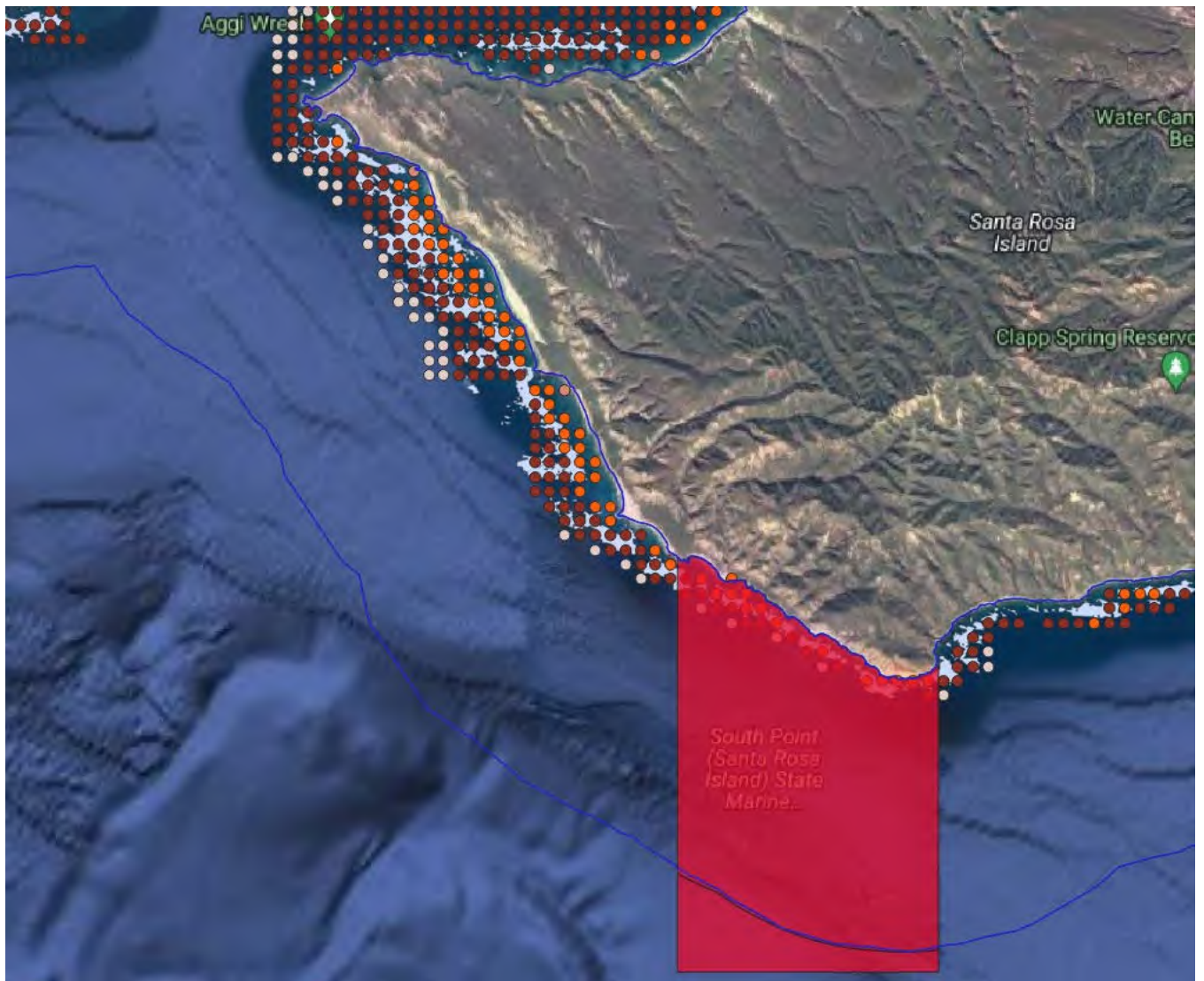


Gull Island SMR



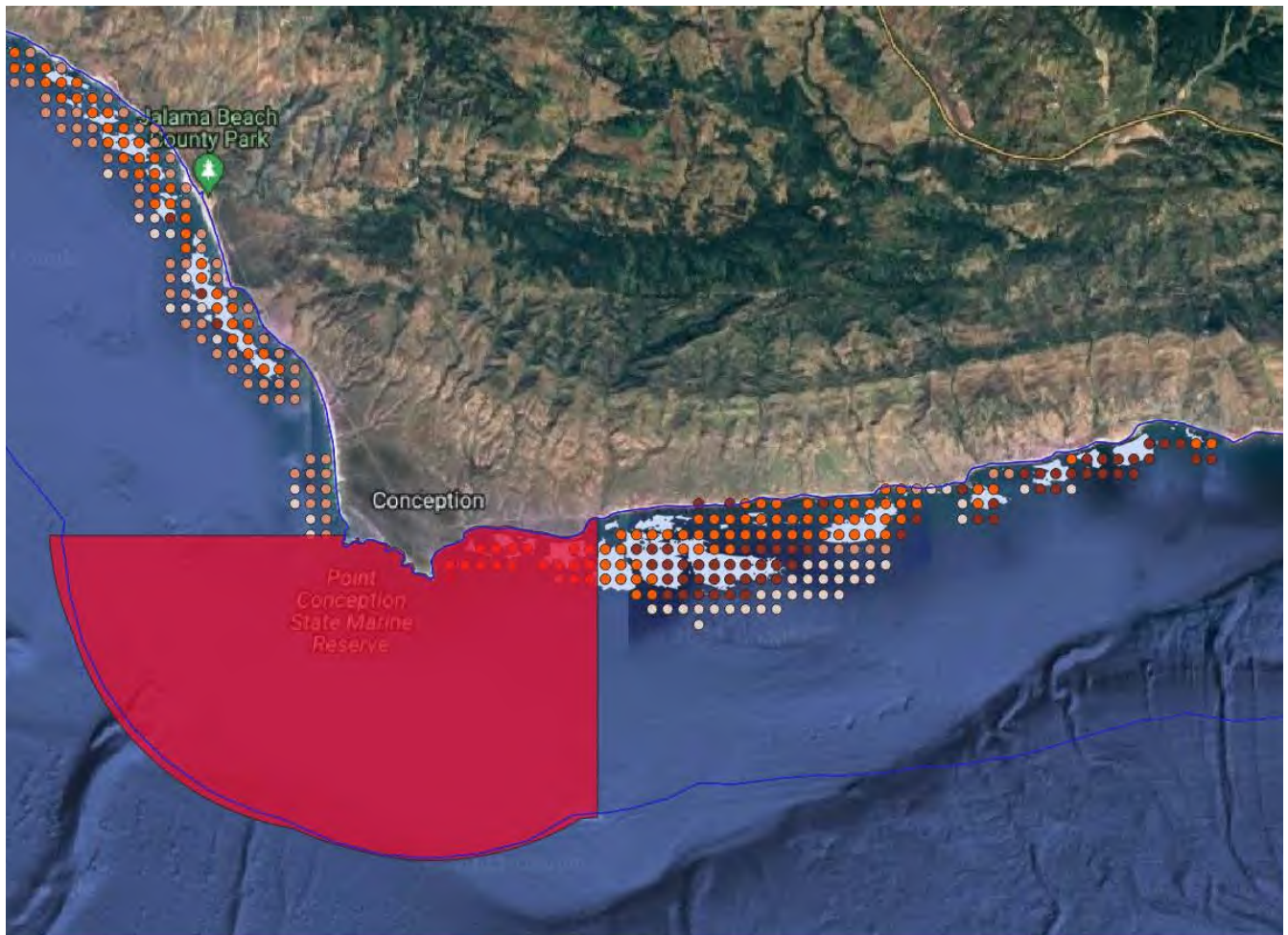


South Point SMR





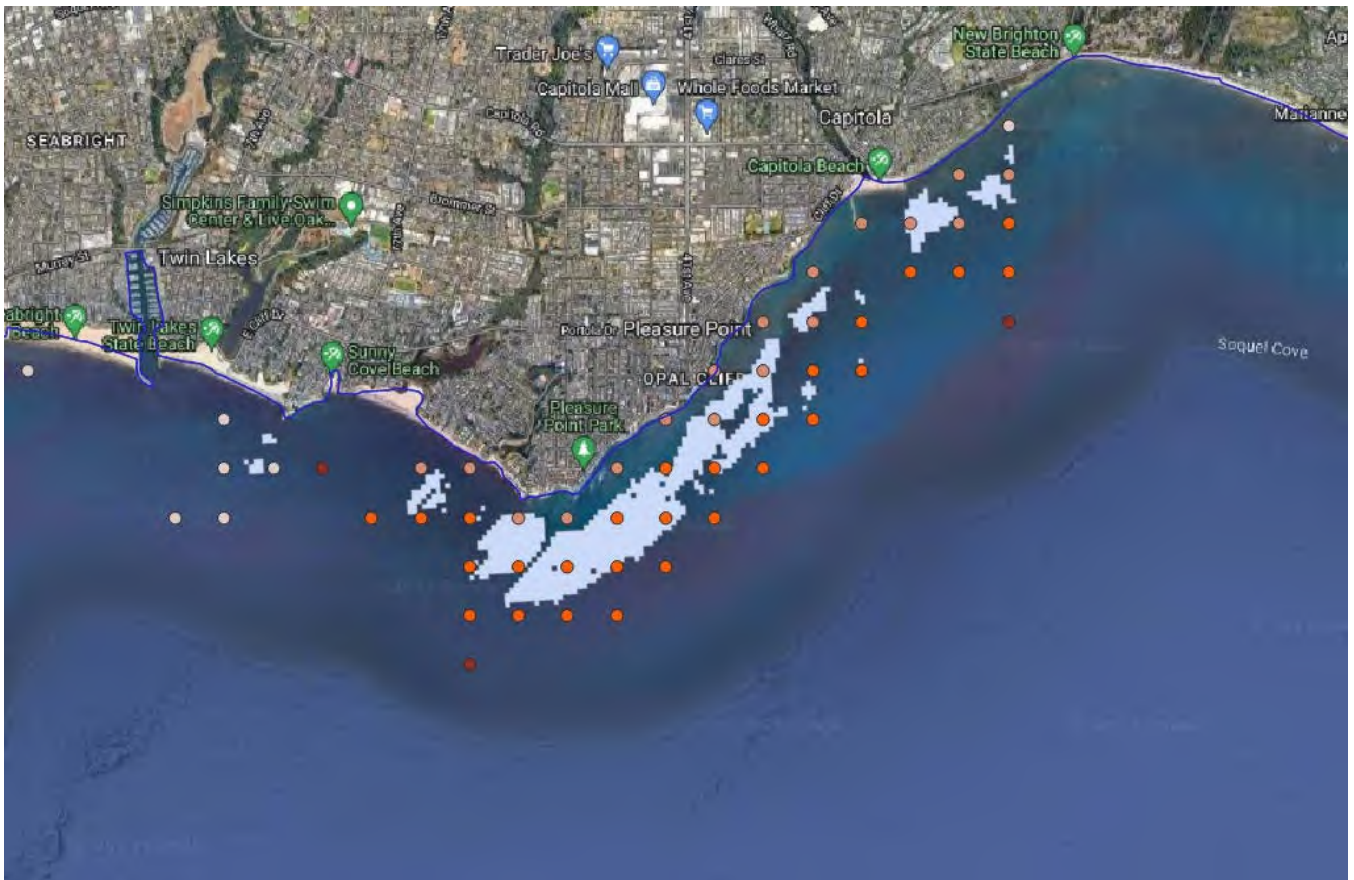
Point Conception SMR



## Natural Bridges SMR



## Pleasure Point, Santa Cruz







**TABLE 1 - Petition to Modify the CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests**

Name	Proposed action	Brief description	Proposed regulations and boundary change	Historical context	Notes
<b>Cabrillo State Marine Reserve (SMR)</b>	Expand by 15.2 sq miles	Large patches of dense, stable kelp forests exist along a large stretch of coast along Point Loma to the north of the very small existing SMR. Expansion is compatible with Cabrillo SMR's current goal to "protect diverse kelp forest, surfgrass, sandy seafloor, and intertidal and nearshore rocky reef habitat". Approximately 1,000,000 people visit the area annually which provides access to the ocean for thousands of school children and other groups. Recreational and subsistence fishing is common here.	No change in regulations. Maintain existing eastern and southern boundaries. Shift the western boundary to the edge of state waters per state MPA design and size guidelines, and shift the northern boundary to a visible geographic landmark at Swordfish Point to bring resilient kelp beds along the western shore of Point Loma within MPA protections. The new proposed boundaries would form straight lines, follow the mean high tide line, and follow the state waters boundary from the current southeast corner of the SMR to approximately the following coordinates:  - Southwest corner: 32° 66.223' N lat. 117° 30.345' W long. - Northwest corner: 32° 72.539' N lat. 117°31.664' W long. - Northeast corner: 32° 72.529' N lat. 117°25.836' W long.	This area was initially included in a large proposed SMR ("Point Loma SMR", Proposal C) in recognition that this is an area of greater biological diversity than other areas. However, the state opted for a reserve far smaller than the science-based minimum size guidelines to avoid conflict with fishing grounds offshore.	To balance kelp forests protection with recreation and low-impact subsistence fishing, we are willing to consider the creation of a new SMCA alongside the existing SMR that allows for recreational hook-and-line fishing and spearfishing.
<b>Point Dume State Marine Conservation Area (SMCA)</b>	Expand by 4.6 sq mi	A large, dense, resilient kelp bed is located immediately west of the current SMCA's boundaries. We propose a small expansion of the SMCA to protect this important kelp bed. Currently, the SMCA protects nearly 16 square miles of sandy beach and seafloor habitat, rocky shores, kelp forests, surfgrass beds, an upwelling zone, and less than a quarter square mile of deep submarine canyon, which together create an area of high biodiversity. This SMCA also provides for excellent surfing, diving, tidepooling, and whale watching opportunities.	No change in regulations. Shift the western boundary to the edge of El Sol County Beach to bring the highly resilient patch of dense kelp forest just west of the current SMCA into MPA protection. The proposed new western boundary forms a straight line extending southward from the mean high tide line to the 3 nm state waters limit at approximately the following coordinates:  - Northwest corner: 34°04'13" N lat. 118°9'063" W long. - Southwest corner: 33°9'899" N lat. 118°9'063" W long.	The kelp beds within the proposed expansion area were part of a historic SMP proposal ("Lechuza SMP", Proposal C) that sought to protect these persistent kelp beds along the Malibu Coast. This proposed SMP was not taken up by the state at the time, likely in favor of designating the Point Dume SMR/SMCA complex just to the east and to maintain spacing guidelines. In addition, the Point Dume SMR/SMCA boundaries were placed to the west of Point Dume in order to leave waters to the east of the point open/unprotected to accommodate for heavy commercial and recreational use - suggesting that the western side of the point was seen as less desirable for commercial and recreational interests.	
<b>South Point SMR</b>	Expand by 26.3 sq mi	The Northern Channel Islands contain some of the largest remaining resilient kelp beds in state waters, although large portions of the islands have experienced die-offs and are rated as "high priority" sites by Ospina-Giraldo et al. 2023. The stretch of coastline to the northwest of South Point SMR on Santa Rosa Island contains one of the largest contiguous resilient kelp beds on the islands. The SMR currently protects around 13 square miles of ocean habitat including rocky reefs, sandy seafloor, surfgrass beds, and small patches of highly resilient kelp forests. Expansion would help to bring the large stretch of resilient kelp bed to the northwest under MPA protection, and is compatible with the SMR goal to "protect the rocky reef, kelp forest, sandy plain habitat found here". This area is remote and only accessible via boat. Backcountry beach camping along the South Point SMR shoreline is permitted from September 16 through December 3.	No change in regulations. Shift the western boundary of the SMR to the westernmost tip of Santa Rosa Island with protections extending south to the 3 nm state waters limit, bringing a large, contiguous patch of resilient kelp forest along the southwest coastline under MPA protections. The new western boundary should form a straight line extending south, connecting the island's westernmost tip and the 3 nm state waters limit at approximately the following coordinates:  -Northwest corner: 34°00'13" N lat. 120°25'07" W long. -Southwest corner: 33°9'38" N lat. 120°25'07" W long.	South Point SMR was established as one of the 13 Channel Islands MPAs in 2003 and re-established with no changes as part of the state MPA network in 2012.	
<b>Gull Island SMR</b>	Expand by 1.8 sq mi	The Northern Channel Islands contain some of the largest remaining resilient kelp beds in state waters, although large portions of the islands have experienced die-offs and are rated as "high priority" sites by Ospina-Giraldo et al. 2023. A small area of unprotected coastline to the northwest of Gull Island SMR contains highly resilient kelp beds worth protecting. Expansion is compatible with the SMR goal to "protect the rocky reef, kelp forest, sandy plain habitat found here".	No change in regulations. Shift the northern boundary of the SMR to the mean high tide line along the southwest coastline of Santa Cruz Island, to bring the highly resilient kelp beds at Posa Anchorage under MPA protection. The new northern boundary should follow the mean high tide line until it joins with an extension of the existing western boundary, at approximately 34°00' N lat.	Gull Island SMR was established as one of the 13 Channel Islands MPAs in 2003 and re-established with no changes as part of the state MPA network in 2012.	
<b>Point Conception SMR</b>	Expand by 14.6 sq mi	A very large patch of resilient kelp forest exists just outside the current eastern boundary of Point Conception SMR. Ospina-Giraldo et al 2023 identified this patch as having a lower risk of future losses compared to nearby kelp patches, and being valuable for natural regeneration and long-term monitoring ("cluster 2" in Hypothetical Use Case #4). Data from an existing shore-based radar system that has been deployed at the site since 2020 shows the area immediately east of the currently MPA appears to be used largely for transit, rather than fishing. Access to this area is currently limited, allowing for additional protections to confer high conservation value while minimizing socioeconomic impacts.	No change in regulations. Maintain existing western and southern boundaries, and shift eastern boundary westward between Arroyo San Agustin and Canada de la Agujas beaches to bring the large resilient kelp bed to the east of Point Conception SMR within MPA protections. The new eastern boundary should form a straight line between the mean high tide line and the 3nm state waters boundary at approximately the following coordinates:  -Northeast corner: 34°45' N lat. 120°3445' W long. -Southeast corner: 34°40' N lat. 120°3445' W long.	The proposed expansion area appears to have been initially included in a larger proposed SMR during the MLPA planning process (South Coast Proposal C) in recognition of this area's biological and oceanographic importance. The rationale for the smaller current boundaries for Point Conception SMR is unclear from the historical documents provided.	

<p><b>Natural Bridges SMR</b></p>	<p>Expand by 13.7 sq mi</p>	<p>Multiple patches of resilient kelp forest exist just offshore from the current SMR boundaries. The original intent of this SMR was to protect the intertidal zone from tidepooling and shore fishing while leaving skiff fishing unimpacted. However, increasing climate impacts, the critical condition of the state's kelp forests, and strong public support for expanded protections, warrant a reevaluation and expansion of this SMR to protect these highly resilient kelp beds and newly vulnerable marine populations.</p>	<p>No change in regulations. Maintain existing western and eastern boundaries, and shift southern boundary out to the 3nm state waters limit to protect the resilient kelp beds and deeper habitats and pelagic waters per CDFW design and feasibility guidelines, as well as recently published peer-reviewed guidelines for climate-resilient MPA design (<a href="#">Arafah-Dalmau et al. 2023</a>).</p>	<p>The Natural Bridges SMR was designed as an intertidal SMR, specifically to avoid socio-economic impacts. The preferred option of siting a SMR that extends to greater depth range (as identified in the IDC proposal) was not pursued in an effort to reduce socio-economic impacts by avoiding siting SMRs adjacent to Santa Cruz harbor.</p>	
<p><b>Pleasure Point SMR</b></p>	<p>Designate ~3.2 sq mi</p>	<p>A large, dense patch of resilient kelp forest exists just off Pleasure Point. The kelp beds of the northern Monterey Bay are some of the largest and most persistent in the state. This area in particular is a well-known and popular surfing location, with little commercial fishing taking place (pers. comms H. Nevins) and minimal recreational hook-and-line fishing and spearfishing occurring when surf conditions are flat. There are strong access points to the area, many educational and recreational opportunities, and a growing, colloquially named "shark park" nearby as the presence of juvenile white sharks increases. See letter from H. Nevins in Appendix B detailing the broader conservation value of the area.</p>	<p>We propose a no-take SMR to best protect this large kelp forest from all destructive and extractive activities. See Column F for an acceptable alternative, and additional consideration. Proposed regulations are as follows:  <i>"It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource."</i></p> <p>Proposed boundaries range from the northeastern edge of Trees Beach along the mean high tide line to the tip of Soquel Point. From the mean high tide line, the proposed boundary extends south (offshore) by 2.5 sq mi, in keeping with CDFW design guidelines and recent peer-reviewed guidelines for climate-resilient MPA design recommending a variety of habitats and depth ranges be represented within an MPA (Arafah-Dalmau et al. 2023). While this area would not meet the state's minimum size guidelines, we recognize the importance of this area for recreational fishing and believe a strategically placed MPA of this size would protect as much of the kelp forest as possible while minimizing economic impact to the larger region, and providing conservation benefits to the broader region as detailed in Appendix A's letter from H. Nevins.</p>	<p>n/a</p>	<p>To balance kelp forest protection with recreation and low-impact subsistence fishing, we are willing to consider a new Pleasure Point SMCA that allows for recreational hook-and-line fishing and spearfishing. In addition, to better protect the ecologically rich and biologically important waters of Soquel Cove nearby, we strongly suggest the state consider designating a larger State Marine Park (or State Marine Conservation Area allowing for all recreational activities) alongside, or in tandem with, the Pleasure Point detailed here for enhanced recreational and ecological benefits (see Appendix A letter from H. Nevins).</p>





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

Environment California Research & Policy Center has one mission that drives everything we do: to protect our natural world. We envision a better, greener California: one that protects and restores more places where all life can thrive and offers us and our children the opportunity to live healthier, more enriching lives.

Azul is a grassroots organization working to conserve marine resources. We treasure the life-sustaining force of the ocean, as well as the physical and spiritual nourishment it provides us. We are a Gente powered and led effort, focused first on celebrating our rich Latino conservation traditions and connecting them to current solutions. Our work is based in authentic engagement, community building, and collaboration.

That's why we welcomed the goal set by Governor Newsom and his Administration of protecting 30% of lands and coastal waters by 2030 ('30x30'), which was codified with the passage of SB337 this Fall. This goal reflects the new scientific consensus that humanity must set aside much more of the ocean to sustain healthy marine life populations and ecosystems.

The State of California's network of Marine Protected Areas (MPAs), created by the Marine Life Protection Act (MLPA), has demonstrated that area-based marine protection works: during the state's recently completed Decadal Management Review (DMR), scientific analysis showed that the network has generally succeeded in protecting ocean habitats, increasing biomass of fishery-targeted species, and enhancing the climate resilience of California's coastal ecosystems.

However, the amount of coastal waters currently protected within the statewide MPA network falls far below the state's 30% goal. Only 12% of California state waters are covered in highly to fully protected areas – the types of protected areas known to provide the best conservation outcomes – and an additional 4% is covered in lightly protected areas that allow considerable human impacts within their boundaries. In total, 16% of state waters are currently protected within an MPA.

We must do more. Coastal and marine ecosystems face growing threats related to climate change and increased human use, as well as emerging threats from new ocean uses such as offshore wind and aquaculture. In the face of these threats, now is the time to make significant improvements to the existing MPA network via an adaptive management process to better protect our ocean and coastal resources in the future.

That is why we are submitting two petitions for rulemaking intended to strengthen the network's ability to conserve critical habitat types and better manage the network. Each of the two petitions stands on their own and are based on new and updated science that were not available to policymakers at the time of designating the original network. The areas we have proposed for expansion or strengthening are prime examples of where California's ocean life stands to benefit through new or updated permanent, area-based protections created under the MLPA.

The areas we are proposing are likely not the only areas that would fit the criteria for enhanced protection laid out in our petitions, nor are our criteria the only ecological criteria that could be used to systemically strengthen the existing network in line with the state's new 30x30 goal. We urge the Fish and Game Commission and all relevant state agencies to conduct analyses that will highlight the habitat types, species, and regions underserved by the current network, with an eye toward building a state MPA network that is resilient in the face of rising ocean temperatures, emerging threats, and continued pressure on endangered and threatened species.

Californians can be proud that we have led the way in ocean conservation over the past decades. It's time to take up the mantle of leadership once again, globally and nationally, not only to create a better future for the amazing life off of our own coasts, but also to inspire other decision makers to do so along every coastline, in every part of the ocean.

With your leadership, our groundbreaking marine protected area network can take its next leap forward.

Sincerely,

Laura Deehan  
Director  
Environment California Research & Policy Center

Marcela Gutiérrez-Graudiņš  
Founder / Executive Director  
Azul

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests**

Dear President Sklar and Honorable Commissioners,

We are writing in support of Environment California Research & Policy Center's petition to increase protections for remaining persistent kelp forests in California state waters through the Marine Life Protection Act (MLPA)'s adaptive management process. As kelp forests contend with increased threats from climate change, predator loss, and invasive species, taking action to preserve the highly persistent kelp forest areas that have so far withstood these threats will be critical to the state's efforts to conserve this essential ecosystem and achieve area-based conservation targets.

California's kelp forests provide numerous and invaluable ecological and environmental benefits. These underwater ecosystems serve as critical nurseries for a wide variety of marine species, providing shelter and food for numerous fish, invertebrates, and marine mammals. They support thriving commercial and recreational fisheries, attract tourists and divers, and can help dampen the impacts of coastal erosion and storm impacts. However, recent decades have seen a decline in kelp forest cover across the Pacific West Coast, including California, due to a combination of natural and human-induced factors such as a major marine heatwave and the loss of predators of kelp grazers by overfishing and disease.

Marine protected areas are a critical tool for increasing the resilience of kelp ecosystems in the face of these stressors. However, the state of California's MPA network has gaps in coverage for the state's most persistent kelp forests. Recent analyses identifying the extent of persistent giant kelp and bull kelp forests in California found only 20.9% of the most highly persistent forests in Central California, 8.4% in Southern California, and less than 1% in Northern California are fully protected.<sup>1,2</sup> Improving the MPA network to better protect our remaining stable kelp forests will aid in increasing the resilience of these ecosystems and prevent further loss of kelp cover.

State officials should utilize all tools at their disposal to address the ongoing threats to kelp forests. Marine protected areas like those created through the California MLPA are a tool that

---

<sup>1</sup> Arafteh-Dalmau et al. 2021, Southward decrease in the protection of persistent giant kelp forests in the northeast Pacific. *Communications Earth & Environment*. <https://doi.org/10.1038/s43247-021-00177-9>

<sup>2</sup> Arafteh-Dalmau et al. 2023, Shortfalls in the protection of persistent bull kelp forests in the USA. *Biological Conservation*. <https://doi.org/10.1016/j.biocon.2023.110133>

has been underutilized in efforts to protect and restore our kelp forests—and one we cannot afford to ignore.

The state has an opportunity to incorporate these new scientific findings into the state network of marine protected areas, ensuring the network better addresses emerging threats to our kelp forests and provides the best possible support for restoration efforts. The petition submitted by Environment California RPC is supported by recent scientific analysis employing 35 years of satellite data to identify persistent kelp forests, and is based on extensive global research demonstrating the benefits of highly to fully protected areas.

As scientists who have spent decades studying our ocean ecosystems, we urge you to take swift action to protect and preserve our coastal and marine resources and natural heritage in the face of increasing climate impacts. Our future depends on it.

Thank you for your ongoing efforts to protect California's ocean heritage, and we look forward to engaging in this important work for years to come.

Sincerely,

Dr. Nur Arafah-Dalamu  
Postdoctoral Scholar, Hopkins Marine Station, Stanford University  
Honorary Fellow, University of Queensland

Dr. Fiorenza Micheli  
David and Lucile Packard Professor of Marine Science, Stanford University

Dr. Kyle Cavanaugh  
Professor, Department of Geography, University of California, Los Angeles

Dr. Dawn Murray  
Professor Environmental Studies, Antioch University Santa Barbara

Dr. Carolina Olguin-Jacobson  
Postdoctoral Scholar, Hopkins Marine Station, Stanford University



WOODS HOLE  
**OCEANOGRAPHIC**  
INSTITUTION

**Tom W. Bell**

*Assistant Scientist*

MS #12, 266 Woods Hole Road, Woods Hole, MA 02543

Cell: 619 857-1233

tbell@whoi.edu    www.whoi.edu

November 29, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests

Dear President Sklar and Honorable Commissioners,

I am writing in support of Environment California Research & Policy Center's petition to increase protections for remaining persistent kelp forests in California state waters through the Marine Life Protection Act (MLPA)'s adaptive management process. As kelp forests contend with increased threats from climate change, predator loss, and invasive species, taking action to preserve the highly persistent kelp forest areas that have so far withstood these threats will be critical to the state's efforts to conserve this essential ecosystem and achieve area-based conservation targets.

California's kelp forests provide numerous and invaluable ecological and environmental benefits. These underwater ecosystems serve as critical nurseries for a wide variety of marine species, providing shelter and food for numerous fish, invertebrates, and marine mammals. They support thriving commercial and recreational fisheries, attract tourists and divers, and can help dampen the impacts of coastal erosion and storm impacts. However, recent decades have seen a decline in kelp forest cover across the Pacific West Coast, including California, due to a combination of natural and human-induced factors such as a major marine heatwave and the loss of predators of kelp grazers by overfishing and disease.

Marine protected areas are a critical tool for increasing the resilience of kelp ecosystems in the face of these stressors. However, the state of California's MPA network has gaps in coverage for the state's most persistent kelp forests. Recent analyses identifying the extent of persistent giant kelp and bull kelp forests in California found only 20.9% of the most highly persistent forests in Central California, 8.4% in Southern California, and less than 1% in Northern California are fully protected. Improving the MPA network to better protect our remaining stable kelp forests will aid in increasing the resilience of these ecosystems and prevent further loss of kelp cover.

State officials should utilize all tools at their disposal to address the ongoing threats to kelp forests. Marine protected areas like those created through the California MLPA are a tool that has been underutilized in efforts to protect and restore our kelp forests—and one we cannot afford to ignore.

The state has an opportunity to incorporate these new scientific findings into the state network of marine protected areas, ensuring the network better addresses emerging threats to our kelp forests and provides the best possible support for restoration efforts. The petition submitted by Environment California RPC is supported by recent scientific analysis employing 35 years of satellite data to identify persistent kelp forests, and is based on extensive global research demonstrating the benefits of highly to fully protected areas.



As scientists who have spent decades studying our ocean ecosystems, we urge you to take swift action to protect and preserve our coastal and marine resources and natural heritage in the face of increasing climate impacts. Our future depends on it.

Thank you for your ongoing efforts to protect California's ocean heritage, and I look forward to engaging in this important work for years to come.

Sincerely,

*Tom Bell*

Dr. Tom Bell

Scientist, Department of Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Support for new MPA to protect kelp, seabirds, and sharks of Santa Cruz**

Dear President Sklar and Honorable Commissioners,

As a local seabird and marine ecosystem biologist, I am writing in support of a new State Marine Reserve proposed by Environment California and Azul to protect kelp, seabirds, and sharks in coastal waters of Santa Cruz County, CA. As climate change impacts ocean conditions, corresponding shifts in fishing behavior will create new risks for forage fish and place increasing pressure on ocean wildlife. Providing protections now for forage fish within critical nearshore kelp forests and sandy bottom environments is essential for mitigating future threats to migratory seabirds, whales, and sharks.

The proposed MPA off Soquel Point in Santa Cruz is positioned within the northern Monterey Bay bight, a biologically rich and unique marine region encompassing nearshore kelp forests, sandy beach, and deeper soft-bottom habitats. Physically, these waters are influenced by the Año Nuevo upwelling front and the area is characterized by a broad shallow shelf. These features create a unique ocean circulation pattern where freshly upwelled and nutrient rich cold-water eddies become slower and recirculate within this semi-enclosed bay<sup>1</sup>. These waters are ideal growing conditions for phytoplankton, crustaceans and cephalopods, larval fishes and forage fishes (anchovies, sardines, herring), which create the base of the food web for predatory sharks, seabirds, and whales.

This biologically diverse area is recognized as important to more than 100 species of marine seabirds and shorebirds, mammals and sea turtles (Harvey & Benson 1997<sup>2</sup>, Henkel 2006<sup>3</sup>, Neuman et al. 2008<sup>4</sup>). In the summer months, enormous flocks of Sooty Shearwater travel 20,000 km from New Zealand 20,000 km to feed on the anchovy schools (Figure 1) within the

---

<sup>1</sup> Graham and Largier 1997. [Upwelling shadows as nearshore retention sites: the example of northern Monterey Bay](#). Continental Shelf Research, 1997

<sup>2</sup> Harvey and Benson 1997. Marine Bird and Mammal Distribution and Abundance in Monterey Bay, During 1996. Moss Landing Marine Laboratories Technical Publication 97-02, 80pp.

<sup>3</sup> Henkel 2004. [Seasonal Abundance of Marine Birds in Monterey Bay, California](#). Western Birds: 126-146.

<sup>4</sup> Neuman, Henkel, and Page. 2008. [Shorebird use of sandy beaches in central California](#) Waterbirds.

northern bight of the Bay (Figure 2) (Adams et al. 2012<sup>5</sup>). This annual natural feeding frenzy phenomenon is described as the “River of Birds” and is fueled by the dense nearshore aggregations of anchovies, which are also host to iconic lunge-feeding humpback whales,<sup>6</sup> pelicans, and gulls.

An “Oasis Effect” has been described for these nearshore areas in California<sup>7</sup> by which whales and other marine animals aggregate in large numbers to feed in nearshore “oases” of forage fish during times of poor food availability offshore. Similarly, Endangered Leatherback Sea Turtles travel from offshore areas to feed within the bight when ocean conditions nearshore favor jellyfish<sup>8</sup>. The connection between nearshore and offshore forage fish dynamics figures importantly in the future conservation of these globally connected migratory species<sup>9</sup>.

However, these areas are not protected from extractive uses including fisheries. Despite 30 years of protected designation within the Monterey Bay National Marine Sanctuary, Adelaars et al. 2012<sup>10</sup> found that the relative level of conservation, particularly within the northern bay sandy shelf area of the Sanctuary, is low. The Sanctuary primarily protects the waters from offshore oil and gas exploitation, but does not protect against the impacts of fishing and many other human activities which may compromise thriving marine food webs. Large important areas of nearshore sandy-bottom and kelp forest habitats in Monterey Bay remain unprotected (see Figure 7 in Adelaars et al.).

In addition, over the past 10 years our coastal ecosystems have seen significant shifts in the face of a changing climate. Warming waters – including intense episodic marine heatwaves – have caused mobile species to temporarily shift their geographic ranges to remain within suitable environmental conditions,<sup>11</sup> often increasing the chances for harmful interactions with fisheries and other human activities. In the Monterey Bay, warming waters have led to habitat

---

<sup>5</sup> Adams, MacLeod, Suryan, Hyrenbach and Harvey. 2012. [Summer-time use of west coast US National Marine Sanctuaries by migrating sooty shearwaters \(\*Puffinus \[=Ardennna\] griseus\*\)](#). Biological Conservation 156: 105-116.

<sup>6</sup> [video] [Sooty Shearwaters on Monterey Bay feeding with Humpback Whales](#) (MB Whale Watch)

<sup>7</sup> Benson, Croll, Marinovic, Chavez, and Harvey. 2002. Changes in the cetacean assemblage of a coastal upwelling ecosystem during El Niño 1997-98 and La Niña 1999. Prog. Oceanogr. 54:279-291.

<sup>8</sup> Benson, Forney, Harvey, Carretta, and Dutton. 2007 Abundance, distribution, and habitat of leatherback turtles (*Dermochelys coriacea*) off California, 1990–2003. Fish. Bull. 105:337–347.

<sup>9</sup> [International Agreement on the Conservation of Albatrosses and Petrels \(Conservation of Migratory Species\)](#).

<sup>10</sup> Adelaars, Bassett, Donlou, Marks, Pardieck, and Lindholm. 2012. [Examining the Conservation Level of Marine management Areas within the Monterey Bay National Marine Sanctuary: How Protected is the Sanctuary?](#) Marine Sanctuaries Conservation Series ONMS-12-04. U.S. Department of Commerce, NOAA, Silver Spring, MD. 41 pp. [NB: Figure 7 - Soquel Cove area]

<sup>11</sup> Pecl, Araju et al. 2017. [Biodiversity redistribution under climate change: Impacts on ecosystems and human well-being](#). Science

compression for whales and other mobile marine species, causing them to move inshore more frequently to feed and resulting in record-high whale entanglements in fishing gear.<sup>12</sup> Other species such as Common Murre, Rhinoceros Auklets and Brandt's Cormorant engage in prey switching as a strategy to buffer prey availability<sup>13</sup>, utilizing species from kelp forests and nearshore ecosystems when offshore species are less abundant. Maintaining healthy nearshore environments with a diversity of prey sources for predators experiencing climatic stressors is critical for the climate resilience of the overall ecosystem. However, the very changes underpinning these shifts in wildlife behavior can also influence fisher behavior,<sup>14</sup> putting pressure on these food webs at the very time that they're needed to maintain ecosystem resilience.

Conservation of healthy forage fish populations in the face of climate change is critical. A recent review highlighted the need for conservation of the prey base with regard to the seabird populations in California, noting that where humans and wild predators coexist, human fishers are far more efficient in their prey harvesting activities<sup>15</sup>. Further, a global review by Cury et al. 2011 suggested a precautionary approach of leaving one third of the fish biomass for the seabirds<sup>16</sup>. Both of these studies point to the need for establishing protections of forage fish for seabirds which are not exploited to full capacity. A new state MPA would strengthen protections for forage fish now, before shifting ocean conditions bring new threats to this area. The proposed MPA area is not currently not currently subject to any significant commercial take, making protecting this area now of minimal economic impact to existing fisheries.

Conservation in this area is aided by the participation of actively engaged citizen scientists. Citizens in Santa Cruz County are very concerned about marine conservation and actively participate in citizen science activities including water quality (Coastal Watershed Council), intertidal and subtidal monitoring (LIMPETS<sup>17</sup>, Reef Check California) and beach monitoring (BeachCOMBERS, Nevins et al. 2011<sup>18</sup>). Since 1997, citizen scientists have been monitoring

---

<sup>12</sup>Santora, Mantua et al. 2020. [Habitat compression and ecosystem shifts as potential links between marine heatwave and record whale entanglements](#). Nature

<sup>13</sup> Warzybok et al. 2018 [Prey switching and consumption by seabirds in the central California Current upwelling ecosystem: Implications for forage fish management](#). J Marine Systems

<sup>14</sup> Pichegru et al. 2012. [Industrial fishing, no-take zones and endangered penguins](#). Biol. Cons. 156:117-125.

<sup>15</sup> Ainley, Adams, Jahncke (eds). 2014 [Towards ecosystem-based fishery management in the California Current system—predators and the preyscape: a workshop](#).

<sup>16</sup> Cury et al. 2011. [Global Seabird Response to Forage Fish Depletion—One-Third for the Birds](#). Science

<sup>17</sup> Pearse et al. 2015 [Long-term monitoring of surfgrass meadows in the Monterey Bay National Marine Sanctuary : recovery followed by stability after the termination of a domestic sewage discharge](#).

<sup>18</sup> Nevins, Benson, Phillips, de Marignac, DeVogelaere, Ames and Harvey. 2011. [Coastal Ocean Mammal and Bird Education and Research Surveys \(BeachCOMBERS\), 1997-2007: ten years of monitoring beached marine birds and mammals in the Monterey Bay National Marine Sanctuary](#).

impacts to marine birds and mammals in and around the proposed MPA, contributing significant evidence for understanding human impacts, documenting the recovery of species in the region, and complementing long-term monitoring efforts by the state.

Northern Monterey Bay is host to a multitude of ocean-focused activities and these have created a thriving nature-based economy: surfers treasure the waves of Pleasure Point from Soquel Point to Capitola; beachgoers enjoy tidepooling, birdwatching, fossil hunting, and fishing along the rocky and sandy shores of New Brighton and Seacliff Beaches. Recently, locals have called this area a “Shark Park”, due to the increased use of the area by juvenile white sharks as seen by drones. This natural phenomenon has created a boon for shark-ecotourism businesses based out of Santa Cruz and Capitola (Figure 3). An established MPA in the area would help provide long-term protections for this oft-maligned species which requires nearshore sandy beaches for growth and survival, while supporting local nature-focused businesses.

The proposed MPA would also amplify nearby land-based protected areas, including four California State Parks (New Brighton, Seacliff Beach, Manresa and Sunset State Beaches). Establishing a land-sea connection between terrestrial and coastal protected areas will not only enhance broader ecological ecosystem function, but could connect users within the proposed MPA to interpretive aspects of state parks, which offer extensive access (trails, beach access, RV and tent camping) and interpretive resources (rangers and visitor centers).

In summary, the proposed MPA would provide multiple species and habitats ecological benefits and greater resilience in the face of climate-related impacts and shifting fishing behaviors, as well as leverage local citizen efforts to increase coastal protection and enhancements for marine species. This effort would enable future generations to enjoy firsthand the natural phenomena of the River of Birds by migratory Sooty Shearwaters and the nursery area found to be important for juvenile White Sharks by protecting the basis of the food web in this ecosystem.

Thank you for considering this proposed designation.

Sincerely,

A handwritten signature in black ink, appearing to read "Hannah Nevins". The signature is written in a cursive, flowing style.

Hannah Nevins, M.S. MSc., Seabird Biologist and Ecologist, Santa Cruz, CA





Figure 1. Shearwaters feed on small schooling fishes including anchovies in nearshore waters of northern Monterey Bay. (Photo: Ingrid Taylor, New Brighton Beach, CA)

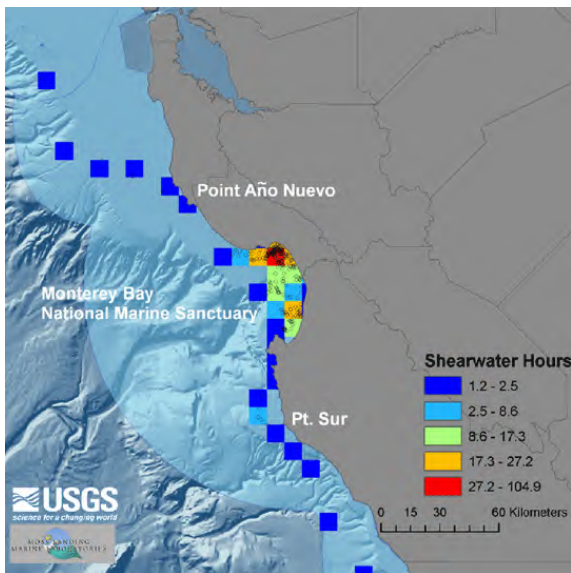


Figure 2. Satellite tracking of migratory Sooty Shearwaters indicate the valuable feeding area in northern Monterey Bay (red area). Northern area is proposed is for greater protection of forage fish important to migratory seabirds and sharks. (Data: USGS/MLML)



Figure 3. Soquel Cove is locally known as the "Shark Park." Passengers on a shark-watching tour based from Santa Cruz check out an approaching great white shark in the sandy bottom habitat off Seacliff Beach in northern Monterey Bay, CA. (Photo Kevin Painchard/Lookout Santa Cruz)

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs

Dear President Sklar and Honorable Commissioners,

As scientists, researchers, and educators who work to understand our changing oceans and inspire the next generation of ocean stewards, we write to express our support for the expansion and strengthening of California's network of Marine Protected Areas (MPAs) to help safeguard the state's diverse marine ecosystems and ensure the long-term resilience of our ocean habitats.

Globally, the ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. California's coastal ecosystems have not been spared these global trends: Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Only an average of 55 Pacific leatherback turtles are now found foraging off California's coast every year, a notable decrease from the yearly average of 128 Pacific leatherbacks observed in the region from 1990 to 2003.<sup>2</sup> Marine heatwaves have doubled over the last 30 years and have become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>3</sup>

Now, California has a unique opportunity to take bold, effective and science-based action to conserve its marine biodiversity by expanding its groundbreaking network of state MPAs. MPAs, like state parks on land, protect unique and important ocean habitats from destructive human activities that can damage the integrity of marine ecosystems. Globally and in California, strongly protected and well-enforced MPAs have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate

---

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> Benson, Scott R., Karin A. Forney, Jeffrey E. Moore, Erin L. LaCasella, James T. Harvey, and James V. Carretta. ["A Long-Term Decline in the Abundance of Endangered Leatherback Turtles, Dermochelys Coriacea, at a Foraging Ground in the California Current Ecosystem."](#) *Global Ecology and Conservation* 24 November 2020.

<sup>3</sup> IPCC (2021). Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte VP, Zhai A, Pirani SL, Connors C, Péan S, et al. (Eds.)].;

change on our oceans.<sup>4</sup> Well-designed and well-implemented reserves better preserve natural interactions within ecosystems, allowing for greater resiliency in the face of rising global temperatures and changing environmental conditions.<sup>5</sup>

California's network of MPAs, established through the 1999 Marine Life Protection Act, celebrated its tenth anniversary last year. The state's recent Decadal Management Review (DMR) analyzed a decade of monitoring data and showed that the MPA network has generally been effective at protecting ocean habitats and increasing fisheries-targeted species' biomass.<sup>6</sup> Now, in the face of increasing threats, we need to build on this system and maintain California's role as a national and global leader in the effort to protect our ocean habitats.

That's why we, as scientists, researchers, and educators, urge you to expand and strengthen our state's network of MPAs via the adaptive management process of the DMR.

Specifically, we support the expansion of the MPA network to include additional protections for California's most resilient kelp forests. While these vital and iconic ecosystems have faced declines statewide in recent years, kelp forests in some areas have persisted or bounced back quickly in the face of marine heatwaves and other disturbances.<sup>7</sup> By expanding protections for these resilient forests under the MLPA, the state can minimize direct human impacts in these relatively healthy areas, helping to ensure their continued persistence and enhancing the effectiveness of restoration efforts for declining kelp ecosystems nearby. Globally, kelp restoration has been most successful in places adjacent to/contiguous with healthy kelp forest ecosystems.<sup>8</sup>

It is also vital that existing California MPAs are able to achieve their stated goals of conserving biodiversity and ecosystem health. We encourage the state to consider increasing protections for MPAs that are currently only lightly or minimally protected, especially in places where weaker or more complicated regulations lead to poor compliance and enforcement. Research has shown that highly and fully protected areas, where few if any destructive or extractive activities are allowed, provide greater ecological benefits than lightly or minimally protected areas.<sup>9</sup> The

---

<sup>4</sup> James Horrox, Kelsey Lamp and Steve Blackledge. [New Life for the Ocean: How Marine Protections Keep Our Waters Wild](#). Environment America Research & Policy Center & Frontier Group, February 3, 2021

<sup>5</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

<sup>6</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.;

<sup>7</sup> Arafteh-Dalmau *et al.*, [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), *One Earth* 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published by Elsevier Inc.

<sup>8</sup> Eger, A.M., Marzinelli, E.M., Christie, H., Fagerli, C.W., Fujita, D., Gonzalez, A.P., Hong, S.W., Kim, J.H., Lee, L.C., McHugh, T.A., Nishihara, G.N., Tatsumi, M., Steinberg, P.D. and Vergés, A. (2022), Global kelp forest restoration: past lessons, present status, and future directions. *Biol Rev*, 97: 1449-1475.

<sup>9</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

state's network currently protects 12% of state waters in highly- or fully-protected MPAs, as defined by Grorud-Colvert et al. (2021), which leaves 4% of the network lacking the most effective conservation protections.<sup>10</sup> By expanding the level of protection to areas already identified as ecologically important, we can ensure that the area's vulnerable marine resources have the chance to recover and flourish.

Our ocean is not just a source of clean air, wildlife, and natural beauty but also a mystery that beckons exploration and discovery. It is our moral imperative to lead the nation and the world in taking bold actions to preserve the sea, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

President Sklar and Honorable Commissioners, you have a chance to take up this imperative and champion the expansion and strengthening of California's network of Marine Protected Areas. By doing so, you will leave a lasting legacy of marine stewardship that will keep California at the forefront of ocean conservation, nationally and globally.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this urgent matter. Together, we can ensure a healthier, more abundant future for the unique marine ecosystems that define California.

Sincerely,

Michael Akresh  
Faculty  
Antioch University

Alice Alldredge  
Professor Emeritus  
University of California, Santa Barbara

Steven Allison  
Professor  
University of California, Irvine

Anupa Asokan  
Ocean advocate

Peter Auster  
Senior Research Scientist & Research Professor  
Emeritus  
Mystic Aquarium & University of Connecticut

Nevé Baker  
PhD Candidate  
University of California Santa Cruz

Leocadio Blanco Bercial  
Assistant Professor  
Arizona State University - Bermuda Institute of  
Ocean Sciences

Bailey Drechsler  
Professor  
Cuesta College

---

<sup>10</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**,0861(2021). DOI:10.1126/science.abf0861

Michelle María Early Capistrán  
Postdoctoral Scholar  
Stanford University

Rikki Eriksen  
Director Marine Spatial Ecology  
California Marine Sanctuary Foundation

Paul Faulstich  
Emeritus Professor of Environmental Analysis  
Pitzer College

Sarah Hameed  
Blue Parks Director & Senior Scientist  
Marine Conservation Institute

Brett Holland  
Faculty  
CSUS

Flora Lu  
Professor of Environmental Studies  
University of California, Santa Cruz

Kathy Ann Miller  
Curator of Algae  
Herbarium, University of California

Lisa Murphy  
co-founder, primary researcher and educator  
Gold Country Bat Project

Dawn Murray  
Professor  
Antioch University

Jacquelin Mutter  
National One Water Planning Lead  
HDR

Erin Naegle  
STEM Dean of Instruction  
Cuesta College

Hannahrose Nevins  
Seabird Ecologist  
Seabird Consultant

Gretchen North  
Professor of Biology  
Occidental College

Carolina Olguin Jacobson  
Postdoctoral fellow  
Hopkins Marine Station of Stanford University

Gorka Sancho  
Professor  
College of Charleston

Joanna Tang  
PhD Candidate  
UCSB

Robert Voeks  
Professor  
Cal State University, Fullerton, Department of  
Geography & the Environment

Charles Zender  
Professor of Earth System Science  
University of California, Irvine



STATE CAPITOL  
P.O. BOX 942849  
SACRAMENTO, CA 94248-0030  
(916) 319-2030

DISTRICT OFFICES  
857 SANTA ROSA STREET  
SAN LUIS OBISPO, CA 95941  
(805) 548-0001

50 PACIFIC STREET, SUITE 575G  
MONTEREY, CA 93940  
(831) 649-2832



COMMITTEES  
HIGHER EDUCATION  
MILITARY AND VETERANS AFFAIRS  
NATURAL RESOURCES  
PUBLIC EMPLOYMENT AND  
RETIREMENT  
RULES  
SELECT COMMITTEES  
CHAIR, OFFSHORE WIND ENERGY IN  
CALIFORNIA  
CHAIR, SERVING STUDENTS WITH  
DISABILITIES  
VICE CHAIR, JOINT COMMITTEE ON  
FISHERIES AND AQUACULTURE

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 28th, 2023

Re: Strengthening and Expanding California's Marine Protected Area Network

Dear President Sklar and Honorable Commissioners,

As an Assemblymember and advocate for the health and vitality of California's coastal ecosystems, I write to express my support for the expansion of the state's network of Marine Protected Areas (MPAs) to include the expansion and strengthening of Point Buchon SMCA and Natural Bridges SMR. Protecting specific habitat areas, including the remaining areas of stable kelp forests, and increasing the rigor of existing marine protected areas are crucial steps in safeguarding our diverse marine species and ensuring the long-term well-being of the ecosystems off our shores.

The state of our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Pollution, overfishing, offshore drilling and other human activities are threatening ocean habitat and marine species, while the changing climate increases the risk of extreme weather events and puts even greater stress on ocean ecosystems.<sup>2,3</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[New Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

<sup>3</sup> Arafah-Dalmau et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), One Earth 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>4</sup> California's network of MPAs, foreseen in the MLPA, celebrated its tenth-anniversary last year, and the state's decadal management review showed that marine life in existing reserves better withstood recent marine heatwaves, and reserves across the state had higher biomass of commercially caught fish than areas lacking protection.<sup>5</sup> Now, we need to build on this system and maintain California's role as a leader, both nationally and globally, in the fight to protect more ocean habitats.

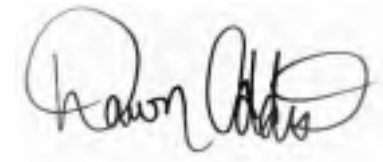
That's why I urge you to expand our state's network of MPAs within the adaptive management process of the Decadal Management Review. In particular, I am writing in support of the strengthening and expansion of Point Buchon SMCA and Natural Bridges SMR off the coast of my community.

We, as Californians, have a deep love for our ocean and feel a profound responsibility to participate in decisions that impact our state's coastal waters. Our ocean is not just a source of clean air, wildlife, and natural beauty but also a mystery that beckons exploration and discovery. It is our moral imperative to lead the nation and the world in taking bold actions to preserve the sea in our own backyard, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

In conclusion, we strongly urge you, Honorable Commissioners, to expand California's MPA network to encompass areas of persistent kelp, with a particular focus on safeguarding the strengthening and expansion of Point Buchon SMCA and Natural Bridges SMR.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Dawn Addis". The signature is fluid and cursive, with the first name "Dawn" being larger and more prominent than the last name "Addis".

DAWN ADDIS  
Assemblymember, 30<sup>th</sup> District

<sup>4</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[New Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

<sup>5</sup> California Department of Fish and Wildlife. [California's Marine Protected Area Network Decadal Management Review](#). 2022.



MAYOR AND CITY COUNCIL

809 Center Street, Room 10, Santa Cruz, CA 95060 • (831) 420-5020 • Fax: (831) 420-5011 • [citycouncil@cityofsantacruz.com](mailto:citycouncil@cityofsantacruz.com)

November 30, 2023

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**RE: Petition to Modify the CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests**

Dear President Sklar and Honorable Commissioners:

As a mayor and advocate for the health and vitality of California's coastal ecosystems, I write to express my unwavering support for the expansion of the State's network of Marine Protected Areas (MPAs), including the expansion of Natural Bridges SMR and the implementation of a new MPA at Pleasure Point. Protecting specific habitat areas, including the remaining areas of stable kelp forests, and increasing the rigor of existing marine protected areas are crucial steps in safeguarding our diverse marine species and ensuring the long-term well-being of the ecosystems off our shores.

The state of our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Pollution, overfishing, offshore drilling, and other human activities are threatening ocean habitats and marine species, while the changing climate increases the risk of extreme weather events and puts even greater stress on ocean ecosystems.<sup>2 3</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the State passed the groundbreaking Marine Life Protection Act (MLPA), which called on the State to use one of the most powerful tools for ocean conservation: MPAs.

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>4</sup>

<sup>1</sup> Meredith McPherson et. al, [Epizootic shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heat wave](#), Communications Biology, March 5, 2021.

<sup>2</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[Slow Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

<sup>3</sup> Arafah-Dalmau et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), One Earth 6, 1–19 November 17, 2023 © 2023 Published by Elsevier Inc.

<sup>4</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[Slow Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

California's network of MPAs, foreseen in the MLPA, celebrated its tenth anniversary last year, and the State's decadal management review showed that marine life in existing reserves better withstood recent marine heatwaves, and reserves across the State had higher biomass of commercially caught fish than areas lacking protection.<sup>5</sup>

Now, we need to build on this system and maintain California's role as a leader, both nationally and globally, in the fight to protect more ocean habitats.

That is why I urge you to expand our State's network of MPAs within the adaptive management process of the Decadal Management Review. In particular, I am writing in support of the expansion of the Natural Bridges SMR and the implementation of a new MPA at Pleasure Point off the coast of my community, Santa Cruz.


As the author of the Marine Life Management Act and the Marine Life Protection Act, I am fully supportive of Environment California's request for additional marine protected areas. When I was Speaker pro tempore of the California Assembly (1996–2002), I was deeply involved in this subject. In my last year, I also authored the California Ocean Trust Act, which created the California Ocean Science Trust (Cal-OST). Cal-OST has written extensively about the successes within the MPAs, and more would be a very good idea.

We, as Californians, have a deep love for our ocean and feel a profound responsibility to participate in decisions that impact our State's coastal waters. Our ocean is not just a source of clean air, wildlife, and natural beauty but also a mystery that beckons exploration and discovery. It is our moral imperative to lead the nation and the world in taking bold actions to preserve the sea in our own backyard, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

In conclusion, we strongly urge you, Honorable Commissioners, to expand California's MPA network to encompass areas of persistent kelp, with a particular focus on safeguarding Natural Bridges State Marine Reserve and implementing a new MPA at Pleasure Point. By doing so, you will leave a lasting legacy of environmental stewardship.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this proposal. Together, we can ensure a healthier, more abundant future for the unique marine ecosystems that define California.

Sincerely,



Fred Keeley  
Mayor

P:\CMAD\Word(Wpfiles)\SUZANNEU\Mayorfk 2022-2026\Letters\CA Fish and Game - Kelp Forests.docx

---

<sup>5</sup> California Department of Fish and Wildlife, [California's Marine Protected Area Network Decadal Management Review](#), 2022.





California Fish and Game Commission  
 715 P Street, 16th floor,  
 Sacramento, CA 95814

November 30th, 2023

RE: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California’s Most Resilient Kelp Forests

Dear President Sklar and Honorable Commissioners:

Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> California sea otters are still listed as threatened under the Endangered Species Act, and one of the biggest barriers to this species’ recovery and range expansion is increased shark bites from a lack of kelp forest cover. Marine

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021



heatwaves have doubled over the last 30 years, and have become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>2</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>3</sup> By providing areas that serve as buffers against climate change, fully protected MPAs adapt to changing environmental conditions because they better preserve natural interactions within ecosystems, allowing for greater resiliency.<sup>4</sup>

California's network of MPAs, foreseen in the MLPA, celebrated its tenth anniversary last year, and the state's decadal management review showed that MPAs effectively protect ocean habitats and increase fishery-targeted species' biomass. Now, we need to build on this system and maintain California's role as a national and global leader in the fight to protect more ocean habitats.

Protecting specific habitat areas, including the remaining areas of stable kelp forests is a crucial step in safeguarding our diverse marine species and ensuring the long-term well-being of our ocean environments.

We support the expansion of the MPA Network to include some of the most resilient kelp forests along California's coastline, by expanding Cabrillo State Marine Reserve, Point Dume State Marine Conservation Area, South Point State Marine Reserve, Gull Island State Marine Reserve, Point Conception State Marine Reserve, Natural Bridges State Marine Reserve, and by creating a new MPA around the beautiful kelp forest off Pleasure Point near Santa Cruz. While kelp forests have faced declines statewide in recent years, in these areas they have persisted or bounced back quickly in the face of marine heatwaves and other disturbances.<sup>5</sup> By expanding protections for

---

<sup>2</sup> García-Reyes, Marisol, Andrew Leising, Rebecca Asch, Steven Bograd, and Tessa M Hill. Rep. Indicators of Climate Change in California, "[Coastal Ocean Temperature](#)", *California Office of Environmental Health Hazard Assessment*, 2022.

<sup>3</sup> Arafeh-Dalmau et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), *One Earth* 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published by Elsevier Inc.

<sup>4</sup> Jankowska, Emilia, et al. "[Climate Benefits from Establishing Marine Protected Areas Targeted at Blue Carbon Solutions](#)." *Proceedings of the National Academy of Sciences*, vol. 119, no. 23, 2022.

<sup>5</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

these resilient forests under the MLPA, the state can minimize direct human impacts in these relatively healthy areas, helping to ensure their continued persistence and enhancing the effectiveness of restoration efforts for declining kelp ecosystems nearby.

Enhancing the protection of California's kelp forests strongly aligns with Goals 1, 2, 3, and 4 of the MLPA by preserving natural diversity, sustaining marine life populations, protecting marine habitats for their intrinsic value, and improving recreational and educational opportunities while minimizing human disturbance. <sup>6</sup> Safeguarding resilient kelp ecosystems will ensure critical habitat preservation for diverse marine species, including endangered sea otters and commercially valuable fish.

Our ocean is a source of clean air, wildlife, and natural beauty, but also a mystery that beckons preservation and exploration. California has the opportunity to lead the nation and the world in taking bold action to preserve the sea, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

Sincerely,

Laura Deehan  
State Director  
Environment California Research and Policy Center

Tomas Valadez  
CA Policy Associate  
Azul

Robert Vergara  
Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Clara Castronovo  
Board Chair  
CALPIRG Students

Keith Shattenkirk  
Program Officer, Healthy Lands and Waters  
Patagonia

---

<sup>6</sup> “Marine Life Protection Act.” CDFW. <https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA>.

Susan Jordan  
Executive Director  
California Coastal Protection Network

Ashley Eagle-Gibbs  
Interim Executive Director  
Environmental Action Committee of West Marin

Krista Rogers  
Program Manager  
Save Our Shores

Azsha Hudson  
Marine Conservation Analyst  
Environmental Defense Center

Chelsea Tu  
Executive Director  
Monterey Waterkeeper

Janet Cox  
President  
Climate Action CA

Pauline Seales  
Organizer  
Santa Cruz Climate Action Network

Dan Silver  
Executive Director  
Endangered Habitats League

Josefina Barrantes  
30x30 Coordinator  
Environmental Protection Information Center (EPIC)

Martha Camacho Rodríguez  
Director  
SEE (Social Eco Education)

Megan Shumway  
Member  
CHN, Sacramento Climate Coalition, SacAct

Antonina Markoff  
Coordinator  
The Climate Reality Project California State Coalition

Robert Gould, MD  
President  
San Francisco Bay Physicians for Social Responsibility

Esperanza Vielma  
Executive Director  
Environmental Coalition for Water Justice

Daniel Chandler  
Steering Committee Member  
350 Humboldt

Andria Ventura  
Legislative and Policy Director  
Clean Water Action/Clean Water Fund

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

Environmental Action was founded in 1970, on the first Earth Day, as a community of grassroots environmental activists working for a cleaner, greener world. We are submitting the following 2,487 signatures in support of Environment California Research & Policy Center's petitions for rulemaking in the state's adaptive management process for the California Marine Protected Area network.

Each of the 2,487 people signed the following letter:

*Dear Governor Newsom,*

*Sea otters bobbing in the surf. Whales diving deep to feed. Seabirds flying above. Our state's coastline is home to wildlife, large and small. As Californians, we've taken steps to protect this ocean heritage by creating a network of marine protected areas that, just like state parks on land, help protect and restore ocean life.*

*I urge you to strengthen this network through the Decadal Management Review in line with your important goal of protecting 30 percent of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection to ocean life.*

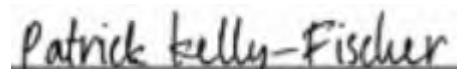
*With your support, California can expand this network of ocean parks to create a brighter future for the ocean life that calls our state home, and hopefully inspire others across the country and around the world to follow our lead.*

*Sincerely,*

As a group that works to protect our most amazing and at risk wildlife across the country, we know that preserving and restoring habitats will be critical to seeing our ocean life thrive. Whether it's a return of sea otters to more of the coastline or more abundant seabirds flying above our heads, expanding and strengthening California's network of marine protected areas will create a more hopeful future for the wild animals that call the state's coastline home.

But the decisions made on California's coast will not only impact the state's wildlife: as with many environmental issues, California's actions here have the potential to reverberate far and wide. If the state acts with ambition during this adaptive management process to fulfill the state's 30 by 30 commitment, it can set the national standard for ocean conservation, leading the country and the globe forward to a better future for our oceans.

Sincerely,



Patrick Kelly-Fischer  
Board Member  
Environmental Action



Cathy Crum, Agoura Hills, CA  
Roger Ewing, Agoura Hills, CA  
Debra Lichstein, Agoura Hills, CA  
Brian Jeffery, Aguanga, CA  
Geraldyn Gulseth, Alameda, CA  
David Howard, Alameda, CA  
Mike Kehl, Alameda, CA  
Jamie Le, Alameda, CA  
Andrew Mueckenberger, Alameda, CA  
Donna Pedroza, Alameda, CA  
Mana-Jean Wagnon, Alameda, CA  
Michael Grant White, Alameda, CA  
Joseph Woodard, Alameda, CA  
Connie Diernisse, Alamo, CA  
Ehren Mierau, Alamo, CA  
Ana Black, Albany, CA  
Lill D, Albany, CA  
Christopher Hamilton, Albany, CA  
Michael Sullivan, Albany, CA  
Lisa Wenzel, Albany, CA  
Barbara Williamson, Albany, CA  
Dobby Sommer, Albion, CA  
Annemarie Weibel, Albion, CA  
Tom Atha, Alhambra, CA  
Araceli Aviles, Alhambra, CA  
Anjanette Caron, Alhambra, CA  
David Gallardo, Alhambra, CA  
Angel Orona, Alhambra, CA  
Christine Sirias, Alhambra, CA  
Laurie Barre, Altadena, CA  
Vic Bostock, Altadena, CA  
Timothy Callahan, Altadena, CA  
G Devine, Altadena, CA  
Beth Herndobler, Altadena, CA  
Jennifer Herstein, Altadena, CA  
Venetia Large, Altadena, CA  
Annamarie Jones, Alturas, CA  
Thomas Mccombs, American Canyon, CA  
Robert Raven, American Canyon, CA  
Nora Coyle, Anaheim, CA  
Shauna Gonzalez, Anaheim, CA  
Penelope Harms, Anaheim, CA  
Jane Iacovetti, Anaheim, CA  
Karen Malley, Anaheim, CA  
Tim Maurer, Anaheim, CA  
Natalie Blasco, Anderson, CA  
Sharon Lieberman, Annapolis, CA  
Melissa Brooks, Antelope, CA  
Jessica Mitchell-Shihabi, Antelope, CA  
John Nadolski, Antelope, CA  
Leslie Clement, Antioch, CA  
Lindsey Kalfsbeek, Antioch, CA  
Dennis Cajas, Apple Valley, CA  
Julia Deasley, Apple Valley, CA  
Val Wren, Apple Valley, CA  
Carol Easton, Aptos, CA  
Michele Faia, Aptos, CA  
Bonnie Gessler, Aptos, CA  
Blaise Brockman, Arcadia, CA  
Jana Harker, Arcadia, CA

Penn Patton, Arcadia, CA  
Richard Wightman, Arcadia, CA  
Jeannie Gunn, Arcata, CA  
Connie Lindgren, Arcata, CA  
Rudy Ramp, Arcata, CA  
Sophie Rocheleau, Arcata, CA  
Jane Spini, Arcata, CA  
Kimberly Tays, Arcata, CA  
Mary Finch, Aromas, CA  
Barbara Frances, Aromas, CA  
Paul Lapidus, Aromas, CA  
Sherry Pennell, Aromas, CA  
Mary Orcutt, Arroyo Grande, CA  
Verona Rebow, Arroyo Grande, CA  
Mary Simmons, Arroyo Grande, CA  
Mitchell Falkenstern, Atascadero, CA  
Tara Gonzales, Atascadero, CA  
Helena Hernandez, Atascadero, CA  
Kathleen Van Every, Atascadero, CA  
Gabriele Miatkowski, Athens, CA  
Marilyn Barthelow, Auburn, CA  
Jana Boccalon, Auburn, CA  
Kermit Carraway, Auburn, CA  
Denise Redden, Auburn, CA  
Shawn Jones, Avila Beach, CA  
Jere Wilkerson, Avila Beach, CA  
Silvia Rocha, Azusa, CA  
Linda Alvarado, Bakersfield, CA  
Jim Carnal, Bakersfield, CA  
Jennifer Cartwright, Bakersfield, CA  
Caryn Cowin, Bakersfield, CA  
Maria Guzman, Bakersfield, CA  
Steve Isenman, Bakersfield, CA  
Judy Matusz, Bakersfield, CA  
Tracy McCowan, Bakersfield, CA  
Steve Sketo, Bakersfield, CA  
Yolanda Berumen, Baldwin Park, CA  
Jesse Calderon, Baldwin Park, CA  
Khai Hang, Baldwin Park, CA  
Vicki Sarnecki, Bangor, CA  
Christopher Jennings, Banning, CA  
Geneva Sherwood, Banning, CA  
Linda Christenson, Beaumont, CA  
Jon Sheehan, Bell Gardens, CA  
Joan Alexander, Bellevue, CA  
Yazmin Gonzalez, Bellflower, CA  
Dennis Landi, Bellflower, CA  
Jason Nolasco, Bellflower, CA  
Andrea Kevech, Belmont, CA  
Angela Gantos, Belvedere Tiburon, CA  
Barbara Meislin, Belvedere Tiburon, CA  
Janie Burkhart, Ben Lomond, CA  
Nancy Phillips, Ben Lomond, CA  
Sarah Holder, Benicia, CA  
Robert Quarrick, Benicia, CA  
Rudy Zeller, Benicia, CA  
Mimi Abers, Berkeley, CA  
Inger Acking, Berkeley, CA  
Rory Alden, Berkeley, CA  
Joan Andersson, Berkeley, CA

Steve Berman, Berkeley, CA  
James Blakly, Berkeley, CA  
Wendy Brown, Berkeley, CA  
Waltraud Buckland, Berkeley, CA  
Lynda Caesara, Berkeley, CA  
Jenny Collins, Berkeley, CA  
Janis Dairiki, Berkeley, CA  
Saraswathi Devi, Berkeley, CA  
Wendy Diamond, Berkeley, CA  
Jonathan Eden, Berkeley, CA  
Christopher Evans, Berkeley, CA  
Mike Evans, Berkeley, CA  
Ellen Franzen, Berkeley, CA  
Rachel Gordon, Berkeley, CA  
Caryn Graves, Berkeley, CA  
Paul Gruber, Berkeley, CA  
Stefanie Guynn, Berkeley, CA  
D.H. Higgins, Berkeley, CA  
Andrea Horbinski, Berkeley, CA  
Kimi Hosoume, Berkeley, CA  
Maggie Hughes, Berkeley, CA  
Richard Huss, Berkeley, CA  
Tasha Isolani, Berkeley, CA  
Kate Kirkhuff, Berkeley, CA  
Lola Leeman, Berkeley, CA  
Robert Magarian, Berkeley, CA  
Rachel Mayeda, Berkeley, CA  
David Miotke, Berkeley, CA  
Elaine Parker, Berkeley, CA  
Dale Peterson, Berkeley, CA

Tawny Reynolds, Berkeley, CA  
Bob Schildgen, Berkeley, CA  
Wendy Stock, Berkeley, CA  
Linda Tiffany, Berkeley, CA  
Paul Vesper, Berkeley, CA  
Jonathan Weinstock, Berkeley, CA  
Stephanie Wellemeyer, Berkeley, CA  
Suzanne Wood, Berkeley, CA  
Scott Nelson, Bethel Island, CA  
Michelle Arc, Beverly Hills, CA  
Val Barri, Beverly Hills, CA  
Suzi Beaton, Beverly Hills, CA  
Meike Blanc, Beverly Hills, CA  
Elizabeth Bona, Beverly Hills, CA  
Verna Dentrey, Beverly Hills, CA  
Antoinette Dusaid, Beverly Hills, CA  
Sara Gernsbacher, Beverly Hills, CA  
Sofia Hallgren, Beverly Hills, CA  
Helen Hearfield, Beverly Hills, CA  
Julia Ivanova, Beverly Hills, CA  
Valeria Kobzak, Beverly Hills, CA  
Kare M, Beverly Hills, CA  
Rick Moffat, Beverly Hills, CA  
Troy Munn, Beverly Hills, CA  
Peter Nielsen, Beverly Hills, CA  
Heather Parekh, Beverly Hills, CA  
Allison Rensch, Beverly Hills, CA  
Ken Rosen, Beverly Hills, CA  
Craig Thompson, Big Bar, CA  
Nancy Freedland, Big Bear City, CA

Karen Roseme, Bishop, CA

Barbara Inyan, Blairsden Graeagle, CA

Antonia Chianis, Blue Jay, CA

Pamela Dornfeld, Bodega Bay, CA

Robert Mizar, Bodega Bay, CA

Tina Ann, Bolinas, CA

Rene Flores, Bonita, CA

Leif Kristiansen, Bonita, CA

Cynthia McMath, Boonville, CA

Cristina Warren, Borrego Springs, CA

Ed Atkins, Boulder Creek, CA

Marivee Frayer, Boulder Creek, CA

Sally Fuess, Boulder Creek, CA

Karen Hillery, Boulder Creek, CA

Diane Knipe, Boulder Creek, CA

Kathryn St. John, Boulder Creek, CA

Ann Thryft, Boulder Creek, CA

Lynn Sentenn, Brea, CA

Donna Buessing, Brentwood, CA

Stephanie Glatt, Buellton, CA

D. Fachko, Buena Park, CA

Jennifer Jerlstrom, Buena Park, CA

Jessica Likens, Buena Park, CA

Nelson Molina, Buena Park, CA

Ruxandra Caranfil, Burbank, CA

Sandra Christopher, Burbank, CA

Chantal Dinnage, Burbank, CA

Olga D Grovic, Burbank, CA

Artineh Havan, Burbank, CA

Laura Herndon, Burbank, CA

Rhonda Kess, Burbank, CA

Lotti Knowles, Burbank, CA

Susan Magnus, Burbank, CA

Tyson Martin, Burbank, CA

William Mead, Burbank, CA

Tom Pitman, Burbank, CA

Ben Anderson, Burlingame, CA

Kendra Knight, Burlingame, CA

Amy Liebman, Burlingame, CA

Sam Morrison, Burlingame, CA

Laura Overmann, Burlingame, CA

Brent Woolsey, Burlingame, CA

Vivian Deutsch, Calabasas, CA

Beth Doshay, Calabasas, CA

Monica Wiesener, Calabasas, CA

David Burtis, Calistoga, CA

Scott Hester, Calistoga, CA

Macella O'Neill, Calistoga, CA

Susan Beil, Camarillo, CA

Grace Cunningham, Camarillo, CA

Jeanette Desmond, Camarillo, CA

Cherie Garrett, Camarillo, CA

Tim Guisinger, Camarillo, CA

Susan Kittinger, Camarillo, CA

John Randle, Camarillo, CA

Charlie Tetoni, Camarillo, CA

Allyson Dallmann, Cambria, CA

Julianne Dunkley, Cambria, CA

Janice E. Farry-Menke, Cambria, CA

Glenda Griffith, Cambria, CA

Lisa McGurrin, Cambria, CA  
Katherine Bossange, Campbell, CA  
Barbara Mason, Campbell, CA  
Louise Perry, Campbell, CA  
Anne Swanson, Campbell, CA  
Judy Wang, Campbell, CA  
George Steinitz, Campo, CA  
Mark Giordani, Canoga Park, CA  
Alan Johnson, Canoga Park, CA  
Sheila Winston, Canoga Park, CA  
Lynda Cook, Canyon Country, CA  
Ramona Agin, Canyonville, CA  
Tim Ryan, Capistrano Beach, CA  
Matt Bender, Cardiff by the Sea, CA  
Mercedes Benet, Carlsbad, CA  
Angie G., Carlsbad, CA  
Lois Ingber, Carlsbad, CA  
Phyllis Lackey, Carlsbad, CA  
Erica Murray, Carlsbad, CA  
Alexa Pallas, Carlsbad, CA  
Michael Parry, Carlsbad, CA  
Avi Shaprut, Carlsbad, CA  
Peter Brickey, Carmel, CA  
Alyce Foster, Carmel, CA  
Diana North, Carmel, CA  
Lonni Trykowski, Carmel, CA  
Julie Dalton, Carmel by the Sea, CA  
Elizabeth Adan, Carmichael, CA  
Nancy Bukowski, Carmichael, CA  
Warren Hageman, Carmichael, CA

Lori Hubbard, Carnation, CA  
Judith Falck-Madsen, Carpinteria, CA  
Mary Wiener, Carpinteria, CA  
G.Diane Matthews-Marcelin, Carson, CA  
Lisa Tyree, Carson, CA  
Gloria Aguirre, Castaic, CA  
Michael Ames, Castro Valley, CA  
Elisabeth Bathgate, Castro Valley, CA  
Patricia Blackwell-Marchant, Castro Valley, CA  
Glen Deardorff, Castro Valley, CA  
Gina Gatto, Castro Valley, CA  
Sue Hall, Castro Valley, CA  
Pati Jio, Castro Valley, CA  
Kerri McGoldrick, Castro Valley, CA  
Reina Robinson, Castro Valley, CA  
Greg Rosas, Castro Valley, CA  
Pamela Sibley, Castro Valley, CA  
Marcie Spencer, Castro Valley, CA  
Barbara Harper, Castroville, CA  
John Hill, Castroville, CA  
Sarah Sowambur, Caterham, CA  
Phillip Cripps, Cathedral City, CA  
Kelly Erwin, Cathedral City, CA  
Hilary Simonetti, Cathedral City, CA  
Stephanie Hagiwara, Cayucos, CA  
Jon Anderholm, Cazadero, CA  
Wallace Rhine, Cazadero, CA  
James Costello, Ceres, CA  
Marie Perry, Ceres, CA  
Jon High, Cerritos, CA



Katherine Hsu, Cerritos, CA  
James Lindgren, Cerritos, CA  
Cristel Cruz, Chatsworth, CA  
C Deguzman, Chatsworth, CA  
Lynette K Henderson, Chatsworth, CA  
Sarah Suhich, Chatsworth, CA  
Barbara Wasserman, Chatsworth, CA  
Garrett Alden, Chico, CA  
Paul Belz, Chico, CA  
Linda Calbreath, Chico, CA  
Grace Dewar, Chico, CA  
Kylee Smith, Chico, CA  
Steve Wolfe, Chico, CA  
Terrie Maguire, Chino, CA  
Cindy Chic, Chino Hills, CA  
Cyndee Gannon, Chino Hills, CA  
Angela Barbee, Chula Vista, CA  
John Knox, Chula Vista, CA  
Alana-Patris Loyer, Chula Vista, CA  
Gaby Ramirez, Chula Vista, CA  
Alfa Santos, Chula Vista, CA  
John Teevan, Chula Vista, CA  
Carol Von Sederholm, Chula Vista, CA  
Robbin Christensen, Citrus Heights, CA  
Sharon Hawkinson, Citrus Heights, CA  
Callie Riley, Citrus Heights, CA  
Laura Riley, Citrus Heights, CA  
Brandy Schumacher, Citrus Heights, CA  
Robert Blackey, Claremont, CA  
Robert Ellwood, Claremont, CA  
Karen Lull, Claremont, CA  
Tanya Nieri, Claremont, CA  
Laurel Tucker, Claremont, CA  
Erica Tyron, Claremont, CA  
Kathleen Love, Clearlake, CA  
Trina Bodine, Cloverdale, CA  
John Kwiatkowski, Cloverdale, CA  
Barbara Matz, Cloverdale, CA  
Cara Barnhill, Clovis, CA  
Gail Blank, Coarsegold, CA  
Dianna Suarez, Colfax, CA  
Diane Hestich, Colton, CA  
Shakayla Thomas, Compton, CA  
Sheila Dixon, Concord, CA  
Jennie Richards Jacob Blei, Concord, CA  
Eugene Jung, Concord, CA  
Susan King, Concord, CA  
Lisa Maker, Concord, CA  
James R Monroe, Concord, CA  
Lynette Ridder, Concord, CA  
Scott Tipton, Concord, CA  
Carlene Visperas, Concord, CA  
Bonnie W, Concord, CA  
Emily Wheeler, Concord, CA  
Shari Wildschutte, Concord, CA  
Jane Bidinian, Cool, CA  
Anne Spesick, Cool, CA  
Joseph White, Cool, CA  
Christina G, Corona, CA  
Valerie Pelletier, Corona, CA

Donna Crossman, Coronado, CA  
Sanja Dimitrijevic, Coronado, CA  
Rhys Atknsn, Corte Madera, CA  
Jennifer Lawson, Corte Madera, CA  
Abigail Millikan States, Corte Madera, CA  
Elaina Caner, Costa Mesa, CA  
Rachelle Cox, Costa Mesa, CA  
Michelle Fay, Costa Mesa, CA  
Jacqueline Gait, Costa Mesa, CA  
F. Carlene Reuscher, Costa Mesa, CA  
Megan Snipes, Costa Mesa, CA  
Lizzie Vierra, Costa Mesa, CA  
Jane Lyon, Cotati, CA  
Kelley Rico, Cottonwood, CA  
Amanda Felt, Covina, CA  
Wendy Monterrosa, Covina, CA  
Sandy Williams, Covina, CA  
Elli Kimbauer, Crescent City, CA  
Paul Norup, Crescent City, CA  
April Quigley, Crescent City, CA  
Ronald Thompson, Crescent City, CA  
Susannah Baxendale, Culver City, CA  
Jane Nadeau, Culver City, CA  
Brian Rutkin, Culver City, CA  
Vj Waks, Culver City, CA  
Peg Albrets, Cupertino, CA  
Robert Jardine, Cupertino, CA  
Helen Graham, Cypress, CA  
Patricia Rudner, Cypress, CA  
Rachel Abdel, Daly City, CA  
Jeff Garner, Daly City, CA  
Randy Gerlach, Daly City, CA  
Noah H, Daly City, CA  
Ramsey Jammal, Daly City, CA  
Elena Orozco, Daly City, CA  
Joanne Scott, Daly City, CA  
Katya Siguenza, Daly City, CA  
Diana Sutton, Daly City, CA  
Mark Weinberger, Daly City, CA  
Cheryl McCarthy, Dana Point, CA  
Rick Edmondson, Danville, CA  
Ramona Williams, Danville, CA  
Sabrina Wong, Danville, CA  
Christine K. Adams, Davis, CA  
Philip Cooper, Davis, CA  
Kristen Douglas, Davis, CA  
Jon Erickson, Davis, CA  
Sherrill Futrell, Davis, CA  
Nancy Hiestand, Davis, CA  
Autumn Marr, Davis, CA  
Jack Milton, Davis, CA  
Diane Moore, Davis, CA  
Sherri Sandberg, Davis, CA  
Nicole Slaton, Davis, CA  
Elizabeth Hennessy Kyle, Del Mar, CA  
Carol Kerridge, Del Mar, CA  
Bea Cohen, Desert Hot Springs, CA  
Maureen Mcdonald, Desert Hot Springs, CA  
Michael McLaughlin, Desert Hot Springs, CA  
Nancy Schelling, Desert Hot Springs, CA

Sarah Sultana, Desert Hot Springs, CA  
Marilyn Eng, Diamond Bar, CA  
Jeffrey Jenkins, Diamond Bar, CA  
Seth Picker, Diamond Springs, CA  
Melissa Villarreal, Dinuba, CA  
Denise Russo, Discovery Bay, CA  
Valerie Victorino, Discovery Bay, CA  
Dan Vasile, Dodgertown, CA  
Sharon Byers, Downey, CA  
Michelle Fox, Downey, CA  
Ivan Llata, Downey, CA  
Dean Peppard, Downey, CA  
Anna Armstrong, Duarte, CA  
Sarah Sismondo, Duarte, CA  
Juliet Flores, Dublin, CA  
Nancy Nilssen, Dublin, CA  
Jean Olds, Dublin, CA  
Mohan Sakhrani, Dublin, CA  
Anthony Totaro, Dublin, CA  
Richard Harden, El Cajon, CA  
Kim Koch, El Cajon, CA  
Linda Martin, El Cajon, CA  
Susan Hampton, El Cerrito, CA  
Paul Hughes, El Cerrito, CA  
Jan Jones, El Cerrito, CA  
Michael Kenney, El Cerrito, CA  
Robert Naumann, El Cerrito, CA  
Carole Sartenaer, El Cerrito, CA  
Anne Tuddenham, El Cerrito, CA  
Cory Antila, El Dorado Hills, CA  
Mary Foley Foley, El Dorado Hills, CA  
Karen Miner, El Dorado Hills, CA  
Dorothy Pasquinelli, El Granada, CA  
Susie Rose Tempesta, El Granada, CA  
Terry Blount, El Segundo, CA  
Matthew Lubs, El Segundo, CA  
Stacy Smith, El Segundo, CA  
Bruce Wimberley, El Segundo, CA  
Martha Booz, El Sobrante, CA  
Garth Casaday, El Sobrante, CA  
Dan Cooley, El Sobrante, CA  
Natasha Kaluza, El Sobrante, CA  
Marsha Lowry, El Sobrante, CA  
John Carroll, Elk Grove, CA  
Donna Giddens, Elk Grove, CA  
Shannon Kemena, Elk Grove, CA  
Sumita Khanna, Elk Grove, CA  
Carol Leuenberger, Elk Grove, CA  
Vivian Leung, Emeryville, CA  
Kaylah Sterling, Emeryville, CA  
Tara A. Birnbaum, Encinitas, CA  
June Evans, Encinitas, CA  
Shawn Johnson, Encinitas, CA  
Barbara Mintz, Encinitas, CA  
Felicia Chase, Encino, CA  
Lucy Hart, Encino, CA  
Hillary Ostrow, Encino, CA  
Andrew Russell, Encino, CA  
Michael Tullius, Encino, CA  
Brenda Bergstrom, Escondido, CA

Dale Crawford, Escondido, CA

Cindy Dupray, Escondido, CA

Candace Galvez, Escondido, CA

Deborah Iannizzotto, Escondido, CA

John Pasqua, Escondido, CA

Erika Porter, Escondido, CA

Peter Randolph, Escondido, CA

Ken Sanford, Escondido, CA

Joanne Tenney, Escondido, CA

Andy Tomsy, Escondido, CA

Rena Zaman-Zade, Escondido, CA

Kevin Goodwin, Eureka, CA

Mary Hurley, Eureka, CA

Edward Macan, Eureka, CA

Lynda McDaniel, Eureka, CA

Karynn Merkel, Eureka, CA

Gina Ness, Eureka, CA

Davin Peterson, Eureka, CA

Anne Pierson, Eureka, CA

Graciela Ramirez, Eureka, CA

Karen Steele, Eureka, CA

Susan Tatro, Eureka, CA

Beti Webb Trauth, Eureka, CA

Don W, Eureka, CA

C Emerson, Fair Oaks, CA

Dean Griswold, Fair Oaks, CA

Steven Holzberg, Fair Oaks, CA

John J McLaughlin Jr, Fair Oaks, CA

Sheila Nason, Fair Oaks, CA

James Sherrel, Fair Oaks, CA

Jeanne Carlson, Fairfax, CA

Cindi Darling, Fairfax, CA

Kathleen Jackson, Fairfax, CA

Gary Mononi, Fairfax, CA

Vakila ter Veld, Fairfax, CA

Samuel Durkin, Fairfield, CA

Mark Edgren, Fairfield, CA

Veronica Michael, Fairfield, CA

Jean Riehl, Fairfield, CA

Todd Musto, Fallbrook, CA

Alice Kelly, Felton, CA

Jim Franzi, Fiddletown, CA

S. Johnson, Fillmore, CA

David Brooks, Folsom, CA

Jessica Dardarian, Folsom, CA

Joan Normington, Folsom, CA

Julie Osborn, Folsom, CA

Benjamin Billhardt, Fontana, CA

James Kawamura, Fontana, CA

Trina Aurin, Foothill Ranch, CA

Janet Ju, Foothill Ranch, CA

Bob Flagg, Forestville, CA

Robert Harrison, Forestville, CA

Gilia Humrich, Forestville, CA

Eric Johnson, Fort Bragg, CA

Bill Lundeen, Fort Bragg, CA

Gary Warner, Fort Jones, CA

Dave Lyons, Fortuna, CA

Ray Bartlett, Fountain Valley, CA

Moktar Salama, Fountain Valley, CA

Mary Brooks, Frazier Park, CA

Catherine Stansell, Frazier Park, CA

Monique Soares, Freedom, CA

Elaine Chung, Fremont, CA

Lacey Hicks, Fremont, CA

Jennifer King, Fremont, CA

Janet Klein, Fremont, CA

David Lanker, Fremont, CA

Vince Lindain, Fremont, CA

Charles Modjeski, Fremont, CA

Meera P, Fremont, CA

Sharon Rodrigues, Fremont, CA

Christopher Ware, Fremont, CA

Christine Anderson, Fresno, CA

Michael Bordenave, Fresno, CA

Kyla Esqueda, Fresno, CA

Britani German, Fresno, CA

Robert Glover, Fresno, CA

Evelyn Johnson-Todd, Fresno, CA

Andrew Jones, Fresno, CA

Francine Keohi, Fresno, CA

Shawn Martinez, Fresno, CA

Nancy McCormick, Fresno, CA

John Poss, Fresno, CA

Jacquelyn Riley, Fresno, CA

Haidie Simonet, Fresno, CA

Monica Yonangitti, Fresno, CA

John Ayala, Fullerton, CA

Donna Grampp, Fullerton, CA

Melodi Gulsen, Fullerton, CA

Lynn Hoang, Fullerton, CA

Winifred Hopkins, Fullerton, CA

Jaclyn Joy Lewis, Fullerton, CA

Evan McDermit, Fullerton, CA

Kent Morris, Fullerton, CA

Christine Doyka, Garberville, CA

Evelyn Ahumada, Garden Grove, CA

Laurie Kinnings, Garden Grove, CA

Dana May, Garden Grove, CA

Carol Tennyson, Garden Grove, CA

Deborah Burge, Garden Valley, CA

Suellen Carroll, Garden Valley, CA

Jennifer Walters, Gardena, CA

Deb Conant, Gilroy, CA

Lynne Long, Gilroy, CA

Carol Stafford, Gilroy, CA

Eleanor Decker, Glen Ellen, CA

Alejandro Artigas, Glendale, CA

A C, Glendale, CA

Carole Cooper, Glendale, CA

Barbara Cunningham, Glendale, CA

Lisa Deines, Glendale, CA

Claudia Hasenhuttl, Glendale, CA

Susi Higgins, Glendale, CA

Peter Hogan, Glendale, CA

Anita Liao, Glendale, CA

J. D. Lombardi, Glendale, CA

Jenette Paisley, Glendale, CA

Jeff Pollak, Glendale, CA

Victoria Shepherd, Glendale, CA



Rebecca Barker, Glendora, CA

Larissa Shen, Glendora, CA

Adriene Stutrud, Glenhaven, CA

Michael Beickel, Goleta, CA

Catherine Dishion Dishion, Goleta, CA

Amanda Heinrich, Goleta, CA

Martin Henderson, Goleta, CA

Kathy Kosinski, Goleta, CA

Patricia Moreno, Goleta, CA

Randall Parada, Goleta, CA

Z. Reisz, Goleta, CA

Joanna Tang, Goleta, CA

Dennis Hammermeister, Granada Hills, CA

Lisa Hammermeister, Granada Hills, CA

John Shell, Granada Hills, CA

Berna & Mark Nitzberg, Granite Bay, CA

Evette Andersen, Grass Valley, CA

Susanne Bader, Grass Valley, CA

Bonny Davis, Grass Valley, CA

Anna Drummond, Grass Valley, CA

John Everett, Grass Valley, CA

Steven Millard, Grass Valley, CA

Patricia Phillips, Grass Valley, CA

Robin Resovich, Grass Valley, CA

James Yonts, Graton, CA

Dixie Brown, Greenbrae, CA

Gordon Ehrman, Greenbrae, CA

Dennis McVey, Greenbrae, CA

Jill Mistretta, Greenbrae, CA

Joan Smith, Greenbrae, CA

Mark Escajeda, Gualala, CA

Querido Galdo, Gualala, CA

Teresa Bowden, Guerneville, CA

Russell Burke, Guerneville, CA

Kimo Cochran, Guerneville, CA

Andrea Kaufman, Guerneville, CA

Marilyn Wolters, Guerneville, CA

Arleen Zuniga, Guerneville, CA

Charles Elliott, Hacienda Heights, CA

Jean Howe, Hacienda Heights, CA

Michael Wisniewski, Hacienda Heights, CA

Debby Dernberger, Half Moon Bay, CA

Mariaelena Springsted, Half Moon Bay, CA

Amy Squires, Hawthorne, CA

Kelly Andrada, Hayward, CA

Gregory Fite, Hayward, CA

H. Gray, Hayward, CA

Rev. Jonathan Tan, Hayward, CA

Maria Daverede, Healdsburg, CA

Tessa Kraft, Healdsburg, CA

Elizabeth Rue, Healdsburg, CA

Ernst Mecke, Helsingfors, CA

Teresa Hensley, Hemet, CA

Larry LaPointe, Hemet, CA

Lily Mejia, Hemet, CA

Diane Schnitzer, Hemet, CA

Debra Shaw, Hemet, CA

Carson Yu, Hercules, CA

William Briggs, Hermosa Beach, CA

Margaret Harrell, Hermosa Beach, CA

Linda Monosmith, Hermosa Beach, CA  
Tammyfa Fait, Hesperia, CA  
Julie Knutson, Hesperia, CA  
Annie Phillips, Hesperia, CA  
Shanna Rojas, Hesperia, CA  
Juanita Westberg, Hesperia, CA  
P Perry, Hidden Valley Lake, CA  
Linda Albarran, Highland, CA  
Vanessa Kong, Hillsborough, CA  
Michael Henderson, Huntington Beach, CA  
Vicki Hughes, Huntington Beach, CA  
Audrey Mannolini, Huntington Beach, CA  
Michael McMahan, Huntington Beach, CA  
Polly D Pitsker, Huntington Beach, CA  
Fred Schloessinger, Huntington Beach, CA  
Sheila Shane, Huntington Beach, CA  
Enel Taylor, Huntington Beach, CA  
Stacie Umetsu, Huntington Beach, CA  
Elijah L., Huntington Park, CA  
Sylvia Cardella, Hydesville, CA  
Jaimy Sprissler, Imperial Beach, CA  
Jayne Cerny, Inverness, CA  
Terri Mckown, Inyokern, CA  
Lorena Cox, Irvine, CA  
Sarah Hoenicke, Irvine, CA  
Lisa Paynemiller, Irvine, CA  
Tracy Shortle, Irvine, CA  
Shana Van Meter, Irvine, CA  
Teresita Vanderdys, Irvine, CA  
Robin Weirich, Irvine, CA

Kelli Zusho, Irvine, CA  
Mary Adams, Jackson, CA  
J Cole, Joshua Tree, CA  
Cody Dolnick, Joshua Tree, CA  
Rob Barnes, Junction City, CA  
Keith Christy, Jurupa Valley, CA  
Vanessa Aguiar, Kelseyville, CA  
Janet Parks, Kensington, CA  
Greg Nowell, Kenwood, CA  
Meghan Behm, Kings Beach, CA  
Gil Gaus, Kings Beach, CA  
Tom Feldman, La Canada Flintridge, CA  
John Hale, La Canada Flintridge, CA  
LouAnne Insprucker, La Canada Flintridge, CA  
Lisa Gee, La Crescenta, CA  
Heather Parker, La Crescenta, CA  
Barbara Poland, La Crescenta, CA  
Linda Triplett, La Honda, CA  
Susan Mc Candless, La Jolla, CA  
Suzi McCandless, La Jolla, CA  
Elizabeth Oliver, La Jolla, CA  
Winke Self, La Jolla, CA  
Jenn Crum, La Mesa, CA  
Jacoba Dolloff, La Mesa, CA  
Judith Edwards, La Mesa, CA  
Arthur Fink, La Mesa, CA  
Steve Gross, La Mesa, CA  
Dan and Lilly Kittredge, La Mesa, CA  
Deborah Lancman, La Mesa, CA  
Cynthia McHugh, La Mesa, CA

Barbara Speidel, La Mesa, CA

Michael LaNoue, La Mirada, CA

Terrance Hutchinson, La Quinta, CA

Claudia Monahan, La Quinta, CA

Melissa Williams, La Quinta, CA

Susan Steube-Nordine, La Verne, CA

Jean Dimler, Ladera Ranch, CA

Katie Yu, Ladera Ranch, CA

Lisa Brahney, Lafayette, CA

Aaron Chan, Lafayette, CA

Nancy Hartman, Lafayette, CA

Lucinda Henderson, Lafayette, CA

Torunn Sivesind, Lafayette, CA

Blake Wu, Lafayette, CA

Patricia Appel, Laguna Beach, CA

Jo Baxter, Laguna Beach, CA

Suzy Capano, Laguna Beach, CA

Tiffany Casler, Laguna Beach, CA

Stacy Cornelius, Laguna Beach, CA

Anne Earhart, Laguna Beach, CA

Mirjam Luthe, Laguna Beach, CA

Robert Reed, Laguna Beach, CA

Sally Sanders, Laguna Beach, CA

Gila Wdowinski, Laguna Beach, CA

Connie Loveland, Laguna Hills, CA

Patti Mickelsen, Laguna Hills, CA

Lynne Jeffries, Laguna Niguel, CA

Erik Kemper, Laguna Niguel, CA

Melissa Waters, Laguna Niguel, CA

Maria Faur, Laguna Woods, CA

Richard Miller, Laguna Woods, CA

Kevin O'Brien, Laguna Woods, CA

Miriam Adler, Lake Balboa, CA

Travis Benneian, Lake Elsinore, CA

Kathy Engstrom, Lake Elsinore, CA

Kathy Monteleone, Lake Elsinore, CA

Julie Pearce, Lake Forest, CA

Linda Schulz, Lake Hughes, CA

Patrick Bernardino, Lakeside, CA

Mary Hicklin, Lakeside, CA

Irene Roos, Lakeside, CA

Michael Broad, Lakewood, CA

Leslie Gombrich, Lakewood, CA

Brenda Lee, Lakewood, CA

Margaret Tollner, Lakewood, CA

Kae Bender, Lancaster, CA

Suzanne Marcella Camarillo, Lancaster, CA

Stephanie Dennis, Lancaster, CA

Julia Ritter, Larkspur, CA

Valerie Nordeman, Laytonville, CA

Sharon Paltin, Laytonville, CA

Charlotte Randolph, Lee Vining, CA

Cynthia Brooks-Fetty, Lemon Grove, CA

Ked Garden, Lemon Grove, CA

Lisa Avila, Lincoln, CA

Nicole Fountain, Lincoln, CA

Sandy McFarlin, Lincoln, CA

Paula Cavagnaro, Livermore, CA

Jean King, Livermore, CA

Caroline Ko, Livermore, CA

Sally Marone, Livermore, CA

Todd Matz, Livermore, CA

Mary Perner, Livermore, CA

Laurie Sargent, Livermore, CA

Sarah Ryan, Liverpool, CA

Mari Dominguez, Lodi, CA

Elizabeth Eisenbeis, Lodi, CA

Kris Cordova, Loma Linda, CA

John Waller, Lompoc, CA

Donna Apodaca, Long Beach, CA

Kevin Bigelow, Long Beach, CA

Ian Bixby, Long Beach, CA

Frederick Cliver, Long Beach, CA

Erlinda Cortez, Long Beach, CA

Kurt Cruger, Long Beach, CA

Marie DiMassa, Long Beach, CA

Lee Eames, Long Beach, CA

Malina H, Long Beach, CA

Brenda Haig, Long Beach, CA

Rebecca Hanna, Long Beach, CA

Douglas Herrera, Long Beach, CA

Diana Kliche, Long Beach, CA

Andrew Kort, Long Beach, CA

Linda Lloyd, Long Beach, CA

Charles Lotstein, Long Beach, CA

Jane Mitchell, Long Beach, CA

Greg Perkins, Long Beach, CA

Melissa Rondilla, Long Beach, CA

Janice Sampson, Long Beach, CA

Lance Smith, Long Beach, CA

Michele Souza Zimmerman, Long Beach, CA

Melinda Taylor, Long Beach, CA

Daniel Wilkinson, Long Beach, CA

Marion Barry, Loomis, CA

Dawn Forcier, Loomis, CA

Jennifer Brooks, Los Altos, CA

Kinshuk Govil, Los Altos, CA

R. Marks, Los Altos, CA

James Patton, Los Altos, CA

Stephanie Reader, Los Altos, CA

Steven Acosta, Los Angeles, CA

Judith Antin, Los Angeles, CA

Valerie Apple, Los Angeles, CA

Soraya Barabi, Los Angeles, CA

Ann Bein, Los Angeles, CA

Jon Benneian, Los Angeles, CA

Adam Bernstein, Los Angeles, CA

Vicki Bingo, Los Angeles, CA

Paula Block-Levor, Los Angeles, CA

Deirdre Boland, Los Angeles, CA

Fabienne Bouville, Los Angeles, CA

Andrea Boyle, Los Angeles, CA

Jason Brock, Los Angeles, CA

Damon Brown, Los Angeles, CA

Robert Burk, Los Angeles, CA

Frank Burke, Los Angeles, CA

Ariel Chapman, Los Angeles, CA

William Cleary, Los Angeles, CA

Amber Cohn, Los Angeles, CA

John Crahan, Los Angeles, CA

Joseph Dadgari, Los Angeles, CA  
Diana Davidson, Los Angeles, CA  
Ellen Davis, Los Angeles, CA  
Lesly Derbyshire, Los Angeles, CA  
John DesJardin, Los Angeles, CA  
Laura Divenere, Los Angeles, CA  
Robert Drummond, Los Angeles, CA  
Isabelle Du Soleil, Los Angeles, CA  
Chris Eaton, Los Angeles, CA  
Jason Eric, Los Angeles, CA  
Gail Farina, Los Angeles, CA  
Aixa Fielder, Los Angeles, CA  
Alexander Fierro-Clarke, Los Angeles, CA  
Thomas Fitzgerald, Los Angeles, CA  
Sara Flamm, Los Angeles, CA  
Reanna Flores, Los Angeles, CA  
Darren Frale, Los Angeles, CA  
Mark Gallegos, Los Angeles, CA  
Kay Gallin, Los Angeles, CA  
Julie Garcia, Los Angeles, CA  
Enrica Gaspari, Los Angeles, CA  
Patricia Gavigan, Los Angeles, CA  
Janna Gelfand, Los Angeles, CA  
Karen Ruth Getchell, Los Angeles, CA  
Mary Glazer, Los Angeles, CA  
Prisca Gloor, Los Angeles, CA  
Luna Gooding, Los Angeles, CA  
Carol Gordon, Los Angeles, CA  
Steve Graff, Los Angeles, CA  
Susan Grant, Los Angeles, CA  
emma-louise hayley, Los Angeles, CA  
Carla Holguin, Los Angeles, CA  
Celeste Hong, Los Angeles, CA  
Ted Hume, Los Angeles, CA  
Elizabeth Johansen, Los Angeles, CA  
Saran K., Los Angeles, CA  
Kaija Keel, Los Angeles, CA  
Sabrina Kemeny, Los Angeles, CA  
Schuyler Kent, Los Angeles, CA  
Mha Atma S Khalsa, Los Angeles, CA  
Leslie Klein, Los Angeles, CA  
Shirlee Kong, Los Angeles, CA  
Anita Kuhn, Los Angeles, CA  
David Kurz, Los Angeles, CA  
Diane Lamont, Los Angeles, CA  
Edward Landler, Los Angeles, CA  
Kenneth Lapointe, Los Angeles, CA  
Seth Laursen, Los Angeles, CA  
Yolanda Leaird, Los Angeles, CA  
Barbara Leake, Los Angeles, CA  
Patricia Lewis, Los Angeles, CA  
Andrea Lieberman, Los Angeles, CA  
Adrian Loeb, Los Angeles, CA  
Alexandria Luostari, Los Angeles, CA  
John-Allan Macunovich, Los Angeles, CA  
Pamela Magathan, Los Angeles, CA  
Eugene Majerowicz, Los Angeles, CA  
Stephen Markel, Los Angeles, CA  
Tina Markowe, Los Angeles, CA  
Patricia Marlatt, Los Angeles, CA



Mary McAuliffe, Los Angeles, CA

Alexandra McCardell, Los Angeles, CA

Karen McCaw, Los Angeles, CA

Robert Meier, Los Angeles, CA

Myron Meisel, Los Angeles, CA

Tony Mendoza, Los Angeles, CA

Barbara Mesney, Los Angeles, CA

Helen Miller, Los Angeles, CA

Deimile Mockus, Los Angeles, CA

Maria Molund, Los Angeles, CA

Erica Munn, Los Angeles, CA

Joan Murray, Los Angeles, CA

Melvyn Nefsky, Los Angeles, CA

Frank Ortiz, Los Angeles, CA

Maaya Ota, Los Angeles, CA

Attilio Pandolfo, Los Angeles, CA

Margaret Phelps, Los Angeles, CA

Patti Pimento, Los Angeles, CA

Samuel Popailo, Los Angeles, CA

Kalpana Pot, Los Angeles, CA

Louis Priven, Los Angeles, CA

Brianda Puig, Los Angeles, CA

Sara Rabbani, Los Angeles, CA

Joseph Rinaldo, Los Angeles, CA

Araeia Robinson, Los Angeles, CA

Candace Rocha, Los Angeles, CA

Roni Rogers, Los Angeles, CA

Flora Rosas, Los Angeles, CA

Rina Rubenstein, Los Angeles, CA

Nicholas Rulli, Los Angeles, CA

Susan Ryan, Los Angeles, CA

Dalia Salgado, Los Angeles, CA

Antoinette Samardzic, Los Angeles, CA

Tom Sanchez, Los Angeles, CA

Benjamin Schlau, Los Angeles, CA

Mariam Shah-Rais, Los Angeles, CA

Joshua Stamberg, Los Angeles, CA

Mark Stannard, Los Angeles, CA

Neal Steiner, Los Angeles, CA

Audrey Stern, Los Angeles, CA

Stephen Stone, Los Angeles, CA

Patricia Strauss, Los Angeles, CA

Laura Strom, Los Angeles, CA

Amy Sullivan, Los Angeles, CA

Janice Tanaka, Los Angeles, CA

Tevet Tee, Los Angeles, CA

Cathy Thornburn, Los Angeles, CA

Glenna Traiger, Los Angeles, CA

Ivy Tran, Los Angeles, CA

Tia Triplett, Los Angeles, CA

Craig Tyron, Los Angeles, CA

Kimberly Uchida, Los Angeles, CA

Alexandra Vese, Los Angeles, CA

Virginia Watson, Los Angeles, CA

Lynne Weiske, Los Angeles, CA

R Wells, Los Angeles, CA

Neil Withnall, Los Angeles, CA

Chris Withrow, Los Angeles, CA

Amy Wolfberg, Los Angeles, CA

Kelly Wright, Los Angeles, CA

Mark Yackley, Los Angeles, CA

Kyle Yaskin, Los Angeles, CA

Anita Youabian, Los Angeles, CA

Esther Zepeda, Los Angeles, CA

Jan Albertie, Los Banos, CA

Judy Dutil, Los Gatos, CA

Thomas Ferrito, Los Gatos, CA

Rea Freedom, Los Gatos, CA

Lisa Gherardi, Los Gatos, CA

Theresa Gonzalez, Los Gatos, CA

Ron and Sandra Harder, Los Gatos, CA

Steven Hayashi, Los Gatos, CA

Rick Koury, Los Gatos, CA

Angela LaPlante, Los Gatos, CA

Joyce Schellenberg, Los Gatos, CA

Katie Franklin, Los Osos, CA

Susan S. Jones, Los Osos, CA

Leslie Spoon, Los Osos, CA

Kevin Branstetter, Lotus, CA

Lori White, Lower Lake, CA

Judy Madigan, Loyalton, CA

Yves DeCargouet, Lucerne, CA

Grace Bell, Mablethorpe, CA

Angela Price, Madera, CA

Deborah Collodel, Malibu, CA

Kelly Kessl, Malibu, CA

Lynne Miller, Malibu, CA

Rob Seltzer, Malibu, CA

Louis Spirito, Malibu, CA

Jimmy Tallal, Malibu, CA

Kelly Tiefen, Malibu, CA

Loretta Tiefen, Malibu, CA

Patricia Savage, Mammoth Lakes, CA

D.G. Sifuentes, Mammoth Lakes, CA

Thomas Conroy, Manhattan Beach, CA

Karla Devine, Manhattan Beach, CA

Dan Esposito, Manhattan Beach, CA

Kathleen Goldman, Manhattan Beach, CA

Marisa Landsberg, Manhattan Beach, CA

Alice Neuhauser, Manhattan Beach, CA

Jennifer Yamamoto, Manhattan Beach, CA

James Liu, Manteca, CA

Jim Ricketts, Manteca, CA

MaryAnn Bomarito, Marina, CA

Creda Markham, Marina, CA

Susanne Cumming, Marina Del Rey, CA

Alexander Dunaev, Marina Del Rey, CA

Renee Klein, Marina del Rey, CA

Amanda Skerski, Marina del Rey, CA

Benjamin Teitelbaum, Marina Del Rey, CA

Judith Turner, Marina del Rey, CA

Bobbie Cavazos, Mariposa, CA

Gabriel Sheets, Mariposa, CA

Burney Stephens, Mariposa, CA

Scott Mason, Martinez, CA

Charlotte Sines, Martinez, CA

Betty Mello, Marysville, CA

Denise Comiskey, McKinleyville, CA

Robin Hamlin, McKinleyville, CA

Francesca Ciancutti, Mendocino, CA

Raven Deerwater, Mendocino, CA  
John Wozniak, Mendocino, CA  
Susan Alpern, Menifee, CA  
Rob Gallinger, Menifee, CA  
Pam Overholtzer, Menifee, CA  
Michael Braude, Menlo Park, CA  
Rebecca Eliscu, Menlo Park, CA  
Connie Habash, Menlo Park, CA  
Vickie Rozell, Menlo Park, CA  
Carol Ohsiek, Middletown, CA  
Alex Levine, Mill Valley, CA  
Liz Marshall, Mill Valley, CA  
Roberta Newman, Mill Valley, CA  
Norman Pacula, Mill Valley, CA  
Marilyn Price, Mill Valley, CA  
Leonie Terfort, Mill Valley, CA  
Gisella Castelluccio, Millbrae, CA  
Jan Castle, Millbrae, CA  
Richard Reale, Millbrae, CA  
Mary Maher, Milpitas, CA  
Denise Henyard, Mira Loma, CA  
Rose Kabir, Mira Loma, CA  
Rosa Strayer, Mira Loma, CA  
Peggy Skomal, Mission Hills, CA  
Denise Meadow, Mission Viejo, CA  
Rochelle Phillips, Mission Viejo, CA  
Carolyn Rhazi, Mission Viejo, CA  
Robin Loewen, Modesto, CA  
Linda Pemberton, Modesto, CA  
Michelle Setaro, Modesto, CA

Christy Bolle, Monrovia, CA  
Angela Galgocz, Monrovia, CA  
Robert Ricewasser, Monrovia, CA  
Heather Crow, Montague, CA  
Samuel Dickson, Montara, CA  
Jeanette Leinweber, Monte Rio, CA  
Kristen Beck, Monterey, CA  
Zoe Edington, Monterey, CA  
Deb Federin, Monterey, CA  
William Hubick, Monterey, CA  
Patrick Maiorana, Monterey, CA  
Shirley Tofte, Monterey, CA  
Fiona Webb, Monterey, CA  
Dave Whipple, Monterey, CA  
Steve Tuttle, Monterey Park, CA  
Karen Drake, Montrose, CA  
Cheri Bly, Moorpark, CA  
Thomas Filip, Moorpark, CA  
Susie Gutowitz, Moorpark, CA  
Marti Jurick, Moorpark, CA  
Erica Ponce, Moorpark, CA  
Art Stclair, Moorpark, CA  
Kathryn Choudhury, Moraga, CA  
Heidi Groom, Moreno Valley, CA  
Christian Reyes, Moreno Valley, CA  
Ilya Turov, Moreno Valley, CA  
Greg Winton, Moreno Valley, CA  
J.T. Averre, Morgan Hill, CA  
Daniel Lebus, Morgan Hill, CA  
Nannette Morgan, Morgan Hill, CA

Anita Manley, Morro Bay, CA

Tina Wener, Morro Bay, CA

Michelle Santy, Moss Beach, CA

Jim Curland, Moss Landing, CA

Greg D, Mount Shasta, CA

Cynthia Marconi, Mount Shasta, CA

Bill Wood, Mount Shasta, CA

Charles Fletcher, Mountain Center, CA

Caroline Bering, Mountain View, CA

Cyril Bouteille, Mountain View, CA

Christopher Cain, Mountain View, CA

Kermit Cuff, Mountain View, CA

Karin Jeffery, Mountain View, CA

Victoria Keoleian, Mountain View, CA

Ben Martin, Mountain View, CA

Rosa Bravo, Murrieta, CA

Dawn Burrell, Murrieta, CA

Daniel Davis, Murrieta, CA

Loan Nguyen, Murrieta, CA

Arianna Walsh, Murrieta, CA

Janet Wheeler, Murrieta, CA

Elizabeth Woodward, Murrieta, CA

Jan Gates, Napa, CA

Catherine George, Napa, CA

Charesa Harper, Napa, CA

Kathy Linale, Napa, CA

Robyn Little, Napa, CA

Katharine Mawer, Napa, CA

Barry Schwartz, Napa, CA

Evelyn Trevethan, Napa, CA

Susan Wheaton, Napa, CA

Ree Whitford, Napa, CA

Jim Wilson, Napa, CA

Dana Monroe, National City, CA

Micki Besancon, Nevada City, CA

Terry Charonnat, Nevada City, CA

Joan Griffin, Nevada City, CA

Judie Rae, Nevada City, CA

Glenn Smith, Nevada City, CA

Maureen Fry, Newark, CA

John Hawkins, Newbury Park, CA

Percy Hicks-Severn, Newbury Park, CA

Nemo Howton, Newbury Park, CA

Rodney Love, Newbury Park, CA

Joyce McIntire, Newbury Park, CA

Beth Merrill, Newbury Park, CA

Nicole Mikals, Newbury Park, CA

Matthew Page, Newbury Park, CA

Kathleen Pierce, Newbury Park, CA

Tracey Sands, Newbury Park, CA

Cindy Stein, Newbury Park, CA

Heidi Taylor, Newbury Park, CA

Jill Wiechman, Newbury Park, CA

Paula Willebrands, Newbury Park, CA

Kathrine Fegette, Newcastle, CA

Joan Peter, Newhall, CA

Alan Yamamoto, Newhall, CA

Elizabeth Edwards, Newport Beach, CA

Steve Iverson, Newport Beach, CA

Vic Paglia, Newport Beach, CA

Stephanie Aston, North Hills, CA

Janice Baxter, North Hills, CA

Christopher Geukens, North Hills, CA

Marian Gould, North Hills, CA

Jim Leske, North Hills, CA

Heidi Miller, North Hills, CA

Natalie Aharonian, North Hollywood, CA

Marilyn Carney, North Hollywood, CA

Kathleen Culp, North Hollywood, CA

Tracy Elliott, North Hollywood, CA

Fred Granlund, North Hollywood, CA

Larry Jasper, North Hollywood, CA

Cathy Kraus, North Hollywood, CA

Michael Marciano, North Hollywood, CA

Stu Nichols, North Hollywood, CA

Manuela Rollins, North Hollywood, CA

Grace Silva, North Hollywood, CA

Judith Vogelsang, North Hollywood, CA

Roslyn Jones, North Palm Springs, CA

Robert Chirpin, Northridge, CA

Lori Dixon, Northridge, CA

Ann Dorsey, Northridge, CA

Gail Camhi, Novato, CA

Mike Cass, Novato, CA

Hillary Davis, Novato, CA

Ian Dogole, Novato, CA

Gary Dowling, Novato, CA

Bonnie Grossman, Novato, CA

Toni Kim, Novato, CA

Lisa Moreno, Novato, CA

H. S. Nadler, Novato, CA

Robert Ortiz, Novato, CA

Thomas Ray, Novato, CA

Jay Rice, Novato, CA

Sheri Rollison, Novato, CA

Arlene Van Craeynest, Novato, CA

Marilyn Wada, Novato, CA

Greg Mull, Oak View, CA

Tree Wright, Oak View, CA

Claire Chambers, Oakdale, CA

John Fitzpatrick, Oakhurst, CA

Dee Allen., Oakland, CA

Jane Armbruster, Oakland, CA

Clara Bargellini, Oakland, CA

Rachel Beck, Oakland, CA

Richard Behrman, Oakland, CA

Julia Benson, Oakland, CA

Esther Boyd, Oakland, CA

Mary Ann Cramer, Oakland, CA

Judith E, Oakland, CA

Stan Fitzgerald, Oakland, CA

Dr A G, Oakland, CA

Rick Gaston, Oakland, CA

Rogelio Giron, Oakland, CA

Ruby Giron-Carson, Oakland, CA

MaryAnne Glazar, Oakland, CA

John Golding, Oakland, CA

Christiana Hart, Oakland, CA

Susan Herting, Oakland, CA

Sterling Hollins, Oakland, CA



Monika Holm, Oakland, CA

Kuanmei Huang, Oakland, CA

Allison Jones, Oakland, CA

Sara Katz, Oakland, CA

Paul Koehler, Oakland, CA

Laakea Laano, Oakland, CA

Jesus M. Maldonado, Oakland, CA

Heather McHugh, Oakland, CA

Caephren McKenna, Oakland, CA

Vasu Murti, Oakland, CA

April Parkins, Oakland, CA

Nancy Paskowitz, Oakland, CA

Rashid Patch, Oakland, CA

Nora Privitera, Oakland, CA

Christine Ranney, Oakland, CA

Ken Rice, Oakland, CA

Evelyn Riche, Oakland, CA

Clifford Robinson, Oakland, CA

Kate S, Oakland, CA

Rondi Saslow, Oakland, CA

Roberta Schear, Oakland, CA

Lesley Schultz, Oakland, CA

Ellen Schwartz, Oakland, CA

Karin Seid, Oakland, CA

Judith Smith, Oakland, CA

Leslie Smith, Oakland, CA

Martin Snapp, Oakland, CA

Madeline Stacy, Oakland, CA

Maria Steinmann, Oakland, CA

Kathleen Tandy, Oakland, CA

Nancy Taylor, Oakland, CA

Michele Tusinac, Oakland, CA

Pablo Voitzuk, Oakland, CA

Kim Walker, Oakland, CA

David Wasley, Oakland, CA

Gwen Weil, Oakland, CA

John Wills, Oakland, CA

Amy Zink, Oakland, CA

James TRUE, Oakland, CA

Molly Mendez, Oakley, CA

Robert Spotts, Oakley, CA

Longwillow Fudemberg, Occidental, CA

Sharon Mulkey, Oceano, CA

Charles Alger, Oceanside, CA

Kelly Brannigan, Oceanside, CA

Sarada Cleary, Oceanside, CA

Cynthia Davenport, Oceanside, CA

Darcy Duval, Oceanside, CA

Andrea Ferrari, Oceanside, CA

Tina Garner, Oceanside, CA

Cathy Gentry, Oceanside, CA

Holly Gilzow, Oceanside, CA

Alexis Grone, Oceanside, CA

Ronnie Huber, Oceanside, CA

Charlene Kerchevall, Oceanside, CA

Sherry Marsh, Oceanside, CA

Tamara Taunt, Oceanside, CA

Paula Thompson, Oceanside, CA

Carol Wanat, Oceanside, CA

Lisa Adair, Ojai, CA

Janine Comrack, Ojai, CA  
Donna Freiermuth, Ojai, CA  
Kathleen Medina, Ojai, CA  
Valerie Shideler, Olivehurst, CA  
Kelly Ayers, Ontario, CA  
Valerie Carrick, Ontario, CA  
Claudia Cook, Ontario, CA  
Ron P, Ontario, CA  
Lynn Baldini, Orange, CA  
Ms Courtney, Orange, CA  
Alexis Merz, Orange, CA  
Raven Davis-King, Orangevale, CA  
Nancy Polito, Orangevale, CA  
Lucy Henderson, Orinda, CA  
Patricia Moloney, Orinda, CA  
Lori Bates, Oxnard, CA  
Lynne Boyle, Oxnard, CA  
Peggy Brown, Oxnard, CA  
Angela C Embree, Oxnard, CA  
Maree Penhart, Oxnard, CA  
Barbara Piszczek, Oxnard, CA  
April Toller, Oxnard, CA  
Carolyn Boydston, Pacific Grove, CA  
Gary Goetz, Pacific Grove, CA  
Melissa Hutchinson, Pacific Grove, CA  
Melissa Lippincott, Pacific Grove, CA  
Celia Stauty Luis, Pacific Grove, CA  
Jane Crist, Pacific Palisades, CA  
Jake Gutman, Pacific Palisades, CA  
Shannon Rhoades, Pacific Palisades, CA

Beth Schlaff, Pacific Palisades, CA  
Ian Silverstein, Pacific Palisades, CA  
Kathy Bede, Pacifica, CA  
Brian Casey, Pacifica, CA  
Ana Herold, Pacifica, CA  
Deanna Nielsen, Pacifica, CA  
Dita . . . Â kaliÃ,, Â• , Palm Desert, CA  
Alexia Valdora, Palm Desert, CA  
Sandra Kanela Barton, Palm Springs, CA  
Michael Biers, Palm Springs, CA  
Vito Degrigoli, Palm Springs, CA  
Wayne Fellabaum, Palm Springs, CA  
FranÃf Ãf Ãf Ãf Ãf Ãf Ãf Ãf Ãf Ãf Ãf  
f Ãf Ãf May, Palm Springs, CA  
Bill McCarthy, Palm Springs, CA  
Bill Munce, Palm Springs, CA  
Maryellen Redish, Palm Springs, CA  
Vivian Vaught, Palm Springs, CA  
Mario Magpale, Palmdale, CA  
Therese Ryan, Palmdale, CA  
Karen Weston, Palmdale, CA  
Debra Y, Palmdale, CA  
Jaye Bergen, Palo Alto, CA  
Jordan Briskin, Palo Alto, CA  
Edward Cavasian, Palo Alto, CA  
Ana Chou, Palo Alto, CA  
Sheila Gholson, Palo Alto, CA  
Nancy Leech, Palo Alto, CA  
Marilyn Levine, Palo Alto, CA  
Mary Lou Meeks, Palo Alto, CA

David Perry, Palo Alto, CA

Sara Van Dusen, Palo Alto, CA

Jan Gardner, Palos Verdes Peninsula, CA

Tajie Major, Palos Verdes Peninsula, CA

Sonia Noemi Cross, Paradise, CA

Marcie Ligammari, Paradise, CA

Joan Aebi, Pasadena, CA

Claude Alexander, Pasadena, CA

Cheryl Auger, Pasadena, CA

Linda B., Pasadena, CA

Catherine Beauchamp, Pasadena, CA

Darrell Clarke, Pasadena, CA

Linc Conard, Pasadena, CA

Richard Kornfeld, Pasadena, CA

Frances Liau, Pasadena, CA

Diane Miller, Pasadena, CA

Allison Moffett, Pasadena, CA

Jacqueline Pineda, Pasadena, CA

Charles Roth, Pasadena, CA

Pete Sloman, Pasadena, CA

Geoffrey Symcox, Pasadena, CA

Erinn Todd, Pasadena, CA

Susan Walp, Pasadena, CA

Joan Wickham, Pasadena, CA

Molly Bennett, Paso Robles, CA

Gail Ryland, Pebble Beach, CA

Mike Pasner, Penn Valley, CA

Jamie Sawtell, Penn Valley, CA

James Woods, Penn Valley, CA

Ernesto Marquez, Perris, CA

Chanda Scelsi, Perris, CA

M. Atkinson, Petaluma, CA

Arlene Baker, Petaluma, CA

Stephanie Charles, Petaluma, CA

Jerry Cook, Petaluma, CA

Stacey DeGooyer, Petaluma, CA

Wendy Denny, Petaluma, CA

Patti Fink, Petaluma, CA

Jamila Garrecht, Petaluma, CA

Diane Gentile, Petaluma, CA

Phoenix Giffen, Petaluma, CA

Elfi Gilford, Petaluma, CA

Michelle Letellier, Petaluma, CA

Ingeborg MacKay, Petaluma, CA

Annette Raible, Petaluma, CA

Chris Rose, Petaluma, CA

Gabrielle Swanberg, Petaluma, CA

Dennis Zerbo, Petaluma, CA

Barbara Wright, Phelan, CA

Susan Hathaway, Pico Rivera, CA

Philip Patino, Pico Rivera, CA

Peggy Holmes, Pinole, CA

Joan Nygaard, Pinole, CA

Carol Oller, Pinole, CA

Bob Leppo, Pismo Beach, CA

Randall Voss, Pismo Beach, CA

Dennis Young, Pismo Beach, CA

Annette Benton, Pittsburg, CA

Candy Bowman, Placerville, CA

Mike Rolbeck, Placerville, CA

Paulette Doulatshahi, Playa Del Rey, CA

Yvonne Fisher, Playa del Rey, CA

Barrett Braun, Pleasant Hill, CA

Mike Cluster, Pleasant Hill, CA

Joan Merrill, Pleasant Hill, CA

Francesca Rago, Pleasant Hill, CA

Deborah Santone, Pleasant Hill, CA

Renee Snyder, Pleasant Hill, CA

Barbara Norton, Pleasanton, CA

Daniel O'Brien, Pleasanton, CA

Urmila Padmanabhan, Pleasanton, CA

Vicki Tomola, Point Arena, CA

Twyla Meyer, Pomona, CA

Jenny Perez, Pomona, CA

Roxann Schaubhut, Pope Valley, CA

Veronica Goode, Porter Ranch, CA

Linda Bresnan, Portola Valley, CA

Karin Eckelmeyer, Portola Valley, CA

Mike Davis, Posey, CA

Joyce Heyn, Poway, CA

Kim Yirak, Poway, CA

Faith Strailey, Quincy, CA

Laura Bagley, Ramona, CA

Tammy Bullock, Ramona, CA

Don Miller, Ramona, CA

Nancy Hunter, Rancho Cordova, CA

Miriam Baum, Rancho Cucamonga, CA

Linda Bourg, Rancho Cucamonga, CA

Frederick Hamilton, Rancho Cucamonga, CA

Heidi Palmer, Rancho Cucamonga, CA

Judy Bradford, Rancho Palos Verdes, CA

Melina Paris, Rancho Palos Verdes, CA

Lin Penrose, Rancho Palos Verdes, CA

Linda Webb, Rancho Palos Verdes, CA

Andrea Abney, Rancho Santa Fe, CA

Alison Bassell, Rancho Santa Margarita, CA

Jack Schwartz, Recceda, CA

Cherie Gans, Redding, CA

Michael Koterba, Redding, CA

Harriet Miller, Redding, CA

Wayne Steffes, Redding, CA

Marianna Vanderklift, Redding, CA

Andrea Dixon, Redlands, CA

Carol Lynne Eyster, Redlands, CA

Sean Hagstrom, Redlands, CA

Doug Bender, Redondo Beach, CA

Laurel Cameron, Redondo Beach, CA

Michael Cavanaugh, Redondo Beach, CA

Maria Corvalan, Redondo Beach, CA

F. R. Eguren, Redondo Beach, CA

Glenn Embrey, Redondo Beach, CA

Stephane Ernoux, Redondo Beach, CA

Richard Esposito, Redondo Beach, CA

Kris Gata, Redondo Beach, CA

Amrit Khalsa, Redondo Beach, CA

M Montenegro, Redondo Beach, CA

Alie Rowen, Redondo Beach, CA

Anne M. Van Alstyne, Redondo Beach, CA

Jeri Fergus, Redway, CA

Erin Gellman, Redway, CA

Juliann Berman, Redwood City, CA

Michael House, Redwood City, CA

Lisa Jensen, Redwood City, CA

Tom Johnson, Redwood City, CA

Judith Kirk, Redwood City, CA

Thalia Lubin, Redwood City, CA

Chris Ouedec, Redwood City, CA

Robert Page, Redwood City, CA

Audrey Quintero, Redwood City, CA

Rush Rehm, Redwood City, CA

Margaret Rogers, Redwood City, CA

John West, Redwood City, CA

Joleen Siebert, Reedley, CA

Jl Angell, Rescue, CA

Rosa Baeza, Reseda, CA

Silvana Garcia, Reseda, CA

Carlos Nunez, Reseda, CA

Rachel Perlman, Reseda, CA

Tracy Gilbert, Rialto, CA

Vincent Bausano, Richmond, CA

Michael Eichenholtz, Richmond, CA

Melanie Hassel, Richmond, CA

Gail Jarocki, Richmond, CA

Kris Johnson Michiels, Richmond, CA

Peggy Mocine, Richmond, CA

Anne Oklan, Richmond, CA

Christine Peterson, Richmond, CA

Christine Peterson, Richmond, CA

Susan Archibald, Ridgecrest, CA

Penelope LePome, Ridgecrest, CA

Mary Loyd Shell, Ridgecrest, CA

Nancy Robinson, Ridgecrest, CA

Cheryl Davis, Rio Linda, CA

Tina Arnold, Rio Vista, CA

Susan Worden, Rio Vista, CA

Bonnie Arbuckle, Riverbank, CA

Sherry Fatzinger, Riverside, CA

Carolann Johnson, Riverside, CA

Harry Knapp, Riverside, CA

Abraham Oboruemuh, Riverside, CA

Henry Rosenfeld, Riverside, CA

Natacha Lascano, Rocklin, CA

Daniel McKeighen, Rocklin, CA

Vanessa Quintero, Rodeo, CA

Jeannie Boyd, Rohnert Park, CA

Elaine Cook, Rohnert Park, CA

Shannon Montoya, Rohnert Park, CA

Kyle Young, Rosamond, CA

Bob McCleary, Roseville, CA

Kevin Pierson, Roseville, CA

Lisa Steele, Roseville, CA

Julie Stinchcomb, Roseville, CA

Pat Thompson, Roseville, CA

Sandra Thompson, Roseville, CA

Dee Warenycia, Roseville, CA

Ann Wasgatt, Roseville, CA

Vicki L Smith, Running Springs, CA

James Adams, Sacramento, CA

Wayne Anderson, Sacramento, CA

Judith Anshin, Sacramento, CA



James Ashcraft, Sacramento, CA  
Jennifer Bair, Sacramento, CA  
Mark Allan Barath, Sacramento, CA  
M Bennett, Sacramento, CA  
Robert Boughton, Sacramento, CA  
Maureen Burness, Sacramento, CA  
Kimberly Carona, Sacramento, CA  
Brendan Chan, Sacramento, CA  
Sandy Commons, Sacramento, CA  
BethAnn Coombs, Sacramento, CA  
Deborah Cosentino, Sacramento, CA  
Jim Deneff, Sacramento, CA  
Cindy Ferguson, Sacramento, CA  
Gilda Fusilier, Sacramento, CA  
Camile Getter, Sacramento, CA  
LuAnn Glatzmaier, Sacramento, CA  
Susan Hood, Sacramento, CA  
Karen Jacques, Sacramento, CA  
Linda Karp, Sacramento, CA  
Lily Lau-Enright, Sacramento, CA  
Rebecca Martin, Sacramento, CA  
Michael McGowan, Sacramento, CA  
Marshal McKitrick, Sacramento, CA  
Esther Mooncrest, Sacramento, CA  
Dorothea Morgenstern, Sacramento, CA  
Sharon Nicodemus, Sacramento, CA  
Rosalind O'Brien, Sacramento, CA  
Sheri Opp, Sacramento, CA  
Joyce Ownbey, Sacramento, CA  
Jana Perinchief, Sacramento, CA  
Judith Poxon, Sacramento, CA  
Penny Redman, Sacramento, CA  
Susan Riseman, Sacramento, CA  
LeAne Rutherford, Sacramento, CA  
Gail Ryall, Sacramento, CA  
Joseph Sebastian, Sacramento, CA  
Aaron Stroh, Sacramento, CA  
Erh-Yen To, Sacramento, CA  
Tami Trearse, Sacramento, CA  
Ellen Tubbs, Sacramento, CA  
Jillian Unger, Sacramento, CA  
Cara Vallot, Sacramento, CA  
Lori White, Sacramento, CA  
Kenneth Wilcox, Sacramento, CA  
Bobbie Zawkiewicz, Sacramento, CA  
Elizabeth Novak Milliken, Saint Helena, CA  
Gerard Sewell, Saint Helena, CA  
Alfred Gonzales, Salinas, CA  
Lauren Keenan, Salinas, CA  
Merlin Wilson, Salinas, CA  
Alison Buist, San Anselmo, CA  
Loren Carjulia, San Anselmo, CA  
Ilene Malt, San Anselmo, CA  
Renee Schofield, San Anselmo, CA  
Herman Waetjen, San Anselmo, CA  
C Leonard, San Bernardino, CA  
Alicia Lomeli, San Bernardino, CA  
Modell McEntire, San Bernardino, CA  
Pamela Rogers, San Bernardino, CA  
Pam Thomas-Hill, San Bernardino, CA

Eileen Cassidy, San Bruno, CA

Luci Evanston, San Bruno, CA

Elisse De Sio, San Carlos, CA

Kate Elsley, San Carlos, CA

Sharon Gong, San Carlos, CA

George Ruiz, San Carlos, CA

Teri Yazdi, San Carlos, CA

Kevin Bissonnette, San Clemente, CA

Randall Hartman, San Clemente, CA

Suzanne Narducy, San Clemente, CA

Allie Palmer, San Clemente, CA

Matt Reola, San Clemente, CA

Beth Rumph, San Clemente, CA

Vicki Wiker, San Clemente, CA

Terri Wiley, San Clemente, CA

Janis Andersen, San Diego, CA

Steven Bal, San Diego, CA

Michael Barnes, San Diego, CA

Cheryl Berkey, San Diego, CA

Cindy Blatnik, San Diego, CA

Michele Boswell, San Diego, CA

Joanne Britton, San Diego, CA

Bonnie Burke, San Diego, CA

Nicole Cervantes, San Diego, CA

B. Chan, San Diego, CA

Christopher Chatard, San Diego, CA

Cecelia Conover, San Diego, CA

April Cordero, San Diego, CA

Bob Davis, San Diego, CA

Terri Dewhirst, San Diego, CA

Elaine Durson, San Diego, CA

Cheryl Elkins, San Diego, CA

Patricia J Flaherty, San Diego, CA

Joan Fulton, San Diego, CA

Bruce Gardner, San Diego, CA

Sharon Gaudette-Hieserich, San Diego, CA

Michelle Grimes, San Diego, CA

Dale Haas, San Diego, CA

Robin Halliday, San Diego, CA

David Haskins, San Diego, CA

Trudi Howell, San Diego, CA

Mari Huff, San Diego, CA

Michael A. Johnston, San Diego, CA

Sean Kilpatrick, San Diego, CA

Diane Krell-Bates, San Diego, CA

Lisa Kutner, San Diego, CA

Rochelle La Frinere, San Diego, CA

Stephanie Laman, San Diego, CA

Patricia Law, San Diego, CA

Paul Levesque, San Diego, CA

Lacey Levitt, San Diego, CA

Mary Jo Lindstrom, San Diego, CA

Colleen Lobel, San Diego, CA

Jimmy Long, San Diego, CA

Jimmie Lunsford, San Diego, CA

Marsha Lyon, San Diego, CA

Martin Marcus, San Diego, CA

Mara Mayfield, San Diego, CA

Andrew McGranahan, San Diego, CA

Mika Menasco, San Diego, CA

Pam Montroy, San Diego, CA

Kim Perszyk, San Diego, CA

Shirley Petersen, San Diego, CA

Scott Pham, San Diego, CA

Raffaella Pippa, San Diego, CA

Lauren Prust, San Diego, CA

Patrick Reid, San Diego, CA

Babette Rose, San Diego, CA

Melanie Ross, San Diego, CA

Conor S, San Diego, CA

Alice Savage, San Diego, CA

Barbara Schell, San Diego, CA

George Schneider, San Diego, CA

Viviane Sebert, San Diego, CA

Sid Shapiro, San Diego, CA

Skip Shaputnic, San Diego, CA

Judy Shively, San Diego, CA

Hal Slater, San Diego, CA

G.H. Soto, San Diego, CA

Allison Souza, San Diego, CA

Joan Spooner, San Diego, CA

Peggy Standley, San Diego, CA

Brian Still, San Diego, CA

Peggy Stone, San Diego, CA

Kathleen Sumida, San Diego, CA

Jeff Thayer, San Diego, CA

Elena Tillman, San Diego, CA

Ava Torre-Bueno, San Diego, CA

Gary Tourville, San Diego, CA

Dorothy Vieira, San Diego, CA

Shawn Wass, San Diego, CA

Linda Wilson, San Diego, CA

Debra Winthrop, San Diego, CA

Tansy Woods, San Diego, CA

Allen Yarowsky, San Diego, CA

Ken Young, San Diego, CA

Ray Ziegler, San Diego, CA

Sylvia De Baca, San Dimas, CA

Sandra Esparza, San Dimas, CA

Rev. Maria Riter Wilson, San Dimas, CA

Mary Ellen Gastelo, San Fernando, CA

Stef B, San Francisco, CA

Linda Bellavia, San Francisco, CA

Kathryn Bender, San Francisco, CA

Charlie Bergstedt, San Francisco, CA

Joseph Blum, San Francisco, CA

Kathleen Bouvier, San Francisco, CA

Richard Bradus, San Francisco, CA

Jonica Brooks, San Francisco, CA

Cecilia Brunazzi, San Francisco, CA

Leo Buckley, San Francisco, CA

Christine Burckhardt, San Francisco, CA

Tim Butler, San Francisco, CA

Ag Callan, San Francisco, CA

Len Carella, San Francisco, CA

Mary Chase, San Francisco, CA

Winnie Chin, San Francisco, CA

Luz Cobarrubias, San Francisco, CA

Sandi Covell, San Francisco, CA

Sarah Date, San Francisco, CA

Maia de Raat, San Francisco, CA  
Christie Decker, San Francisco, CA  
James DiCarlo, San Francisco, CA  
Lawrence Dillard, San Francisco, CA  
Glenna Dowling, San Francisco, CA  
Jerilyn Downing, San Francisco, CA  
Ramona Draeger, San Francisco, CA  
Susan Dugger-Mathison, San Francisco, CA  
Jym Dyer, San Francisco, CA  
Evan Elias, San Francisco, CA  
Bee Epremian, San Francisco, CA  
Rita Fahrner, San Francisco, CA  
Adrienne Fong, San Francisco, CA  
Pamela Glintenkamp, San Francisco, CA  
Stephen Gold, San Francisco, CA  
Linda Gourley, San Francisco, CA  
Gia Granucci, San Francisco, CA  
J. Barry Gurdin, San Francisco, CA  
Sharon Handa, San Francisco, CA  
Sharon Hefke, San Francisco, CA  
Mali Henigman, San Francisco, CA  
Birgit Hermann, San Francisco, CA  
Saroyan Humphrey, San Francisco, CA  
Jeffrey Hurwitz, San Francisco, CA  
Pauline Kahney, San Francisco, CA  
Constance Kao, San Francisco, CA  
Lisa Kellman, San Francisco, CA  
Karen Kirschling, San Francisco, CA  
Betty Kissilove, San Francisco, CA  
Ellen Koivisto, San Francisco, CA  
Ady Larsen, San Francisco, CA  
R Dene Larson, San Francisco, CA  
Peter Lee, San Francisco, CA  
David Lin, San Francisco, CA  
Helen Loeser, San Francisco, CA  
Denise Louie, San Francisco, CA  
Pamela Magers, San Francisco, CA  
Mariano Marquez III, San Francisco, CA  
Jon Mc Veight, San Francisco, CA  
Marisa McFarlane, San Francisco, CA  
Shannon Mcneil, San Francisco, CA  
Anuruddh Misra, San Francisco, CA  
Bianca Molgora, San Francisco, CA  
William Mora, San Francisco, CA  
Mary Moycik, San Francisco, CA  
Gretchen Mueller, San Francisco, CA  
Ron Nieberding, San Francisco, CA  
Mary Novasic, San Francisco, CA  
Maria Nowicki, San Francisco, CA  
John Oda, San Francisco, CA  
Marsha Orent, San Francisco, CA  
Matthew Parker, San Francisco, CA  
Annalee Pineda, San Francisco, CA  
Jackie Pomies, San Francisco, CA  
Susan Powers, San Francisco, CA  
Francesca Prada, San Francisco, CA  
Jessica Pullano, San Francisco, CA  
Charles Ray, San Francisco, CA  
Ivan Rhudick, San Francisco, CA  
Matt Richardson, San Francisco, CA

Roberto Romo, San Francisco, CA  
Joan Rost, San Francisco, CA  
Kim Russo, San Francisco, CA  
Christi Saltonstall, San Francisco, CA  
Natasha Saravanja, San Francisco, CA  
Karin Schmidt, San Francisco, CA  
Dan Schubart, San Francisco, CA  
Judy Schultz, San Francisco, CA  
Erika Shershun, San Francisco, CA  
Paul Shimazaki, San Francisco, CA  
RoseMarie Shishkin, San Francisco, CA  
Carolyn Shuman, San Francisco, CA  
Laura Simmons, San Francisco, CA  
John Steponaitis, San Francisco, CA  
Tai Stillwater, San Francisco, CA  
Robert Stine, San Francisco, CA  
Edward Sullivan, San Francisco, CA  
Sara T, San Francisco, CA  
Michael Tomczyszyn, San Francisco, CA  
Justin Truong, San Francisco, CA  
Anthony Tupasi, San Francisco, CA  
Iris Vaughan, San Francisco, CA  
Wolfgang Vermeer, San Francisco, CA  
Nathan Vogel, San Francisco, CA  
Linda Weiner, San Francisco, CA  
Maxine Zylberberg, San Francisco, CA  
Michele Massey, San Jacinto, CA  
Kieran Alcumbrac, San Jose, CA  
Sue Andarmani, San Jose, CA  
Murielle Antoku, San Jose, CA

Thomas Arnold, San Jose, CA  
Teresa Awtrey, San Jose, CA  
Tim Barrington, San Jose, CA  
Allan Campbell, San Jose, CA  
Manou Cassel, San Jose, CA  
Beng Chiu, San Jose, CA  
Edward Fairchild, San Jose, CA  
Mary Fedullo, San Jose, CA  
Ted Fishman, San Jose, CA  
Mark Galbraith, San Jose, CA  
Charlene Garcia, San Jose, CA  
Susan Golbetz, San Jose, CA  
Elaine Gould, San Jose, CA  
Michael Hazelton, San Jose, CA  
Charlene Henley, San Jose, CA  
Randall Herz, San Jose, CA  
Tania I Redlich, San Jose, CA  
Pec Indman, San Jose, CA  
Paula Kerrebijn, San Jose, CA  
Santosh Kumar, San Jose, CA  
Eva Lanker, San Jose, CA  
Allen Leinwand, San Jose, CA  
Miriam Leiseroff, San Jose, CA  
Patty Linder, San Jose, CA  
Claude McDonald, San Jose, CA  
Du Ng, San Jose, CA  
Margaret P, San Jose, CA  
Jim Petkiewicz, San Jose, CA  
Jamie Pfister, San Jose, CA  
Veronica Romero, San Jose, CA



Charles Smith, San Jose, CA

Singgih Tan, San Jose, CA

Susan Trivisonno, San Jose, CA

Susan Urang, San Jose, CA

Nona Weiner, San Jose, CA

Jimmie Yonemoto, San Jose, CA

Dave Beck, San Juan Capistrano, CA

Philip Fraser, San Juan Capistrano, CA

Lucille Robustelli, San Juan Capistrano, CA

Aj Cho, San Leandro, CA

Michael Denton, San Leandro, CA

Gloria Eive, San Leandro, CA

Linda Gee, San Leandro, CA

Roberta LaFrance, San Leandro, CA

John Moreau, San Leandro, CA

John Payne, San Lorenzo, CA

Monica Barricarte, San Luis Obispo, CA

Joseph Boone, San Luis Obispo, CA

Maryan Infield, San Luis Obispo, CA

Sharon Rheingans, San Luis Obispo, CA

Nancy Walter, San Luis Obispo, CA

Liz Brown, San Marcos, CA

Dianne Christ, San Marcos, CA

Laura Dufel, San Marcos, CA

Randy Gray, San Marcos, CA

Teri Kelly, San Marcos, CA

John Maxwell, San Marcos, CA

Joan Quinn, San Marcos, CA

Lois Ruble, San Marcos, CA

Brooke Scruggs, San Marcos, CA

Mary Ann Seltzer, San Marcos, CA

Thelma Faulkner, San Martin, CA

Elise Beliak, San Mateo, CA

Gina Colangelo, San Mateo, CA

Kevin Hearle Ph.D., San Mateo, CA

Linda Johnson, San Mateo, CA

Evan Josa, San Mateo, CA

Evelyn Newman, San Mateo, CA

Tom Pache, San Mateo, CA

Mark Rhynsburger, San Mateo, CA

Mark Rhynsburger, San Mateo, CA

Mariano Svidler, San Mateo, CA

Leyza Yardley, San Mateo, CA

Leah Fagundes, San Pablo, CA

Linda Morgan, San Pablo, CA

Carol Schaffer, San Pablo, CA

Brooke Balestreri, San Pedro, CA

Susan Bogdanovich, San Pedro, CA

Molly Brent, San Pedro, CA

Angela Carter, San Pedro, CA

Sharon Caserma, San Pedro, CA

Matt Davison, San Pedro, CA

Petrina Long, San Pedro, CA

Anne Barker, San Rafael, CA

Susan Berlin, San Rafael, CA

Kelly Berry, San Rafael, CA

Eileen Blossman, San Rafael, CA

Cayla Coleman, San Rafael, CA

Steven Gaman, San Rafael, CA

James Haig, San Rafael, CA

Margie Halladin, San Rafael, CA  
Sandra Levine MD, San Rafael, CA  
Erika Martinez, San Rafael, CA  
Diana McBride, San Rafael, CA  
Elaine Mont-Eton, San Rafael, CA  
Dianne Morrison, San Rafael, CA  
Susan Peters, San Rafael, CA  
Mary Poor, San Rafael, CA  
Allegra Printz, San Rafael, CA  
Peter Ring, San Rafael, CA  
Jena Rose, San Rafael, CA  
Philip Simon, San Rafael, CA  
Ariel Spilsbury, San Rafael, CA  
Deborah Temple, San Rafael, CA  
Lydia Vignau, San Rafael, CA  
Jenifer Wilson, San Rafael, CA  
Jason Witchel, San Rafael, CA  
Jeffrey Hemenez, San Ramon, CA  
Charles Wieland, San Ramon, CA  
Patrick Farrell, San Ysidro, CA  
Sarah Baxter, Santa Ana, CA  
Colleen Bergh, Santa Ana, CA  
Nicolas Duonn, Santa Ana, CA  
Mike Honda, Santa Ana, CA  
Richard Spicer, Santa Ana, CA  
Marie Winter, Santa Ana, CA  
Dennis Allen, Santa Barbara, CA  
Thea Altman, Santa Barbara, CA  
Debby Anderson, Santa Barbara, CA  
Martha Aubin, Santa Barbara, CA

Trudy Bixby, Santa Barbara, CA  
Tina Brenza, Santa Barbara, CA  
Lisabette Brinkman, Santa Barbara, CA  
Heather Brophy, Santa Barbara, CA  
Thomas Burt, Santa Barbara, CA  
Lynne Cantlay, Santa Barbara, CA  
Carole Ann Cole, Santa Barbara, CA  
Ronit Corry, Santa Barbara, CA  
Katherine Crawford, Santa Barbara, CA  
Jenny Cushnie, Santa Barbara, CA  
Gary Denny, Santa Barbara, CA  
Catharine Edwardson, Santa Barbara, CA  
Joel Fithian, Santa Barbara, CA  
Camille Gilbert, Santa Barbara, CA  
Janet Graham, Santa Barbara, CA  
Madeleine Ignon, Santa Barbara, CA  
Katherine Johnson, Santa Barbara, CA  
Virginia Johnstone, Santa Barbara, CA  
John Kay, Santa Barbara, CA  
Connie Marquez, Santa Barbara, CA  
Nancy Martin, Santa Barbara, CA  
Michael Merenda, Santa Barbara, CA  
Sandra Moore, Santa Barbara, CA  
Lauren Murdock, Santa Barbara, CA  
Edith Ogella, Santa Barbara, CA  
Gina Petuskey, Santa Barbara, CA  
Barbara Rosen, Santa Barbara, CA  
Miranda Scalzo, Santa Barbara, CA  
Chris Seaton, Santa Barbara, CA  
Wendy Simons, Santa Barbara, CA

Julie Sullwold, Santa Barbara, CA

Sandy Suttton, Santa Barbara, CA

Katie Thibodeau, Santa Barbara, CA

Paul Voyen, Santa Barbara, CA

Bill Woodbridge, Santa Barbara, CA

Theresa Yandell, Santa Barbara, CA

Friend Friend, Santa Clara, CA

Alexis Georgiou, Santa Clara, CA

Kim Messmer, Santa Clara, CA

Judy Rees, Santa Clara, CA

Mushtaq Syed, Santa Clara, CA

Carina Chadwick, Santa Clarita, CA

James McKelvey, Santa Clarita, CA

John Paladin, Santa Clarita, CA

David Soto, Santa Clarita, CA

Anita Wisch, Santa Clarita, CA

Paul Andrade, Santa Cruz, CA

Leslie Andrews, Santa Cruz, CA

Joyce Banzhaf, Santa Cruz, CA

Milo Barisof, Santa Cruz, CA

David Bezanson PhD, Santa Cruz, CA

Elaine Boles, Santa Cruz, CA

Martha Carrington, Santa Cruz, CA

Michael Cooper, Santa Cruz, CA

Teresa Coyle, Santa Cruz, CA

Janet De Lu, Santa Cruz, CA

MarianKitty Dennis, Santa Cruz, CA

Richard Gallo, Santa Cruz, CA

Barbara Ginsberg, Santa Cruz, CA

Bruce Grobman, Santa Cruz, CA

Jacob Huskey, Santa Cruz, CA

Carolyn T Israel, Santa Cruz, CA

Lizann Keyes, Santa Cruz, CA

Mary Kuntz-Cote, Santa Cruz, CA

Kevin Manning, Santa Cruz, CA

Karsten Mueller, Santa Cruz, CA

Eric Nysten, Santa Cruz, CA

Vivienne Orgel, Santa Cruz, CA

David Pierotti, Santa Cruz, CA

Elizabeth Potts, Santa Cruz, CA

David Ross, Santa Cruz, CA

Emmanuel Ross Hartway, Santa Cruz, CA

Lynda Sierra, Santa Cruz, CA

Bret Smith, Santa Cruz, CA

Erica Stanojevic, Santa Cruz, CA

Pela Tomasello, Santa Cruz, CA

Sylvia Vairo, Santa Cruz, CA

Russell Weisz, Santa Cruz, CA

Rachel Wolf, Santa Cruz, CA

Eric Anches, Santa Maria, CA

Jerid Anderson, Santa Maria, CA

Carlos Arnold, Santa Maria, CA

Nancy Heck, Santa Maria, CA

Nancy Miller, Santa Maria, CA

Joanne Altschuler, Santa Monica, CA

Dr. Jon Amsden, Santa Monica, CA

John Barone, Santa Monica, CA

Elizabeth Chang, Santa Monica, CA

Steven Chasen, Santa Monica, CA

Phyllis Chavez, Santa Monica, CA

Shelley Corwin, Santa Monica, CA

Guillemette Epailly, Santa Monica, CA

Deborah Fallender, Santa Monica, CA

Glenn and Alexandra Garrison, Santa Monica,  
CA

Patricia Healy, Santa Monica, CA

Janet Heinle, Santa Monica, CA

Amelia Jones, Santa Monica, CA

Rachel Kelley, Santa Monica, CA

Chelsey Marsing, Santa Monica, CA

Anne Munitz, Santa Monica, CA

Ted Myers, Santa Monica, CA

Ruth Olafsdottir, Santa Monica, CA

Diane Olson, Santa Monica, CA

Jerry Persky, Santa Monica, CA

Mary Rojeski, Santa Monica, CA

Mary Romanek, Santa Monica, CA

D. Rowe, Santa Monica, CA

Myra Schegloff, Santa Monica, CA

Alex Sokolow, Santa Monica, CA

Shelley Sterrett, Santa Monica, CA

J Yudell, Santa Monica, CA

Louise Priest, Santa Paula, CA

Louise Rangel, Santa Paula, CA

Cristina Amarillas, Santa Rosa, CA

Gillian Anderson, Santa Rosa, CA

Leanne B., Santa Rosa, CA

Linda Bell, Santa Rosa, CA

Jerry Bernhaut, Santa Rosa, CA

Patricia Bode, Santa Rosa, CA

David Zachary Brown, Santa Rosa, CA

Deb Dearing, Santa Rosa, CA

Ryan Dell, Santa Rosa, CA

Janet Drew, Santa Rosa, CA

Louise Espinoza, Santa Rosa, CA

Mark Feldman, Santa Rosa, CA

Zora Hocking, Santa Rosa, CA

Jude Iam, Santa Rosa, CA

Barbara Judson, Santa Rosa, CA

Lucy Kenyon, Santa Rosa, CA

Bernard Lefson, Santa Rosa, CA

Ellen Lewis, Santa Rosa, CA

Lois Look, Santa Rosa, CA

Dan McAllister, Santa Rosa, CA

Bob Miller, Santa Rosa, CA

Jane Moad, Santa Rosa, CA

Lorilie Morey, Santa Rosa, CA

Jana Mariposa Muhar, Santa Rosa, CA

Josie Peluso, Santa Rosa, CA

Daniel Podell, Santa Rosa, CA

Joe Salazar, Santa Rosa, CA

Linda Thompson, Santa Rosa, CA

Ken Wilson, Santa Rosa, CA

Pam Zimmerman, Santa Rosa, CA

Gary Beckerman, Santa Ynez, CA

Vicki Call, Santee, CA

Elizabeth McCandless, Santee, CA

Rob Roberto, Santee, CA

Kelly Doyle, Sausalito, CA

Evan Jane Fletcher, Sausalito, CA

Evan Jane Kriss, Sausalito, CA

Patricia Pigman, Sausalito, CA

Lonna Richmond, Sausalito, CA

Greg Thomson, Sausalito, CA

Gerald Cummings, Scotts Valley, CA

Rob Dun, Scotts Valley, CA

Kay MacDonald, Seal Beach, CA

Bernadette Meltzer, Seal Beach, CA

Natalija Sale, Seal Beach, CA

Brent Spencer, Seal Beach, CA

Enrico Verga, Seal Beach, CA

Scott Ames, Sebastopol, CA

Felicia Bander, Sebastopol, CA

Corey Barnes, Sebastopol, CA

Stacie Charlebois, Sebastopol, CA

Sharron Fisher, Sebastopol, CA

Kris Hall, Sebastopol, CA

Katharine Kehr, Sebastopol, CA

Deborah Kermode, Sebastopol, CA

Constance Miles, Sebastopol, CA

Kenneth Mooney, Sebastopol, CA

Lilith Rogers, Sebastopol, CA

Sharon Sadler, Sebastopol, CA

Julie Sicaud, Sebastopol, CA

Susan Stover, Sebastopol, CA

Lisa Salazar, Shasta Lake, CA

Reuben Allen, Sherman Oaks, CA

Gene Arias, Sherman Oaks, CA

Carol Becker, Sherman Oaks, CA

Hilarey Benda, Sherman Oaks, CA

Stephanie Colet, Sherman Oaks, CA

Jeffrey Jones, Sherman Oaks, CA

Jodi Milstein, Sherman Oaks, CA

Patrick Pade, Sherman Oaks, CA

Patricia Ritter, Sherman Oaks, CA

Mox Ruge, Sherman Oaks, CA

Sheila Desmond, Shingle Springs, CA

Karen Neumeier, Shingle Springs, CA

John Lamb, Sierra Madre, CA

Marguerite Shuster, Sierra Madre, CA

Carol Hewitt, Signal Hill, CA

Patti Barto, Silverado, CA

Derek Beauchemin, Simi Valley, CA

Christina Ciesla, Simi Valley, CA

Justin Duso, Simi Valley, CA

Frances Emanuel, Simi Valley, CA

James Johnson, Simi Valley, CA

Mary Ann Lowe, Simi Valley, CA

Madison Mitchell, Simi Valley, CA

Pam Morarre, Simi Valley, CA

Brad Parsa, Simi Valley, CA

Chuck Rocco, Simi Valley, CA

Jack Rollens, Simi Valley, CA

Diana Shycoff, Simi Valley, CA

Kelsey McCann, Sloughouse, CA

Laurie Neill, Smith River, CA

Christy Bulskov, Solana Beach, CA

Natasha Weaver, Solana Beach, CA

Debra Hunt, Solvang, CA

Carol Lake, Solvang, CA



Andy Philpot, Solvang, CA  
Michelle Sparks-Gillis, Solvang, CA  
Sheila Silan, Somerset, CA  
Joy Pratt, Somis, CA  
Renee Darner, Sonoma, CA  
John Feissel, Sonoma, CA  
Penny Hartman, Sonoma, CA  
Patricia Locks, Sonoma, CA  
Helen Mehl, Sonoma, CA  
June Osbourn, Sonoma, CA  
Michael R. Watson, Sonoma, CA  
Brad Squires, Sonoma, CA  
Michelle Allison, Sonoma, CA  
Leslie Kowalczyk, Sonoma, CA  
Stephen Foltz, Soquel, CA  
Sonia King, Soquel, CA  
Gary Landgrebe, Soquel, CA  
Pamela Machutt, Soquel, CA  
Marianna Mejia Contact, Soquel, CA  
Sallye Steiner Bowyer, Soquel, CA  
Diana Swisher, Soquel, CA  
Hunter Wallof, Soulsbyville, CA  
Arturo Beyeler, South Lake Tahoe, CA  
Anne Roos, South Lake Tahoe, CA  
Francie Stone, South Lake Tahoe, CA  
Scott Jung, South Pasadena, CA  
Yuliya Rudnik, South Pasadena, CA  
Liz Ibarra, South San Francisco, CA  
Ron Parsons, South San Francisco, CA  
Heidi Behnke, Spring Valley, CA  
Jennifer Bradford, Spring Valley, CA  
Patricia Hadsall, Spring Valley, CA  
Theodora Moriarty, Spring Valley, CA  
Terrie Smith, Spring Valley, CA  
Toni Watson, Spring Valley, CA  
Joyce Kolasa, Springville, CA  
Carol Ruth, Stanford, CA  
Nikki Larkins, Stanton, CA  
Stu Greenburg, Stevenson Ranch, CA  
Michelle Montano, Stockton, CA  
Alisha Nickols, Stockton, CA  
Barb Varellas, Stockton, CA  
Andra Eisen, Studio City, CA  
Ines Glorian, Studio City, CA  
Genevieve Guzman, Studio City, CA  
Susan Lea, Studio City, CA  
Ellen Little, Studio City, CA  
David Norrell, Studio City, CA  
Natalia Spornik, Studio City, CA  
Inga Stanelun, Studio City, CA  
James Roberts, Sugarloaf, CA  
Robin Van Tassell, Summerland, CA  
Chris Hernandez, Sun Valley, CA  
Gerald Shaia, Sun Valley, CA  
Katharine Warner, Sunland, CA  
Scott Barlow, Sunnyvale, CA  
Ernest Boyd, Sunnyvale, CA  
John Cremin, Sunnyvale, CA  
Krista Dana, Sunnyvale, CA  
Marilyn Hall, Sunnyvale, CA

Rose Linn, Sunnyvale, CA

Richard Payne, Sunnyvale, CA

John Robbins, Sunnyvale, CA

Laura Robichek, Sunnyvale, CA

Marcia Sherman, Sunnyvale, CA

Vira Confectioner, Sunol, CA

Sandra Hendricks, Sutter Creek, CA

Sally Lambert, Sutter Creek, CA

Theo Dawson, Sylmar, CA

Chad Johnson, Sylmar, CA

Margarita Perez, Sylmar, CA

Charles Wolfe, Sylmar, CA

Carol p, Tahoe Vista, CA

El. Pe., Talmage, CA

Nilofar Amier, Tarzana, CA

Louise Bianco, Tarzana, CA

Theresa Bucher, Tarzana, CA

Monica Freedman, Tarzana, CA

Roger Hollander, Tarzana, CA

Ken Bailey, Taylorsville, CA

Gail Roberts, Tecate, CA

Missie Smith, Tehachapi, CA

Wendy Allen, Temecula, CA

Richard Blain, Temecula, CA

Holly Hall, Temecula, CA

Jena Hallmark, Temecula, CA

Deborah McIntosh, Temecula, CA

John Peterson, Temecula, CA

Janet Rhodes, Temecula, CA

Linda Skorheim, Temple City, CA

Cassie A. Murphy, Templeton, CA

Deborah Filipelli, PhD, The Sea Ranch, CA

Victoria Behar, Thousand Oaks, CA

Lexie Cataldo, Thousand Oaks, CA

Elaine Edell, Thousand Oaks, CA

Stephen Fitch, Thousand Oaks, CA

Mariana Mellor, Thousand Oaks, CA

Gary Raymond, Thousand Oaks, CA

Joanne Sulkoske, Thousand Oaks, CA

Gerry Williams, Thousand Oaks, CA

Rochelle Adelman, Three Rivers, CA

Lyndell Pritchett, Three Rivers, CA

Lulu LaRocca, Toluca Lake, CA

Isabel Freeman, Topanga, CA

Jed Fuhrman, Topanga, CA

Kenneth Miller, Topanga, CA

Jaime Nahman, Topanga, CA

Julie Ries, Topanga, CA

Penelope Ward, Topanga, CA

Kristina Wunder, Topanga, CA

Sherrie King, Torrance, CA

Joyce M Campbell, Torrance, CA

Jeff Pierce, Torrance, CA

Faye Ryan, Torrance, CA

Lynn Ryan, Torrance, CA

Diana Waters, Torrance, CA

Shelley Zagars, Torrance, CA

Elissa Babiuk, Trabuco Canyon, CA

Jinx Hydeman, Trabuco Canyon, CA

Douglas McCormick, Trabuco Canyon, CA

Theresa Hundchen, Tracy, CA

Deborah Frame, Trinidad, CA

Jen Gavin, Trinidad, CA

Ron Melin, Trinidad, CA

C E Mone, Trinidad, CA

Glenn Ross, Trinidad, CA

Brett Bell, Tujunga, CA

Simone Boudriot, Tujunga, CA

Probyn Gregory, Tujunga, CA

Barbara Newton, Turlock, CA

Everett A. Vieira III, Turlock, CA

Perry Gx, Tustin, CA

Stephen Bohac, Twain Harte, CA

Beverly Tiner, Twentynine Palms, CA

Olive Franklin, Ukiah, CA

James McArdle, Ukiah, CA

Tom McDonough, Ukiah, CA

Eileen Mitro, Ukiah, CA

Judi Walsh, Ukiah, CA

Mark Winkler, Ukiah, CA

George Wood, Ukiah, CA

Shelley Abbate, Union City, CA

Ernest Walters, Union City, CA

Courtney Christoffer, Upland, CA

Christine Hayes, Upland, CA

Jay Jones, Upland, CA

Jo Mandrell, Upland, CA

Yvonne Smith, Upland, CA

Nicole Amato, Vacaville, CA

Nicole Antonelli, Vacaville, CA

Denice Eldridge, Vacaville, CA

Lorraine Lowry, Vacaville, CA

Debra Reuter, Vacaville, CA

Janice Boyd, Valencia, CA

Sara Fogan, Valencia, CA

Jane Casey, Vallejo, CA

Suzanne Connors, Vallejo, CA

Victoria Humphrey, Vallejo, CA

Alicia Jackson, Vallejo, CA

Carmen Klucsor, Vallejo, CA

Nikki Nafziger, Vallejo, CA

Kathleen Powell, Vallejo, CA

Lana Touchstone, Vallejo, CA

Florence Litton, Valley Center, CA

Laura Diffenbaugh, Valley Springs, CA

Gail Krieger, Valley Springs, CA

Monica Smith, Valley Springs, CA

Amy Fleiss, Valley Village, CA

Cindee H, Valley Village, CA

Darynne Jessler, Valley Village, CA

Kim Nicholson, Valley Village, CA

Jennifer Wilson, Valley Village, CA

Dudley and Candace Campbell, Van Nuys, CA

Reed Fenton, Van Nuys, CA

Agnieszka Gocek, Van Nuys, CA

Janet Laur, Van Nuys, CA

Stephanie Proctor, Van Nuys, CA

Ken Windrum, Van Nuys, CA

Karen Brodtkin, Venice, CA

Jesse Croxton, Venice, CA

Linda Eberle, Venice, CA

Richard Horne, Venice, CA

Kenneth Howard, Venice, CA

Nan Lamb, Venice, CA

Deborah Rumens, Venice, CA

Ruth Seroussi, Venice, CA

Titiphan Vutiprichar, Venice, CA

Jennifer Abernathy, Ventura, CA

Kathleen Applen, Ventura, CA

Sherry Berry, Ventura, CA

David Cotner, Ventura, CA

Tim Covey, Ventura, CA

Barbara Dincau, Ventura, CA

Jamie Green, Ventura, CA

Mabel Gulovsen, Ventura, CA

Ms. Lilith, Ventura, CA

Nina Minsky, Ventura, CA

Kenneth Pennington, Ventura, CA

Sherry Schafer, Ventura, CA

Karen Socher, Ventura, CA

Mary Stanistreet, Ventura, CA

Melissa Vasconcellos, Ventura, CA

Barbara Whyman, Ventura, CA

Simone Fonseca, Victorville, CA

Paula Lopez, Victorville, CA

Carol Wiley, Victorville, CA

Laurie Gorman, Visalia, CA

Arlene Shayer, Visalia, CA

Patricia A Marks, Vista, CA

Jennifer Ball, Vista, CA

Barbara Bernatovich, Vista, CA

Tamara Bond, Vista, CA

Ad Clayton, Vista, CA

Angela Clayton, Vista, CA

Tyler Fitzgerald, Vista, CA

Mary Gilman, Vista, CA

Chad Kapusta, Vista, CA

Marilyn Baldwin, Volcano, CA

Erfin Hartojo, Walnut, CA

Jackie Samallo, Walnut, CA

Richard Saretsky, Walnut, CA

Rita Thio, Walnut, CA

Ana Belle, Walnut Creek, CA

Constantine Bogios, Walnut Creek, CA

Colleena Brazen, Walnut Creek, CA

Thomas Brustman, Walnut Creek, CA

Colleen Dowd, Walnut Creek, CA

Dale Drouin, Walnut Creek, CA

Ruth Felix, Walnut Creek, CA

Julia Fuller, Walnut Creek, CA

Madelaine Georgette, Walnut Creek, CA

Marsha Goodman, Walnut Creek, CA

Janicedotherighting Greenberg, Walnut Creek,  
CA

Barbara Greenwood, Walnut Creek, CA

Helen Hays, Walnut Creek, CA

Barb Linc, Walnut Creek, CA

Michele Dawn Sanderson, Walnut Creek, CA

Karen Savelich, Walnut Creek, CA

J. Schaffell, Walnut Creek, CA

Andrea Schauer, Walnut Creek, CA  
David Wendt, Walnut Creek, CA  
Suzanne Nevins, Warner Springs, CA  
Paul Cheney, Watsonville, CA  
Michael Craib, Watsonville, CA  
Mary Doane, Watsonville, CA  
Monica Gordon, Watsonville, CA  
Valerie Justus-Rusconi, Watsonville, CA  
Sarah Peck, Watsonville, CA  
Michael C. Ford and Richard B. Marks,  
Watsonville, CA  
Celeste Stanik, Watsonville, CA  
Shireen Nickel, Weed, CA  
Diana Sottana, Weed, CA  
Maria Fraga, West Covina, CA  
Georgina Perez, West Covina, CA  
Consuelo Rovirosa, West Covina, CA  
Jeanne Schuster, West Covina, CA  
Shari Becker, West Hills, CA  
Rebecca Clark, West Hills, CA  
Linda Howie, West Hills, CA  
Pilar Zorrilla, West Hills, CA  
David Aronovitch, West Hollywood, CA  
Abbie Bernstein, West Hollywood, CA  
Howard H. Holmes, West Hollywood, CA  
Susan Mathison, West Hollywood, CA  
Tameka Murrain, West Hollywood, CA  
Christina Nillo, West Hollywood, CA  
Paul Stanley, West Hollywood, CA  
Agnew Wilson, West Hollywood, CA  
Signe Wetteland, West Sacramento, CA  
Barbara E., Westlake Village, CA  
Stacey Keller, Westlake Village, CA  
Heather Kovach, Westlake Village, CA  
Theron Akers, Westminster, CA  
David Cristini, Westminster, CA  
Brandon Lowentrou, Westminster, CA  
Tina Colafranceschi, Whitethorn, CA  
Walter Huitema, Whittier, CA  
Vanessa Leal, Whittier, CA  
Michael Allen, Willits, CA  
Stacey Rohrbaugh, Willits, CA  
Sally Wieland, Willits, CA  
Matthew Culmore, Windsor, CA  
Claudia Piaseckyj, Winnetka, CA  
Charles Raines, Winnetka, CA  
Bita Edwards, Woodacre, CA  
Susan Pelican, Woodland, CA  
Bronwen Hughes, Woodland Hills, CA  
Stephanie Larro, Woodland Hills, CA  
Debra Lawrence, Woodland Hills, CA  
Jollee Saphier, Woodland Hills, CA  
Eva Thomas, Woodside, CA  
Dianne Ostrow, Wrightwood, CA  
C Rivera, X, CA  
Susan Wayne, Xxx, CA  
Marilyn Adams, Yorba Linda, CA  
Kathleen Fernandez, Yorba Linda, CA  
Barry Lovinger, Yorba Linda, CA  
Gabriel Graubner, Yountville, CA



Charles Heinrichs, Yreka, CA

Linda Freeman, Yuba City, CA

Ashley Millard, Yuba City, CA

Norm Wilmes, Yuba City, CA

Gilbert Crabtree, Yucaipa, CA

Lundi Belleau, Yucca Valley, CA

Renaldo Gonzalez, Yucca Valley, CA

Darlene Morris, Yucca Valley, CA

Ardis Breslauer, CA

Yasmin Chitty, CA

Sophie Ciurlik Rittenbaum, CA

Gary Connaught, CA

Kim Ferlazzo, CA

Hope Hendricks, CA

Elizabeth Lehr, CA

Alvaro Reyes, CA

Sharon Steuer, CA

Alejandra Tolley, CA

James Yonts, CA

Morgan Folger, Denver, CO

Doug Flack, New York, NY

David Rauenzahn, Portland, OR

Rebecca Brown, Merion Station, PA

Michelle Barbour, Bullard, TX



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

CALPIRG Students is a statewide, student-run, and student-funded organization that works to protect the environment, make college affordable, and promote civic engagement. We have over 20,000 dues-paying members across the UC system and have been on campus for almost 50 years advocating for students on issues that students care about most. As part of our ongoing efforts to win better protections for California's ocean, we are submitting 214 signatures from our supporters on campuses across the state in support of Environment California Research & Policy's petitions for rulemaking in the state's adaptive management process for the California marine protected area network.

Each of the 214 people signed the following letter:

*To: Governor Gavin Newsom*

*Sea otters bobbing in the surf. Whales diving deep to feed. Seabirds flying above. Our state's coastline is home to wildlife, large and small. As students and young people, we are proud to live in a state that has taken steps to protect this ocean heritage for future generations. California's network of marine protected areas are places that, just like state parks on land, help protect and restore ocean life.*

*I urge you to strengthen this network through the Decadal Management Review in line with your important goal of protecting 30 percent of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection to ocean life.*

*With your support, California can expand this network of ocean parks to create a brighter future for the ocean life that calls our state home, and hopefully inspire others across the country and around the world to follow our lead.*

As young people, we are working everyday to tackle the most pressing problems facing our ocean, our climate and our communities. That's why we are heartened to see state leaders like

# CALPIRG Students

Governor Newsom and the state legislature set bold and ambitious goals to protect more of our coastline.

But goals need to be followed by action to ensure the future health and abundance of our ocean wildlife and wild places. That's why our student members have been campaigning for better ocean protections, and why we are excited to have this opportunity in the Decadal Management Review to push our state's groundbreaking network of MPAs forward. An expanded, strengthened network will make our coasts more resilient in the face of climate change and give our ocean life a chance to thrive.

Thank you for this opportunity, and we look forward to working with you to continue to create a better future for California's coasts.

Sincerely,



Clara Castronovo  
State Board Chair  
CALPIRG Students

# CALPIRG

## Students

Camellia Cartland, Alhambra, CA  
Mary Ann Gutierrez, Alhambra, CA  
Jaylene Madrid, Apple Valley, CA  
Ainsley Wilkin, Apple Valley, CA  
TREINA LE, Baldwin Park, CA  
Erika Alfaro, Berkeley, CA  
Erik Beahrs, Berkeley, CA  
Sophia Brodie-Weisberg, Berkeley, CA  
Julissa Esparza, Berkeley, CA  
Ellen Franzen, Berkeley, CA  
Olivia Hom, Berkeley, CA  
Kaki Li, Berkeley, CA  
Ryan Montis, Berkeley, CA  
Stachi Thockchom, Berkeley, CA  
Minqi Wang, Berkeley, CA  
Caroline Yee, Berkeley, CA  
Erinne Yoo, Berkeley, CA  
Erik Hart, Bonny Doon, CA  
Kofi Addo, Buena Park, CA  
Taylor Keppel, Burbank, CA  
Monica Wiesener, Calabasas, CA  
Radha Jujare, Campbell, CA  
Adrian Contreras, Capitola, CA  
Jane Giza, Carmichael, CA  
Eduardo Angel Hurtado, Chula Vista, CA  
Roxanna Braganca, Chula Vista, CA  
Rachel Burnett, Concord, CA  
Alexis Hammond, Coronado, CA  
Mark Danilak, Cupertino, CA  
Marea Ayala, Davis, CA  
Aster Basnick, Davis, CA  
Harriet Chilton, Davis, CA  
ReJenai Cloy, Davis, CA  
Rena Cohen, Davis, CA  
Olivia Lim, Davis, CA  
Seth Marshall, Davis, CA  
An Nguyen, Davis, CA  
Trevor Ottoson, Davis, CA  
Madelyn Parker, Davis, CA  
Caitlin Perea, Davis, CA  
Emmalie Perez, Davis, CA  
Aaron Saint John, Davis, CA  
Samuel Saxe-Taller, Davis, CA  
Percival Singson, Davis, CA  
Avery Thau, Davis, CA  
Josue Velasquez, Davis, CA  
Mackenna Weems, Davis, CA  
hiliary wang, Diamond Bar, CA  
Ariadne meza-lopez, Diamond Springs, CA  
Ria Dadia, Dublin, CA  
Aziz Abdulahad, El Cajon, CA  
Claire Wang, El Cajon, CA  
Eythana Miller, Emeryville, CA  
Rosina Miranda, Fair Oaks, CA  
Michael Assmus, Fairfax, CA  
julie park, Fountain Valley, CA

# CALPIRG Students

Jasmine Avila Soria, Fremont, CA

Bao tran Nguyen, Fremont, CA

Alex Sanchez, Fresno, CA

Kelalani Luong-Kha, Garden Grove, CA

Toby Ngo, Garden Grove, CA

Ariaeli Hernandez, Gilroy, CA

Nathan Carbajal, Goleta, CA

Ana Cardenas Gasca, Goleta, CA

Kittamet Chanchaiworawit, Goleta, CA

Lizzie Harding, Goleta, CA

Lluvia Medina, Goleta, CA

Mariana Morton, Goleta, CA

Joanna Tang, Goleta, CA

joanna tang, Goleta, CA

Bradley Thomas, Goleta, CA

Henry Lindhurst, Granite Bay, CA

Peter Le, Hawthorne, CA

adriana zapotitla, Indio, CA

Kimberly Torres, Industry, CA

Andy Fleischer, Irvine, CA

Rhianna Heaster, Irvine, CA

Anisa Johnson, Irvine, CA

Nathaniel Jordan, Irvine, CA

Hudson Lee, Irvine, CA

Henson Ning, Irvine, CA

Ash Quan, Irvine, CA

Lucie Villata, Irvine, CA

Karen Yan, La Jolla, CA

Charlee Marlinga, La Quinta, CA

Gianna Wright, La Quinta, CA

Nathaniel Friedman, Lafayette, CA

Emma Contreras, Lemon Grove, CA

Samikshaya Auanthakrisknan, Lincoln, CA

Elina Dern, Lincoln, CA

Jennifer Gonzalez-Espinoza, Lindsay, CA

Kristi Copeland, Long Beach, CA

Liam Williams, Long Beach, CA

Lexi Crilley, Los Altos Hills, CA

Hoque Akter, Los Angeles, CA

Kimberly Barrueta, Los Angeles, CA

Gabby Ebrahimi, Los Angeles, CA

Bahar Farzaneh, Los Angeles, CA

Janine Fischer, Los Angeles, CA

Tyler Holmes, Los Angeles, CA

Kieran Johnson, Los Angeles, CA

Lucy Kaff, Los Angeles, CA

Daniel Lamas Sanchez, Los Angeles, CA

Dean Lewis, Los Angeles, CA

Kainoa MacDonald, Los Angeles, CA

Darla Marie Duffy, Los Angeles, CA

Alayah Marshall, Los Angeles, CA

Mireya Mondragon, Los Angeles, CA

Lilia Naylor, Los Angeles, CA

Alina Orendain-Calderon, Los Angeles, CA

Shannon Park, Los Angeles, CA

Owen Pogue, Los Angeles, CA



# CALPIRG

## Students

Lizbeth Rivera, Los Angeles, CA  
Alondra Roque, Los Angeles, CA  
Jonas Shladovsky, Los Angeles, CA  
madelyn spence, Los Angeles, CA  
Anita Theng, Los Angeles, CA  
Nataly Villasenor, Los Angeles, CA  
Rujin Yu, Los Angeles, CA  
Jonathan Giang, Monterey Park, CA  
Sam Strieter, Moreno Valley, CA  
Samantha Strieter, Moreno Valley, CA  
Lizzie Su, Mountain House, CA  
Angel Parra, Murrieta, CA  
Eleanor Vo, Oakland, CA  
Alonzo Canete, Ontario, CA  
Lori Shen, Ontario, CA  
Jacqueline Barnes, Palo Alto, CA  
Alicia Acevedo, Perris, CA  
Morgen Guzman, Petaluma, CA  
Ruth Simon, Placentia, CA  
Danae Delgado-Diaz, Pomona, CA  
Rachel Lucine, Rancho Cucamonga, CA  
Kurubel Tesfay, Rancho Palos Verdes, CA  
Cassidy Creighton, Redwood City, CA  
Ren Romero, Redwood City, CA  
Nicole Castillo, Richmond, CA  
Lida Halilovic, Riverside, CA  
Ryan LaCasse, Riverside, CA  
Hannah Kae Monson, Riverside, CA  
Katharine Pan, Riverside, CA  
Paige Smith, Riverside, CA  
Laurel Tennant, Riverside, CA  
Esteban Torres, Riverside, CA  
Jennifer Vo, Riverside, CA  
Sage Prudente, Rocklin, CA  
Olivia Teich, Rohnert Park, CA  
Panka Kernacs, Sacramento, CA  
Megyn Horton, San Anselmo, CA  
Nox Keel, San Clemente, CA  
Yingqi Cao, San Diego, CA  
Mekayli Claros, San Diego, CA  
Avamarie Fromm, San Diego, CA  
Camila Gonzalez, San Diego, CA  
Benjamin Greenstein, San Diego, CA  
Xiaoyu Gui, San Diego, CA  
Anne Huynh, San Diego, CA  
Michael Iter, San Diego, CA  
Katrina Mai, San Diego, CA  
Lizard Merrick, San Diego, CA  
Ava Ramirez-Brown, San Diego, CA  
Dhruv Sehgal, San Diego, CA  
Sarah Song, San Diego, CA  
Isabella Wagner, San Diego, CA  
Lucy Yang, San Diego, CA  
Rachel , San Diego, CA  
Nadia Nehme, San Francisco, CA  
Caroline Sykes, San Francisco, CA

# CALPIRG

## Students

Tatiana Aguilera, San Leandro, CA

Anjuli Oey, San Leandro, CA

Lilly Wolf-Hoy, San Marcos, CA

Elise Won, San Mateo, CA

Yahir Alexis Leal, Santa Ana, CA

Belen Cordova, Santa Cruz, CA

Chaitan Butte, Santa Monica, CA

Nikolas Brandt, Sebastopol, CA

Natalie Bai, Stanford, CA

Sofia Perez, Temecula, CA

Elena Picinich, Temecula, CA

Jiovanni Esteveec, Temple City, CA

Brent Pitts, Torrance, CA

Eva Pullen, Truckee, CA

Audrey Robertson, Tustin, CA

samael yang, Union City, CA

Emily Arana, Vacaville, CA

melissa fryar, Vacaville, CA

Taylor Arrington, Vallejo, CA

Natalie Rodriguez, West Covina, CA

Sara Morris, Whittier, CA

Claire Griffiths, Yorba Linda, CA

Neilyn Alvarez-Rodriguez, CA

Diana Cardova, CA

Anna Chuang, CA

Dharma Gutierrez Romero, CA

Wafaa Lawai, CA

Markus Mantyvaara, CA

Nayeli Orozco, CA

Kenya Santamaria, CA

Maia Boell, Carroll, IA

Charlie Cronenwett, Leawood, KS

Michael Basmajian, Somerville, MA

Miranda Sih, Minneapolis, MN

Julianna Evinski, Linwood, NJ

John Dunn, Morristown, NJ

Benito Morales, , WA

Ava Png, Weston, WI

Shashank Uma Deepak

Titouan Faure,

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 28th, 2023

Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs

Dear President Sklar and Honorable Commissioners,

In solidarity with the shared responsibility for the well-being of our planet, particularly the oceans and coastlines we hold dear, we are reaching out as college students to express our firm support for the amplification and extension of California's Marine Protected Area (MPA) network. Understanding the critical importance of maintaining stable kelp ecosystems and safeguarding conserved ocean areas, we are committed to ensuring the prolonged vitality of our oceans and the myriad marine species that inhabit them.

The state of our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Only 50 Pacific leatherback turtles are now found foraging off California's coast, a notable decrease from the 178 Pacific leatherbacks observed from 1990 to 2003.<sup>2</sup> Marine heatwaves have doubled over the last 30 years, and have become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>3</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

---

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> Benson, Scott R., Karin A. Forney, Jeffrey E. Moore, Erin L. LaCasella, James T. Harvey, and James V. Carretta. ["A Long-Term Decline in the Abundance of Endangered Leatherback Turtles, Dermochelys Coriacea, at a Foraging Ground in the California Current Ecosystem."](#) *Global Ecology and Conservation* 24 (November 2020).

<sup>3</sup> García-Reyes, Marisol, Andrew Leising, Rebecca Asch, Steven Bograd, and Tessa M Hill. Rep. Indicators of Climate Change in California, ["Coastal Ocean Temperature"](#), *California Office of Environmental Health Hazard Assessment*, 2022.

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>4</sup> By providing areas that serve as buffers against climate change, fully protected MPAs adapt to changing environmental conditions because they better preserve natural interactions within ecosystems, allowing for greater resiliency.<sup>5</sup>

California's network of MPAs, foreseen in the MLPA, celebrated its tenth anniversary last year, and the state's Decadal Management Review (DMR) showed that MPAs effectively protect ocean habitats and increase fishery-targeted species' biomass. The DMR found that the older the MPA, the larger the increase in the biomass of fished species. Some ecological communities like kelp forests and rocky intertidal ecosystems within MPAs appeared more resilient and recovered more quickly after marine heatwaves than similar habitats outside MPAs.<sup>6</sup> Now, we need to build on this system and maintain California's role as a national and global leader in the fight to protect more ocean habitats.

We support the expansion of the MPA Network to include critical, resilient kelp forests along California's coastline. While these vital and iconic ecosystems have faced declines statewide in recent years, kelp forests in some areas have persisted or bounced back quickly in the face of marine heatwaves and other disturbances.<sup>7</sup> By expanding protections for these resilient forests under the MLPA, the state can minimize direct human impacts in these relatively healthy areas, helping to ensure their continued persistence and enhancing the effectiveness of restoration efforts for declining kelp ecosystems nearby.

It is also vital that existing California MPAs are able to achieve their stated goals of conserving biodiversity and ecosystem health. We encourage the state to consider increasing protections for MPAs that are currently only lightly or minimally protected, especially in places where weaker or more complicated regulations lead to poor compliance and enforcement. Research has shown that highly and fully protected areas, where few if any destructive or extractive activities are allowed, provide greater ecological benefits than lightly or minimally protected areas.<sup>8</sup>

As college students, we keenly feel the urgency to address the environmental crises, particularly along California's coast. Having grown up witnessing the impacts of climate change, it's clear

---

<sup>4</sup> Arafteh-Dalmai et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), One Earth 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published by Elsevier Inc.

<sup>5</sup> Jankowska, Emilia, et al. "[Climate Benefits from Establishing Marine Protected Areas Targeted at Blue Carbon Solutions](#)." *Proceedings of the National Academy of Sciences*, vol. 119, no. 23, 2022.

<sup>6</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

<sup>7</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

<sup>8</sup> Ibid Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

that action is needed to limit harm to the environment. That's why we urge the Fish and Game Commission to make significant changes in preserving and protecting our vast ocean habitats, ensuring a meaningful and lasting impact for generations to come.

Our ocean is not just a provider of fresh air, diverse wildlife, and breathtaking scenery; it's also an enigma that calls us to explore and uncover its secrets. As college students, we believe it's our duty to be at the forefront of national and global efforts, taking bold steps to safeguard the ocean. This commitment ensures its future and the welfare of communities dependent on it for survival and prosperity.

In conclusion, we strongly urge you, Fish and Game Commissioners, to champion the expansion and fortification of California's network of Marine Protected Areas, with a particular focus on safeguarding kelp forests and reinforcing the protection of existing MPAs. By doing so, you will leave a lasting legacy of environmental stewardship.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this urgent matter. Together, we can ensure a healthier, more abundant future for the unique marine ecosystems that define California.

Sincerely,

Clara Castronovo  
Board Chair  
CALPIRG Students

Brandi Sanchez  
President  
Ecology Behavior and Evolution Club at UC San Diego

Brandi Sanchez  
President  
Pollinator Club at UC San Diego

Aiden Ledbetter  
President  
Davis College Democrats

Hannah Hughes  
President  
5C Plant-Based Mission at the Claremont Colleges





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

From the foothills of the Sierras to the seaside of the Central Coast, Californians care about our ocean and the life that calls it home. That's why we are submitting the attached 7,549 signatures in support of our petitions for rulemaking in the Decadal Management Review adaptive management process.

Each of the 7,549 people signed the following letter:

*Dear Governor Newsom,*

*California's coastline is home to stunning beaches, amazing wildlife, and is a true treasure for everyone who lives in or visits our state. That's why we've invested in protecting this ocean heritage through the creation of our state network of marine protected areas. Just like state parks on land, these areas help protect and restore ocean life.*

*Now we have an opportunity to strengthen this network through the Decadal Management Review. I urge you to use this process to advance your important goal of protecting 30% of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection for ocean life.*

*With your leadership, California can expand this network of ocean parks to create a brighter future for our state's ocean life and continue to lead the country in ocean conservation.*

*Sincerely,*

By expanding the state's MPA network to better protect areas of stable kelp and by strengthening protections for areas not currently achieving their conservation outcomes due to weak or confusing regulations, the state can help our coasts adapt and thrive in the face of rising temperatures and emerging threats.

With your leadership, we can create a better future for California's coastal ecosystems and the wildlife that calls them home.

Sincerely,

Laura Deehan  
Director  
Environment California  
Environment California Research & Policy Center



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Betty Canter, Agoura Hills, CA  
Cathy Crum, Agoura Hills, CA  
Diane King, Agoura Hills, CA  
Tamara Lesser, Agoura Hills, CA  
Brian Jeffery, Agouanga, CA  
Amber Bales, Alameda, CA  
John Brooks, Alameda, CA  
Barbara Cone, Alameda, CA  
Zachary Gray, Alameda, CA  
Mike Kehl, Alameda, CA  
Angie Klein, Alameda, CA  
Andre Kruglikov, Alameda, CA  
Brian J McGuire, Alameda, CA  
Andrew Mueckenberger, Alameda, CA  
Alexandra Mummery, Alameda, CA  
Jack Rafferty, Alameda, CA  
Gina Rivera, Alameda, CA  
Barbara Snethen@gmail.com, Alameda, CA  
James Stehr, Alameda, CA  
Joshua Summit, Alameda, CA  
Kathryn Warner, Alameda, CA  
Ehren Mierau, Alamo, CA  
Sandra Beckley, Albany, CA  
Linda Berkowitz, Albany, CA  
Susan Burr, Albany, CA  
Bart Grossman, Albany, CA  
Tami Jordan, Albany, CA  
Raymond Neutra, Albany, CA  
Paula Rini, Albany, CA  
Steven Schultz, Albany, CA

Kym Sterner, Albany, CA  
Michael Sullivan, Albany, CA  
Araceli Aviles, Alhambra, CA  
Cindy Coty, Alhambra, CA  
Lynda Harris, Alhambra, CA  
Joseph Manza, Alhambra, CA  
John Perez, Alhambra, CA  
Alec Taratula, Alhambra, CA  
Annetta Bettis, Aliso Viejo, CA  
Andrea Bonnett, Altadena, CA  
Jason Capell, Altadena, CA  
Patrick Ela, Altadena, CA  
Andre Ettinger, Altadena, CA  
Beth Herndobler, Altadena, CA  
Joan Kahn, Altadena, CA  
Althea Kennedy, Altadena, CA  
Carol Lachata, Altadena, CA  
Linda Nishio, Altadena, CA  
Julie Parker, Altadena, CA  
Allan Wasserman, Altadena, CA  
Christina Imhoof, An Diego, CA  
Bruce Bluestein, Anaheim, CA  
Drew Cartwright, Anaheim, CA  
Thuan Do, Anaheim, CA  
Robert Jansen, Anaheim, CA  
Charles Richmond, Anaheim, CA  
Michelle Smith, Anaheim, CA  
Natalie Blasco, Anderson, CA  
Donna Crane, Anderson, CA  
lynmari calabi, Angwin, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sharon Lieberman, Annapolis, CA  
Jessica Mitchell-Shihabi, Antelope, CA  
Shirene Saunby, Antelope, CA  
Lindsey Kalfsbeek, Antioch, CA  
Bernadine Sequeira, Antioch, CA  
James Alfred Smith, Jr., Antioch, CA  
Stanley Hodge, Apple Valley, CA  
Norbert Benecke, Aptos, CA  
LeAnn Bjelle, Aptos, CA  
Katherine Doctor, Aptos, CA  
Michele Faia, Aptos, CA  
Jane Goddard, Aptos, CA  
Jeanne Lance, Aptos, CA  
Alan Schenck, Aptos, CA  
Edward Shapiro, Aptos, CA  
Denis Elliott, Arcadia, CA  
Jason Park, Arcadia, CA  
Jeanne Roberts, Arcadia, CA  
Mikal Baker, Arcata, CA  
Connie Lindgren, Arcata, CA  
Sophie Rocheleau, Arcata, CA  
Jerry McNamara, Arnold, CA  
Brian Harris, Arroyo Grande, CA  
Linda Kohler-Trott, Arroyo Grande, CA  
Landon Neustadt, Arroyo Grande, CA  
Joseph Read, Arroyo Grande, CA  
Gregory Ross, Arroyo Grande, CA  
Thomas Tucker, Arroyo Grande, CA  
Corinne Huckaby, Atascadero, CA  
Scott Burgess, Atascadero, CA

Ellen Evans, Atascadero, CA  
John Farhar, Atascadero, CA  
Patti Frey, Atascadero, CA  
Kelly Martin, Atherton, CA  
James Neupert, Atherton, CA  
Jena Norton, Atwater, CA  
Marilyn Barthelow, Auburn, CA  
Caralee Clarke, Auburn, CA  
Roxanne Hill, Auburn, CA  
David Hooper, Azusa, CA  
Solomon Pulgar, Azusa, CA  
Roger Anderson, Bakersfield, CA  
Matthew Barajas, Bakersfield, CA  
Jim Carnal, Bakersfield, CA  
Caryn Cowin, Bakersfield, CA  
Richard Reed, Bakersfield, CA  
Yolanda Berumen, Baldwin Park, CA  
Jesse Calderon, Baldwin Park, CA  
Cherilyn Cibelli, Beaumont, CA  
Mohamed Chahine, Bell Gardens, CA  
Yazmin Gonzalez, Bellflower, CA  
Jason Nolasco, Bellflower, CA  
Shiela Cockshott, Belmont, CA  
Giovannina Fazio, Belmont, CA  
Valerie Gould, Belmont, CA  
Kimberly Knapp, Belmont, CA  
Tracy Molyneux, Belmont, CA  
Robert Sharp, Belmont, CA  
Angela Gantos, Belvedere Tiburon, CA  
Barbara Meislin, Belvedere Tiburon, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sandra Wolfe, Belvedere Tiburon, CA

Nancy Phillips, Ben Lomond, CA

Dorothy Renaud, Ben Lomond, CA

Raf Strudley, Ben Lomond, CA

Colleen Walter, Ben Lomond, CA

Judith Amlin, Benicia, CA

Cathy Bennett, Benicia, CA

Peter Bray, Benicia, CA

Dannys Cody, Benicia, CA

Joni Grisham, Benicia, CA

Nancy Lund, Benicia, CA

Twila Newey, Benicia, CA

Marylee Parr, Benicia, CA

Christian Phillips, Benicia, CA

Annina Puccio, Benicia, CA

Robert Quarrick, Benicia, CA

Jessica Smith, Benicia, CA

Mimi Abers, Berkeley, CA

Inger Acking, Berkeley, CA

Stephen Alpert, Berkeley, CA

Pamela Baird, Berkeley, CA

Robert Baird, Berkeley, CA

Karl Battenbowman, Berkeley, CA

James Blakly, Berkeley, CA

Lois Brubeck, Berkeley, CA

Nancy Carleton, Berkeley, CA

Eileen Cohen, Berkeley, CA

Craig Collins, Berkeley, CA

Alexandra Crisafulli, Berkeley, CA

Janis Dairiki, Berkeley, CA

Anya Davis, Berkeley, CA

Richard Entenman, Berkeley, CA

Christopher Evans, Berkeley, CA

Hyacinth Fleming, Berkeley, CA

Ellen Franzen, Berkeley, CA

Rachel Gordon, Berkeley, CA

Martha Griswold, Berkeley, CA

Stefanie Guynn, Berkeley, CA

Doug Hamilton, Berkeley, CA

Mary Harte, Berkeley, CA

Curran Honorah, Berkeley, CA

Holly Howard, Berkeley, CA

Marjory Keenan, Berkeley, CA

Betsy Kelly, Berkeley, CA

Morgan Lambert, Berkeley, CA

Catherine Lerza, Berkeley, CA

Alex Madonik, Berkeley, CA

Robert Magarian, Berkeley, CA

Rebecca Meyer, Berkeley, CA

Ann Myers, Berkeley, CA

Jaleh Niazi, Berkeley, CA

Kaveh Niazi, Berkeley, CA

Jonathan Packman, Berkeley, CA

Kristine Panik, Berkeley, CA

Heather Pierce, Berkeley, CA

Janet Ramsay, Berkeley, CA

Catherine Rauch, Berkeley, CA

Janette Reid, Berkeley, CA

Rachel Resnikoff, Berkeley, CA

Anthony Rhodes, Berkeley, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Bob Schildgen, Berkeley, CA

Sandra Smith, Berkeley, CA

Lenore Sorensen, Berkeley, CA

michael sullivan, Berkeley, CA

Debbie Tenenbaum, Berkeley, CA

Timothy Volz, Berkeley, CA

Dandelo Waters, Berkeley, CA

Jonathan Weinstock, Berkeley, CA

Helene Whitson, Berkeley, CA

John Wolfe, Berkeley, CA

Sara Zimmerman, Berkeley, CA

Lori Ginsburg, Beverly Hills, CA

Beverly Harris, Beverly Hills, CA

Ilene Proctor, Beverly Hills, CA

Trudie Haven, Big Bear City, CA

Valerie Hart, Big Pine, CA

Marianne Brettell-Vaughn, Bishop, CA

Michael Harris, Bodega Bay, CA

Tina Ann, Bolinas, CA

Betsyann Gallagher, Bolinas, CA

Sean Thackrey, Bolinas, CA

Vivian Sherrill, Bonita, CA

Ed Atkins, Boulder Creek, CA

Moira Bischoff, Boulder Creek, CA

Trudi James, Boulder Creek, CA

Ray Schwarz, Boulder Creek, CA

Kathryn St. John, Boulder Creek, CA

Jack Kline, Brentwood, CA

Chris Zahnd, Brentwood, CA

Stephanie Glatt, Buellton, CA

Jennifer Jerlstrom, Buena Park, CA

Jessica Likens, Buena Park, CA

Cathy Biermann, Burbank, CA

Sandra Christopher, Burbank, CA

Ryan Davis, Burbank, CA

Katyana Farzanrad, Burbank, CA

Jennifer Hurdle, Burbank, CA

Tyson Martin, Burbank, CA

Gina Richardson, Burbank, CA

Rosalie Salvato, Burbank, CA

Gilbert Saucedo, Burbank, CA

Lucinda Walker, Burbank, CA

Kenneth Aron, Burlingame, CA

Jeffrey Krolik, Burlingame, CA

Lara McDonald, Burlingame, CA

Kathryn Morton, Burlingame, CA

Laura Somers, Burlingame, CA

Judy Boeken, Calabasas, CA

Vivian Deutsch, Calabasas, CA

Claude Duss, Calabasas, CA

Veronica Pepe, Calabasas, CA

Kalyna Snylyk, Calabasas, CA

Terry Spellman, California City, CA

David Burtis, Calistoga, CA

Martha Casselman, Calistoga, CA

Scott Hester, Calistoga, CA

Susan Beil, Camarillo, CA

Nancy Borelli, Camarillo, CA

Catherine Burriss, Camarillo, CA

Carol Cressy, Camarillo, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cherie Garrett, Camarillo, CA  
Larry Gassan, Camarillo, CA  
Deidre Leonard, Camarillo, CA  
Carla Marting, Camarillo, CA  
Jerami Prendiville, Camarillo, CA  
Charlie Tetoni, Camarillo, CA  
Ann Walker, Camarillo, CA  
Ted Key, Cambria, CA  
Linda Kierce, Cambria, CA  
Richard Shepard, Cambria, CA  
Lena Fine, Campbell, CA  
Barbara Mason, Campbell, CA  
Anne Swanson, Campbell, CA  
Tony Vega, Campbell, CA  
Mark Giordani, Canoga Park, CA  
Debra Moss, Canoga Park, CA  
Barbara Dinius, Canyon Country, CA  
Yrineo Vasquez, Canyon Country, CA  
Ben Brucker, Capistrano Beach, CA  
John Glina, Capitola, CA  
Edith Leni, Capitola, CA  
Dana Herman, Cardiff, CA  
William Stern, Cardiff, CA  
Matt Bender, Cardiff by the Sea, CA  
Suzanne Mindlin, Cardiff By The Sea, CA  
Nance Robertson, Cardiff by the Sea, CA  
Lisa Adamson, Carlsbad, CA  
Shawna Bader, Carlsbad, CA  
Judy Burzell, Carlsbad, CA  
Chihwu Chang, Carlsbad, CA

Gerald Good, Carlsbad, CA  
Kendra Haddock, Carlsbad, CA  
Matthew Huber, Carlsbad, CA  
Luis Jaramillo, Carlsbad, CA  
Kevin Krause, Carlsbad, CA  
Phyllis Lackey, Carlsbad, CA  
ben steen, Carlsbad, CA  
Greg Thomsen, Carlsbad, CA  
Catherine Valadez, Carlsbad, CA  
Damon Anderson, Carmel, CA  
John Hall, Carmel, CA  
Diana North, Carmel, CA  
Rosalie Pinkert, Carmel, CA  
judi zaches, Carmel, CA  
Sheila Sheppard, Carmel By The Sea, CA  
Herbert Aarons, Carmel Valley, CA  
Janis Wilson-Pavlik, Carmel Valley, CA  
Elizabeth Adan, Carmichael, CA  
William Rasmussen, Carmichael, CA  
Jo Souvignier, Carmichael, CA  
Karen Taylor, Carmichael, CA  
Jack Tolomei, Carmichael, CA  
Jill Vanneman, Carmichael, CA  
mary vollstedt, Carmichael, CA  
Roxanne Coke, Carpinteria, CA  
William Hornung, Carpinteria, CA  
Gail Marshall, Carpinteria, CA  
Amy Mcdonald, Carpinteria, CA  
Linda Reimel, Carpinteria, CA  
Scott Van Fossen, Carpinteria, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Glen Deardorff, Castro Valley, CA  
Julie Greenfield, Castro Valley, CA  
Sue Hall, Castro Valley, CA  
Pati Jio, Castro Valley, CA  
Harriet Skelly, Castro Valley, CA  
Arthur Squillante, Castro Valley, CA  
Barbara Harper, Castroville, CA  
John Hill, Castroville, CA  
Armando MacMillan, Castroville, CA  
Phillip Cripps, Cathedral City, CA  
Anne Gannon, Cathedral City, CA  
Janis Michaels, Cathedral City, CA  
Wallace Rhine, Cazadero, CA  
Eric Hironymous, Cedarville, CA  
Marie Perry, Ceres, CA  
Meredith Cox, Cerritos, CA  
James Lindgren, Cerritos, CA  
Patti Boniface, Chatsworth, CA  
Alejandra Castro, Chatsworth, CA  
Miguel Loayza, Chatsworth, CA  
Binh Tang, Chatsworth, CA  
Barbara Wasserman, Chatsworth, CA  
Mary Caulfield, Chicago Park, CA  
Garrett Alden, Chico, CA  
Valerie Fannin, Chico, CA  
Dee Randolph, Chico, CA  
Abigail Rizzo, Chico, CA  
Sonya Rose, Chico, CA  
Linda Sheppard, Chico, CA  
Kate Transchel, Chico, CA

Dale Beaver, Chula Vista, CA  
Denise Berrian, Chula Vista, CA  
John Brown, Chula Vista, CA  
Rita Clement, Chula Vista, CA  
Alfa Santos, Chula Vista, CA  
David Sorce, Chula Vista, CA  
John Teevan, Chula Vista, CA  
Susana Vega, Chula Vista, CA  
Cari Chenkin, Citrus Heights, CA  
Karen and Edward Osgood, Citrus Heights, CA  
Aaron Shoup, Citrus Heights, CA  
Robert Blackey, Claremont, CA  
Christopher Hayes, Claremont, CA  
Steven Hoelke, Claremont, CA  
John Maher, Claremont, CA  
Cheryllynne Ofstedahl, Claremont, CA  
Laurel Tucker, Claremont, CA  
Marsha Tudor, Claremont, CA  
Erica Tyron, Claremont, CA  
Victoria Verches, Claremont, CA  
Patricia Goodson, Clearlake Oaks, CA  
John Kwiatkowski, Cloverdale, CA  
Kim Peterson, Cloverdale, CA  
Dolores Amato, Clovis, CA  
Tara Hagen, Clovis, CA  
Thomas Kaschak, Clovis, CA  
Diane Hestich, Colton, CA  
Fred Wright, Colton, CA  
Mindy Alegria, Concord, CA  
Stephanie Clark, Concord, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan King, Concord, CA  
Sheri Kuticka, Concord, CA  
Robert Larsen, Concord, CA  
Paul Lowry, Concord, CA  
James R Monroe, Concord, CA  
Nancy Pratt, Concord, CA  
Cindy Sundberg, Concord, CA  
Anne Spesick, Cool, CA  
Jennifer Artunian, Corona, CA  
Lisa Laflame, Corona, CA  
Linda Oeth, Corona del Mar, CA  
Tad Sullivan, Corona del Mar, CA  
Sanja Dimitrijevic, Coronado, CA  
Elizabeth Luning, Corralitos, CA  
Ronald Gremban, Corte Madera, CA  
Jennifer Lawson, Corte Madera, CA  
Abigail Millikan States, Corte Madera, CA  
Rachelle Cox, Costa Mesa, CA  
Hieu Dang, Costa Mesa, CA  
Sharon Daniel, Costa Mesa, CA  
Victoria Gagniere, Costa Mesa, CA  
Kathlyn Grabenstein, Costa Mesa, CA  
Jennifer Greenwalt, Costa Mesa, CA  
Rickie Moore, Costa Mesa, CA  
Kim Nero, Costa Mesa, CA  
Lisa Piner, Costa Mesa, CA  
Lizzie Vierra, Costa Mesa, CA  
Janice Emery, Cotati, CA  
Jane Lyon, Cotati, CA  
R Brancheau, Covina, CA

Wendy Monterrosa, Covina, CA  
Angela Park, Covina, CA  
Sandy Williams, Covina, CA  
April Quigley, Crescent City, CA  
Ronald Thompson, Crescent City, CA  
Susannah Baxendale, Culver City, CA  
Thomas Carlton, Culver City, CA  
Jill Davine, Culver City, CA  
Gwendoline Gansky, Culver City, CA  
Vernette Griffee, Culver City, CA  
Walter Lamb, Culver City, CA  
Andrew Meyer, Culver City, CA  
Patricia Morgan, Culver City, CA  
Chris Nevil, Culver City, CA  
Alicia Tan, Culver City, CA  
Anita Thomason, Culver City, CA  
Keil Albert, Cupertino, CA  
Peg Albrets, Cupertino, CA  
Nora Elsokkary, Cupertino, CA  
Wallace Iimura, Cupertino, CA  
Marte Thompson, Cupertino, CA  
Lana Wertz, Cupertino, CA  
Susie Leonard, Cypress, CA  
Noah H, Daly City, CA  
Susan Klingman, Daly City, CA  
Bonnie Miyake, Daly City, CA  
Katya Siguenza, Daly City, CA  
earl west, Daly City, CA  
John Goodman, Dana Point, CA  
Nancy Amini, Danville, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Erlan Bliss, Danville, CA  
Priscilla Rich, Danville, CA  
Catherine Alexander, Davis, CA  
Kristen Douglas, Davis, CA  
Lisa Goldberg, Davis, CA  
Daniel Gusfield, Davis, CA  
Verne Harlan, Davis, CA  
Nancy Hiestand, Davis, CA  
Kathryn Litton, Davis, CA  
Frances McChesney, Davis, CA  
Jack Milton, Davis, CA  
Katherine Muir, Davis, CA  
Donna Russell, Davis, CA  
Rebecca Ryland, Davis, CA  
Penelope Shackelford, Davis, CA  
Timothy Tutt, Davis, CA  
Maryla Wade, Davis, CA  
Arleene Antin, Del Mar, CA  
Jean Balgrosky, Del Mar, CA  
Bruce Bekkar, MD, Del Mar, CA  
Laura Converse, Del Mar, CA  
Lynne Small, Del Mar, CA  
Judy Dotson, Denair, CA  
Clyde Weston, Descanso, CA  
Jacque Carlson, Desert Hot Springs, CA  
Maureen McDonald, Desert Hot Springs, CA  
Nancy Schelling, Desert Hot Springs, CA  
Brian Chen, Diamond Bar, CA  
Marilyn Eng, Diamond Bar, CA  
Jeffrey Jenkins, Diamond Bar, CA

Ruth Buxman, Dinuba, CA  
Sharon Byers, Downey, CA  
Deborah Ross, Duarte, CA  
Sarah Sismondo, Duarte, CA  
Eloise Hamann, Dublin, CA  
Mohan Sakhrani, Dublin, CA  
Robert Baker, Dunlap, CA  
Rev. Will Agee, El Cajon, CA  
Kelley Bishop, El Cajon, CA  
Anna Brzuza, El Cajon, CA  
Christina Hartonczyk, El Cajon, CA  
Meredith Kennedy, El Cajon, CA  
Anna Salvatierra, El Cajon, CA  
Sadie Sullivan-Greiner, El Cajon, CA  
Elizabeth Bone, El Cerrito, CA  
Byron Brown, El Cerrito, CA  
Daniel Elkan, El Cerrito, CA  
Emiliano Gomez, El Cerrito, CA  
Paul Hughes, El Cerrito, CA  
Jan Jones, El Cerrito, CA  
Kin Jung, El Cerrito, CA  
Judith Libow, El Cerrito, CA  
Carol Long, El Cerrito, CA  
Robert Naumann, El Cerrito, CA  
Judith Rogers, El Cerrito, CA  
Cynthia Williams, El Cerrito, CA  
Tracy Bryan, El Dorado Hills, CA  
Virginia Shaw, El Dorado Hills, CA  
Judd Stark, El Dorado Hills, CA  
David Marsland, El Granada, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Terry Blount, El Segundo, CA  
Alison Hart, El Segundo, CA  
Matthew Lubs, El Segundo, CA  
Stacy Sealock, El Segundo, CA  
Claudia Avila, El Sobrante, CA  
Martha Booz, El Sobrante, CA  
Garth Casaday, El Sobrante, CA  
Katharine Handler, El Sobrante, CA  
Julie Harris, El Sobrante, CA  
Carol Kinser, Elk Grove, CA  
Marta Williams, Elk Grove, CA  
Kathleen Stutz, Elmira, CA  
Amanda Caskey, Emeryville, CA  
Claudia Garcia, Emeryville, CA  
Maia Orr, Emeryville, CA  
Vijaya Rogers, Emeryville, CA  
Kimberley Sevcik, Emeryville, CA  
Elizabeth Staton, Emeryville, CA  
Cheryl Alexander, Encinitas, CA  
Cathy Bacquet, Encinitas, CA  
Brett Colby, Encinitas, CA  
Brian Collins, Encinitas, CA  
Caleb Fitzpatrick, Encinitas, CA  
Devin Frei, Encinitas, CA  
Victor Hernandez, Encinitas, CA  
Shawn Johnson, Encinitas, CA  
William Paxton, Encinitas, CA  
Eric Pence, Encinitas, CA  
Sheila Smith, Encinitas, CA  
Steve White, Encinitas, CA

Lucy Hart, Encino, CA  
Dale Crawford, Escondido, CA  
Nancy Gangi, Escondido, CA  
Ken Sanford, Escondido, CA  
Andy Tomsy, Escondido, CA  
Kristi Wilson, Escondido, CA  
Delight Wisniewski, Escondido, CA  
Rena Zaman-Zade, Escondido, CA  
Melissa Birch, Eureka, CA  
patricia kanzler, Eureka, CA  
Gina Ness, Eureka, CA  
Mary Schweickert, Eureka, CA  
Susan Tatro, Eureka, CA  
Beti Webb Trauth, Eureka, CA  
Geraldine Card, Exeter, CA  
Melissa Christopher, Fair Oaks, CA  
Brian Mcclintock, Fair Oaks, CA  
Teresa Rauschkolb, Fair Oaks, CA  
Blair Reynolds, Fair Oaks, CA  
Kathleen Jackson, Fairfax, CA  
Aria Sternik, Fairfax, CA  
Sagar Wanaselja, Fairfax, CA  
William Lane, Fairfield, CA  
Adriana Llamas, Fairfield, CA  
Kathleen Morgan, Fallbrook, CA  
Andrea Boone, Felton, CA  
Alice Kelly, Felton, CA  
Pamela Morgan, Felton, CA  
Michelle Alex, Folsom, CA  
Jessica Dardarian, Folsom, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Veronica Mohn, Foothill Ranch, CA

Larry Hanson, Forestville, CA

Thomas Hawkins, Fort Bragg, CA

Lonnie Mathieson, Fort Bragg, CA

Katherine Patterson, Fort Bragg, CA

Kathleen Gause, Fountain Valley, CA

Frances Morrison, Fountain Valley, CA

Kenneth Arnold, Fountain Vly, CA

Mary Brooks, Frazier Park, CA

Susan Schrager, Frazier Park, CA

Gina Jager, Fremont, CA

Michael Maddon, Fremont, CA

Utkarsh Nath, Fremont, CA

Erica Pace, Fremont, CA

Nancy Palmer, Fremont, CA

Adelle Regalia, Fremont, CA

Christopher Ware, Fremont, CA

Jack Whealen, Fremont, CA

Charlotte Alldredge, Fresno, CA

Gerald Bill, Fresno, CA

Michael Bordenave, Fresno, CA

Lynn Campbell, Fresno, CA

Joseph Catania, Fresno, CA

Gilda Cox, Fresno, CA

Elizabeth Fralicks, Fresno, CA

Rosemary Gastelo, Fresno, CA

Robert Glover, Fresno, CA

Yolanda Gomez, Fresno, CA

Nancy McCormick, Fresno, CA

Gayle Mitchell, Fresno, CA

Emily Poulsen, Fresno, CA

Lynda Robinson, Fresno, CA

Walter Ullrich, Fresno, CA

Lowell Young, Fresno, CA

Donna Grampp, Fullerton, CA

Lynn Hoang, Fullerton, CA

Evan McDermit, Fullerton, CA

Colleen Wieghorst, Fullerton, CA

Christine Doyka, Garberville, CA

Ana Gonzalez, Garden Grove, CA

Laurie Kinnings, Garden Grove, CA

Dana May, Garden Grove, CA

Walter Reece, Garden Grove, CA

Suellen Carroll, Garden Valley, CA

Marcella Andrade, Gilroy, CA

Miguel Avila, Gilroy, CA

Mary Ludwick, Gilroy, CA

Jidith Seehafer, Gilroy, CA

Joe Mangiantini, Glen Ellen, CA

Alejandro Artigas, Glendale, CA

Carol Bennett, Glendale, CA

Timothy Brock, Glendale, CA

R. Leslie Choi, Glendale, CA

Michelle Colletti, Glendale, CA

James Grant, Glendale, CA

Dena Guerry Henriquez, Glendale, CA

Elise Kalfayan, Glendale, CA

Valerie Keiser, Glendale, CA

Denise Meyer, Glendale, CA

Faatui Panama, Glendale, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Patricia Pei, Glendale, CA  
Bari Phillips, Glendale, CA  
John Price, Glendale, CA  
Ann Sattenspiel, Glendale, CA  
Jordan Vanderlinde, Glendale, CA  
Laura Flanders, Glendora, CA  
Diana Lozano, Glendora, CA  
Larissa Shen, Glendora, CA  
Dawnielle Burich, Goleta, CA  
Irene Cooke, Goleta, CA  
Martin Henderson, Goleta, CA  
Larry A Kaempf, Goleta, CA  
Jennifer Matthews, Goleta, CA  
Kevin McGarry, Goleta, CA  
Wendy Morgan, Goleta, CA  
Michelle Profant, Goleta, CA  
Z. Reisz, Goleta, CA  
Julie Rodgers, Goleta, CA  
Deborah Williams, Goleta, CA  
Dennis Hammermeister, Granada Hills, CA  
Brook Hall, Granite Bay, CA  
Evette Andersen, Grass Valley, CA  
Kendra Anderson, Grass Valley, CA  
Susanne Bader, Grass Valley, CA  
Ellen Clephane, Grass Valley, CA  
Bonny Davis, Grass Valley, CA  
Anna Drummond, Grass Valley, CA  
John Everett, Grass Valley, CA  
Kathleen Shaffer, Grass Valley, CA  
Mark Toelkes, Grass Valley, CA

Abbie Whitehead, Grass Valley, CA  
Peter Yaholkovsky, Grass Valley, CA  
Daniel Healy, Green Valley Lake, CA  
Courtney Benham, Greenbrae, CA  
patricia klein, Greenbrae, CA  
Dennis McVey, Greenbrae, CA  
Meredith Mill, Greenbrae, CA  
Jill Mistretta, Greenbrae, CA  
DYAN PIKE, Greenbrae, CA  
Benjamin Rowe, Greenbrae, CA  
Joan Smith, Greenbrae, CA  
Kate Lunn, Grover Beach, CA  
Marc Fuller, Guadalupe, CA  
Carlos Madrigal, Hacienda Heights, CA  
Edith Bella, Half Moon Bay, CA  
Irene Madrid, Half Moon Bay, CA  
Christine Olivero, Half Moon Bay, CA  
Wade Painter, Half Moon Bay, CA  
Tim Riley, Half Moon Bay, CA  
L. Watson, Half Moon Bay, CA  
Claire Jones, Hanford, CA  
Nancy Plumer, Harbor City, CA  
Deb B, Hawthorne, CA  
Roberta Barr, Hawthorne, CA  
Bonnie Maloney, Hawthorne, CA  
Rachel Asturias, Hayward, CA  
Elliott Betty, Hayward, CA  
Gregory Fite, Hayward, CA  
Evelyn Gonzalez, Hayward, CA  
Sherman Lewis, Hayward, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Laurie Price, Hayward, CA  
Rev. Jonathan Tan, Hayward, CA  
Bretta Rambo, Healdsburg, CA  
Elizabeth Rue, Healdsburg, CA  
Paula Baeza, Hemet, CA  
Lily Mejia, Hemet, CA  
REBECCA DESMOND, Hercules, CA  
Gloria Evans-Young, Hercules, CA  
Linda Monosmith, Hermosa Beach, CA  
Dency Nelson, Hermosa Beach, CA  
Geri Shapiro, Hermosa Beach, CA  
Julie Knutson, Hesperia, CA  
Shanna Rojas, Hesperia, CA  
Juanita Westberg, Hesperia, CA  
P Perry, Hidden Valley Lake, CA  
Renee O'Neil, Highland, CA  
Robert Vargas, Highland, CA  
Kathleen Callaghan, Hollister, CA  
Monica Sharp, Holtville, CA  
Tina Moody, Hopland, CA  
Paul Barkmeier, Huntington Beach, CA  
Buffie Channel, Huntington Beach, CA  
Carol Comparsi, Huntington Beach, CA  
Laura Davidson, Huntington Beach, CA  
Tim Denton, Huntington Beach, CA  
Vicki Dipaolo, Huntington Beach, CA  
Myrrha Eberly, Huntington Beach, CA  
Kathy Hanson, Huntington Beach, CA  
Beverly Heiberg, Huntington Beach, CA  
Vicki Hughes, Huntington Beach, CA

Meaghan Jones, Huntington Beach, CA  
Mike Kelly, Huntington Beach, CA  
Thaddeus Kopacki, Huntington Beach, CA  
Michael Marr, Huntington Beach, CA  
Michael McMahan, Huntington Beach, CA  
Michael Ozaki, Huntington Beach, CA  
James Preston, Huntington Beach, CA  
Peggy Rosen, Huntington Beach, CA  
Brandon Ross, Huntington Beach, CA  
Fred Schloessinger, Huntington Beach, CA  
Rita Spira, Huntington Beach, CA  
mary tindukasiri, Huntington Beach, CA  
Carol Acosta, Idyllwild, CA  
Jason Leichter, Imperial Beach, CA  
Lindsay Erickson, Indio, CA  
William Heagy, Indio, CA  
Matthew Humphrey, Indio, CA  
Robert Ikehorn, Indio, CA  
Karen Seeberg, Indio, CA  
Sheila Breeding, Inglewood, CA  
Kathleen McConn, Inglewood, CA  
Terri Mckown, Inyokern, CA  
Charlotte Rolle, Ione, CA  
James Beirne, Irvine, CA  
Rosanne Bravo, Irvine, CA  
Jill Dunham, Irvine, CA  
Robert Glasser, Irvine, CA  
Mehdi Jazayeri, Irvine, CA  
Wendy Kleeb, Irvine, CA  
Joseph Lambert, Irvine, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robin Weirich, Irvine, CA

Alexander Acuna, Isla Vista, CA

Dee Leineke, Jackson, CA

Michael Anderson, Jamul, CA

Gillian Parrillo, Kelseyville, CA

Carmela Perez, Kelseyville, CA

Darcy Skarada, Kelseyville, CA

Steve Caramia, Kensington, CA

John Kramer, Kensington, CA

Nicole Bergman, La Canada Flintridge, CA

LouAnne Insprucker, La Canada Flintridge, CA

Nickolaos Mastrodemos, La Canada Flintridge,  
CA

Alison Brett, La Crescenta, CA

Ruth Jones, La Crescenta, CA

Kimberley Moreno, La Crescenta, CA

Ellen Segal, La Crescenta, CA

Linda Wright, La Crescenta, CA

Michael Rodriguez, La Habra, CA

Glenn Jones, La Honda, CA

Nathan Brenner, La Jolla, CA

Sharon Laabs, La Jolla, CA

Michele Lang-Hillyard, La Jolla, CA

Susan Mc Candless, La Jolla, CA

Howard Moss, La Jolla, CA

Dave Paterson, La Jolla, CA

Anita Speier, La Jolla, CA

Elyse Tierney, La Jolla, CA

Joanee Ude, La Jolla, CA

Michael Beam, La Mesa, CA

Sietse Peter Boersma, La Mesa, CA

Robert Buchanan, La Mesa, CA

Christina Jackson, La Mesa, CA

Brenda Thompson, La Mesa, CA

Richard Vestal, La Mesa, CA

Harlan Lebo, La Mirada, CA

David Maraszek, La Mirada, CA

Rodney Mcguire, La Quinta, CA

Claudia Monahan, La Quinta, CA

Rhonda Oliver, La Quinta, CA

Thomas McVay, Ladera Ranch, CA

Aaron Chan, Lafayette, CA

Sakti Das, Lafayette, CA

S Herold, Lafayette, CA

Elsa Ramos, Lafayette, CA

Alice Stauffer, Lafayette, CA

Patricia Appel, Laguna Beach, CA

Stacy Cornelius, Laguna Beach, CA

Daniel Haspert, Laguna Beach, CA

Adam Kaplan, Laguna Beach, CA

Robert Reed, Laguna Beach, CA

Leif Trondsen, Laguna Beach, CA

Margaret White, Laguna Beach, CA

Susan Wood, Laguna Beach, CA

Connie Loveland, Laguna Hills, CA

Phyllis Roberts, Laguna Hills, CA

Steven Allison, Laguna Niguel, CA

Suzanne Fliszar, Laguna Niguel, CA

Karyn Parvis, Laguna Niguel, CA

Lauren Linda, Laguna Woods, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kevin O'Brien, Laguna Woods, CA

Sandra Van Horn, Laguna Woods, CA

David Reddy, Lake Arrowhead, CA

Richard Bejarano, Lake Elsinore, CA

Charles Decelles, Lake Elsinore, CA

Sean Brien, Lake Forest, CA

Bruce Cook, Lake Forest, CA

Bonnie Coomes, Lake Forest, CA

Shelley Logan, Lake Forest, CA

Darnell Montejano, Lake Forest, CA

Carman Broderick, Lakeport, CA

Patrick Bernardino, Lakeside, CA

Robert L Davenport, Lakewood, CA

Susan Brisby, Lancaster, CA

Patrishia Hodgman, Lancaster, CA

Eric Layton, Larkspur, CA

Rachael Richman, Larkspur, CA

Mona Bourell, Laytonville, CA

Sharon Paltin, Laytonville, CA

Ked Garden, Lemon Grove, CA

Jessica Fleischer, Lincoln, CA

Nicole Fountain, Lincoln, CA

Gail Marculescu, Lincoln, CA

Peggy Galusha, Live Oak, CA

Patricia MacLeod, Livermore, CA

Leo Mara, Livermore, CA

Sally Marone, Livermore, CA

Jerri Mcvicker, Livermore, CA

Stephen Stradling, Livermore, CA

Cindy Lashbrook, Livingston, CA

Elizabeth Eisenbeis, Lodi, CA

Audrey Lee, Lodi, CA

Patricia Maddock, Lodi, CA

Maribeth Ackerman, Lomita, CA

Mary Cook, Lomita, CA

Lise Fillion, Lomita, CA

Wendy Becker, Long Beach, CA

Frederick Cliver, Long Beach, CA

Thomas Crochet, Long Beach, CA

Kurt Cruger, Long Beach, CA

John Diaz, Long Beach, CA

Vanessa Dolan, Long Beach, CA

Mary Flint, Long Beach, CA

Debbie Flores, Long Beach, CA

Cheryl Follett, Long Beach, CA

Tamra Goris, Long Beach, CA

William Harte, Long Beach, CA

Genie Ideman, Long Beach, CA

Gail Karn, Long Beach, CA

Andrew Kort, Long Beach, CA

Gene Kumagai, Long Beach, CA

David Means, Long Beach, CA

Janmei Murdock, Long Beach, CA

Michsel Newey, Long Beach, CA

Greg Perkins, Long Beach, CA

Gail Powers, Long Beach, CA

Stanley Seeman, Long Beach, CA

Lance Smith, Long Beach, CA

Mark Sullivan, Long Beach, CA

Ryan Tilke, Long Beach, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Raymond Kraft, Loomis, CA

Sandy Friedman, Los Alamitos, CA

Tamara Madison, Los Alamitos, CA

Janice Apol, Los Altos, CA

Linda Brummer, Los Altos, CA

Gloria Dralla, Los Altos, CA

Linnea F, Los Altos, CA

Tracy Gibbons, Los Altos, CA

Kinshuk Govil, Los Altos, CA

Isabel Lee, Los Altos, CA

Jill Stone, Los Altos, CA

Leslie Abbott, Los Angeles, CA

Asad Abidi, Los Angeles, CA

Scott Acord, Los Angeles, CA

Marsha Alperin, Los Angeles, CA

Ernesto Alvarez, Los Angeles, CA

Richard Alvidrez, Los Angeles, CA

Stan Alvidrez, Los Angeles, CA

Raul Anorve, Los Angeles, CA

Raymond Aramburu, Los Angeles, CA

Thais Arata, Los Angeles, CA

Claudine Armand, Los Angeles, CA

Erika Armin, Los Angeles, CA

Lori Avalos, Los Angeles, CA

Soraya Barabi, Los Angeles, CA

Ann Bein, Los Angeles, CA

Linda Benjamin, Los Angeles, CA

Nancy Berman, Los Angeles, CA

Adam Bernstein, Los Angeles, CA

Mike Bievenouer, Los Angeles, CA

Vicki Bingo, Los Angeles, CA

Rollin Blanton, Los Angeles, CA

Paula Block-Levor, Los Angeles, CA

Jonathand Bogdanove, Los Angeles, CA

Daniel Boland, Los Angeles, CA

Deirdre Boland, Los Angeles, CA

David Bottrell, Los Angeles, CA

Julia Boyd, Los Angeles, CA

Mark Bramhall, Los Angeles, CA

Susan Brenner, Los Angeles, CA

Barbara Broide, Los Angeles, CA

Marcello Bue, Los Angeles, CA

Robert Burk, Los Angeles, CA

Thomas Cahill, Los Angeles, CA

Lisa Carloss, Los Angeles, CA

Melissa Casey, Los Angeles, CA

Victor Citrin, Los Angeles, CA

Jacob Combs, Los Angeles, CA

Steven Curtis, Los Angeles, CA

Sandra Del Castillo, Los Angeles, CA

Frank Devlin, Los Angeles, CA

Garry Diamond, Los Angeles, CA

Vicki Dipietro, Los Angeles, CA

Lance Dodes, Los Angeles, CA

Isabelle Du Soleil, Los Angeles, CA

Jan Ducker, Los Angeles, CA

Scott Dunfrund, Los Angeles, CA

Connie Eakes, Los Angeles, CA

Chris Eaton, Los Angeles, CA

Frederick Echeverria, Los Angeles, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joe Eckre, Los Angeles, CA  
Susan Estrella, Los Angeles, CA  
Dominick Falzone, Los Angeles, CA  
Alexander Fierro-Clarke, Los Angeles, CA  
Sean Foley, Los Angeles, CA  
Robert Frcek, Los Angeles, CA  
Cynthia Freeman, Los Angeles, CA  
Elly Fry, Los Angeles, CA  
Kristina Fukuda, Los Angeles, CA  
Leslie Fung, Los Angeles, CA  
Kay Gallin, Los Angeles, CA  
Eugene Garvin, Los Angeles, CA  
Terri Gedo, Los Angeles, CA  
Chelsea Gilmore, Los Angeles, CA  
Mary Glazer, Los Angeles, CA  
Prisca Gloor, Los Angeles, CA  
Jan Goldstein, Los Angeles, CA  
Beth Goode, Los Angeles, CA  
Luna Gooding, Los Angeles, CA  
Carol Gordon, Los Angeles, CA  
Andrea Grano, Los Angeles, CA  
Cheryl Guerbaoui, Los Angeles, CA  
Megan Hanson, Los Angeles, CA  
Matthew Harrington, Los Angeles, CA  
William Hartung, Los Angeles, CA  
Mary Herbener, Los Angeles, CA  
Julie Hermelin, Los Angeles, CA  
Jim Hillin, Los Angeles, CA  
Deborah Holcomb, Los Angeles, CA  
Carla Holguin, Los Angeles, CA

Steffeny Holtz, Los Angeles, CA  
Merri Huang, Los Angeles, CA  
Cynthia Hudley, Los Angeles, CA  
Melissa Hunt, Los Angeles, CA  
Faisal Hussain, Los Angeles, CA  
Shigeyo Hyman, Los Angeles, CA  
Lara Ingraham, Los Angeles, CA  
Matthew Jablin, Los Angeles, CA  
Michelle Jackino, Los Angeles, CA  
Angie Johnson, Los Angeles, CA  
James Johnson, Los Angeles, CA  
Marlene Josephs, Los Angeles, CA  
Michelle Kawata, Los Angeles, CA  
Kaija Keel, Los Angeles, CA  
Aeolan Kelly, Los Angeles, CA  
Jon Kinnally, Los Angeles, CA  
Julie Klabin, Los Angeles, CA  
Rebecca Klarin, Los Angeles, CA  
Ann Kowaleski, Los Angeles, CA  
Kevin Kraus, Los Angeles, CA  
Francine Kubrin, Los Angeles, CA  
Anita Kuhn, Los Angeles, CA  
lyn kupferman, Los Angeles, CA  
Jean Lace, Los Angeles, CA  
Diane Lamont, Los Angeles, CA  
Edward Landler, Los Angeles, CA  
Jacob Lang, Los Angeles, CA  
Patrice Laponce, Los Angeles, CA  
Seth Laursen, Los Angeles, CA  
Terrie Lavery, Los Angeles, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Linda Leckart, Los Angeles, CA

Daniel Ledesam, Los Angeles, CA

Deborah Levine, Los Angeles, CA

Janice Levine, Los Angeles, CA

Paula Levy, Los Angeles, CA

Tracey Levy, Los Angeles, CA

Marie Lewis, Los Angeles, CA

Helena Lipstadt, Los Angeles, CA

Robin Long, Los Angeles, CA

Alexandria Luostari, Los Angeles, CA

Anthony M Ramey, Los Angeles, CA

Arnold Magid, Los Angeles, CA

James Mahan, Los Angeles, CA

Jennifer Mandel, Los Angeles, CA

Ann Marable, Los Angeles, CA

Tina Markowe, Los Angeles, CA

Linda Martinez, Los Angeles, CA

Casee Maxfield, Los Angeles, CA

Blythe Mayne, Los Angeles, CA

Patrica Mcanally, Los Angeles, CA

Karen McCaw, Los Angeles, CA

Shereen McDade, Los Angeles, CA

Scott Mckinsey, Los Angeles, CA

Gail McMullen, Los Angeles, CA

Robert Meier, Los Angeles, CA

Myron Meisel, Los Angeles, CA

Barbara Mesney, Los Angeles, CA

Jeremy Miller, Los Angeles, CA

John Miller, Los Angeles, CA

Eddie Mirman, Los Angeles, CA

Maria Molund, Los Angeles, CA

Curtis Mortenson, Los Angeles, CA

Meg Murphy, Los Angeles, CA

Joan Murray, Los Angeles, CA

Anna Narysheva, Los Angeles, CA

Anthony Navarrete, Los Angeles, CA

Winifred Neisser, Los Angeles, CA

Carol Ng, Los Angeles, CA

James Nicholas, Los Angeles, CA

Nan Norris, Los Angeles, CA

Krister Olsson, Los Angeles, CA

Frank Ortiz, Los Angeles, CA

Michelle Pazer, Los Angeles, CA

David Pelka, Los Angeles, CA

John Perry, Los Angeles, CA

Michael Price, Los Angeles, CA

Louis Priven, Los Angeles, CA

Mark Rachki, Los Angeles, CA

Luvh Rakhe, Los Angeles, CA

Nina Richmond, Los Angeles, CA

Jeff Richter, Los Angeles, CA

Merete Rietveld, Los Angeles, CA

Candace Rocha, Los Angeles, CA

Martha Ronk, Los Angeles, CA

Valerie Rose, Los Angeles, CA

Brandon Ruiz, Los Angeles, CA

Dalia Salgado, Los Angeles, CA

Nina Savill, Los Angeles, CA

Darby Saxbe, Los Angeles, CA

Jeffrey Sayers, Los Angeles, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Alisha Seaton, Los Angeles, CA

Lisa Sergy, Los Angeles, CA

Eric Shabsis, Los Angeles, CA

Mariam Shah-Rais, Los Angeles, CA

Theodore Shapiro, Los Angeles, CA

Susan Shaughnessy, Los Angeles, CA

A.F. Shayne, Los Angeles, CA

Rick Siegel, Los Angeles, CA

Marc Silverman, Los Angeles, CA

Elizabeth Singleton, Los Angeles, CA

Jerry Sisneros, Los Angeles, CA

Erica Smith, Los Angeles, CA

Valeece Smith, Los Angeles, CA

Stanley Stahl, Los Angeles, CA

Paul Steel, Los Angeles, CA

Neal Steiner, Los Angeles, CA

Julie Tan, Los Angeles, CA

Francine Tansey, Los Angeles, CA

Donna Tate, Los Angeles, CA

Cathy Thornburn, Los Angeles, CA

Aja Thrasher, Los Angeles, CA

Glenna Traiger, Los Angeles, CA

Ivy Tran, Los Angeles, CA

Dennis Tufano, Los Angeles, CA

Graham Turner, Los Angeles, CA

Tara Turner, Los Angeles, CA

Mary Urrutia, Los Angeles, CA

Nicholas Vanbrunt, Los Angeles, CA

Alvaro Vega, Los Angeles, CA

Alexandra Ward, Los Angeles, CA

Mack Watson, Los Angeles, CA

Mary Weeks, Los Angeles, CA

Lindsey Weinstein, Los Angeles, CA

Michael White, Los Angeles, CA

Peter White, Los Angeles, CA

Deborah Willis, Los Angeles, CA

Maggie Wineburgh-Freed, Los Angeles, CA

Sidney Winston, Los Angeles, CA

Michael Wolfson, Los Angeles, CA

Lacey Wozny, Los Angeles, CA

Kelly Wright, Los Angeles, CA

Jenny Yamazaki, Los Angeles, CA

Mary Young, Los Angeles, CA

Noah Youngelson, Los Angeles, CA

Allen Zipper, Los Angeles, CA

ALVEN ANDERSEN, Los Banos, CA

Esther Ciprian, Los Banos, CA

Thomas Ferrito, Los Gatos, CA

Marilyn Fuller, Los Gatos, CA

Lisa Gherardi, Los Gatos, CA

Karole Ishida, Los Gatos, CA

Tim Kain, Los Gatos, CA

Brenda Laurel, Los Gatos, CA

Arlene Lightford, Los Gatos, CA

Whitney Parker, Los Gatos, CA

Mark Parrinello, Los Gatos, CA

Peter Bresler, Los Osos, CA

Jacqueline Froehlich-Lheureaux, Los Osos, CA

Lesley McCance, Los Osos, CA

Pamela Morrison, Los Osos, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Judy Madigan, Loyalton, CA  
Samuel Clark, Magalia, CA  
Lucia Castaneda, Malibu, CA  
Deborah Collodel, Malibu, CA  
Marilyn Green, Malibu, CA  
Cliff Selbert, Malibu, CA  
Rob Seltzer, Malibu, CA  
D.G. Sifuentes, Mammoth Lakes, CA  
John Clifford, Manhattan Beach, CA  
Joe Flanagan, Manhattan Beach, CA  
Joanne Hadley, Manhattan Beach, CA  
Marisa Landsberg, Manhattan Beach, CA  
John Miller, Manhattan Beach, CA  
Orlando Aguilar, Manteca, CA  
Rene Cabrera, Manteca, CA  
Kathi Fotinos, Manteca, CA  
Linda Gordin, Manteca, CA  
Pia Baker, Marina, CA  
Henry Bergstresser, Marina, CA  
Colette Erreca-Norris, Marina, CA  
Trudy Goodman, Marina Del Rey, CA  
Leean Lantos, Marina Del Rey, CA  
Steven Mandel, Marina Del Rey, CA  
Margaret Morris, Marina Del Rey, CA  
Cathy Nadell, Marina Del Rey, CA  
Robert Pool, Marina Del Rey, CA  
Donald Newman, Mariposa, CA  
Dianna Mitzner, Markleeville, CA  
Leonard Miller, Martinez, CA  
Margaret Netherby, Martinez, CA

Kris Skow, Martinez, CA  
Robin Hamlin, McKinleyville, CA  
Jimmie Oneal, Meadow Valley, CA  
Kimberly Berryman, Meadow Vista, CA  
Raven Deerwater, Mendocino, CA  
Rob Gallinger, Menifee, CA  
Keith Williams, Menifee, CA  
William Brown, Menlo Park, CA  
Nancy Federspiel, Menlo Park, CA  
Erin Gillett, Menlo Park, CA  
Sam Karp, Menlo Park, CA  
Hunter Lyng, Menlo Park, CA  
Christina McClure, Menlo Park, CA  
Janet Poses, Menlo Park, CA  
Mark Reed, Menlo Park, CA  
Vickie Rozell, Menlo Park, CA  
Suzan Syrett, Menlo Park, CA  
Kyle Vogel, Menlo Park, CA  
Odessa Osby, Merced, CA  
Connie Wright, Merced, CA  
J Trudnich, Midway City, CA  
Larry Bathgate, Mill Valley, CA  
Joslyn Baxter, Mill Valley, CA  
Carl Bidleman, Mill Valley, CA  
Maria Brown, Mill Valley, CA  
Catherine Chute, Mill Valley, CA  
David Donenfeld, Mill Valley, CA  
Diane Goldman, Mill Valley, CA  
Jane Hall, Mill Valley, CA  
Arlene Heitner, Mill Valley, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Nancy Kehoe, Mill Valley, CA  
Ann Lawrence, Mill Valley, CA  
Natalie Lenn, Mill Valley, CA  
Sarah Maddix, Mill Valley, CA  
Antonina Markoff, Mill Valley, CA  
Catherine Moreno, Mill Valley, CA  
Roberta Newman, Mill Valley, CA  
Simon Perkoff, Mill Valley, CA  
Marilyn Price, Mill Valley, CA  
Sherry Reson, Mill Valley, CA  
Daniel Stewart, Mill Valley, CA  
Frank Valone, Mill Valley, CA  
Gary Vanacker, Mill Valley, CA  
Dianna Taylor, Millbrae, CA  
Brenda Rodriguez, Mission Hills, CA  
Timothy Haney, Mission Viejo, CA  
Lorrie Rudolph, Mission Viejo, CA  
Lollie Christner, Modesto, CA  
Amber Eby, Modesto, CA  
Karen Lynas, Modesto, CA  
Derek Scholten, Modesto, CA  
Dennis And Andrea Hopkins, Monrovia, CA  
Donna Alleyne-Chin, Montara, CA  
Sandra McColley, Montclair, CA  
Ruth Alota, Monterey, CA  
Deb Federin, Monterey, CA  
Steven Hall, Monterey, CA  
Lauren Leonarduzzi, Monterey, CA  
Donna Owens, Monterey, CA  
Niccole Tiffany, Monterey, CA

Stephen Vicuna, Monterey Park, CA  
Karen Drake, Montrose, CA  
Cheri Bly, Moorpark, CA  
Patricia Connors, Moorpark, CA  
Christine Holmes, Moorpark, CA  
Kathryn Choudhury, Moraga, CA  
Ashley Coates, Moraga, CA  
Greg Tomlin, Moraga, CA  
Mary West, Moraga, CA  
David DANIEL, Moreno Valley, CA  
Sandra Wilcox, Moreno Valley, CA  
Cynthia Burnham, Morgan Hill, CA  
Paula Diederich, Morgan Hill, CA  
Kathy Farrell, Morgan Hill, CA  
Janet Hagemann, Morgan Hill, CA  
Martin Smallen, Morgan Hill, CA  
Nancy Carter, Morro Bay, CA  
Genevieve Holloway, Morro Bay, CA  
Larry Truesdale, Morro Bay, CA  
Cheryl Parker, Moss Beach, CA  
Denise Phillips, Moss Beach, CA  
Michelle Santy, Moss Beach, CA  
Jim Curland, Moss Landing, CA  
Jennifer Roach, Mount Shasta, CA  
Alice Rogers, Mount Shasta, CA  
Paul Blumenstein, Mountain View, CA  
Judith Butts, Mountain View, CA  
Kermit Cuff, Mountain View, CA  
Bruce England, Mountain View, CA  
Marie Evitt, Mountain View, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Linda Freccia, Mountain View, CA

Diana Hall, Mountain View, CA

Amy Laden, Mountain View, CA

Rachel Loui, Mountain View, CA

Ben Martin, Mountain View, CA

Katherine Rivera, Mountain View, CA

Dinmani Savla, Mountain View, CA

Robert Valenti, Mountain View, CA

Julie Watt, Mountain View, CA

D Cameron Sellar, Murphys, CA

Susan Horne, Murrieta, CA

Anisa Johnson, Murrieta, CA

Kay Lieber, Murrieta, CA

Ana Rial, Murrieta, CA

Anna Starbuck-White, Murrieta, CA

Martha Treckman, Murrieta, CA

Janet Wheeler, Murrieta, CA

Jerrold Baker, Napa, CA

Kathy Bliss, Napa, CA

Jeff Conklin, Napa, CA

Kathy Cramer, Napa, CA

Ellen Gachesa, Napa, CA

Joe Gonzales, Napa, CA

Charesa Harper, Napa, CA

Donna Holt, Napa, CA

Timothy Milos, Napa, CA

Linda Newberry, Napa, CA

Julie Owen, Napa, CA

John Reichel, Napa, CA

Susan Sandler, Napa, CA

Evelyn Trevethan, Napa, CA

Jacob Wolbert, Napa, CA

Moana Moeller, National City, CA

Micki Besancon, Nevada City, CA

Michael Garitty, Nevada City, CA

Scott Howard, Nevada City, CA

Lester Milroy, Nevada City, CA

Glenn Smith, Nevada City, CA

Christine Fisher, Newark, CA

Lyla Diaz, Newbury Park, CA

Chantal Ferguson, Newbury Park, CA

Audrey Greene, Newbury Park, CA

Doug Kingery, Newbury Park, CA

Sylvia Lewis Gunning, Newbury Park, CA

Cindy Stein, Newbury Park, CA

Steve Iverson, Newport Beach, CA

Joyce Meyers, Newport Beach, CA

Vic Paglia, Newport Beach, CA

Dan Rossen, Newport Beach, CA

Shala Shamardi, Newport Beach, CA

Robin Williams, Nicasio, CA

Stephanie Aston, North Hills, CA

Christopher Geukens, North Hills, CA

Natalie Aharonian, North Hollywood, CA

Andrea Dundas, North Hollywood, CA

Steven Meissner, North Hollywood, CA

Fjaere Mooney, North Hollywood, CA

Llyn Parker, North Hollywood, CA

Dennis Brue, Northridge, CA

Randy Harken, Northridge, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Parker, Northridge, CA  
Janis CARROLL, Novato, CA  
Mike Cass, Novato, CA  
Orrin Cook, Novato, CA  
Adrian Fried, Novato, CA  
michael griffin, Novato, CA  
William Hoffman, Novato, CA  
Marisa Hoke, Novato, CA  
Daniel Kemp, Novato, CA  
Mary Mixter, Novato, CA  
Nancy Parker, Novato, CA  
Marianna Riser, Novato, CA  
Maija Schaefer, Novato, CA  
Allan Young, Novato, CA  
Carl Bage, Oak Park, CA  
Paul Kleinbaum, Oak Park, CA  
Enid Miller, Oak Park, CA  
helen conly, Oak View, CA  
Lindsey Goosherst, Oakdale, CA  
Bonnie Thompson, Oakdale, CA  
Scott Amundson, Oakland, CA  
Patrice Anderson, Oakland, CA  
cindy beckley, Oakland, CA  
Thomas Borders, Oakland, CA  
Linda Brandon, Oakland, CA  
Ruth Brousseau, Oakland, CA  
Sarah Cathey, Oakland, CA  
Shelley Charney, Oakland, CA  
Elizabeth Christian, Oakland, CA  
Daniel Clanon, Oakland, CA

Barbara Clark, Oakland, CA  
Karen Clayton, Oakland, CA  
Anne Corcos, Oakland, CA  
Devin Coyle, Oakland, CA  
Joseph Dashiell, Oakland, CA  
Kai Drekmeier, Oakland, CA  
Anya Dubin, Oakland, CA  
Judith Ennis, Oakland, CA  
Nancy Erb, Oakland, CA  
Jean Farooki, Oakland, CA  
Jemima Farwell, Oakland, CA  
Susan Flakus, Oakland, CA  
Marcia Flannery, Oakland, CA  
Jon Floyd, Oakland, CA  
Denise Forant, Oakland, CA  
Dr A G, Oakland, CA  
Kenneth Gibson, Oakland, CA  
John Golding, Oakland, CA  
Joan Gombos, Oakland, CA  
Doug Gwosdz, Oakland, CA  
Henry Harmon, Oakland, CA  
Ann Harvey, Oakland, CA  
Carol Haskell, Oakland, CA  
Karl Heins, Oakland, CA  
Nancy Huneke, Oakland, CA  
Amy Johnson, Oakland, CA  
Christine Kalb, Oakland, CA  
Laakea Laano, Oakland, CA  
Mark Lecker, Oakland, CA  
Cheryl Levin, Oakland, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joseph Maffei, Oakland, CA

Diana Malloy, Oakland, CA

Caephren McKenna, Oakland, CA

Susan Mclean, Oakland, CA

Merrilee Mitchell, Oakland, CA

Sandra Morey, Oakland, CA

Jann Noddin, Oakland, CA

Alicea Osborne, Oakland, CA

Julie Ouellette, Oakland, CA

Nancy Paskowitz, Oakland, CA

Ikaren Payne, Oakland, CA

Catherine Pennington, Oakland, CA

Micaela Pronio, Oakland, CA

Barbara Richmon, Oakland, CA

Karen Riley, Oakland, CA

Carly Ritter, Oakland, CA

Nancy Rowell, Oakland, CA

Gina Sanfilippo, Oakland, CA

Rondi Saslow, Oakland, CA

William Saul, Oakland, CA

Lesley Schultz, Oakland, CA

Judith Smith, Oakland, CA

Leslie Smith, Oakland, CA

Leslie Smith, Oakland, CA

Deborah Song, Oakland, CA

Emily Sparks, Oakland, CA

Gaylen Stirton, Oakland, CA

Laura Tan, Oakland, CA

Leslie Tenney, Oakland, CA

Dena Thaler, Oakland, CA

Nadya Tichman, Oakland, CA

Ruth Tretbar, Oakland, CA

Marge Turngren, Oakland, CA

Virginia Vida, Oakland, CA

Pablo Voitzuk, Oakland, CA

Mary Watkins, Oakland, CA

Sally Weare, Oakland, CA

Jessica Weida, Oakland, CA

Gail Weininger, Oakland, CA

Marie Whidden, Oakland, CA

Patrice Woeppel, Oakland, CA

Aaron Young, Oakland, CA

Margaret Zhou, Oakland, CA

Donald Betts, Oceanside, CA

Alessandra Colfi, Oceanside, CA

Sarah Crooks, Oceanside, CA

Linda Evans, Oceanside, CA

Andrea Ferrari, Oceanside, CA

Holly Gilzow, Oceanside, CA

Charmaine Hicks, Oceanside, CA

Ronnie Huber, Oceanside, CA

Beverly Kanawi, Oceanside, CA

Ronald Mirolla, Oceanside, CA

Barry Ortega, Oceanside, CA

Ivy Pratt, Oceanside, CA

Michael Price, Oceanside, CA

Donna Taylor, Oceanside, CA

Sharon Engel, Ojai, CA

Stephan Foley, Ojai, CA

Joseph Gilbert, Ojai, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cindy Kosinski, Ojai, CA  
Brooke Obrien, Ojai, CA  
Rebecca Windinwood, Ojai, CA  
Valerie Shideler, Olivehurst, CA  
Zahra Mansouri, Olympic Valley, CA  
Kelly Ayers, Ontario, CA  
Kathy Simington, Ontario, CA  
Richard Wiles, Ontario, CA  
Danett Abbott-Wicker, Orange, CA  
Florice Hoffman, Orange, CA  
Ellen Jordan, Orange, CA  
Tammy Vigiletti, Orange, CA  
Nancy Polito, Orangevale, CA  
Lynne Thomson, Orangevale, CA  
Diane Bianchi, Orinda, CA  
Alan Goldhammer, Orinda, CA  
Lucy Henderson, Orinda, CA  
Nancy Henderson, Orinda, CA  
Lynn Kalmar, Orinda, CA  
Lindy Novak, Orinda, CA  
Eileen Taglang, Orinda, CA  
Phil Chandler, Oxnard, CA  
Kim Haley, Oxnard, CA  
Ivan Mendez, Oxnard, CA  
Lauren Mendez, Oxnard, CA  
Maree Penhart, Oxnard, CA  
Jeannie Pollak, Oxnard, CA  
Susan Porteus, Oxnard, CA  
Nancy Bainter, Pacific Grove, CA  
Margaret Goodman, Pacific Grove, CA

Melissa Hutchinson, Pacific Grove, CA  
Celia Stauty Luis, Pacific Grove, CA  
Paul Burkhart, Pacific Palisades, CA  
Josephine Chen, Pacific Palisades, CA  
Tatsinda Doddscohen, Pacific Palisades, CA  
Melanie Green, Pacific Palisades, CA  
Waldemar Kalinowski, Pacific Palisades, CA  
Vienna Nowell, Pacific Palisades, CA  
Gerald Offsay, Pacific Palisades, CA  
Timothy Phan, Pacific Palisades, CA  
Pat Polinger, Pacific Palisades, CA  
Jeanette Ryan, Pacific Palisades, CA  
Cathleen Sands, Pacific Palisades, CA  
Teresa Lang, Pacific Plsds, CA  
Grace Garza, Pacifica, CA  
Paul Spakowski, Pacifica, CA  
Jeremy Aldridge, Pacoima, CA  
Dita Æ. Æ kaliÃ,, Â• , Palm Desert, CA  
Bonnie Bauman, Palm Desert, CA  
Katy Kane, Palm Desert, CA  
Joseph Anatra, Palm Springs, CA  
Elizabeth Ingersoll, Palm Springs, CA  
Bill Munce, Palm Springs, CA  
Michelle Palladine, Palm Springs, CA  
Kathleen Taggart, Palm Springs, CA  
Therese Ryan, Palmdale, CA  
Albert Bivas, Palo Alto, CA  
Jordan Briskin, Palo Alto, CA  
Ana Chou, Palo Alto, CA  
Sue Dinwiddie, Palo Alto, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Madeline Dirado, Palo Alto, CA  
Faith Gibson, Palo Alto, CA  
Christine James, Palo Alto, CA  
Zahra Kassam, Palo Alto, CA  
Nancy Kramer, Palo Alto, CA  
Divanny Lamas, Palo Alto, CA  
Evan Lurie, Palo Alto, CA  
Peter Moffat, Palo Alto, CA  
Thomas Patterson, Palo Alto, CA  
David Perry, Palo Alto, CA  
Jack Pines, Palo Alto, CA  
Margaret Rosenbloom, Palo Alto, CA  
Cindy Siu, Palo Alto, CA  
Robin Benezra, Palos Verdes Peninsula, CA  
Jan Gardner, Palos Verdes Peninsula, CA  
Katherine Greenberg, Palos Verdes Peninsula, CA  
Craig Dawson, Paradise, CA  
Joan Aebi, Pasadena, CA  
Catherine Beauchamp, Pasadena, CA  
Sandra Bendon, Pasadena, CA  
Maria Sol Caro Martini, Pasadena, CA  
Linc Conard, Pasadena, CA  
April Danz, Pasadena, CA  
George Elder, Pasadena, CA  
Laura Fleming, Pasadena, CA  
Robert Gibbs, Pasadena, CA  
Gary Green, Pasadena, CA  
Francisco Ochoa, Pasadena, CA  
Leisa Onzo, Pasadena, CA

Matthew Owen, Pasadena, CA  
Jeremy Polgar, Pasadena, CA  
Charles Roth, Pasadena, CA  
Joseph Salinas, Pasadena, CA  
Erica Spier, Pasadena, CA  
Grayson Torgersen, Pasadena, CA  
Susan Walp, Pasadena, CA  
Eric Beaulieu, Paso Robles, CA  
Gaye Torjusen, Penn Valley, CA  
Tyrone Johnson, Perris, CA  
Rebecca Smith, Perris, CA  
Jeanne Martin, Pescadero, CA  
Elizabeth Ambrosi, Petaluma, CA  
Scott Andrews, Petaluma, CA  
Tom Bornheimer, Petaluma, CA  
Mary Fazekas, Petaluma, CA  
Patti Fink, Petaluma, CA  
Phoenix Giffen, Petaluma, CA  
David Keller, Petaluma, CA  
Rachel Lucine, Petaluma, CA  
Annette Raible, Petaluma, CA  
Wrenn Rittenhouse, Petaluma, CA  
M. Steere, Petaluma, CA  
Jane Vosburg, Petaluma, CA  
Barry Weinzveg, Petaluma, CA  
Justine Zang, Petaluma, CA  
Debra Valenzuela, Pico Rivera, CA  
James Chanin, Piedmont, CA  
John Hardgrove, Piedmont, CA  
Janice Foss, Pinole, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joan Nygaard, Pinole, CA  
Pamela Suess, Pinole, CA  
Marjorie Kearns, Pinon Hills, CA  
janet hergamo, Piru, CA  
Bob Leppo, Pismo Beach, CA  
Lisa Hardesty, Pittsburg, CA  
William Ninde, Pittsburg, CA  
Candy Bowman, Placerville, CA  
David Hess, Placerville, CA  
Mike Rolbeck, Placerville, CA  
Rob Doucette, Playa del Rey, CA  
Gerda Gober, Playa Vista, CA  
Lisa Nelson Colton, Playa Vista, CA  
Karen Castle, Pleasant Hill, CA  
Nathalie Musson, Pleasant Hill, CA  
Shari Riffe, Pleasant Hill, CA  
Marie Silva, Pleasant Hill, CA  
John Yavorsky, Pleasant Hill, CA  
Linda Wong, Pleasanton, CA  
Ken Lake, Pollock Pines, CA  
Linda Watson, Pomona, CA  
Roxann Schaubhut, Pope Valley, CA  
Daniel Vargas, Port Hueneme, CA  
Frances Goodsite, Porter Ranch, CA  
Curtis Miller, Porter Ranch, CA  
Kristi Somers-Kawas, Porter Ranch, CA  
Wanda Salaiz, Porterville, CA  
Malcolm Moore, Portola, CA  
Tracy Sherman, Portola Valley, CA  
Birgitte Moyer, Portola Vally, CA

Mary Callan, Poway, CA  
Laura Flynn, Poway, CA  
Beverly Greene, Poway, CA  
Linda Rhine, Quail Valley, CA  
Faith Strailey, Quincy, CA  
Tammy Bullock, Ramona, CA  
Jeanette Worland, Ramona, CA  
Dale Wright, Ramona, CA  
Karyn Wagman, Rancho Cordova, CA  
Antoinette Anderson, Rancho Cucamonga, CA  
Miriam Baum, Rancho Cucamonga, CA  
Frederick Hamilton, Rancho Cucamonga, CA  
Michael Herbert, Rancho Cucamonga, CA  
Dianna McNair, Rancho Cucamonga, CA  
Vickie Reedy, Rancho Cucamonga, CA  
Laura Saint Martin, Rancho Cucamonga, CA  
Katina Vlastos, Rancho Cucamonga, CA  
Pete Childs, Rancho Mirage, CA  
Richard Gonzales, Rancho Mirage, CA  
John Varga, Rancho Mirage, CA  
Judy Bradford, Rancho Palos Verdes, CA  
Mary Schneider, Rancho Palos Verdes, CA  
Linda Webb, Rancho Palos Verdes, CA  
Kathy Dougherty, Rancho Santa Fe, CA  
Craig Fenech, Rancho Santa Fe, CA  
Allyson Finkel, Rancho Santa Margarita, CA  
Dionne Hofmeister, Rch Cucamonga, CA  
Yvonne Olivares, Rch Cucamonga, CA  
Susan Thompson, Rcho Sta Marg, CA  
Susan Emerson, Redding, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joyce Harris, Redding, CA

James Hastings, Redding, CA

Ann Lougee, Redding, CA

Neal Malmsten, Redding, CA

Andrea Dixon, Redlands, CA

Sean Hagstrom, Redlands, CA

Jayne Miller, Redlands, CA

Rhonda Stanton, Redlands, CA

Tracy Wise, Redlands, CA

Doug Bender, Redondo Beach, CA

Jade Hall, Redondo Beach, CA

Kathleen Jacecko, Redondo Beach, CA

Craig Masuoka, Redondo Beach, CA

Alie Rowen, Redondo Beach, CA

Don Schlossman, Redondo Beach, CA

Dayla Sims, Redondo Beach, CA

Kate Ashley, Redwood City, CA

Juliann Berman, Redwood City, CA

Kerry Boyd, Redwood City, CA

Daryl Carr, Redwood City, CA

Tiki Dare, Redwood City, CA

Lisa Gruman, Redwood City, CA

Jeffrey Hayden, Redwood City, CA

Thalia Lubin, Redwood City, CA

Elyce Melmon, Redwood City, CA

Bruce Storms, Redwood City, CA

John West, Redwood City, CA

Jeff Box, Redwood Valley, CA

Alisha Bettinsoli, Reedley, CA

Jl Angell, Rescue, CA

Rosa Baeza, Reseda, CA

Eugenia Buerklin, Reseda, CA

Christine Douglass, Reseda, CA

Sheila Fox, Reseda, CA

Katharine Greenebaum, Reseda, CA

Carlos Nunez, Reseda, CA

Bret Polish, Reseda, CA

Sandra Angell, Richmond, CA

Nancy Donald, Richmond, CA

Johanna Ferman, Richmond, CA

Robert Knorr, Richmond, CA

Kevin McKay, Richmond, CA

BILL PINKHAM, Richmond, CA

B Sandow, Richmond, CA

Michael Sholinbeck, Richmond, CA

Robert Thomas, Richmond, CA

Carol Dezellem, Ridgecrest, CA

Penelope LePome, Ridgecrest, CA

Pat Marshall, Rio Linda, CA

Bonnie Arbuckle, Riverbank, CA

Mike Acosta, Riverside, CA

Sherri Baker, Riverside, CA

Kay Downer, Riverside, CA

Ed Garcia, Riverside, CA

Michael Harrop, Riverside, CA

Susan Hemsley, Riverside, CA

Julie Holdridge-Prado, Riverside, CA

Patricia Knox, Riverside, CA

Catherine Mason, Riverside, CA

Pamela Mcdonald, Riverside, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Henry Rosenfeld, Riverside, CA  
Pam Schmitt, Riverside, CA  
James Toland, Riverside, CA  
Nisa Wallace, Riverside, CA  
Bernard Waltzer, Riverside, CA  
Reta Davis, Rocklin, CA  
Daniel McKeighen, Rocklin, CA  
Elaine Wander Leclair, Rodeo, CA  
Alan Bosch, Rohnert Park, CA  
Denise Brown, Rohnert Park, CA  
Sandra Lee, Rohnert Park, CA  
Susan Ott, Rohnert Park, CA  
Lawrence Joe, Rosemead, CA  
Abigail Davis, Roseville, CA  
Natalie Grand, Roseville, CA  
Glenda Hay, Roseville, CA  
Jamie Smith, Roseville, CA  
Ann Wasgatt, Roseville, CA  
Stephanie Legras, Ross, CA  
Helen Hooper, Rumsey, CA  
Shalomar Loving, Running Springs, CA  
Henryk Flashner, S Pasadena, CA  
Anders Olsson, S Pasadena, CA  
Seth Ackerman, Sacramento, CA  
James Adams, Sacramento, CA  
Todd Bloom, Sacramento, CA  
Robert Boughton, Sacramento, CA  
Maureen Burness, Sacramento, CA  
Faylene Carter, Sacramento, CA  
Sandy Commons, Sacramento, CA

Deborah Cosentino, Sacramento, CA  
Jim Deneff, Sacramento, CA  
Patty Dismukes, Sacramento, CA  
Mary Duplat, Sacramento, CA  
Georgia Econome, Sacramento, CA  
Cindy Ferguson, Sacramento, CA  
Natsuki Fukasawa, Sacramento, CA  
Jody Gordon, Sacramento, CA  
Alan Graham, Sacramento, CA  
Cynthia Gunston-Parks, Sacramento, CA  
Margaret Haines, Sacramento, CA  
Greg Hayes, Sacramento, CA  
Karen Jacques, Sacramento, CA  
Dwayne Johnson, Sacramento, CA  
Barbara Lucas, Sacramento, CA  
Carol Luery, Sacramento, CA  
Marshal McKitrick, Sacramento, CA  
Esther Mooncrest, Sacramento, CA  
Kiara Mowry, Sacramento, CA  
Sharon Nicodemus, Sacramento, CA  
Holly Nightingale, Sacramento, CA  
Jana Perinchief, Sacramento, CA  
Donald Porath, Sacramento, CA  
Stuart Reeves, Sacramento, CA  
Mark Reichel, Sacramento, CA  
Twyla Rowe, Sacramento, CA  
Darlene Ruiz, Sacramento, CA  
Renee Sankus, Sacramento, CA  
Joseph Sebastian, Sacramento, CA  
Fay Slaterp9, Sacramento, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gayle Smith, Sacramento, CA  
Sylvia Star, Sacramento, CA  
Joan Stults, Sacramento, CA  
Theresa Taylor, Sacramento, CA  
Deborah Thomson, Sacramento, CA  
Erh-Yen To, Sacramento, CA  
Ian Turner, Sacramento, CA  
Jillian Unger, Sacramento, CA  
Cara Vallot, Sacramento, CA  
Betty Wright, Sacramento, CA  
Sandra Young, Sacramento, CA  
Elizabeth Novak Milliken, Saint Helena, CA  
Richard Allen, Salinas, CA  
Dale Hillard, Salinas, CA  
David Prina, Salinas, CA  
Catherine Uchiyama, Salinas, CA  
Roseann Dal Bello, San Anselmo, CA  
Sherry Freeman, San Anselmo, CA  
Zoe Harris, San Anselmo, CA  
Catherine Loudis, San Anselmo, CA  
Sheila Mcclear, San Anselmo, CA  
Julia Riboli, San Anselmo, CA  
Genevieve Richardson, San Anselmo, CA  
Paula Spencer, San Anselmo, CA  
Bret Walburg, San Anselmo, CA  
April Wolcott, San Anselmo, CA  
Kristin Womack, San Anselmo, CA  
Deborah Bayne, San Bernardino, CA  
Eileen Bordy, San Bruno, CA  
Daniel Carrillo, San Bruno, CA

Elisse De Sio, San Carlos, CA  
George Ruiz, San Carlos, CA  
Anne Tartaglia, San Carlos, CA  
Lori Avakian, San Clemente, CA  
Kevin Bissonnette, San Clemente, CA  
Dennis Bright, San Clemente, CA  
Maryann LaNew, San Clemente, CA  
Marcela Vizcaya, San Clemente, CA  
Terri Wiley, San Clemente, CA  
Natalie Addleson, San Diego, CA  
Kimberly Alexander, San Diego, CA  
John Anderson, San Diego, CA  
Ian Bates, San Diego, CA  
Melissa Behar, San Diego, CA  
Victoria Bennett, San Diego, CA  
Sarah Black, San Diego, CA  
Joanne Britton, San Diego, CA  
Bonnie Burke, San Diego, CA  
Shereeliz Caldwell, San Diego, CA  
Suzan Candas, San Diego, CA  
Christopher Chatard, San Diego, CA  
Cecelia Conover, San Diego, CA  
Geoffrey Cook, San Diego, CA  
Andrew Corn, San Diego, CA  
Suzanne Daneshvari, San Diego, CA  
Sandra Dawes, San Diego, CA  
Britton Donaldson, San Diego, CA  
Sami Doski, San Diego, CA  
robert downey, San Diego, CA  
Rich Elam, San Diego, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Larry Emerson, San Diego, CA  
James Ferguson, San Diego, CA  
Terrance Gardner, San Diego, CA  
Henry Goff, San Diego, CA  
Dale Haas, San Diego, CA  
Barbara Hall, San Diego, CA  
Robin Halliday, San Diego, CA  
Brooke Harding, San Diego, CA  
Fiona Hardy, San Diego, CA  
Anne Harrington, San Diego, CA  
Joanie Hartman, San Diego, CA  
Steve Hartnett, San Diego, CA  
Robert Haselbeck, San Diego, CA  
David Haskins, San Diego, CA  
Joanne Hayakawa, San Diego, CA  
Dee Hayes, San Diego, CA  
Diana Henderson, San Diego, CA  
miguel and yolanda higuera, San Diego, CA  
Jane Illades, San Diego, CA  
Stephanie Jennings, San Diego, CA  
Michael A. Johnston, San Diego, CA  
Rebecca Kloker, San Diego, CA  
Julie Kolb, San Diego, CA  
Rochelle La Frinere, San Diego, CA  
John Landmann, San Diego, CA  
Dianne Lane, San Diego, CA  
Kira Lebowitz, San Diego, CA  
Diana Lee, San Diego, CA  
Furman Lee, San Diego, CA  
Don Leichtling, San Diego, CA

Lacey Levitt, San Diego, CA  
Mary Jo Lindstrom, San Diego, CA  
Dawna Mackedanz, San Diego, CA  
Paula Maglione, San Diego, CA  
Alicia Mangum, San Diego, CA  
Martin Marcus, San Diego, CA  
Krista Marx, San Diego, CA  
Carol Masterson, San Diego, CA  
Jacqueline McVicar, San Diego, CA  
Diana Meisenholder, San Diego, CA  
Mika Menasco, San Diego, CA  
Stephen Mitton, San Diego, CA  
David Montesi, San Diego, CA  
Pam Montroy, San Diego, CA  
Susan Oliver, San Diego, CA  
Beverly Rehm, San Diego, CA  
Robin Reinhart, San Diego, CA  
Thomas Roberts, San Diego, CA  
Jack Robertson, San Diego, CA  
Karen Roegner, San Diego, CA  
Barbara Schell, San Diego, CA  
Sid Shapiro, San Diego, CA  
Judy Shively, San Diego, CA  
Ian Silverman, San Diego, CA  
Doug Skeen, San Diego, CA  
Jan Smith, San Diego, CA  
Joan Spooner, San Diego, CA  
Brian Still, San Diego, CA  
Karen Summers, San Diego, CA  
Mary Talbot, San Diego, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Akiko Tamano, San Diego, CA

Monica Valentino, San Diego, CA

Leland Wessel, San Diego, CA

Robert Wheeler, San Diego, CA

Evan White, San Diego, CA

Craig Woempner, San Diego, CA

Lyssa Woo, San Diego, CA

Tansy Woods, San Diego, CA

William Woods, San Diego, CA

Shandra Wright, San Diego, CA

Nita Young, San Diego, CA

Robert Alvarez, San Dimas, CA

Arax Maksoudian, San Dimas, CA

Tina Schrader, San Fernando, CA

Richard Adhikari, San Francisco, CA

Michael Anderson, San Francisco, CA

cecilia azinger, San Francisco, CA

Kimo Bailey, San Francisco, CA

Rob Bain, San Francisco, CA

Wilma Bass, San Francisco, CA

Joan Becker, San Francisco, CA

Gary Berger, San Francisco, CA

Charlie Bergstedt, San Francisco, CA

Charlene Biagi, San Francisco, CA

Joseph Blum, San Francisco, CA

Lisa Brinker, San Francisco, CA

Betsy Brown, San Francisco, CA

Daniel Celidonio, San Francisco, CA

Ravi Chandra, San Francisco, CA

S. Chapek, San Francisco, CA

Janet Chavez, San Francisco, CA

Andrew Chou-Belden, San Francisco, CA

Angel Clark, San Francisco, CA

Helynn Coles, San Francisco, CA

Barbara Conwell, San Francisco, CA

Mike Dahlin, San Francisco, CA

Sarah Date, San Francisco, CA

Helen Davis, San Francisco, CA

Christie Decker, San Francisco, CA

L. Diaz, San Francisco, CA

Lisa Disterheft, San Francisco, CA

Judith Doane, San Francisco, CA

Ramona Draeger, San Francisco, CA

Jym Dyer, San Francisco, CA

Irene Endrizzi, San Francisco, CA

Patsy Fergusson, San Francisco, CA

Michael Fleming, San Francisco, CA

Buffy Francisco, San Francisco, CA

Vince Gamboa, San Francisco, CA

Ryan Gillette, San Francisco, CA

Martha Goldin, San Francisco, CA

Sharon Handa, San Francisco, CA

Linda Hegenbarth, San Francisco, CA

Kate Hellenga, San Francisco, CA

PETER HEMENWAY, San Francisco, CA

Leslie Hendricks, San Francisco, CA

Birgit Hermann, San Francisco, CA

Amanda Hirshon, San Francisco, CA

Steven Holden, San Francisco, CA

Lisa Honig, San Francisco, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Martin Horwitz, San Francisco, CA  
Nicole Hsu, San Francisco, CA  
Louise Itzler, San Francisco, CA  
talat jabbar, San Francisco, CA  
Constance Kao, San Francisco, CA  
Brendan Keenan, San Francisco, CA  
Michael Kemper, San Francisco, CA  
Betty Kissilove, San Francisco, CA  
Andria Knapp, San Francisco, CA  
Marko Knezevic, San Francisco, CA  
Ady Larsen, San Francisco, CA  
Jutta Leibrock, San Francisco, CA  
Kendrick Lewallen, San Francisco, CA  
Ruth Lym, San Francisco, CA  
James Mcandrew, San Francisco, CA  
Janet McGarry, San Francisco, CA  
Erin McMahon, San Francisco, CA  
Amy Montalvo, San Francisco, CA  
Paul Mooney, San Francisco, CA  
Gerald Moore, San Francisco, CA  
William Mora, San Francisco, CA  
Janine Moss, San Francisco, CA  
Amy Moy, San Francisco, CA  
Stephen Murphy, San Francisco, CA  
John Musgrove, San Francisco, CA  
Kevin Neeson, San Francisco, CA  
Komoot Ngaojutha, San Francisco, CA  
Karen Nicks, San Francisco, CA  
Maria Nowicki, San Francisco, CA  
John Oda, San Francisco, CA

Robert Peluso, San Francisco, CA  
elena pena, San Francisco, CA  
Eric Peterson, San Francisco, CA  
E. Phinney, San Francisco, CA  
Jackie Pomies, San Francisco, CA  
Roland Prijoles, San Francisco, CA  
Nancy Putney-Abernathy, San Francisco, CA  
Sean Quinn, San Francisco, CA  
Adrianna Quintero, San Francisco, CA  
Ruta Radzins, San Francisco, CA  
Sarah Reyes, San Francisco, CA  
Ivan Rhudick, San Francisco, CA  
Jonathan Roberts, San Francisco, CA  
Nora Roman, San Francisco, CA  
Roberto Romo, San Francisco, CA  
Jane Salvin, San Francisco, CA  
Natasha Saravanja, San Francisco, CA  
Laura Saunders, San Francisco, CA  
Brian Sawyer, San Francisco, CA  
Edie Schaffer, San Francisco, CA  
Judy Schultz, San Francisco, CA  
Jeanie Scott, San Francisco, CA  
Elena Seitz, San Francisco, CA  
Neil Sekhri, San Francisco, CA  
Peter Skala, San Francisco, CA  
Erin Smith, San Francisco, CA  
Todd Snyder, San Francisco, CA  
Michael Sobel, San Francisco, CA  
Martha Stabler, San Francisco, CA  
Tai Stillwater, San Francisco, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Stine, San Francisco, CA  
Priscilla Stoyanof, San Francisco, CA  
Joel Streicker, San Francisco, CA  
Edward Sullivan, San Francisco, CA  
Lucile J Taber, San Francisco, CA  
Stephen Talbot, San Francisco, CA  
Hong-An Truong, San Francisco, CA  
Justin Truong, San Francisco, CA  
Anthony Tupasi, San Francisco, CA  
Pamela Vaughn, San Francisco, CA  
Wolfgang Vermeer, San Francisco, CA  
Preethi Vijaykrishnan, San Francisco, CA  
Isabelle Wade, San Francisco, CA  
Henrietta Weiner, San Francisco, CA  
Linda Weiner, San Francisco, CA  
Stewart Wilber, San Francisco, CA  
Aimee Williams, San Francisco, CA  
Jennifer Willis, San Francisco, CA  
sandra yagi, San Francisco, CA  
Erin Yip, San Francisco, CA  
R. Zierikzee, San Francisco, CA  
Christine Zupanovich, San Francisco, CA  
Maxine Zylberberg, San Francisco, CA  
Seeyew Mo, San Francisco, CA  
A Eittinger, San Gabriel, CA  
David Turner, San Gabriel, CA  
Kristine Andarmani, San Jose, CA  
James Barrie, San Jose, CA  
Nancy Bell, San Jose, CA  
Sushma Bhatia, San Jose, CA

Andrew Boyle, San Jose, CA  
Colleen Cabot, San Jose, CA  
Mark Cabral, San Jose, CA  
Allan Campbell, San Jose, CA  
Thomas Carlino, San Jose, CA  
Debra Chong, San Jose, CA  
Eugene Chung, San Jose, CA  
Barbara Comiskey, San Jose, CA  
Lawrence Deng, San Jose, CA  
Ann Filor, San Jose, CA  
Judith Gibbons, San Jose, CA  
John Gilbert, San Jose, CA  
Winston Gould, San Jose, CA  
Marilyn Griffiths, San Jose, CA  
Scot Guenter, San Jose, CA  
William Henzel, San Jose, CA  
Maryanne Hoirup-Bacolod, San Jose, CA  
Meike Huizinga, San Jose, CA  
Dotti King, San Jose, CA  
David Laranjeira, San Jose, CA  
Robert Lord, San Jose, CA  
Natalie Mathison, San Jose, CA  
Richard McGowan, San Jose, CA  
Rosa Molina, San Jose, CA  
Yukie Murata, San Jose, CA  
Du Ng, San Jose, CA  
Keith Pedersen, San Jose, CA  
Sandra Perez, San Jose, CA  
Ronald Reber, San Jose, CA  
Elvia Reyna, San Jose, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Veronica Romero, San Jose, CA  
Donald Saito, San Jose, CA  
Tim Schwalbach, San Jose, CA  
Rocky Sharma, San Jose, CA  
Kelly Shepherd, San Jose, CA  
Star St John, San Jose, CA  
Georgiann Suhr, San Jose, CA  
Darlene Thorne, San Jose, CA  
Mark Verdi, San Jose, CA  
Nona Weiner, San Jose, CA  
Glenn Wheatland, San Jose, CA  
Jennifer Williams, San Jose, CA  
Jimmie Yonemoto, San Jose, CA  
Dave Beck, San Juan Capistrano, CA  
Kathy Fitzwater, San Juan Capistrano, CA  
Philip Fraser, San Juan Capistrano, CA  
Maria Menichini, San Juan Capistrano, CA  
Michael Rotcher, San Juan Capo, CA  
Brad Bowers, San Leandro, CA  
Aj Cho, San Leandro, CA  
Virginia Collins, San Leandro, CA  
Randy Epstein, San Leandro, CA  
Cicely Hart, San Leandro, CA  
John Moreau, San Leandro, CA  
Jo Quinlivan, San Leandro, CA  
Robert Thistlethwaite, San Leandro, CA  
Sydney Winsor, San Leandro, CA  
Carol Donovan, San Lorenzo, CA  
Helen Bankston, San Luis Obispo, CA  
Judith Anderson, San Luis Obispo, CA

William Donovan, San Luis Obispo, CA  
Raymond Ensing, San Luis Obispo, CA  
Pete Evans, San Luis Obispo, CA  
Judy Hornaday, San Luis Obispo, CA  
Maryan Infield, San Luis Obispo, CA  
Carrie Langner, San Luis Obispo, CA  
lauren Ornelas, San Luis Obispo, CA  
Duane Wall, San Luis Obispo, CA  
Anna Alessi, San Marcos, CA  
Leilani Hart, San Marcos, CA  
Silvia Memminger, San Marcos, CA  
Brooke Scruggs, San Marcos, CA  
Sandra Spaeth, San Marcos, CA  
Melba Alfaro, San Mateo, CA  
Steve Bianco, San Mateo, CA  
Belinda Chlouber, San Mateo, CA  
Gina Colangelo, San Mateo, CA  
Laurie Glatt, San Mateo, CA  
Stephen Gross, San Mateo, CA  
Nathan H., San Mateo, CA  
Kevin Hearle Ph.D., San Mateo, CA  
Christine Matsumotodeveau, San Mateo, CA  
Rae Sofos, San Mateo, CA  
Mary Vance, San Mateo, CA  
Linda Morgan, San Pablo, CA  
Rebecca Robinson, San Pablo, CA  
Carol Schaffer, San Pablo, CA  
Tom Earnist, San Pedro, CA  
Noel Gould, San Pedro, CA  
Tina Madden, San Pedro, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kendi Ravsten, San Pedro, CA  
Roman Reardon, San Pedro, CA  
Dana Weiser, San Pedro, CA  
Ellen Akre, San Rafael, CA  
Susan Berlin, San Rafael, CA  
Christina Bradley, San Rafael, CA  
Belle Dedioscohen, San Rafael, CA  
Eleanor Errante, San Rafael, CA  
Elizabeth Ferris, San Rafael, CA  
Susan Ghest, San Rafael, CA  
Alexandra Guenther, San Rafael, CA  
Margie Halladin, San Rafael, CA  
Isabel Hogan, San Rafael, CA  
Nancy Kozlenko, San Rafael, CA  
Dianne Morrison, San Rafael, CA  
Susan Peters, San Rafael, CA  
Lornaa Pickrell, San Rafael, CA  
Rus Postel, San Rafael, CA  
Judith Purdom, San Rafael, CA  
Sheri Remail, San Rafael, CA  
Josh Richter, San Rafael, CA  
Sandy Shapiro, San Rafael, CA  
Philip Simon, San Rafael, CA  
Robert Stark, San Rafael, CA  
Deborah Temple, San Rafael, CA  
John Tetzlaff, San Rafael, CA  
Mitchell Turpin, San Rafael, CA  
Alex Vollmer, San Rafael, CA  
Ruth Vosmek, San Rafael, CA  
Jeffrey Hemenez, San Ramon, CA

Kate Vermillion, San Ramon, CA  
Margaret Bendig, Santa Ana, CA  
Karrie Good, Santa Ana, CA  
Mike Honda, Santa Ana, CA  
Kristin Laughtin-Dunker, Santa Ana, CA  
Sandra Ortiz, Santa Ana, CA  
James Yacenda, Santa Ana, CA  
Janet Adelson, Santa Barbara, CA  
Dennis Allen, Santa Barbara, CA  
Rebecca Amundsen, Santa Barbara, CA  
Cindy Antonucci-Ameen, Santa Barbara, CA  
Nicholas Beeson, Santa Barbara, CA  
Lisabette Brinkman, Santa Barbara, CA  
Ellen Broidy, Santa Barbara, CA  
Shirley Cabeen, Santa Barbara, CA  
Carole Ann Cole, Santa Barbara, CA  
Ronit Corry, Santa Barbara, CA  
Alison Coutts-Jordan, Santa Barbara, CA  
Tara Cuellar, Santa Barbara, CA  
Catharine Edwardson, Santa Barbara, CA  
Christine Fedeli, Santa Barbara, CA  
Terry Frewin, Santa Barbara, CA  
Camille Gilbert, Santa Barbara, CA  
Kevin Hanley, Santa Barbara, CA  
Gillian Healed, Santa Barbara, CA  
Frode Holm, Santa Barbara, CA  
Lisa Hugo, Santa Barbara, CA  
Cynthia James, Santa Barbara, CA  
Judy Karin, Santa Barbara, CA  
Lisa Ann Kelly and Family, Santa Barbara, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Larry Koppelman, Santa Barbara, CA  
Betty Little, Santa Barbara, CA  
Geness L Lorien, Santa Barbara, CA  
Peter Melnick, Santa Barbara, CA  
Marlene Mills, Santa Barbara, CA  
Tosh Montee, Santa Barbara, CA  
Maureen Needham, Santa Barbara, CA  
Mary Nixon, Santa Barbara, CA  
Martha Noble, Santa Barbara, CA  
Michael Oconnell, Santa Barbara, CA  
Gail Osherenko, Santa Barbara, CA  
Halina Pinsker, Santa Barbara, CA  
Claudio Pollero, Santa Barbara, CA  
Peter Quimby, Santa Barbara, CA  
Michael Stowe, Santa Barbara, CA  
Richard Sutherland, Santa Barbara, CA  
Lynda Unterthiner, Santa Barbara, CA  
Angelika vonRoos, Santa Barbara, CA  
Sally Warner-Arnett, Santa Barbara, CA  
Mark Whitney, Santa Barbara, CA  
Bill Woodbridge, Santa Barbara, CA  
Theresa Yandell, Santa Barbara, CA  
Richard Yates, Santa Barbara, CA  
Jeanine Lee, Santa Clara, CA  
Cruz Medina, Santa Clara, CA  
Rosa Preciado, Santa Clara, CA  
Michelle Balady, Santa Clarita, CA  
James McKelvey, Santa Clarita, CA  
Gayle Vogel, Santa Clarita, CA  
Anita Wisch, Santa Clarita, CA

Milo Barisof, Santa Cruz, CA  
Len Beyea, Santa Cruz, CA  
Elaine Boles, Santa Cruz, CA  
Sandra Brown, Santa Cruz, CA  
Andrew Carman, Santa Cruz, CA  
Kathleen Caton, Santa Cruz, CA  
Jean Crossley, Santa Cruz, CA  
MarianKitty Dennis, Santa Cruz, CA  
Hepburn-Janour Ellis, Santa Cruz, CA  
Richard Gallo, Santa Cruz, CA  
Julie Hughes, Santa Cruz, CA  
Gail Jack, Santa Cruz, CA  
KEVIN KEEDY, Santa Cruz, CA  
Lizann Keyes, Santa Cruz, CA  
Mary Anne Kramer-Urner, Santa Cruz, CA  
Nancy Krusoe, Santa Cruz, CA  
Mary Kuntz-Cote, Santa Cruz, CA  
Sarah Limroth, Santa Cruz, CA  
Sheryl Loomis, Santa Cruz, CA  
Scott Malsom, Santa Cruz, CA  
Kevin Manning, Santa Cruz, CA  
Janice Manov, Santa Cruz, CA  
Karsten Mueller, Santa Cruz, CA  
Vivienne Orgel, Santa Cruz, CA  
Josh Pederson, Santa Cruz, CA  
Rebecca Peet, Santa Cruz, CA  
Ron Pomerantz, Santa Cruz, CA  
Elizabeth Potts, Santa Cruz, CA  
Benjamin Ramsden-Stein, Santa Cruz, CA  
Dave Rundio, Santa Cruz, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Scheller, Santa Cruz, CA  
Jonathan Scher, Santa Cruz, CA  
Kirsten Schwind, Santa Cruz, CA  
Laura Shaw, Santa Cruz, CA  
Pela Tomasello, Santa Cruz, CA  
Sylvia Vairo, Santa Cruz, CA  
Marilyn Veltrop, Santa Cruz, CA  
Patrice Wallace, Santa Cruz, CA  
Russell Weisz, Santa Cruz, CA  
Carlos Arnold, Santa Maria, CA  
Constance Ford, Santa Maria, CA  
Roger Hart, Santa Maria, CA  
Nancy Heck, Santa Maria, CA  
James Kitagawa, Santa Maria, CA  
Jim Mckinniss, Santa Maria, CA  
Kristina Allen, Santa Monica, CA  
Grisel Arriaga, Santa Monica, CA  
Karen Bailey, Santa Monica, CA  
Susan Black, Santa Monica, CA  
Emmanuelle Bourlier, Santa Monica, CA  
Chris Bradford, Santa Monica, CA  
Sherry Brouman, Santa Monica, CA  
Elizabeth Chang, Santa Monica, CA  
Phyllis Chavez, Santa Monica, CA  
Catherine Corwin, Santa Monica, CA  
Lauri Crane, Santa Monica, CA  
Linda Davis, Santa Monica, CA  
Guillemette Epailly, Santa Monica, CA  
Gina Garcia, Santa Monica, CA  
Mohammad Ghorbanali, Santa Monica, CA

Pris Haffenden, Santa Monica, CA  
Amelia Jones, Santa Monica, CA  
Patricia Joubert, Santa Monica, CA  
Kathy Knight, Santa Monica, CA  
Cathy Ladman, Santa Monica, CA  
Ralf Leeb, Santa Monica, CA  
Daryl Marsh, Santa Monica, CA  
Kristy Martin, Santa Monica, CA  
Anne Munitz, Santa Monica, CA  
Ted Myers, Santa Monica, CA  
Brian Olson, Santa Monica, CA  
Steven Perez, Santa Monica, CA  
Jerry Persky, Santa Monica, CA  
Jayne Pitchford, Santa Monica, CA  
Donna Presley, Santa Monica, CA  
Sophie Robertson, Santa Monica, CA  
Mary Romanek, Santa Monica, CA  
Adrian Roup, Santa Monica, CA  
D. Rowe, Santa Monica, CA  
Myra Schegloff, Santa Monica, CA  
Gary Shapiro, Santa Monica, CA  
Nancy Smith, Santa Monica, CA  
Roberto Tinti, Santa Monica, CA  
Frank Uddo, Santa Monica, CA  
Bobbygoode Zancan, Santa Monica, CA  
Harriet Zaretsky, Santa Monica, CA  
George Burnham, Santa Paula, CA  
Stephen Wolpin, Santa Paula, CA  
Cristina Amarillas, Santa Rosa, CA  
Paul Bishop, Santa Rosa, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Margaret Buhn, Santa Rosa, CA  
Sandra Capecci, Santa Rosa, CA  
Phallon Davis, Santa Rosa, CA  
Janet Drew, Santa Rosa, CA  
Richard Fairfield, Santa Rosa, CA  
Yona Flemming, Santa Rosa, CA  
Fred Friedland, Santa Rosa, CA  
Maureen Gevirtz, Santa Rosa, CA  
Penny Hamilton, Santa Rosa, CA  
Philip Hansten, Santa Rosa, CA  
Michael Hutchison, Santa Rosa, CA  
Robin Jurs, Santa Rosa, CA  
C Mcguirk, Santa Rosa, CA  
Bob Miller, Santa Rosa, CA  
Erin Moilanen, Santa Rosa, CA  
Richard Nolen, Santa Rosa, CA  
Norma Ortman, Santa Rosa, CA  
Shirley Phillips, Santa Rosa, CA  
Gary Pischke, Santa Rosa, CA  
Daniel Podell, Santa Rosa, CA  
Cindi Rivas, Santa Rosa, CA  
Joe Salazar, Santa Rosa, CA  
Gail Seymour, Santa Rosa, CA  
Marcia Sheaves, Santa Rosa, CA  
Olaina Silva, Santa Rosa, CA  
Paige Sobel, Santa Rosa, CA  
Anton Teytaud, Santa Rosa, CA  
David Vandever, Santa Rosa, CA  
April West, Santa Rosa, CA  
Rhea Zaks, Santa Rosa, CA

Sebastian Allinder, Santee, CA  
James Braun, Santee, CA  
Theresa McCarthy, Santee, CA  
Greg Denari, Saratoga, CA  
Mike Finck, Sausalito, CA  
Tricia Gellman, Sausalito, CA  
Evan Jane Kriss, Sausalito, CA  
Mary Mongan, Sausalito, CA  
Jason Tunnell, Sausalito, CA  
Margaret Ward, Sausalito, CA  
Rob Dun, Scotts Valley, CA  
Megan Hawk, Scotts Valley, CA  
Barry Buckheim, Seal Beach, CA  
Julie Ford, Seal Beach, CA  
Jillian Gallery, Seal Beach, CA  
Pamela Miller, Seal Beach, CA  
Brent Spencer, Seal Beach, CA  
Felicia Bander, Sebastopol, CA  
Edith Barry, Sebastopol, CA  
Jacqueline Braun, Sebastopol, CA  
Glenn Finch, Sebastopol, CA  
Anna Kaufman, Sebastopol, CA  
Joe LeBlanc, Sebastopol, CA  
William Olzman, Sebastopol, CA  
Tamara Voyles, Sebastopol, CA  
Amanda Zangara, Sebastopol, CA  
Mark Coller, Shasta Lake, CA  
Lisa Salazar, Shasta Lake, CA  
Gene Arias, Sherman Oaks, CA  
Carol Becker, Sherman Oaks, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Georgia Brewer, Sherman Oaks, CA  
Mark Fletcher, Sherman Oaks, CA  
Caroline Good, Sherman Oaks, CA  
Cathy Janacua, Sherman Oaks, CA  
Dwayne Jones, Sherman Oaks, CA  
Samar Lachini, Sherman Oaks, CA  
RICHARD AND SHARON MAYER, Sherman Oaks, CA  
Gaye Nelson, Sherman Oaks, CA  
Patrick Pade, Sherman Oaks, CA  
Amanda Palley, Sherman Oaks, CA  
Alison Reisel, Sherman Oaks, CA  
Patricia Ritter, Sherman Oaks, CA  
Mox Ruge, Sherman Oaks, CA  
Giuliano Sartori, Sherman Oaks, CA  
Kay Steele, Sherman Oaks, CA  
Leslie Tolan, Sherman Oaks, CA  
Sherri Donlon, Shingle Springs, CA  
Elizabeth Ball, Sierra Madre, CA  
Patricia Barron, Sierra Madre, CA  
Robert Buckner, Sierra Madre, CA  
Renee Cossutta, Sierra Madre, CA  
Jacqueline Fisher, Sierra Madre, CA  
John Lamb, Sierra Madre, CA  
Jill Sumiyasu, Sierra Madre, CA  
Natalie Garth, Silverado, CA  
Nina Macdonald, Silverado, CA  
Jerry Dewitt, Simi Valley, CA  
Gina Howell, Simi Valley, CA  
Katrina Livingston, Simi Valley, CA

K. C. Mccarthy, Simi Valley, CA  
Madison Mitchell, Simi Valley, CA  
Gulshan Oomerjee, Simi Valley, CA  
brooke schick, Simi Valley, CA  
Jessica Smith, Simi Valley, CA  
Laurie Neill, Smith River, CA  
Christy Bulskov, Solana Beach, CA  
Susan Kirkpatrick, Solana Beach, CA  
Sheila Silan, Somerset, CA  
Linda Whitney, Somerset, CA  
Diane Baarbera, Sonoma, CA  
Tarney Baldinger, Sonoma, CA  
Lana Bruski, Sonoma, CA  
Kate Farrell, Sonoma, CA  
John Feissel, Sonoma, CA  
Francesca Fifis, Sonoma, CA  
Avram Goldman, Sonoma, CA  
Kent Iverson, Sonoma, CA  
Barbara Jacobsen, Sonoma, CA  
Andrew Keasler, Sonoma, CA  
Kris Kelly, Sonoma, CA  
Elizabeth Vaughn, Sonoma, CA  
Shelley Winn, Sonoma, CA  
Michelle Allison, Sonora, CA  
Leslie Kowalczyk, Sonora, CA  
Sharon Rose, Sonora, CA  
Kathy Berry, Soquel, CA  
Robert Darcy, Soquel, CA  
Gary Landgrebe, Soquel, CA  
Pamela Machutt, Soquel, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Leslie Potenzo, Soquel, CA  
Cecelia Crane, South Lake Tahoe, CA  
Morgan Machen, South Lake Tahoe, CA  
Max Benavidez, South Pasadena, CA  
Norman Bentson, South Pasadena, CA  
Heather Clyde, South Pasadena, CA  
Kelly Finley, South Pasadena, CA  
Thomas Fong, South Pasadena, CA  
Sandra Kitto, South Pasadena, CA  
Joshua Klaparda, South Pasadena, CA  
Karin Manger, South Pasadena, CA  
Sandra Zicke, South San Francisco, CA  
Jennifer Bradford, Spring Valley, CA  
George Schieck, Spring Valley, CA  
Terrie Smith, Spring Valley, CA  
Toni Watson, Spring Valley, CA  
Rachel Gibson, Stanford, CA  
Monika Greenleaf, Stanford, CA  
Janice Beyer, Stockton, CA  
Jackie Bronder, Stockton, CA  
Paul Takhar, Stockton, CA  
Sheena Bhindie, Studio City, CA  
Christopher Brown, Studio City, CA  
Andrew Hyman, Studio City, CA  
Nancy Knipe, Studio City, CA  
Susan Lea, Studio City, CA  
Elisa Marsh, Studio City, CA  
Aaron Mendelsohn, Studio City, CA  
Suzanne Naegle, Studio City, CA  
Julie Skille, Studio City, CA

Natalia Spornik, Studio City, CA  
Jeremy Trimm, Suisun City, CA  
Robin Van Tassell, Summerland, CA  
Katharine Warner, Sunland, CA  
Kimberly Zimmerman, Sunland, CA  
Victoria Armigo, Sunnyvale, CA  
Scott Barlow, Sunnyvale, CA  
Ernest Boyd, Sunnyvale, CA  
Lenore Cohen, Sunnyvale, CA  
Susan Johnson, Sunnyvale, CA  
Liana Laskin, Sunnyvale, CA  
Iztok Marjanovic, Sunnyvale, CA  
Robert Park, Sunnyvale, CA  
Mark Philips, Sunnyvale, CA  
Bryan Richter, Sunnyvale, CA  
John Robbins, Sunnyvale, CA  
Kris Stadelman, Sunnyvale, CA  
Gerald Tinder, Sunnyvale, CA  
Rose-Marie Twu, Sunnyvale, CA  
Mary White, Sunnyvale, CA  
Sandra Hendricks, Sutter Creek, CA  
Delores Abramson, Sylmar, CA  
Diane Boucher, Sylmar, CA  
Paul Enders, Sylmar, CA  
Robert Iaccino, Sylmar, CA  
Nancy Nolen, Sylmar, CA  
Vicki Smith, Sylmar, CA  
Andrew Patton, Tahoe Vista, CA  
Frank Watts, Tahoe Vista, CA  
El. Pe., Talmage, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Louise Bianco, Tarzana, CA  
Cecly Corbett, Tarzana, CA  
Roger Hollander, Tarzana, CA  
Beth Hamilton, Tehachapi, CA  
Deborah Hand, Tehachapi, CA  
Gary Baker, Temecula, CA  
Richard Blain, Temecula, CA  
Holly Hall, Temecula, CA  
Sofia Okolowicz, Temecula, CA  
Anthony Terich, Temecula, CA  
Christine Lew, Temple City, CA  
Linda Skorheim, Temple City, CA  
Cassie A. Murphy, Templeton, CA  
Deborah Filipelli, PhD, The Sea Ranch, CA  
Victoria Behar, Thousand Oaks, CA  
Bob Fryer, Thousand Oaks, CA  
Ibia Gomez, Thousand Oaks, CA  
Marc Orfanos, Thousand Oaks, CA  
Katherine Strong, Thousand Oaks, CA  
Richard Sugerman, Thousand Oaks, CA  
Paul Teplitz, Thousand Oaks, CA  
Karissa Turner, Thousand Oaks, CA  
Douglas Foster, Three Rivers, CA  
Lorraine Grace, Tiburon, CA  
Timothy McCollum, Tollhouse, CA  
Marti Hale, Toluca Lake, CA  
Madelyn Hodges, Tomales, CA  
Donna Cetorelli, Topanga, CA  
Mae Hein, Topanga, CA  
Jon Povill, Topanga, CA

Nora Slattery, Topanga, CA  
Adrien Thein-Sandler, Topanga, CA  
Penelope Ward, Topanga, CA  
Ruth Ehrenberg, Torrance, CA  
Joyce Harrington, Torrance, CA  
Edwin Miller, Torrance, CA  
Faye Ryan, Torrance, CA  
Erin Suyehara, Torrance, CA  
Mary Walker, Torrance, CA  
Jinx Hydeman, Trabuco Canyon, CA  
Deborah Mueller, Trabuco Canyon, CA  
Karen Negus, Trabuco Canyon, CA  
Gloria Sefton, Trabuco Canyon, CA  
Vasuki Nijagal, Tracy, CA  
David Freeman, Truckee, CA  
Brett Bell, Tujunga, CA  
Darlene Goguen, Tujunga, CA  
Probyn Gregory, Tujunga, CA  
Charleen Schendel, Turlock, CA  
Everett A. Vieira III, Turlock, CA  
Perry Gx, Tustin, CA  
Veronica Noguer, Tustin, CA  
Jim Estus, Twentynine Palms, CA  
Jorge DeCecco, Ukiah, CA  
Tisha Douthwaite, Ukiah, CA  
Mary Gustafson, Ukiah, CA  
Lisa Hillegas, Ukiah, CA  
Judy Morgan, Ukiah, CA  
Raymond Radell, Ukiah, CA  
Ernest Walters, Union City, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Courtney Christoffer, Upland, CA  
Kristen Osman, Upland, CA  
Yvonne Smith, Upland, CA  
Janet Sturgeon, Upland, CA  
Becky Cecena, Vacaville, CA  
Michael Heffernan, Vacaville, CA  
Lorraine Lowry, Vacaville, CA  
Adrienne. Micco, Vacaville, CA  
Carole Lutness, Valencia, CA  
Donald Van Santen, Valencia, CA  
Karen Black, Vallejo, CA  
Valerie Duda, Vallejo, CA  
Karen Eft, Vallejo, CA  
Jocelyn Graef, Vallejo, CA  
Ann Harrison, Vallejo, CA  
Lorri Humberd, Vallejo, CA  
David Macdonald, Vallejo, CA  
Diane Merrick, Vallejo, CA  
Marni Nacheff, Vallejo, CA  
Nikki Nafziger, Vallejo, CA  
Dave Smail, Vallejo, CA  
Carrie Trochet, Vallejo, CA  
Lenette Weishaar, Vallejo, CA  
Laura Diffenbaugh, Valley Springs, CA  
Gerald Vietor, Valley Springs, CA  
Laura Holmes, Valley Village, CA  
Darynne Jessler, Valley Village, CA  
Anne Kurtzman, Valley Village, CA  
Andrew Sigal, Valley Village, CA  
Stokes Stanzi, Valley Village, CA

Dianna Davidson, Van Nuys, CA  
Valerie Ferrante, Van Nuys, CA  
Mark Heiliger, Van Nuys, CA  
Susan Jones, Van Nuys, CA  
Janet Laur, Van Nuys, CA  
Vicki Modesti, Van Nuys, CA  
Ana Reedy, Van Nuys, CA  
P Soucek, Van Nuys, CA  
Ken Windrum, Van Nuys, CA  
Jesse Croxton, Venice, CA  
Ann Ducommun, Venice, CA  
Arnaud Dunoyer, Venice, CA  
Zoe Friedman, Venice, CA  
Frank Krentzman, Venice, CA  
Linda Laisure, Venice, CA  
Nancy Lombardi, Venice, CA  
Brendan Miller, Venice, CA  
Ruth Seroussi, Venice, CA  
Chris Tilly, Venice, CA  
Jamie Wolf, Venice, CA  
Farrah Zeigler, Venice, CA  
Robert Brunner, Ventura, CA  
Gary Channer, Ventura, CA  
David Cotner, Ventura, CA  
Laura Elam, Ventura, CA  
Jamie Green, Ventura, CA  
Suzanne Guthrie, Ventura, CA  
Helen Johnson, Ventura, CA  
Erin Kraus, Ventura, CA  
Elizabeth Ladiana, Ventura, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jan Langer, Ventura, CA  
Carrie Mc, Ventura, CA  
Jane Niehaus-Tull, Ventura, CA  
Mary Stanistreet, Ventura, CA  
Wendy Steiger, Ventura, CA  
Elaine Stephenson, Ventura, CA  
Krista Stevenson, Ventura, CA  
Chelsea Sutula, Ventura, CA  
Mike Trivich Trivich, Ventura, CA  
Melissa Vasconcellos, Ventura, CA  
LeAnn Walters, Ventura, CA  
Kathy Yeomans, Ventura, CA  
Carol Wiley, Victorville, CA  
Alonna Farrar, Vista, CA  
James Hagar, Vista, CA  
Joleen Hirscher, Vista, CA  
Trisha Pahmeier, Vista, CA  
Constance Youens, Vista, CA  
Keith Forrest, Volcano, CA  
Michael Shapiro, W. Hollywood, CA  
Chris Dissanayake, Walnut, CA  
Erfin Hartojo, Walnut, CA  
Rita Thio, Walnut, CA  
Sarah Adams, Walnut Creek, CA  
Ana Belle, Walnut Creek, CA  
Nancy Bocanegra, Walnut Creek, CA  
Susan Desmond, Walnut Creek, CA  
Lu Einer, Walnut Creek, CA  
Annette Eisenbergsmith, Walnut Creek, CA  
Julia Fuller, Walnut Creek, CA

Janicedotherighthing Greenberg, Walnut Creek, CA  
Barbara Greenwood, Walnut Creek, CA  
Joan Johnston, Walnut Creek, CA  
Emmanuel Lagpacan, Walnut Creek, CA  
Barb Linc, Walnut Creek, CA  
Anne M Stewart, Walnut Creek, CA  
Ginger Megley, Walnut Creek, CA  
Patricia Raso, Walnut Creek, CA  
Stanley Smith, Walnut Creek, CA  
Nancy Thursby, Walnut Creek, CA  
Jan Warren, Walnut Creek, CA  
David Wendt, Walnut Creek, CA  
Virginia Wheaton, Walnut Creek, CA  
Randall Wiley, Walnut Creek, CA  
Pam Nelson, Warner Springs, CA  
Marguerite Barragan, Watsonville, CA  
Paul Cheney, Watsonville, CA  
Joe Gallagher, Watsonville, CA  
Ana Hernandez, Watsonville, CA  
Roberta Krenz, Watsonville, CA  
Laura Maitra, Watsonville, CA  
Steffany Mccabe, Watsonville, CA  
Sarah Peck, Watsonville, CA  
Celeste Stanik, Watsonville, CA  
Susan Hazard, Weaverville, CA  
Randolph Yates, Weaverville, CA  
John Brennan, Weed, CA  
John Allen, West Covina, CA  
Lauren Flahive, West Covina, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Meilee Langi, West Covina, CA  
Donald Overlin, West Covina, CA  
Fernando Ramirez, West Covina, CA  
Susan Zaragoza, West Covina, CA  
Rebecca Clark, West Hills, CA  
Paul Hogan, West Hills, CA  
Linda Howie, West Hills, CA  
Abbie Bernstein, West Hollywood, CA  
Howard H. Holmes, West Hollywood, CA  
Susan Mathison, West Hollywood, CA  
Christina Nillo, West Hollywood, CA  
Kathy Scher, West Hollywood, CA  
Dolores Scozzesi, West Hollywood, CA  
Jon Sperry, West Hollywood, CA  
Andrew Hamilton, West Sacramento, CA  
Signe Wetteland, West Sacramento, CA  
Barbara E., Westlake Village, CA  
Jeanne Harrison, Westlake Village, CA  
Lia Woodward, Westlake Village, CA  
Michael Lawler, Westminster, CA  
Brandon Lowentroun, Westminster, CA  
Tina Colafranceschi, Whithorn, CA  
Jo Beede, Whittier, CA  
Narcissa Enzmann, Whittier, CA  
Vanessa Leal, Whittier, CA  
Robert Palomino, Whittier, CA  
Jose Rodriguez, Whittier, CA  
Jan Joe, Windsor, CA  
Barbara Lyon, Windsor, CA  
Allison McConnell, Windsor, CA

Susan Bohannon, Winnetka, CA  
Andre Plessis, Winnetka, CA  
Caryn Banque, Woodland, CA  
Kay Bogart, Woodland, CA  
Donna Bousquet, Woodland, CA  
Sheri Masterson, Woodland, CA  
Ellie Slaven, Woodland, CA  
Gretchen Smurr, Woodland, CA  
Susan George-Rydberg, Woodland Hills, CA  
Bobbi Goldin, Woodland Hills, CA  
Michael Goldman, Woodland Hills, CA  
Willie Hill, Woodland Hills, CA  
Arax Lanman, Woodland Hills, CA  
Stephanie Larro, Woodland Hills, CA  
Lorraine Priceman, Woodland Hills, CA  
Victoria Riskin, Woodland Hills, CA  
Jollee Saphier, Woodland Hills, CA  
Marc Tarpenning, Woodside, CA  
Kathleen Fernandez, Yorba Linda, CA  
Peggie Kirkpatrick, Yorba Linda, CA  
Ben Mckinstry, Yorba Linda, CA  
Gabriel Graubner, Yountville, CA  
Carole Evers, Yucaipa, CA  
Kt Gates-Waldrup, Yucaipa, CA  
Jo Bollen, Yucca Valley, CA  
Rose Bachman, CA 90001  
Leonardo Corro, CA 90001  
Penelope Daily, CA 90001  
Adrian Juarez, CA 90001  
Denise Miceli, CA 90001





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michele Carrizalez, CA 90002  
Julio Robledo, CA 90003  
Vanessa Bayer, CA 90004  
Shirley Hey, CA 90004  
Glen Morgan, CA 90004  
Grant Sloss, CA 90004  
Jeremy Tague, CA 90004  
Candy Kaiser, CA 90005  
David Mack, CA 90005  
Henry Muniz, CA 90005  
Jorge Valle-Artiga, CA 90005  
Michelle Rito, CA 90006  
Tripti Kamath, CA 90007  
Beth Palkovic, CA 90007  
Joshua Yeargain, CA 90007  
Gail Gentry, CA 90008  
Fred Mosbey, CA 90008  
Scott Baird, CA 90010  
Jessie Hahn, CA 90010  
Barbara Hoke, CA 90010  
Hector Arroyo, CA 90011  
Bruce Stout, CA 90011  
Lisa Callahan, CA 90012  
Wendy Vinglinsky, CA 90012  
Narda Zacchino, CA 90012  
Drex Heikes, CA 90013  
Jolie Krance, CA 90013  
J Magnuson, CA 90013  
Adam Miller, CA 90013  
Sigmund Palasek, CA 90013

Michael Vizcarrondo, CA 90013  
Linda Desola, CA 90014  
Andrew Matson, CA 90014  
Glicelia Avila, CA 90015  
Chad Sarver, CA 90015  
Ricky Shum, CA 90015  
Gary Williams, CA 90015  
Theodore Burton, CA 90016  
Michael Damanskis, CA 90016  
Victoria Kemsley, CA 90016  
Joan Benjamin, CA 90017  
Lisa Shinavier, CA 90018  
Jo Trigo, CA 90018  
Sarah Boldt, CA 90019  
Dejarne Bourne, CA 90019  
Sharron Craig, CA 90019  
Brian Dent, CA 90019  
Uri Fleming, CA 90019  
Jennifer Griffin, CA 90019  
Julia Hasen, CA 90019  
Ksenia Koban, CA 90019  
Jane Martin, CA 90019  
Jaimie Mullens, CA 90019  
Thuyvan Nguyen, CA 90019  
Kevin Proulx, CA 90019  
Daniel Shapiro, CA 90019  
Melody Thornton, CA 90019  
Karen Tillman, CA 90019  
Daniel Yoo, CA 90019  
James Jackson, CA 90020



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gerald Park, CA 90020

Alexandra Weinberger, CA 90020

Amishi Shah, CA 90021

Mills Davis, CA 90022

Steven Baaden, CA 90024

Geoffrey Bogeaus, CA 90024

Geoff Bywater, CA 90024

Susan Friedman, CA 90024

Janet Hirsch, CA 90024

Melodie Hollander, CA 90024

Kiera Kosciulek, CA 90024

Christine Oldenbrook, CA 90024

Kevin Poirier, CA 90024

Wendy Richmond, CA 90024

Phillip Savenick, CA 90024

Joel Smith, CA 90024

Jeremy Vernon, CA 90024

Joseph Ziomek, CA 90024

Philip Bartolf, CA 90025

Phyllis Gabriel, CA 90025

Kathryn Hyder, CA 90025

Harriet Levine, CA 90025

Rachel McClard, CA 90025

Harvey Myman, CA 90025

John Stapleton, CA 90025

Danielle Stclair, CA 90025

Rosie Alvarenga, CA 90026

Rochelle Bassarear, CA 90026

Hugo Chavez, CA 90026

Danika Choe, CA 90026

Henry Estrada, CA 90026

Jonathan Gibson, CA 90026

Melissa Jones, CA 90026

Margaret Kingsbury, CA 90026

Raen Malone, CA 90026

Frances Maloney, CA 90026

Rebecca Rufer, CA 90026

Toby Tannenbaum, CA 90026

Alison Waller, CA 90026

Paul Brittain, CA 90027

Devlyn Corrigan, CA 90027

Morgan Doverpearl, CA 90027

Terri Foster, CA 90027

Kathryn Nelson, CA 90027

Jb Popplewell, CA 90027

Autumn Reeser, CA 90027

Manuel Rodriguez, CA 90027

Michele Sohnen, CA 90027

Zackary Taylor, CA 90027

Lisa Wallace, CA 90027

Lisa Carney, CA 90028

Melissa Gelmo, CA 90028

Kendra Miller, CA 90028

Coleen Novak, CA 90028

Morgan Bleuel, CA 90029

Suzanne Carney, CA 90029

Andrew Gage, CA 90029

Jessica Rosen, CA 90029

Gustavo Torres, CA 90029

Audrey Arkins, CA 90031



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Lourdes Beltran, CA 90031  
Nathana Schooler, CA 90031  
Misty Arceneaux, CA 90032  
Tony Beck, CA 90032  
Zoely Biel, CA 90032  
Raymond Dangelo, CA 90032  
Arturo Jauregui, CA 90032  
George Torres, CA 90032  
Jazmin Ortega, CA 90033  
Mitchell Roberts, CA 90033  
Annie Wong, CA 90033  
Victoria Brago, CA 90034  
Gonzalez Cani, CA 90034  
Stanley Coleite, CA 90034  
Cristina Cruz, CA 90034  
Claudia Garcia, CA 90034  
David Hawthorne, CA 90034  
Elisa Iovine, CA 90034  
Delia Lopez, CA 90034  
Annie Orange, CA 90034  
Nicole Pina, CA 90034  
Tucker Poindexter, CA 90034  
Michael Raileanu, CA 90034  
Collin Reynolds, CA 90034  
Elizabeth Rose, CA 90034  
Frank Sorkin, CA 90034  
Bernestine Taylor, CA 90034  
Brandon Vineyard, CA 90034  
Florence Williams, CA 90034  
Tricia Berman, CA 90035

Mitchell Cohen, CA 90035  
Andrew David, CA 90035  
Marcy Kelly, CA 90035  
Randall Leighton, CA 90035  
Steven Luftman, CA 90035  
Sara Mattison, CA 90035  
Jordyn Ostroff, CA 90035  
Brenda Rutenberg, CA 90035  
Joan Sobel, CA 90035  
Crystal Us, CA 90035  
Stacy Barninger, CA 90036  
Lauren Bopp, CA 90036  
Jennifer Brett, CA 90036  
Anne Brilliant, CA 90036  
Claire Castle, CA 90036  
Paqueta Davis, CA 90036  
Marisa Duarte, CA 90036  
Alan Ehrlich, CA 90036  
Thomas Gossard, CA 90036  
Suzanna Griffith, CA 90036  
Henry Johnson, CA 90036  
Kevin Keenan, CA 90036  
Chad Kenward, CA 90036  
Anne Madariaga, CA 90036  
Gabrielle Mahdesian, CA 90036



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Eric Opanga, CA 90036  
Bill Petrotta, CA 90036  
Micah Pittard, CA 90036  
Cherie Sandum, CA 90036  
Rick Wartzman, CA 90036  
Gregory Mitchell, CA 90037  
Daniel Shaw, CA 90037  
Ellynn Brown, CA 90038  
Justin Horowitz, CA 90038  
Kenneth Rincon, CA 90038  
Dominick Romain, CA 90038  
Reiss Clauson-Wolf, CA 90039  
Sean Cooley, CA 90039  
Melodie Mcdaniel, CA 90039  
Paulina Quintana, CA 90039  
Erik Rhey, CA 90039  
Annelle Grajeda, CA 90040  
Pablo Vargas, CA 90040  
Francesca Fiorentini, CA 90041  
Teru Kanazawa, CA 90041  
Michael Nehring, CA 90041  
Paul Vallejo, CA 90041  
Jennifer Wilson, CA 90041  
Martamaria Cross, CA 90042  
Laura Cultrera, CA 90042  
Vincent Delley, CA 90042  
Ann Diederich, CA 90042  
Austin Flack, CA 90042  
Jacqueline Hardy, CA 90042  
Brendan Hughes, CA 90042

James Knudsen, CA 90042  
Michele Lavecchia, CA 90042  
Nancy Sharrett, CA 90042  
Yolanda Duvernay, CA 90043  
Carla Huckaby, CA 90043  
Janice Kingcade, CA 90043  
Emma Rivera, CA 90043  
Larry Roberson, CA 90043  
Teraesa Vinson, CA 90043  
Monique Browne, CA 90044  
Michael Hall, CA 90044  
Vincent Marzullo, CA 90044  
Diane Corbin, CA 90045  
Michael Eberly, CA 90045  
Shay Gipson, CA 90045  
Sasha Kushner, CA 90045  
Jason Phillips, CA 90045  
Robyn Rhinehart, CA 90045  
Lilian Salvatore, CA 90045  
Eleanor Schwartz, CA 90045  
Shannon Algeo, CA 90046  
sharon barber, CA 90046  
Nicholas Barlow, CA 90046  
Rusty Buchanan, CA 90046  
Peter Burns, CA 90046  
Laniesha Butler, CA 90046  
Monique Caulfield, CA 90046  
Sukee Chew, CA 90046  
Lisa Crilley, CA 90046  
Jonathan Darr, CA 90046



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kae Erickson, CA 90046  
Taylor Forbes, CA 90046  
Mary Haskell, CA 90046  
Jason Hicks, CA 90046  
Paula Hooks, CA 90046  
Daniel Howell, CA 90046  
Corey Jiannalone, CA 90046  
Michael Kelleher, CA 90046  
Rada Konvisser, CA 90046  
Meredith Lovegrove, CA 90046  
Christopher Mcfarland, CA 90046  
Matthew Nolinleblanc, CA 90046  
Nancy Priddy, CA 90046  
Sydney Van Gorp, CA 90046  
Linda Cryer, CA 90047  
Claire Evans, CA 90047  
Franklin Marline, CA 90047  
Marvin Zacharie, CA 90047  
Cayla Bonn, CA 90048  
Lucy Bradley, CA 90048  
James Forrester, CA 90048  
Deborah Glass, CA 90048  
Douglas Long, CA 90048  
Eric Ortner, CA 90048  
David Resnik, CA 90048  
James Rounds, CA 90048  
Stephen Viens, CA 90048  
Charlene Williams, CA 90048  
Susan Bleecher, CA 90049  
Ronda Gomezquinones, CA 90049

Judith Gordon, CA 90049  
Andrea Green, CA 90049  
Nicole Hillebrandt, CA 90049  
Steven Hitter, CA 90049  
Theresa Kvale, CA 90049  
Laurel Newbound, CA 90049  
Katie Ng, CA 90049  
Arnold Platzker, CA 90049  
Paul Puri, CA 90049  
Rebecca Sperber, CA 90049  
Matthew Tolchin, CA 90049  
Marshall King, CA 90056  
Richard Krelle, CA 90056  
Cynthia Mason, CA 90056  
Andreda Pruitt, CA 90056  
Sylvia Swilley, CA 90056  
Carmencita Solidum, CA 90057  
Cynthia Hawkins, CA 90059  
Daniel Zepeda, CA 90059  
Dana Hubert, CA 90061  
Yanscy Flores, CA 90063  
Beatriz Higuera, CA 90063  
Kathy Rose, CA 90063  
Nicole Bergelson, CA 90064  
Thomas Byrnes, CA 90064  
Shellie Collier, CA 90064  
Karin Diskin, CA 90064  
Karen Edgerton, CA 90064  
Matthew Fillman, CA 90064  
Jody Frank, CA 90064





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Gage, CA 90064  
Mark Hembree, CA 90064  
Linda Levy, CA 90064  
Jennie Maguen, CA 90064  
Michael McIntyre, CA 90064  
Susan Montgomery, CA 90064  
Barbara Satinover, CA 90064  
Michael Schaffer, CA 90064  
Cindy Sison, CA 90064  
Ruth Strauss MD, CA 90064  
Barbara Trelease, CA 90064  
Jill Uhlenkott, CA 90064  
Julie Ahlberg, CA 90065  
Maria Borden, CA 90065  
Lamar Damon, CA 90065  
Sarah Soquel Morhaim, CA 90065  
Arthur Shapiro, CA 90065  
Carlos Tobar, CA 90065  
Maria Warmoth, CA 90065  
Kelly Aeolan, CA 90066  
Ethan Arnold, CA 90066  
Peter Basch, CA 90066  
Barbara Berney, CA 90066  
Faith Brewer, CA 90066  
Stephanie Davis Don, CA 90066  
Sarah Epperson, CA 90066  
Timothy Groff, CA 90066  
Gilbert Guerra, CA 90066  
Akhil Gupta, CA 90066  
Camille Harris, CA 90066

Luann Jaffe, CA 90066  
Alex Kruglov, CA 90066  
Danielle Loefflad, CA 90066  
Sean Porter, CA 90066  
Eileen Selogie, CA 90066  
Sondra Yevette, CA 90066  
Robert Zaugh, CA 90066  
Morgan Chu, CA 90067  
Laura Cordovano, CA 90067  
Howard Fredman, CA 90067  
Stephanie Marshall, CA 90067  
Susan Rodriguez, CA 90067  
Shelly Rothschild, CA 90067  
Wesley Strick, CA 90067  
Jason Wallach, CA 90067  
Nancee Allen, CA 90068  
Lynn Collings, CA 90068  
Jodi Ehrlich, CA 90068  
Brian Henson, CA 90068  
Tim Long, CA 90068  
Kay Morris, CA 90068  
Shane Nguyen, CA 90068  
Jimmy Wachtel, CA 90068  
Wendy Alvarez, CA 90069  
Frank Baquero, CA 90069  
Daniel Cohen, CA 90069  
Nicole Cutright, CA 90069  
Wendy Lipin, CA 90069  
Jennifer Martin, CA 90069  
Kent McCallister, CA 90069



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jordan Rosenberg, CA 90069

Meir Shamy, CA 90069

Matthew Shields, CA 90069

Sara West, CA 90069

Tambi Yu, CA 90069

Robert Daly, CA 90077

Matthew Harrison, CA 90077

Richard Kipper, CA 90077

Francine Maisler, CA 90077

Stephen Sohmer, CA 90077

Amarjit Soni, CA 90077

Forrest Walsh, CA 90077

Jonathan Leahy, CA 90078

Kevin Chang, CA 90079

Jill Klein, CA 90093

Joan Shapiro, CA 90094

Laura Barajas, CA 90201

Juan Guerrero, CA 90201

Efrain Meda, CA 90201

Marie Sia, CA 90201

Lori Soto, CA 90201

Nestor Valencia, CA 90201

Sathara Duong, CA 90210

Jasmine Folden, CA 90210

Victoria Jahanmardi, CA 90210

Amir Kojoory, CA 90210

Eve Rodsky, CA 90210

Arnold Stiefel, CA 90210

Dawn Eliashiv, CA 90211

Alexandra Feldman, CA 90211

Marcie Alexander, CA 90212

Josh Millet, CA 90212

Shareef Aquil, CA 90220

Emily Ragobeer, CA 90220

Kelly Gardner, CA 90221

Stefanie Cleaver, CA 90222

Yolanda Melvinnelms, CA 90222

Brian Decato, CA 90230

Barbara Golbin, CA 90230

Patricia Hughes, CA 90230

Sharon Kerson, CA 90230

James Miller, CA 90230

Pat Nomura, CA 90230

Joanna Rowles, CA 90230

Glenn Stewart, CA 90230

Lilli Valtierra, CA 90230

Glenda Wina, CA 90230

Jeremy Zuniga, CA 90230

Bill Birdsall, CA 90232

Mark Galanty, CA 90232

Jonathan Glater, CA 90232

Jim Hornstein, CA 90232

Joy Kecken, CA 90232

Parisa Mirzadehgan, CA 90232

Helki Zeigler, CA 90239

Anita Boorman, CA 90240

Xavier Granados, CA 90240

Salvador Padill, CA 90240

Bernice Caan, CA 90241

Walter Connick, CA 90245



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Rhonda Haley, CA 90245

Chris Miller, CA 90245

Sarah Mosseller, CA 90245

Judy Smith, CA 90245

Gloria Telles, CA 90245

Diane Trevizo, CA 90245

Josephine Baltazar, CA 90249

Marion Dwyer, CA 90250

Julio Gavio, CA 90250

Ellen King, CA 90250

Megan Klein, CA 90250

Maureen Kleinman, CA 90250

Viki Short, CA 90250

Carl Weibel, CA 90250

David Adler, CA 90254

Megan Bowers, CA 90254

Chas Costello, CA 90254

Caitlin Dahl, CA 90254

Martin Fogel, CA 90254

Ann Gotthoffer, CA 90254

Carol Horne, CA 90254

Alicia Jones, CA 90254

Kimberly Legrand, CA 90254

Rosanna Savone, CA 90254

Angel Alva, CA 90260

Anthony Owens, CA 90260

Zenaida Alfaro, CA 90262

Tabitha Dileo, CA 90264

Robert Adler, CA 90265

Maureen De Koff, CA 90265

Jeff Eisen, CA 90265

Marla Hosie, CA 90265

Constance Shafran, CA 90265

Georgia Cano, CA 90266

Bradley Dodge, CA 90266

Carol Dormer, CA 90266

Ralph Goldstein, CA 90266

Otto Gudiel, CA 90266

Brittany Hilgendorf, CA 90266

Lynn Smith, CA 90266

Lisa Taub, CA 90266

Sara Thaves, CA 90266

Lynn Werner, CA 90266

Irene White, CA 90266

Dorothy Yungman, CA 90266

Brooke Covington, CA 90272

Kimberly Michel, CA 90272

Weston Naef, CA 90272

Leo Perez, CA 90272

Nora Perricone, CA 90272

Peter Rogers, CA 90272

Ellie Ross, CA 90272

Patricia Sinclair, CA 90272

Paul Solomon, CA 90272

Christine Steele, CA 90272

Michael Chiado, CA 90274

Michael Eicher, CA 90274

Janis Fitzsimmons, CA 90274

Arthur Friedman, CA 90274

Yvonne Godfrey, CA 90274



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Karen Govenar, CA 90274

Lawrence Maltz, CA 90274

Colleen MULLowney, CA 90274

Sandra Peck, CA 90274

Ellie Berkowitz, CA 90275

Virendra Kadakia, CA 90275

Louis Krouse, CA 90275

Mark Martinez, CA 90275

Teri Perez, CA 90275

Jason Rosenfeld, CA 90275

Sandra Brilliant, CA 90277

Christine Coffelt, CA 90277

Patrick Daley, CA 90277

Victoria DeFrank, CA 90277

Donna Haupt, CA 90277

Angelica Hurd, CA 90277

Carol Mckeown, CA 90277

Melanie Nelson, CA 90277

Pamela Popovich, CA 90277

Larry Styza, CA 90277

Marc Teitelbaum, CA 90277

Deborah Vaia, CA 90277

David Barnes, CA 90278

Nancy Bartolo, CA 90278

Juan Mansill, CA 90278

Nicole Smith, CA 90278

Daniel Wallace-Brewster, CA 90278

Sandra Flores, CA 90280

Marilyn Ball, CA 90290

Cynthia Hodnett, CA 90290

Angela Mogg, CA 90290

Coon Bruno, CA 90291

Naomi Saldana, CA 90291

Paula Silver, CA 90291

Donna Sylvester, CA 90291

Harbans Ahluwalia, CA 90292

Jason Bohrer, CA 90292

Kelli Cardiff, CA 90292

Jennifer Chiu, CA 90292

Kylie Clark, CA 90292

Courtney Nichols-Gould, CA 90292

Sanya Obsivac, CA 90292

Larry Otting, CA 90292

Michael Perry, CA 90292

Rainer Poertner, CA 90292

Scott Sewell, CA 90292

Nancy Wergeles, CA 90292

Richard Benzel, CA 90293

Louise Lance, CA 90293

Nicole Martinez, CA 90293

Bonnie Mishelevich, CA 90293

Michelle Ouellet, CA 90293

Bob Oyama, CA 90293

Jennifer Rice, CA 90293

Stanley Sharpe, CA 90293

Amy Bell, CA 90301

Debra Lockie, CA 90301

Dawn Sitahal, CA 90301

Annie Flowal, CA 90302

Maria Marchand, CA 90302



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Roy Smith, CA 90302

Mar Sorell, CA 90302

Nathaniel Jemison, CA 90303

Cristobal Tostado, CA 90304

Kendall Dennis, CA 90305

Maria Morse, CA 90310

Claudine Gueniot, CA 90401

Brian Sutter, CA 90401

Kathryn Takis, CA 90401

Daniel Arkin, CA 90402

Dave Feldman, CA 90402

Ronni Kern, CA 90402

Frank Stiefel, CA 90402

Jaime Toporovich, CA 90402

Chares Brann, CA 90403

Frederick Carroll, CA 90403

Katie Corridan, CA 90403

Dorothy Froix, CA 90403

Lee Herschler, CA 90403

Sintra Martins, CA 90403

Helen Mccullough, CA 90403

Joe Orcutt, CA 90403

Nectar Redman, CA 90403

Jill Sharaf, CA 90403

Amy Williams, CA 90403

Stefanie Zuroff, CA 90403

Larena Allen, CA 90404

Joan Bee, CA 90404

Ingrid Debeus, CA 90404

Thomas Hawkins, CA 90404

Marlise Malkames, CA 90404

Mary Quinn, CA 90404

Sienna Sanders, CA 90404

Mary Vorasky, CA 90404

Bernard Alfs, CA 90405

Joe Alter, CA 90405

Toby Book, CA 90405

Barry Bunes, CA 90405

Peter Erskine, CA 90405

Linda Garrett, CA 90405

Dan Genetti, CA 90405

Jeffrey Hahn, CA 90405

PAMELA Lane, CA 90405

Erin Martin, CA 90405

Reid Mcglamery, CA 90405

Beverly Millson, CA 90405

Lisa Moseley, CA 90405

Lynn Peterson, CA 90405

Nancy Rosenblum, CA 90405

Mara Thompson, CA 90405

Ashley Wrobel, CA 90405

Tony Wu, CA 90405

Anne Yapple, CA 90405

Chris Hamayasu, CA 90501

Mitchell Hicks, CA 90501

Gregory Jacobs, CA 90501

Gail Nowak, CA 90501

Bryant Odega, CA 90501

Gloria Diaz, CA 90502

Rosemary Levenson, CA 90502





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Bobbi Scoville, CA 90502  
Michelle Hartman, CA 90503  
Judith Baer, CA 90505  
Garland Elaina, CA 90505  
Elizabeth Leung, CA 90505  
Simon Pang, CA 90505  
Asma Rasikh, CA 90505  
Michael Warner, CA 90505  
Bob Lewis, CA 90506  
Charlotte Borst, CA 90601  
Janine Gonzalez, CA 90601  
Robert King, CA 90601  
John Melendrez, CA 90602  
Delmira Miovsky, CA 90602  
Ralph Picon, CA 90602  
Thomas Riebs, CA 90602  
Jeff Palmer, CA 90603  
William Wong, CA 90603  
Michael Oppenheim, CA 90604  
Frank Samaniego, CA 90604  
Andrew Ytuarte, CA 90604  
Diane Zaha, CA 90604  
Genienne Gastelum, CA 90605  
Andrew Nguyen, CA 90605  
John Thomas, CA 90605  
Catherine Mcfall, CA 90606  
Michele Lujan, CA 90620  
Lisa Bearbower, CA 90630  
Amy Estrada, CA 90630  
Hilarie Favro, CA 90630

Christine Handson, CA 90630  
Connie Araujo, CA 90631  
Louis Estrada, CA 90631  
Christina Malm, CA 90631  
Alfred Velasco, CA 90631  
Sylvia Duran-Katnik, CA 90638  
Jorge Moreno, CA 90640  
Luis Parocua, CA 90640  
Priscilla Tostado, CA 90640  
Gloria Haley, CA 90650  
Henry Resendez, CA 90650  
Madeline Ayala, CA 90660  
Irma Barrios, CA 90660  
Stacey Esparza, CA 90660  
Victoria Rodriguez, CA 90660  
Laura Garcia, CA 90670  
Katherine Koh, CA 90670  
Luisa Acosta, CA 90680  
Eloisa Likens, CA 90701  
Sherry Barbour, CA 90703  
Antonino Castillo, CA 90703  
Stephen Hamrick, CA 90703  
Patricia Lozano, CA 90703  
Linda Rochin, CA 90703  
April Goebel, CA 90706  
Lee Orozco, CA 90706  
Rodrigo Vazquez, CA 90706  
Janet Kordich, CA 90710  
Lawrence Circosta, CA 90713  
Sharney Alvarez, CA 90715



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Frenee Dellosa, CA 90715  
Beverly Tolliver, CA 90715  
Patricia Hydo, CA 90717  
Colin Caesar, CA 90720  
Kelly Fleagle, CA 90720  
Jay Leibowitz, CA 90720  
Jimmy Sorensen, CA 90720  
Daniel Teran, CA 90720  
Melinda Porter, CA 90723  
Josue Garcia, CA 90731  
Janet Jackson, CA 90731  
Mark Latno, CA 90731  
Rosemary Locklear, CA 90731  
Kathleen Durazo, CA 90732  
Kerry Mcosker, CA 90732  
Peggy Morales, CA 90732  
Jason Buell, CA 90740  
Elda Lowe, CA 90740  
Roni Shevick, CA 90740  
Rebecca Wyatt, CA 90740  
Amanda Herring, CA 90742  
Elvia Maciel, CA 90744  
Crisostomo Caratao, CA 90745  
John Winston, CA 90745  
Dionecia Usher, CA 90746  
Harold Williams, CA 90746  
Sylvia Baker, CA 90755  
Donna Vaughan, CA 90755  
Jason Castner, CA 90802  
Alison Chabot, CA 90802

Lynda Crow, CA 90802  
Claus Jurgensen, CA 90802  
Matthew Lampe, CA 90802  
John Lowe, CA 90802  
William Moody, CA 90802  
Michael Moskowitz, CA 90802  
Nancy Oneill, CA 90802  
Gregory Pacificar, CA 90802  
Arnold Rosenberg, CA 90802  
Timothy Smith, CA 90802  
Krista Stoltz, CA 90802  
Bonnie Bishop, CA 90803  
Lisa Buchanan, CA 90803  
Shawn Lamont, CA 90803  
Krishna Manvi, CA 90803  
Debra Martin, CA 90803  
Anne Reggie, CA 90803  
Mark Rogers, CA 90803  
Michael Werner, CA 90803  
Kylee Yates, CA 90803  
Vicky Gutierrez, CA 90804  
Lena Serrano, CA 90804  
Terry Allen, CA 90805  
Chris Lauderdale, CA 90805  
Trulena Reed, CA 90805  
Rose Regalado, CA 90805  
Marvin Todd, CA 90805  
Brett Banditelli, CA 90806  
Sheryl Breault, CA 90806  
Linda Gore, CA 90806



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ian Cross, CA 90807

Robert Hilty, CA 90807

Mary Humme, CA 90807

Loretta Klonecky, CA 90807

Kent Lockart, CA 90807

Sharon Mcdougal, CA 90807

Robert Miller, CA 90807

Okatch Otieno, CA 90807

Denise Wallace, CA 90807

Louise Cunningham, CA 90808

Richard Kasube, CA 90808

Elizabeth Kurila, CA 90808

Patricia Martinez, CA 90808

Adam Nelson, CA 90808

Michelle Vasiloff, CA 90808

Amy Williford, CA 90808

Becky Wilson, CA 90808

Travis Yarbrough, CA 90808

Samantha Fabrigas, CA 90810

Phoebe Nichols, CA 90810

Alba Carlos, CA 90813

David Navarro, CA 90813

Guillermo Olarte, CA 90813

Sharron Pannell, CA 90813

Jack Dourigan, CA 90814

Robert Loparo, CA 90814

Courtnei Pugh, CA 90814

Jason Suarez, CA 90814

Stella Ursua, CA 90814

Abigail Bradecich, CA 90815

Melanie Buckowski, CA 90815

Chester Chebegia, CA 90815

Sylvia Gyimesi, CA 90815

Rhonda Weisenberger, CA 90815

Bernard Adamczyk, CA 91001

Ontresicia Averette, CA 91001

Patricia Fielder, CA 91001

Sheldon Halpern, CA 91001

Sydney Harris, CA 91001

Kenneth Jones, CA 91001

Elsa Lopez McLeod, CA 91001

Cate MatherS-Suter, CA 91001

Scott Streicher, CA 91001

Susan Lauer, CA 91006

Steven Lee, CA 91006

Joyce Sakai, CA 91006

Albert Hu, CA 91007

Guodi Sun, CA 91007

Diane Coscarelli, CA 91010

David Knapik, CA 91010

Claudia Trefzger, CA 91010

Dave Allen, CA 91011

Joanne Doyle, CA 91011

Tracey Welk, CA 91011

Stephanie Farah, CA 91016

Sandra Glaser, CA 91016

Renee Lindsey, CA 91016

Mary Lutz, CA 91016

Wayne Prasertong, CA 91016

Christine Pregent, CA 91016



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jon Sattler, CA 91016  
Rena Snider, CA 91016  
Ruben Valenzuela, CA 91016  
Kristen Cunningham, CA 91020  
Justin Smith, CA 91024  
Linda Bortell, CA 91030  
Gionne Bozzi, CA 91030  
Deirdre Brenner, CA 91030  
Kevin Fox, CA 91030  
Shandor Garrison, CA 91030  
Wes Kennedy, CA 91030  
Joseph Loo, CA 91030  
Bob Lynch, CA 91030  
Stephanie Rodriguez, CA 91030  
Robin A, CA 91040  
Mary Leask, CA 91040  
Stephanie Mines, CA 91041  
Cecelia Hall, CA 91042  
Suzan Ortmeier, CA 91042  
Leonard Hinzo, CA 91101  
David Mceliece, CA 91101  
Inna Sarac, CA 91101  
Jessica Servin, CA 91101  
Evelyn Zamora, CA 91101  
Garret Gervais, CA 91103  
Daniel Denoncourt, CA 91104  
Rudy Oclaray, CA 91104  
Sherri Solinger, CA 91104  
Melissa Afable, CA 91105  
Rosemary Distaso, CA 91105

Sable Hodson, CA 91105  
Susan Kalmanson, CA 91105  
Laila Karne, CA 91105  
Jose Marquez, CA 91105  
Susan Weber, CA 91105  
Thomas Castaneda, CA 91106  
Lyle Davis, CA 91106  
Courtney Sanford, CA 91106  
Patricia Tavera, CA 91106  
Richard von Ernst, CA 91106  
Daniel Kiczek, CA 91107  
Joan Money, CA 91107  
Scott Reed, CA 91108  
Jordan Sollitto, CA 91108  
Patrick Moloughney, CA 91117  
Julia Dennett, CA 91118  
Phillip Argento, CA 91199  
Kathleen Conroy, CA 91201  
Michael Lent, CA 91201  
Michael Fairman, CA 91202  
Eve Hinchcliffe, CA 91202  
Oscar Ibardolaza, CA 91202  
Mike Powers, CA 91202  
JOHN PAUL KARLIAK, CA 91205  
Charles Merman, CA 91205  
Madoka Minoff, CA 91205  
Greg Nash, CA 91205  
Yael Torbati, CA 91205  
Bonnie Benefield, CA 91206  
Barri Brown, CA 91206



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Janna Gosselin, CA 91206  
Samuel Jordan, CA 91206  
Robin Rose, CA 91206  
Johanna Shapiro, CA 91206  
Matthew Hancock, CA 91207  
Maya Gingery, CA 91208  
John Wagner, CA 91208  
Vahe Badalian, CA 91214  
Elizabeth Connors, CA 91214  
Alicia Elliott, CA 91214  
Rachel Mcdowell, CA 91214  
Belinda Smith, CA 91214  
James Vitek, CA 91214  
Warren Wolfswinkel, CA 91214  
Bonnie Aharoni, CA 91301  
Julie Burkert, CA 91301  
Harvey Davis, CA 91301  
Helen Dembski, CA 91301  
Laura Gilbard, CA 91301  
Karen Lijewski, CA 91301  
Kellee Mcdonald, CA 91301  
Nicolas Miller, CA 91301  
Mary Perezkorinko, CA 91301  
Deborah Raymond, CA 91301  
Kurt Teutsch, CA 91301  
Yaara Berdan, CA 91302  
Chittabhattacha Bhattacharya, CA 91302  
Kerry Ehrin, CA 91302  
James Estill, CA 91302  
Marcia Jones, CA 91302

Paul Malmont, CA 91302  
Marianne Price, CA 91302  
Snuffy Walden, CA 91302  
Marissa Espinoza, CA 91303  
Bernita Gross, CA 91303  
Kristina Hergot, CA 91304  
Ernest Hess, CA 91304  
Wendy Liebman, CA 91304  
Ernesto Lising, CA 91304  
Sandra Machado, CA 91304  
Lesley Webster, CA 91304  
Kirk Bales, CA 91306  
Collette Snoonian, CA 91306  
Charlesdelore Wilbert, CA 91306  
Garrett Clancy, CA 91307  
Katherine Eskey, CA 91307  
John Golden, CA 91307  
Deborah Hyde, CA 91307  
Zenia Lasola, CA 91307  
Lori Love, CA 91307  
Pamela Maggin, CA 91307  
Richard Naimy, CA 91307  
Philip Sager, CA 91307  
Miriam Bogler, CA 91311  
Cassandra Kubiak, CA 91311  
Lea Oliver, CA 91311  
Brian Patridge, CA 91311  
Juativa Spurlock, CA 91311  
Ann Bose, CA 91316  
Cindy Durian, CA 91316





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kenneth Zunder, CA 91316

Beth Kramer, CA 91320

Eugenio Rodriguez, CA 91320

Albert Sciamann, CA 91320

Cherie Wrigley, CA 91320

Fahim Aladin, CA 91321

Peggy Streid, CA 91321

Barbara Testa, CA 91321

Saul Candi, CA 91324

Rita Silverman, CA 91324

Erin Feaster, CA 91325

Frank Freeman, CA 91325

Cynthia Mendoza, CA 91325

Kelly Moore, CA 91325

Marion Pucci, CA 91325

Sharon Cho, CA 91326

Terrence Fischer, CA 91326

Leslie Ousdahl, CA 91326

Garrett Shorr, CA 91331

Erphan Delgir, CA 91335

Barbara Gershowitz, CA 91335

Daniel Greenbaum, CA 91335

Steven Kent, CA 91335

Betty Ross, CA 91335

Donna Silverman, CA 91335

Alma Melendez, CA 91340

Julia Arroyo, CA 91342

Diana Cabral, CA 91342

Anna Felix, CA 91342

Debra Lizarraga, CA 91342

Judy Courtney, CA 91343

Robin Dickerson, CA 91343

Gustavo Garcia, CA 91343

Robert Jones, CA 91343

Mohammed Manik, CA 91343

Chris Papio, CA 91343

Lewis Gruber, CA 91344

Lisa Jernagan, CA 91344

Margie Ridolfi, CA 91344

Jack Rorke, CA 91344

Debra Stafford, CA 91344

Albert Campbell, CA 91350

Victoria Davis, CA 91350

Richard Davis, CA 91351

Patrick Hayes, CA 91351

Tami Cox, CA 91354

Ellyn Frechette, CA 91354

Laura Lively, CA 91354

Zane Smythe, CA 91354

Monica Bellows, CA 91355

Julie Molinare, CA 91355

Mister Oshodi, CA 91355

Christopher Severance, CA 91355

Sarah Skilton, CA 91355

Linda Swartz, CA 91355

John Trudell, CA 91355

Ladae Bond, CA 91356

Michael Dibenedetto, CA 91356

Tina Glantz, CA 91356

Aaron Katz, CA 91356



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Peter Marafatsos, CA 91356

Eve Newton Gill, CA 91356

Sandra Orleans, CA 91356

Neil Reichline, CA 91356

Manindersethi Sethi, CA 91356

Neil Soltman, CA 91356

Walter Virginia, CA 91357

Arlene Bloom, CA 91360

Josie Borkan, CA 91360

Patricia Bowen, CA 91360

Ronald Clyburn, CA 91360

David Courtland, CA 91360

Karen Giacalone, CA 91360

Manuel Gonzalez-Olmo, CA 91360

Anna Matthews, CA 91360

Michael Pittas, CA 91360

Raquel Robinson, CA 91360

Gary Schattl, CA 91360

Kristin Dark, CA 91361

Lewis Fairley, CA 91361

Suzan Kavusi, CA 91361

Cindy Masci, CA 91361

Marianne Reeves, CA 91361

Andrea Richard, CA 91361

Ravi Sawhney, CA 91361

Suzette Sheweloff, CA 91361

Brigitte Cox, CA 91362

Karen Drees, CA 91362

Cyndi Ex, CA 91362

Debra Gass, CA 91362

Sara Hibbitts, CA 91362

Carl Josefsson, CA 91362

Maxine Raleigh, CA 91362

Paula Varblow, CA 91362

Jill Whitesides, CA 91362

Joey Dianda, CA 91364

John Edelston, CA 91364

Irene Escardo, CA 91364

Ardeshir Farah, CA 91364

Liz Golombek, CA 91364

Jeffrey Pittman, CA 91364

Karen Spencer, CA 91364

Sharla Bridgett, CA 91367

Deborah Cohen, CA 91367

Angela Deluca, CA 91367

Robert Dyck, CA 91367

John Elder, CA 91367

Lisa Insana, CA 91367

Charles Lagola, CA 91367

John Liddy, CA 91367

Christopher Matted, CA 91367

Luz Rockey, CA 91367

Melinda Romeo, CA 91367

Daniel Zagayer, CA 91367

John Billesdon, CA 91377

Margaret Han, CA 91377

Jana Hand, CA 91377

Samantha Hart, CA 91377

Amy Keys, CA 91377

David Robinson, CA 91377



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Miklos Wright, CA 91384

Rose Duarte, CA 91387

Lynn Farwell, CA 91387

Folahan Ogunyankin, CA 91387

Faith Jackson, CA 91394

Christina Anthony, CA 91401

Carolyn Collum, CA 91401

Lauren Dimascio Hilary, CA 91401

Alice Engelmann, CA 91401

Kathy Foley, CA 91401

Tanya Gradet, CA 91401

Jessica Hicks, CA 91401

Jodi Kustanovich, CA 91401

Brenda Miller, CA 91401

Corey Reed, CA 91401

Tami Tirgrath, CA 91401

Kathleen Gooley, CA 91402

Julie Peterson, CA 91402

Carol Baumzweiger, CA 91403

Rene Compean, CA 91403

Pete Decoste, CA 91403

David Frederick, CA 91403

Frances Garcia, CA 91403

Rome Mendheim, CA 91403

Emily Rehm, CA 91403

Nina Berry, CA 91405

Joann Gonzalez, CA 91405

Jeana Mamer, CA 91405

Maria Perez, CA 91405

Mary Pittelli, CA 91405

Brian Saulter, CA 91405

Andrea Tullio, CA 91405

Norma Castro, CA 91406

Melissa Elliott, CA 91406

Richard Follett, CA 91406

James Kimmel, CA 91406

Jean Mensing, CA 91406

Jenny Benjamin, CA 91411

Lilia Espino, CA 91411

Stephanie Hail, CA 91411

Melinda Liberatore, CA 91411

Rhonda Britten, CA 91423

Patrick Fabian, CA 91423

Chiara Gambini, CA 91423

Cheryl Kopitzke, CA 91423

Vicky Leiner, CA 91423

Hannah Lipow, CA 91423

Michael Mccoll, CA 91423

Chandra Padover, CA 91423

Stan Rogow, CA 91423

Sara White, CA 91423

K Andrews, CA 91436

Barbara Bresler, CA 91436

Tracy Danza, CA 91436

Tara Gallogly, CA 91436

Alan Gerson, CA 91436

Jamie Grossman, CA 91436

Hannah Mandel, CA 91436

David Miller, CA 91436

Katrina Parks, CA 91436



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gia Twine, CA 91436  
William Bilton, CA 91501  
Peter Carrisoza, CA 91501  
Norma Long Smith, CA 91501  
Sarah Min, CA 91501  
Penny Moore, CA 91501  
Barbara Chalsma, CA 91502  
Lonnie Schnell, CA 91502  
Ellen Burns, CA 91504  
Jb Dlugo, CA 91504  
Jane Gagle, CA 91504  
Gerardo Lorenz, CA 91504  
Denise Petski, CA 91504  
Lana Wilson, CA 91504  
Barbara Bali, CA 91505  
Ramona Banuelos, CA 91505  
Roberto Ceja, CA 91505  
Lydia Delaney, CA 91505  
Terry Gwilt, CA 91505  
Clayton Holt, CA 91505  
Cynthia Mazza, CA 91505  
Lynda Morris, CA 91505  
Christopher Nicholson, CA 91505  
Gloria Rodriguez, CA 91505  
Laura Strubing, CA 91505  
Carole Tyminski, CA 91505  
Peter Wood, CA 91505  
Lauren Dean, CA 91506  
Lindsey Gary, CA 91506  
Joseph Lafalce, CA 91506

Debbie Peterson, CA 91506  
Ada Suros, CA 91506  
Aaron Berjohn, CA 91601  
Carole Meyers, CA 91601  
Matthew Murphu, CA 91601  
Nicholas Schutz, CA 91601  
Greg French, CA 91602  
Catherine Genovese, CA 91602  
Pamela Hannah, CA 91602  
Julie James, CA 91602  
David Kemker, CA 91602  
Diane Wilson, CA 91602  
Jeff Aldrich, CA 91604  
Claire Austin, CA 91604  
Joshua Bobrowsky, CA 91604  
Monica Brown, CA 91604  
Sherri Elkaim, CA 91604  
Barbara Epstein, CA 91604  
Tim Farish, CA 91604  
F Forte, CA 91604  
Hayley Frazier, CA 91604  
Kellie Green, CA 91604  
Cynthia Hasday, CA 91604  
Alma Hernandez, CA 91604  
Masako Ichino, CA 91604  
Jeffrey Kaufman, CA 91604  
Amy Larkowski, CA 91604  
Christine Mantilla, CA 91604  
Mary Kay Griepentrog, CA 91605  
Anthony Karlic, CA 91605



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Richard Kelley, CA 91605  
Myrna Garcia, CA 91606  
Janet Hessert, CA 91606  
Pattie Tierce, CA 91606  
Carl Amodeo, CA 91607  
Toby Brody, CA 91607  
Chloe Castro, CA 91607  
Robert Laskin, CA 91607  
Timothy Malcolm, CA 91607  
Julie Shemitz, CA 91607  
Barbara Singer, CA 91607  
Daamen Krall, CA 91610  
Alba Boren, CA 91701  
Victoria Chestnut, CA 91701  
Michelle Dudek, CA 91701  
Beverly Pearson, CA 91701  
America Rivas, CA 91701  
Rose Blanco, CA 91702  
Ana Juarez, CA 91702  
Lisa Oakes, CA 91702  
Jon Sparks, CA 91702  
Gregory Vaniman, CA 91702  
Linda Bolella, CA 91706  
Lisa Cunningham, CA 91709  
Luis Nino, CA 91709  
Evangeline Obrero, CA 91709  
Pamela Pederson, CA 91709  
Artan Qerushi, CA 91709  
Agnes Ferrer, CA 91710  
Kimberly Goodwin, CA 91710

Gregory Lawson, CA 91710  
Cathy Mergaert, CA 91710  
Naomi Miller, CA 91710  
Bernard Karmatz, CA 91711  
Daeho Kim, CA 91711  
Mary Kraus, CA 91711  
Elizabeth Spinrads, CA 91711  
Christine Zivelonghi, CA 91711  
Michael Bond, CA 91722  
Michelle Cozad, CA 91722  
Carl Molitor, CA 91722  
Joyce Mitchell, CA 91723  
Steven Jimenez, CA 91724  
Dana Veit, CA 91724  
Gilbert Ahumada, CA 91730  
Karen Desimone, CA 91730  
Edward Hays, CA 91730  
Demetria Johnson, CA 91730  
Marva Taylor, CA 91730  
Phyllis White, CA 91730  
David Sandoval, CA 91732  
Cherie French, CA 91737  
Tammy Wilson, CA 91737  
Maria Mendoza, CA 91739  
Wanda Peyton, CA 91739  
Tedd Johnson, CA 91740  
Andy Wang, CA 91740  
Fred Beck, CA 91741  
Steven Concidine, CA 91741  
Kristine Nelson, CA 91741





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michael Carr, CA 91744  
Jacqueline Cellian, CA 91744  
Hector Estrada, CA 91744  
Enrique Duenas, CA 91745  
Irene Loh, CA 91745  
Rebecca Meyer, CA 91745  
Gabrielanthony Murillo, CA 91745  
Mary Rubalcava, CA 91746  
Marilyn Bidwell, CA 91750  
Dale Gibboney, CA 91750  
Bonnie Karlyle, CA 91750  
Martha Smith, CA 91750  
Kelly Whittington, CA 91750  
Warren Winter, CA 91750  
Matthew Leal, CA 91752  
Alysa Majer, CA 91752  
Yip Johnson, CA 91754  
Jack Loh, CA 91754  
Allan Shatkin, CA 91754  
Lucille Dimmick, CA 91761  
Mark Iannuzzo, CA 91761  
Marcia Sedillo, CA 91761  
Jerry Weems, CA 91761  
GEORGIANN SLINGERLAND, CA 91762  
Graciela Gambino, CA 91763  
Wendi Cate, CA 91764  
David Taylor, CA 91764  
Judith Aguilera, CA 91765  
Gary Davis, CA 91765  
Varun Dutt, CA 91765

Jean Garcia, CA 91765  
Samuel Johnson, CA 91765  
Greg Krayser, CA 91765  
Hugh Lawrence, CA 91765  
Mamie Lindsey, CA 91765  
So Pak, CA 91765  
Tammi Senzaki, CA 91765  
Rosa Lara, CA 91766  
Guillermo Monterroso, CA 91766  
William Pospishil, CA 91766  
Erlene Stevenson, CA 91766  
John Valadez, CA 91766  
Melissa Crowley, CA 91767  
Bryn Pellegrino, CA 91767  
Christianne Arouze, CA 91768  
Erlinda Fantauzzi, CA 91770  
Jose Meji, CA 91770  
Carol Bowe, CA 91773  
Remedios Gan, CA 91773  
Andrew Ortiz, CA 91773  
Nosakhare Oyemade, CA 91773  
Renee Taylor, CA 91773  
Edward Aguirre, CA 91775  
Brooks Atherton, CA 91776  
Arlene Rios, CA 91776  
Lynn Castro, CA 91780  
Agustin Jimenez, CA 91780  
Maria Skilbred, CA 91784  
Jaymi Abusham, CA 91786  
Socorro Garcia, CA 91786



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jeff McCall, CA 91786  
Marco Ramirez, CA 91786  
Ed Clemensen, CA 91789  
Vilma Takamine, CA 91789  
Carol Tang, CA 91789  
Gregory Newcomer, CA 91790  
Mary Silverstein, CA 91791  
Jeanne Ambriz, CA 91792  
Ariadna Arambula, CA 91801  
Daniella Cota, CA 91801  
Richard Spindler, CA 91801  
Erika Kao, CA 91802  
Lothar Imbior, CA 91803  
Tiffany Wardloveland, CA 91803  
Eduardo Becerra, CA 91902  
Richard Hanks, CA 91902  
France Williams, CA 91902  
Soledad Boucree, CA 91910  
Osadolor Godwin, CA 91910  
Blanca Lopez, CA 91910  
Jose Puente, CA 91910  
Elizabeth Verastigue, CA 91910  
Debra Ashley, CA 91911  
Maurice Gray, CA 91911  
Alan Palmer, CA 91911  
Wendy Shurelds, CA 91911  
Keith Hammond, CA 91913  
Seoul Holloway, CA 91913  
Hung Nguyen, CA 91913  
Vilma Clariza, CA 91915

Fernando Delgado, CA 91915  
George Hurt, CA 91915  
Linda Petty, CA 91915  
Kimberly Williams Kee, CA 91915  
Kevin Collier, CA 91935  
Fred Gordon, CA 91941  
Bebi Rosa, CA 91941  
John Barrios, CA 91942  
Mary Fay, CA 91942  
Mark Forte, CA 91942  
Chelsea Halpine Berger, CA 91942  
Susan Kawar, CA 91942  
Mimi Lev, CA 91942  
Barbara Lueder, CA 91942  
Marjorie McLaughlin, CA 91942  
Susan Mullaney, CA 91942  
Patricia Cortez, CA 91945  
Matt Niles, CA 91945  
Caitlin Wion, CA 91945  
Josefina Alvarado, CA 91950  
Patricia Salazar, CA 91950  
David Valladolid, CA 91950  
Angello Carlin, CA 91977  
Jason Heil, CA 91977  
Carrie Lopez, CA 91977  
Karen Simpson, CA 91977  
Delores Threatt, CA 91977  
Cheryl Carr, CA 91978  
Shawn Hanna, CA 92007  
Alana Howell, CA 92007



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Laurel Howard, CA 92008

Megan Rounds, CA 92008

William Betts, CA 92009

Linda Brenner, CA 92009

Rene Brunold, CA 92009

Megan Dewitt, CA 92009

Christine Dicken, CA 92009

Amal Ghazi, CA 92009

Tiffany Karnig, CA 92009

Judith King, CA 92009

Phillip Nguyen, CA 92009

Gina Pisello, CA 92009

Faramarz Rassouli, CA 92009

Jacqui Schneider, CA 92009

John Detreville, CA 92010

Veronica Glaser, CA 92010

Linda Vancea, CA 92010

Elizabeth Hamelin, CA 92011

Brenna Hardman, CA 92011

Cheryl Bianchi, CA 92014

Samuel Engel, CA 92014

John Erick, CA 92014

Janet Harris, CA 92014

Kay Hoeprich, CA 92014

Candace Lowry, CA 92014

Deanna Lucci, CA 92014

Rand Steiger, CA 92014

Marie Teehan, CA 92014

Kyle Williams, CA 92014

Robert Brandenburg, CA 92019

Tracy Clingan, CA 92019

Veronica Atilano, CA 92020

Dvora Fajerman, CA 92020

Frank Ferrone, CA 92020

Janet Kaiser, CA 92020

Edward Matus, CA 92021

Joan Monkman, CA 92021

Woody Wilson, CA 92021

Cynthia Clark, CA 92023

Misty Andersen, CA 92024

Caroline Augustine, CA 92024

Stephen Baldini, CA 92024

Michele Haber, CA 92024

Richard Hauger, CA 92024

Ann Irwin, CA 92024

Anand Janaswamy, CA 92024

Maureen Kowba, CA 92024

Sarah Mason, CA 92024

Laura Metzinger, CA 92024

Meaghan Oleary, CA 92024

Mark Sonnenshein, CA 92024

Karen Sulger, CA 92024

Ellen Trester, CA 92024

Susan Giroux, CA 92025

Timothy Jarrett, CA 92025

Carmen Ivins, CA 92026

Kimberly Marin, CA 92026

Julie Choi, CA 92027

Mitchell Green, CA 92027

George Kliassov, CA 92027



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Konstantin Sheverdyayev, CA 92027

Susan Beld, CA 92028

Patricia Eastman, CA 92028

Ernest Holburt, CA 92028

Richard Mannino, CA 92028

Diane Parker, CA 92028

Samuel Pietrofeso, CA 92028

Kenneth Samuels, CA 92028

Tom Simmons, CA 92028

Richard Beck, CA 92029

Thomas Hearn, CA 92029

Robert Knaier, CA 92029

Neal Henderson, CA 92030

Robert Blanchard, CA 92037

Barry Bloom, CA 92037

Elizabeth Boyer, CA 92037

Isabel Brown, CA 92037

Brian Campion, CA 92037

Gary Ferdman, CA 92037

Michelle Lerach, CA 92037

Megan Phelps, CA 92037

Oliver Polo, CA 92037

David Thompson, CA 92037

Christopher Jrfisher, CA 92038

Kirk Sword, CA 92040

Barbara Thompson, CA 92040

William Crawford, CA 92049

Thomas Gougherty, CA 92049

John Collins, CA 92052

Carolyn Boone, CA 92054

Susan Buckland, CA 92054

Joseph Calvino, CA 92054

Jason Edwards, CA 92054

John Engel, CA 92054

Patricia Hopper, CA 92054

Christopher Martin, CA 92054

Mark Minkler, CA 92054

Luke Tesluk, CA 92054

Rita Atkinson, CA 92056

William Boston, CA 92056

Rudy Carino, CA 92056

Thomas Labrot, CA 92056

Edward Mankowski, CA 92056

Julie Scott, CA 92056

Natalie Byler, CA 92057

Michael Caracappa, CA 92057

Mark Gillen, CA 92057

Eva Gonzalez, CA 92057

Frank Jacobs, CA 92057

Kelly Kissinger, CA 92057

Laurie Lister, CA 92057

Suzanne Schaefer, CA 92057

Michael Schwalbe, CA 92057

Beverly Stiles, CA 92057

Charlotte Turner, CA 92057

Victoria Volmer, CA 92057

Anna Hamrick, CA 92058

Adrienne Marraccini, CA 92058

Michele Engel, CA 92064

Tom Fahrnkopf, CA 92064



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Belinda Haire, CA 92064

Sharon Hanson, CA 92064

Pamela Keyser, CA 92064

Christopher Nielsen, CA 92064

Maria Stravelakis, CA 92064

Deborah Supergan, CA 92064

April West, CA 92064

Andrea Whitehill, CA 92064

Connie Bley, CA 92065

Eileen Coppola, CA 92065

Paul Firth, CA 92065

Sandra Smith, CA 92065

Michael Gelfand, CA 92067

Nannette Davis, CA 92069

Mary Houle, CA 92069

Howard Motyl, CA 92069

Christina Baumgardner, CA 92071

Darlene Jenkins, CA 92071

Hugo Lepur, CA 92071

Phillip Panuco, CA 92071

Viki Wong, CA 92071

Cathryn Bolt, CA 92075

Jean-Louis Saillot, CA 92075

Tauna Andreoli, CA 92078

Melanie Bennetts, CA 92078

Susan Bowers, CA 92078

Jessica Lynn, CA 92079

Alex Alavi, CA 92081

Annette Berg, CA 92081

Peter Boutte, CA 92081

Bonita Lang, CA 92081

Matilda McLaughlin, CA 92081

Michael Santucci, CA 92081

Rosemarie Bilandzija, CA 92082

Marcia Francis, CA 92083

Brenda Squires, CA 92083

Karen Eso, CA 92084

Marilyn Falsetti, CA 92084

Anne Ichord, CA 92084

Peter Jones, CA 92084

Shelley Markoscrivner, CA 92084

Julianne Howell, CA 92093

Steve Altman, CA 92101

Melissa Blackburn Joniaux, CA 92101

Christina Cole, CA 92101

Joe Cordileone, CA 92101

Drew Dunk, CA 92101

Joshua Gruenberg, CA 92101

Chana Grunvald, CA 92101

Ann Hart, CA 92101

Brad Herrin, CA 92101

Bruce Jaques, CA 92101

Jeff Jordan, CA 92101

Joshua Kuehler, CA 92101

Gregory Lockyer, CA 92101

Charley Myers, CA 92101

Henry Rosen, CA 92101

Jon Ruelle, CA 92101

Julie Smith, CA 92101

Kaylan Thornhill, CA 92101





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Keith Vandellen, CA 92101

Kelly Vandenheuvel, CA 92101

Leonard Flagg, CA 92102

Christian Bulcao, CA 92103

Elise Curry, CA 92103

Bradley Foltz, CA 92103

Wayne Maxwell, CA 92103

Mary Padial, CA 92103

Jack Ray, CA 92103

Richard Thill, CA 92103

Judybeth Tropp, CA 92103

Viridiana Ayala, CA 92104

Sandrs Chambers, CA 92104

Amber Ferguson, CA 92104

Derek Floyd, CA 92104

Emily Greeno, CA 92104

Susan Groves, CA 92104

Janine Harty, CA 92104

Albert Orcino, CA 92104

Nancy Relaford, CA 92104

Robert Silbaugh, CA 92104

Todd Simpson, CA 92104

Michelle Sullivan, CA 92104

Lynne Graham, CA 92105

Eric Green, CA 92105

Margarita Jimenez, CA 92105

Christopher Rocha, CA 92105

Jennifer Boyd Mims, CA 92106

Kirsten Chrisman, CA 92106

Luther Lewis, CA 92106

John Silva, CA 92106

Tasha White, CA 92106

Cindy English, CA 92107

Alison Gang, CA 92107

Daniel Garcia, CA 92107

Zac Garripoli, CA 92107

Shanann Klaver, CA 92107

Amber Rabon, CA 92107

Jaime Bartholomew, CA 92108

Edward Billard, CA 92108

Sharon Brown, CA 92108

Helios Gonzalez, CA 92108

Lynn Jarman, CA 92108

Kim Myers, CA 92108

George Salcedo, CA 92108

Alejandra Bobadilla, CA 92109

Thomas Cooper, CA 92109

Hillary Cowan, CA 92109

Mary Oreilly, CA 92109

Rogelio Quesada, CA 92109

Arlina Whetstone, CA 92109

Joseph Atkinson, CA 92110

John Goodwin, CA 92110

Jennifer Latta, CA 92110

Jason Raymond, CA 92110

John Seymour, CA 92110

Barbara Thomas, CA 92110

Janis Cadwallader, CA 92111

John Comes, CA 92111

Carolyn Floyd, CA 92111



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Debra Frischer, CA 92111  
Virginia Holcomb, CA 92111  
Yael Kosta, CA 92111  
Ana Saucedo, CA 92111  
Yolanda Peraza, CA 92113  
Yolandra Thrash, CA 92113  
REBECCA CORREA, CA 92114  
Vivian Griffin, CA 92114  
Kelly Wallace, CA 92114  
Forest Fischer, CA 92115  
Kelly Gavin, CA 92115  
Holly Hamilton, CA 92115  
Jerry Mackenzie, CA 92115  
Robert Snider, CA 92115  
Drew Gingrich, CA 92116  
Robert Hauer, CA 92116  
Paul Hemmerling, CA 92116  
Pfeiffer Ledjema, CA 92116  
Herbert Schwab, CA 92116  
Janeth Alvarez, CA 92117  
Gisela Baranda, CA 92117  
John Brady, CA 92117  
Tim Caulder, CA 92117  
David Fisher, CA 92117  
Barbara Rolando, CA 92117  
Greg Wong, CA 92117  
Anneilynn Wright, CA 92117  
Kevin Ashley, CA 92118  
Shane Chase, CA 92118  
Patti Flanagan, CA 92118

Ann Posthill, CA 92119  
Evangelina Woo, CA 92119  
Christopher Hall, CA 92120  
Kristina Isberg, CA 92120  
Kristin Anderson, CA 92121  
Michael Buckley, CA 92121  
John Ginn, CA 92121  
Kim Bolivar, CA 92122  
Anne Brinkman, CA 92122  
Christine Esau, CA 92122  
Paula Fitzgerald, CA 92122  
Nancy Kern, CA 92122  
Brandon Messerly, CA 92122  
Marie Minnick, CA 92122  
Rosemary Straley, CA 92122  
Andrew Utley, CA 92122  
Dina Beebe, CA 92123  
Loretta Lowery, CA 92123  
Martha Romero, CA 92123  
Arash Yarpezeshkan, CA 92123  
Glenn Buberl, CA 92124  
Anne Nohelty, CA 92124  
Margarita Badaraco, CA 92126  
Jennifer Betancourt, CA 92126  
Melissa Fraser, CA 92126  
Alfredo Iglesias, CA 92126  
Ann Rael, CA 92126  
Shawn Romero, CA 92126  
Debra Sigal, CA 92126  
Charles Smith, CA 92126



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Brenda Johnson, CA 92127

Kathleen Nahman, CA 92127

Nora Nido, CA 92127

Leslie Taylor, CA 92127

Anthony Franchino, CA 92128

Pat Lampasso, CA 92128

Mark Stutzman, CA 92128

Manisha Varaiya, CA 92128

Jacob Wheatley, CA 92128

Cynthia Fehrenbach, CA 92129

Nathalie Gill Podgorski, CA 92129

Katherine Holvoet, CA 92129

Taylor Israel, CA 92129

Courtney Kaull, CA 92129

Lindsay Moon, CA 92129

Debra Sammon, CA 92129

Sue Berard, CA 92130

Donna Durlak, CA 92130

Betty Garbutt, CA 92130

Genevieve Goldstone, CA 92130

Michael Hartogs, CA 92130

Charles Holland, CA 92130

Mario Petrocco, CA 92130

Deborah Wheeler, CA 92130

Matthew Hetrick, CA 92131

Ethan Marcus, CA 92131

Edlene Mckenzie, CA 92131

James Mullen, CA 92131

Robert Shull, CA 92131

Mayra Arellano, CA 92154

Valerie Haas, CA 92154

Kimberly Morgan, CA 92154

Andrea Stella, CA 92154

Larosa Watson, CA 92154

Carolyn Hollins, CA 92160

Susan Blum, CA 92166

Alex Munguia, CA 92193

Maria Eustice, CA 92201

Linda Harris, CA 92201

Patrick Knox, CA 92201

Jacqueline Lopez, CA 92201

Rhona Bader, CA 92203

Lori Dermer, CA 92203

Kathleen Murray, CA 92203

Francis Fashing, CA 92211

Norene Fremont-Bloom, CA 92211

Cheryl Matthews-Fullerton, CA 92211

Donna Mccloudy, CA 92211

Pam Parker, CA 92211

Frederick Schmidt, CA 92211

Earle Wolfe, CA 92211

Cheryl Hopkins, CA 92220

Lyn Johnson, CA 92220

Misty Lane, CA 92220

William Mccloud, CA 92220

Susan Bonner, CA 92223

Loui Cronholm, CA 92223

Anita Finkelstein, CA 92223

Janet Reed, CA 92223

Lori Robillard, CA 92223



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sylvia Diego, CA 92227  
Chryssa Brazil, CA 92234  
Heidi Holmes, CA 92234  
Edith Lascola, CA 92234  
Dale Meyer, CA 92234  
Donald Moore, CA 92234  
Scott Randall, CA 92234  
Victor Rodriguez, CA 92234  
Sydney Skosana, CA 92234  
Kent Taylor, CA 92234  
Sarah Vazquez, CA 92234  
Lilian Velasquez, CA 92234  
George Williamson, CA 92234  
Zee Wong, CA 92234  
Linda Bjornberg, CA 92240  
Ronald Scheer, CA 92240  
Victoria Escalante, CA 92243  
Akbar Zadeh, CA 92243  
Sandy Villa, CA 92251  
Mary Hitchcock, CA 92252  
Linda Perry, CA 92252  
Thomas Burbank, CA 92253  
Jackie Grenz, CA 92253  
Emmett Lewis, CA 92253  
Walter Nelson, CA 92253  
Sharon Prentice, CA 92253  
Jim Watson, CA 92253  
Nancy Woodruff, CA 92253  
Mark Chappell, CA 92256  
Jayne Combs, CA 92256

Michael Foster, CA 92256  
Gregory Bauer, CA 92260  
Sharon Beckman, CA 92260  
Frances Ferguson, CA 92260  
Shirley Findlay, CA 92260  
Genevieve Judge, CA 92260  
Barbara Marx, CA 92260  
Robert Nowie, CA 92260  
Ilene Schimmel, CA 92260  
Kimberly Valentine, CA 92260  
Myriam Westendorf, CA 92260  
Steven Bean, CA 92262  
Clayton Blackburn, CA 92262  
Robert Brandt, CA 92262  
Justin Ceeko, CA 92262  
Martin Foster, CA 92262  
Brandon Hoskins, CA 92262  
Brian Ingelson, CA 92262  
John Mahoney, CA 92262  
John Meyer, CA 92262  
Victor Pellegrini, CA 92262  
Vonne Ringle, CA 92262  
Julian Smariga, CA 92262  
David Wallace, CA 92262  
Richard Witzel, CA 92262  
Sally Goodman, CA 92263  
Rosemarie Olecki, CA 92263  
Jane Stampe, CA 92263  
Deanne Anders, CA 92264  
William Bodine, CA 92264



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Humfeld, CA 92264

Patricia Martin, CA 92264

Kathleen Mcelvarr Garrity, CA 92264

Philip Sacino, CA 92264

Mark Steffen, CA 92264

Leland Vandeventer, CA 92264

Abby Winston, CA 92264

Paul Addison, CA 92270

Shirelle Alexander, CA 92270

Judith Ankney, CA 92270

Bruce Flamenbaum, CA 92270

David Lacharite, CA 92270

Annamarie Viglizzo, CA 92270

Barbara Wiesen, CA 92270

Beth Windsor, CA 92270

Judy Wright, CA 92270

Susan Trexler, CA 92274

Lisa Ayres, CA 92276

Robert Hofmann, CA 92277

James Knight, CA 92277

Vanessa Souza, CA 92277

Laura Valentine, CA 92277

David Woods, CA 92277

Jace Ribblett, CA 92284

Ned Porter, CA 92308

Karen Proctor, CA 92313

Cindy Lalonde, CA 92315

Annette Johnson, CA 92316

Patricia Cuesta, CA 92317

Loretta Airaghi, CA 92321

Kofi Donkor, CA 92324

Megan Mescher, CA 92324

Kenneth Vandusen, CA 92325

Elsa Murdoch, CA 92333

Sunshyne Leyba, CA 92336

Franci Taylor, CA 92337

Margo Alexander, CA 92342

Holly Miller, CA 92345

Adriene Moore, CA 92345

Catherine Smith, CA 92345

Shelley Valadez, CA 92345

Nicholas Warino, CA 92345

Lynette Adelson, CA 92346

Barbara Leelhasuwan, CA 92346

Michela Ratto, CA 92346

Dean Sundquist, CA 92346

James Ferranti, CA 92352

David Bee, CA 92354

Richard Guth, CA 92354

Rivera Nivar, CA 92359

David Leonard, CA 92363

Urvashi Barua, CA 92373

Judith Whitehouse, CA 92373

Chris Clautice, CA 92374

Yolanda Garnicahickey, CA 92374

Keith Moore, CA 92374

Randy Morris, CA 92374

Alex Zhigimont, CA 92374

Toni Formby, CA 92376

Stephanie Gleason, CA 92376





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Adeline Rosales, CA 92376  
Cheryl Piri, CA 92378  
Rosalie Redmile, CA 92382  
Sarah Hatchell, CA 92386  
Connie Harris, CA 92392  
Juanita Murray, CA 92392  
Linda Neumaier, CA 92392  
Michael Oliver, CA 92392  
Eddie Smith, CA 92392  
Lydia Burks, CA 92394  
Roberto Cardenas, CA 92394  
Evelia Gomez, CA 92394  
Lee Arvinger, CA 92395  
Ariene Bennett, CA 92395  
Marsha Owens, CA 92395  
Sharon Dougherty, CA 92397  
Kathryn Boatman, CA 92399  
Gay Hardy, CA 92399  
Heather Longyear, CA 92399  
Helen Reynaud, CA 92399  
Severiana Jordan, CA 92404  
Susan Fleming, CA 92501  
Dianne Hughes, CA 92501  
Shavon Shegog, CA 92501  
Gabriel Flores, CA 92503  
Sandra Neal, CA 92503  
Kathy Sutherland, CA 92503  
Paula Allbeck, CA 92504  
Melissa Banda, CA 92504  
Jason Hackman, CA 92504

Ladanta Heriman, CA 92504  
Martin Martinez, CA 92504  
Tiffany Farr, CA 92505  
Juanita Mckenzie, CA 92505  
Kathy Mcneilly, CA 92505  
Kimberly Romero, CA 92505  
Jonathan Green, CA 92506  
Debra Rivera, CA 92506  
Robin Sinkhorn, CA 92506  
Stephanie Stolzenberg, CA 92506  
Glenn Williams, CA 92506  
Michael Esparza, CA 92507  
Nora Moti, CA 92507  
Natalie Ralston, CA 92507  
Emma Wilson, CA 92507  
Shihui Yang, CA 92507  
Ruth Lumsdon, CA 92508  
Ellen Schaub, CA 92508  
Suzanne Ramirez, CA 92509  
Lorena Torres, CA 92509  
Marty Torres, CA 92509  
Jayson Sandoval, CA 92517  
Ana Cotton, CA 92521  
George Rolla, CA 92530  
Linda Taylor, CA 92530  
Au Ngo, CA 92532  
Richard Provencio, CA 92532  
Sylvia Ross, CA 92532  
Debra Person, CA 92543  
Margaret Marsden, CA 92544



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Anthony Moya, CA 92544

Lisa Ostrow, CA 92544

Mark Branyon, CA 92548

Charles Meece, CA 92549

Paul Martin, CA 92553

Lilia Salais, CA 92553

Monica Woodward, CA 92553

Timothy Cobos, CA 92555

Carola Fabiola Galvez, CA 92555

David Hyde, CA 92557

Renee Osburn, CA 92557

Carlos Morfin, CA 92561

Shawn Hug, CA 92562

Jan Principe, CA 92562

Marsha Burkhalter, CA 92563

Chanstay Corlew, CA 92563

Robert Decubellis, CA 92563

Dorothy Gerard, CA 92563

Wilbur Miller, CA 92563

Paul Smith, CA 92563

Billie Kelpin, CA 92567

Linda Adams, CA 92570

Johnny James, CA 92570

Valerie Jones, CA 92570

Fred Pedregon, CA 92570

Robert Gyngard, CA 92582

Angela Johnson, CA 92582

Chris Amestoy, CA 92584

Karen Marshall, CA 92584

Dolore Scorzo, CA 92584

Charlotte Shifflet, CA 92584

Laurie Stuart, CA 92585

Debra Hall, CA 92586

Carol Luevano, CA 92586

Sheila Monaghandavis, CA 92586

Shari Palmer, CA 92586

Veronica Poss, CA 92586

Eileen Snow, CA 92586

Linda Sproul, CA 92587

John Pozza, CA 92590

Michael Vantrojen, CA 92590

Patsy Calderon, CA 92591

Marcos Camacho, CA 92591

Dolores Esparza, CA 92591

Peggy Hagberg, CA 92591

Josie Madrid, CA 92591

Charyl Malanaphy, CA 92591

Bethany Rogers, CA 92591

Judi Thompson, CA 92591

Robert Audibert, CA 92592

Angelo Lingos, CA 92592

Michael Maginski, CA 92592

Dina Meir, CA 92592

Paul Randall, CA 92592

Danielle Shirley, CA 92592

Mary Vann, CA 92592

Robbin Abeer, CA 92595

Gene Aurand, CA 92596

Kathleen Marquez, CA 92596

Richard Alegre, CA 92602



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Byrne, CA 92602  
Sarah Millerberg, CA 92602  
Neda Moayedi, CA 92602  
Phaeryn Sheehan, CA 92602  
Tom Wiedemann, CA 92602  
Youmin Zhao, CA 92602  
Earl Biven, CA 92603  
Paniz Ebrahimi, CA 92603  
Debi Lambert, CA 92603  
Jenny Lamott, CA 92603  
Peggy Meadows, CA 92604  
Gwen Oden, CA 92604  
Justin Stone, CA 92604  
Solaimani Ferri, CA 92606  
Susan Leinberger, CA 92606  
Douglas Mason, CA 92606  
Patricia Messerly, CA 92606  
Christine Penning, CA 92606  
Nicole Kroesen, CA 92610  
Kristen Allison, CA 92612  
Karen Barnett, CA 92612  
Paul Kiburis, CA 92612  
Christina Krause, CA 92612  
Frank McGill, CA 92612  
Lynnann Williamson, CA 92612  
Nira Brand, CA 92614  
Maria Centeno, CA 92614  
Raeleen Endo-Russell, CA 92614  
Lin Hong, CA 92614  
Tikiri Karunasundera, CA 92614

Steve Murow, CA 92614  
Lori Wallace, CA 92614  
Kathy White, CA 92614  
Adriana Briscoe, CA 92617  
Joanne Donovan, CA 92617  
Tira Palmquist, CA 92617  
Courtney Costello, CA 92618  
Serap Frautschy, CA 92618  
Jeffrey Reznic, CA 92618  
Behraam Baqai, CA 92620  
Michael Cobin, CA 92620  
Adrienne Escoe, CA 92620  
David Kapsner, CA 92620  
Rieva Lesonsky, CA 92620  
Mili Mehta, CA 92620  
Clare Greene, CA 92624  
Daniel Gil, CA 92625  
Joanne Hunt, CA 92625  
Patricia McCormick, CA 92625  
Bill Schenker, CA 92625  
Ruth Silver, CA 92625  
Tamar Wilson, CA 92625  
Robert Getter, CA 92626  
cristina mayer, CA 92626  
Philip McGovern, CA 92626  
Conor Sontag, CA 92626  
Larry Weinheimer, CA 92626  
Crystal Willis, CA 92626  
Gerardo Ambriz, CA 92627  
Steven Behrens, CA 92627



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Forbath, CA 92627

Stephen Hennessey, CA 92627

Tracie Hoffman, CA 92627

Damian Perry, CA 92627

Laura Ricke, CA 92627

James Thomas, CA 92627

Donna Tranter, CA 92627

Axel Truwill, CA 92627

Janice Turner, CA 92627

Marie Wencel, CA 92627

Sherri Eaton, CA 92629

Jeff Fleming, CA 92629

Lisa Kopelman, CA 92629

John Kucera, CA 92629

Lisa Mckee, CA 92629

Richard Moran, CA 92629

Monte Yoder, CA 92629

Gretchen Adin, CA 92630

Linda Burkholder, CA 92630

Jose Cuevas, CA 92630

Michele Dinneen, CA 92630

irving engel, CA 92630

John Flora-Tostado, CA 92630

Elaine Froome, CA 92630

Connie Martin, CA 92630

Shaiko Mukurazhizha, CA 92630

Dejbakhsh Nader, CA 92630

Mary Brogdon, CA 92637

Debra David, CA 92637

Marilyn Giss, CA 92637

Ramesh Joshi, CA 92637

Anne Llewellyn, CA 92637

Debbie Lowe, CA 92637

Delilah Manary, CA 92637

Joseph Meyer, CA 92637

Barbara Sprayregen, CA 92637

Patricia Boyle, CA 92646

John Briody, CA 92646

Carol M. Correia, R.N., M.S., CA 92646

Mona Cortez, CA 92646

Kelly Elder, CA 92646

Ronald Gould, CA 92646

Steve Graham, CA 92646

Gabrielle Hass, CA 92646

Jennifer Jahnke, CA 92646

Sally Kanarek, CA 92646

suzanne lockhart, CA 92646

Maria Mastropaolo, CA 92646

Ginette Nourse, CA 92646

MOKHTAR SHAWKY, CA 92646

Kathy Wanchek, CA 92646

Lisa Welcher, CA 92646

Joseph Harris, CA 92647

Patrick Kennedy, CA 92647

David Kurien, CA 92647

Becky Roepke, CA 92647

Rosemary Rosales, CA 92647

Thomas Cammann, CA 92648

Kristine Cerone, CA 92648

Carole Fulford, CA 92648



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Eleanor Gruenebaum, CA 92648

Amy Hanson, CA 92648

Karen Kettler, CA 92648

Shelley Lowrey, CA 92648

Lisa Martinez, CA 92648

Timothy Murphy, CA 92648

Priscilla Taylor, CA 92648

Cheri Atkinson, CA 92649

Sarah Gibson, CA 92649

Tam Glunt, CA 92649

Randall Keeth, CA 92649

Rick Orr, CA 92649

Sarah Pirch, CA 92649

Rick Shearer, CA 92649

Tom Stanton, CA 92649

Sandra Hartness, CA 92651

Jolie Jensen, CA 92651

Glenna Lovett, CA 92651

Elsa Mitani, CA 92651

George Ripley, CA 92651

Alexander Rounaghi, CA 92651

Wendy Tenebaum, CA 92651

Lauren Dibiasi, CA 92653

Valerie Estrada, CA 92653

Ivo Gough Eschrich, CA 92653

Courtney Kim, CA 92653

Bertha Torres, CA 92653

Socorro Alvarez, CA 92655

Quy Bao, CA 92655

Martha Ramirez, CA 92655

Lorie Cohen, CA 92656

Anne Dalluge, CA 92656

Melissa Deveikis, CA 92656

Rachel Felix, CA 92656

Dru Kaplan, CA 92656

Elizabeth Mcgrath, CA 92656

Maria Perez, CA 92656

Todd Schoedel, CA 92656

Kevin Steele, CA 92656

Linda Westlake, CA 92656

Lawrence Kugelman, CA 92657

Eugene Spiritus, CA 92657

Kevin Vuchinich, CA 92657

Toni Antonacci, CA 92660

Goli Aydin, CA 92660

John Dickinson, CA 92660

Lauren Henry, CA 92660

Robert Herbst, CA 92660

Jan Luymes, CA 92660

Yolanda Mendiveles, CA 92660

Peggy Pugh, CA 92660

Robert Hampton, CA 92661

Cheryl Freeman, CA 92663

Gina Gunal, CA 92663

Bonnie Jeannette, CA 92663

William Kirwin, CA 92663

Holly Thibodeaux, CA 92663

Mike Willison, CA 92663

Sherry Price, CA 92672

Theresa Recht, CA 92672





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Leongah Wheeler, CA 92672

Barbara Bernal, CA 92673

Amanda Einhorn, CA 92673

James Guilfoil, CA 92673

Anthony Hewes, CA 92673

Ronald Koby, CA 92673

Jessica Labbe, CA 92673

Janet Leger, CA 92673

Andrew Lichty, CA 92673

John Mairs, CA 92673

Steven Bellomo, CA 92675

Kirsten Mickelson, CA 92675

Mark Perez, CA 92675

Mark Rodrigues, CA 92675

Nicole Herold, CA 92676

Rhonda Baron, CA 92677

James Birdsall, CA 92677

Rosalind Chasman, CA 92677

Ellen Eber, CA 92677

Jacob Faigin, CA 92677

Thomas Fitch, CA 92677

Tina Freeland, CA 92677

Lara Horgan, CA 92677

Bahman Joorabchi, CA 92677

Gary Olson, CA 92677

Nader Peikar, CA 92677

Anne Perry, CA 92677

Jeanine Roche, CA 92677

Sadia Siddiqui, CA 92677

David White, CA 92677

Greg Young, CA 92677

Vicki Iacono, CA 92678

Marian Ballog, CA 92679

Peggy Calcagnie, CA 92679

Colleen Daniel, CA 92679

Jeffrey Dreyer, CA 92679

Michelle Graham, CA 92679

Stacy Hagen, CA 92679

Josefina Azcona, CA 92683

Regina Christ, CA 92683

Peter Haaker, CA 92683

John Parry, CA 92683

Viet Pham, CA 92683

Gina Thompson, CA 92683

Catherine Besselmanhuescher, CA 92688

Robert Dorman, CA 92688

Purya Ghrabeti, CA 92688

Jennifer Jenrette, CA 92688

Erik Sandstrom, CA 92688

Phillip Woodham, CA 92688

Dorothy Andrews, CA 92691

Carolyn Cohn-Morros, CA 92691

Wesley Jung, CA 92691

Patrick Knotts, CA 92691

Priscilla Monroe, CA 92691

John Mooney, CA 92691

Amy Moore, CA 92691

Michael Sappingfield, CA 92691

Paul Swanson, CA 92691

Jolanta Woog, CA 92691



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Elizabeth Aronson, CA 92692

Dixie Auringer, CA 92692

Sher Azizi, CA 92692

Kenneth Ballan, CA 92692

Cheryl Boyett, CA 92692

Jack Brumfield, CA 92692

Joy Chart, CA 92692

Hamid Fadavi, CA 92692

Mary Glackin, CA 92692

Robert Gonter, CA 92692

Rita Knisely, CA 92692

Diane Nixon, CA 92692

Annette Ohuche, CA 92692

Pamela Perry, CA 92692

James Tam, CA 92692

Mark Delaurence, CA 92694

Susan Knapp, CA 92694

Greg Prouty, CA 92694

Jamie Browning, CA 92698

Jesus Adorno, CA 92701

Eliza Martinez, CA 92701

Simone Ponce, CA 92701

Robert Unetic, CA 92701

Manuel Villalba, CA 92703

Angel Cardoza, CA 92704

Veronica Lopez, CA 92704

Karen Allen, CA 92705

Florence Bishop, CA 92705

Robert Bowman, CA 92705

Christe Bruderlin-Nelso, CA 92705

Kathleen Calder, CA 92705

Santos Cortez, CA 92705

Louise Davy, CA 92705

Deborah Dean, CA 92705

Paula Gelman, CA 92705

Lydia Levin, CA 92705

Cherie Phipps, CA 92705

Maggie Ryan, CA 92705

Trisha Shipcott, CA 92705

Linda Warde, CA 92705

Laura Atkinson, CA 92706

Quan Dinh, CA 92706

Paula Gates, CA 92706

Natalie Rankin, CA 92706

Donna Drizin, CA 92707

Leanne Carter, CA 92708

Gayle Fenton, CA 92708

Heidi Nguyen, CA 92708

Eileen Powell, CA 92708

Gabriel Talavera, CA 92708

Lee Fink, CA 92780

Amy Greyson, CA 92780

Doris Kollias, CA 92780

Hillary Streichenberger, CA 92780

Gordon Thomson, CA 92780

Virginia Tibbetts, CA 92780

Patricia Schuck, CA 92781

Gonzalo Ferro, CA 92782

Ronald Imus, CA 92782

Susan Keefe, CA 92782



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Quang Wong, CA 92782  
Brian Dang, CA 92801  
Mary Delgado, CA 92801  
Schwanda Grant, CA 92801  
Jolynn Ibanez, CA 92801  
Farhana Rawnaq, CA 92804  
Doug Benoit, CA 92805  
Stephanie Butler, CA 92805  
David Cartwright, CA 92806  
C Ford, CA 92806  
Mario Gerace, CA 92807  
Kimberly Leshin, CA 92807  
Debra Martin, CA 92807  
K McDon, CA 92807  
Barry Staymates, CA 92807  
Lonnie Hahn, CA 92808  
Carole Tamme, CA 92808  
Linda Vanwormer, CA 92808  
Penny Bowman-Mcwright, CA 92821  
Bruce Laclair, CA 92821  
Shannon Morisako, CA 92821  
Lauren Perkins, CA 92821  
Joyce Wills, CA 92821  
Peter Lin, CA 92823  
William Lackey, CA 92825  
Maria Garcia, CA 92831  
Joanna Johnson, CA 92831  
Sandra Park, CA 92831  
Leo Song, CA 92831  
Kenny Tokusato, CA 92831

Bryan Barboz, CA 92832  
Julie Dufau, CA 92832  
Jennifer Egan, CA 92833  
Teresa Franco, CA 92833  
Ingrid Garner, CA 92835  
Kenneth Green, CA 92835  
Gavin Watt, CA 92835  
Mary Bollong, CA 92840  
Cathleen Cardoz, CA 92840  
Maria Espinoza, CA 92840  
Taryn Waddle, CA 92840  
Janice Smallwood, CA 92843  
Gonzalo Ortega, CA 92844  
Jennifer Vargas, CA 92845  
Cuba Munsey, CA 92856  
Green Charoletta, CA 92860  
Rosa Marquez, CA 92860  
Lorraine Gurnari, CA 92865  
Barbara Nelson, CA 92866  
Terry Nowotarski, CA 92866  
Valarie Brumfield, CA 92867  
Janelle Farkas, CA 92867  
Kazuo Furusawa, CA 92867  
Prarthana Mohan, CA 92867  
Janice Shelton, CA 92867  
Jared Mendez, CA 92868  
Tawny Robinson, CA 92868  
Alan Aidekman, CA 92869  
Ronald Dunbar, CA 92869  
Kathryn England, CA 92869



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Vicki James, CA 92869  
Saskia Knight, CA 92869  
Gary Manulkin, CA 92869  
Everett Martinez, CA 92869  
Thomas Rapport, CA 92869  
Charles Robinson, CA 92869  
Patricia Duffie, CA 92870  
Barbara Hearnnes, CA 92870  
Armando Morel, CA 92870  
Jacqueline Olivier, CA 92870  
David Hibbetts, CA 92879  
Anne Johnson, CA 92879  
Nora Gomez, CA 92880  
JEANINE MAHONEY, CA 92880  
Garrett Ball, CA 92881  
Paul Carmichael, CA 92881  
Charlie Lachance, CA 92881  
Peggy Mutsch, CA 92881  
Jill Ross, CA 92881  
Roseanna Barron, CA 92882  
Cynthia Chavez, CA 92882  
Lance Frantzich, CA 92882  
Catrina Paez, CA 92882  
Ruben Saldana, CA 92882  
Jackie Hearnns, CA 92883  
Linda Limberg, CA 92883  
Sally DePoy, CA 92887  
Jim Heaviside, CA 92887  
Marguerite Mulhall, CA 92887  
Jennifer Nichols, CA 92887

Heather Aebi, CA 93001  
Mike Blacker, CA 93001  
Caryn Carroll, CA 93001  
Dennis Hall, CA 93001  
Donald Hill, CA 93001  
Barbara Urban, CA 93001  
Timothy Vandehey, CA 93001  
Jojo Alvarez, CA 93003  
Bruce Barrios, CA 93003  
Carl Clapham, CA 93003  
Erica Connell, CA 93003  
Dorian Guerrero, CA 93003  
Marsha Morrow, CA 93003  
Sharon Anglum, CA 93004  
Stephen Ginn, CA 93004  
Rita Mercado, CA 93004  
Benjamin Ayala, CA 93010  
Margaret Doten, CA 93010  
Joan Handzel, CA 93010  
Melissa Reynolds, CA 93010  
Bob Rust, CA 93010  
Patricia Carney, CA 93012  
Gloria Deaton, CA 93012  
Dave McLaughlin, CA 93012  
Barbara Metier, CA 93012  
Meleese Seigler, CA 93012  
Kevin Smith, CA 93012  
Gregory Speth, CA 93012  
Margurite Stenberg, CA 93012  
Linda Hernandez, CA 93013



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gene Miller, CA 93013  
Jeanne Cantaro, CA 93015  
Marilyn Marme, CA 93021  
Tom Martinez, CA 93022  
Lanae Carter, CA 93023  
Robert Dodge, CA 93023  
Jan Helfrich, CA 93023  
Jinx Mccune, CA 93023  
Judy Rosenthal, CA 93023  
Sandra Rowse, CA 93023  
W Slaughter, CA 93023  
James Null, CA 93024  
Pearl Montorio, CA 93030  
Silvano Pivato, CA 93030  
Cheryl Daniels, CA 93033  
Victoria Borjesson, CA 93035  
Jennifer Clancy, CA 93035  
Kara Gastelum, CA 93035  
David Harper, CA 93035  
Alison Norris, CA 93035  
Dawn Oneill, CA 93035  
Robert Rubin, CA 93035  
Sylvia Salas, CA 93035  
Ritchie Wimberly, CA 93035  
Michael Combs, CA 93041  
Cynthia Aguilar, CA 93060  
Tony Luboff, CA 93060  
Joseph Simpson, CA 93060  
Claudia Eaton, CA 93063  
Henrik Larsen, CA 93063

Christopher Mcadamis, CA 93063  
Anthony Sgaraglino, CA 93063  
William Sutton, CA 93063  
Claude Cantin, CA 93065  
Barbara Cieslak, CA 93065  
Sandra Gill, CA 93065  
Joanne Hewitt, CA 93065  
Jamie Taylor, CA 93065  
Sanford Weisberg, CA 93065  
Kathleen Moacanin, CA 93066  
Jeffrey Graham, CA 93067  
Christine Dawkins, CA 93101  
Cris Hamilton, CA 93101  
Laura Knight, CA 93101  
Alaina Kwasizur, CA 93101  
Nancy Marriott, CA 93101  
Rita Moya, CA 93101  
Lin Rolens, CA 93101  
John Skotchdopole, CA 93101  
Barry Spector, CA 93101  
Karen Atkins, CA 93105  
Judy Cleary, CA 93105  
Anthony Fischer, CA 93105  
Kim Gross, CA 93105  
Andrew Bermant, CA 93108  
Amanda Berry, CA 93108  
Burks Hamner, CA 93108  
Patricia Hughes, CA 93108  
Margaret Pearson, CA 93108  
Dan Wright, CA 93108





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Vicky Blum, CA 93109

Katherine Bonfilio, CA 93109

Ted Chiles, CA 93109

Carolyn Sacks, CA 93109

Susan Bell, CA 93110

claudette roehrig, CA 93110

Theresa Sanitate, CA 93110

Rosemary Fatano, CA 93111

Teena Grant, CA 93111

Joanna Lara, CA 93111

James Sirianni, CA 93111

Ana Citrin, CA 93117

Frank Farwell, CA 93117

Kyle Furlong, CA 93117

Anelise Salvo, CA 93117

Inez Provencio, CA 93202

Jennifer House, CA 93221

Jack Lara, CA 93221

John Peters, CA 93222

Circe Cox, CA 93225

Emily Burnias, CA 93230

Sylvia Cordero, CA 93230

Tasha Mcirvin, CA 93240

Tracy Nardiello, CA 93247

Evelina Huizar, CA 93256

Carol Jett, CA 93257

Bonnie Karlea, CA 93257

Theodore Pizanis, CA 93257

Lauri Adair, CA 93263

Elenora Moats, CA 93263

Jerry Hawley, CA 93274

Sally Carter, CA 93277

Darrell Chudej, CA 93277

Angelina Eich, CA 93277

Karen Kirkpatrick, CA 93277

Diane Post, CA 93277

Susan Radtke, CA 93277

Adria Warren, CA 93277

Carol Harrison, CA 93279

Colleen Brelje, CA 93283

Marian Kuster, CA 93291

Linda Swaim, CA 93291

Abel Tavarez, CA 93291

Benjamin Newcomer, CA 93292

Marlina Aran, CA 93304

Karen Cooley, CA 93304

Barbara Mattick, CA 93304

Donald Bender, CA 93306

Belva Bradshaw, CA 93308

Miguel Mariscal, CA 93308

Janet Cogdill, CA 93309

Michelle Roberts, CA 93309

Ernest Solano, CA 93309

Fredrick Turner, CA 93309

Valerie Black, CA 93311

Lori Braschler, CA 93311

Yvonne Cavanagh, CA 93311

Marklewisbrown Heckendorn, CA 93311

Elizabeth Primrose, CA 93311

Priscilla Wright, CA 93311



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Casey Yeazel, CA 93311  
Becky Wright, CA 93312  
Val Barron, CA 93313  
Bonnie Gallegos, CA 93313  
Brian Russom, CA 93313  
Ricardo Salas, CA 93390  
Erin Englund, CA 93401  
Marilyn Farmer, CA 93401  
Sandra Giberson, CA 93401  
Vikas Jammalamadaka, CA 93401  
Joann Merver, CA 93401  
Susan Olson, CA 93401  
Patricia Robinson, CA 93401  
Judith Serafin, CA 93401  
William Tuculet, CA 93401  
Kara Woodruff, CA 93401  
Carolyn Porco, CA 93402  
Richard Schermerhorn, CA 93402  
Michelle Turner, CA 93402  
Christy Anderson, CA 93405  
Germaine Casola, CA 93405  
Thomas Flanigan, CA 93405  
Dee Ann Hairgrove, CA 93405  
Carol Sexton, CA 93405  
Nancy Holman, CA 93420  
Robin Werderits, CA 93420  
Michele Coombs, CA 93422  
Lynne Higgins, CA 93422  
Denise Nickeson, CA 93422  
Joseph Nickless, CA 93422

Rayna Ortizbochum, CA 93422  
Crissa Pisa, CA 93422  
Catherine Porter, CA 93422  
Harry Williamson, CA 93422  
Daniel Garcia, CA 93428  
Janet Lyon, CA 93428  
Suzann Love, CA 93430  
Judy Guarnera, CA 93433  
Judythe Guarnera, CA 93433  
Jennifer Mangum, CA 93433  
Peter Anderson, CA 93436  
Genese Izuno, CA 93436  
Frank Matela, CA 93436  
Leilani Mccullough, CA 93436  
Anita Withers, CA 93440  
Kim Barrett, CA 93442  
Robert Jonez, CA 93442  
Caroline Brower, CA 93444  
Lee Durard, CA 93444  
Ryan Tafoya, CA 93444  
Lynn Davis, CA 93446  
Nancy Jambor, CA 93446  
Robert Jordan, CA 93446  
Del Olds, CA 93446  
Dennis Olivier, CA 93446  
Donna Raymond, CA 93446  
Stuart Toomey, CA 93446  
Gary Wray, CA 93446  
Marcella Gelman, CA 93449  
Paul Vangerwen, CA 93449



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gael Mueller, CA 93453  
Diana Corral, CA 93454  
Erika Culley, CA 93455  
Sharon Haneman, CA 93455  
Judith Lazzarini, CA 93455  
Pam Martin, CA 93455  
Larry Mcduff, CA 93455  
George Fischer, CA 93458  
Loren Duffy, CA 93460  
Michael Rhodes, CA 93460  
Rona Barrett, CA 93463  
Joyce Johnson, CA 93463  
John Porter, CA 93465  
Janet Kehlor, CA 93505  
Michael Glavin, CA 93510  
Sandra Gunther, CA 93510  
Steven Sheffield, CA 93510  
Karen Keehn, CA 93514  
Karyle Tong, CA 93514  
William Michael, CA 93526  
Damien Jacotin, CA 93527  
Joan Tetreault, CA 93531  
Matthew Britton, CA 93535  
Tiffany Countryman, CA 93535  
Ian Guyton, CA 93535  
Donna Mcnew, CA 93535  
Tanisha Rodriguez, CA 93535  
Carol Trees, CA 93535  
Virginia Arcos, CA 93536  
Clare Gmur, CA 93536

Gabriel Partida, CA 93536  
Madeline Ramirez, CA 93536  
Felicia Scott, CA 93536  
Judy Wickman, CA 93545  
Douglas Stewart, CA 93546  
Hoang Baumann, CA 93550  
Raymundo Perales, CA 93550  
Bonnie Vaughan, CA 93550  
Amina Vela, CA 93550  
Olivia Carchi, CA 93551  
Cuthbert Lawry, CA 93551  
Dennis Carey, CA 93552  
Cynthia Bradley, CA 93555  
Ashton Dunn, CA 93555  
Gaynell Schiller, CA 93555  
James Stanford, CA 93555  
Naomi Heinsma, CA 93556  
Adelle Gruett, CA 93561  
Denise Rowles, CA 93561  
Raymond Vaughn, CA 93561  
Duane Aitken, CA 93599  
Diane Curfman, CA 93611  
Elysia Dambrosia, CA 93611  
Cindy Farris, CA 93611  
Glen Westersund, CA 93611  
Jerry Walker, CA 93612  
Gale Okazaki Hugh, CA 93614  
Jim Betts, CA 93619  
Juan Garcia, CA 93619  
Denise Gravano, CA 93619



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Greg Griffin, CA 93619  
Carolyn Kraft, CA 93619  
Thomas Sims, CA 93619  
Judie Visser, CA 93619  
Julie Young, CA 93619  
Valerie Spongberg, CA 93631  
Judith Pucci, CA 93636  
Ben Graham, CA 93638  
Sharon Willy, CA 93643  
Polly Rotan, CA 93654  
Jordan Telford, CA 93657  
Sandra Barbo, CA 93662  
Gus Longoria, CA 93702  
Kate Mcknight, CA 93703  
Joseph Barron, CA 93704  
Janet Bray, CA 93704  
Ivy Darden, CA 93704  
Michael Garcia, CA 93704  
Adela Gonzalez, CA 93704  
P Hansen, CA 93704  
Joann Mccarthy, CA 93704  
Emily Vega, CA 93704  
Esperanza Velazco, CA 93704  
Kiki Wells, CA 93704  
Rene Cisneros, CA 93705  
Elizabeth Madrigal, CA 93705  
Paula Singer, CA 93705  
Nancy Godwin, CA 93710  
Elaine Cavitt, CA 93711  
Marsha Conant, CA 93711

Fredricka Del Carlo, CA 93711  
Geetanjali Srivastava, CA 93711  
Anne Staley, CA 93711  
Teddy Usude, CA 93711  
Roberta Atkinson, CA 93720  
Krista De La Torre, CA 93720  
Juan Herrera, CA 93720  
Cameron Rosso, CA 93720  
Erin Smith, CA 93720  
Doug Gordon, CA 93721  
Hannah Degroot, CA 93722  
Billie Hardcastle, CA 93722  
Roxanne Hinds, CA 93722  
Carla Manning, CA 93722  
Manuel Graves, CA 93723  
Mian Ijaz, CA 93725  
Barbara Ortiz, CA 93725  
Joyce Gonzalez, CA 93726  
Michael Mathies, CA 93726  
Bonnie Pavlovich, CA 93726  
Warren Vang, CA 93726  
Irma Vera, CA 93726  
Dawn Williams, CA 93726  
Samantha Perez, CA 93727  
Carlos Sanchez, CA 93727  
Lindsay Shaver, CA 93728  
Victor Bergman, CA 93729  
Leslie Hoyt, CA 93730  
Lloyd Wamhof, CA 93730  
Elaine Mcgraw, CA 93744



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Aramis Miller, CA 93747

Kate Innis, CA 93901

Gary Jones, CA 93901

S Norris, CA 93901

Barbie Souter, CA 93901

Marisol Gonzalez, CA 93905

Ben Carrillo, CA 93906

Rosa Dozal, CA 93906

Ronald Genauer, CA 93906

Elena Lagrimas, CA 93906

Mary Vought, CA 93906

Carl Hazen, CA 93907

Weston Miller, CA 93907

Janice Mulvey, CA 93907

Patricia Arias, CA 93908

Catherine Fanoë, CA 93908

Mary Eileen Kiniry, CA 93908

Pamela Snyder, CA 93908

Michael Weaver, CA 93922

Myrna Brandwein, CA 93923

Gary Jepson, CA 93923

Jenny Lutes, CA 93923

Diane Woodend, CA 93923

Kenneth McClintock, CA 93926

Curtis Mukes, CA 93933

Laura Allen, CA 93940

Elaine Bachmann, CA 93940

Steven Crain, CA 93940

Colleen Devlin, CA 93940

Roseanne Fischer, CA 93940

Sandra Fowler, CA 93940

Christopher Kneisley, CA 93940

Barbara Marron, CA 93940

Regina Marshall, CA 93940

Juan Rodriguez, CA 93940

Nina Rosete, CA 93940

Niccole Tiffany, CA 93940

Maureen Vieth, CA 93940

Elizabeth Weber, CA 93940

Marianne Grover, CA 93950

Linda Hylle, CA 93950

Janet MCGough, CA 93950

Donna Phillips, CA 93950

Angelique Simons, CA 93950

Maryadine Washington, CA 93955

Russell Kinley, CA 93960

Robert Gold, CA 94002

Robin Mckoy, CA 94002

Carol Molyneux, CA 94002

Kay Yoshida, CA 94002

Ann Whittemore, CA 94005

Mike Alleman, CA 94010

Maureen Boland, CA 94010

Peter Borocz, CA 94010

Sophie Colefoster, CA 94010

Richard Davis, CA 94010

Lynn Feeny, CA 94010

David Jen, CA 94010

Dotti Letourneau, CA 94010

Lenny Low, CA 94010





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ramon Maghsoudi, CA 94010  
Sidney Mobell, CA 94010  
William Pace, CA 94010  
Jennifer Parker, CA 94010  
Charlotte Petri, CA 94010  
Judy Swanson, CA 94010  
Gary Toothman, CA 94010  
Monroe Cooper, CA 94014  
Edwin Lansang, CA 94014  
Irene Marin, CA 94014  
Ana Montes, CA 94014  
Concepcion Cavales, CA 94015  
Kathleen Cunnie, CA 94015  
Kendra Elliott, CA 94015  
Rosario Polis, CA 94015  
Deborah Porter, CA 94017  
Tricia Dell, CA 94018  
Sabrina Jewell, CA 94019  
Lisa Mccaffrey, CA 94019  
Penny Oneal, CA 94019  
Sharon Ruhland, CA 94019  
Jenny Skoble, CA 94019  
Stephen Friedman, CA 94022  
Sheryl Heckman, CA 94022  
Mary Mills, CA 94022  
Elfi Montes, CA 94022  
Pam Rasmussen, CA 94022  
Francine Reynolds, CA 94022  
Mary Hall, CA 94024  
Barbara Mclellan, CA 94024

Cynthia Sweeney, CA 94024  
Leslie Alston, CA 94025  
Dimitra Anderson, CA 94025  
John Beardslee, CA 94025  
Nancy Bush, CA 94025  
Kevin Collins, CA 94025  
William Dower, CA 94025  
Susan Freyberg, CA 94025  
Judith Kleinberg, CA 94025  
Jennie Kosko, CA 94025  
Marissa Pike, CA 94025  
Kathleen Riggins, CA 94025  
Marilyn Spence, CA 94025  
Polly Wingfield, CA 94025  
Tom Gelbach, CA 94027  
Tom Hutton, CA 94027  
Stacey Kertsman, CA 94027  
Anne Peterson, CA 94027  
Deborah Pinkston, CA 94027  
David Popowitz, CA 94027  
Nina Else, CA 94028  
Danielle Guttman, CA 94028  
Paul Helce, CA 94028  
Judy Klein, CA 94028  
Helge Ternsten, CA 94028  
Thomas Lightner, CA 94030  
Ann Oleary, CA 94030  
Yolanda Parker, CA 94030  
Caitlin Reavey, CA 94030  
Stephanie Allen, CA 94035



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joseph Armstead, CA 94040

Corinne Callan, CA 94040

Richard Curtis, CA 94040

Ann Kato, CA 94041

Shreyes Seshasai, CA 94041

Peter Spangler, CA 94041

Joyce Tucker, CA 94041

Samantha Bears, CA 94043

Abigail Clark, CA 94043

Carole Flores, CA 94043

Walter Goode, CA 94043

Rebecca Jensen, CA 94043

Brittany Mcdonald, CA 94043

Saghi Moghadam, CA 94043

Evelyn Nordberg, CA 94043

Laurie Palmer, CA 94043

Bernie Rodgers, CA 94043

Karen Brandenberger, CA 94044

Caroline Herter, CA 94044

Nichole Herttua, CA 94044

Robert Meyerson, CA 94044

Laurel Patton, CA 94044

Beth Smerdon, CA 94044

Maryann Campion, CA 94061

Anna Engstrom, CA 94061

Ralph Fallant, CA 94061

Judith Gutierrez, CA 94061

Cheryl Macgregor, CA 94061

Gail Pomerantz, CA 94061

Susan Scott, CA 94061

Mark Siegel, CA 94061

Lora Angelot, CA 94062

Daniel Gibson, CA 94062

Brandon Rule, CA 94062

Melinda Davis, CA 94063

Paulette Elliott, CA 94063

Michele Kuperus, CA 94063

Marla Weber, CA 94063

Ana Oyuela, CA 94064

Michael Rogers, CA 94065

Manique Wijewardena Bloom, CA 94065

Corrine Aragon, CA 94066

Cheryl Hernandez, CA 94066

Kathy Rinetti, CA 94066

Jessica Williams, CA 94066

Mark Albertson, CA 94070

Vivian Brates, CA 94070

Arnulfo Ferfas, CA 94070

Helen Flynn, CA 94070

Marie Monohan, CA 94070

Gregory Brown, CA 94080

Barbara Butler, CA 94080

Caroline Dunn, CA 94080

Robert Merchan, CA 94080

Tom Mullen, CA 94080

Amy Nolan, CA 94080

Colleen Raymond, CA 94080

Raul Reyes, CA 94080

David Taylor, CA 94080

Judy Wedekind, CA 94080



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Thomas Williams, CA 94080

Prince Bibee, CA 94085

Michael Carder, CA 94085

Elisabeth Cone, CA 94086

Michael Goltzer, CA 94086

Russell Hudson, CA 94086

William Jenkins, CA 94086

Alec Reitter, CA 94086

Kathleen Tomari, CA 94086

Hao Zhou, CA 94086

Janice Boothe, CA 94087

Carl Cheng, CA 94087

Paul Falworth, CA 94087

Jan Looney, CA 94087

Marilyn Wendler, CA 94087

Alison White, CA 94087

Joseph Batchelder, CA 94089

Michelle Rifkin, CA 94089

Anne Farrah, CA 94102

Allegra Fortunati, CA 94102

Andrea Gomez, CA 94102

Valerie Gruber, CA 94102

William Heaps, CA 94102

Jennifer Levin, CA 94102

Carol Sexton, CA 94102

Bradley Wiedmaier, CA 94102

Rachel Becker, CA 94103

Amy Dipasquale, CA 94103

Derek Dukes, CA 94103

Lucas Foglia, CA 94103

Elisha Greenwell, CA 94103

Chris Hipps, CA 94103

Eamonn Kelly, CA 94103

Bonnie Rose, CA 94103

Victoria Rouse, CA 94103

Shelley Sandusky, CA 94103

Andrea Segura Smith, CA 94103

Sarah Vickers, CA 94103

Margaret Jacobberger, CA 94105

Dulcie Arnold, CA 94107

Natasha Arroyo, CA 94107

Toby Barlow, CA 94107

Michael Bergelson, CA 94107

Katherine Bowdish, CA 94107

Cassandra Caputo, CA 94107

Susan Cote, CA 94107

John Croizat, CA 94107

Martha Dean, CA 94107

Barbara Dickinson, CA 94107

Arthur Dixon, CA 94107

Jeffrey Galyon, CA 94107

Vera Grey, CA 94107

Amy Grigsby, CA 94107

Tal Hutchins, CA 94107

Kody Kilcrease, CA 94107

Joy M, CA 94107

Sally Mccarty, CA 94107

Elizabeth Mcnichols, CA 94107

Robyn Miles, CA 94107

Veronica Munoz, CA 94107



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Steven Phillips, CA 94107

David Ropp, CA 94107

Sudesh Singh, CA 94107

Helen Soboski, CA 94107

Ann Spivack, CA 94107

Don Spradlin, CA 94107

Emily Zing, CA 94107

Maria Boutacoff, CA 94108

Gary Cne, CA 94108

Alison Hightower, CA 94108

Howard Holderness, CA 94108

Kirsten Strobel, CA 94108

Rose Abril, CA 94109

Michael Andow, CA 94109

Allison Brown, CA 94109

Roberta Buell, CA 94109

Matthew Castillon, CA 94109

Mary Cody, CA 94109

Gail Defferari, CA 94109

David Goff, CA 94109

Melissa Grindstaff, CA 94109

Robert Hall, CA 94109

Doreen Horowitz, CA 94109

Louise Lowry, CA 94109

Timothy Lucas, CA 94109

Robert Panozzo, CA 94109

Jennie Parrilla, CA 94109

Nicole Pitarre, CA 94109

Jeanne Rizzo, CA 94109

Fred Sherman, CA 94109

Julie Tang, CA 94109

Jennifer Wang, CA 94109

Helene Wenzel, CA 94109

Nancy Williams, CA 94109

Ane Becker, CA 94110

Josephine Bellaco, CA 94110

Lisabeth Castro-Smyth, CA 94110

Patricia Cotter, CA 94110

Suzanne Deblois, CA 94110

Dale Disney, CA 94110

Erika Ehmsen, CA 94110

John Fenno, CA 94110

Consuelo Ferreira, CA 94110

Stuart Gurtman, CA 94110

Charles Hemminger, CA 94110

Connie Hendrix, CA 94110

Ester Hernandez, CA 94110

Mirna Jiron, CA 94110

Benjamin Kim, CA 94110

Nate Koechley, CA 94110

Efrem Korngold, CA 94110

Eric Lamothe, CA 94110

Peter Mattsson, CA 94110

Lisa Messano, CA 94110

Carol O'Donovan, CA 94110

Jodi Perelman, CA 94110

Nicole Petrak, CA 94110

Felisa Preskill, CA 94110

Lori Sinsley, CA 94110

Suzanne Spong, CA 94110



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Samuel Stone, CA 94110

Melinda Sullivan, CA 94110

Sasha Wisotsky, CA 94110

Ellen Embry, CA 94111

Barnett Klane, CA 94111

Jared Loewen, CA 94111

Jessica Silvestro, CA 94111

Charlie Stone, CA 94111

Jason Wallach, CA 94111

Brigitte Davila, CA 94112

Dernelio Echegoyen, CA 94112

George Engler, CA 94112

Herbert Jeong, CA 94112

Joe Litehiser, CA 94112

Sarah Machugh, CA 94112

Colby Ostberg, CA 94112

Sara Scanlan, CA 94112

Irene Smith, CA 94112

Robert Strawder, CA 94112

Joaquin Torres, CA 94112

Irene Zbiczak, CA 94112

Mark Ziegler, CA 94112

Michelle Birch, CA 94114

John Brooks, CA 94114

Steven Brown, CA 94114

Laurie Bushman, CA 94114

Lawrence Crickenberger, CA 94114

Gianna Defilippis, CA 94114

Susan Epstein, CA 94114

Helen Ferentinos, CA 94114

Richard Fouts, CA 94114

Stacey Lamirand, CA 94114

Dean Larson, CA 94114

Frank Latko, CA 94114

James Mchugh, CA 94114

Jeffrey Mitchell, CA 94114

Irma Perez, CA 94114

Ruben Perez, CA 94114

Jody Reichel, CA 94114

Robin Rome, CA 94114

Donald Schwarcz, CA 94114

Robert Scott, CA 94114

Edith Souter, CA 94114

Adam Sterling, CA 94114

Dale Tegman, CA 94114

John Wilkie, CA 94114

Christian Williams, CA 94114

Kathleen Yatskan, CA 94114

Nanette Bisher, CA 94115

Alejandra Calderon, CA 94115

Joanna Horsfall, CA 94115

David Isljamovski, CA 94115

Shan Kaur, CA 94115

Gerd Mairandres, CA 94115

Emily Martinez, CA 94115

Maureen Miller, CA 94115

Susan Miller, CA 94115

T o'Shea, CA 94115

Terri Perozzi, CA 94115

Sudie Sides, CA 94115





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Starkey, CA 94115  
James Walter, CA 94115  
Amy Widdowson, CA 94115  
Yevgenia Altman, CA 94116  
Bryan Boyle, CA 94116  
Max Kwok, CA 94116  
Carlos Lazo, CA 94116  
Diana Puig, CA 94116  
Mary Shays, CA 94116  
Monique Aas, CA 94117  
Tyler Altrup, CA 94117  
Jennifer Brown, CA 94117  
Brina Bujkovsky, CA 94117  
Nicole Censani, CA 94117  
Don Ehrlich, CA 94117  
Elana Feinberg, CA 94117  
Melinda Frenkel, CA 94117  
Stephen Hartman, CA 94117  
Stephen Herman, CA 94117  
Anna Ioakimedes, CA 94117  
Courtney Iwanaga, CA 94117  
Deborah Jaffe, CA 94117  
Pam Kalinowski, CA 94117  
Takahiro Kawaguchi, CA 94117  
Joe Mullin, CA 94117  
Thomas Munn, CA 94117  
Travis Peterson, CA 94117  
Alexander Pollen, CA 94117  
Belinda Presser, CA 94117  
Kevin Rasmussen, CA 94117

Stephen Rosenbaum, CA 94117  
Aaron Sagin, CA 94117  
Susanna Shimizu, CA 94117  
Anne Sunderland, CA 94117  
David Tang, CA 94117  
Renee Ward, CA 94117  
Tomohisa Watanabe, CA 94117  
Deb Zipp, CA 94117  
Katie Albright, CA 94118  
John Ball, CA 94118  
John Beebe, CA 94118  
Andrew Blackwell, CA 94118  
Benjamin Byrne, CA 94118  
Nicholas Goncharoff, CA 94118  
Robin Greg, CA 94118  
Terrel Hutton, CA 94118  
Christopher Keyes, CA 94118  
Faith Lubber, CA 94118  
Teya Neff, CA 94118  
William Pearson, CA 94118  
Kerry Philp, CA 94118  
Michael Pinell, CA 94118  
Patti Prichard, CA 94118  
Peter Roopnarine, CA 94118  
Kyra Vargas, CA 94118  
Michele Bronson, CA 94121  
Michael Coletta, CA 94121  
Kristina Dahl, CA 94121  
Rikki De Wit, CA 94121  
Paul Kirkland, CA 94121



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Maryjo Tisor, CA 94121  
Sandra Ackers, CA 94122  
Jessica Bayer, CA 94122  
Myriam Delajara, CA 94122  
Michael Fuchs, CA 94122  
Jeff Ishizu, CA 94122  
Diane Joneslowrey, CA 94122  
Courtney Ryan, CA 94122  
Anita Sigurdson, CA 94122  
Laura Webber, CA 94122  
Julie Baeder, CA 94123  
Mike Gardner, CA 94123  
Martin Gellen, CA 94123  
Catherine Howley, CA 94123  
Hayley Johnson, CA 94123  
Robert Mcgown, CA 94123  
Avia Mendez, CA 94123  
Janice Moore, CA 94123  
Russ Rogers, CA 94123  
Luis Uribe, CA 94123  
Miguel Galarza, CA 94124  
Angelique Vonhalle, CA 94124  
Allison Brown, CA 94127  
Edith Matulac, CA 94127  
Allison Metz, CA 94127  
Dieter Meyerhoff, CA 94127  
Michelle Childs, CA 94129  
Robin Cornwell, CA 94129  
Twonnette Pack, CA 94130  
Ernesto Alfaro, CA 94131

Gerald Buss, CA 94131  
Tod Elkins, CA 94131  
Howard Fallon, CA 94131  
Kieran Hannon, CA 94131  
Alexis Panzer, CA 94131  
Ashley Pittson, CA 94131  
Michael Shpizner, CA 94131  
Steffany Dignum, CA 94132  
Youngha Lee, CA 94132  
Nancy Mace, CA 94132  
Rebecca Nepales, CA 94132  
Michele Perlmutter, CA 94132  
Jess Wells, CA 94132  
Susan Adams, CA 94133  
Emley Barbara, CA 94133  
Michael Brunner, CA 94133  
Linda Burke, CA 94133  
Stacy Coghlan, CA 94133  
Tom Edgar, CA 94133  
Haideen Anderson, CA 94134  
Michelle Biondini, CA 94134  
Mitch Clark, CA 94134  
Rolando Nunez Baza, CA 94134  
Jaime Osorio, CA 94134  
Michael Walsh, CA 94140  
Robert Tessler, CA 94143  
Maira Matsui, CA 94158  
Kimberly Parolari, CA 94164  
Takhong Guan, CA 94301  
Gregory Hosono, CA 94301



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Nemerov, CA 94301

Ann Phares, CA 94301

Josh Rubietta, CA 94301

Margaret Simmons, CA 94301

Brian Goncher, CA 94303

Rick Jew, CA 94303

Lachen Pence, CA 94303

Thomas Snodgrass, CA 94303

Jj Davis, CA 94304

David Keefer, CA 94305

Barbara Wada, CA 94305

Irene Wapnir, CA 94305

Paul Cegielski, CA 94306

Sarah Cornwell, CA 94306

Megan Dunn, CA 94306

Kevin Hurley, CA 94306

Robert Klein, CA 94306

David Morandi, CA 94306

Joel Rosenberg, CA 94306

Ilya Veygman, CA 94306

Jay Levin, CA 94401

Natalia Nicholson, CA 94401

Tomasi Toki, CA 94401

Amber Farinha, CA 94402

Cynthia Ladd, CA 94402

Elizabeth Landsverk, CA 94402

Julie Neale, CA 94402

Benjamin Rubenstein, CA 94402

Sheila Sandow, CA 94402

Ross Weiner, CA 94402

Karen Biggers, CA 94403

Grace Hassid, CA 94403

Jane Mc Creary, CA 94403

Marianda Fahrnbruch, CA 94404

Nicole Gregory, CA 94404

Jennifer Sand, CA 94404

George Vail, CA 94404

Roxana Wales, CA 94404

John Chase, CA 94501

Anthony Dimaano, CA 94501

Benjamin Finkenbinder, CA 94501

Carlanne Foushee, CA 94501

Jeannine Gravem, CA 94501

Spencer Gross, CA 94501

Jill Hartman, CA 94501

Lori Hitchcock, CA 94501

Judith Hoff, CA 94501

Amba Johnson, CA 94501

Mary Larivers, CA 94501

Jessica Lilie, CA 94501

Erika Monterroza, CA 94501

Kelly Peterson, CA 94501

Anna Rossi, CA 94501

Claire Splan, CA 94501

Oscar Trevino, CA 94501

Linda Yang, CA 94501

Choni Yangzom, CA 94501

Cynthia Brashaun, CA 94502

Andrew Cohen, CA 94502

Cheryl Jones, CA 94502



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Frances Shipilov, CA 94505

Steve Filson, CA 94506

Lori Garcia, CA 94506

Elizabeth Ng, CA 94506

Mark Wolfe, CA 94506

Raymond Cocchi, CA 94507

Fred Pazos, CA 94507

Richard Harrison, CA 94508

Kenneth Moll, CA 94508

Robert Stelling, CA 94508

Andre Clark, CA 94509

Terry Lakin, CA 94509

Juanita Patton-Alexandr, CA 94509

Teresa Pedras, CA 94509

Aida Rubio, CA 94509

Kornelia Strong, CA 94509

Michael Young, CA 94509

Elizabeth Nolan, CA 94510

Harry Andujar, CA 94513

Randa Awwad, CA 94513

Donald Burrow, CA 94513

Heather Partid, CA 94513

Jack Martin, CA 94515

Marcia Carrasco, CA 94517

Terry Barger, CA 94518

Michelle Curran, CA 94518

Jose Garcia, CA 94518

Ignacio Sanchez Hernandez, CA 94518

Casey Sasser, CA 94518

Christine Swieszcz, CA 94518

KATHERINE UTCHEN, CA 94518

Patricia Brinton, CA 94519

Louis Dreyer, CA 94519

Samantha Fields, CA 94519

Megan Hallahan, CA 94519

Lisa Salbato, CA 94519

Melanie Thompson, CA 94519

Ann Collins, CA 94520

Salma Noor, CA 94520

Ellen Barrons, CA 94521

David Belli, CA 94521

Kimberly Espina, CA 94521

Craig Fleming, CA 94521

William Guthreau, CA 94521

Kevin Murphy, CA 94521

Richard Villalobos, CA 94521

Nicholas Kennen, CA 94523

James Phelan, CA 94523

Bruce Presnick, CA 94523

Iris Segal, CA 94523

Debra Stanley, CA 94523

Cathy Teegardin, CA 94523

Stephen Wilde, CA 94523

Erin Foley, CA 94526

Kevin Walker, CA 94526

Michele Ward, CA 94526

Chris Winter, CA 94526

Norman Bookstein, CA 94530

Betty Buginas, CA 94530

Jane Davis, CA 94530



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jennifer Kawar, CA 94530

Robert Maccoun, CA 94530

Monica Montgomery, CA 94530

Lisa Schoof, CA 94530

William Scott, CA 94530

Jemma Williams, CA 94530

Ruben Apodaca, CA 94531

Barbara Heredia, CA 94531

Connie Roark, CA 94531

Tonya Alston, CA 94533

Larry Bluford, CA 94533

Guadalupe Castro, CA 94533

Danielle Fischer, CA 94533

Myra Somerville, CA 94533

Steve Anaya, CA 94534

Lori Byrd, CA 94534

Samuel Catani, CA 94534

Robyn Collins, CA 94534

Everett Wood, CA 94534

Catherine Foster, CA 94536

Nicholas Horn, CA 94536

James Jensen, CA 94536

Richard Jones, CA 94536

Tamari Kirtadze, CA 94536

Elizabeth Knight, CA 94536

Eleanor Lykins, CA 94536

Alexis Madrid, CA 94536

Janet Quilici, CA 94536

George Avila, CA 94538

Venkata Balaji, CA 94538

Kristie Bihl, CA 94538

Andrew Strommen, CA 94538

Derrick Watson, CA 94538

Gilbert Doan, CA 94539

Valerie Kavlick, CA 94539

Matthew McGinty, CA 94539

Shubhang Varma, CA 94539

Erlinda Flores, CA 94540

Catherine Ruesz, CA 94540

Bill Bradley, CA 94541

Kevin Burns, CA 94541

Adriana Gilmete, CA 94541

Sarah White, CA 94541

Kathleen Affleck, CA 94542

Jacki Anderson, CA 94542

Sandra Huffman, CA 94542

Elaine Jonesayer, CA 94542

Stephen Miller, CA 94542

Carol Morgan, CA 94542

Craig Browning, CA 94544

Patricia Smith, CA 94544

Carlos Uriarte, CA 94544

Earlene Wiley, CA 94544

Faisal Hamid, CA 94545

Alice Kemp, CA 94545

Joan Smith, CA 94545

David Butner, CA 94546

Edward Byrne, CA 94546

Lou Johnstone, CA 94546

Yvonne Jones, CA 94546





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Steve Lewis, CA 94546  
Katherine Sullivan, CA 94546  
Christine The, CA 94546  
James Wildeman, CA 94546  
Allison Montgomery, CA 94547  
Thomas Bishop, CA 94549  
David Chiappetta, CA 94549  
Julie Jarratt, CA 94549  
Tim Lynch, CA 94549  
Kathleen Marshall, CA 94549  
Nick Pasto, CA 94549  
Kathleen Penn, CA 94549  
Jessica Uppal, CA 94549  
Cynthia Benson, CA 94550  
Mark Cameron, CA 94550  
James Krossa, CA 94550  
Jesse Palma, CA 94550  
Marisa Balfour, CA 94551  
Yvonne Konneker, CA 94551  
Pamela Miller, CA 94551  
Michael Reed, CA 94551  
Melissa Wilson, CA 94551  
Edward Molyneaux, CA 94552  
Sonja Neal, CA 94552  
Santha Pisharody, CA 94552  
Pickens Saxton, CA 94552  
Sondra Yellen, CA 94552  
Eva Antilla, CA 94553  
Sharon Cravanas, CA 94553  
Deborah Cuevas, CA 94553

Terry Flaherty, CA 94553  
Steven Freedman, CA 94553  
Hope Garcia, CA 94553  
Richard Keenley, CA 94553  
Shirley Mcelhattan, CA 94553  
Carole Nacon, CA 94553  
Kathleen Nichols, CA 94553  
Courtney O'Brien, CA 94553  
Virginia Pursley, CA 94553  
Monica Rinna, CA 94553  
Mark Salimbeve, CA 94553  
Lisa Songster, CA 94553  
Carol Sprecher, CA 94553  
James Swide, CA 94553  
Maurice Turrieta, CA 94553  
Dolores Velasco, CA 94553  
Janet Volkar, CA 94553  
Ajay Aggrwal, CA 94555  
Subbiah Kandasamy, CA 94555  
Ralph Thomas, CA 94555  
Gregory Watkins, CA 94556  
Alex Alpert, CA 94558  
Kira Ballotta, CA 94558  
Oscar Castelo, CA 94558  
Kris Freewoman, CA 94558  
Tony Heinricher, CA 94558  
Christopher Hoel, CA 94558  
Linda Inlay, CA 94558  
Nancy Nauman, CA 94558  
Jeff Prather, CA 94558



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kendra Schalk, CA 94558  
Alice Shearon, CA 94558  
William Wendt, CA 94558  
Kathryn Corna, CA 94559  
Daniel Johns, CA 94559  
Brian Nuss, CA 94559  
Becky Peterson, CA 94559  
Carolyn Sanchez, CA 94559  
William Lockwood, CA 94560  
Harral Robin, CA 94560  
Nathalie Lezama-Ferro, CA 94561  
John Zamora, CA 94561  
Kathleen Dell'Aquila, CA 94563  
Kyle Faulker, CA 94563  
Lynn Uzzo, CA 94563  
Ronald Wallace, CA 94563  
Emily Wu, CA 94563  
Ann Clay, CA 94564  
Linda Katz, CA 94564  
Cherry Molinari, CA 94564  
Jasmine Smith, CA 94564  
Katherine Dilao, CA 94565  
Randall Gutierrez, CA 94565  
Lisa Maule, CA 94565  
Jennifer Achtert, CA 94566  
Ede Bruce, CA 94566  
Leonore Cusenza, CA 94566  
Sriram Garimella, CA 94566  
Linda Jordan, CA 94566  
Serena Klimek, CA 94566

Sharon Marshall, CA 94566  
Anil Mirchandani, CA 94566  
Kori Neilsen, CA 94566  
Robert Shenon, CA 94566  
Sheila Thompson, CA 94566  
Vito Tragni, CA 94566  
Pegah Barzegar, CA 94568  
Michele Day, CA 94568  
Laurie Grand, CA 94568  
Glenda Leatherman, CA 94568  
Sam Mohanta, CA 94568  
Linda Ballard, CA 94571  
Joseph Pinkney, CA 94571  
Justine Tenzeldam, CA 94572  
Ann Estrada, CA 94574  
Elaine Honig, CA 94574  
Dawn Leininger, CA 94574  
John Quinn, CA 94574  
Miriam Delagrange, CA 94577  
Anita Hong, CA 94577  
Patricia Kilroe, CA 94577  
Kerry Kurtz, CA 94577  
Don Magnifico, CA 94577  
Ilana Marcucci-Morris, CA 94577  
Edward Strickland, CA 94577  
Soraya Rahami, CA 94578  
Mattie Turner, CA 94578  
Karin Flores, CA 94579  
Dori Grandbois, CA 94579  
Mike Lanfear, CA 94580



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Akira Sasaki, CA 94582  
Julie Buchanan, CA 94583  
Sharon Donovan, CA 94583  
Mona Epstein, CA 94583  
Jana Johnson, CA 94583  
John Moore, CA 94583  
Penny Wolfsohn, CA 94583  
Vicky Clayton, CA 94585  
Russell Jordan, CA 94586  
Michael Mitchell, CA 94586  
Todd Benson, CA 94587  
Daniel Chaja, CA 94587  
Aaron Christianson, CA 94587  
Michael Guevara, CA 94587  
Schola Idem, CA 94587  
Dorothy Jones, CA 94587  
Susan Lydick, CA 94587  
Rick Munoz, CA 94587  
Robin Talbott, CA 94587  
James Woodhead, CA 94587  
Alex Briones, CA 94588  
Michelle Lee, CA 94588  
June Lister, CA 94588  
Heidi Mcfadden, CA 94588  
David Telles, CA 94588  
Vicky Fagan, CA 94589  
Craig Christena, CA 94590  
Amy Combs, CA 94590  
Jimmy Genn, CA 94590  
Sheri Jepperson, CA 94590

Alan Kimelman, CA 94590  
Randall Koch, CA 94590  
Robert Lewis, CA 94590  
Kevin Radley, CA 94590  
James Worthen, CA 94590  
Natalia Zuniga, CA 94590  
John Lawson, CA 94591  
Steven Pasquale, CA 94591  
Amelia Smith, CA 94591  
Shannon Williams, CA 94591  
Susan Williams, CA 94591  
Paul Roberts, CA 94592  
Kendra Berch, CA 94595  
Steven Freemire, CA 94595  
Stephanie Johnsonbaugh, CA 94595  
Elizabeth Johnston, CA 94595  
Drue Kramer, CA 94595  
Marie Krausova, CA 94595  
Nora Lapointe, CA 94595  
David McMurry, CA 94595  
Irene Wong, CA 94595  
Robert Beavers, CA 94596  
Karen Davey, CA 94596  
Susan Iwamoto, CA 94596  
Matthew Lawson, CA 94596  
Randall Thompson, CA 94596  
Kristy Wheeler, CA 94596  
Robin Wolf, CA 94596  
jane Corcoran, CA 94597  
Paul Gommel, CA 94597



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cary Hellman, CA 94597

Elliott Leas, CA 94597

Danny Fried, CA 94598

John Hall, CA 94598

Allen Krimmel, CA 94598

Stewart Nakamura, CA 94598

Michael Strong, CA 94598

Lori Thomas, CA 94598

Omar Alaji, CA 94601

Nancy Broderick, CA 94601

Theresa Catlin, CA 94601

Cheri King, CA 94601

Mark Gilley, CA 94602

Edward Grigas, CA 94602

Jes Levine, CA 94602

Natasha Middleton, CA 94602

Brook Stern, CA 94602

Bonnie Stewart, CA 94602

Barbara Szudy, CA 94602

Gerrie Washburn, CA 94602

Karl Zitzow, CA 94602

Russell Blume, CA 94605

Dennie Cambitsis, CA 94605

Charlotte Campbell, CA 94605

Betty Mechles, CA 94605

Linda Petersen, CA 94605

Judith Rowan, CA 94606

Hoang Vuong, CA 94606

Jack Whiteford, CA 94606

Sue Ballinger, CA 94607

Odell Gibbs, CA 94607

Matthew Maltbie, CA 94607

Gregory Owens, CA 94607

Jill Shortley, CA 94607

Vani Singleton, CA 94607

Joanne Dickerson, CA 94608

Ben Ezeokoli, CA 94608

Daniel Gamboa, CA 94608

Peter Glazer, CA 94608

Michaele Smith, CA 94608

Alfred Edwards, CA 94609

Cassie Lopez, CA 94609

Stephanie Orozco, CA 94609

Kay Shearer, CA 94609

Dustin Smith, CA 94609

Jane Smith, CA 94609

Abdulaziz Alkhamri, CA 94610

Dale Bachman, CA 94610

Joanna Black, CA 94610

Shannon Coleman, CA 94610

Tracey Corder, CA 94610

Dias Cynthia, CA 94610

Marilyn Flower, CA 94610

Jim Hickman, CA 94610

Jewel Jauregui, CA 94610

Patricia Littlefield, CA 94610

Sabrina Moreno, CA 94610

Yeh Ray, CA 94610

Molly Sims, CA 94610

Peter Takeuchi, CA 94610



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ceil Tilney, CA 94610  
Endrias Yohannes, CA 94610  
David Arndt, CA 94611  
Ada Burko, CA 94611  
Blue Figueroa, CA 94611  
Adella Gaston, CA 94611  
Glen Hughes, CA 94611  
Sarah Karlinsky, CA 94611  
Michael Lamp, CA 94611  
Meg Mcadam, CA 94611  
Pamela Mercer, CA 94611  
Daniel Newbrun, CA 94611  
Terry Roemer, CA 94611  
Suzanne Rowell, CA 94611  
Dawn Warriner, CA 94611  
Thomas Wright, CA 94611  
Philip Zymet, CA 94611  
Kevin Bean, CA 94612  
Ernest Gundling, CA 94612  
Penny Kreitzer, CA 94612  
Lynda Morgan, CA 94612  
Joseph Quisol, CA 94612  
Peter Abel, CA 94618  
Nicole Delger, CA 94618  
Tracey Grossbach, CA 94618  
Paula Hamilton, CA 94618  
Lisa Kermish, CA 94618  
Carl Resnikoff, CA 94618  
Katrina Saba, CA 94618  
Fran Solomon, CA 94618

Elizabeth Vanbenschoten, CA 94618  
Ayanna Bennett, CA 94619  
Diane Garner, CA 94619  
Margaret Hu, CA 94619  
Jacqueline Joseph-Veal, CA 94619  
John Lee, CA 94619  
Stuart Liroff, CA 94619  
Sylvia Mcdaniel, CA 94619  
Erin Miller, CA 94619  
Meagan Mitchell, CA 94619  
Robin Rosario, CA 94619  
Thomas Swift, CA 94619  
Susan Kaplan, CA 94702  
Devon Lake, CA 94702  
Ary Amerikaner, CA 94703  
Sarah Crabtree, CA 94703  
Brian Linde, CA 94703  
Katherine Paur, CA 94703  
Leah Simonweisberg, CA 94703  
Vicki Sommer, CA 94703  
Moulitsas Markos, CA 94704  
Paul Mccold, CA 94704  
Rohit Agrawal, CA 94705  
Chris Averett, CA 94705  
Helen Kim, CA 94705  
Thomas Leong, CA 94705  
Lisa Valentine, CA 94705  
William Veale, CA 94705  
Miles Culpepper, CA 94706  
Rande Johnson, CA 94706





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Lise Narath, CA 94706  
Richard Wong, CA 94706  
Kenneth Hempel, CA 94707  
Susanne Huttner, CA 94707  
Gail Miles, CA 94707  
Paul Gill, CA 94708  
Rose Morrell, CA 94708  
David Bank, CA 94709  
Nancy Denero, CA 94709  
Guy Isely, CA 94709  
Stephen Levine, CA 94709  
Laurie Loftus, CA 94710  
Clara Mclean, CA 94710  
Summer Oram, CA 94710  
Lydia Anderson, CA 94801  
Frank Andrade, CA 94801  
Susan Binder, CA 94801  
Marsha Tomassi, CA 94801  
Sharon Waterman, CA 94801  
Lizabeth Asami, CA 94803  
Diane Harris, CA 94803  
Willie Jackson, CA 94803  
Martha Acosta, CA 94804  
Ian Carey, CA 94804  
Shannon Erby, CA 94804  
Gary Frank, CA 94804  
Nancy Gruver, CA 94804  
Raleigh Latham, CA 94804  
Leatrice Lyon, CA 94804  
Elizabeth Masterson, CA 94804

Lynne Maylath, CA 94804  
Barbara Needell, CA 94804  
Craig Parada, CA 94804  
Marsha Vaughn, CA 94804  
Amanda Bowens, CA 94805  
Serena Donovan, CA 94805  
Ruth Levin, CA 94805  
Katherine Ralph, CA 94805  
Michele Rappaport, CA 94805  
Joseph Sosensky, CA 94805  
Patsy Stubbs, CA 94805  
Darrione Glover, CA 94806  
Martin Goldie, CA 94806  
Sam Maxie, CA 94806  
Katherine Beacock, CA 94901  
Jeanne Brophy, CA 94901  
Rose Hunter, CA 94901  
Mari Johnson, CA 94901  
Dorothy Jones, CA 94901  
Veronica Kirkpatrick, CA 94901  
Barbara Levinson, CA 94901  
Alexa Lucas, CA 94901  
Sara Marchi, CA 94901  
Anna Melillo, CA 94901  
Miguel Ohara, CA 94901  
Kathleen Pallie, CA 94901  
Craig Shinnfield, CA 94901  
Richard Britton, CA 94903  
Marilynne Chophel, CA 94903  
Christopher Fadeff, CA 94903



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Walter Searway, CA 94903

Constance Sewing, CA 94903

Adam Silver, CA 94903

Cathy Tennant, CA 94903

Alfred Wallace, CA 94903

Brian Gleeson, CA 94904

Richard Lawrence, CA 94904

Emily Neill, CA 94904

Tanja Ross, CA 94904

Laura Talmus, CA 94904

Janet Wiginton, CA 94904

Lisa Flannigan, CA 94912

Janet Weil, CA 94920

Godie Gale, CA 94923

Joseph Straton, CA 94924

Leslie Baker, CA 94925

Glenda Corning, CA 94925

Candice Crider, CA 94925

Lori Saltveit, CA 94925

Sergio Canavati De La Torre, CA 94928

Pamela Feltrop, CA 94928

Timothy Griesser, CA 94928

Deanna Harmon, CA 94928

Tyson Hill, CA 94928

William Patterson, CA 94928

Bill Uriarte, CA 94928

Connie Varela, CA 94928

Latonia Wilson, CA 94928

Radha Blackman, CA 94930

Derek Johnson, CA 94930

Maureen Kroll, CA 94930

Larry Norall, CA 94930

Ashley Simon, CA 94930

Genevieve Sollecito, CA 94930

Gwen Wilson, CA 94930

Harry Boatright, CA 94931

Barbara Drago, CA 94931

Marilee Maertz, CA 94931

Ellen Miller, CA 94931

Janice Miskel, CA 94931

Deborah Prince, CA 94931

cindy wespestad, CA 94937

Monica Dehghan, CA 94939

Bugra Bakan, CA 94941

Christine Brandt, CA 94941

Jack Clapper, CA 94941

David Crockett, CA 94941

Melissa Damore, CA 94941

Sandra Godwin, CA 94941

Karen Henry, CA 94941

Margie Herman, CA 94941

Linda Lam, CA 94941

John Levin, CA 94941

Andrew Mcwhorter, CA 94941

Marina Multhaup, CA 94941

Lauren Parsons, CA 94941

Fredric Sherman, CA 94941

Allison Youngling, CA 94941

Ben Zelazny, CA 94941

Melissa Armoza, CA 94945



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Francesca Bell, CA 94945

Scott Kohn, CA 94945

Tamami Tokutake, CA 94945

Meredith Vecchio, CA 94945

Silverman Lj, CA 94947

Karen Lynch, CA 94947

Karen Marks, CA 94947

Pauline Ridyard, CA 94947

Heather Sargent, CA 94947

Clive Burton, CA 94949

Macgregor Goodhart, CA 94949

Marcia Mclean, CA 94949

William Schultz, CA 94949

Erica Blaauw, CA 94952

Elenoa Komaisavai, CA 94952

Laurie Roth, CA 94952

Linda Book, CA 94954

Whitney Charles, CA 94954

Janet Fauerso, CA 94954

Stephanie Fuelling, CA 94954

Deb Haynes, CA 94954

Rickie Marecek, CA 94954

Sandra Parrett, CA 94954

Nancy Raw, CA 94954

Martha Frankel, CA 94956

Ann Griffin, CA 94956

Kristi Patterson, CA 94956

Terri Boutwell Boutwell, CA 94960

Michael Clark, CA 94960

Cara Derham, CA 94960

Paige Dickow, CA 94960

Angie Flynn, CA 94960

jane hall, CA 94960

John Lacy, CA 94960

Benhur Mesfin, CA 94960

Cynthia Rangaves, CA 94960

Kevin Spera, CA 94960

Elizabeth King, CA 94965

Aisha Stephenson, CA 94965

Jack Freckmann, CA 94973

Douglas Blaisdell, CA 95003

Robert Burkhart, CA 95003

Joseph Crossen, CA 95003

John Kelbert, CA 95003

Thomas Millman, CA 95003

Chris Scalzo, CA 95003

Dan Barnett, CA 95005

Roger Dunn, CA 95005

Erin Rogers, CA 95005

Heather Vinson, CA 95006

Sandra Harrington, CA 95008

Ricardo Herrera, CA 95008

Susan Rhodes, CA 95008

Amr Salahieh, CA 95008

Tena Taormina, CA 95008

Christine Weng, CA 95008

Catherine Dobbins, CA 95010

Mary Reilly, CA 95010

Deborah Secrest, CA 95010

Mary January, CA 95014



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Babu Nott, CA 95014  
Umesh Patil, CA 95014  
Don Sun, CA 95014  
Mariah Waite, CA 95014  
Gerry Gerringer, CA 95018  
Eric Welty, CA 95018  
Alan Kabert, CA 95020  
Ygnacia Rivas, CA 95020  
Carol Tolbert, CA 95020  
Lawrence Turk, CA 95020  
Glynis Crabb, CA 95023  
David Pollard, CA 95023  
Sue Tatro, CA 95023  
Alison Brewer, CA 95030  
Kimberli Doty, CA 95030  
Deborah Goldsmith, CA 95030  
Jennifer Shepherd, CA 95030  
Maryellen Burr, CA 95032  
Tracey Fisher, CA 95032  
Mft Maxwell, CA 95032  
Pamela Price-Hawley, CA 95032  
Sharon Roth, CA 95032  
Michael Turpin, CA 95032  
William Adams, CA 95033  
Robert Boatright, CA 95033  
Denise Devlin, CA 95033  
Lee Simmons, CA 95033  
Matthew Baltar, CA 95035  
Ronald Harris, CA 95035  
Rebecca Jacobs, CA 95035

Thuy Le, CA 95035  
Anthony Miller, CA 95035  
Wendy Stegeman, CA 95035  
Karen Caruana, CA 95037  
Joseph Charfauros, CA 95037  
Orlando Davisson, CA 95037  
Richard Overstreet, CA 95037  
Brenda Sass, CA 95037  
Anna Jenkins, CA 95046  
Andrea Beswetherick, CA 95050  
Rachelle Couture, CA 95050  
Sherry Ernst, CA 95050  
donna gatson, CA 95050  
Amy Gies, CA 95050  
Kim Gray, CA 95050  
Barbara Hartman, CA 95050  
Kellan Mcnamara, CA 95050  
Benjamin Williams, CA 95050  
Theresa Bashyam, CA 95051  
David Holmby, CA 95051  
David Ilumin, CA 95051  
Adi Ogle, CA 95051  
Derrick Chang, CA 95054  
Mark Shimrock, CA 95054  
Larry Smith, CA 95054  
Karen Berlin, CA 95060  
Mckenna Booth, CA 95060  
Wendy Chapman, CA 95060  
Roger Emanuels, CA 95060  
Elizabeth Hagan, CA 95060



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Stephen Kleshinski, CA 95060  
Laurie Longenecker, CA 95060  
Margaret Nelson, CA 95060  
Rebecca Nolan, CA 95060  
Donald Payne, CA 95060  
Lelah Riccio, CA 95060  
Diane Sipkin, CA 95060  
Caroline Spurgin, CA 95060  
Craig Venable, CA 95060  
Chris Wentzien, CA 95060  
Susan Zevanove, CA 95060  
Armando Arias, CA 95062  
William Farrington, CA 95062  
Russell Frye, CA 95062  
Robin Lysne, CA 95062  
Claudio Perez, CA 95062  
Julia Pinsky, CA 95062  
Heidi Rielly, CA 95062  
Anita Sandman, CA 95062  
Susan Walton, CA 95062  
William Wright, CA 95062  
Jonathan Fox, CA 95064  
Shankari Patel, CA 95064  
Lee Ritscher, CA 95064  
John Laurent, CA 95066  
James Hopkins, CA 95070  
Christine Hurd, CA 95070  
David Scott, CA 95070  
Alayne Meeks, CA 95073  
Bruno Casillas, CA 95076

Michael Cruddas, CA 95076  
LOIS HAGEN, CA 95076  
Patti Jadrich, CA 95076  
Victor Kimura, CA 95076  
Barbara Knapp, CA 95076  
Lee Rhoades, CA 95076  
Berta Rodriguez, CA 95076  
Robert Shacklett, CA 95076  
Cristina Kochevar, CA 95077  
Sandra Jackson, CA 95101  
Keith Berger, CA 95110  
Amanda Georges, CA 95110  
Kevin Hughes, CA 95110  
Richard Saunders, CA 95110  
Jason Syu, CA 95110  
Rochelle Velazquez, CA 95110  
Robert Hatch, CA 95111  
Joel Wachs, CA 95111  
Lori Gilliar, CA 95112  
Una Mendoza, CA 95112  
Katherine Mirassou, CA 95112  
Armando Cabrales, CA 95116  
Phuc Le, CA 95116  
Olympia Williams, CA 95116  
Marty Brill, CA 95117  
Stephen Hartzell, CA 95117  
Rosario Herrera, CA 95117  
Charles Beazell, CA 95118  
Gloria Brown, CA 95118  
Jill Levy, CA 95118





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Thomas Logan, CA 95118  
Medhat Matter, CA 95119  
Sherri Enzminger, CA 95120  
Patricia Lockyer, CA 95120  
Robert Murua, CA 95120  
Pollyanna Pixton, CA 95120  
Lisa Vasquez, CA 95120  
Lisa Ayala, CA 95121  
Tho Nguyen, CA 95121  
Elizabeth Shaw, CA 95121  
Le Tan, CA 95121  
Kimberlee Cowan, CA 95123  
Marcia Harper, CA 95123  
Gbvivek Li, CA 95123  
Rowena Pelczynski, CA 95123  
Elizabeth Tritch, CA 95123  
Sharlene Valencia, CA 95123  
Zachary Vaughn, CA 95123  
Zonia Caceres, CA 95124  
Fernando Chavez, CA 95124  
Mark Jansen, CA 95124  
Heather Peters, CA 95124  
Jennifer Petroff, CA 95124  
Anette Reeves, CA 95124  
David Sylvia, CA 95124  
Jeromy Carssow, CA 95125  
Denise Cranney, CA 95125  
Larry Engstro, CA 95125  
Mahmoud Gahrahmat, CA 95125  
Julianita Maestas, CA 95125

Erin Sarpa, CA 95125  
Sonja Scheelke, CA 95125  
Benjamin Trumbull, CA 95125  
Lindsey Adams, CA 95126  
Fernando Chavez, CA 95126  
Gregory Cohen, CA 95126  
Frank Farris, CA 95126  
Cecila Macias, CA 95126  
Stephanie Taylor, CA 95126  
Zeenat Vastrad, CA 95126  
Laura Gambelin, CA 95127  
Hossein Akbari, CA 95128  
Rick Grassadonia, CA 95128  
Candice Piper, CA 95128  
Virginia Wilson, CA 95128  
Akruti Gupta, CA 95129  
Roseanne Becher, CA 95130  
Amanda Micheli, CA 95130  
Linda Kitchen, CA 95131  
Erik Sanjurjo, CA 95132  
Dominique Yarritu, CA 95132  
Laura Bader, CA 95133  
Greka Badilla, CA 95133  
Elena Cacace, CA 95134  
Cheryl Culclager, CA 95134  
Susan Kincaid, CA 95134  
Lawrence Tutino, CA 95134  
Renee Delacruz, CA 95136  
Douglas Easley, CA 95136  
Rolwin Lewis, CA 95136



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

John Villasenor, CA 95136

Yvonne French, CA 95138

Daphne Renelle, CA 95139

Jessica Lucas, CA 95148

Minda Vasquez, CA 95148

Halle Weingarten, CA 95148

David Saltman, CA 95150

Thomas Shephard, CA 95201

Cristina Villalvazo, CA 95203

James Mason, CA 95204

Dana Murdock, CA 95204

Ernest Vasti, CA 95204

Jose Duran, CA 95206

Walter Hastings, CA 95206

Oscar Hernandez, CA 95206

Becky Teberg, CA 95206

Helen Botiller, CA 95207

Paulette Castellanos, CA 95207

Cole Elliott, CA 95207

Rachel Lee, CA 95207

Ksybella Pope Sears, CA 95207

William Siegel, CA 95207

Cynthia Summers, CA 95207

Michael Gilayeneh, CA 95209

Evelyn Ryan, CA 95209

Gay King, CA 95210

Salvador Yadao, CA 95210

Joseph Cartagenas, CA 95212

William Fattarsi, CA 95219

Clinton Lukeroth, CA 95219

Damali Robertson, CA 95219

Thomas Cahill, CA 95223

Traci Adams, CA 95240

Michael Robinson, CA 95240

Randy Reeves, CA 95242

Charnette Boylan, CA 95249

Jessica Lindahl, CA 95257

Camilo Soto, CA 95301

Crystal King, CA 95305

Tanya Edwards, CA 95307

Margi Tanner, CA 95311

Thomas Bundy, CA 95316

Jamie Sims, CA 95320

Doral Gonzales, CA 95322

Julie Wilcox, CA 95327

Kathryn Gomes, CA 95336

Allen Wittenberger, CA 95336

Ron Bledsoe, CA 95337

John Hulbert, CA 95338

Jennifer Anderson, CA 95340

Janet McCabe, CA 95340

Juan Villegas, CA 95340

Doreen Kuneck, CA 95341

Rebecca Graves, CA 95348

Lynn Kateley, CA 95348

Norene Austin, CA 95350

Vernon Hartwell, CA 95350

Ami Mishler, CA 95350

Randy Sanchez Landa, CA 95350

Leticia Venegas, CA 95351



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michael Abbott, CA 95354

Lisa Arnold, CA 95354

Regina Brennan, CA 95354

Emanuel Cardoso, CA 95354

Minerva Perez, CA 95354

Margaret Beck, CA 95355

Karole Britton, CA 95355

Wendy Bryson, CA 95355

Paula Crowther, CA 95355

Mark Wilbur, CA 95355

Carol Bulman, CA 95356

Jeri Johnson, CA 95356

Hugo Patino, CA 95356

Phillip Somers, CA 95356

Jerry Weimer, CA 95356

Eugenia Bentayeb, CA 95360

Lauren Noble, CA 95361

Leanne Baker, CA 95366

Misael Avila, CA 95367

Mike Jackson, CA 95367

Patrick Webster, CA 95368

Roy Bartholomew, CA 95370

Emily Branscum, CA 95370

Carol Mckee, CA 95370

Lavada Sullivan, CA 95370

Julie Harris, CA 95372

DAWN BILL, CA 95376

Anna Dearlove, CA 95376

Dave Groves, CA 95376

Vicki Ramirez, CA 95376

Ralph Jones, CA 95377

Keith Loche, CA 95377

Teri Hines, CA 95380

Kathleen Tullio, CA 95382

Catherine Jones, CA 95383

Chelsea Horvath, CA 95386

Javier Soliz, CA 95391

Randi Cornwall, CA 95401

Heather Hardcastle, CA 95401

Donna Parker, CA 95401

Lynn Sarrade, CA 95401

Viorica Sebestin, CA 95401

Ronald White, CA 95401

Charles Hughes, CA 95402

Pamela Benz, CA 95403

Kim Marbury, CA 95403

Carol Pagal, CA 95403

Sheila Robinson, CA 95403

Laurelyn Andrew, CA 95404

Jane Campbell, CA 95404

Susan Gentile, CA 95404

Dennis Goodrow, CA 95404

Kelly Jenkins, CA 95404

Lawrence Natalini, CA 95404

Jennifer Vala, CA 95404

Kevin White, CA 95404

Michael Wilde, CA 95404

Peggy Albright, CA 95405

Sally Downs-Phoenix, CA 95405

Amy Forlan, CA 95405



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Keith Hallock, CA 95405

Nadenia Newkirk, CA 95405

Wayne Seden, CA 95405

Diana Rae, CA 95407

Renate Fassbender, CA 95409

Patricia Holladay, CA 95409

Frank Longoria, CA 95409

Alan Schackman, CA 95409

Paul Schwartz, CA 95409

Andrea Weinstein, CA 95409

Kaytlin Bennett, CA 95421

Karen Walker, CA 95436

Mary Desautels, CA 95437

Charles Fleischman, CA 95437

TIMOTHY HALL, CA 95437

Timothy Perry, CA 95437

Norma Watkins, CA 95437

Lana Karhu, CA 95444

Antoinette Lang, CA 95445

Paul Mcknight, CA 95446

Katherine Lacy, CA 95448

Garrick Maul, CA 95448

Bonita Munoz, CA 95448

Elizabeth Schuiling, CA 95448

Sharon Stinson, CA 95448

Sally Weed, CA 95448

paul carlsen, CA 95451

Robert Laubach, CA 95451

Kathleen Shanklin, CA 95452

Hedy Montoya, CA 95453

Barbara Mccoid, CA 95461

Lorin Mcclendon, CA 95464

Lori Platt, CA 95470

Diane Estrin, CA 95472

Kevin Kraynak, CA 95472

Devra Newhouse, CA 95472

Christopher Orsine, CA 95472

Gregory Bowman, CA 95476

Carlile Breeze, CA 95476

colleen carrano, CA 95476

Kimberly Enzensperger, CA 95476

Susan Lucas-Conwell, CA 95476

Rene Parker, CA 95476

Charles Williams, CA 95476

Adrienne Doss, CA 95492

Gary Johanson, CA 95492

Shirley Jones, CA 95492

Scott Snow, CA 95492

Crista Truex, CA 95501

Robert Pitts, CA 95503

Jill Williams, CA 95503

Charles Dory, CA 95519

Ashley Kane, CA 95519

Scott Sway, CA 95519

Virginia Rogers, CA 95521

Marian Bogdanyi, CA 95536

Emily Silver, CA 95536

Pamela Bellah, CA 95540

Michael Thompson, CA 95542

Pamela Lutchen, CA 95554



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jason Hachtel, CA 95562

Brian Dadisman, CA 95567

Karen Dillon, CA 95567

Fran Cvitkovich, CA 95570

Ellen Drury, CA 95570

Patricia Strepy, CA 95570

Joan Beesley, CA 95602

Thomas Neary, CA 95602

Nicolas Bellanca, CA 95603

Barbara Grandstaff, CA 95603

Glen Kramer, CA 95603

Helen Melick, CA 95603

Claude Davis, CA 95604

Terre Davis, CA 95604

Robyn Pask, CA 95604

Brian Belluomini, CA 95608

Tawasky Carter, CA 95608

Jamie Elverum, CA 95608

Sally Lee, CA 95608

George Leidy, CA 95608

Russell Lobue, CA 95608

Barbara Owens, CA 95608

Terry White, CA 95608

Linda Coffman, CA 95610

Pamela Rubitsky, CA 95610

Daniel Anderson, CA 95616

Helen Barbe, CA 95616

Carol Biancalana, CA 95616

Leslie Gordon, CA 95616

Rebecka Hagerty, CA 95616

Robert Halferty, CA 95616

Gautam Jagannath, CA 95616

Nancy Kirk, CA 95616

Barbara Renwick, CA 95616

Laura Routh, CA 95616

Charla Salcido, CA 95616

Sylvia Sensiper, CA 95616

Marilyn Stratton, CA 95616

Steven Weiss, CA 95616

Marian Zingaro, CA 95616

Colleen Clancy, CA 95618

James Danzer, CA 95618

Anett Evans, CA 95618

Joseph Green, CA 95618

Elaine Bishop, CA 95620

Katherine James, CA 95620

Miguel Oropeza, CA 95620

James Stevens, CA 95620

Linda Moffatt, CA 95621

Karen Perry, CA 95621

Georgia Tardy, CA 95621

Stephanie Batey, CA 95624

John Camarra, CA 95624

Erin Dant, CA 95624

David Quecke, CA 95624

Michael Radam, CA 95624

James Walls, CA 95624

Javier Lerma, CA 95626

Sandra Reed, CA 95627

Lynn Rolston, CA 95627





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Benny Barrios, CA 95628  
Albert Cheung, CA 95628  
Carrie Culver, CA 95628  
Darius Davenport, CA 95628  
Karen Hallagan, CA 95628  
Kathy Kilpatrick, CA 95628  
Susan Neal, CA 95628  
David Neff, CA 95628  
Coleman Newell, CA 95628  
Jonathan Sachs, CA 95628  
Kirsten Votaw, CA 95628  
Dianna Batt, CA 95630  
Soyab Huseinbhai, CA 95630  
Frank Jacobs, CA 95630  
Patrick Kelly, CA 95630  
James Marsh, CA 95630  
Michele Smith, CA 95630  
John Thomas, CA 95630  
Laural Hockenson, CA 95633  
Charlyn Parker, CA 95638  
Cheryl Bozzie, CA 95640  
Jacqueline Butler, CA 95648  
Leslie Cappelletti, CA 95648  
Robert Christopherson, CA 95648  
Theodore Cohen, CA 95648  
B Franks, CA 95648  
Susan Hannah, CA 95648  
Patricia Malberg, CA 95648  
Donald Rives, CA 95648  
Leslie Uyeno, CA 95648

Brooke Allison, CA 95650  
Janis Jones, CA 95650  
Michael Neal, CA 95650  
Pamela Richards, CA 95650  
Patrick Sayer, CA 95650  
Dana Stone, CA 95650  
Gloria Omania, CA 95651  
Lorraine Osborn, CA 95660  
Janis Arredondo, CA 95661  
F Chalmers, CA 95661  
Paul Fisher, CA 95661  
Joyce Frederick, CA 95661  
Sheryl Gray, CA 95661  
Kia Hatch, CA 95661  
Brooke Whitlock, CA 95661  
Lynn Yamamoto, CA 95661  
Dan Durrant, CA 95662  
Judy Elston, CA 95662  
Brett Pittman, CA 95664  
Jacob Rosano, CA 95664  
Mary Hickcox, CA 95665  
William Dye, CA 95666  
Shirley Trent, CA 95666  
Susan Turner, CA 95666  
Julie Collier, CA 95667  
Alison Gimpel, CA 95667  
Mark Thoma, CA 95667  
Michaele Beebe, CA 95670  
Dale Hatt, CA 95670  
Jane Pearce, CA 95670



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Purvis, CA 95670  
Mary Yaryan, CA 95670  
Owen Davies, CA 95672  
Cheryl Abernathy, CA 95673  
Jennifer Wells, CA 95674  
Lana Gartin, CA 95677  
Jill Matney, CA 95677  
Mary Pitcher, CA 95677  
Melinda Wetzel, CA 95677  
Ellen Debachriley, CA 95678  
Donald Hall, CA 95678  
Cheri Jump, CA 95678  
Pamela Lundgren, CA 95678  
Helane Seikaly, CA 95678  
Sylvia Escobar, CA 95682  
Patricia Felten, CA 95682  
Diane Shoff, CA 95682  
Sally White, CA 95683  
James Perry, CA 95685  
Teresa Cospers, CA 95687  
Daunna Harris, CA 95687  
Denise Peebles, CA 95687  
Joyce Pippen, CA 95687  
Richard Potts, CA 95687  
Megan Kaufman, CA 95688  
Mark Richard, CA 95688  
Derek Backus, CA 95691  
Terri Mccall, CA 95691  
Brad Pedersen, CA 95691  
Barbara Winter, CA 95691

Reuben Schilling, CA 95694  
Deanna Petersen, CA 95695  
Robert Pratt, CA 95695  
Christine Russell, CA 95695  
Lori Shaw, CA 95695  
Jennifer Cantrell, CA 95701  
Adrienne Arnold, CA 95722  
Carol Bellamy, CA 95722  
Michael Vonada, CA 95726  
Cynthia Weight, CA 95741  
Cindy Colosimo, CA 95742  
Marcia Hager, CA 95742  
Patricia Williams, CA 95742  
Kristy Muller, CA 95746  
Mona Reyes, CA 95746  
Leanna Wedel, CA 95746  
Rebecca Acosta, CA 95747  
Anne Barrett, CA 95747  
Susan Edie, CA 95747  
Julie Galliano, CA 95747  
Chinnaian Jawahar, CA 95747  
Christopher Kent, CA 95747  
Kathleen Maccoll, CA 95747  
Jaclyn Moreno, CA 95747  
Beverly Nesmith, CA 95747  
Janine Preston, CA 95747  
Frankie Schesser, CA 95747  
Kim Anderson, CA 95758  
John Caldwell, CA 95758  
Rydell Gibson, CA 95758



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jen Teyler, CA 95758

Olivia Willis, CA 95758

Ross Woodman, CA 95758

Aaron Anderson, CA 95762

Mary Lou Gattuso, CA 95762

Lauren Gould, CA 95762

Rhonda Grider, CA 95762

Vikki Lewis, CA 95762

Cassandra Aceves, CA 95765

Susan Andrews, CA 95765

Kathleen Doerr, CA 95765

Kenneth Lembach, CA 95765

Tom McMahan, CA 95765

Richard Riley, CA 95765

Noreene Shaffer, CA 95765

David Kumar, CA 95776

Dennis Wilson, CA 95798

Gil Caravantes, CA 95811

Philip Harvey, CA 95811

Benjamin Lesenana, CA 95812

Monique Polk, CA 95812

Jacob Whitaker, CA 95812

Sherri Cizad, CA 95814

Arnold Holm, CA 95814

Karen Lemmons, CA 95814

John Weems, CA 95814

Katherine Craig, CA 95815

Lindsay Bennett, CA 95816

Patrice Davis, CA 95816

Janet Geiger, CA 95816

Walter H. Loving Iii, CA 95816

Barb Thalacker, CA 95816

Eric Waddell, CA 95816

Chris Weare, CA 95816

Haley Williams, CA 95816

Robert Yee, CA 95816

Judy Brush, CA 95818

Janet Cassie, CA 95818

Phoebe Celestin, CA 95818

Aaron Stillwell, CA 95818

William Aguirre, CA 95819

Kathleen Cook, CA 95819

Connie Emerson, CA 95819

Wayne Mcguirt, CA 95819

Kristina Palmer, CA 95819

Paul Hanson, CA 95820

Dale King, CA 95820

Samantha Ramsey, CA 95820

Sasha Wisotsky, CA 95820

Margaret Hodo, CA 95821

Patricia Lawson, CA 95821

Deniece Radan, CA 95821

Joan Batie, CA 95822

Matthew Carrigan, CA 95822

terri clark, CA 95822

Myriam Levy, CA 95822

Zak Venegas, CA 95822

Daniel Weitzman, CA 95822

Dayle Thompson, CA 95823

Frank Torres, CA 95824



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Bear, CA 95825  
Jerry Beeler, CA 95825  
Linda Budd, CA 95825  
Diane Delaney, CA 95825  
Penny Ellison, CA 95825  
Polly Kleinberg, CA 95825  
Tim Reese, CA 95825  
Julia Winston, CA 95825  
Bibiana Alvarez, CA 95826  
Brenda Heath, CA 95826  
Linda Moulton, CA 95826  
Gary Pennington, CA 95826  
Cherise Zufelt, CA 95826  
Sharon Craig, CA 95828  
Maria Dedet, CA 95828  
Victoria Mcilwain, CA 95828  
Dale McKinney, CA 95828  
Sara Mira, CA 95828  
Elizabeth Adams, CA 95829  
Johnny Chong, CA 95829  
Erika Hughes, CA 95829  
Charles Martin, CA 95831  
Rella Remedios, CA 95831  
Suzanne Thompson, CA 95831  
Justin Wentzel, CA 95831  
Susan Williams, CA 95831  
Theresa Lose, CA 95832  
Daniel Albert, CA 95833  
Alain Conder, CA 95833  
Sue Considine, CA 95833

Gina Dasilva, CA 95833  
Justin Kennedy, CA 95833  
Victor Mora, CA 95833  
John Cronin, CA 95834  
Roy Harrell, CA 95834  
Mark Thorsell, CA 95834  
Mark Viviano, CA 95834  
Raymond Cadei, CA 95835  
Alverta Harty, CA 95835  
Bonnie March, CA 95835  
Tammy Pappas, CA 95835  
Susan Persons, CA 95835  
Madalynn Rucker, CA 95835  
Merry Gaskill, CA 95838  
Michael Obrien, CA 95841  
Lauren Musgrove, CA 95842  
Ellen Read, CA 95842  
Kathleen Rubin, CA 95842  
Melissa Macias, CA 95843  
Rob Woods, CA 95843  
Robert Yount, CA 95843  
Ayanna Crenshaw, CA 95852  
Robyn Delong, CA 95864  
Autumn Finnerty, CA 95864  
Leslie Holzman, CA 95864  
Mary Huttner, CA 95864  
Gabriel Maiol, CA 95864  
Hattie Bains, CA 95901  
Denise Bays, CA 95901  
Shelley Lehman, CA 95918



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sylvie Allione, CA 95926  
Barbara Bertapelle, CA 95926  
Teresa Gisske, CA 95926  
John Martin, CA 95926  
Lynn Millon, CA 95926  
Susan Prescott, CA 95926  
Genevieve Smith, CA 95926  
Richard Snodgrass, CA 95926  
Gary Wilson, CA 95926  
Darin Bolt, CA 95928  
Rebecca Brunelli, CA 95928  
Sonya Huss, CA 95928  
Michelle Mcgivern, CA 95928  
Cameron Pearson, CA 95928  
Traci Burnham, CA 95937  
Sharon Deal, CA 95945  
Ella Lerche, CA 95945  
Laura Morton, CA 95945  
Terence Young, CA 95945  
Lindsey Buis-Kelley, CA 95947  
Susan Ingrey, CA 95947  
Victor Doherty, CA 95949  
Brian Kilcourse, CA 95949  
Laura Mcnaughton, CA 95949  
Patricia Loera, CA 95951  
Linda Evans, CA 95953  
Anita King, CA 95954  
Sue McClinton, CA 95954  
Jonathan Blinder, CA 95959  
Stephanie Howerton, CA 95959

Marilyn Mociun, CA 95959  
Tammi Taber, CA 95961  
Terry Fountain, CA 95963  
Linda Waddell, CA 95966  
Robert Melera, CA 95968  
David Nemat-Nasser, CA 95973  
Melissa Wheeler, CA 95977  
Ryan Mc Kindles, CA 95981  
Jana Rigsby, CA 95991  
Lynn Arp, CA 95993  
Doug Gibbs, CA 95993  
Marilyn Scott, CA 95993  
Kathleen Lowrance, CA 96001  
Nelda Mayo, CA 96001  
Sara Nichols, CA 96001  
Ashley Raimondi, CA 96001  
Anna Ratner, CA 96001  
Tammi Garber, CA 96002  
Angelica Huerta, CA 96002  
Keith Brookshaw, CA 96003  
Jacquelyn Carr, CA 96003  
Constance Laughlin, CA 96003  
Keith Melton, CA 96003  
Kim Tyler, CA 96003  
John Hayes, CA 96007  
Dalton Boecking, CA 96019  
Debbie Bailey, CA 96022  
Kathryn Richards, CA 96022  
Toni Wyro, CA 96032  
Valerie Allison, CA 96067





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Karen Holmes, CA 96067

Jill Phillips, CA 96067

Paula Bibb, CA 96073

Kenneth Towle, CA 96073

Patricia Heiman, CA 96094

Randall Peterson, CA 96094

Martin Rosen, CA 96109

Barbar Bannar, CA 96150

Abby Pappenfus, CA 96150

Hailey Brewer, CA 96161

Carrie Haines, CA 96161

Ahrin Koppel, CA 96161

Violet Nakayama, CA 96161

James Wiesner, CO 92024

Janel Jung, IA 94107

Beth Rimanoczy, IN 948

Sandra Obrien, Anchorage, AK

Mela Arevalo, Juneau, AK

Lola Collins, Anniston, AL

Zakia Kator, Corona, AL

Roxanne Moran, Harrison, AR

Rita Redmond, Avondale, AZ

Jay Luna, Phoenix, AZ

John Stoneham, Prescott, AZ

Michelle Garcia, Prescott Valley, AZ

John Harrison, Scottsdale, AZ

Leslie Janik, Surprise, AZ

Catherine Studer, Tucson, AZ

Thomas Gordon, Denver, CO

Pat Kelly, Denver, CO

Torunn Sivesind, Denver, CO

Lael Mccoy, Golden, CO

Mark Selak, Parker, CO

Sarah Kincaid, Wheat Ridge, CO

Wendy Novick, Orange, CT

Jay Weinman, Redding, CT

Blair Bowie, Washington, DC

Lois Fishman, Washington, DC

Michael Kharfen, Washington, DC

Lauren Miller, Washington, DC

Betty Southard, Largo, FL

Pavelly Moure, Lehigh Acres, FL

Horacio Arce, Miami, FL

Glenn Joyner, Orlando, FL

Justina Powell, Pembroke Pines, FL

Ken Beer, Port Saint Lucie, FL

Edward Klein, Vero Beach, FL

Marilyn Saffer, West Palm Beach, FL

Alice Gray, Atlanta, GA

Kaiulani Conner, Haiku, HI

Tamara Todd, Hilo, HI

Linda Orr, Kailua Kona, HI

Elissa Kline, Hailey, ID

Sherry Chandos, Chicago, IL

John Garcia, Chicago, IL

Maureen Graves, Chicago, IL

Melissa Bailey, Columbus, IL

Jeffrey Scott, Granite City, IL

Robyn Donaldson, Hazel Crest, IL

Raymond Ryals, Libertyville, IL



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

David Fox, Wheaton, IL  
Lilian Hsu, Amherst, MA  
Matthew Dixon, Boston, MA  
Jasi Walker, Boston, MA  
Kori Hitchcock, Brookline, MA  
Srivatsa Manjunath, Chelmsford, MA  
Susana Carranza, Melrose, MA  
Jeanne Markel, Osterville, MA  
Jack Cheng, Waban, MA  
Stefanie Moore, Baltimore, MD  
Sangeetha Menon, Columbia, MD  
Jim Arney, Ellicott City, MD  
Paul Sivak, Parkville, MD  
Susan Buck, Rockville, MD  
Scott Jacobs, Takoma Park, MD  
Heidi Turner, Calais, ME  
Steven Shane, South Portland, ME  
Gregory Fox, Ann Arbor, MI  
Judy Rodrigues, Belmont, MI  
Cheryl Vaughn, Brighton, MI  
Michelle Moustakas, Canton, MI  
Kate McClanaghan, Detroit, MI  
Julio Marquez, Mount Pleasant, MI  
Michael Cohen, Royal Oak, MI  
Lisa Jacobs, Springport, MI  
Eva Bagen, Eden Prairie, MN  
Brian Breheny, Minneapolis, MN  
Pearce Bunting, Minneapolis, MN  
Alex Sachs, Kansas City, MO  
Juanita Hennessey, Durham, NC

Justin DeWaele, Wilmington, NC  
Katrina Church, Winston Salem, NC  
Kathleen Matz, East Hampstead, NH  
Jonathan Stephenson, Lyndeborough, NH  
Thomas Jesse, Wilton, NH  
Melissa Campbell, Millburn, NJ  
Kanan Gubins, Moorestown, NJ  
John Fasone, Verona, NJ  
Judy Acereto, Albuquerque, NM  
Lance Hurtubise, Albuquerque, NM  
Sarah Levalley, Albuquerque, NM  
Emily J Stafford, Albuquerque, NM  
John Fleischhauer, Corrales, NM  
Arthur Barcinas, Santa Fe, NM  
Marilyn Hood, Las Vegas, NV  
Judith Anderson, Reno, NV  
Valli Camiller, Verdi, NV  
Omari Smith, Beacon, NY  
Richard Knapp, Bronx, NY  
Ray Dantuono, Brooklyn, NY  
Ben Graney, Brooklyn, NY  
Brandon Hall, Brooklyn, NY  
Jason Weiss, Brooklyn, NY  
Patty Cornell, Cazenovia, NY  
Ronald Zumwalt, Chappaqua, NY  
Richard Loftus, Cooperstown, NY  
Carolyn Ramsay, New York, NY  
Kelly Ford, Saint Albans, NY  
Charles Knight, Seneca Falls, NY  
Carolyn Abbey, Columbus, OH



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Christopher Burgess, Columbus, OH

Joyce Wagner, Dayton, OH

Jennifer Mariotti, Bend, OR

Edward Ehrhart, Eugene, OR

Ann Mounce, Grants Pass, OR

Kelly Villarreal, La Pine, OR

Sean Becker, Lake Oswego, OR

Caitlin French, Lake Oswego, OR

Tammy Carpenter, Portland, OR

Emily Howell, Portland, OR

Evan Ingle, Portland, OR

Patricia Iwata, Portland, OR

Kathryn Kucinski, Portland, OR

Ann Lyon, Portland, OR

Soohyen Park, Portland, OR

David Samuels, Portland, OR

Joseph Sharp, Portland, OR

Sally Travi, Portland, OR

Martin Vazquez, Portland, OR

Idabelle Fosse, Salem, OR

John Saffell, Tazana, OR

Richard Colisch, Tualatin, OR

Judith Terry, Veneta, OR

Barbara Tabler, West Linn, OR

Travis Beller, Allentown, PA

Carl Griffin, Downingtown, PA

Jaime West, Greensburg, PA

Peter Dualacher, Havertown, PA

Kim Allen, Norristown, PA

Joyce Leasher, North Wales, PA

Jenny Littleton, Richboro, PA

M. Colette Plum, Rutledge, PA

Linda Hoffman, Telford, PA

Brian Houghtaling, Wellsboro, PA

LEROY BENNETT, Middletown, RI

Laurie Masterson, Warwick, RI

Maria Guillen, Bluffton, SC

Natilee Duning, Brentwood, TN

Ian Salter, Clarksville, TN

Lesley Wood, Knoxville, TN

James Nicol, Aledo, TX

Madelyn Bernstein, Austin, TX

Darryl Crawford, Austin, TX

Jessica Lorenzana, Austin, TX

Joe Nation, Austin, TX

Kristen Schumacher, Bandera, TX

Pamela Burnham, Cedar Park, TX

Richard Robinson, Corpus Christi, TX

Aaron Weinstein, Dallas, TX

Madalyn Martinez, Denton, TX

Michael Patton, Flatonia, TX

Pandora Angelisanti, Harker Heights, TX

Mason Jones, Lubbock, TX

Victoria Glass, McAllen, TX

David Schwartz, Sachse, TX

Pam Fox, San Antonio, TX

William Sibley, San Antonio, TX

Ed Nobis, Salt Lake City, UT

Elissa Smith, Alexandria, VA

Jerry Turney, Midlothian, VA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Danielle Sorahan, Vienna, VA

Jane Riedel, Orwell, VT

James Mackinnon, Richford, VT

Anne Bower, S Pomfret, VT

Caroline Coker Mckie, Bainbridge Island, WA

Michael Rosenthal, Bainbridge Island, WA

Pat Schaechter, Bellevue, WA

SHARYN MARTIN, Bellingham, WA

Larry Hejny, Grants Pass, WA

Andrew Struck, Kent, WA

Eric Simila, Kingston, WA

Turner Erin, Kirkland, WA

Chris Diehl, Mercer Island, WA

Karen Crum, Poulsbo, WA

Kevin Bertrand, Pullman, WA

Paul Jonas, Redmond, WA

Che Anselmo, Seattle, WA

Elisabeth Crabtree, Seattle, WA

David Dresser, Seattle, WA

Benjamin Park, Seattle, WA

Nina Simonds, Seattle, WA

Jonah Weikert, Seattle, WA

Lynn Johnson, Spokane, WA

Gwenvere Modica, Spokane, WA

Whitney Parker, Vancouver, WA

Kathy Wolchick, Vashon, WA

Kay Gore, White Salmon, WA

Laura Landreth, Balsam Lake, WI

Dorcas Jones, Fairfield, WI

Ruth Crump, Madison, WI

Earl Green, Madison, WI

Sam Egan, Milwaukee, WI

Alzina Davenport, Jackson, WY



Tracking Number: (2023-34MPA  
)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

- 1. Person or organization requesting the change: Environment California Research and Policy Center and Azul**  
Name of primary contact person: Laura Deehan, Environment California Research and Policy Center  
Address: 3435 Wilshire Blvd., Suite 385, Los Angeles, CA, 90010  
Telephone number: (415) 420-4710  
Email address: [Ideehan@environmentcalifornia.org](mailto:Ideehan@environmentcalifornia.org)
- 2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code..
- 3. Overview (Required)** - *Summarize the proposed changes to regulations:* In order to advance the goals of the California Marine Life Protection Act and better protect our ocean and coastal resources into the future, this joint petition submitted by Environment California RPC and Azul seeks to increase the level of protection and help to improve enforceability for three state MPAs. We request that the CA Fish & Game Commission: 1) upgrade Point Buchon State Marine Conservation Area (SMCA) to a no-take State Marine Reserve (SMR) to streamline and enhance enforcement and compliance and increase protection in the face of future stressors, and 2) modify the regulations of Farnsworth Onshore SMCA and Farnsworth Offshore SMCA to allow only recreational spearfishing within their boundaries, in order to better protect this highly sensitive, rare, and valuable ecosystem. There may be additional state MPAs in need of similar action, and we encourage the state to do its own analysis to identify existing MPAs in need of enhanced biodiversity conservation, streamlined enforcement, and increased ease of compliance.





4. **Rationale (Required)** - Describe the problem and the reason for the proposed change: According to law enforcement updates and the [California Compliance Forums](#) convened by the MPA Collaborative Network, compliance with [Point Buchon SMCA/SMR](#) and [Farnsworth Onshore/Offshore SMCA](#) regulations is very low. The Compliance Forums found that compliance is particularly compromised in areas with confusing regulations, boundaries, or jurisdictions, and these MPA clusters are prime examples. The offshore/onshore boundary divisions of these MPA clusters, along with the extremely complicated regulations for both Farnsworth SMCAs, make it difficult for stakeholders to understand the two most important compliance-related questions: where is the MPA, and what does it allow?

In addition, since the California MPA network’s creation, extensive peer-reviewed research has underscored the differences in outcomes between strongly and lightly protected marine areas. With coastal and marine ecosystems facing growing threats related to climate change, increased human use, new ocean uses, and infrastructure projects such as offshore wind and aquaculture, significant improvements to the existing MPA network are warranted to better protect our ocean and coastal resources into the future. The regulation changes proposed herein seek to improve conservation outcomes for California SMCAs with compliance issues and low levels of protection.

See attached Petition Narrative for full rationale and site-specific information.

Primary contact info:

Laura Deehan, Environment California Research and Policy Center, (415) 420-4710,

[ldeehan@environmentcalifornia.org](mailto:ldeehan@environmentcalifornia.org)

Marcela Gutiérrez-Graudiņš, Azul, [mar@azul.org](mailto:mar@azul.org)

**SECTION II: Optional Information**

5. **Date of Petition:** 11/29/2023

6. **Category of Proposed Change**

Sport Fishing

Commercial Fishing

Hunting

Other, please specify: MPAs, Section 632.

7. **The proposal is to:** (To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)

Amend Title 14 Section(s): [Westlaw regulations](#).

Add New Title 14 Section(s):

Repeal Title 14 Section(s):

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

9. Or  Not applicable.



10. **Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: As soon as is practicable for the State of California.
11. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
  - a. Petition Narrative
  - b. Appendix A - Letters of support
    - i. Petitioner's letter of support
    - ii. Letter from Assemblymember Dawn Addis
    - iii. Joint letter from 9 leading scientists and co-authors of The MPA Guide
    - iv. Joint letter from 27 scientists, researchers, and educators
    - v. Joint letter from 20 NGOs
    - vi. Letter from Environmental Action signed by 2,487 member of the public
    - vii. Letter signed by 214 CALPIRG students
    - viii. Letter from 5 California college student leaders
    - ix. Petition signed by over 7,000 members of the public
12. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

The Point Buchon SMCA currently allows for the recreational and commercial take of salmon and albacore. While it is possible there may be very minor short-term economic impacts associated with closing the area, depending on the level of albacore fishing conducted within the existing SMCA, they are expected to be negligible. Salmon fishing is presently closed for all state waters, and the extremely poor status of salmon stocks no longer appear to support specific allowances in the state's MPA network. In addition, we argue that the long-term benefits provided by an increased level of protection and streamlined enforceability for this area will outweigh the short-term costs, especially in the face of climate change, increasing ocean uses and competition, and potential impacts from offshore wind development.

We acknowledge that the proposed regulations change to the Farnsworth SMCAs to may have some impact on the commercial market squid fishery and recreational sportfishing. However, the risk of damage to this highly sensitive ecological area is too high to allow even for pelagic fishing activities, which can result in bottom disturbance and bycatch. For instance, party boat patrons have often been observed dropping weighted lines that interact with bottom habitat in the Onshore SMCA (pers. comms with local recreational fisher wishing to remain anonymous). Further, these proposed regulation changes strongly align with and help to promote the high intrinsic and recreational value of the area, improving the safety and quality of recreation for divers, underwater photographers, and spearfishers.

13. **Forms:** If applicable, list any forms to be created, amended or repealed:

### **SECTION 3: FGC Staff Only**



Date received: 11/30/2023

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- Denied by FGC
- Denied - same as petition \_\_\_\_\_

Tracking Number

- Granted for consideration of regulation change

**Petition to Increase Level of Protection and Streamline Enforcement  
for Several California State MPAs**

Joint Submission by Environment California and Azul

**PETITION NARRATIVE**

**Overview**

In order to advance the goals of the California Marine Life Protection Act (MLPA) and better protect our ocean and coastal resources into the future, this petition seeks to increase the level of protection and help to improve enforceability for three state MPAs. We request that the CA Fish & Game Commission: 1) upgrade Point Buchon State Marine Conservation Area (SMCA) to a no-take State Marine Reserve (SMR) to streamline and enhance enforcement and compliance and increase protection in the face of future stressors, and 2) modify the regulations of Farnsworth Bank Onshore SMCA and Farnsworth Bank Offshore SMCA to allow only for recreational spearfishing to take place within their boundaries, in order to better protect this highly sensitive, rare, and valuable ecosystem. There may be additional state MPAs in need of similar action, and we encourage the state to do its own analysis to identify existing MPAs in need of enhanced biodiversity conservation, streamlined enforcement, and increased ease of compliance.

**Enforcement & compliance within California MPAs**

The success of any MPA relies on effective enforcement and community support and understanding of regulations. A global synthesis of MPA outcomes identified being well-enforced as one of the five essential features predicting MPA success around the world (Edgar et al. 2014). Further, one of the explicit goals of the MLPA is to “ensure California’s MPAs have...adequate enforcement” (Goal 5, California MLPA).

However, despite laudable investment in enforcement, outreach, and education from the state, there is a high level of illegal fishing and other FGC violations occurring in and near some of California’s MPAs (California Statewide Compliance Forum 2022). The MPA Collaborative Network held over 15 virtual and in-person public fora gathering over 500 stakeholders from 2019 to 2020 to discuss MPA compliance concerns and to brainstorm ideas to address those concerns. The Forums found that compliance is particularly compromised in areas with confusing regulations, boundaries, or jurisdictions. Public awareness and understanding of MPA regulations is crucial for compliance, and confusing regulations and a lack of understanding of restrictions can contribute to unintentional violations. While some of California’s State Marine Conservation Areas (SMCAs) have limited take allowances and provide a relatively high level of conservation value to most species, other SMCAs currently have extensive and confusing regulations, and several are paired with onshore no-take State Marine Reserves (SMRs) to form an MPA cluster – making it even more difficult for stakeholders to understand the two most

important compliance-related questions for MPAs: where are they, and what do they allow?<sup>1</sup> Proposed stakeholder solutions include potential regulatory changes for fishing and other activities along the coast, as well as greater investment in education and outreach.

Complicated regulations also make it exceedingly difficult for law enforcement officers or the public monitoring these areas to visually assess whether a vessel's occupants are complying with on-the-water regulations. For instance, if an officer sees a vessel in an SMCA using rod and reel gear where fishing for some pelagic species is allowed but fishing for other species is prohibited, it is virtually impossible for that officer to tell whether the boaters are complying without boarding the vessel to assess the boaters' catch. This only increases the amount of time, resources, and dollars necessary to ensure compliance in these areas, as California's enforcement officers also contend with limited staffing and budgets (Murray and Hee 2019). The same is true around the world – in fact, research has shown that areas with a mixture of partial and full protection are up to twice as expensive to manage than a simpler, fully protected area (Ban et al. 2011).

### **Higher levels of protection lead to greater benefits**

Since the California MPA network's creation, extensive peer-reviewed research has underscored the differences in outcomes between strongly and lightly protected marine areas. We now know that highly and fully protected areas – those where little to no extractive or destructive activities are permitted – provide the greatest ecological and conservation benefits (Grorud-Colvert et al. 2021). For instance, one meta-analysis of global MPAs found that fish biomass in fully protected (“no-take”) MPAs is 343% higher than in partially-protected MPAs (Sala & Giakoumis 2018). Another global analysis found that weakly regulated areas showed minimal ecological benefits, while highly to fully protected areas showed higher abundance and biomass of commercially important species (Zupan et al. 2018). Similarly, a 24-year long timeseries of catch data in Kenya found that per-person daily catches increased 25 times faster in waters around fully protected MPAs than in areas that regulated fishing gear only (McClanahan 2021). In addition, fully protected areas have been shown to provide stronger climate adaptation and resilience benefits than lightly protected areas (Roberts et al. 2016). Finally – and importantly – an assessment of ecological effectiveness and social perceptions of MPAs in southern Australia found that partially protected areas had no more fish, invertebrates, or algae than unprotected areas; were poorly understood by coastal users; were not more attractive than unprotected areas; and were not perceived to have better marine life than unprotected areas. In addition, the fully protected areas were not only more effective ecologically, but were perceived more positively by local communities and visitors and assigned a higher value by local communities and visitors (Turnbull et al. 2021).

---

<sup>1</sup> The MPA Collaborative Network's Vetted Regulation Recommendations cite many instances where confusing boundaries and regulations are leading to unintended violations or accidental poaching in SMR/SMCA complexes. For examples, see lines 22, 37, 43, 47, 50, 51, 54, 55, 58, 62, 63, 65, 66, 71, 87, 90, 92, 97, 99, 104, 133, 145, 146, 148, 154, 155, and 165.



With coastal and marine ecosystems facing growing threats related to climate change, increased human use, new ocean uses, and infrastructure projects such as offshore wind and aquaculture, significant improvements to the existing MPA network are warranted to better protect our ocean and coastal resources into the future. Governor Newsom recently set the goal of protecting 30% of lands and coastal waters by 2030 ('30x30'), which was codified with the passage of SB337 in 2023. However, the area protected within the statewide MPA network represents far below 30% of our state waters. Only 12% of state waters are covered in highly to fully protected areas, and an additional 4% is covered in lightly protected areas that allow considerable human impacts within their boundaries. In total, only 16% of state waters are currently protected within an MPA. As the state works to achieve its 30x30 goal, the FGC and other agencies should consider where increases in the level of protection offered by existing California MPAs are warranted, to ensure the network is able to provide the best ecological and social outcomes possible.

### **Proposed regulation changes for California SMCA with compliance issues and low levels of protection**

#### Point Buchon SMCA

Point Buchon SMCA is located eight miles south of Morro Bay in San Luis Obispo County. It is part of an onshore-offshore pair of adjoining MPAs covering almost 19 square miles of rocky reefs, sandy seafloor and beaches, kelp forests, rocky intertidal areas, and offshore pinnacles. The adjoining no-take marine protected area, Point Buchon State Marine Reserve, covers the inshore portion of the MPA complex from the mean high tide line to the halfway point between the coast and the state waters limit. Point Buchon SMCA sits offshore of the SMR and encompasses more than 12 square miles of waters that range from about 200 to 400 feet deep.

Compliance with Point Buchon's regulations appears to be very low. The California Compliance Forum in San Luis Obispo cited "a high level of illegal offshore fishing and squid boats in the Point Buchon MPAs", and the Decadal Management Review revealed Point Buchon SMCA had the third highest number of violations for MPAs in Central Coast region over past decade ([DMR Report](#)). In 2022, it was listed among the top 10 MPAs with the highest MPA violations across the entire state ([Committee Staff Summary for July 20, 2023 MRC Meeting](#)).

At the same time, the potential for non-fishing impacts to the area are increasing. The Morro Bay Wind Energy Area (WEA) lies in the federal waters just outside of the Point Buchon SMCA, and the Bureau of Ocean Energy Management recently issued two leases for offshore wind development in the Morro Bay WEA. These offshore wind farms are anticipated to transmit power via undersea cables that connect with onshore power terminals, potentially at the nearby Diablo Canyon Power Plant located just outside the southern boundary of Point Buchon SMR. Offshore wind construction and operations are expected to impact the marine environment through increased ocean noise, the introduction of electromagnetic fields, alterations to existing habitats and hydrodynamics, and the possible release of contaminants (NOAA Fisheries). While the state of California is working closely with the federal government to minimize environmental

impacts, the region, and the Point Buchon SMR/SMCA complex, will experience some level of impact related to the development of heavily industrialized renewable energy projects. By minimizing ecosystem stressors, fully protected areas provide maximum resilience and greater opportunity to identify the cause of ecosystem impacts (Grorud-Colvert et al. 2021).

### *Current regulations*

Point Buchon SMCA currently allows for recreational and commercial salmon and albacore fishing within its boundaries. The current regulations read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational and commercial take of salmon and albacore is allowed.”

California’s salmon fishery has experienced significant challenges due to the proliferation of dams, the loss of wetlands and estuaries, and recently, prolonged drought and increased warming that affects freshwater habitat. As a result, the entire fishery was closed in 2023. Sport fishing for albacore is largely centered from the California Channel Islands south to Ensenada. Given these circumstances, converting the Point Buchon SMCA into an SMR would provide full no-take protection for this important area with de minimis impacts to fishing activity.

In addition, the boundary between the SMCA and SMR is oriented as a diagonal line that runs parallel to the coastline. The headlands of Point Buchon hide the southeast corner of the SMCA/SMR complex from view from the north, allowing for poaching to occur more easily in the SMR. Enforcement officers patrolling the busier, more heavily trafficked waters to the north of the point aren’t able to see fishing boats that enter the SMR via the southeast corner of the SMCA, and unless enforcement officers take the time to cross the point to patrol this area specifically, vessels are able to fish in the SMR without being detected.

### *Proposed regulation change*

We propose merging the Point Buchon SMR/SMCA complex into a single State Marine Reserve, creating a more enforceable protected area able to confer greater conservation benefits consistent with its intended role as an “anchor” protected area in the Central Coast region. The new, proposed regulations would reflect those of Point Buchon SMR, and would read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.”

We also strongly recommend the state revisit installing a camera near the flagpole looking south at Point Buchon. A camera or the M2 radar system could inform officers and help address offshore poaching regularly occurring there.

### *Socioeconomic impacts*

As mentioned above, the Point Buchon SMCA currently allows for the recreational and commercial take of salmon and albacore. While it is possible there may be very minor short-term economic impacts associated with closing the area depending on the level of albacore fishing conducted within the existing SMCA, they are expected to be negligible. Salmon fishing is presently closed for all state waters, and the extremely poor status of salmon stocks no longer appear to support specific allowances in the state's MPA network. In addition, we argue that the long-term benefits provided by an increased level of protection and streamlined enforceability for this area will outweigh the short-term costs, especially in the face of climate change, increasing ocean uses and competition, and potential impacts from offshore wind development.

### *Historical context and intent*

The Point Buchon SMR/SMCA complex was placed near the Diablo Canyon Power Plant to align with the no-fishing zone already surrounding the power plant, thereby limiting the negative socio-economic effects on the local fishing community. The state decided to split the Point Buchon MPA into an onshore SMR and an offshore SMCA to minimize the impacts on recreational fishing in the area, allowing for recreational salmon fishing within the SMCA.

One of the objectives of the Point Buchon SMR/SMCA complex is to "Protect ecosystem structure, function, integrity and ecological processes...from disturbances both natural and human induced". In light of increased impacts from nearby offshore wind development areas, stronger protections are warranted for this MPA complex to continue meeting stated objectives.

### Farnsworth Onshore and Offshore SMCAs

The Farnsworth Onshore/Offshore SMCA complex is located on the windward side of Santa Catalina Island, a little more than 20 miles south-southwest of the Southern California mainland. This SMCA complex protects a series of pinnacles and underwater mountains known as Farnsworth Bank, which is one of only four known locations of a rare purple hydrocoral and is a well-known, exceptional location for advanced SCUBA diving and underwater photography. Farnsworth Onshore SMCA also provides critical habitat for the endangered black abalone, which dwells in the intertidal zone, and the endangered white abalone, which inhabits the deeper, subtidal zone. The full SMCA complex protects the unique cooler water, wave-exposed portions of the "east islands" bioregion and includes a high diversity of productive, relatively high-exposure habitats, productive nearshore reefs and a wider shelf than found on the leeward side of Catalina Island.

Both SMCAs allow for several gear types and species to be targeted, with some slight differences between the two areas. The regulations themselves and also the regulation differences are challenging to understand, creating confusion and unintentional regulation violations. Commercial passenger fishing vessels (also known as "party boats") are also often

seen illegally fishing in Farnsworth Onshore SMCA, moving out if they see a patrol boat approaching ([MPA Collaborative Network's Vetted Regulation Recommendations](#) lines 146 & 147).

### *Current regulations*

These SMCAs are currently “minimally protected” according to the MPA Guide framework (Grorud-Colvert et al. 2021), due to the substantial number of gear types allowed and species targeted. The regulations for Farnsworth Onshore SMCA are currently as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of market squid by hand-held dip net; white seabass and pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphins), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, blue shark, salmon shark, shortfin mako shark, thresher shark, swordfish, tunas, Pacific bonito, and yellowtail) by spearfishing; and marlin, tuna and dorado by trolling is allowed.

Commercial take of coastal pelagic species (northern anchovy, Pacific sardine, Pacific mackerel, jack mackerel, and market squid) by round-haul net, brail gear, and light boat; and swordfish by harpoon is allowed (no commercial take of marlin is allowed). Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.”

The regulations for Farnsworth Offshore SMCA are currently as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of market squid by hand-held dip net; white seabass by spearfishing; pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphins), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, blue shark, salmon shark, shortfin mako shark, thresher shark, swordfish, tunas, Pacific bonito, and yellowtail) by hook-and-line or spearfishing, and marlin, tuna and dorado by trolling is allowed.

Commercial take of coastal pelagic species (northern anchovy, Pacific sardine, Pacific mackerel, jack mackerel, and market squid) by round-haul net, brail gear, and light boat; and swordfish by harpoon is allowed (no commercial take of marlin is allowed). Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.”

The difference between the two is almost impossible to detect, leading to confusion about what is and isn't permitted, increasing chances of accidental violations, and possibly acting as a disincentive for law enforcement officers to enforce these MPAs and/or prosecutors to pursue these cases.

### *Proposed regulations*

To simultaneously streamline regulations, increase the level of protection for this ecologically significant site, and honor the original intent of the SMCA complex to allow for recreational use, we propose adjusting the regulations for both SMCAs to allow only for recreational take via spearfishing. Spearfishing is a relatively low-impact activity that, with close attention to buoyancy and best practices, has a low likelihood of interaction with bottom habitat. The new, proposed regulations for both SMCAs (effectively merging them into one) would read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of white seabass and pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphinfish), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, Pacific bonito, and yellowtail by spearfishing.”

### *Socioeconomic impact*

We acknowledge that closing this area to non-recreational spearfishing may have some impact on the commercial market squid fishery and recreational sportfishing. However, the risk of damage to this highly sensitive ecological area is too high to allow even for pelagic fishing activities, which can result in bottom disturbance and bycatch. For instance, party boat patrons have often been observed dropping weighted lines that interact with bottom habitat in the Onshore SMCA (pers. comms with local recreational fisher wishing to remain anonymous). Further, these proposed regulation changes strongly align with and help to promote the high intrinsic and recreational value of the area, improving the safety and quality of recreation for divers, underwater photographers, and spearfishers.

### *Historical context and intent*

This area has been protected since 1973, when the California Fish and Game Commission designated Farnsworth Bank an ecological reserve. During the MLPA planning process, a much larger SMR protecting Farnsworth Bank was proposed in order to fully protect Farnsworth Bank and a variety of other ecologically important features nearby, such as the deep water squid spawning habitat. While CDFW’s Feasibility Analysis deemed that this historical proposal met feasibility criteria, the state decided upon the smaller onshore/offshore SMCA complex currently in place, with the intent of balancing conservation with recreational and commercial use. This pair of SMCAs are considered “backbone MPAs” for the backside of Catalina Island.

### **Relevance to MLPA Goals and DMR Recommendations**

The changes proposed in this petition strongly align with [Goals 1, 2, and 5 of the Marine Life Protection Act \(MLPA\)](#). Notably, the first finding of the MLPA is: "2851. The Legislature finds and declares all of the following: (a) California’s marine protected areas (MPAs) were established on a piecemeal basis rather than according to a coherent plan and sound scientific guidelines. Many of these MPAs lack clearly defined purposes, effective management measures and enforcement. As a result, the array of MPAs creates the illusion of protection while falling far short of its potential to protect and conserve living marine life and habitat." Ten years later,



California's MPA network is no longer piecemeal, yet current MPAs with unduly complicated regulations risk this very same problem.

By increasing the level of protection for several minimally and lightly protected MPAs, the state will enhance the protection of marine life as well as the structure, function, and integrity of marine ecosystems, and will enhance these MPAs' ability to sustain, conserve, and protect marine life populations, including those that are commercially valuable. By streamlining regulations for these SMCAs, the state will help to ensure that California's MPAs are adequately enforced.

In addition, this petition helps to advance DMR Recommendation 4.b.) "Identify and utilize best science-based approaches to inform potential changes to the MPA Network in order to enhance Network performance." Since the creation of the MPA network, a decade of scientific peer-reviewed research from around the world has shown that highly to fully protected areas provide the greatest benefits for biodiversity conservation, and that partially protected areas only hinder enforcement, public understanding, and conservation outcomes.

In the face of growing threats related to climate change and increased human use, the state has the opportunity now to improve and enhance our MPA network to better protect our ocean and coastal resources into the future for generations to come.

## Bibliography

- Edgar, Graham J., et al. "Global Conservation Outcomes Depend on Marine Protected Areas with Five Key Features." *Nature*, vol. 506, no. 7487, 2014, pp. 216–220, <https://doi.org/10.1038/nature13022>.
- "Marine Life Protection Act." *CDFW*, <https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA>
- "California Statewide Compliance Forum", *MPA Collaborative Network*, 2022, <https://www.mpacollaborative.org/wp-content/uploads/2021/03/California-Statewide-Compliance-Forum-Report-Final-Reduced-1.pdf>
- Murray, Amantha. Hee, Tyler T. "A rising tide: California's ongoing commitment to monitoring, managing and enforcing its marine protected areas", *Ocean & Coastal Management*, Volume 182, 2019, 104920, ISSN 0964-5691, <https://www.sciencedirect.com/science/article/pii/S0964569119301206>
- Ban, Natalie C et. al. "Promise and problems for estimating management costs of marine protected areas" *Conservation Letters*, 2011, <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/j.1755-263X.2011.00171.x>
- Kirsten Grorud-Colvert *et al.* "The MPA Guide: A framework to achieve global goals for the ocean" *Science*, 2021, <https://www.science.org/stoken/author-tokens/ST-2/full>
- Sala, Enric. Giakoumi, Sylvaine . "No-take marine reserves are the most effective protected areas in the ocean", *ICES Journal of Marine Science*, Volume 75, Issue 3, 2018, Pages 1166–1168, <https://doi.org/10.1093/icesjms/fsx059>
- Zupan, Mirta. Et. al. "Marine partially protected areas: drivers of ecological effectiveness" *Frontiers in Ecology and the Environment*, 2018, <https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.1934>
- McClanahan, Tim. R, "Marine reserve more sustainable than gear restriction in maintaining long-term coral reef fisheries yields", *Marine Policy*, volume 128, 2021, <https://www.sciencedirect.com/science/article/pii/S0308597X21000890?via%3Dihub>
- Roberts, Callum M. et. al. "Marine reserves can mitigate and promote adaptation to climate change", *PNAS*, Vol. 114. No. 24, 2017, <https://www.pnas.org/doi/abs/10.1073/pnas.1701262114>
- Turnbull, John W. et. al. "Evaluating the social and ecological effectiveness of partially protected marine areas" *Conservation Biology*, 2021, <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13677>
- "Offshore Wind Energy: Protecting Marine Life", *NOAA Fisheries*, 2023, <https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life>



California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

Environment California Research & Policy Center has one mission that drives everything we do: to protect our natural world. We envision a better, greener California: one that protects and restores more places where all life can thrive and offers us and our children the opportunity to live healthier, more enriching lives.

Azul is a grassroots organization working to conserve marine resources. We treasure the life-sustaining force of the ocean, as well as the physical and spiritual nourishment it provides us. We are a Gente powered and led effort, focused first on celebrating our rich Latino conservation traditions and connecting them to current solutions. Our work is based in authentic engagement, community building, and collaboration.

That's why we welcomed the goal set by Governor Newsom and his Administration of protecting 30% of lands and coastal waters by 2030 ('30x30'), which was codified with the passage of SB337 this Fall. This goal reflects the new scientific consensus that humanity must set aside much more of the ocean to sustain healthy marine life populations and ecosystems.

The State of California's network of Marine Protected Areas (MPAs), created by the Marine Life Protection Act (MLPA), has demonstrated that area-based marine protection works: during the state's recently completed Decadal Management Review (DMR), scientific analysis showed that the network has generally succeeded in protecting ocean habitats, increasing biomass of fishery-targeted species, and enhancing the climate resilience of California's coastal ecosystems.

However, the amount of coastal waters currently protected within the statewide MPA network falls far below the state's 30% goal. Only 12% of California state waters are covered in highly to fully protected areas – the types of protected areas known to provide the best conservation outcomes – and an additional 4% is covered in lightly protected areas that allow considerable human impacts within their boundaries. In total, 16% of state waters are currently protected within an MPA.

We must do more. Coastal and marine ecosystems face growing threats related to climate change and increased human use, as well as emerging threats from new ocean uses such as offshore wind and aquaculture. In the face of these threats, now is the time to make significant improvements to the existing MPA network via an adaptive management process to better protect our ocean and coastal resources in the future.

That is why we are submitting two petitions for rulemaking intended to strengthen the network's ability to conserve critical habitat types and better manage the network. Each of the two petitions stands on their own and are based on new and updated science that were not available to policymakers at the time of designating the original network. The areas we have proposed for expansion or strengthening are prime examples of where California's ocean life stands to benefit through new or updated permanent, area-based protections created under the MLPA.

The areas we are proposing are likely not the only areas that would fit the criteria for enhanced protection laid out in our petitions, nor are our criteria the only ecological criteria that could be used to systemically strengthen the existing network in line with the state's new 30x30 goal. We urge the Fish and Game Commission and all relevant state agencies to conduct analyses that will highlight the habitat types, species, and regions underserved by the current network, with an eye toward building a state MPA network that is resilient in the face of rising ocean temperatures, emerging threats, and continued pressure on endangered and threatened species.

Californians can be proud that we have led the way in ocean conservation over the past decades. It's time to take up the mantle of leadership once again, globally and nationally, not only to create a better future for the amazing life off of our own coasts, but also to inspire other decision makers to do so along every coastline, in every part of the ocean.

With your leadership, our groundbreaking marine protected area network can take its next leap forward.

Sincerely,

Laura Deehan  
Director  
Environment California Research & Policy Center

Marcela Gutiérrez-Graudiņš  
Founder / Executive Director  
Azul

STATE CAPITOL  
P.O. BOX 942849  
SACRAMENTO, CA 94248-0030  
(916) 319-2030

DISTRICT OFFICES  
857 SANTA ROSA STREET  
SAN LUIS OBISPO, CA 95901  
(805) 548-0001

50 PACIFIC STREET, SUITE 5750  
MONTEREY, CA 93940  
(831) 649-2832



COMMITTEES  
HIGHER EDUCATION  
MILITARY AND VETERANS AFFAIRS  
NATURAL RESOURCES  
PUBLIC EMPLOYMENT AND  
RETIREMENT  
RULES  
SELECT COMMITTEES  
CHAIR, OFFSHORE WIND ENERGY IN  
CALIFORNIA  
CHAIR, SERVING STUDENTS WITH  
DISABILITIES  
VICE CHAIR, JOINT COMMITTEE ON  
FISHERIES AND AQUACULTURE

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 28th, 2023

Re: Strengthening and Expanding California's Marine Protected Area Network

Dear President Sklar and Honorable Commissioners,

As an Assemblymember and advocate for the health and vitality of California's coastal ecosystems, I write to express my support for the expansion of the state's network of Marine Protected Areas (MPAs) to include the expansion and strengthening of Point Buchon SMCA and Natural Bridges SMR. Protecting specific habitat areas, including the remaining areas of stable kelp forests, and increasing the rigor of existing marine protected areas are crucial steps in safeguarding our diverse marine species and ensuring the long-term well-being of the ecosystems off our shores.

The state of our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Pollution, overfishing, offshore drilling and other human activities are threatening ocean habitat and marine species, while the changing climate increases the risk of extreme weather events and puts even greater stress on ocean ecosystems.<sup>2,3</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[New Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

<sup>3</sup> Arafah-Dalmau et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), One Earth 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published



MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>4</sup> California's network of MPAs, foreseen in the MLPA, celebrated its tenth-anniversary last year, and the state's decadal management review showed that marine life in existing reserves better withstood recent marine heatwaves, and reserves across the state had higher biomass of commercially caught fish than areas lacking protection.<sup>5</sup> Now, we need to build on this system and maintain California's role as a leader, both nationally and globally, in the fight to protect more ocean habitats.

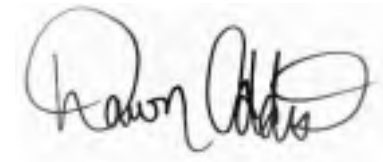
That's why I urge you to expand our state's network of MPAs within the adaptive management process of the Decadal Management Review. In particular, I am writing in support of the strengthening and expansion of Point Buchon SMCA and Natural Bridges SMR off the coast of my community.

We, as Californians, have a deep love for our ocean and feel a profound responsibility to participate in decisions that impact our state's coastal waters. Our ocean is not just a source of clean air, wildlife, and natural beauty but also a mystery that beckons exploration and discovery. It is our moral imperative to lead the nation and the world in taking bold actions to preserve the sea in our own backyard, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

In conclusion, we strongly urge you, Honorable Commissioners, to expand California's MPA network to encompass areas of persistent kelp, with a particular focus on safeguarding the strengthening and expansion of Point Buchon SMCA and Natural Bridges SMR.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Dawn Addis". The signature is written in a cursive, flowing style.

DAWN ADDIS  
Assemblymember, 30<sup>th</sup> District

<sup>4</sup> James Horrox, Steve Blackledge and Kelsey Lamp, "[New Life for the Ocean: How marine protections keep our waters wild](#)," Environment America Research and Policy Center & Frontier Group, February 2021.

<sup>5</sup> California Department of Fish and Wildlife. [California's Marine Protected Area Network Decadal Management Review](#). 2022.

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

We, the undersigned scientists with expertise in marine conservation and the area-based management of marine ecosystems, are writing to express our support for the petition put forth by the Environment California Research & Policy Center seeking to increase the level of protection conferred to California marine ecosystems by the state's marine protected areas (MPAs).

Decades of global peer-reviewed research has shown that, when key enabling conditions are met, highly to fully protected areas that minimize or eliminate all destructive and extractive human activities confer the greatest ecological and biodiversity conservation benefits compared to lightly or minimally protected areas. When well-designed, strongly protected, and well-enforced, MPAs can increase the biomass, abundance, and size of species within their boundaries, enhance nearby fisheries when commercially-targeted species "spill over" into surrounding areas, promote the persistence of important habitat types, provide incredible opportunities for recreation and non-consumptive uses by local communities, and so much more. The larger sizes of animals inside these MPAs also makes a disproportionately large contribution to the reproductive output of the entire population. We have seen first-hand the types of outstanding outcomes that these protected areas can deliver. As co-authors and supporters of *The MPA Guide*, a scientific framework to identify different types of MPAs and connect these types of MPAs with the outcomes they are expected to achieve, we strongly endorse efforts to increase the level of protection conferred by California's MPAs.

Additionally, strong enforcement and compliance are critical for realizing conservation benefits. Where regulations are too weak or confusing, MPAs can fail to conserve the important ocean life and ecosystems they are intended to protect. Several of California's MPAs should be improved with streamlined regulations, amended boundaries, and the removal of allowances for certain gear types that have since proven too damaging for certain habitats or target species that have since experienced extreme declines.

Scientific guidance published over the last decade since the California MPA network was put in place has made it ever clearer what makes for a successful MPA. Updating the network to incorporate this new science within the adaptive management process will uphold the goals of the MLPA and ensure that California continues to lead on area-based marine protection, nationally and globally.

Thank you for your ongoing ocean conservation leadership and tireless efforts to protect California's ocean heritage.

Sincerely,

Alan Friedlander, Ph.D.  
Senior Director of Research, Pristine Seas, National Geographic Society  
Researcher, Hawai'i Institute of Marine Biology, University of Hawai'i

Enric Sala, Ph.D.  
Explorer in Residence, National Geographic Society  
Executive Director, National Geographic Pristine Seas

Lance Morgan, PhD  
President, Marine Conservation Institute

Sarah Hameed, PhD  
Blue Parks Director & Senior Scientist, Marine Conservation Institute

Peter J. Auster, PhD  
Senior Research Scientist, Mystic Aquarium  
Research Professor Emeritus of Marine Sciences, University of Connecticut

Beth Pike, M.E.M.  
Marine Protection Atlas Program Director, Marine Conservation Institute

Dawn Murray, PhD  
Professor Environmental Studies, Antioch University Santa Barbara

Nur Arafah Dalmau, PhD  
Postdoctoral Researcher, Hopkins Marine Station, Stanford University  
Honorary Fellow the University of Queensland

Carolina Olguín-Jacobson, PhD  
Postdoctoral Researcher, Hopkins Marine Station of Stanford University

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs

Dear President Sklar and Honorable Commissioners,

As scientists, researchers, and educators who work to understand our changing oceans and inspire the next generation of ocean stewards, we write to express our support for the expansion and strengthening of California's network of Marine Protected Areas (MPAs) to help safeguard the state's diverse marine ecosystems and ensure the long-term resilience of our ocean habitats.

Globally, the ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. California's coastal ecosystems have not been spared these global trends: Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Only an average of 55 Pacific leatherback turtles are now found foraging off California's coast every year, a notable decrease from the yearly average of 128 Pacific leatherbacks observed in the region from 1990 to 2003.<sup>2</sup> Marine heatwaves have doubled over the last 30 years and have become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>3</sup>

Now, California has a unique opportunity to take bold, effective and science-based action to conserve its marine biodiversity by expanding its groundbreaking network of state MPAs. MPAs, like state parks on land, protect unique and important ocean habitats from destructive human activities that can damage the integrity of marine ecosystems. Globally and in California, strongly protected and well-enforced MPAs have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate

---

<sup>1</sup> Meredith McPherson et al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> Benson, Scott R., Karin A. Forney, Jeffrey E. Moore, Erin L. LaCasella, James T. Harvey, and James V. Carretta. ["A Long-Term Decline in the Abundance of Endangered Leatherback Turtles, Dermochelys Coriacea, at a Foraging Ground in the California Current Ecosystem."](#) *Global Ecology and Conservation* 24 November 2020.

<sup>3</sup> IPCC (2021). Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte VP, Zhai A, Pirani SL, Connors C, Péan S, et al. (Eds.)];

change on our oceans.<sup>4</sup> Well-designed and well-implemented reserves better preserve natural interactions within ecosystems, allowing for greater resiliency in the face of rising global temperatures and changing environmental conditions.<sup>5</sup>

California's network of MPAs, established through the 1999 Marine Life Protection Act, celebrated its tenth anniversary last year. The state's recent Decadal Management Review (DMR) analyzed a decade of monitoring data and showed that the MPA network has generally been effective at protecting ocean habitats and increasing fisheries-targeted species' biomass.<sup>6</sup> Now, in the face of increasing threats, we need to build on this system and maintain California's role as a national and global leader in the effort to protect our ocean habitats.

That's why we, as scientists, researchers, and educators, urge you to expand and strengthen our state's network of MPAs via the adaptive management process of the DMR.

Specifically, we support the expansion of the MPA network to include additional protections for California's most resilient kelp forests. While these vital and iconic ecosystems have faced declines statewide in recent years, kelp forests in some areas have persisted or bounced back quickly in the face of marine heatwaves and other disturbances.<sup>7</sup> By expanding protections for these resilient forests under the MLPA, the state can minimize direct human impacts in these relatively healthy areas, helping to ensure their continued persistence and enhancing the effectiveness of restoration efforts for declining kelp ecosystems nearby. Globally, kelp restoration has been most successful in places adjacent to/contiguous with healthy kelp forest ecosystems.<sup>8</sup>

It is also vital that existing California MPAs are able to achieve their stated goals of conserving biodiversity and ecosystem health. We encourage the state to consider increasing protections for MPAs that are currently only lightly or minimally protected, especially in places where weaker or more complicated regulations lead to poor compliance and enforcement. Research has shown that highly and fully protected areas, where few if any destructive or extractive activities are allowed, provide greater ecological benefits than lightly or minimally protected areas.<sup>9</sup> The

---

<sup>4</sup> James Horrox, Kelsey Lamp and Steve Blackledge. [New Life for the Ocean: How Marine Protections Keep Our Waters Wild](#). Environment America Research & Policy Center & Frontier Group, February 3, 2021

<sup>5</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

<sup>6</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.;

<sup>7</sup> Arafteh-Dalmau *et al.*, [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), *One Earth* 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published by Elsevier Inc.

<sup>8</sup> Eger, A.M., Marzinelli, E.M., Christie, H., Fagerli, C.W., Fujita, D., Gonzalez, A.P., Hong, S.W., Kim, J.H., Lee, L.C., McHugh, T.A., Nishihara, G.N., Tatsumi, M., Steinberg, P.D. and Vergés, A. (2022), Global kelp forest restoration: past lessons, present status, and future directions. *Biol Rev*, 97: 1449-1475.

<sup>9</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861



state's network currently protects 12% of state waters in highly- or fully-protected MPAs, as defined by Grorud-Colvert et al. (2021), which leaves 4% of the network lacking the most effective conservation protections.<sup>10</sup> By expanding the level of protection to areas already identified as ecologically important, we can ensure that the area's vulnerable marine resources have the chance to recover and flourish.

Our ocean is not just a source of clean air, wildlife, and natural beauty but also a mystery that beckons exploration and discovery. It is our moral imperative to lead the nation and the world in taking bold actions to preserve the sea, ensuring its future and the well-being of the communities that rely on it for their survival and prosperity.

President Sklar and Honorable Commissioners, you have a chance to take up this imperative and champion the expansion and strengthening of California's network of Marine Protected Areas. By doing so, you will leave a lasting legacy of marine stewardship that will keep California at the forefront of ocean conservation, nationally and globally.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this urgent matter. Together, we can ensure a healthier, more abundant future for the unique marine ecosystems that define California.

Sincerely,

Michael Akresh  
Faculty  
Antioch University

Alice Alldredge  
Professor Emeritus  
University of California, Santa Barbara

Steven Allison  
Professor  
University of California, Irvine

Anupa Asokan  
Ocean advocate

Peter Auster  
Senior Research Scientist & Research Professor  
Emeritus  
Mystic Aquarium & University of Connecticut

Nevé Baker  
PhD Candidate  
University of California Santa Cruz

Leocadio Blanco Bercial  
Assistant Professor  
Arizona State University - Bermuda Institute of  
Ocean Sciences

Bailey Drechsler  
Professor  
Cuesta College

---

<sup>10</sup> Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**,0861(2021). DOI:10.1126/science.abf0861

Michelle María Early Capistrán  
Postdoctoral Scholar  
Stanford University

Rikki Eriksen  
Director Marine Spatial Ecology  
California Marine Sanctuary Foundation

Paul Faulstich  
Emeritus Professor of Environmental Analysis  
Pitzer College

Sarah Hameed  
Blue Parks Director & Senior Scientist  
Marine Conservation Institute

Brett Holland  
Faculty  
CSUS

Flora Lu  
Professor of Environmental Studies  
University of California, Santa Cruz

Kathy Ann Miller  
Curator of Algae  
Herbarium, University of California

Lisa Murphy  
co-founder, primary researcher and educator  
Gold Country Bat Project

Dawn Murray  
Professor  
Antioch University

Jacquelin Mutter  
National One Water Planning Lead  
HDR

Erin Naegle  
STEM Dean of Instruction  
Cuesta College

Hannahrose Nevins  
Seabird Ecologist  
Seabird Consultant

Gretchen North  
Professor of Biology  
Occidental College

Carolina Olguin Jacobson  
Postdoctoral fellow  
Hopkins Marine Station of Stanford University

Gorka Sancho  
Professor  
College of Charleston

Joanna Tang  
PhD Candidate  
UCSB

Robert Voeks  
Professor  
Cal State University, Fullerton, Department of  
Geography & the Environment

Charles Zender  
Professor of Earth System Science  
University of California, Irvine



California Fish and Game Commission  
715 P Street, 16th floor,  
Sacramento, CA 95814

November 30th, 2023

RE: Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs

Dear President Sklar and Honorable Commissioners:

Our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Only 50 Pacific leatherback turtles are now found foraging off California’s coast, a notable decrease from the 178 Pacific leatherbacks observed from 1990 to 2003.<sup>1</sup> Marine heatwaves have doubled over the last 30 years and have

<sup>1</sup> Benson, Scott R., Karin A. Forney, Jeffrey E. Moore, Erin L. LaCasella, James T. Harvey, and James V. Carretta. [“A Long-Term Decline in the Abundance of Endangered Leatherback Turtles, Dermochelys Coriacea, at a Foraging Ground in the California Current Ecosystem.”](#) *Global Ecology and Conservation* 24 (November 2020).

become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>2</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>3</sup> By providing areas that serve as buffers against climate change, fully protected MPAs adapt to changing environmental conditions because they better preserve natural interactions within ecosystems, allowing for greater resiliency.<sup>4</sup>

California's network of MPAs, foreseen in the MLPA, celebrated its tenth anniversary last year, and the state's decadal management review showed that MPAs effectively protect ocean habitats and increase fishery-targeted species' biomass. Now, we need to build on this system and maintain California's role as a national and global leader in the fight to protect more ocean habitats.

Protecting specific habitat areas and increasing the rigor of existing marine protected areas are crucial steps in safeguarding our diverse marine species and ensuring the long-term well-being of our ocean environments.

It is vital that existing California MPAs are able to achieve their stated goals of conserving biodiversity and ecosystem health. We encourage the state to consider increasing protections for MPAs that are currently only lightly or minimally protected, especially in places where weaker or more complicated regulations lead to poor compliance and enforcement. We are proposing stronger protections for Point Buchon SMCA and the Farnsworth Onshore and Offshore SMCAs. Research has shown that highly and fully protected areas, where few if any destructive

---

<sup>2</sup> Teri E. Nicholson, Karl A. Mayer, Michelle M. Staedler, Jessica A. Fujii, Michael J. Murray, Andrew B. Johnson, M. Tim Tinker, Kyle S. Van Houtan, [Gaps in kelp cover may threaten the recovery of California sea otters](#), *Ecography, a Journal of Space and Time in Ecology*, (February, 2018).

García-Reyes, Marisol, Andrew Leising, Rebecca Asch, Steven Bograd, and Tessa M Hill. Rep. Indicators of Climate Change in California, ["Coastal Ocean Temperature"](#), *California Office of Environmental Health Hazard Assessment*, 2022.

<sup>3</sup> Arafeh-Dalmau et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), *One Earth* 6, 1–19 November 17, 2023<sup>a</sup> 2023 Published by Elsevier Inc.

<sup>4</sup> Jankowska, Emilia, et al. ["Climate Benefits from Establishing Marine Protected Areas Targeted at Blue Carbon Solutions."](#) *Proceedings of the National Academy of Sciences*, vol. 119, no. 23, 2022.

or extractive activities are allowed, provide greater ecological benefits than lightly or minimally protected areas.<sup>5</sup>

Enhancing the protection of California's critical ocean habitats strongly aligns with Goals 1, 2, 3, and 4 of the MLPA by preserving natural diversity, sustaining marine life populations, protecting marine habitats for their intrinsic value, and improving recreational and educational opportunities while minimizing human disturbance.<sup>6</sup> Safeguarding and further protecting critical marine habitats will ensure critical habitat preservation for diverse marine species, including endangered sea otters and commercially valuable fish.

In summary, we encourage you, Fish and Game Commissioners, to actively support strengthening and expanding California's Marine Protected Areas.

We appreciate your steadfast dedication to our ocean's well-being and consideration of this pressing issue. Working together, we can secure a more robust future for California's distinctive marine ecosystems.

Sincerely,

Laura Deehan  
State Director  
Environment California Research and Policy Center

Tomas Valadez  
CA Policy Associate  
Azul

Robert Vergara  
Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Clara Castronovo  
Board Chair  
CALPIRG Students

Keith Shattenkirk  
Program Officer, Healthy Lands and Waters

---

<sup>5</sup>Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

<sup>6</sup>“Marine Life Protection Act.” CDFW. <https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA>.



Patagonia

Susan Jordan  
Executive Director  
California Coastal Protection Network

Krista Rogers  
Program Manager  
Save Our Shores

Chelsea Tu  
Executive Director  
Monterey Waterkeeper

Janet Cox  
President  
Climate Action CA

Pauline Seales  
Organizer  
Santa Cruz Climate Action Network

Dan Silver  
Executive Director  
Endangered Habitats League

Josefina Barrantes  
30x30 Coordinator  
Environmental Protection Information Center (EPIC)

Martha Camacho Rodríguez  
Director  
SEE (Social Eco Education)

Megan Shumway  
Member  
CHN, Sacramento Climate Coalition, SacAct

Antonina Markoff  
Coordinator

The Climate Reality Project California State Coalition

Robert Gould, MD

President

San Francisco Bay Physicians for Social Responsibility

Esperanza Vielma

Executive Director

Environmental Coalition for Water Justice

Daniel Chandler

Steering Committee Member

350 Humboldt

Andria Ventura

Legislative and Policy Director

Clean Water Action/Clean Water Fund

Daniel Gluesenkamp

Executive Director

California Institute for Biodiversity

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 28th, 2023

Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs

Dear President Sklar and Honorable Commissioners,

In solidarity with the shared responsibility for the well-being of our planet, particularly the oceans and coastlines we hold dear, we are reaching out as college students to express our firm support for the amplification and extension of California's Marine Protected Area (MPA) network. Understanding the critical importance of maintaining stable kelp ecosystems and safeguarding conserved ocean areas, we are committed to ensuring the prolonged vitality of our oceans and the myriad marine species that inhabit them.

The state of our ocean is at a critical juncture, with escalating global temperatures, declining biodiversity, and a growing number of endangered marine species. Northern California has lost more than 95% of its kelp forests since 2014, and kelp forests statewide have experienced declines over the past decade.<sup>1</sup> Only 50 Pacific leatherback turtles are now found foraging off California's coast, a notable decrease from the 178 Pacific leatherbacks observed from 1990 to 2003.<sup>2</sup> Marine heatwaves have doubled over the last 30 years, and have become more intense and longer in duration, putting stress on California's marine species and ecosystems.<sup>3</sup>

In the face of these mounting threats, California has a unique opportunity to take bold and effective action to conserve ocean habitats and ensure a greater abundance of life off our coast. Over two decades ago, the state passed the groundbreaking Marine Life Protection Act (MLPA), which called on the state to use one of the most powerful tools for ocean conservation: marine protected areas (MPAs).

---

<sup>1</sup> Meredith McPherson et. al, [Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave](#), Communications Biology, March 5, 2021

<sup>2</sup> Benson, Scott R., Karin A. Forney, Jeffrey E. Moore, Erin L. LaCasella, James T. Harvey, and James V. Carretta. ["A Long-Term Decline in the Abundance of Endangered Leatherback Turtles, Dermochelys Coriacea, at a Foraging Ground in the California Current Ecosystem."](#) *Global Ecology and Conservation* 24 (November 2020).

<sup>3</sup> García-Reyes, Marisol, Andrew Leising, Rebecca Asch, Steven Bograd, and Tessa M Hill. Rep. Indicators of Climate Change in California, ["Coastal Ocean Temperature"](#), *California Office of Environmental Health Hazard Assessment*, 2022.

MPAs, like state parks on land, protect unique and important ocean habitats from activities that can damage ocean life. Areas that are strongly protected have been shown to be highly effective in conserving biodiversity, enhancing ecosystem resilience, and mitigating the impacts of climate change on our oceans.<sup>4</sup> By providing areas that serve as buffers against climate change, fully protected MPAs adapt to changing environmental conditions because they better preserve natural interactions within ecosystems, allowing for greater resiliency.<sup>5</sup>

California's network of MPAs, foreseen in the MLPA, celebrated its tenth anniversary last year, and the state's Decadal Management Review (DMR) showed that MPAs effectively protect ocean habitats and increase fishery-targeted species' biomass. The DMR found that the older the MPA, the larger the increase in the biomass of fished species. Some ecological communities like kelp forests and rocky intertidal ecosystems within MPAs appeared more resilient and recovered more quickly after marine heatwaves than similar habitats outside MPAs.<sup>6</sup> Now, we need to build on this system and maintain California's role as a national and global leader in the fight to protect more ocean habitats.

We support the expansion of the MPA Network to include critical, resilient kelp forests along California's coastline. While these vital and iconic ecosystems have faced declines statewide in recent years, kelp forests in some areas have persisted or bounced back quickly in the face of marine heatwaves and other disturbances.<sup>7</sup> By expanding protections for these resilient forests under the MLPA, the state can minimize direct human impacts in these relatively healthy areas, helping to ensure their continued persistence and enhancing the effectiveness of restoration efforts for declining kelp ecosystems nearby.

It is also vital that existing California MPAs are able to achieve their stated goals of conserving biodiversity and ecosystem health. We encourage the state to consider increasing protections for MPAs that are currently only lightly or minimally protected, especially in places where weaker or more complicated regulations lead to poor compliance and enforcement. Research has shown that highly and fully protected areas, where few if any destructive or extractive activities are allowed, provide greater ecological benefits than lightly or minimally protected areas.<sup>8</sup>

As college students, we keenly feel the urgency to address the environmental crises, particularly along California's coast. Having grown up witnessing the impacts of climate change, it's clear

---

<sup>4</sup> Arafteh-Dalmai et al., [Integrating climate adaptation and transboundary management: Guidelines for designing climate smart marine protected areas](#), One Earth 6, 1–19 November 17, 2023 <sup>a</sup> 2023 Published by Elsevier Inc.

<sup>5</sup> Jankowska, Emilia, et al. "[Climate Benefits from Establishing Marine Protected Areas Targeted at Blue Carbon Solutions](#)." *Proceedings of the National Academy of Sciences*, vol. 119, no. 23, 2022.

<sup>6</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

<sup>7</sup> California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

<sup>8</sup> Ibid Kirsten Grorud-Colvert *et al.*, [The MPA Guide: A framework to achieve global goals for the ocean](#). *Science* **373**, eabf0861(2021). DOI:10.1126/science.abf0861

that action is needed to limit harm to the environment. That's why we urge the Fish and Game Commission to make significant changes in preserving and protecting our vast ocean habitats, ensuring a meaningful and lasting impact for generations to come.

Our ocean is not just a provider of fresh air, diverse wildlife, and breathtaking scenery; it's also an enigma that calls us to explore and uncover its secrets. As college students, we believe it's our duty to be at the forefront of national and global efforts, taking bold steps to safeguard the ocean. This commitment ensures its future and the welfare of communities dependent on it for survival and prosperity.

In conclusion, we strongly urge you, Fish and Game Commissioners, to champion the expansion and fortification of California's network of Marine Protected Areas, with a particular focus on safeguarding kelp forests and reinforcing the protection of existing MPAs. By doing so, you will leave a lasting legacy of environmental stewardship.

Thank you for your unwavering commitment to the welfare of our ocean and for considering this urgent matter. Together, we can ensure a healthier, more abundant future for the unique marine ecosystems that define California.

Sincerely,

Clara Castronovo  
Board Chair  
CALPIRG Students

Brandi Sanchez  
President  
Ecology Behavior and Evolution Club at UC San Diego

Brandi Sanchez  
President  
Pollinator Club at UC San Diego

Aiden Ledbetter  
President  
Davis College Democrats

Hannah Hughes  
President  
5C Plant-Based Mission at the Claremont Colleges





California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

CALPIRG Students is a statewide, student-run, and student-funded organization that works to protect the environment, make college affordable, and promote civic engagement. We have over 20,000 dues-paying members across the UC system and have been on campus for almost 50 years advocating for students on issues that students care about most. As part of our ongoing efforts to win better protections for California's ocean, we are submitting 214 signatures from our supporters on campuses across the state in support of Environment California Research & Policy's petitions for rulemaking in the state's adaptive management process for the California marine protected area network.

Each of the 214 people signed the following letter:

*To: Governor Gavin Newsom*

*Sea otters bobbing in the surf. Whales diving deep to feed. Seabirds flying above. Our state's coastline is home to wildlife, large and small. As students and young people, we are proud to live in a state that has taken steps to protect this ocean heritage for future generations. California's network of marine protected areas are places that, just like state parks on land, help protect and restore ocean life.*

*I urge you to strengthen this network through the Decadal Management Review in line with your important goal of protecting 30 percent of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection to ocean life.*

*With your support, California can expand this network of ocean parks to create a brighter future for the ocean life that calls our state home, and hopefully inspire others across the country and around the world to follow our lead.*

As young people, we are working everyday to tackle the most pressing problems facing our ocean, our climate and our communities. That's why we are heartened to see state leaders like

# CALPIRG Students

Governor Newsom and the state legislature set bold and ambitious goals to protect more of our coastline.

But goals need to be followed by action to ensure the future health and abundance of our ocean wildlife and wild places. That's why our student members have been campaigning for better ocean protections, and why we are excited to have this opportunity in the Decadal Management Review to push our state's groundbreaking network of MPAs forward. An expanded, strengthened network will make our coasts more resilient in the face of climate change and give our ocean life a chance to thrive.

Thank you for this opportunity, and we look forward to working with you to continue to create a better future for California's coasts.

Sincerely,



Clara Castronovo  
State Board Chair  
CALPIRG Students

# CALPIRG

## Students

Camellia Cartland, Alhambra, CA  
Mary Ann Gutierrez, Alhambra, CA  
Jaylene Madrid, Apple Valley, CA  
Ainsley Wilkin, Apple Valley, CA  
TREINA LE, Baldwin Park, CA  
Erika Alfaro, Berkeley, CA  
Erik Beahrs, Berkeley, CA  
Sophia Brodie-Weisberg, Berkeley, CA  
Julissa Esparza, Berkeley, CA  
Ellen Franzen, Berkeley, CA  
Olivia Hom, Berkeley, CA  
Kaki Li, Berkeley, CA  
Ryan Montis, Berkeley, CA  
Stachi Thockchom, Berkeley, CA  
Minqi Wang, Berkeley, CA  
Caroline Yee, Berkeley, CA  
Erinne Yoo, Berkeley, CA  
Erik Hart, Bonny Doon, CA  
Kofi Addo, Buena Park, CA  
Taylor Keppel, Burbank, CA  
Monica Wiesener, Calabasas, CA  
Radha Jujare, Campbell, CA  
Adrian Contreras, Capitola, CA  
Jane Giza, Carmichael, CA  
Eduardo Angel Hurtado, Chula Vista, CA  
Roxanna Braganca, Chula Vista, CA  
Rachel Burnett, Concord, CA  
Alexis Hammond, Coronado, CA  
Mark Danilak, Cupertino, CA  
Marea Ayala, Davis, CA  
Aster Basnick, Davis, CA  
Harriet Chilton, Davis, CA  
ReJenai Cloy, Davis, CA  
Rena Cohen, Davis, CA  
Olivia Lim, Davis, CA  
Seth Marshall, Davis, CA  
An Nguyen, Davis, CA  
Trevor Ottoson, Davis, CA  
Madelyn Parker, Davis, CA  
Caitlin Perea, Davis, CA  
Emmalie Perez, Davis, CA  
Aaron Saint John, Davis, CA  
Samuel Saxe-Taller, Davis, CA  
Percival Singson, Davis, CA  
Avery Thau, Davis, CA  
Josue Velasquez, Davis, CA  
Mackenna Weems, Davis, CA  
hiliary wang, Diamond Bar, CA  
Ariadne meza-lopez, Diamond Springs, CA  
Ria Dadia, Dublin, CA  
Aziz Abdulahad, El Cajon, CA  
Claire Wang, El Cajon, CA  
Eythana Miller, Emeryville, CA  
Rosina Miranda, Fair Oaks, CA  
Michael Assmus, Fairfax, CA  
julie park, Fountain Valley, CA

# CALPIRG Students

Jasmine Avila Soria, Fremont, CA  
Baotran Nguyen, Fremont, CA  
Alex Sanchez, Fresno, CA  
Kelalani Luong-Kha, Garden Grove, CA  
Toby Ngo, Garden Grove, CA  
Ariaeli Hernandez, Gilroy, CA  
Nathan Carbajal, Goleta, CA  
Ana Cardenas Gasca, Goleta, CA  
Kittamet Chanchaiworawit, Goleta, CA  
Lizzie Harding, Goleta, CA  
Lluvia Medina, Goleta, CA  
Mariana Morton, Goleta, CA  
Joanna Tang, Goleta, CA  
joanna tang, Goleta, CA  
Bradley Thomas, Goleta, CA  
Henry Lindhurst, Granite Bay, CA  
Peter Le, Hawthorne, CA  
adriana zapotitla, Indio, CA  
Kimberly Torres, Industry, CA  
Andy Fleischer, Irvine, CA  
Rhianna Heaster, Irvine, CA  
Anisa Johnson, Irvine, CA  
Nathaniel Jordan, Irvine, CA  
Hudson Lee, Irvine, CA  
Henson Ning, Irvine, CA  
Ash Quan, Irvine, CA  
Lucie Villata, Irvine, CA  
Karen Yan, La Jolla, CA  
Charlee Marlinga, La Quinta, CA  
Gianna Wright, La Quinta, CA  
Nathaniel Friedman, Lafayette, CA  
Emma Contreras, Lemon Grove, CA  
Samikshaya Auanthakrisknan, Lincoln, CA  
Elina Dern, Lincoln, CA  
Jennifer Gonzalez-Espinoza, Lindsay, CA  
Kristi Copeland, Long Beach, CA  
Liam Williams, Long Beach, CA  
Lexi Crilley, Los Altos Hills, CA  
Hoque Akter, Los Angeles, CA  
Kimberly Barrueta, Los Angeles, CA  
Gabby Ebrahimi, Los Angeles, CA  
Bahar Farzaneh, Los Angeles, CA  
Janine Fischer, Los Angeles, CA  
Tyler Holmes, Los Angeles, CA  
Kieran Johnson, Los Angeles, CA  
Lucy Kaff, Los Angeles, CA  
Daniel Lamas Sanchez, Los Angeles, CA  
Dean Lewis, Los Angeles, CA  
Kainoa MacDonald, Los Angeles, CA  
Darla Marie Duffy, Los Angeles, CA  
Alayah Marshall, Los Angeles, CA  
Mireya Mondragon, Los Angeles, CA  
Lilia Naylor, Los Angeles, CA  
Alina Orendain-Calderon, Los Angeles, CA  
Shannon Park, Los Angeles, CA  
Owen Pogue, Los Angeles, CA

# CALPIRG

## Students

Lizbeth Rivera, Los Angeles, CA  
Alondra Roque, Los Angeles, CA  
Jonas Shladovsky, Los Angeles, CA  
madelyn spence, Los Angeles, CA  
Anita Theng, Los Angeles, CA  
Nataly Villasenor, Los Angeles, CA  
Rujin Yu, Los Angeles, CA  
Jonathan Giang, Monterey Park, CA  
Sam Strieter, Moreno Valley, CA  
Samantha Strieter, Moreno Valley, CA  
Lizzie Su, Mountain House, CA  
Angel Parra, Murrieta, CA  
Eleanor Vo, Oakland, CA  
Alonzo Canete, Ontario, CA  
Lori Shen, Ontario, CA  
Jacqueline Barnes, Palo Alto, CA  
Alicia Acevedo, Perris, CA  
Morgen Guzman, Petaluma, CA  
Ruth Simon, Placentia, CA  
Danae Delgado-Diaz, Pomona, CA  
Rachel Lucine, Rancho Cucamonga, CA  
Kurubel Tesfay, Rancho Palos Verdes, CA  
Cassidy Creighton, Redwood City, CA  
Ren Romero, Redwood City, CA  
Nicole Castillo, Richmond, CA  
Lida Halilovic, Riverside, CA  
Ryan LaCasse, Riverside, CA  
Hannah Kae Monson, Riverside, CA  
Katharine Pan, Riverside, CA  
Paige Smith, Riverside, CA  
Laurel Tennant, Riverside, CA  
Esteban Torres, Riverside, CA  
Jennifer Vo, Riverside, CA  
Sage Prudente, Rocklin, CA  
Olivia Teich, Rohnert Park, CA  
Panka Kernacs, Sacramento, CA  
Megyn Horton, San Anselmo, CA  
Nox Keel, San Clemente, CA  
Yingqi Cao, San Diego, CA  
Mekayli Claros, San Diego, CA  
Avamarie Fromm, San Diego, CA  
Camila Gonzalez, San Diego, CA  
Benjamin Greenstein, San Diego, CA  
Xiaoyu Gui, San Diego, CA  
Anne Huynh, San Diego, CA  
Michael Iter, San Diego, CA  
Katrina Mai, San Diego, CA  
Lizard Merrick, San Diego, CA  
Ava Ramirez-Brown, San Diego, CA  
Dhruv Sehgal, San Diego, CA  
Sarah Song, San Diego, CA  
Isabella Wagner, San Diego, CA  
Lucy Yang, San Diego, CA  
Rachel , San Diego, CA  
Nadia Nehme, San Francisco, CA  
Caroline Sykes, San Francisco, CA



# CALPIRG

## Students

Tatiana Aguilera, San Leandro, CA

Anjuli Oey, San Leandro, CA

Lilly Wolf-Hoy, San Marcos, CA

Elise Won, San Mateo, CA

Yahir Alexis Leal, Santa Ana, CA

Belen Cordova, Santa Cruz, CA

Chaitan Butte, Santa Monica, CA

Nikolas Brandt, Sebastopol, CA

Natalie Bai, Stanford, CA

Sofia Perez, Temecula, CA

Elena Picinich, Temecula, CA

Jiovanni Esteveec, Temple City, CA

Brent Pitts, Torrance, CA

Eva Pullen, Truckee, CA

Audrey Robertson, Tustin, CA

samael yang, Union City, CA

Emily Arana, Vacaville, CA

melissa fryar, Vacaville, CA

Taylor Arrington, Vallejo, CA

Natalie Rodriguez, West Covina, CA

Sara Morris, Whittier, CA

Claire Griffiths, Yorba Linda, CA

Neilyn Alvarez-Rodriguez, CA

Diana Cardova, CA

Anna Chuang, CA

Dharma Gutierrez Romero, CA

Wafaa Lawai, CA

Markus Mantyvaara, CA

Nayeli Orozco, CA

Kenya Santamaria, CA

Maia Boell, Carroll, IA

Charlie Cronenwett, Leawood, KS

Michael Basmajian, Somerville, MA

Miranda Sih, Minneapolis, MN

Julianna Evinski, Linwood, NJ

John Dunn, Morristown, NJ

Benito Morales, , WA

Ava Png, Weston, WI

Shashank Uma Deepak

Titouan Faure,

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 29, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

Environmental Action was founded in 1970, on the first Earth Day, as a community of grassroots environmental activists working for a cleaner, greener world. We are submitting the following 2,487 signatures in support of Environment California Research & Policy Center's petitions for rulemaking in the state's adaptive management process for the California Marine Protected Area network.

Each of the 2,487 people signed the following letter:

*Dear Governor Newsom,*

*Sea otters bobbing in the surf. Whales diving deep to feed. Seabirds flying above. Our state's coastline is home to wildlife, large and small. As Californians, we've taken steps to protect this ocean heritage by creating a network of marine protected areas that, just like state parks on land, help protect and restore ocean life.*

*I urge you to strengthen this network through the Decadal Management Review in line with your important goal of protecting 30 percent of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection to ocean life.*

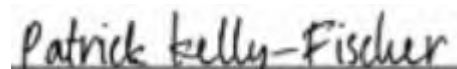
*With your support, California can expand this network of ocean parks to create a brighter future for the ocean life that calls our state home, and hopefully inspire others across the country and around the world to follow our lead.*

*Sincerely,*

As a group that works to protect our most amazing and at risk wildlife across the country, we know that preserving and restoring habitats will be critical to seeing our ocean life thrive. Whether it's a return of sea otters to more of the coastline or more abundant seabirds flying above our heads, expanding and strengthening California's network of marine protected areas will create a more hopeful future for the wild animals that call the state's coastline home.

But the decisions made on California's coast will not only impact the state's wildlife: as with many environmental issues, California's actions here have the potential to reverberate far and wide. If the state acts with ambition during this adaptive management process to fulfill the state's 30 by 30 commitment, it can set the national standard for ocean conservation, leading the country and the globe forward to a better future for our oceans.

Sincerely,



Patrick Kelly-Fischer  
Board Member  
Environmental Action

Cathy Crum, Agoura Hills, CA  
Roger Ewing, Agoura Hills, CA  
Debra Lichstein, Agoura Hills, CA  
Brian Jeffery, Aguanga, CA  
Geraldyn Gulseth, Alameda, CA  
David Howard, Alameda, CA  
Mike Kehl, Alameda, CA  
Jamie Le, Alameda, CA  
Andrew Mueckenberger, Alameda, CA  
Donna Pedroza, Alameda, CA  
Mana-Jean Wagnon, Alameda, CA  
Michael Grant White, Alameda, CA  
Joseph Woodard, Alameda, CA  
Connie Diernisse, Alamo, CA  
Ehren Mierau, Alamo, CA  
Ana Black, Albany, CA  
Lill D, Albany, CA  
Christopher Hamilton, Albany, CA  
Michael Sullivan, Albany, CA  
Lisa Wenzel, Albany, CA  
Barbara Williamson, Albany, CA  
Dobby Sommer, Albion, CA  
Annemarie Weibel, Albion, CA  
Tom Atha, Alhambra, CA  
Araceli Aviles, Alhambra, CA  
Anjanette Caron, Alhambra, CA  
David Gallardo, Alhambra, CA  
Angel Orona, Alhambra, CA  
Christine Sirias, Alhambra, CA  
Laurie Barre, Altadena, CA  
Vic Bostock, Altadena, CA  
Timothy Callahan, Altadena, CA  
G Devine, Altadena, CA  
Beth Herndobler, Altadena, CA  
Jennifer Herstein, Altadena, CA  
Venetia Large, Altadena, CA  
Annamarie Jones, Alturas, CA  
Thomas Mccombs, American Canyon, CA  
Robert Raven, American Canyon, CA  
Nora Coyle, Anaheim, CA  
Shauna Gonzalez, Anaheim, CA  
Penelope Harms, Anaheim, CA  
Jane Iacovetti, Anaheim, CA  
Karen Malley, Anaheim, CA  
Tim Maurer, Anaheim, CA  
Natalie Blasco, Anderson, CA  
Sharon Lieberman, Annapolis, CA  
Melissa Brooks, Antelope, CA  
Jessica Mitchell-Shihabi, Antelope, CA  
John Nadolski, Antelope, CA  
Leslie Clement, Antioch, CA  
Lindsey Kalfsbeek, Antioch, CA  
Dennis Cajas, Apple Valley, CA  
Julia Deasley, Apple Valley, CA  
Val Wren, Apple Valley, CA  
Carol Easton, Aptos, CA  
Michele Faia, Aptos, CA  
Bonnie Gessler, Aptos, CA  
Blaise Brockman, Arcadia, CA  
Jana Harker, Arcadia, CA

Penn Patton, Arcadia, CA  
Richard Wightman, Arcadia, CA  
Jeannie Gunn, Arcata, CA  
Connie Lindgren, Arcata, CA  
Rudy Ramp, Arcata, CA  
Sophie Rocheleau, Arcata, CA  
Jane Spini, Arcata, CA  
Kimberly Tays, Arcata, CA  
Mary Finch, Aromas, CA  
Barbara Frances, Aromas, CA  
Paul Lapidus, Aromas, CA  
Sherry Pennell, Aromas, CA  
Mary Orcutt, Arroyo Grande, CA  
Verona Rebow, Arroyo Grande, CA  
Mary Simmons, Arroyo Grande, CA  
Mitchell Falkenstern, Atascadero, CA  
Tara Gonzales, Atascadero, CA  
Helena Hernandez, Atascadero, CA  
Kathleen Van Every, Atascadero, CA  
Gabriele Miatkowski, Athens, CA  
Marilyn Barthelow, Auburn, CA  
Jana Boccalon, Auburn, CA  
Kermit Carraway, Auburn, CA  
Denise Redden, Auburn, CA  
Shawn Jones, Avila Beach, CA  
Jere Wilkerson, Avila Beach, CA  
Silvia Rocha, Azusa, CA  
Linda Alvarado, Bakersfield, CA  
Jim Carnal, Bakersfield, CA  
Jennifer Cartwright, Bakersfield, CA  
Caryn Cowin, Bakersfield, CA  
Maria Guzman, Bakersfield, CA  
Steve Isenman, Bakersfield, CA  
Judy Matusz, Bakersfield, CA  
Tracy McCowan, Bakersfield, CA  
Steve Sketo, Bakersfield, CA  
Yolanda Berumen, Baldwin Park, CA  
Jesse Calderon, Baldwin Park, CA  
Khai Hang, Baldwin Park, CA  
Vicki Sarnecki, Bangor, CA  
Christopher Jennings, Banning, CA  
Geneva Sherwood, Banning, CA  
Linda Christenson, Beaumont, CA  
Jon Sheehan, Bell Gardens, CA  
Joan Alexander, Bellevue, CA  
Yazmin Gonzalez, Bellflower, CA  
Dennis Landi, Bellflower, CA  
Jason Nolasco, Bellflower, CA  
Andrea Kevech, Belmont, CA  
Angela Gantos, Belvedere Tiburon, CA  
Barbara Meislin, Belvedere Tiburon, CA  
Janie Burkhart, Ben Lomond, CA  
Nancy Phillips, Ben Lomond, CA  
Sarah Holder, Benicia, CA  
Robert Quarrick, Benicia, CA  
Rudy Zeller, Benicia, CA  
Mimi Abers, Berkeley, CA  
Inger Acking, Berkeley, CA  
Rory Alden, Berkeley, CA  
Joan Andersson, Berkeley, CA

Steve Berman, Berkeley, CA  
James Blakly, Berkeley, CA  
Wendy Brown, Berkeley, CA  
Waltraud Buckland, Berkeley, CA  
Lynda Caesara, Berkeley, CA  
Jenny Collins, Berkeley, CA  
Janis Dairiki, Berkeley, CA  
Saraswathi Devi, Berkeley, CA  
Wendy Diamond, Berkeley, CA  
Jonathan Eden, Berkeley, CA  
Christopher Evans, Berkeley, CA  
Mike Evans, Berkeley, CA  
Ellen Franzen, Berkeley, CA  
Rachel Gordon, Berkeley, CA  
Caryn Graves, Berkeley, CA  
Paul Gruber, Berkeley, CA  
Stefanie Guynn, Berkeley, CA  
D.H. Higgins, Berkeley, CA  
Andrea Horbinski, Berkeley, CA  
Kimi Hosoume, Berkeley, CA  
Maggie Hughes, Berkeley, CA  
Richard Huss, Berkeley, CA  
Tasha Isolani, Berkeley, CA  
Kate Kirkhuff, Berkeley, CA  
Lola Leeman, Berkeley, CA  
Robert Magarian, Berkeley, CA  
Rachel Mayeda, Berkeley, CA  
David Miotke, Berkeley, CA  
Elaine Parker, Berkeley, CA  
Dale Peterson, Berkeley, CA

Tawny Reynolds, Berkeley, CA  
Bob Schildgen, Berkeley, CA  
Wendy Stock, Berkeley, CA  
Linda Tiffany, Berkeley, CA  
Paul Vesper, Berkeley, CA  
Jonathan Weinstock, Berkeley, CA  
Stephanie Wellemeyer, Berkeley, CA  
Suzanne Wood, Berkeley, CA  
Scott Nelson, Bethel Island, CA  
Michelle Arc, Beverly Hills, CA  
Val Barri, Beverly Hills, CA  
Suzi Beaton, Beverly Hills, CA  
Meike Blanc, Beverly Hills, CA  
Elizabeth Bona, Beverly Hills, CA  
Verna Dentrey, Beverly Hills, CA  
Antoinette Dusaid, Beverly Hills, CA  
Sara Gernsbacher, Beverly Hills, CA  
Sofia Hallgren, Beverly Hills, CA  
Helen Hearfield, Beverly Hills, CA  
Julia Ivanova, Beverly Hills, CA  
Valeria Kobzak, Beverly Hills, CA  
Kare M, Beverly Hills, CA  
Rick Moffat, Beverly Hills, CA  
Troy Munn, Beverly Hills, CA  
Peter Nielsen, Beverly Hills, CA  
Heather Parekh, Beverly Hills, CA  
Allison Rensch, Beverly Hills, CA  
Ken Rosen, Beverly Hills, CA  
Craig Thompson, Big Bar, CA  
Nancy Freedland, Big Bear City, CA



Karen Roseme, Bishop, CA

Barbara Inyan, Blairsden Graeagle, CA

Antonia Chianis, Blue Jay, CA

Pamela Dornfeld, Bodega Bay, CA

Robert Mizar, Bodega Bay, CA

Tina Ann, Bolinas, CA

Rene Flores, Bonita, CA

Leif Kristiansen, Bonita, CA

Cynthia McMath, Boonville, CA

Cristina Warren, Borrego Springs, CA

Ed Atkins, Boulder Creek, CA

Marivee Frayer, Boulder Creek, CA

Sally Fuess, Boulder Creek, CA

Karen Hillery, Boulder Creek, CA

Diane Knipe, Boulder Creek, CA

Kathryn St. John, Boulder Creek, CA

Ann Thryft, Boulder Creek, CA

Lynn Sentenn, Brea, CA

Donna Buessing, Brentwood, CA

Stephanie Glatt, Buellton, CA

D. Fachko, Buena Park, CA

Jennifer Jerlstrom, Buena Park, CA

Jessica Likens, Buena Park, CA

Nelson Molina, Buena Park, CA

Ruxandra Caranfil, Burbank, CA

Sandra Christopher, Burbank, CA

Chantal Dinnage, Burbank, CA

Olga D Grovic, Burbank, CA

Artineh Havan, Burbank, CA

Laura Herndon, Burbank, CA

Rhonda Kess, Burbank, CA

Lotti Knowles, Burbank, CA

Susan Magnus, Burbank, CA

Tyson Martin, Burbank, CA

William Mead, Burbank, CA

Tom Pitman, Burbank, CA

Ben Anderson, Burlingame, CA

Kendra Knight, Burlingame, CA

Amy Liebman, Burlingame, CA

Sam Morrison, Burlingame, CA

Laura Overmann, Burlingame, CA

Brent Woolsey, Burlingame, CA

Vivian Deutsch, Calabasas, CA

Beth Doshay, Calabasas, CA

Monica Wiesener, Calabasas, CA

David Burtis, Calistoga, CA

Scott Hester, Calistoga, CA

Macella O'Neill, Calistoga, CA

Susan Beil, Camarillo, CA

Grace Cunningham, Camarillo, CA

Jeanette Desmond, Camarillo, CA

Cherie Garrett, Camarillo, CA

Tim Guisinger, Camarillo, CA

Susan Kittinger, Camarillo, CA

John Randle, Camarillo, CA

Charlie Tetoni, Camarillo, CA

Allyson Dallmann, Cambria, CA

Julianne Dunkley, Cambria, CA

Janice E. Farry-Menke, Cambria, CA

Glenda Griffith, Cambria, CA

Lisa McGurrin, Cambria, CA  
Katherine Bossange, Campbell, CA  
Barbara Mason, Campbell, CA  
Louise Perry, Campbell, CA  
Anne Swanson, Campbell, CA  
Judy Wang, Campbell, CA  
George Steinitz, Campo, CA  
Mark Giordani, Canoga Park, CA  
Alan Johnson, Canoga Park, CA  
Sheila Winston, Canoga Park, CA  
Lynda Cook, Canyon Country, CA  
Ramona Agin, Canyonville, CA  
Tim Ryan, Capistrano Beach, CA  
Matt Bender, Cardiff by the Sea, CA  
Mercedes Benet, Carlsbad, CA  
Angie G., Carlsbad, CA  
Lois Ingber, Carlsbad, CA  
Phyllis Lackey, Carlsbad, CA  
Erica Murray, Carlsbad, CA  
Alexa Pallas, Carlsbad, CA  
Michael Parry, Carlsbad, CA  
Avi Shaprut, Carlsbad, CA  
Peter Brickey, Carmel, CA  
Alyce Foster, Carmel, CA  
Diana North, Carmel, CA  
Lonni Trykowski, Carmel, CA  
Julie Dalton, Carmel by the Sea, CA  
Elizabeth Adan, Carmichael, CA  
Nancy Bukowski, Carmichael, CA  
Warren Hageman, Carmichael, CA

Lori Hubbard, Carnation, CA  
Judith Falck-Madsen, Carpinteria, CA  
Mary Wiener, Carpinteria, CA  
G.Diane Matthews-Marcelin, Carson, CA  
Lisa Tyree, Carson, CA  
Gloria Aguirre, Castaic, CA  
Michael Ames, Castro Valley, CA  
Elisabeth Bathgate, Castro Valley, CA  
Patricia Blackwell-Marchant, Castro Valley, CA  
Glen Deardorff, Castro Valley, CA  
Gina Gatto, Castro Valley, CA  
Sue Hall, Castro Valley, CA  
Pati Jio, Castro Valley, CA  
Kerri McGoldrick, Castro Valley, CA  
Reina Robinson, Castro Valley, CA  
Greg Rosas, Castro Valley, CA  
Pamela Sibley, Castro Valley, CA  
Marcy Spencer, Castro Valley, CA  
Barbara Harper, Castroville, CA  
John Hill, Castroville, CA  
Sarah Sowambur, Caterham, CA  
Phillip Cripps, Cathedral City, CA  
Kelly Erwin, Cathedral City, CA  
Hilary Simonetti, Cathedral City, CA  
Stephanie Hagiwara, Cayucos, CA  
Jon Anderholm, Cazadero, CA  
Wallace Rhine, Cazadero, CA  
James Costello, Ceres, CA  
Marie Perry, Ceres, CA  
Jon High, Cerritos, CA

Katherine Hsu, Cerritos, CA  
James Lindgren, Cerritos, CA  
Cristel Cruz, Chatsworth, CA  
C Deguzman, Chatsworth, CA  
Lynette K Henderson, Chatsworth, CA  
Sarah Suhich, Chatsworth, CA  
Barbara Wasserman, Chatsworth, CA  
Garrett Alden, Chico, CA  
Paul Belz, Chico, CA  
Linda Calbreath, Chico, CA  
Grace Dewar, Chico, CA  
Kylee Smith, Chico, CA  
Steve Wolfe, Chico, CA  
Terrie Maguire, Chino, CA  
Cindy Chic, Chino Hills, CA  
Cyndee Gannon, Chino Hills, CA  
Angela Barbee, Chula Vista, CA  
John Knox, Chula Vista, CA  
Alana-Patris Loyer, Chula Vista, CA  
Gaby Ramirez, Chula Vista, CA  
Alfa Santos, Chula Vista, CA  
John Teevan, Chula Vista, CA  
Carol Von Sederholm, Chula Vista, CA  
Robbin Christensen, Citrus Heights, CA  
Sharon Hawkinson, Citrus Heights, CA  
Callie Riley, Citrus Heights, CA  
Laura Riley, Citrus Heights, CA  
Brandy Schumacher, Citrus Heights, CA  
Robert Blackey, Claremont, CA  
Robert Ellwood, Claremont, CA  
Karen Lull, Claremont, CA  
Tanya Nieri, Claremont, CA  
Laurel Tucker, Claremont, CA  
Erica Tyron, Claremont, CA  
Kathleen Love, Clearlake, CA  
Trina Bodine, Cloverdale, CA  
John Kwiatkowski, Cloverdale, CA  
Barbara Matz, Cloverdale, CA  
Cara Barnhill, Clovis, CA  
Gail Blank, Coarsegold, CA  
Dianna Suarez, Colfax, CA  
Diane Hestich, Colton, CA  
Shakayla Thomas, Compton, CA  
Sheila Dixon, Concord, CA  
Jennie Richards Jacob Blei, Concord, CA  
Eugene Jung, Concord, CA  
Susan King, Concord, CA  
Lisa Maker, Concord, CA  
James R Monroe, Concord, CA  
Lynette Ridder, Concord, CA  
Scott Tipton, Concord, CA  
Carlene Visperas, Concord, CA  
Bonnie W, Concord, CA  
Emily Wheeler, Concord, CA  
Shari Wildschutte, Concord, CA  
Jane Bidinian, Cool, CA  
Anne Spesick, Cool, CA  
Joseph White, Cool, CA  
Christina G, Corona, CA  
Valerie Pelletier, Corona, CA

Donna Crossman, Coronado, CA  
Sanja Dimitrijevic, Coronado, CA  
Rhys Atknsn, Corte Madera, CA  
Jennifer Lawson, Corte Madera, CA  
Abigail Millikan States, Corte Madera, CA  
Elaina Caner, Costa Mesa, CA  
Rachelle Cox, Costa Mesa, CA  
Michelle Fay, Costa Mesa, CA  
Jacqueline Gait, Costa Mesa, CA  
F. Carlene Reuscher, Costa Mesa, CA  
Megan Snipes, Costa Mesa, CA  
Lizzie Vierra, Costa Mesa, CA  
Jane Lyon, Cotati, CA  
Kelley Rico, Cottonwood, CA  
Amanda Felt, Covina, CA  
Wendy Monterrosa, Covina, CA  
Sandy Williams, Covina, CA  
Elli Kimbauer, Crescent City, CA  
Paul Norup, Crescent City, CA  
April Quigley, Crescent City, CA  
Ronald Thompson, Crescent City, CA  
Susannah Baxendale, Culver City, CA  
Jane Nadeau, Culver City, CA  
Brian Rutkin, Culver City, CA  
Vj Waks, Culver City, CA  
Peg Albrets, Cupertino, CA  
Robert Jardine, Cupertino, CA  
Helen Graham, Cypress, CA  
Patricia Rudner, Cypress, CA  
Rachel Abdel, Daly City, CA  
Jeff Garner, Daly City, CA  
Randy Gerlach, Daly City, CA  
Noah H, Daly City, CA  
Ramsey Jammal, Daly City, CA  
Elena Orozco, Daly City, CA  
Joanne Scott, Daly City, CA  
Katya Siguenza, Daly City, CA  
Diana Sutton, Daly City, CA  
Mark Weinberger, Daly City, CA  
Cheryl McCarthy, Dana Point, CA  
Rick Edmondson, Danville, CA  
Ramona Williams, Danville, CA  
Sabrina Wong, Danville, CA  
Christine K. Adams, Davis, CA  
Philip Cooper, Davis, CA  
Kristen Douglas, Davis, CA  
Jon Erickson, Davis, CA  
Sherrill Futrell, Davis, CA  
Nancy Hiestand, Davis, CA  
Autumn Marr, Davis, CA  
Jack Milton, Davis, CA  
Diane Moore, Davis, CA  
Sherri Sandberg, Davis, CA  
Nicole Slaton, Davis, CA  
Elizabeth Hennessy Kyle, Del Mar, CA  
Carol Kerridge, Del Mar, CA  
Bea Cohen, Desert Hot Springs, CA  
Maureen Mcdonald, Desert Hot Springs, CA  
Michael McLaughlin, Desert Hot Springs, CA  
Nancy Schelling, Desert Hot Springs, CA

Sarah Sultana, Desert Hot Springs, CA  
Marilyn Eng, Diamond Bar, CA  
Jeffrey Jenkins, Diamond Bar, CA  
Seth Picker, Diamond Springs, CA  
Melissa Villarreal, Dinuba, CA  
Denise Russo, Discovery Bay, CA  
Valerie Victorino, Discovery Bay, CA  
Dan Vasile, Dodgertown, CA  
Sharon Byers, Downey, CA  
Michelle Fox, Downey, CA  
Ivan Llata, Downey, CA  
Dean Peppard, Downey, CA  
Anna Armstrong, Duarte, CA  
Sarah Sismondo, Duarte, CA  
Juliet Flores, Dublin, CA  
Nancy Nilssen, Dublin, CA  
Jean Olds, Dublin, CA  
Mohan Sakhrani, Dublin, CA  
Anthony Totaro, Dublin, CA  
Richard Harden, El Cajon, CA  
Kim Koch, El Cajon, CA  
Linda Martin, El Cajon, CA  
Susan Hampton, El Cerrito, CA  
Paul Hughes, El Cerrito, CA  
Jan Jones, El Cerrito, CA  
Michael Kenney, El Cerrito, CA  
Robert Naumann, El Cerrito, CA  
Carole Sartenaer, El Cerrito, CA  
Anne Tuddenham, El Cerrito, CA  
Cory Antila, El Dorado Hills, CA  
Mary Foley Foley, El Dorado Hills, CA  
Karen Miner, El Dorado Hills, CA  
Dorothy Pasquinelli, El Granada, CA  
Susie Rose Tempesta, El Granada, CA  
Terry Blount, El Segundo, CA  
Matthew Lubs, El Segundo, CA  
Stacy Smith, El Segundo, CA  
Bruce Wimberley, El Segundo, CA  
Martha Booz, El Sobrante, CA  
Garth Casaday, El Sobrante, CA  
Dan Cooley, El Sobrante, CA  
Natasha Kaluza, El Sobrante, CA  
Marsha Lowry, El Sobrante, CA  
John Carroll, Elk Grove, CA  
Donna Giddens, Elk Grove, CA  
Shannon Kemena, Elk Grove, CA  
Sumita Khanna, Elk Grove, CA  
Carol Leuenberger, Elk Grove, CA  
Vivian Leung, Emeryville, CA  
Kaylah Sterling, Emeryville, CA  
Tara A. Birnbaum, Encinitas, CA  
June Evans, Encinitas, CA  
Shawn Johnson, Encinitas, CA  
Barbara Mintz, Encinitas, CA  
Felicia Chase, Encino, CA  
Lucy Hart, Encino, CA  
Hillary Ostrow, Encino, CA  
Andrew Russell, Encino, CA  
Michael Tullius, Encino, CA  
Brenda Bergstrom, Escondido, CA



Dale Crawford, Escondido, CA

Cindy Dupray, Escondido, CA

Candace Galvez, Escondido, CA

Deborah Iannizzotto, Escondido, CA

John Pasqua, Escondido, CA

Erika Porter, Escondido, CA

Peter Randolph, Escondido, CA

Ken Sanford, Escondido, CA

Joanne Tenney, Escondido, CA

Andy Tomsy, Escondido, CA

Rena Zaman-Zade, Escondido, CA

Kevin Goodwin, Eureka, CA

Mary Hurley, Eureka, CA

Edward Macan, Eureka, CA

Lynda McDaniel, Eureka, CA

Karynn Merkel, Eureka, CA

Gina Ness, Eureka, CA

Davin Peterson, Eureka, CA

Anne Pierson, Eureka, CA

Graciela Ramirez, Eureka, CA

Karen Steele, Eureka, CA

Susan Tatro, Eureka, CA

Beti Webb Trauth, Eureka, CA

Don W, Eureka, CA

C Emerson, Fair Oaks, CA

Dean Griswold, Fair Oaks, CA

Steven Holzberg, Fair Oaks, CA

John J McLaughlin Jr, Fair Oaks, CA

Sheila Nason, Fair Oaks, CA

James Sherrel, Fair Oaks, CA

Jeanne Carlson, Fairfax, CA

Cindi Darling, Fairfax, CA

Kathleen Jackson, Fairfax, CA

Gary Mononi, Fairfax, CA

Vakila ter Veld, Fairfax, CA

Samuel Durkin, Fairfield, CA

Mark Edgren, Fairfield, CA

Veronica Michael, Fairfield, CA

Jean Riehl, Fairfield, CA

Todd Musto, Fallbrook, CA

Alice Kelly, Felton, CA

Jim Franzi, Fiddletown, CA

S. Johnson, Fillmore, CA

David Brooks, Folsom, CA

Jessica Dardarian, Folsom, CA

Joan Normington, Folsom, CA

Julie Osborn, Folsom, CA

Benjamin Billhardt, Fontana, CA

James Kawamura, Fontana, CA

Trina Aurin, Foothill Ranch, CA

Janet Ju, Foothill Ranch, CA

Bob Flagg, Forestville, CA

Robert Harrison, Forestville, CA

Gilia Humrich, Forestville, CA

Eric Johnson, Fort Bragg, CA

Bill Lundeen, Fort Bragg, CA

Gary Warner, Fort Jones, CA

Dave Lyons, Fortuna, CA

Ray Bartlett, Fountain Valley, CA

Moktar Salama, Fountain Valley, CA

Mary Brooks, Frazier Park, CA

Catherine Stansell, Frazier Park, CA

Monique Soares, Freedom, CA

Elaine Chung, Fremont, CA

Lacey Hicks, Fremont, CA

Jennifer King, Fremont, CA

Janet Klein, Fremont, CA

David Lanker, Fremont, CA

Vince Lindain, Fremont, CA

Charles Modjeski, Fremont, CA

Meera P, Fremont, CA

Sharon Rodrigues, Fremont, CA

Christopher Ware, Fremont, CA

Christine Anderson, Fresno, CA

Michael Bordenave, Fresno, CA

Kyla Esqueda, Fresno, CA

Britani German, Fresno, CA

Robert Glover, Fresno, CA

Evelyn Johnson-Todd, Fresno, CA

Andrew Jones, Fresno, CA

Francine Keohi, Fresno, CA

Shawn Martinez, Fresno, CA

Nancy McCormick, Fresno, CA

John Poss, Fresno, CA

Jacquelyn Riley, Fresno, CA

Haidie Simonet, Fresno, CA

Monica Yonangitti, Fresno, CA

John Ayala, Fullerton, CA

Donna Grampp, Fullerton, CA

Melodi Gulsen, Fullerton, CA

Lynn Hoang, Fullerton, CA

Winifred Hopkins, Fullerton, CA

Jaclyn Joy Lewis, Fullerton, CA

Evan McDermit, Fullerton, CA

Kent Morris, Fullerton, CA

Christine Doyka, Garberville, CA

Evelyn Ahumada, Garden Grove, CA

Laurie Kinnings, Garden Grove, CA

Dana May, Garden Grove, CA

Carol Tennyson, Garden Grove, CA

Deborah Burge, Garden Valley, CA

Suellen Carroll, Garden Valley, CA

Jennifer Walters, Gardena, CA

Deb Conant, Gilroy, CA

Lynne Long, Gilroy, CA

Carol Stafford, Gilroy, CA

Eleanor Decker, Glen Ellen, CA

Alejandro Artigas, Glendale, CA

A C, Glendale, CA

Carole Cooper, Glendale, CA

Barbara Cunningham, Glendale, CA

Lisa Deines, Glendale, CA

Claudia Hasenhuttl, Glendale, CA

Susi Higgins, Glendale, CA

Peter Hogan, Glendale, CA

Anita Liao, Glendale, CA

J. D. Lombardi, Glendale, CA

Jenette Paisley, Glendale, CA

Jeff Pollak, Glendale, CA

Victoria Shepherd, Glendale, CA

Rebecca Barker, Glendora, CA

Larissa Shen, Glendora, CA

Adriene Stutrud, Glenhaven, CA

Michael Beickel, Goleta, CA

Catherine Dishion Dishion, Goleta, CA

Amanda Heinrich, Goleta, CA

Martin Henderson, Goleta, CA

Kathy Kosinski, Goleta, CA

Patricia Moreno, Goleta, CA

Randall Parada, Goleta, CA

Z. Reisz, Goleta, CA

Joanna Tang, Goleta, CA

Dennis Hammermeister, Granada Hills, CA

Lisa Hammermeister, Granada Hills, CA

John Shell, Granada Hills, CA

Berna & Mark Nitzberg, Granite Bay, CA

Evette Andersen, Grass Valley, CA

Susanne Bader, Grass Valley, CA

Bonny Davis, Grass Valley, CA

Anna Drummond, Grass Valley, CA

John Everett, Grass Valley, CA

Steven Millard, Grass Valley, CA

Patricia Phillips, Grass Valley, CA

Robin Resovich, Grass Valley, CA

James Yonts, Graton, CA

Dixie Brown, Greenbrae, CA

Gordon Ehrman, Greenbrae, CA

Dennis McVey, Greenbrae, CA

Jill Mistretta, Greenbrae, CA

Joan Smith, Greenbrae, CA

Mark Escajeda, Gualala, CA

Querido Galdo, Gualala, CA

Teresa Bowden, Guerneville, CA

Russell Burke, Guerneville, CA

Kimo Cochran, Guerneville, CA

Andrea Kaufman, Guerneville, CA

Marilyn Wolters, Guerneville, CA

Arleen Zuniga, Guerneville, CA

Charles Elliott, Hacienda Heights, CA

Jean Howe, Hacienda Heights, CA

Michael Wisniewski, Hacienda Heights, CA

Debby Dernberger, Half Moon Bay, CA

Mariaelena Springsted, Half Moon Bay, CA

Amy Squires, Hawthorne, CA

Kelly Andrada, Hayward, CA

Gregory Fite, Hayward, CA

H. Gray, Hayward, CA

Rev. Jonathan Tan, Hayward, CA

Maria Daverede, Healdsburg, CA

Tessa Kraft, Healdsburg, CA

Elizabeth Rue, Healdsburg, CA

Ernst Mecke, Helsingfors, CA

Teresa Hensley, Hemet, CA

Larry LaPointe, Hemet, CA

Lily Mejia, Hemet, CA

Diane Schnitzer, Hemet, CA

Debra Shaw, Hemet, CA

Carson Yu, Hercules, CA

William Briggs, Hermosa Beach, CA

Margaret Harrell, Hermosa Beach, CA

Linda Monosmith, Hermosa Beach, CA  
Tammyfa Fait, Hesperia, CA  
Julie Knutson, Hesperia, CA  
Annie Phillips, Hesperia, CA  
Shanna Rojas, Hesperia, CA  
Juanita Westberg, Hesperia, CA  
P Perry, Hidden Valley Lake, CA  
Linda Albarran, Highland, CA  
Vanessa Kong, Hillsborough, CA  
Michael Henderson, Huntington Beach, CA  
Vicki Hughes, Huntington Beach, CA  
Audrey Mannolini, Huntington Beach, CA  
Michael McMahan, Huntington Beach, CA  
Polly D Pitsker, Huntington Beach, CA  
Fred Schloessinger, Huntington Beach, CA  
Sheila Shane, Huntington Beach, CA  
Enel Taylor, Huntington Beach, CA  
Stacie Umetsu, Huntington Beach, CA  
Elijah L., Huntington Park, CA  
Sylvia Cardella, Hydesville, CA  
Jaimy Sprissler, Imperial Beach, CA  
Jayne Cerny, Inverness, CA  
Terri Mckown, Inyokern, CA  
Lorena Cox, Irvine, CA  
Sarah Hoenicke, Irvine, CA  
Lisa Paynemiller, Irvine, CA  
Tracy Shortle, Irvine, CA  
Shana Van Meter, Irvine, CA  
Teresita Vanderdys, Irvine, CA  
Robin Weirich, Irvine, CA

Kelli Zusho, Irvine, CA  
Mary Adams, Jackson, CA  
J Cole, Joshua Tree, CA  
Cody Dolnick, Joshua Tree, CA  
Rob Barnes, Junction City, CA  
Keith Christy, Jurupa Valley, CA  
Vanessa Aguiar, Kelseyville, CA  
Janet Parks, Kensington, CA  
Greg Nowell, Kenwood, CA  
Meghan Behm, Kings Beach, CA  
Gil Gaus, Kings Beach, CA  
Tom Feldman, La Canada Flintridge, CA  
John Hale, La Canada Flintridge, CA  
LouAnne Insprucker, La Canada Flintridge, CA  
Lisa Gee, La Crescenta, CA  
Heather Parker, La Crescenta, CA  
Barbara Poland, La Crescenta, CA  
Linda Triplett, La Honda, CA  
Susan Mc Candless, La Jolla, CA  
Suzi McCandless, La Jolla, CA  
Elizabeth Oliver, La Jolla, CA  
Winke Self, La Jolla, CA  
Jenn Crum, La Mesa, CA  
Jacoba Dolloff, La Mesa, CA  
Judith Edwards, La Mesa, CA  
Arthur Fink, La Mesa, CA  
Steve Gross, La Mesa, CA  
Dan and Lilly Kittredge, La Mesa, CA  
Deborah Lancman, La Mesa, CA  
Cynthia McHugh, La Mesa, CA

Barbara Speidel, La Mesa, CA

Michael LaNoue, La Mirada, CA

Terrance Hutchinson, La Quinta, CA

Claudia Monahan, La Quinta, CA

Melissa Williams, La Quinta, CA

Susan Steube-Nordine, La Verne, CA

Jean Dimler, Ladera Ranch, CA

Katie Yu, Ladera Ranch, CA

Lisa Brahney, Lafayette, CA

Aaron Chan, Lafayette, CA

Nancy Hartman, Lafayette, CA

Lucinda Henderson, Lafayette, CA

Torunn Sivesind, Lafayette, CA

Blake Wu, Lafayette, CA

Patricia Appel, Laguna Beach, CA

Jo Baxter, Laguna Beach, CA

Suzy Capano, Laguna Beach, CA

Tiffany Casler, Laguna Beach, CA

Stacy Cornelius, Laguna Beach, CA

Anne Earhart, Laguna Beach, CA

Mirjam Luthe, Laguna Beach, CA

Robert Reed, Laguna Beach, CA

Sally Sanders, Laguna Beach, CA

Gila Wdowinski, Laguna Beach, CA

Connie Loveland, Laguna Hills, CA

Patti Mickelsen, Laguna Hills, CA

Lynne Jeffries, Laguna Niguel, CA

Erik Kemper, Laguna Niguel, CA

Melissa Waters, Laguna Niguel, CA

Maria Faur, Laguna Woods, CA

Richard Miller, Laguna Woods, CA

Kevin O'Brien, Laguna Woods, CA

Miriam Adler, Lake Balboa, CA

Travis Benneian, Lake Elsinore, CA

Kathy Engstrom, Lake Elsinore, CA

Kathy Monteleone, Lake Elsinore, CA

Julie Pearce, Lake Forest, CA

Linda Schulz, Lake Hughes, CA

Patrick Bernardino, Lakeside, CA

Mary Hicklin, Lakeside, CA

Irene Roos, Lakeside, CA

Michael Broad, Lakewood, CA

Leslie Gombrich, Lakewood, CA

Brenda Lee, Lakewood, CA

Margaret Tollner, Lakewood, CA

Kae Bender, Lancaster, CA

Suzanne Marcella Camarillo, Lancaster, CA

Stephanie Dennis, Lancaster, CA

Julia Ritter, Larkspur, CA

Valerie Nordeman, Laytonville, CA

Sharon Paltin, Laytonville, CA

Charlotte Randolph, Lee Vining, CA

Cynthia Brooks-Fetty, Lemon Grove, CA

Ked Garden, Lemon Grove, CA

Lisa Avila, Lincoln, CA

Nicole Fountain, Lincoln, CA

Sandy McFarlin, Lincoln, CA

Paula Cavagnaro, Livermore, CA

Jean King, Livermore, CA

Caroline Ko, Livermore, CA



Sally Marone, Livermore, CA

Todd Matz, Livermore, CA

Mary Perner, Livermore, CA

Laurie Sargent, Livermore, CA

Sarah Ryan, Liverpool, CA

Mari Dominguez, Lodi, CA

Elizabeth Eisenbeis, Lodi, CA

Kris Cordova, Loma Linda, CA

John Waller, Lompoc, CA

Donna Apodaca, Long Beach, CA

Kevin Bigelow, Long Beach, CA

Ian Bixby, Long Beach, CA

Frederick Cliver, Long Beach, CA

Erlinda Cortez, Long Beach, CA

Kurt Cruger, Long Beach, CA

Marie DiMassa, Long Beach, CA

Lee Eames, Long Beach, CA

Malina H, Long Beach, CA

Brenda Haig, Long Beach, CA

Rebecca Hanna, Long Beach, CA

Douglas Herrera, Long Beach, CA

Diana Kliche, Long Beach, CA

Andrew Kort, Long Beach, CA

Linda Lloyd, Long Beach, CA

Charles Lotstein, Long Beach, CA

Jane Mitchell, Long Beach, CA

Greg Perkins, Long Beach, CA

Melissa Rondilla, Long Beach, CA

Janice Sampson, Long Beach, CA

Lance Smith, Long Beach, CA

Michele Souza Zimmerman, Long Beach, CA

Melinda Taylor, Long Beach, CA

Daniel Wilkinson, Long Beach, CA

Marion Barry, Loomis, CA

Dawn Forcier, Loomis, CA

Jennifer Brooks, Los Altos, CA

Kinshuk Govil, Los Altos, CA

R. Marks, Los Altos, CA

James Patton, Los Altos, CA

Stephanie Reader, Los Altos, CA

Steven Acosta, Los Angeles, CA

Judith Antin, Los Angeles, CA

Valerie Apple, Los Angeles, CA

Soraya Barabi, Los Angeles, CA

Ann Bein, Los Angeles, CA

Jon Benneian, Los Angeles, CA

Adam Bernstein, Los Angeles, CA

Vicki Bingo, Los Angeles, CA

Paula Block-Levor, Los Angeles, CA

Deirdre Boland, Los Angeles, CA

Fabienne Bouville, Los Angeles, CA

Andrea Boyle, Los Angeles, CA

Jason Brock, Los Angeles, CA

Damon Brown, Los Angeles, CA

Robert Burk, Los Angeles, CA

Frank Burke, Los Angeles, CA

Ariel Chapman, Los Angeles, CA

William Cleary, Los Angeles, CA

Amber Cohn, Los Angeles, CA

John Crahan, Los Angeles, CA

Joseph Dadgari, Los Angeles, CA  
Diana Davidson, Los Angeles, CA  
Ellen Davis, Los Angeles, CA  
Lesly Derbyshire, Los Angeles, CA  
John DesJardin, Los Angeles, CA  
Laura Divenere, Los Angeles, CA  
Robert Drummond, Los Angeles, CA  
Isabelle Du Soleil, Los Angeles, CA  
Chris Eaton, Los Angeles, CA  
Jason Eric, Los Angeles, CA  
Gail Farina, Los Angeles, CA  
Aixa Fielder, Los Angeles, CA  
Alexander Fierro-Clarke, Los Angeles, CA  
Thomas Fitzgerald, Los Angeles, CA  
Sara Flamm, Los Angeles, CA  
Reanna Flores, Los Angeles, CA  
Darren Frale, Los Angeles, CA  
Mark Gallegos, Los Angeles, CA  
Kay Gallin, Los Angeles, CA  
Julie Garcia, Los Angeles, CA  
Enrica Gaspari, Los Angeles, CA  
Patricia Gavigan, Los Angeles, CA  
Janna Gelfand, Los Angeles, CA  
Karen Ruth Getchell, Los Angeles, CA  
Mary Glazer, Los Angeles, CA  
Prisca Gloor, Los Angeles, CA  
Luna Gooding, Los Angeles, CA  
Carol Gordon, Los Angeles, CA  
Steve Graff, Los Angeles, CA  
Susan Grant, Los Angeles, CA  
emma-louise hayley, Los Angeles, CA  
Carla Holguin, Los Angeles, CA  
Celeste Hong, Los Angeles, CA  
Ted Hume, Los Angeles, CA  
Elizabeth Johansen, Los Angeles, CA  
Saran K., Los Angeles, CA  
Kaija Keel, Los Angeles, CA  
Sabrina Kemeny, Los Angeles, CA  
Schuyler Kent, Los Angeles, CA  
Mha Atma S Khalsa, Los Angeles, CA  
Leslie Klein, Los Angeles, CA  
Shirlee Kong, Los Angeles, CA  
Anita Kuhn, Los Angeles, CA  
David Kurz, Los Angeles, CA  
Diane Lamont, Los Angeles, CA  
Edward Landler, Los Angeles, CA  
Kenneth Lapointe, Los Angeles, CA  
Seth Laursen, Los Angeles, CA  
Yolanda Leaird, Los Angeles, CA  
Barbara Leake, Los Angeles, CA  
Patricia Lewis, Los Angeles, CA  
Andrea Lieberman, Los Angeles, CA  
Adrian Loeb, Los Angeles, CA  
Alexandria Luostari, Los Angeles, CA  
John-Allan Macunovich, Los Angeles, CA  
Pamela Magathan, Los Angeles, CA  
Eugene Majerowicz, Los Angeles, CA  
Stephen Markel, Los Angeles, CA  
Tina Markowe, Los Angeles, CA  
Patricia Marlatt, Los Angeles, CA

Mary McAuliffe, Los Angeles, CA

Alexandra McCardell, Los Angeles, CA

Karen McCaw, Los Angeles, CA

Robert Meier, Los Angeles, CA

Myron Meisel, Los Angeles, CA

Tony Mendoza, Los Angeles, CA

Barbara Mesney, Los Angeles, CA

Helen Miller, Los Angeles, CA

Deimile Mockus, Los Angeles, CA

Maria Molund, Los Angeles, CA

Erica Munn, Los Angeles, CA

Joan Murray, Los Angeles, CA

Melvyn Nefsky, Los Angeles, CA

Frank Ortiz, Los Angeles, CA

Maaya Ota, Los Angeles, CA

Attilio Pandolfo, Los Angeles, CA

Margaret Phelps, Los Angeles, CA

Patti Pimento, Los Angeles, CA

Samuel Popailo, Los Angeles, CA

Kalpana Pot, Los Angeles, CA

Louis Priven, Los Angeles, CA

Brianda Puig, Los Angeles, CA

Sara Rabbani, Los Angeles, CA

Joseph Rinaldo, Los Angeles, CA

Araeia Robinson, Los Angeles, CA

Candace Rocha, Los Angeles, CA

Roni Rogers, Los Angeles, CA

Flora Rosas, Los Angeles, CA

Rina Rubenstein, Los Angeles, CA

Nicholas Rulli, Los Angeles, CA

Susan Ryan, Los Angeles, CA

Dalia Salgado, Los Angeles, CA

Antoinette Samardzic, Los Angeles, CA

Tom Sanchez, Los Angeles, CA

Benjamin Schlau, Los Angeles, CA

Mariam Shah-Rais, Los Angeles, CA

Joshua Stamberg, Los Angeles, CA

Mark Stannard, Los Angeles, CA

Neal Steiner, Los Angeles, CA

Audrey Stern, Los Angeles, CA

Stephen Stone, Los Angeles, CA

Patricia Strauss, Los Angeles, CA

Laura Strom, Los Angeles, CA

Amy Sullivan, Los Angeles, CA

Janice Tanaka, Los Angeles, CA

Tevet Tee, Los Angeles, CA

Cathy Thornburn, Los Angeles, CA

Glenna Traiger, Los Angeles, CA

Ivy Tran, Los Angeles, CA

Tia Triplett, Los Angeles, CA

Craig Tyron, Los Angeles, CA

Kimberly Uchida, Los Angeles, CA

Alexandra Vese, Los Angeles, CA

Virginia Watson, Los Angeles, CA

Lynne Weiske, Los Angeles, CA

R Wells, Los Angeles, CA

Neil Withnall, Los Angeles, CA

Chris Withrow, Los Angeles, CA

Amy Wolfberg, Los Angeles, CA

Kelly Wright, Los Angeles, CA

Mark Yackley, Los Angeles, CA

Kyle Yaskin, Los Angeles, CA

Anita Youabian, Los Angeles, CA

Esther Zepeda, Los Angeles, CA

Jan Albertie, Los Banos, CA

Judy Dutil, Los Gatos, CA

Thomas Ferrito, Los Gatos, CA

Rea Freedom, Los Gatos, CA

Lisa Gherardi, Los Gatos, CA

Theresa Gonzalez, Los Gatos, CA

Ron and Sandra Harder, Los Gatos, CA

Steven Hayashi, Los Gatos, CA

Rick Koury, Los Gatos, CA

Angela LaPlante, Los Gatos, CA

Joyce Schellenberg, Los Gatos, CA

Katie Franklin, Los Osos, CA

Susan S. Jones, Los Osos, CA

Leslie Spoon, Los Osos, CA

Kevin Branstetter, Lotus, CA

Lori White, Lower Lake, CA

Judy Madigan, Loyalton, CA

Yves DeCargouet, Lucerne, CA

Grace Bell, Mablethorpe, CA

Angela Price, Madera, CA

Deborah Collodel, Malibu, CA

Kelly Kessl, Malibu, CA

Lynne Miller, Malibu, CA

Rob Seltzer, Malibu, CA

Louis Spirito, Malibu, CA

Jimmy Tallal, Malibu, CA

Kelly Tiefen, Malibu, CA

Loretta Tiefen, Malibu, CA

Patricia Savage, Mammoth Lakes, CA

D.G. Sifuentes, Mammoth Lakes, CA

Thomas Conroy, Manhattan Beach, CA

Karla Devine, Manhattan Beach, CA

Dan Esposito, Manhattan Beach, CA

Kathleen Goldman, Manhattan Beach, CA

Marisa Landsberg, Manhattan Beach, CA

Alice Neuhauser, Manhattan Beach, CA

Jennifer Yamamoto, Manhattan Beach, CA

James Liu, Manteca, CA

Jim Ricketts, Manteca, CA

MaryAnn Bomarito, Marina, CA

Creda Markham, Marina, CA

Susanne Cumming, Marina Del Rey, CA

Alexander Dunaev, Marina Del Rey, CA

Renee Klein, Marina del Rey, CA

Amanda Skerski, Marina del Rey, CA

Benjamin Teitelbaum, Marina Del Rey, CA

Judith Turner, Marina del Rey, CA

Bobbie Cavazos, Mariposa, CA

Gabriel Sheets, Mariposa, CA

Burney Stephens, Mariposa, CA

Scott Mason, Martinez, CA

Charlotte Sines, Martinez, CA

Betty Mello, Marysville, CA

Denise Comiskey, McKinleyville, CA

Robin Hamlin, McKinleyville, CA

Francesca Ciancutti, Mendocino, CA

Raven Deerwater, Mendocino, CA  
John Wozniak, Mendocino, CA  
Susan Alpern, Menifee, CA  
Rob Gallinger, Menifee, CA  
Pam Overholtzer, Menifee, CA  
Michael Braude, Menlo Park, CA  
Rebecca Eliscu, Menlo Park, CA  
Connie Habash, Menlo Park, CA  
Vickie Rozell, Menlo Park, CA  
Carol Ohsiek, Middletown, CA  
Alex Levine, Mill Valley, CA  
Liz Marshall, Mill Valley, CA  
Roberta Newman, Mill Valley, CA  
Norman Pacula, Mill Valley, CA  
Marilyn Price, Mill Valley, CA  
Leonie Terfort, Mill Valley, CA  
Gisella Castelluccio, Millbrae, CA  
Jan Castle, Millbrae, CA  
Richard Reale, Millbrae, CA  
Mary Maher, Milpitas, CA  
Denise Henyard, Mira Loma, CA  
Rose Kabir, Mira Loma, CA  
Rosa Strayer, Mira Loma, CA  
Peggy Skomal, Mission Hills, CA  
Denise Meadow, Mission Viejo, CA  
Rochelle Phillips, Mission Viejo, CA  
Carolyn Rhazi, Mission Viejo, CA  
Robin Loewen, Modesto, CA  
Linda Pemberton, Modesto, CA  
Michelle Setaro, Modesto, CA

Christy Bolle, Monrovia, CA  
Angela Galgocz, Monrovia, CA  
Robert Ricewasser, Monrovia, CA  
Heather Crow, Montague, CA  
Samuel Dickson, Montara, CA  
Jeanette Leinweber, Monte Rio, CA  
Kristen Beck, Monterey, CA  
Zoe Edington, Monterey, CA  
Deb Federin, Monterey, CA  
William Hubick, Monterey, CA  
Patrick Maiorana, Monterey, CA  
Shirley Tofte, Monterey, CA  
Fiona Webb, Monterey, CA  
Dave Whipple, Monterey, CA  
Steve Tuttle, Monterey Park, CA  
Karen Drake, Montrose, CA  
Cheri Bly, Moorpark, CA  
Thomas Filip, Moorpark, CA  
Susie Gutowitz, Moorpark, CA  
Marti Jurick, Moorpark, CA  
Erica Ponce, Moorpark, CA  
Art Stclair, Moorpark, CA  
Kathryn Choudhury, Moraga, CA  
Heidi Groom, Moreno Valley, CA  
Christian Reyes, Moreno Valley, CA  
Ilya Turov, Moreno Valley, CA  
Greg Winton, Moreno Valley, CA  
J.T. Averre, Morgan Hill, CA  
Daniel Lebus, Morgan Hill, CA  
Nannette Morgan, Morgan Hill, CA



Anita Manley, Morro Bay, CA

Tina Wener, Morro Bay, CA

Michelle Santy, Moss Beach, CA

Jim Curland, Moss Landing, CA

Greg D, Mount Shasta, CA

Cynthia Marconi, Mount Shasta, CA

Bill Wood, Mount Shasta, CA

Charles Fletcher, Mountain Center, CA

Caroline Bering, Mountain View, CA

Cyril Bouteille, Mountain View, CA

Christopher Cain, Mountain View, CA

Kermit Cuff, Mountain View, CA

Karin Jeffery, Mountain View, CA

Victoria Keoleian, Mountain View, CA

Ben Martin, Mountain View, CA

Rosa Bravo, Murrieta, CA

Dawn Burrell, Murrieta, CA

Daniel Davis, Murrieta, CA

Loan Nguyen, Murrieta, CA

Arianna Walsh, Murrieta, CA

Janet Wheeler, Murrieta, CA

Elizabeth Woodward, Murrieta, CA

Jan Gates, Napa, CA

Catherine George, Napa, CA

Charesa Harper, Napa, CA

Kathy Linale, Napa, CA

Robyn Little, Napa, CA

Katharine Mawer, Napa, CA

Barry Schwartz, Napa, CA

Evelyn Trevethan, Napa, CA

Susan Wheaton, Napa, CA

Ree Whitford, Napa, CA

Jim Wilson, Napa, CA

Dana Monroe, National City, CA

Micki Besancon, Nevada City, CA

Terry Charonnat, Nevada City, CA

Joan Griffin, Nevada City, CA

Judie Rae, Nevada City, CA

Glenn Smith, Nevada City, CA

Maureen Fry, Newark, CA

John Hawkins, Newbury Park, CA

Percy Hicks-Severn, Newbury Park, CA

Nemo Howton, Newbury Park, CA

Rodney Love, Newbury Park, CA

Joyce McIntire, Newbury Park, CA

Beth Merrill, Newbury Park, CA

Nicole Mikals, Newbury Park, CA

Matthew Page, Newbury Park, CA

Kathleen Pierce, Newbury Park, CA

Tracey Sands, Newbury Park, CA

Cindy Stein, Newbury Park, CA

Heidi Taylor, Newbury Park, CA

Jill Wiechman, Newbury Park, CA

Paula Willebrands, Newbury Park, CA

Kathrine Fegette, Newcastle, CA

Joan Peter, Newhall, CA

Alan Yamamoto, Newhall, CA

Elizabeth Edwards, Newport Beach, CA

Steve Iverson, Newport Beach, CA

Vic Paglia, Newport Beach, CA

Stephanie Aston, North Hills, CA

Janice Baxter, North Hills, CA

Christopher Geukens, North Hills, CA

Marian Gould, North Hills, CA

Jim Leske, North Hills, CA

Heidi Miller, North Hills, CA

Natalie Aharonian, North Hollywood, CA

Marilyn Carney, North Hollywood, CA

Kathleen Culp, North Hollywood, CA

Tracy Elliott, North Hollywood, CA

Fred Granlund, North Hollywood, CA

Larry Jasper, North Hollywood, CA

Cathy Kraus, North Hollywood, CA

Michael Marciano, North Hollywood, CA

Stu Nichols, North Hollywood, CA

Manuela Rollins, North Hollywood, CA

Grace Silva, North Hollywood, CA

Judith Vogelsang, North Hollywood, CA

Roslyn Jones, North Palm Springs, CA

Robert Chirpin, Northridge, CA

Lori Dixon, Northridge, CA

Ann Dorsey, Northridge, CA

Gail Camhi, Novato, CA

Mike Cass, Novato, CA

Hillary Davis, Novato, CA

Ian Dogole, Novato, CA

Gary Dowling, Novato, CA

Bonnie Grossman, Novato, CA

Toni Kim, Novato, CA

Lisa Moreno, Novato, CA

H. S. Nadler, Novato, CA

Robert Ortiz, Novato, CA

Thomas Ray, Novato, CA

Jay Rice, Novato, CA

Sheri Rollison, Novato, CA

Arlene Van Craeynest, Novato, CA

Marilyn Wada, Novato, CA

Greg Mull, Oak View, CA

Tree Wright, Oak View, CA

Claire Chambers, Oakdale, CA

John Fitzpatrick, Oakhurst, CA

Dee Allen., Oakland, CA

Jane Armbruster, Oakland, CA

Clara Bargellini, Oakland, CA

Rachel Beck, Oakland, CA

Richard Behrman, Oakland, CA

Julia Benson, Oakland, CA

Esther Boyd, Oakland, CA

Mary Ann Cramer, Oakland, CA

Judith E, Oakland, CA

Stan Fitzgerald, Oakland, CA

Dr A G, Oakland, CA

Rick Gaston, Oakland, CA

Rogelio Giron, Oakland, CA

Ruby Giron-Carson, Oakland, CA

MaryAnne Glazar, Oakland, CA

John Golding, Oakland, CA

Christiana Hart, Oakland, CA

Susan Herting, Oakland, CA

Sterling Hollins, Oakland, CA

Monika Holm, Oakland, CA

Kuanmei Huang, Oakland, CA

Allison Jones, Oakland, CA

Sara Katz, Oakland, CA

Paul Koehler, Oakland, CA

Laakea Laano, Oakland, CA

Jesus M. Maldonado, Oakland, CA

Heather McHugh, Oakland, CA

Caephren McKenna, Oakland, CA

Vasu Murti, Oakland, CA

April Parkins, Oakland, CA

Nancy Paskowitz, Oakland, CA

Rashid Patch, Oakland, CA

Nora Privitera, Oakland, CA

Christine Ranney, Oakland, CA

Ken Rice, Oakland, CA

Evelyn Riche, Oakland, CA

Clifford Robinson, Oakland, CA

Kate S, Oakland, CA

Rondi Saslow, Oakland, CA

Roberta Schear, Oakland, CA

Lesley Schultz, Oakland, CA

Ellen Schwartz, Oakland, CA

Karin Seid, Oakland, CA

Judith Smith, Oakland, CA

Leslie Smith, Oakland, CA

Martin Snapp, Oakland, CA

Madeline Stacy, Oakland, CA

Maria Steinmann, Oakland, CA

Kathleen Tandy, Oakland, CA

Nancy Taylor, Oakland, CA

Michele Tusinac, Oakland, CA

Pablo Voitzuk, Oakland, CA

Kim Walker, Oakland, CA

David Wasley, Oakland, CA

Gwen Weil, Oakland, CA

John Wills, Oakland, CA

Amy Zink, Oakland, CA

James TRUE, Oakland, CA

Molly Mendez, Oakley, CA

Robert Spotts, Oakley, CA

Longwillow Fudemberg, Occidental, CA

Sharon Mulkey, Oceano, CA

Charles Alger, Oceanside, CA

Kelly Brannigan, Oceanside, CA

Sarada Cleary, Oceanside, CA

Cynthia Davenport, Oceanside, CA

Darcy Duval, Oceanside, CA

Andrea Ferrari, Oceanside, CA

Tina Garner, Oceanside, CA

Cathy Gentry, Oceanside, CA

Holly Gilzow, Oceanside, CA

Alexis Grone, Oceanside, CA

Ronnie Huber, Oceanside, CA

Charlene Kerchevall, Oceanside, CA

Sherry Marsh, Oceanside, CA

Tamara Taunt, Oceanside, CA

Paula Thompson, Oceanside, CA

Carol Wanat, Oceanside, CA

Lisa Adair, Ojai, CA



David Perry, Palo Alto, CA

Sara Van Dusen, Palo Alto, CA

Jan Gardner, Palos Verdes Peninsula, CA

Tajie Major, Palos Verdes Peninsula, CA

Sonia Noemi Cross, Paradise, CA

Marcie Ligammari, Paradise, CA

Joan Aebi, Pasadena, CA

Claude Alexander, Pasadena, CA

Cheryl Auger, Pasadena, CA

Linda B., Pasadena, CA

Catherine Beauchamp, Pasadena, CA

Darrell Clarke, Pasadena, CA

Linc Conard, Pasadena, CA

Richard Kornfeld, Pasadena, CA

Frances Liau, Pasadena, CA

Diane Miller, Pasadena, CA

Allison Moffett, Pasadena, CA

Jacqueline Pineda, Pasadena, CA

Charles Roth, Pasadena, CA

Pete Sloman, Pasadena, CA

Geoffrey Symcox, Pasadena, CA

Erinn Todd, Pasadena, CA

Susan Walp, Pasadena, CA

Joan Wickham, Pasadena, CA

Molly Bennett, Paso Robles, CA

Gail Ryland, Pebble Beach, CA

Mike Pasner, Penn Valley, CA

Jamie Sawtell, Penn Valley, CA

James Woods, Penn Valley, CA

Ernesto Marquez, Perris, CA

Chanda Scelsi, Perris, CA

M. Atkinson, Petaluma, CA

Arlene Baker, Petaluma, CA

Stephanie Charles, Petaluma, CA

Jerry Cook, Petaluma, CA

Stacey DeGooyer, Petaluma, CA

Wendy Denny, Petaluma, CA

Patti Fink, Petaluma, CA

Jamila Garrecht, Petaluma, CA

Diane Gentile, Petaluma, CA

Phoenix Giffen, Petaluma, CA

Elfi Gilford, Petaluma, CA

Michelle Letellier, Petaluma, CA

Ingeborg MacKay, Petaluma, CA

Annette Raible, Petaluma, CA

Chris Rose, Petaluma, CA

Gabrielle Swanberg, Petaluma, CA

Dennis Zerbo, Petaluma, CA

Barbara Wright, Phelan, CA

Susan Hathaway, Pico Rivera, CA

Philip Patino, Pico Rivera, CA

Peggy Holmes, Pinole, CA

Joan Nygaard, Pinole, CA

Carol Oller, Pinole, CA

Bob Leppo, Pismo Beach, CA

Randall Voss, Pismo Beach, CA

Dennis Young, Pismo Beach, CA

Annette Benton, Pittsburg, CA

Candy Bowman, Placerville, CA

Mike Rolbeck, Placerville, CA



Paulette Doulatshahi, Playa Del Rey, CA

Yvonne Fisher, Playa del Rey, CA

Barrett Braun, Pleasant Hill, CA

Mike Cluster, Pleasant Hill, CA

Joan Merrill, Pleasant Hill, CA

Francesca Rago, Pleasant Hill, CA

Deborah Santone, Pleasant Hill, CA

Renee Snyder, Pleasant Hill, CA

Barbara Norton, Pleasanton, CA

Daniel O'Brien, Pleasanton, CA

Urmila Padmanabhan, Pleasanton, CA

Vicki Tomola, Point Arena, CA

Twyla Meyer, Pomona, CA

Jenny Perez, Pomona, CA

Roxann Schaubhut, Pope Valley, CA

Veronica Goode, Porter Ranch, CA

Linda Bresnan, Portola Valley, CA

Karin Eckelmeyer, Portola Valley, CA

Mike Davis, Posey, CA

Joyce Heyn, Poway, CA

Kim Yirak, Poway, CA

Faith Strailey, Quincy, CA

Laura Bagley, Ramona, CA

Tammy Bullock, Ramona, CA

Don Miller, Ramona, CA

Nancy Hunter, Rancho Cordova, CA

Miriam Baum, Rancho Cucamonga, CA

Linda Bourg, Rancho Cucamonga, CA

Frederick Hamilton, Rancho Cucamonga, CA

Heidi Palmer, Rancho Cucamonga, CA

Judy Bradford, Rancho Palos Verdes, CA

Melina Paris, Rancho Palos Verdes, CA

Lin Penrose, Rancho Palos Verdes, CA

Linda Webb, Rancho Palos Verdes, CA

Andrea Abney, Rancho Santa Fe, CA

Alison Bassell, Rancho Santa Margarita, CA

Jack Schwartz, Recceda, CA

Cherie Gans, Redding, CA

Michael Koterba, Redding, CA

Harriet Miller, Redding, CA

Wayne Steffes, Redding, CA

Marianna Vanderklift, Redding, CA

Andrea Dixon, Redlands, CA

Carol Lynne Eyster, Redlands, CA

Sean Hagstrom, Redlands, CA

Doug Bender, Redondo Beach, CA

Laurel Cameron, Redondo Beach, CA

Michael Cavanaugh, Redondo Beach, CA

Maria Corvalan, Redondo Beach, CA

F. R. Eguren, Redondo Beach, CA

Glenn Embrey, Redondo Beach, CA

Stephane Ernoux, Redondo Beach, CA

Richard Esposito, Redondo Beach, CA

Kris Gata, Redondo Beach, CA

Amrit Khalsa, Redondo Beach, CA

M Montenegro, Redondo Beach, CA

Alie Rowen, Redondo Beach, CA

Anne M. Van Alstyne, Redondo Beach, CA

Jeri Fergus, Redway, CA

Erin Gellman, Redway, CA

Juliann Berman, Redwood City, CA

Michael House, Redwood City, CA

Lisa Jensen, Redwood City, CA

Tom Johnson, Redwood City, CA

Judith Kirk, Redwood City, CA

Thalia Lubin, Redwood City, CA

Chris Ouedec, Redwood City, CA

Robert Page, Redwood City, CA

Audrey Quintero, Redwood City, CA

Rush Rehm, Redwood City, CA

Margaret Rogers, Redwood City, CA

John West, Redwood City, CA

Joleen Siebert, Reedley, CA

Jl Angell, Rescue, CA

Rosa Baeza, Reseda, CA

Silvana Garcia, Reseda, CA

Carlos Nunez, Reseda, CA

Rachel Perlman, Reseda, CA

Tracy Gilbert, Rialto, CA

Vincent Bausano, Richmond, CA

Michael Eichenholtz, Richmond, CA

Melanie Hassel, Richmond, CA

Gail Jarocki, Richmond, CA

Kris Johnson Michiels, Richmond, CA

Peggy Mocine, Richmond, CA

Anne Oklan, Richmond, CA

Christine Peterson, Richmond, CA

Christine Peterson, Richmond, CA

Susan Archibald, Ridgecrest, CA

Penelope LePome, Ridgecrest, CA

Mary Loyd Shell, Ridgecrest, CA

Nancy Robinson, Ridgecrest, CA

Cheryl Davis, Rio Linda, CA

Tina Arnold, Rio Vista, CA

Susan Worden, Rio Vista, CA

Bonnie Arbuckle, Riverbank, CA

Sherry Fatzinger, Riverside, CA

Carolann Johnson, Riverside, CA

Harry Knapp, Riverside, CA

Abraham Oboruemuh, Riverside, CA

Henry Rosenfeld, Riverside, CA

Natacha Lascano, Rocklin, CA

Daniel McKeighen, Rocklin, CA

Vanessa Quintero, Rodeo, CA

Jeannie Boyd, Rohnert Park, CA

Elaine Cook, Rohnert Park, CA

Shannon Montoya, Rohnert Park, CA

Kyle Young, Rosamond, CA

Bob McCleary, Roseville, CA

Kevin Pierson, Roseville, CA

Lisa Steele, Roseville, CA

Julie Stinchcomb, Roseville, CA

Pat Thompson, Roseville, CA

Sandra Thompson, Roseville, CA

Dee Warenycia, Roseville, CA

Ann Wasgatt, Roseville, CA

Vicki L Smith, Running Springs, CA

James Adams, Sacramento, CA

Wayne Anderson, Sacramento, CA

Judith Anshin, Sacramento, CA

James Ashcraft, Sacramento, CA  
Jennifer Bair, Sacramento, CA  
Mark Allan Barath, Sacramento, CA  
M Bennett, Sacramento, CA  
Robert Boughton, Sacramento, CA  
Maureen Burness, Sacramento, CA  
Kimberly Carona, Sacramento, CA  
Brendan Chan, Sacramento, CA  
Sandy Commons, Sacramento, CA  
BethAnn Coombs, Sacramento, CA  
Deborah Cosentino, Sacramento, CA  
Jim Deneff, Sacramento, CA  
Cindy Ferguson, Sacramento, CA  
Gilda Fusilier, Sacramento, CA  
Camile Getter, Sacramento, CA  
LuAnn Glatzmaier, Sacramento, CA  
Susan Hood, Sacramento, CA  
Karen Jacques, Sacramento, CA  
Linda Karp, Sacramento, CA  
Lily Lau-Enright, Sacramento, CA  
Rebecca Martin, Sacramento, CA  
Michael McGowan, Sacramento, CA  
Marshal McKitrick, Sacramento, CA  
Esther Mooncrest, Sacramento, CA  
Dorothea Morgenstern, Sacramento, CA  
Sharon Nicodemus, Sacramento, CA  
Rosalind O'Brien, Sacramento, CA  
Sheri Opp, Sacramento, CA  
Joyce Ownbey, Sacramento, CA  
Jana Perinchief, Sacramento, CA  
Judith Poxon, Sacramento, CA  
Penny Redman, Sacramento, CA  
Susan Riseman, Sacramento, CA  
LeAne Rutherford, Sacramento, CA  
Gail Ryall, Sacramento, CA  
Joseph Sebastian, Sacramento, CA  
Aaron Stroh, Sacramento, CA  
Erh-Yen To, Sacramento, CA  
Tami Trearse, Sacramento, CA  
Ellen Tubbs, Sacramento, CA  
Jillian Unger, Sacramento, CA  
Cara Vallot, Sacramento, CA  
Lori White, Sacramento, CA  
Kenneth Wilcox, Sacramento, CA  
Bobbie Zawkiewicz, Sacramento, CA  
Elizabeth Novak Milliken, Saint Helena, CA  
Gerard Sewell, Saint Helena, CA  
Alfred Gonzales, Salinas, CA  
Lauren Keenan, Salinas, CA  
Merlin Wilson, Salinas, CA  
Alison Buist, San Anselmo, CA  
Loren Carjulia, San Anselmo, CA  
Ilene Malt, San Anselmo, CA  
Renee Schofield, San Anselmo, CA  
Herman Waetjen, San Anselmo, CA  
C Leonard, San Bernardino, CA  
Alicia Lomeli, San Bernardino, CA  
Modell McEntire, San Bernardino, CA  
Pamela Rogers, San Bernardino, CA  
Pam Thomas-Hill, San Bernardino, CA

Eileen Cassidy, San Bruno, CA

Luci Evanston, San Bruno, CA

Elisse De Sio, San Carlos, CA

Kate Elsley, San Carlos, CA

Sharon Gong, San Carlos, CA

George Ruiz, San Carlos, CA

Teri Yazdi, San Carlos, CA

Kevin Bissonnette, San Clemente, CA

Randall Hartman, San Clemente, CA

Suzanne Narducy, San Clemente, CA

Allie Palmer, San Clemente, CA

Matt Reola, San Clemente, CA

Beth Rumph, San Clemente, CA

Vicki Wiker, San Clemente, CA

Terri Wiley, San Clemente, CA

Janis Andersen, San Diego, CA

Steven Bal, San Diego, CA

Michael Barnes, San Diego, CA

Cheryl Berkey, San Diego, CA

Cindy Blatnik, San Diego, CA

Michele Boswell, San Diego, CA

Joanne Britton, San Diego, CA

Bonnie Burke, San Diego, CA

Nicole Cervantes, San Diego, CA

B. Chan, San Diego, CA

Christopher Chatard, San Diego, CA

Cecelia Conover, San Diego, CA

April Cordero, San Diego, CA

Bob Davis, San Diego, CA

Terri Dewhirst, San Diego, CA

Elaine Durson, San Diego, CA

Cheryl Elkins, San Diego, CA

Patricia J Flaherty, San Diego, CA

Joan Fulton, San Diego, CA

Bruce Gardner, San Diego, CA

Sharon Gaudette-Hieserich, San Diego, CA

Michelle Grimes, San Diego, CA

Dale Haas, San Diego, CA

Robin Halliday, San Diego, CA

David Haskins, San Diego, CA

Trudi Howell, San Diego, CA

Mari Huff, San Diego, CA

Michael A. Johnston, San Diego, CA

Sean Kilpatrick, San Diego, CA

Diane Krell-Bates, San Diego, CA

Lisa Kutner, San Diego, CA

Rochelle La Frinere, San Diego, CA

Stephanie Laman, San Diego, CA

Patricia Law, San Diego, CA

Paul Levesque, San Diego, CA

Lacey Levitt, San Diego, CA

Mary Jo Lindstrom, San Diego, CA

Colleen Lobel, San Diego, CA

Jimmy Long, San Diego, CA

Jimmie Lunsford, San Diego, CA

Marsha Lyon, San Diego, CA

Martin Marcus, San Diego, CA

Mara Mayfield, San Diego, CA

Andrew McGranahan, San Diego, CA

Mika Menasco, San Diego, CA

Pam Montroy, San Diego, CA

Kim Perszyk, San Diego, CA

Shirley Petersen, San Diego, CA

Scott Pham, San Diego, CA

Raffaella Pippa, San Diego, CA

Lauren Prust, San Diego, CA

Patrick Reid, San Diego, CA

Babette Rose, San Diego, CA

Melanie Ross, San Diego, CA

Conor S, San Diego, CA

Alice Savage, San Diego, CA

Barbara Schell, San Diego, CA

George Schneider, San Diego, CA

Viviane Sebert, San Diego, CA

Sid Shapiro, San Diego, CA

Skip Shaputnic, San Diego, CA

Judy Shively, San Diego, CA

Hal Slater, San Diego, CA

G.H. Soto, San Diego, CA

Allison Souza, San Diego, CA

Joan Spooner, San Diego, CA

Peggy Standley, San Diego, CA

Brian Still, San Diego, CA

Peggy Stone, San Diego, CA

Kathleen Sumida, San Diego, CA

Jeff Thayer, San Diego, CA

Elena Tillman, San Diego, CA

Ava Torre-Bueno, San Diego, CA

Gary Tourville, San Diego, CA

Dorothy Vieira, San Diego, CA

Shawn Wass, San Diego, CA

Linda Wilson, San Diego, CA

Debra Winthrop, San Diego, CA

Tansy Woods, San Diego, CA

Allen Yarowsky, San Diego, CA

Ken Young, San Diego, CA

Ray Ziegler, San Diego, CA

Sylvia De Baca, San Dimas, CA

Sandra Esparza, San Dimas, CA

Rev. Maria Riter Wilson, San Dimas, CA

Mary Ellen Gastelo, San Fernando, CA

Stef B, San Francisco, CA

Linda Bellavia, San Francisco, CA

Kathryn Bender, San Francisco, CA

Charlie Bergstedt, San Francisco, CA

Joseph Blum, San Francisco, CA

Kathleen Bouvier, San Francisco, CA

Richard Bradus, San Francisco, CA

Jonica Brooks, San Francisco, CA

Cecilia Brunazzi, San Francisco, CA

Leo Buckley, San Francisco, CA

Christine Burckhardt, San Francisco, CA

Tim Butler, San Francisco, CA

Ag Callan, San Francisco, CA

Len Carella, San Francisco, CA

Mary Chase, San Francisco, CA

Winnie Chin, San Francisco, CA

Luz Cobarrubias, San Francisco, CA

Sandi Covell, San Francisco, CA

Sarah Date, San Francisco, CA



Maia de Raat, San Francisco, CA  
Christie Decker, San Francisco, CA  
James DiCarlo, San Francisco, CA  
Lawrence Dillard, San Francisco, CA  
Glenna Dowling, San Francisco, CA  
Jerilyn Downing, San Francisco, CA  
Ramona Draeger, San Francisco, CA  
Susan Dugger-Mathison, San Francisco, CA  
Jym Dyer, San Francisco, CA  
Evan Elias, San Francisco, CA  
Bee Epremian, San Francisco, CA  
Rita Fahrner, San Francisco, CA  
Adrienne Fong, San Francisco, CA  
Pamela Glintenkamp, San Francisco, CA  
Stephen Gold, San Francisco, CA  
Linda Gourley, San Francisco, CA  
Gia Granucci, San Francisco, CA  
J. Barry Gurdin, San Francisco, CA  
Sharon Handa, San Francisco, CA  
Sharon Hefke, San Francisco, CA  
Mali Henigman, San Francisco, CA  
Birgit Hermann, San Francisco, CA  
Saroyan Humphrey, San Francisco, CA  
Jeffrey Hurwitz, San Francisco, CA  
Pauline Kahney, San Francisco, CA  
Constance Kao, San Francisco, CA  
Lisa Kellman, San Francisco, CA  
Karen Kirschling, San Francisco, CA  
Betty Kissilove, San Francisco, CA  
Ellen Koivisto, San Francisco, CA  
Ady Larsen, San Francisco, CA  
R Dene Larson, San Francisco, CA  
Peter Lee, San Francisco, CA  
David Lin, San Francisco, CA  
Helen Loeser, San Francisco, CA  
Denise Louie, San Francisco, CA  
Pamela Magers, San Francisco, CA  
Mariano Marquez III, San Francisco, CA  
Jon Mc Veight, San Francisco, CA  
Marisa McFarlane, San Francisco, CA  
Shannon Mcneil, San Francisco, CA  
Anuruddh Misra, San Francisco, CA  
Bianca Molgora, San Francisco, CA  
William Mora, San Francisco, CA  
Mary Moycik, San Francisco, CA  
Gretchen Mueller, San Francisco, CA  
Ron Nieberding, San Francisco, CA  
Mary Novasic, San Francisco, CA  
Maria Nowicki, San Francisco, CA  
John Oda, San Francisco, CA  
Marsha Orent, San Francisco, CA  
Matthew Parker, San Francisco, CA  
Annalee Pineda, San Francisco, CA  
Jackie Pomies, San Francisco, CA  
Susan Powers, San Francisco, CA  
Francesca Prada, San Francisco, CA  
Jessica Pullano, San Francisco, CA  
Charles Ray, San Francisco, CA  
Ivan Rhudick, San Francisco, CA  
Matt Richardson, San Francisco, CA

Roberto Romo, San Francisco, CA  
Joan Rost, San Francisco, CA  
Kim Russo, San Francisco, CA  
Christi Saltonstall, San Francisco, CA  
Natasha Saravanja, San Francisco, CA  
Karin Schmidt, San Francisco, CA  
Dan Schubart, San Francisco, CA  
Judy Schultz, San Francisco, CA  
Erika Shershun, San Francisco, CA  
Paul Shimazaki, San Francisco, CA  
RoseMarie Shishkin, San Francisco, CA  
Carolyn Shuman, San Francisco, CA  
Laura Simmons, San Francisco, CA  
John Steponaitis, San Francisco, CA  
Tai Stillwater, San Francisco, CA  
Robert Stine, San Francisco, CA  
Edward Sullivan, San Francisco, CA  
Sara T, San Francisco, CA  
Michael Tomczyszyn, San Francisco, CA  
Justin Truong, San Francisco, CA  
Anthony Tupasi, San Francisco, CA  
Iris Vaughan, San Francisco, CA  
Wolfgang Vermeer, San Francisco, CA  
Nathan Vogel, San Francisco, CA  
Linda Weiner, San Francisco, CA  
Maxine Zylberberg, San Francisco, CA  
Michele Massey, San Jacinto, CA  
Kieran Alcumbrac, San Jose, CA  
Sue Andarmani, San Jose, CA  
Murielle Antoku, San Jose, CA

Thomas Arnold, San Jose, CA  
Teresa Awtrey, San Jose, CA  
Tim Barrington, San Jose, CA  
Allan Campbell, San Jose, CA  
Manou Cassel, San Jose, CA  
Beng Chiu, San Jose, CA  
Edward Fairchild, San Jose, CA  
Mary Fedullo, San Jose, CA  
Ted Fishman, San Jose, CA  
Mark Galbraith, San Jose, CA  
Charlene Garcia, San Jose, CA  
Susan Golbetz, San Jose, CA  
Elaine Gould, San Jose, CA  
Michael Hazelton, San Jose, CA  
Charlene Henley, San Jose, CA  
Randall Herz, San Jose, CA  
Tania I Redlich, San Jose, CA  
Pec Indman, San Jose, CA  
Paula Kerrebijn, San Jose, CA  
Santosh Kumar, San Jose, CA  
Eva Lanker, San Jose, CA  
Allen Leinwand, San Jose, CA  
Miriam Leiseroff, San Jose, CA  
Patty Linder, San Jose, CA  
Claude McDonald, San Jose, CA  
Du Ng, San Jose, CA  
Margaret P, San Jose, CA  
Jim Petkiewicz, San Jose, CA  
Jamie Pfister, San Jose, CA  
Veronica Romero, San Jose, CA

Charles Smith, San Jose, CA

Singgih Tan, San Jose, CA

Susan Trivisonno, San Jose, CA

Susan Urang, San Jose, CA

Nona Weiner, San Jose, CA

Jimmie Yonemoto, San Jose, CA

Dave Beck, San Juan Capistrano, CA

Philip Fraser, San Juan Capistrano, CA

Lucille Robustelli, San Juan Capistrano, CA

Aj Cho, San Leandro, CA

Michael Denton, San Leandro, CA

Gloria Eive, San Leandro, CA

Linda Gee, San Leandro, CA

Roberta LaFrance, San Leandro, CA

John Moreau, San Leandro, CA

John Payne, San Lorenzo, CA

Monica Barricarte, San Luis Obispo, CA

Joseph Boone, San Luis Obispo, CA

Maryan Infield, San Luis Obispo, CA

Sharon Rheingans, San Luis Obispo, CA

Nancy Walter, San Luis Obispo, CA

Liz Brown, San Marcos, CA

Dianne Christ, San Marcos, CA

Laura Dufel, San Marcos, CA

Randy Gray, San Marcos, CA

Teri Kelly, San Marcos, CA

John Maxwell, San Marcos, CA

Joan Quinn, San Marcos, CA

Lois Ruble, San Marcos, CA

Brooke Scruggs, San Marcos, CA

Mary Ann Seltzer, San Marcos, CA

Thelma Faulkner, San Martin, CA

Elise Beliak, San Mateo, CA

Gina Colangelo, San Mateo, CA

Kevin Hearle Ph.D., San Mateo, CA

Linda Johnson, San Mateo, CA

Evan Josa, San Mateo, CA

Evelyn Newman, San Mateo, CA

Tom Pache, San Mateo, CA

Mark Rhynsburger, San Mateo, CA

Mark Rhynsburger, San Mateo, CA

Mariano Svidler, San Mateo, CA

Leyza Yardley, San Mateo, CA

Leah Fagundes, San Pablo, CA

Linda Morgan, San Pablo, CA

Carol Schaffer, San Pablo, CA

Brooke Balestreri, San Pedro, CA

Susan Bogdanovich, San Pedro, CA

Molly Brent, San Pedro, CA

Angela Carter, San Pedro, CA

Sharon Caserma, San Pedro, CA

Matt Davison, San Pedro, CA

Petrina Long, San Pedro, CA

Anne Barker, San Rafael, CA

Susan Berlin, San Rafael, CA

Kelly Berry, San Rafael, CA

Eileen Blossman, San Rafael, CA

Cayla Coleman, San Rafael, CA

Steven Gaman, San Rafael, CA

James Haig, San Rafael, CA

Margie Halladin, San Rafael, CA  
Sandra Levine MD, San Rafael, CA  
Erika Martinez, San Rafael, CA  
Diana McBride, San Rafael, CA  
Elaine Mont-Eton, San Rafael, CA  
Dianne Morrison, San Rafael, CA  
Susan Peters, San Rafael, CA  
Mary Poor, San Rafael, CA  
Allegra Printz, San Rafael, CA  
Peter Ring, San Rafael, CA  
Jena Rose, San Rafael, CA  
Philip Simon, San Rafael, CA  
Ariel Spilsbury, San Rafael, CA  
Deborah Temple, San Rafael, CA  
Lydia Vignau, San Rafael, CA  
Jenifer Wilson, San Rafael, CA  
Jason Witchel, San Rafael, CA  
Jeffrey Hemenez, San Ramon, CA  
Charles Wieland, San Ramon, CA  
Patrick Farrell, San Ysidro, CA  
Sarah Baxter, Santa Ana, CA  
Colleen Bergh, Santa Ana, CA  
Nicolas Duonn, Santa Ana, CA  
Mike Honda, Santa Ana, CA  
Richard Spicer, Santa Ana, CA  
Marie Winter, Santa Ana, CA  
Dennis Allen, Santa Barbara, CA  
Thea Altman, Santa Barbara, CA  
Debby Anderson, Santa Barbara, CA  
Martha Aubin, Santa Barbara, CA

Trudy Bixby, Santa Barbara, CA  
Tina Brenza, Santa Barbara, CA  
Lisabette Brinkman, Santa Barbara, CA  
Heather Brophy, Santa Barbara, CA  
Thomas Burt, Santa Barbara, CA  
Lynne Cantlay, Santa Barbara, CA  
Carole Ann Cole, Santa Barbara, CA  
Ronit Corry, Santa Barbara, CA  
Katherine Crawford, Santa Barbara, CA  
Jenny Cushnie, Santa Barbara, CA  
Gary Denny, Santa Barbara, CA  
Catharine Edwardson, Santa Barbara, CA  
Joel Fithian, Santa Barbara, CA  
Camille Gilbert, Santa Barbara, CA  
Janet Graham, Santa Barbara, CA  
Madeleine Ignon, Santa Barbara, CA  
Katherine Johnson, Santa Barbara, CA  
Virginia Johnstone, Santa Barbara, CA  
John Kay, Santa Barbara, CA  
Connie Marquez, Santa Barbara, CA  
Nancy Martin, Santa Barbara, CA  
Michael Merenda, Santa Barbara, CA  
Sandra Moore, Santa Barbara, CA  
Lauren Murdock, Santa Barbara, CA  
Edith Ogella, Santa Barbara, CA  
Gina Petuskey, Santa Barbara, CA  
Barbara Rosen, Santa Barbara, CA  
Miranda Scalzo, Santa Barbara, CA  
Chris Seaton, Santa Barbara, CA  
Wendy Simons, Santa Barbara, CA

Julie Sullwold, Santa Barbara, CA  
Sandy Suttton, Santa Barbara, CA  
Katie Thibodeau, Santa Barbara, CA  
Paul Voyen, Santa Barbara, CA  
Bill Woodbridge, Santa Barbara, CA  
Theresa Yandell, Santa Barbara, CA  
Friend Friend, Santa Clara, CA  
Alexis Georgiou, Santa Clara, CA  
Kim Messmer, Santa Clara, CA  
Judy Rees, Santa Clara, CA  
Mushtaq Syed, Santa Clara, CA  
Carina Chadwick, Santa Clarita, CA  
James McKelvey, Santa Clarita, CA  
John Paladin, Santa Clarita, CA  
David Soto, Santa Clarita, CA  
Anita Wisch, Santa Clarita, CA  
Paul Andrade, Santa Cruz, CA  
Leslie Andrews, Santa Cruz, CA  
Joyce Banzhaf, Santa Cruz, CA  
Milo Barisof, Santa Cruz, CA  
David Bezanson PhD, Santa Cruz, CA  
Elaine Boles, Santa Cruz, CA  
Martha Carrington, Santa Cruz, CA  
Michael Cooper, Santa Cruz, CA  
Teresa Coyle, Santa Cruz, CA  
Janet De Lu, Santa Cruz, CA  
MarianKitty Dennis, Santa Cruz, CA  
Richard Gallo, Santa Cruz, CA  
Barbara Ginsberg, Santa Cruz, CA  
Bruce Grobman, Santa Cruz, CA

Jacob Huskey, Santa Cruz, CA  
Carolyn T Israel, Santa Cruz, CA  
Lizann Keyes, Santa Cruz, CA  
Mary Kuntz-Cote, Santa Cruz, CA  
Kevin Manning, Santa Cruz, CA  
Karsten Mueller, Santa Cruz, CA  
Eric Nysten, Santa Cruz, CA  
Vivienne Orgel, Santa Cruz, CA  
David Pierotti, Santa Cruz, CA  
Elizabeth Potts, Santa Cruz, CA  
David Ross, Santa Cruz, CA  
Emmanuel Ross Hartway, Santa Cruz, CA  
Lynda Sierra, Santa Cruz, CA  
Bret Smith, Santa Cruz, CA  
Erica Stanojevic, Santa Cruz, CA  
Pela Tomasello, Santa Cruz, CA  
Sylvia Vairo, Santa Cruz, CA  
Russell Weisz, Santa Cruz, CA  
Rachel Wolf, Santa Cruz, CA  
Eric Anches, Santa Maria, CA  
Jerid Anderson, Santa Maria, CA  
Carlos Arnold, Santa Maria, CA  
Nancy Heck, Santa Maria, CA  
Nancy Miller, Santa Maria, CA  
Joanne Altschuler, Santa Monica, CA  
Dr. Jon Amsden, Santa Monica, CA  
John Barone, Santa Monica, CA  
Elizabeth Chang, Santa Monica, CA  
Steven Chasen, Santa Monica, CA  
Phyllis Chavez, Santa Monica, CA



Shelley Corwin, Santa Monica, CA

Guillemette Epailly, Santa Monica, CA

Deborah Fallender, Santa Monica, CA

Glenn and Alexandra Garrison, Santa Monica,  
CA

Patricia Healy, Santa Monica, CA

Janet Heinle, Santa Monica, CA

Amelia Jones, Santa Monica, CA

Rachel Kelley, Santa Monica, CA

Chelsey Marsing, Santa Monica, CA

Anne Munitz, Santa Monica, CA

Ted Myers, Santa Monica, CA

Ruth Olafsdottir, Santa Monica, CA

Diane Olson, Santa Monica, CA

Jerry Persky, Santa Monica, CA

Mary Rojeski, Santa Monica, CA

Mary Romanek, Santa Monica, CA

D. Rowe, Santa Monica, CA

Myra Schegloff, Santa Monica, CA

Alex Sokolow, Santa Monica, CA

Shelley Sterrett, Santa Monica, CA

J Yudell, Santa Monica, CA

Louise Priest, Santa Paula, CA

Louise Rangel, Santa Paula, CA

Cristina Amarillas, Santa Rosa, CA

Gillian Anderson, Santa Rosa, CA

Leanne B., Santa Rosa, CA

Linda Bell, Santa Rosa, CA

Jerry Bernhaut, Santa Rosa, CA

Patricia Bode, Santa Rosa, CA

David Zachary Brown, Santa Rosa, CA

Deb Dearing, Santa Rosa, CA

Ryan Dell, Santa Rosa, CA

Janet Drew, Santa Rosa, CA

Louise Espinoza, Santa Rosa, CA

Mark Feldman, Santa Rosa, CA

Zora Hocking, Santa Rosa, CA

Jude Iam, Santa Rosa, CA

Barbara Judson, Santa Rosa, CA

Lucy Kenyon, Santa Rosa, CA

Bernard Lefson, Santa Rosa, CA

Ellen Lewis, Santa Rosa, CA

Lois Look, Santa Rosa, CA

Dan McAllister, Santa Rosa, CA

Bob Miller, Santa Rosa, CA

Jane Moad, Santa Rosa, CA

Lorilie Morey, Santa Rosa, CA

Jana Mariposa Muhar, Santa Rosa, CA

Josie Peluso, Santa Rosa, CA

Daniel Podell, Santa Rosa, CA

Joe Salazar, Santa Rosa, CA

Linda Thompson, Santa Rosa, CA

Ken Wilson, Santa Rosa, CA

Pam Zimmerman, Santa Rosa, CA

Gary Beckerman, Santa Ynez, CA

Vicki Call, Santee, CA

Elizabeth McCandless, Santee, CA

Rob Roberto, Santee, CA

Kelly Doyle, Sausalito, CA

Evan Jane Fletcher, Sausalito, CA

Evan Jane Kriss, Sausalito, CA

Patricia Pigman, Sausalito, CA

Lonna Richmond, Sausalito, CA

Greg Thomson, Sausalito, CA

Gerald Cummings, Scotts Valley, CA

Rob Dun, Scotts Valley, CA

Kay MacDonald, Seal Beach, CA

Bernadette Meltzer, Seal Beach, CA

Natalija Sale, Seal Beach, CA

Brent Spencer, Seal Beach, CA

Enrico Verga, Seal Beach, CA

Scott Ames, Sebastopol, CA

Felicia Bander, Sebastopol, CA

Corey Barnes, Sebastopol, CA

Stacie Charlebois, Sebastopol, CA

Sharron Fisher, Sebastopol, CA

Kris Hall, Sebastopol, CA

Katharine Kehr, Sebastopol, CA

Deborah Kermod, Sebastopol, CA

Constance Miles, Sebastopol, CA

Kenneth Mooney, Sebastopol, CA

Lilith Rogers, Sebastopol, CA

Sharon Sadler, Sebastopol, CA

Julie Sicaud, Sebastopol, CA

Susan Stover, Sebastopol, CA

Lisa Salazar, Shasta Lake, CA

Reuben Allen, Sherman Oaks, CA

Gene Arias, Sherman Oaks, CA

Carol Becker, Sherman Oaks, CA

Hilarey Benda, Sherman Oaks, CA

Stephanie Colet, Sherman Oaks, CA

Jeffrey Jones, Sherman Oaks, CA

Jodi Milstein, Sherman Oaks, CA

Patrick Pade, Sherman Oaks, CA

Patricia Ritter, Sherman Oaks, CA

Mox Ruge, Sherman Oaks, CA

Sheila Desmond, Shingle Springs, CA

Karen Neumeier, Shingle Springs, CA

John Lamb, Sierra Madre, CA

Marguerite Shuster, Sierra Madre, CA

Carol Hewitt, Signal Hill, CA

Patti Barto, Silverado, CA

Derek Beauchemin, Simi Valley, CA

Christina Ciesla, Simi Valley, CA

Justin Duso, Simi Valley, CA

Frances Emanuel, Simi Valley, CA

James Johnson, Simi Valley, CA

Mary Ann Lowe, Simi Valley, CA

Madison Mitchell, Simi Valley, CA

Pam Morarre, Simi Valley, CA

Brad Parsa, Simi Valley, CA

Chuck Rocco, Simi Valley, CA

Jack Rollens, Simi Valley, CA

Diana Shycoff, Simi Valley, CA

Kelsey McCann, Sloughouse, CA

Laurie Neill, Smith River, CA

Christy Bulskov, Solana Beach, CA

Natasha Weaver, Solana Beach, CA

Debra Hunt, Solvang, CA

Carol Lake, Solvang, CA

Andy Philpot, Solvang, CA  
Michelle Sparks-Gillis, Solvang, CA  
Sheila Silan, Somerset, CA  
Joy Pratt, Somis, CA  
Renee Darner, Sonoma, CA  
John Feissel, Sonoma, CA  
Penny Hartman, Sonoma, CA  
Patricia Locks, Sonoma, CA  
Helen Mehl, Sonoma, CA  
June Osbourn, Sonoma, CA  
Michael R. Watson, Sonoma, CA  
Brad Squires, Sonoma, CA  
Michelle Allison, Sonoma, CA  
Leslie Kowalczyk, Sonoma, CA  
Stephen Foltz, Soquel, CA  
Sonia King, Soquel, CA  
Gary Landgrebe, Soquel, CA  
Pamela Machutt, Soquel, CA  
Marianna Mejia Contact, Soquel, CA  
Sallye Steiner Bowyer, Soquel, CA  
Diana Swisher, Soquel, CA  
Hunter Wallof, Soulsbyville, CA  
Arturo Beyeler, South Lake Tahoe, CA  
Anne Roos, South Lake Tahoe, CA  
Francie Stone, South Lake Tahoe, CA  
Scott Jung, South Pasadena, CA  
Yuliya Rudnik, South Pasadena, CA  
Liz Ibarra, South San Francisco, CA  
Ron Parsons, South San Francisco, CA  
Heidi Behnke, Spring Valley, CA  
Jennifer Bradford, Spring Valley, CA  
Patricia Hadsall, Spring Valley, CA  
Theodora Moriarty, Spring Valley, CA  
Terrie Smith, Spring Valley, CA  
Toni Watson, Spring Valley, CA  
Joyce Kolasa, Springville, CA  
Carol Ruth, Stanford, CA  
Nikki Larkins, Stanton, CA  
Stu Greenburg, Stevenson Ranch, CA  
Michelle Montano, Stockton, CA  
Alisha Nickols, Stockton, CA  
Barb Varellas, Stockton, CA  
Andra Eisen, Studio City, CA  
Ines Glorian, Studio City, CA  
Genevieve Guzman, Studio City, CA  
Susan Lea, Studio City, CA  
Ellen Little, Studio City, CA  
David Norrell, Studio City, CA  
Natalia Spornik, Studio City, CA  
Inga Stanelun, Studio City, CA  
James Roberts, Sugarloaf, CA  
Robin Van Tassell, Summerland, CA  
Chris Hernandez, Sun Valley, CA  
Gerald Shaia, Sun Valley, CA  
Katharine Warner, Sunland, CA  
Scott Barlow, Sunnyvale, CA  
Ernest Boyd, Sunnyvale, CA  
John Cremin, Sunnyvale, CA  
Krista Dana, Sunnyvale, CA  
Marilyn Hall, Sunnyvale, CA

Rose Linn, Sunnyvale, CA

Richard Payne, Sunnyvale, CA

John Robbins, Sunnyvale, CA

Laura Robichek, Sunnyvale, CA

Marcia Sherman, Sunnyvale, CA

Vira Confectioner, Sunol, CA

Sandra Hendricks, Sutter Creek, CA

Sally Lambert, Sutter Creek, CA

Theo Dawson, Sylmar, CA

Chad Johnson, Sylmar, CA

Margarita Perez, Sylmar, CA

Charles Wolfe, Sylmar, CA

Carol p, Tahoe Vista, CA

El. Pe., Talmage, CA

Nilofar Amier, Tarzana, CA

Louise Bianco, Tarzana, CA

Theresa Bucher, Tarzana, CA

Monica Freedman, Tarzana, CA

Roger Hollander, Tarzana, CA

Ken Bailey, Taylorsville, CA

Gail Roberts, Tecate, CA

Missie Smith, Tehachapi, CA

Wendy Allen, Temecula, CA

Richard Blain, Temecula, CA

Holly Hall, Temecula, CA

Jena Hallmark, Temecula, CA

Deborah McIntosh, Temecula, CA

John Peterson, Temecula, CA

Janet Rhodes, Temecula, CA

Linda Skorheim, Temple City, CA

Cassie A. Murphy, Templeton, CA

Deborah Filipelli, PhD, The Sea Ranch, CA

Victoria Behar, Thousand Oaks, CA

Lexie Cataldo, Thousand Oaks, CA

Elaine Edell, Thousand Oaks, CA

Stephen Fitch, Thousand Oaks, CA

Mariana Mellor, Thousand Oaks, CA

Gary Raymond, Thousand Oaks, CA

Joanne Sulkoske, Thousand Oaks, CA

Gerry Williams, Thousand Oaks, CA

Rochelle Adelman, Three Rivers, CA

Lyndell Pritchett, Three Rivers, CA

Lulu LaRocca, Toluca Lake, CA

Isabel Freeman, Topanga, CA

Jed Fuhrman, Topanga, CA

Kenneth Miller, Topanga, CA

Jaime Nahman, Topanga, CA

Julie Ries, Topanga, CA

Penelope Ward, Topanga, CA

Kristina Wunder, Topanga, CA

Sherrie King, Torrance, CA

Joyce M Campbell, Torrance, CA

Jeff Pierce, Torrance, CA

Faye Ryan, Torrance, CA

Lynn Ryan, Torrance, CA

Diana Waters, Torrance, CA

Shelley Zagars, Torrance, CA

Elissa Babiuk, Trabuco Canyon, CA

Jinx Hydeman, Trabuco Canyon, CA

Douglas McCormick, Trabuco Canyon, CA

Theresa Hundchen, Tracy, CA  
Deborah Frame, Trinidad, CA  
Jen Gavin, Trinidad, CA  
Ron Melin, Trinidad, CA  
C E Mone, Trinidad, CA  
Glenn Ross, Trinidad, CA  
Brett Bell, Tujunga, CA  
Simone Boudriot, Tujunga, CA  
Probyn Gregory, Tujunga, CA  
Barbara Newton, Turlock, CA  
Everett A. Vieira III, Turlock, CA  
Perry Gx, Tustin, CA  
Stephen Bohac, Twain Harte, CA  
Beverly Tiner, Twentynine Palms, CA  
Olive Franklin, Ukiah, CA  
James McArdle, Ukiah, CA  
Tom McDonough, Ukiah, CA  
Eileen Mitro, Ukiah, CA  
Judi Walsh, Ukiah, CA  
Mark Winkler, Ukiah, CA  
George Wood, Ukiah, CA  
Shelley Abbate, Union City, CA  
Ernest Walters, Union City, CA  
Courtney Christoffer, Upland, CA  
Christine Hayes, Upland, CA  
Jay Jones, Upland, CA  
Jo Mandrell, Upland, CA  
Yvonne Smith, Upland, CA  
Nicole Amato, Vacaville, CA  
Nicole Antonelli, Vacaville, CA

Denice Eldridge, Vacaville, CA  
Lorraine Lowry, Vacaville, CA  
Debra Reuter, Vacaville, CA  
Janice Boyd, Valencia, CA  
Sara Fogan, Valencia, CA  
Jane Casey, Vallejo, CA  
Suzanne Connors, Vallejo, CA  
Victoria Humphrey, Vallejo, CA  
Alicia Jackson, Vallejo, CA  
Carmen Klucsor, Vallejo, CA  
Nikki Nafziger, Vallejo, CA  
Kathleen Powell, Vallejo, CA  
Lana Touchstone, Vallejo, CA  
Florence Litton, Valley Center, CA  
Laura Diffenbaugh, Valley Springs, CA  
Gail Krieger, Valley Springs, CA  
Monica Smith, Valley Springs, CA  
Amy Fleiss, Valley Village, CA  
Cindee H, Valley Village, CA  
Darynne Jessler, Valley Village, CA  
Kim Nicholson, Valley Village, CA  
Jennifer Wilson, Valley Village, CA  
Dudley and Candace Campbell, Van Nuys, CA  
Reed Fenton, Van Nuys, CA  
Agnieszka Gocek, Van Nuys, CA  
Janet Laur, Van Nuys, CA  
Stephanie Proctor, Van Nuys, CA  
Ken Windrum, Van Nuys, CA  
Karen Brodtkin, Venice, CA  
Jesse Croxton, Venice, CA



Linda Eberle, Venice, CA

Richard Horne, Venice, CA

Kenneth Howard, Venice, CA

Nan Lamb, Venice, CA

Deborah Rumens, Venice, CA

Ruth Seroussi, Venice, CA

Titiphan Vutiprichar, Venice, CA

Jennifer Abernathy, Ventura, CA

Kathleen Applen, Ventura, CA

Sherry Berry, Ventura, CA

David Cotner, Ventura, CA

Tim Covey, Ventura, CA

Barbara Dincau, Ventura, CA

Jamie Green, Ventura, CA

Mabel Gulovsen, Ventura, CA

Ms. Lilith, Ventura, CA

Nina Minsky, Ventura, CA

Kenneth Pennington, Ventura, CA

Sherry Schafer, Ventura, CA

Karen Socher, Ventura, CA

Mary Stanistreet, Ventura, CA

Melissa Vasconcellos, Ventura, CA

Barbara Whyman, Ventura, CA

Simone Fonseca, Victorville, CA

Paula Lopez, Victorville, CA

Carol Wiley, Victorville, CA

Laurie Gorman, Visalia, CA

Arlene Shayer, Visalia, CA

Patricia A Marks, Vista, CA

Jennifer Ball, Vista, CA

Barbara Bernatovich, Vista, CA

Tamara Bond, Vista, CA

Ad Clayton, Vista, CA

Angela Clayton, Vista, CA

Tyler Fitzgerald, Vista, CA

Mary Gilman, Vista, CA

Chad Kapusta, Vista, CA

Marilyn Baldwin, Volcano, CA

Erfin Hartojo, Walnut, CA

Jackie Samallo, Walnut, CA

Richard Saretsky, Walnut, CA

Rita Thio, Walnut, CA

Ana Belle, Walnut Creek, CA

Constantine Bogios, Walnut Creek, CA

Colleena Brazen, Walnut Creek, CA

Thomas Brustman, Walnut Creek, CA

Colleen Dowd, Walnut Creek, CA

Dale Drouin, Walnut Creek, CA

Ruth Felix, Walnut Creek, CA

Julia Fuller, Walnut Creek, CA

Madelaine Georgette, Walnut Creek, CA

Marsha Goodman, Walnut Creek, CA

Janicedotherighting Greenberg, Walnut Creek,  
CA

Barbara Greenwood, Walnut Creek, CA

Helen Hays, Walnut Creek, CA

Barb Linc, Walnut Creek, CA

Michele Dawn Sanderson, Walnut Creek, CA

Karen Savelich, Walnut Creek, CA

J. Schaffell, Walnut Creek, CA

Andrea Schauer, Walnut Creek, CA  
David Wendt, Walnut Creek, CA  
Suzanne Nevins, Warner Springs, CA  
Paul Cheney, Watsonville, CA  
Michael Craib, Watsonville, CA  
Mary Doane, Watsonville, CA  
Monica Gordon, Watsonville, CA  
Valerie Justus-Rusconi, Watsonville, CA  
Sarah Peck, Watsonville, CA  
Michael C. Ford and Richard B. Marks,  
Watsonville, CA  
Celeste Stanik, Watsonville, CA  
Shireen Nickel, Weed, CA  
Diana Sottana, Weed, CA  
Maria Fraga, West Covina, CA  
Georgina Perez, West Covina, CA  
Consuelo Rovirosa, West Covina, CA  
Jeanne Schuster, West Covina, CA  
Shari Becker, West Hills, CA  
Rebecca Clark, West Hills, CA  
Linda Howie, West Hills, CA  
Pilar Zorrilla, West Hills, CA  
David Aronovitch, West Hollywood, CA  
Abbie Bernstein, West Hollywood, CA  
Howard H. Holmes, West Hollywood, CA  
Susan Mathison, West Hollywood, CA  
Tameka Murrain, West Hollywood, CA  
Christina Nillo, West Hollywood, CA  
Paul Stanley, West Hollywood, CA  
Agnew Wilson, West Hollywood, CA  
Signe Wetteland, West Sacramento, CA  
Barbara E., Westlake Village, CA  
Stacey Keller, Westlake Village, CA  
Heather Kovach, Westlake Village, CA  
Theron Akers, Westminster, CA  
David Cristini, Westminster, CA  
Brandon Lowentrou, Westminster, CA  
Tina Colafranceschi, Whitethorn, CA  
Walter Huitema, Whittier, CA  
Vanessa Leal, Whittier, CA  
Michael Allen, Willits, CA  
Stacey Rohrbaugh, Willits, CA  
Sally Wieland, Willits, CA  
Matthew Culmore, Windsor, CA  
Claudia Piaseckyj, Winnetka, CA  
Charles Raines, Winnetka, CA  
Bita Edwards, Woodacre, CA  
Susan Pelican, Woodland, CA  
Bronwen Hughes, Woodland Hills, CA  
Stephanie Larro, Woodland Hills, CA  
Debra Lawrence, Woodland Hills, CA  
Jollee Saphier, Woodland Hills, CA  
Eva Thomas, Woodside, CA  
Dianne Ostrow, Wrightwood, CA  
C Rivera, X, CA  
Susan Wayne, Xxx, CA  
Marilyn Adams, Yorba Linda, CA  
Kathleen Fernandez, Yorba Linda, CA  
Barry Lovinger, Yorba Linda, CA  
Gabriel Graubner, Yountville, CA

Charles Heinrichs, Yreka, CA

Linda Freeman, Yuba City, CA

Ashley Millard, Yuba City, CA

Norm Wilmes, Yuba City, CA

Gilbert Crabtree, Yucaipa, CA

Lundi Belleau, Yucca Valley, CA

Renaldo Gonzalez, Yucca Valley, CA

Darlene Morris, Yucca Valley, CA

Ardis Breslauer, CA

Yasmin Chitty, CA

Sophie Ciurlik Rittenbaum, CA

Gary Connaught, CA

Kim Ferlazzo, CA

Hope Hendricks, CA

Elizabeth Lehr, CA

Alvaro Reyes, CA

Sharon Steuer, CA

Alejandra Tolley, CA

James Yonts, CA

Morgan Folger, Denver, CO

Doug Flack, New York, NY

David Rauenzahn, Portland, OR

Rebecca Brown, Merion Station, PA

Michelle Barbour, Bullard, TX



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

November 30th, 2023

**Re: Petition to Modify CA Marine Protected Area Network to Enhance Protections for California's Most Resilient Kelp Forests; Petition to Increase Level of Protection and Streamline Enforcement for Several California State MPAs**

Dear President Sklar and Honorable Commissioners,

From the foothills of the Sierras to the seaside of the Central Coast, Californians care about our ocean and the life that calls it home. That's why we are submitting the attached 7,549 signatures in support of our petitions for rulemaking in the Decadal Management Review adaptive management process.

Each of the 7,549 people signed the following letter:

*Dear Governor Newsom,*

*California's coastline is home to stunning beaches, amazing wildlife, and is a true treasure for everyone who lives in or visits our state. That's why we've invested in protecting this ocean heritage through the creation of our state network of marine protected areas. Just like state parks on land, these areas help protect and restore ocean life.*

*Now we have an opportunity to strengthen this network through the Decadal Management Review. I urge you to use this process to advance your important goal of protecting 30% of our state waters by 2030. Specifically, I urge you to expand the network to protect the state's last remaining kelp forests, critical homes to fish and sea otters, and to strengthen existing areas that don't yet provide high levels of protection for ocean life.*

*With your leadership, California can expand this network of ocean parks to create a brighter future for our state's ocean life and continue to lead the country in ocean conservation.*

*Sincerely,*

By expanding the state's MPA network to better protect areas of stable kelp and by strengthening protections for areas not currently achieving their conservation outcomes due to weak or confusing regulations, the state can help our coasts adapt and thrive in the face of rising temperatures and emerging threats.

With your leadership, we can create a better future for California's coastal ecosystems and the wildlife that calls them home.

Sincerely,

Laura Deehan  
Director  
Environment California  
Environment California Research & Policy Center



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Betty Canter, Agoura Hills, CA  
Cathy Crum, Agoura Hills, CA  
Diane King, Agoura Hills, CA  
Tamara Lesser, Agoura Hills, CA  
Brian Jeffery, Agouanga, CA  
Amber Bales, Alameda, CA  
John Brooks, Alameda, CA  
Barbara Cone, Alameda, CA  
Zachary Gray, Alameda, CA  
Mike Kehl, Alameda, CA  
Angie Klein, Alameda, CA  
Andre Kruglikov, Alameda, CA  
Brian J McGuire, Alameda, CA  
Andrew Mueckenberger, Alameda, CA  
Alexandra Mummery, Alameda, CA  
Jack Rafferty, Alameda, CA  
Gina Rivera, Alameda, CA  
Barbara Snethen [REDACTED] Alameda, CA  
James Stehr, Alameda, CA  
Joshua Summit, Alameda, CA  
Kathryn Warner, Alameda, CA  
Ehren Mierau, Alamo, CA  
Sandra Beckley, Albany, CA  
Linda Berkowitz, Albany, CA  
Susan Burr, Albany, CA  
Bart Grossman, Albany, CA  
Tami Jordan, Albany, CA  
Raymond Neutra, Albany, CA  
Paula Rini, Albany, CA  
Steven Schultz, Albany, CA

Kym Sterner, Albany, CA  
Michael Sullivan, Albany, CA  
Araceli Aviles, Alhambra, CA  
Cindy Coty, Alhambra, CA  
Lynda Harris, Alhambra, CA  
Joseph Manza, Alhambra, CA  
John Perez, Alhambra, CA  
Alec Taratula, Alhambra, CA  
Annetta Bettis, Aliso Viejo, CA  
Andrea Bonnett, Altadena, CA  
Jason Capell, Altadena, CA  
Patrick Ela, Altadena, CA  
Andre Ettinger, Altadena, CA  
Beth Herndobler, Altadena, CA  
Joan Kahn, Altadena, CA  
Althea Kennedy, Altadena, CA  
Carol Lachata, Altadena, CA  
Linda Nishio, Altadena, CA  
Julie Parker, Altadena, CA  
Allan Wasserman, Altadena, CA  
Christina Imhoof, An Diego, CA  
Bruce Bluestein, Anaheim, CA  
Drew Cartwright, Anaheim, CA  
Thuan Do, Anaheim, CA  
Robert Jansen, Anaheim, CA  
Charles Richmond, Anaheim, CA  
Michelle Smith, Anaheim, CA  
Natalie Blasco, Anderson, CA  
Donna Crane, Anderson, CA  
lynmari calabi, Angwin, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sharon Lieberman, Annapolis, CA  
Jessica Mitchell-Shihabi, Antelope, CA  
Shirene Saunby, Antelope, CA  
Lindsey Kalfsbeek, Antioch, CA  
Bernadine Sequeira, Antioch, CA  
James Alfred Smith, Jr., Antioch, CA  
Stanley Hodge, Apple Valley, CA  
Norbert Benecke, Aptos, CA  
LeAnn Bjelle, Aptos, CA  
Katherine Doctor, Aptos, CA  
Michele Faia, Aptos, CA  
Jane Goddard, Aptos, CA  
Jeanne Lance, Aptos, CA  
Alan Schenck, Aptos, CA  
Edward Shapiro, Aptos, CA  
Denis Elliott, Arcadia, CA  
Jason Park, Arcadia, CA  
Jeanne Roberts, Arcadia, CA  
Mikal Baker, Arcata, CA  
Connie Lindgren, Arcata, CA  
Sophie Rocheleau, Arcata, CA  
Jerry McNamara, Arnold, CA  
Brian Harris, Arroyo Grande, CA  
Linda Kohler-Trott, Arroyo Grande, CA  
Landon Neustadt, Arroyo Grande, CA  
Joseph Read, Arroyo Grande, CA  
Gregory Ross, Arroyo Grande, CA  
Thomas Tucker, Arroyo Grande, CA  
Corinne Huckaby, Atascadero, CA  
Scott Burgess, Atascadero, CA

Ellen Evans, Atascadero, CA  
John Farhar, Atascadero, CA  
Patti Frey, Atascadero, CA  
Kelly Martin, Atherton, CA  
James Neupert, Atherton, CA  
Jena Norton, Atwater, CA  
Marilyn Barthelow, Auburn, CA  
Caralee Clarke, Auburn, CA  
Roxanne Hill, Auburn, CA  
David Hooper, Azusa, CA  
Solomon Pulgar, Azusa, CA  
Roger Anderson, Bakersfield, CA  
Matthew Barajas, Bakersfield, CA  
Jim Carnal, Bakersfield, CA  
Caryn Cowin, Bakersfield, CA  
Richard Reed, Bakersfield, CA  
Yolanda Berumen, Baldwin Park, CA  
Jesse Calderon, Baldwin Park, CA  
Cherilyn Cibelli, Beaumont, CA  
Mohamed Chahine, Bell Gardens, CA  
Yazmin Gonzalez, Bellflower, CA  
Jason Nolasco, Bellflower, CA  
Shiela Cockshott, Belmont, CA  
Giovannina Fazio, Belmont, CA  
Valerie Gould, Belmont, CA  
Kimberly Knapp, Belmont, CA  
Tracy Molyneux, Belmont, CA  
Robert Sharp, Belmont, CA  
Angela Gantos, Belvedere Tiburon, CA  
Barbara Meislin, Belvedere Tiburon, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sandra Wolfe, Belvedere Tiburon, CA

Nancy Phillips, Ben Lomond, CA

Dorothy Renaud, Ben Lomond, CA

Raf Strudley, Ben Lomond, CA

Colleen Walter, Ben Lomond, CA

Judith Amlin, Benicia, CA

Cathy Bennett, Benicia, CA

Peter Bray, Benicia, CA

Dannys Cody, Benicia, CA

Joni Grisham, Benicia, CA

Nancy Lund, Benicia, CA

Twila Newey, Benicia, CA

Marylee Parr, Benicia, CA

Christian Phillips, Benicia, CA

Annina Puccio, Benicia, CA

Robert Quarrick, Benicia, CA

Jessica Smith, Benicia, CA

Mimi Abers, Berkeley, CA

Inger Acking, Berkeley, CA

Stephen Alpert, Berkeley, CA

Pamela Baird, Berkeley, CA

Robert Baird, Berkeley, CA

Karl Battenbowman, Berkeley, CA

James Blakly, Berkeley, CA

Lois Brubeck, Berkeley, CA

Nancy Carleton, Berkeley, CA

Eileen Cohen, Berkeley, CA

Craig Collins, Berkeley, CA

Alexandra Crisafulli, Berkeley, CA

Janis Dairiki, Berkeley, CA

Anya Davis, Berkeley, CA

Richard Entenman, Berkeley, CA

Christopher Evans, Berkeley, CA

Hyacinth Fleming, Berkeley, CA

Ellen Franzen, Berkeley, CA

Rachel Gordon, Berkeley, CA

Martha Griswold, Berkeley, CA

Stefanie Guynn, Berkeley, CA

Doug Hamilton, Berkeley, CA

Mary Harte, Berkeley, CA

Curran Honorah, Berkeley, CA

Holly Howard, Berkeley, CA

Marjory Keenan, Berkeley, CA

Betsy Kelly, Berkeley, CA

Morgan Lambert, Berkeley, CA

Catherine Lerza, Berkeley, CA

Alex Madonik, Berkeley, CA

Robert Magarian, Berkeley, CA

Rebecca Meyer, Berkeley, CA

Ann Myers, Berkeley, CA

Jaleh Niazi, Berkeley, CA

Kaveh Niazi, Berkeley, CA

Jonathan Packman, Berkeley, CA

Kristine Panik, Berkeley, CA

Heather Pierce, Berkeley, CA

Janet Ramsay, Berkeley, CA

Catherine Rauch, Berkeley, CA

Janette Reid, Berkeley, CA

Rachel Resnikoff, Berkeley, CA

Anthony Rhodes, Berkeley, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Bob Schildgen, Berkeley, CA

Sandra Smith, Berkeley, CA

Lenore Sorensen, Berkeley, CA

michael sullivan, Berkeley, CA

Debbie Tenenbaum, Berkeley, CA

Timothy Volz, Berkeley, CA

Dandelo Waters, Berkeley, CA

Jonathan Weinstock, Berkeley, CA

Helene Whitson, Berkeley, CA

John Wolfe, Berkeley, CA

Sara Zimmerman, Berkeley, CA

Lori Ginsburg, Beverly Hills, CA

Beverly Harris, Beverly Hills, CA

Ilene Proctor, Beverly Hills, CA

Trudie Haven, Big Bear City, CA

Valerie Hart, Big Pine, CA

Marianne Brettell-Vaughn, Bishop, CA

Michael Harris, Bodega Bay, CA

Tina Ann, Bolinas, CA

Betsyann Gallagher, Bolinas, CA

Sean Thackrey, Bolinas, CA

Vivian Sherrill, Bonita, CA

Ed Atkins, Boulder Creek, CA

Moira Bischoff, Boulder Creek, CA

Trudi James, Boulder Creek, CA

Ray Schwarz, Boulder Creek, CA

Kathryn St. John, Boulder Creek, CA

Jack Kline, Brentwood, CA

Chris Zahnd, Brentwood, CA

Stephanie Glatt, Buellton, CA

Jennifer Jerlstrom, Buena Park, CA

Jessica Likens, Buena Park, CA

Cathy Biermann, Burbank, CA

Sandra Christopher, Burbank, CA

Ryan Davis, Burbank, CA

Katyana Farzanrad, Burbank, CA

Jennifer Hurdle, Burbank, CA

Tyson Martin, Burbank, CA

Gina Richardson, Burbank, CA

Rosalie Salvato, Burbank, CA

Gilbert Saucedo, Burbank, CA

Lucinda Walker, Burbank, CA

Kenneth Aron, Burlingame, CA

Jeffrey Krolik, Burlingame, CA

Lara McDonald, Burlingame, CA

Kathryn Morton, Burlingame, CA

Laura Somers, Burlingame, CA

Judy Boeken, Calabasas, CA

Vivian Deutsch, Calabasas, CA

Claude Duss, Calabasas, CA

Veronica Pepe, Calabasas, CA

Kalyna Snylyk, Calabasas, CA

Terry Spellman, California City, CA

David Burtis, Calistoga, CA

Martha Casselman, Calistoga, CA

Scott Hester, Calistoga, CA

Susan Beil, Camarillo, CA

Nancy Borelli, Camarillo, CA

Catherine Burriss, Camarillo, CA

Carol Cressy, Camarillo, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cherie Garrett, Camarillo, CA  
Larry Gassan, Camarillo, CA  
Deidre Leonard, Camarillo, CA  
Carla Marting, Camarillo, CA  
Jerami Prendiville, Camarillo, CA  
Charlie Tetoni, Camarillo, CA  
Ann Walker, Camarillo, CA  
Ted Key, Cambria, CA  
Linda Kierce, Cambria, CA  
Richard Shepard, Cambria, CA  
Lena Fine, Campbell, CA  
Barbara Mason, Campbell, CA  
Anne Swanson, Campbell, CA  
Tony Vega, Campbell, CA  
Mark Giordani, Canoga Park, CA  
Debra Moss, Canoga Park, CA  
Barbara Dinius, Canyon Country, CA  
Yrineo Vasquez, Canyon Country, CA  
Ben Brucker, Capistrano Beach, CA  
John Glina, Capitola, CA  
Edith Leni, Capitola, CA  
Dana Herman, Cardiff, CA  
William Stern, Cardiff, CA  
Matt Bender, Cardiff by the Sea, CA  
Suzanne Mindlin, Cardiff By The Sea, CA  
Nance Robertson, Cardiff by the Sea, CA  
Lisa Adamson, Carlsbad, CA  
Shawna Bader, Carlsbad, CA  
Judy Burzell, Carlsbad, CA  
Chihwu Chang, Carlsbad, CA

Gerald Good, Carlsbad, CA  
Kendra Haddock, Carlsbad, CA  
Matthew Huber, Carlsbad, CA  
Luis Jaramillo, Carlsbad, CA  
Kevin Krause, Carlsbad, CA  
Phyllis Lackey, Carlsbad, CA  
ben steen, Carlsbad, CA  
Greg Thomsen, Carlsbad, CA  
Catherine Valadez, Carlsbad, CA  
Damon Anderson, Carmel, CA  
John Hall, Carmel, CA  
Diana North, Carmel, CA  
Rosalie Pinkert, Carmel, CA  
judi zaches, Carmel, CA  
Sheila Sheppard, Carmel By The Sea, CA  
Herbert Aarons, Carmel Valley, CA  
Janis Wilson-Pavlik, Carmel Valley, CA  
Elizabeth Adan, Carmichael, CA  
William Rasmussen, Carmichael, CA  
Jo Souvignier, Carmichael, CA  
Karen Taylor, Carmichael, CA  
Jack Tolomei, Carmichael, CA  
Jill Vanneman, Carmichael, CA  
mary vollstedt, Carmichael, CA  
Roxanne Coke, Carpinteria, CA  
William Hornung, Carpinteria, CA  
Gail Marshall, Carpinteria, CA  
Amy Mcdonald, Carpinteria, CA  
Linda Reimel, Carpinteria, CA  
Scott Van Fossen, Carpinteria, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Glen Deardorff, Castro Valley, CA  
Julie Greenfield, Castro Valley, CA  
Sue Hall, Castro Valley, CA  
Pati Jio, Castro Valley, CA  
Harriet Skelly, Castro Valley, CA  
Arthur Squillante, Castro Valley, CA  
Barbara Harper, Castroville, CA  
John Hill, Castroville, CA  
Armando MacMillan, Castroville, CA  
Phillip Cripps, Cathedral City, CA  
Anne Gannon, Cathedral City, CA  
Janis Michaels, Cathedral City, CA  
Wallace Rhine, Cazadero, CA  
Eric Hironymous, Cedarville, CA  
Marie Perry, Ceres, CA  
Meredith Cox, Cerritos, CA  
James Lindgren, Cerritos, CA  
Patti Boniface, Chatsworth, CA  
Alejandra Castro, Chatsworth, CA  
Miguel Loayza, Chatsworth, CA  
Binh Tang, Chatsworth, CA  
Barbara Wasserman, Chatsworth, CA  
Mary Caulfield, Chicago Park, CA  
Garrett Alden, Chico, CA  
Valerie Fannin, Chico, CA  
Dee Randolph, Chico, CA  
Abigail Rizzo, Chico, CA  
Sonya Rose, Chico, CA  
Linda Sheppard, Chico, CA  
Kate Transchel, Chico, CA

Dale Beaver, Chula Vista, CA  
Denise Berrian, Chula Vista, CA  
John Brown, Chula Vista, CA  
Rita Clement, Chula Vista, CA  
Alfa Santos, Chula Vista, CA  
David Sorce, Chula Vista, CA  
John Teevan, Chula Vista, CA  
Susana Vega, Chula Vista, CA  
Cari Chenkin, Citrus Heights, CA  
Karen and Edward Osgood, Citrus Heights, CA  
Aaron Shoup, Citrus Heights, CA  
Robert Blackey, Claremont, CA  
Christopher Hayes, Claremont, CA  
Steven Hoelke, Claremont, CA  
John Maher, Claremont, CA  
Cheryllynne Ofstedahl, Claremont, CA  
Laurel Tucker, Claremont, CA  
Marsha Tudor, Claremont, CA  
Erica Tyron, Claremont, CA  
Victoria Verches, Claremont, CA  
Patricia Goodson, Clearlake Oaks, CA  
John Kwiatkowski, Cloverdale, CA  
Kim Peterson, Cloverdale, CA  
Dolores Amato, Clovis, CA  
Tara Hagen, Clovis, CA  
Thomas Kaschak, Clovis, CA  
Diane Hestich, Colton, CA  
Fred Wright, Colton, CA  
Mindy Alegria, Concord, CA  
Stephanie Clark, Concord, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan King, Concord, CA  
Sheri Kuticka, Concord, CA  
Robert Larsen, Concord, CA  
Paul Lowry, Concord, CA  
James R Monroe, Concord, CA  
Nancy Pratt, Concord, CA  
Cindy Sundberg, Concord, CA  
Anne Spesick, Cool, CA  
Jennifer Artunian, Corona, CA  
Lisa Laflame, Corona, CA  
Linda Oeth, Corona del Mar, CA  
Tad Sullivan, Corona del Mar, CA  
Sanja Dimitrijevic, Coronado, CA  
Elizabeth Luning, Corralitos, CA  
Ronald Gremban, Corte Madera, CA  
Jennifer Lawson, Corte Madera, CA  
Abigail Millikan States, Corte Madera, CA  
Rachelle Cox, Costa Mesa, CA  
Hieu Dang, Costa Mesa, CA  
Sharon Daniel, Costa Mesa, CA  
Victoria Gagniere, Costa Mesa, CA  
Kathlyn Grabenstein, Costa Mesa, CA  
Jennifer Greenwalt, Costa Mesa, CA  
Rickie Moore, Costa Mesa, CA  
Kim Nero, Costa Mesa, CA  
Lisa Piner, Costa Mesa, CA  
Lizzie Vierra, Costa Mesa, CA  
Janice Emery, Cotati, CA  
Jane Lyon, Cotati, CA  
R Brancheau, Covina, CA

Wendy Monterrosa, Covina, CA  
Angela Park, Covina, CA  
Sandy Williams, Covina, CA  
April Quigley, Crescent City, CA  
Ronald Thompson, Crescent City, CA  
Susannah Baxendale, Culver City, CA  
Thomas Carlton, Culver City, CA  
Jill Davine, Culver City, CA  
Gwendoline Gansky, Culver City, CA  
Vernette Griffee, Culver City, CA  
Walter Lamb, Culver City, CA  
Andrew Meyer, Culver City, CA  
Patricia Morgan, Culver City, CA  
Chris Nevil, Culver City, CA  
Alicia Tan, Culver City, CA  
Anita Thomason, Culver City, CA  
Keil Albert, Cupertino, CA  
Peg Albrets, Cupertino, CA  
Nora Elsokkary, Cupertino, CA  
Wallace Iimura, Cupertino, CA  
Marte Thompson, Cupertino, CA  
Lana Wertz, Cupertino, CA  
Susie Leonard, Cypress, CA  
Noah H, Daly City, CA  
Susan Klingman, Daly City, CA  
Bonnie Miyake, Daly City, CA  
Katya Siguenza, Daly City, CA  
earl west, Daly City, CA  
John Goodman, Dana Point, CA  
Nancy Amini, Danville, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Erlan Bliss, Danville, CA  
Priscilla Rich, Danville, CA  
Catherine Alexander, Davis, CA  
Kristen Douglas, Davis, CA  
Lisa Goldberg, Davis, CA  
Daniel Gusfield, Davis, CA  
Verne Harlan, Davis, CA  
Nancy Hiestand, Davis, CA  
Kathryn Litton, Davis, CA  
Frances McChesney, Davis, CA  
Jack Milton, Davis, CA  
Katherine Muir, Davis, CA  
Donna Russell, Davis, CA  
Rebecca Ryland, Davis, CA  
Penelope Shackelford, Davis, CA  
Timothy Tutt, Davis, CA  
Maryla Wade, Davis, CA  
Arleene Antin, Del Mar, CA  
Jean Balgrosky, Del Mar, CA  
Bruce Bekkar, MD, Del Mar, CA  
Laura Converse, Del Mar, CA  
Lynne Small, Del Mar, CA  
Judy Dotson, Denair, CA  
Clyde Weston, Descanso, CA  
Jacque Carlson, Desert Hot Springs, CA  
Maureen McDonald, Desert Hot Springs, CA  
Nancy Schelling, Desert Hot Springs, CA  
Brian Chen, Diamond Bar, CA  
Marilyn Eng, Diamond Bar, CA  
Jeffrey Jenkins, Diamond Bar, CA

Ruth Buxman, Dinuba, CA  
Sharon Byers, Downey, CA  
Deborah Ross, Duarte, CA  
Sarah Sismondo, Duarte, CA  
Eloise Hamann, Dublin, CA  
Mohan Sakhrani, Dublin, CA  
Robert Baker, Dunlap, CA  
Rev. Will Agee, El Cajon, CA  
Kelley Bishop, El Cajon, CA  
Anna Brzuza, El Cajon, CA  
Christina Hartonczyk, El Cajon, CA  
Meredith Kennedy, El Cajon, CA  
Anna Salvatierra, El Cajon, CA  
Sadie Sullivan-Greiner, El Cajon, CA  
Elizabeth Bone, El Cerrito, CA  
Byron Brown, El Cerrito, CA  
Daniel Elkan, El Cerrito, CA  
Emiliano Gomez, El Cerrito, CA  
Paul Hughes, El Cerrito, CA  
Jan Jones, El Cerrito, CA  
Kin Jung, El Cerrito, CA  
Judith Libow, El Cerrito, CA  
Carol Long, El Cerrito, CA  
Robert Naumann, El Cerrito, CA  
Judith Rogers, El Cerrito, CA  
Cynthia Williams, El Cerrito, CA  
Tracy Bryan, El Dorado Hills, CA  
Virginia Shaw, El Dorado Hills, CA  
Judd Stark, El Dorado Hills, CA  
David Marsland, El Granada, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Terry Blount, El Segundo, CA  
Alison Hart, El Segundo, CA  
Matthew Lubs, El Segundo, CA  
Stacy Sealock, El Segundo, CA  
Claudia Avila, El Sobrante, CA  
Martha Booz, El Sobrante, CA  
Garth Casaday, El Sobrante, CA  
Katharine Handler, El Sobrante, CA  
Julie Harris, El Sobrante, CA  
Carol Kinser, Elk Grove, CA  
Marta Williams, Elk Grove, CA  
Kathleen Stutz, Elmira, CA  
Amanda Caskey, Emeryville, CA  
Claudia Garcia, Emeryville, CA  
Maia Orr, Emeryville, CA  
Vijaya Rogers, Emeryville, CA  
Kimberley Sevcik, Emeryville, CA  
Elizabeth Staton, Emeryville, CA  
Cheryl Alexander, Encinitas, CA  
Cathy Bacquet, Encinitas, CA  
Brett Colby, Encinitas, CA  
Brian Collins, Encinitas, CA  
Caleb Fitzpatrick, Encinitas, CA  
Devin Frei, Encinitas, CA  
Victor Hernandez, Encinitas, CA  
Shawn Johnson, Encinitas, CA  
William Paxton, Encinitas, CA  
Eric Pence, Encinitas, CA  
Sheila Smith, Encinitas, CA  
Steve White, Encinitas, CA

Lucy Hart, Encino, CA  
Dale Crawford, Escondido, CA  
Nancy Gangi, Escondido, CA  
Ken Sanford, Escondido, CA  
Andy Tomsy, Escondido, CA  
Kristi Wilson, Escondido, CA  
Delight Wisniewski, Escondido, CA  
Rena Zaman-Zade, Escondido, CA  
Melissa Birch, Eureka, CA  
patricia kanzler, Eureka, CA  
Gina Ness, Eureka, CA  
Mary Schweickert, Eureka, CA  
Susan Tatro, Eureka, CA  
Beti Webb Trauth, Eureka, CA  
Geraldine Card, Exeter, CA  
Melissa Christopher, Fair Oaks, CA  
Brian Mcclintock, Fair Oaks, CA  
Teresa Rauschkolb, Fair Oaks, CA  
Blair Reynolds, Fair Oaks, CA  
Kathleen Jackson, Fairfax, CA  
Aria Sternik, Fairfax, CA  
Sagar Wanaselja, Fairfax, CA  
William Lane, Fairfield, CA  
Adriana Llamas, Fairfield, CA  
Kathleen Morgan, Fallbrook, CA  
Andrea Boone, Felton, CA  
Alice Kelly, Felton, CA  
Pamela Morgan, Felton, CA  
Michelle Alex, Folsom, CA  
Jessica Dardarian, Folsom, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Veronica Mohn, Foothill Ranch, CA

Larry Hanson, Forestville, CA

Thomas Hawkins, Fort Bragg, CA

Lonnie Mathieson, Fort Bragg, CA

Katherine Patterson, Fort Bragg, CA

Kathleen Gause, Fountain Valley, CA

Frances Morrison, Fountain Valley, CA

Kenneth Arnold, Fountain Vly, CA

Mary Brooks, Frazier Park, CA

Susan Schrager, Frazier Park, CA

Gina Jager, Fremont, CA

Michael Maddon, Fremont, CA

Utkarsh Nath, Fremont, CA

Erica Pace, Fremont, CA

Nancy Palmer, Fremont, CA

Adelle Regalia, Fremont, CA

Christopher Ware, Fremont, CA

Jack Whealen, Fremont, CA

Charlotte Alldredge, Fresno, CA

Gerald Bill, Fresno, CA

Michael Bordenave, Fresno, CA

Lynn Campbell, Fresno, CA

Joseph Catania, Fresno, CA

Gilda Cox, Fresno, CA

Elizabeth Fralicks, Fresno, CA

Rosemary Gastelo, Fresno, CA

Robert Glover, Fresno, CA

Yolanda Gomez, Fresno, CA

Nancy McCormick, Fresno, CA

Gayle Mitchell, Fresno, CA

Emily Poulsen, Fresno, CA

Lynda Robinson, Fresno, CA

Walter Ullrich, Fresno, CA

Lowell Young, Fresno, CA

Donna Grampp, Fullerton, CA

Lynn Hoang, Fullerton, CA

Evan McDermit, Fullerton, CA

Colleen Wieghorst, Fullerton, CA

Christine Doyka, Garberville, CA

Ana Gonzalez, Garden Grove, CA

Laurie Kinnings, Garden Grove, CA

Dana May, Garden Grove, CA

Walter Reece, Garden Grove, CA

Suellen Carroll, Garden Valley, CA

Marcella Andrade, Gilroy, CA

Miguel Avila, Gilroy, CA

Mary Ludwick, Gilroy, CA

Jidith Seehafer, Gilroy, CA

Joe Mangiantini, Glen Ellen, CA

Alejandro Artigas, Glendale, CA

Carol Bennett, Glendale, CA

Timothy Brock, Glendale, CA

R. Leslie Choi, Glendale, CA

Michelle Colletti, Glendale, CA

James Grant, Glendale, CA

Dena Guerry Henriquez, Glendale, CA

Elise Kalfayan, Glendale, CA

Valerie Keiser, Glendale, CA

Denise Meyer, Glendale, CA

Faatui Panama, Glendale, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Patricia Pei, Glendale, CA  
Bari Phillips, Glendale, CA  
John Price, Glendale, CA  
Ann Sattenspiel, Glendale, CA  
Jordan Vanderlinde, Glendale, CA  
Laura Flanders, Glendora, CA  
Diana Lozano, Glendora, CA  
Larissa Shen, Glendora, CA  
Dawnielle Burich, Goleta, CA  
Irene Cooke, Goleta, CA  
Martin Henderson, Goleta, CA  
Larry A Kaempf, Goleta, CA  
Jennifer Matthews, Goleta, CA  
Kevin McGarry, Goleta, CA  
Wendy Morgan, Goleta, CA  
Michelle Profant, Goleta, CA  
Z. Reisz, Goleta, CA  
Julie Rodgers, Goleta, CA  
Deborah Williams, Goleta, CA  
Dennis Hammermeister, Granada Hills, CA  
Brook Hall, Granite Bay, CA  
Evette Andersen, Grass Valley, CA  
Kendra Anderson, Grass Valley, CA  
Susanne Bader, Grass Valley, CA  
Ellen Clephane, Grass Valley, CA  
Bonny Davis, Grass Valley, CA  
Anna Drummond, Grass Valley, CA  
John Everett, Grass Valley, CA  
Kathleen Shaffer, Grass Valley, CA  
Mark Toelkes, Grass Valley, CA

Abbie Whitehead, Grass Valley, CA  
Peter Yaholkovsky, Grass Valley, CA  
Daniel Healy, Green Valley Lake, CA  
Courtney Benham, Greenbrae, CA  
patricia klein, Greenbrae, CA  
Dennis McVey, Greenbrae, CA  
Meredith Mill, Greenbrae, CA  
Jill Mistretta, Greenbrae, CA  
DYAN PIKE, Greenbrae, CA  
Benjamin Rowe, Greenbrae, CA  
Joan Smith, Greenbrae, CA  
Kate Lunn, Grover Beach, CA  
Marc Fuller, Guadalupe, CA  
Carlos Madrigal, Hacienda Heights, CA  
Edith Bella, Half Moon Bay, CA  
Irene Madrid, Half Moon Bay, CA  
Christine Olivero, Half Moon Bay, CA  
Wade Painter, Half Moon Bay, CA  
Tim Riley, Half Moon Bay, CA  
L. Watson, Half Moon Bay, CA  
Claire Jones, Hanford, CA  
Nancy Plumer, Harbor City, CA  
Deb B, Hawthorne, CA  
Roberta Barr, Hawthorne, CA  
Bonnie Maloney, Hawthorne, CA  
Rachel Asturias, Hayward, CA  
Elliott Betty, Hayward, CA  
Gregory Fite, Hayward, CA  
Evelyn Gonzalez, Hayward, CA  
Sherman Lewis, Hayward, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Laurie Price, Hayward, CA  
Rev. Jonathan Tan, Hayward, CA  
Bretta Rambo, Healdsburg, CA  
Elizabeth Rue, Healdsburg, CA  
Paula Baeza, Hemet, CA  
Lily Mejia, Hemet, CA  
REBECCA DESMOND, Hercules, CA  
Gloria Evans-Young, Hercules, CA  
Linda Monosmith, Hermosa Beach, CA  
Dency Nelson, Hermosa Beach, CA  
Geri Shapiro, Hermosa Beach, CA  
Julie Knutson, Hesperia, CA  
Shanna Rojas, Hesperia, CA  
Juanita Westberg, Hesperia, CA  
P Perry, Hidden Valley Lake, CA  
Renee O'Neil, Highland, CA  
Robert Vargas, Highland, CA  
Kathleen Callaghan, Hollister, CA  
Monica Sharp, Holtville, CA  
Tina Moody, Hopland, CA  
Paul Barkmeier, Huntington Beach, CA  
Buffie Channel, Huntington Beach, CA  
Carol Comparsi, Huntington Beach, CA  
Laura Davidson, Huntington Beach, CA  
Tim Denton, Huntington Beach, CA  
Vicki Dipaolo, Huntington Beach, CA  
Myrrha Eberly, Huntington Beach, CA  
Kathy Hanson, Huntington Beach, CA  
Beverly Heiberg, Huntington Beach, CA  
Vicki Hughes, Huntington Beach, CA

Meaghan Jones, Huntington Beach, CA  
Mike Kelly, Huntington Beach, CA  
Thaddeus Kopacki, Huntington Beach, CA  
Michael Marr, Huntington Beach, CA  
Michael McMahan, Huntington Beach, CA  
Michael Ozaki, Huntington Beach, CA  
James Preston, Huntington Beach, CA  
Peggy Rosen, Huntington Beach, CA  
Brandon Ross, Huntington Beach, CA  
Fred Schloessinger, Huntington Beach, CA  
Rita Spira, Huntington Beach, CA  
mary tindukasiri, Huntington Beach, CA  
Carol Acosta, Idyllwild, CA  
Jason Leichter, Imperial Beach, CA  
Lindsay Erickson, Indio, CA  
William Heagy, Indio, CA  
Matthew Humphrey, Indio, CA  
Robert Ikehorn, Indio, CA  
Karen Seeberg, Indio, CA  
Sheila Breeding, Inglewood, CA  
Kathleen McConn, Inglewood, CA  
Terri Mckown, Inyokern, CA  
Charlotte Rolle, Ione, CA  
James Beirne, Irvine, CA  
Rosanne Bravo, Irvine, CA  
Jill Dunham, Irvine, CA  
Robert Glasser, Irvine, CA  
Mehdi Jazayeri, Irvine, CA  
Wendy Kleeb, Irvine, CA  
Joseph Lambert, Irvine, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robin Weirich, Irvine, CA

Alexander Acuna, Isla Vista, CA

Dee Leineke, Jackson, CA

Michael Anderson, Jamul, CA

Gillian Parrillo, Kelseyville, CA

Carmela Perez, Kelseyville, CA

Darcy Skarada, Kelseyville, CA

Steve Caramia, Kensington, CA

John Kramer, Kensington, CA

Nicole Bergman, La Canada Flintridge, CA

LouAnne Insprucker, La Canada Flintridge, CA

Nickolaos Mastrodemos, La Canada Flintridge,  
CA

Alison Brett, La Crescenta, CA

Ruth Jones, La Crescenta, CA

Kimberley Moreno, La Crescenta, CA

Ellen Segal, La Crescenta, CA

Linda Wright, La Crescenta, CA

Michael Rodriguez, La Habra, CA

Glenn Jones, La Honda, CA

Nathan Brenner, La Jolla, CA

Sharon Laabs, La Jolla, CA

Michele Lang-Hillyard, La Jolla, CA

Susan Mc Candless, La Jolla, CA

Howard Moss, La Jolla, CA

Dave Paterson, La Jolla, CA

Anita Speier, La Jolla, CA

Elyse Tierney, La Jolla, CA

Joanee Ude, La Jolla, CA

Michael Beam, La Mesa, CA

Sietse Peter Boersma, La Mesa, CA

Robert Buchanan, La Mesa, CA

Christina Jackson, La Mesa, CA

Brenda Thompson, La Mesa, CA

Richard Vestal, La Mesa, CA

Harlan Lebo, La Mirada, CA

David Maraszek, La Mirada, CA

Rodney Mcguire, La Quinta, CA

Claudia Monahan, La Quinta, CA

Rhonda Oliver, La Quinta, CA

Thomas McVay, Ladera Ranch, CA

Aaron Chan, Lafayette, CA

Sakti Das, Lafayette, CA

S Herold, Lafayette, CA

Elsa Ramos, Lafayette, CA

Alice Stauffer, Lafayette, CA

Patricia Appel, Laguna Beach, CA

Stacy Cornelius, Laguna Beach, CA

Daniel Haspert, Laguna Beach, CA

Adam Kaplan, Laguna Beach, CA

Robert Reed, Laguna Beach, CA

Leif Trondsen, Laguna Beach, CA

Margaret White, Laguna Beach, CA

Susan Wood, Laguna Beach, CA

Connie Loveland, Laguna Hills, CA

Phyllis Roberts, Laguna Hills, CA

Steven Allison, Laguna Niguel, CA

Suzanne Fliszar, Laguna Niguel, CA

Karyn Parvis, Laguna Niguel, CA

Lauren Linda, Laguna Woods, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kevin O'Brien, Laguna Woods, CA

Sandra Van Horn, Laguna Woods, CA

David Reddy, Lake Arrowhead, CA

Richard Bejarano, Lake Elsinore, CA

Charles Decelles, Lake Elsinore, CA

Sean Brien, Lake Forest, CA

Bruce Cook, Lake Forest, CA

Bonnie Coomes, Lake Forest, CA

Shelley Logan, Lake Forest, CA

Darnell Montejano, Lake Forest, CA

Carman Broderick, Lakeport, CA

Patrick Bernardino, Lakeside, CA

Robert L Davenport, Lakewood, CA

Susan Brisby, Lancaster, CA

Patrishia Hodgman, Lancaster, CA

Eric Layton, Larkspur, CA

Rachael Richman, Larkspur, CA

Mona Bourell, Laytonville, CA

Sharon Paltin, Laytonville, CA

Ked Garden, Lemon Grove, CA

Jessica Fleischer, Lincoln, CA

Nicole Fountain, Lincoln, CA

Gail Marculescu, Lincoln, CA

Peggy Galusha, Live Oak, CA

Patricia MacLeod, Livermore, CA

Leo Mara, Livermore, CA

Sally Marone, Livermore, CA

Jerri Mcvicker, Livermore, CA

Stephen Stradling, Livermore, CA

Cindy Lashbrook, Livingston, CA

Elizabeth Eisenbeis, Lodi, CA

Audrey Lee, Lodi, CA

Patricia Maddock, Lodi, CA

Maribeth Ackerman, Lomita, CA

Mary Cook, Lomita, CA

Lise Fillion, Lomita, CA

Wendy Becker, Long Beach, CA

Frederick Cliver, Long Beach, CA

Thomas Crochet, Long Beach, CA

Kurt Cruger, Long Beach, CA

John Diaz, Long Beach, CA

Vanessa Dolan, Long Beach, CA

Mary Flint, Long Beach, CA

Debbie Flores, Long Beach, CA

Cheryl Follett, Long Beach, CA

Tamra Goris, Long Beach, CA

William Harte, Long Beach, CA

Genie Ideman, Long Beach, CA

Gail Karn, Long Beach, CA

Andrew Kort, Long Beach, CA

Gene Kumagai, Long Beach, CA

David Means, Long Beach, CA

Janmei Murdock, Long Beach, CA

Michsel Newey, Long Beach, CA

Greg Perkins, Long Beach, CA

Gail Powers, Long Beach, CA

Stanley Seeman, Long Beach, CA

Lance Smith, Long Beach, CA

Mark Sullivan, Long Beach, CA

Ryan Tilke, Long Beach, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Raymond Kraft, Loomis, CA

Sandy Friedman, Los Alamitos, CA

Tamara Madison, Los Alamitos, CA

Janice Apol, Los Altos, CA

Linda Brummer, Los Altos, CA

Gloria Dralla, Los Altos, CA

Linnea F, Los Altos, CA

Tracy Gibbons, Los Altos, CA

Kinshuk Govil, Los Altos, CA

Isabel Lee, Los Altos, CA

Jill Stone, Los Altos, CA

Leslie Abbott, Los Angeles, CA

Asad Abidi, Los Angeles, CA

Scott Acord, Los Angeles, CA

Marsha Alperin, Los Angeles, CA

Ernesto Alvarez, Los Angeles, CA

Richard Alvidrez, Los Angeles, CA

Stan Alvidrez, Los Angeles, CA

Raul Anorve, Los Angeles, CA

Raymond Aramburu, Los Angeles, CA

Thais Arata, Los Angeles, CA

Claudine Armand, Los Angeles, CA

Erika Armin, Los Angeles, CA

Lori Avalos, Los Angeles, CA

Soraya Barabi, Los Angeles, CA

Ann Bein, Los Angeles, CA

Linda Benjamin, Los Angeles, CA

Nancy Berman, Los Angeles, CA

Adam Bernstein, Los Angeles, CA

Mike Bievenouer, Los Angeles, CA

Vicki Bingo, Los Angeles, CA

Rollin Blanton, Los Angeles, CA

Paula Block-Levor, Los Angeles, CA

Jonathand Bogdanove, Los Angeles, CA

Daniel Boland, Los Angeles, CA

Deirdre Boland, Los Angeles, CA

David Bottrell, Los Angeles, CA

Julia Boyd, Los Angeles, CA

Mark Bramhall, Los Angeles, CA

Susan Brenner, Los Angeles, CA

Barbara Broide, Los Angeles, CA

Marcello Bue, Los Angeles, CA

Robert Burk, Los Angeles, CA

Thomas Cahill, Los Angeles, CA

Lisa Carloss, Los Angeles, CA

Melissa Casey, Los Angeles, CA

Victor Citrin, Los Angeles, CA

Jacob Combs, Los Angeles, CA

Steven Curtis, Los Angeles, CA

Sandra Del Castillo, Los Angeles, CA

Frank Devlin, Los Angeles, CA

Garry Diamond, Los Angeles, CA

Vicki Dipietro, Los Angeles, CA

Lance Dodes, Los Angeles, CA

Isabelle Du Soleil, Los Angeles, CA

Jan Ducker, Los Angeles, CA

Scott Dunfrund, Los Angeles, CA

Connie Eakes, Los Angeles, CA

Chris Eaton, Los Angeles, CA

Frederick Echeverria, Los Angeles, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joe Eckre, Los Angeles, CA  
Susan Estrella, Los Angeles, CA  
Dominick Falzone, Los Angeles, CA  
Alexander Fierro-Clarke, Los Angeles, CA  
Sean Foley, Los Angeles, CA  
Robert Frcek, Los Angeles, CA  
Cynthia Freeman, Los Angeles, CA  
Elly Fry, Los Angeles, CA  
Kristina Fukuda, Los Angeles, CA  
Leslie Fung, Los Angeles, CA  
Kay Gallin, Los Angeles, CA  
Eugene Garvin, Los Angeles, CA  
Terri Gedo, Los Angeles, CA  
Chelsea Gilmore, Los Angeles, CA  
Mary Glazer, Los Angeles, CA  
Prisca Gloor, Los Angeles, CA  
Jan Goldstein, Los Angeles, CA  
Beth Goode, Los Angeles, CA  
Luna Gooding, Los Angeles, CA  
Carol Gordon, Los Angeles, CA  
Andrea Grano, Los Angeles, CA  
Cheryl Guerbaoui, Los Angeles, CA  
Megan Hanson, Los Angeles, CA  
Matthew Harrington, Los Angeles, CA  
William Hartung, Los Angeles, CA  
Mary Herbener, Los Angeles, CA  
Julie Hermelin, Los Angeles, CA  
Jim Hillin, Los Angeles, CA  
Deborah Holcomb, Los Angeles, CA  
Carla Holguin, Los Angeles, CA

Steffeny Holtz, Los Angeles, CA  
Merri Huang, Los Angeles, CA  
Cynthia Hudley, Los Angeles, CA  
Melissa Hunt, Los Angeles, CA  
Faisal Hussain, Los Angeles, CA  
Shigeyo Hyman, Los Angeles, CA  
Lara Ingraham, Los Angeles, CA  
Matthew Jablin, Los Angeles, CA  
Michelle Jackino, Los Angeles, CA  
Angie Johnson, Los Angeles, CA  
James Johnson, Los Angeles, CA  
Marlene Josephs, Los Angeles, CA  
Michelle Kawata, Los Angeles, CA  
Kaija Keel, Los Angeles, CA  
Aeolan Kelly, Los Angeles, CA  
Jon Kinnally, Los Angeles, CA  
Julie Klabin, Los Angeles, CA  
Rebecca Klarin, Los Angeles, CA  
Ann Kowaleski, Los Angeles, CA  
Kevin Kraus, Los Angeles, CA  
Francine Kubrin, Los Angeles, CA  
Anita Kuhn, Los Angeles, CA  
lyn kupferman, Los Angeles, CA  
Jean Lace, Los Angeles, CA  
Diane Lamont, Los Angeles, CA  
Edward Landler, Los Angeles, CA  
Jacob Lang, Los Angeles, CA  
Patrice Laponce, Los Angeles, CA  
Seth Laursen, Los Angeles, CA  
Terrie Lavery, Los Angeles, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Linda Leckart, Los Angeles, CA

Daniel Ledesam, Los Angeles, CA

Deborah Levine, Los Angeles, CA

Janice Levine, Los Angeles, CA

Paula Levy, Los Angeles, CA

Tracey Levy, Los Angeles, CA

Marie Lewis, Los Angeles, CA

Helena Lipstadt, Los Angeles, CA

Robin Long, Los Angeles, CA

Alexandria Luostari, Los Angeles, CA

Anthony M Ramey, Los Angeles, CA

Arnold Magid, Los Angeles, CA

James Mahan, Los Angeles, CA

Jennifer Mandel, Los Angeles, CA

Ann Marable, Los Angeles, CA

Tina Markowe, Los Angeles, CA

Linda Martinez, Los Angeles, CA

Casee Maxfield, Los Angeles, CA

Blythe Mayne, Los Angeles, CA

Patrica Mcanally, Los Angeles, CA

Karen McCaw, Los Angeles, CA

Shereen McDade, Los Angeles, CA

Scott Mckinsey, Los Angeles, CA

Gail McMullen, Los Angeles, CA

Robert Meier, Los Angeles, CA

Myron Meisel, Los Angeles, CA

Barbara Mesney, Los Angeles, CA

Jeremy Miller, Los Angeles, CA

John Miller, Los Angeles, CA

Eddie Mirman, Los Angeles, CA

Maria Molund, Los Angeles, CA

Curtis Mortenson, Los Angeles, CA

Meg Murphy, Los Angeles, CA

Joan Murray, Los Angeles, CA

Anna Narysheva, Los Angeles, CA

Anthony Navarrete, Los Angeles, CA

Winifred Neisser, Los Angeles, CA

Carol Ng, Los Angeles, CA

James Nicholas, Los Angeles, CA

Nan Norris, Los Angeles, CA

Krister Olsson, Los Angeles, CA

Frank Ortiz, Los Angeles, CA

Michelle Pazer, Los Angeles, CA

David Pelka, Los Angeles, CA

John Perry, Los Angeles, CA

Michael Price, Los Angeles, CA

Louis Priven, Los Angeles, CA

Mark Rachki, Los Angeles, CA

Luvh Rakhe, Los Angeles, CA

Nina Richmond, Los Angeles, CA

Jeff Richter, Los Angeles, CA

Merete Rietveld, Los Angeles, CA

Candace Rocha, Los Angeles, CA

Martha Ronk, Los Angeles, CA

Valerie Rose, Los Angeles, CA

Brandon Ruiz, Los Angeles, CA

Dalia Salgado, Los Angeles, CA

Nina Savill, Los Angeles, CA

Darby Saxbe, Los Angeles, CA

Jeffrey Sayers, Los Angeles, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Alisha Seaton, Los Angeles, CA

Lisa Sergy, Los Angeles, CA

Eric Shabsis, Los Angeles, CA

Mariam Shah-Rais, Los Angeles, CA

Theodore Shapiro, Los Angeles, CA

Susan Shaughnessy, Los Angeles, CA

A.F. Shayne, Los Angeles, CA

Rick Siegel, Los Angeles, CA

Marc Silverman, Los Angeles, CA

Elizabeth Singleton, Los Angeles, CA

Jerry Sisneros, Los Angeles, CA

Erica Smith, Los Angeles, CA

Valeece Smith, Los Angeles, CA

Stanley Stahl, Los Angeles, CA

Paul Steel, Los Angeles, CA

Neal Steiner, Los Angeles, CA

Julie Tan, Los Angeles, CA

Francine Tansey, Los Angeles, CA

Donna Tate, Los Angeles, CA

Cathy Thornburn, Los Angeles, CA

Aja Thrasher, Los Angeles, CA

Glenna Traiger, Los Angeles, CA

Ivy Tran, Los Angeles, CA

Dennis Tufano, Los Angeles, CA

Graham Turner, Los Angeles, CA

Tara Turner, Los Angeles, CA

Mary Urrutia, Los Angeles, CA

Nicholas Vanbrunt, Los Angeles, CA

Alvaro Vega, Los Angeles, CA

Alexandra Ward, Los Angeles, CA

Mack Watson, Los Angeles, CA

Mary Weeks, Los Angeles, CA

Lindsey Weinstein, Los Angeles, CA

Michael White, Los Angeles, CA

Peter White, Los Angeles, CA

Deborah Willis, Los Angeles, CA

Maggie Wineburgh-Freed, Los Angeles, CA

Sidney Winston, Los Angeles, CA

Michael Wolfson, Los Angeles, CA

Lacey Wozny, Los Angeles, CA

Kelly Wright, Los Angeles, CA

Jenny Yamazaki, Los Angeles, CA

Mary Young, Los Angeles, CA

Noah Youngelson, Los Angeles, CA

Allen Zipper, Los Angeles, CA

ALVEN ANDERSEN, Los Banos, CA

Esther Ciprian, Los Banos, CA

Thomas Ferrito, Los Gatos, CA

Marilyn Fuller, Los Gatos, CA

Lisa Gherardi, Los Gatos, CA

Karole Ishida, Los Gatos, CA

Tim Kain, Los Gatos, CA

Brenda Laurel, Los Gatos, CA

Arlene Lightford, Los Gatos, CA

Whitney Parker, Los Gatos, CA

Mark Parrinello, Los Gatos, CA

Peter Bresler, Los Osos, CA

Jacqueline Froehlich-Lheureaux, Los Osos, CA

Lesley McCance, Los Osos, CA

Pamela Morrison, Los Osos, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Judy Madigan, Loyalton, CA  
Samuel Clark, Magalia, CA  
Lucia Castaneda, Malibu, CA  
Deborah Collodel, Malibu, CA  
Marilyn Green, Malibu, CA  
Cliff Selbert, Malibu, CA  
Rob Seltzer, Malibu, CA  
D.G. Sifuentes, Mammoth Lakes, CA  
John Clifford, Manhattan Beach, CA  
Joe Flanagan, Manhattan Beach, CA  
Joanne Hadley, Manhattan Beach, CA  
Marisa Landsberg, Manhattan Beach, CA  
John Miller, Manhattan Beach, CA  
Orlando Aguilar, Manteca, CA  
Rene Cabrera, Manteca, CA  
Kathi Fotinos, Manteca, CA  
Linda Gordin, Manteca, CA  
Pia Baker, Marina, CA  
Henry Bergstresser, Marina, CA  
Colette Erreca-Norris, Marina, CA  
Trudy Goodman, Marina Del Rey, CA  
Leean Lantos, Marina Del Rey, CA  
Steven Mandel, Marina Del Rey, CA  
Margaret Morris, Marina Del Rey, CA  
Cathy Nadell, Marina Del Rey, CA  
Robert Pool, Marina Del Rey, CA  
Donald Newman, Mariposa, CA  
Dianna Mitzner, Markleeville, CA  
Leonard Miller, Martinez, CA  
Margaret Netherby, Martinez, CA

Kris Skow, Martinez, CA  
Robin Hamlin, McKinleyville, CA  
Jimmie Oneal, Meadow Valley, CA  
Kimberly Berryman, Meadow Vista, CA  
Raven Deerwater, Mendocino, CA  
Rob Gallinger, Menifee, CA  
Keith Williams, Menifee, CA  
William Brown, Menlo Park, CA  
Nancy Federspiel, Menlo Park, CA  
Erin Gillett, Menlo Park, CA  
Sam Karp, Menlo Park, CA  
Hunter Lyng, Menlo Park, CA  
Christina McClure, Menlo Park, CA  
Janet Poses, Menlo Park, CA  
Mark Reed, Menlo Park, CA  
Vickie Rozell, Menlo Park, CA  
Suzan Syrett, Menlo Park, CA  
Kyle Vogel, Menlo Park, CA  
Odessa Osby, Merced, CA  
Connie Wright, Merced, CA  
J Trudnich, Midway City, CA  
Larry Bathgate, Mill Valley, CA  
Joslyn Baxter, Mill Valley, CA  
Carl Bidleman, Mill Valley, CA  
Maria Brown, Mill Valley, CA  
Catherine Chute, Mill Valley, CA  
David Donenfeld, Mill Valley, CA  
Diane Goldman, Mill Valley, CA  
Jane Hall, Mill Valley, CA  
Arlene Heitner, Mill Valley, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Nancy Kehoe, Mill Valley, CA  
Ann Lawrence, Mill Valley, CA  
Natalie Lenn, Mill Valley, CA  
Sarah Maddix, Mill Valley, CA  
Antonina Markoff, Mill Valley, CA  
Catherine Moreno, Mill Valley, CA  
Roberta Newman, Mill Valley, CA  
Simon Perkoff, Mill Valley, CA  
Marilyn Price, Mill Valley, CA  
Sherry Reson, Mill Valley, CA  
Daniel Stewart, Mill Valley, CA  
Frank Valone, Mill Valley, CA  
Gary Vanacker, Mill Valley, CA  
Dianna Taylor, Millbrae, CA  
Brenda Rodriguez, Mission Hills, CA  
Timothy Haney, Mission Viejo, CA  
Lorrie Rudolph, Mission Viejo, CA  
Lollie Christner, Modesto, CA  
Amber Eby, Modesto, CA  
Karen Lynas, Modesto, CA  
Derek Scholten, Modesto, CA  
Dennis And Andrea Hopkins, Monrovia, CA  
Donna Alleyne-Chin, Montara, CA  
Sandra McColley, Montclair, CA  
Ruth Alota, Monterey, CA  
Deb Federin, Monterey, CA  
Steven Hall, Monterey, CA  
Lauren Leonarduzzi, Monterey, CA  
Donna Owens, Monterey, CA  
Niccole Tiffany, Monterey, CA

Stephen Vicuna, Monterey Park, CA  
Karen Drake, Montrose, CA  
Cheri Bly, Moorpark, CA  
Patricia Connors, Moorpark, CA  
Christine Holmes, Moorpark, CA  
Kathryn Choudhury, Moraga, CA  
Ashley Coates, Moraga, CA  
Greg Tomlin, Moraga, CA  
Mary West, Moraga, CA  
David DANIEL, Moreno Valley, CA  
Sandra Wilcox, Moreno Valley, CA  
Cynthia Burnham, Morgan Hill, CA  
Paula Diederich, Morgan Hill, CA  
Kathy Farrell, Morgan Hill, CA  
Janet Hagemann, Morgan Hill, CA  
Martin Smallen, Morgan Hill, CA  
Nancy Carter, Morro Bay, CA  
Genevieve Holloway, Morro Bay, CA  
Larry Truesdale, Morro Bay, CA  
Cheryl Parker, Moss Beach, CA  
Denise Phillips, Moss Beach, CA  
Michelle Santy, Moss Beach, CA  
Jim Curland, Moss Landing, CA  
Jennifer Roach, Mount Shasta, CA  
Alice Rogers, Mount Shasta, CA  
Paul Blumenstein, Mountain View, CA  
Judith Butts, Mountain View, CA  
Kermit Cuff, Mountain View, CA  
Bruce England, Mountain View, CA  
Marie Evitt, Mountain View, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Linda Freccia, Mountain View, CA

Diana Hall, Mountain View, CA

Amy Laden, Mountain View, CA

Rachel Loui, Mountain View, CA

Ben Martin, Mountain View, CA

Katherine Rivera, Mountain View, CA

Dinmani Savla, Mountain View, CA

Robert Valenti, Mountain View, CA

Julie Watt, Mountain View, CA

D Cameron Sellar, Murphys, CA

Susan Horne, Murrieta, CA

Anisa Johnson, Murrieta, CA

Kay Lieber, Murrieta, CA

Ana Rial, Murrieta, CA

Anna Starbuck-White, Murrieta, CA

Martha Treckman, Murrieta, CA

Janet Wheeler, Murrieta, CA

Jerrold Baker, Napa, CA

Kathy Bliss, Napa, CA

Jeff Conklin, Napa, CA

Kathy Cramer, Napa, CA

Ellen Gachesa, Napa, CA

Joe Gonzales, Napa, CA

Charesa Harper, Napa, CA

Donna Holt, Napa, CA

Timothy Milos, Napa, CA

Linda Newberry, Napa, CA

Julie Owen, Napa, CA

John Reichel, Napa, CA

Susan Sandler, Napa, CA

Evelyn Trevethan, Napa, CA

Jacob Wolbert, Napa, CA

Moana Moeller, National City, CA

Micki Besancon, Nevada City, CA

Michael Garitty, Nevada City, CA

Scott Howard, Nevada City, CA

Lester Milroy, Nevada City, CA

Glenn Smith, Nevada City, CA

Christine Fisher, Newark, CA

Lyla Diaz, Newbury Park, CA

Chantal Ferguson, Newbury Park, CA

Audrey Greene, Newbury Park, CA

Doug Kingery, Newbury Park, CA

Sylvia Lewis Gunning, Newbury Park, CA

Cindy Stein, Newbury Park, CA

Steve Iverson, Newport Beach, CA

Joyce Meyers, Newport Beach, CA

Vic Paglia, Newport Beach, CA

Dan Rossen, Newport Beach, CA

Shala Shamardi, Newport Beach, CA

Robin Williams, Nicasio, CA

Stephanie Aston, North Hills, CA

Christopher Geukens, North Hills, CA

Natalie Aharonian, North Hollywood, CA

Andrea Dundas, North Hollywood, CA

Steven Meissner, North Hollywood, CA

Fjaere Mooney, North Hollywood, CA

Llyn Parker, North Hollywood, CA

Dennis Brue, Northridge, CA

Randy Harken, Northridge, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Parker, Northridge, CA  
Janis CARROLL, Novato, CA  
Mike Cass, Novato, CA  
Orrin Cook, Novato, CA  
Adrian Fried, Novato, CA  
michael griffin, Novato, CA  
William Hoffman, Novato, CA  
Marisa Hoke, Novato, CA  
Daniel Kemp, Novato, CA  
Mary Mixter, Novato, CA  
Nancy Parker, Novato, CA  
Marianna Riser, Novato, CA  
Maija Schaefer, Novato, CA  
Allan Young, Novato, CA  
Carl Bage, Oak Park, CA  
Paul Kleinbaum, Oak Park, CA  
Enid Miller, Oak Park, CA  
helen conly, Oak View, CA  
Lindsey Goosherst, Oakdale, CA  
Bonnie Thompson, Oakdale, CA  
Scott Amundson, Oakland, CA  
Patrice Anderson, Oakland, CA  
cindy beckley, Oakland, CA  
Thomas Borders, Oakland, CA  
Linda Brandon, Oakland, CA  
Ruth Brousseau, Oakland, CA  
Sarah Cathey, Oakland, CA  
Shelley Charney, Oakland, CA  
Elizabeth Christian, Oakland, CA  
Daniel Clanon, Oakland, CA

Barbara Clark, Oakland, CA  
Karen Clayton, Oakland, CA  
Anne Corcos, Oakland, CA  
Devin Coyle, Oakland, CA  
Joseph Dashiell, Oakland, CA  
Kai Drekmeier, Oakland, CA  
Anya Dubin, Oakland, CA  
Judith Ennis, Oakland, CA  
Nancy Erb, Oakland, CA  
Jean Farooki, Oakland, CA  
Jemima Farwell, Oakland, CA  
Susan Flakus, Oakland, CA  
Marcia Flannery, Oakland, CA  
Jon Floyd, Oakland, CA  
Denise Forant, Oakland, CA  
Dr A G, Oakland, CA  
Kenneth Gibson, Oakland, CA  
John Golding, Oakland, CA  
Joan Gombos, Oakland, CA  
Doug Gwosdz, Oakland, CA  
Henry Harmon, Oakland, CA  
Ann Harvey, Oakland, CA  
Carol Haskell, Oakland, CA  
Karl Heins, Oakland, CA  
Nancy Huneke, Oakland, CA  
Amy Johnson, Oakland, CA  
Christine Kalb, Oakland, CA  
Laakea Laano, Oakland, CA  
Mark Lecker, Oakland, CA  
Cheryl Levin, Oakland, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joseph Maffei, Oakland, CA

Diana Malloy, Oakland, CA

Caephren McKenna, Oakland, CA

Susan Mclean, Oakland, CA

Merrilee Mitchell, Oakland, CA

Sandra Morey, Oakland, CA

Jann Noddin, Oakland, CA

Alicea Osborne, Oakland, CA

Julie Ouellette, Oakland, CA

Nancy Paskowitz, Oakland, CA

Ikaren Payne, Oakland, CA

Catherine Pennington, Oakland, CA

Micaela Pronio, Oakland, CA

Barbara Richmon, Oakland, CA

Karen Riley, Oakland, CA

Carly Ritter, Oakland, CA

Nancy Rowell, Oakland, CA

Gina Sanfilippo, Oakland, CA

Rondi Saslow, Oakland, CA

William Saul, Oakland, CA

Lesley Schultz, Oakland, CA

Judith Smith, Oakland, CA

Leslie Smith, Oakland, CA

Leslie Smith, Oakland, CA

Deborah Song, Oakland, CA

Emily Sparks, Oakland, CA

Gaylen Stirton, Oakland, CA

Laura Tan, Oakland, CA

Leslie Tenney, Oakland, CA

Dena Thaler, Oakland, CA

Nadya Tichman, Oakland, CA

Ruth Tretbar, Oakland, CA

Marge Turngren, Oakland, CA

Virginia Vida, Oakland, CA

Pablo Voitzuk, Oakland, CA

Mary Watkins, Oakland, CA

Sally Weare, Oakland, CA

Jessica Weida, Oakland, CA

Gail Weininger, Oakland, CA

Marie Whidden, Oakland, CA

Patrice Woeppel, Oakland, CA

Aaron Young, Oakland, CA

Margaret Zhou, Oakland, CA

Donald Betts, Oceanside, CA

Alessandra Colfi, Oceanside, CA

Sarah Crooks, Oceanside, CA

Linda Evans, Oceanside, CA

Andrea Ferrari, Oceanside, CA

Holly Gilzow, Oceanside, CA

Charmaine Hicks, Oceanside, CA

Ronnie Huber, Oceanside, CA

Beverly Kanawi, Oceanside, CA

Ronald Mirolla, Oceanside, CA

Barry Ortega, Oceanside, CA

Ivy Pratt, Oceanside, CA

Michael Price, Oceanside, CA

Donna Taylor, Oceanside, CA

Sharon Engel, Ojai, CA

Stephan Foley, Ojai, CA

Joseph Gilbert, Ojai, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cindy Kosinski, Ojai, CA  
Brooke Obrien, Ojai, CA  
Rebecca Windinwood, Ojai, CA  
Valerie Shideler, Olivehurst, CA  
Zahra Mansouri, Olympic Valley, CA  
Kelly Ayers, Ontario, CA  
Kathy Simington, Ontario, CA  
Richard Wiles, Ontario, CA  
Danett Abbott-Wicker, Orange, CA  
Florice Hoffman, Orange, CA  
Ellen Jordan, Orange, CA  
Tammy Vigiletti, Orange, CA  
Nancy Polito, Orangevale, CA  
Lynne Thomson, Orangevale, CA  
Diane Bianchi, Orinda, CA  
Alan Goldhammer, Orinda, CA  
Lucy Henderson, Orinda, CA  
Nancy Henderson, Orinda, CA  
Lynn Kalmar, Orinda, CA  
Lindy Novak, Orinda, CA  
Eileen Taglang, Orinda, CA  
Phil Chandler, Oxnard, CA  
Kim Haley, Oxnard, CA  
Ivan Mendez, Oxnard, CA  
Lauren Mendez, Oxnard, CA  
Maree Penhart, Oxnard, CA  
Jeannie Pollak, Oxnard, CA  
Susan Porteus, Oxnard, CA  
Nancy Bainter, Pacific Grove, CA  
Margaret Goodman, Pacific Grove, CA

Melissa Hutchinson, Pacific Grove, CA  
Celia Stauty Luis, Pacific Grove, CA  
Paul Burkhart, Pacific Palisades, CA  
Josephine Chen, Pacific Palisades, CA  
Tatsinda Doddscohen, Pacific Palisades, CA  
Melanie Green, Pacific Palisades, CA  
Waldemar Kalinowski, Pacific Palisades, CA  
Vienna Nowell, Pacific Palisades, CA  
Gerald Offsay, Pacific Palisades, CA  
Timothy Phan, Pacific Palisades, CA  
Pat Polinger, Pacific Palisades, CA  
Jeanette Ryan, Pacific Palisades, CA  
Cathleen Sands, Pacific Palisades, CA  
Teresa Lang, Pacific Plsds, CA  
Grace Garza, Pacifica, CA  
Paul Spakowski, Pacifica, CA  
Jeremy Aldridge, Pacoima, CA  
Dita . . Â kaliÃ,, Â• , Palm Desert, CA  
Bonnie Bauman, Palm Desert, CA  
Katy Kane, Palm Desert, CA  
Joseph Anatra, Palm Springs, CA  
Elizabeth Ingersoll, Palm Springs, CA  
Bill Munce, Palm Springs, CA  
Michelle Palladine, Palm Springs, CA  
Kathleen Taggart, Palm Springs, CA  
Therese Ryan, Palmdale, CA  
Albert Bivas, Palo Alto, CA  
Jordan Briskin, Palo Alto, CA  
Ana Chou, Palo Alto, CA  
Sue Dinwiddie, Palo Alto, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Madeline Dirado, Palo Alto, CA  
Faith Gibson, Palo Alto, CA  
Christine James, Palo Alto, CA  
Zahra Kassam, Palo Alto, CA  
Nancy Kramer, Palo Alto, CA  
Divanny Lamas, Palo Alto, CA  
Evan Lurie, Palo Alto, CA  
Peter Moffat, Palo Alto, CA  
Thomas Patterson, Palo Alto, CA  
David Perry, Palo Alto, CA  
Jack Pines, Palo Alto, CA  
Margaret Rosenbloom, Palo Alto, CA  
Cindy Siu, Palo Alto, CA  
Robin Benezra, Palos Verdes Peninsula, CA  
Jan Gardner, Palos Verdes Peninsula, CA  
Katherine Greenberg, Palos Verdes Peninsula, CA  
Craig Dawson, Paradise, CA  
Joan Aebi, Pasadena, CA  
Catherine Beauchamp, Pasadena, CA  
Sandra Bendon, Pasadena, CA  
Maria Sol Caro Martini, Pasadena, CA  
Linc Conard, Pasadena, CA  
April Danz, Pasadena, CA  
George Elder, Pasadena, CA  
Laura Fleming, Pasadena, CA  
Robert Gibbs, Pasadena, CA  
Gary Green, Pasadena, CA  
Francisco Ochoa, Pasadena, CA  
Leisa Onzo, Pasadena, CA

Matthew Owen, Pasadena, CA  
Jeremy Polgar, Pasadena, CA  
Charles Roth, Pasadena, CA  
Joseph Salinas, Pasadena, CA  
Erica Spier, Pasadena, CA  
Grayson Torgersen, Pasadena, CA  
Susan Walp, Pasadena, CA  
Eric Beaulieu, Paso Robles, CA  
Gaye Torjusen, Penn Valley, CA  
Tyrone Johnson, Perris, CA  
Rebecca Smith, Perris, CA  
Jeanne Martin, Pescadero, CA  
Elizabeth Ambrosi, Petaluma, CA  
Scott Andrews, Petaluma, CA  
Tom Bornheimer, Petaluma, CA  
Mary Fazekas, Petaluma, CA  
Patti Fink, Petaluma, CA  
Phoenix Giffen, Petaluma, CA  
David Keller, Petaluma, CA  
Rachel Lucine, Petaluma, CA  
Annette Raible, Petaluma, CA  
Wrenn Rittenhouse, Petaluma, CA  
M. Steere, Petaluma, CA  
Jane Vosburg, Petaluma, CA  
Barry Weinzveg, Petaluma, CA  
Justine Zang, Petaluma, CA  
Debra Valenzuela, Pico Rivera, CA  
James Chanin, Piedmont, CA  
John Hardgrove, Piedmont, CA  
Janice Foss, Pinole, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joan Nygaard, Pinole, CA  
Pamela Suess, Pinole, CA  
Marjorie Kearns, Pinon Hills, CA  
janet hergamo, Piru, CA  
Bob Leppo, Pismo Beach, CA  
Lisa Hardesty, Pittsburg, CA  
William Ninde, Pittsburg, CA  
Candy Bowman, Placerville, CA  
David Hess, Placerville, CA  
Mike Rolbeck, Placerville, CA  
Rob Doucette, Playa del Rey, CA  
Gerda Gober, Playa Vista, CA  
Lisa Nelson Colton, Playa Vista, CA  
Karen Castle, Pleasant Hill, CA  
Nathalie Musson, Pleasant Hill, CA  
Shari Riffe, Pleasant Hill, CA  
Marie Silva, Pleasant Hill, CA  
John Yavorsky, Pleasant Hill, CA  
Linda Wong, Pleasanton, CA  
Ken Lake, Pollock Pines, CA  
Linda Watson, Pomona, CA  
Roxann Schaubhut, Pope Valley, CA  
Daniel Vargas, Port Hueneme, CA  
Frances Goodsite, Porter Ranch, CA  
Curtis Miller, Porter Ranch, CA  
Kristi Somers-Kawas, Porter Ranch, CA  
Wanda Salaiz, Porterville, CA  
Malcolm Moore, Portola, CA  
Tracy Sherman, Portola Valley, CA  
Birgitte Moyer, Portola Vally, CA

Mary Callan, Poway, CA  
Laura Flynn, Poway, CA  
Beverly Greene, Poway, CA  
Linda Rhine, Quail Valley, CA  
Faith Strailey, Quincy, CA  
Tammy Bullock, Ramona, CA  
Jeanette Worland, Ramona, CA  
Dale Wright, Ramona, CA  
Karyn Wagman, Rancho Cordova, CA  
Antoinette Anderson, Rancho Cucamonga, CA  
Miriam Baum, Rancho Cucamonga, CA  
Frederick Hamilton, Rancho Cucamonga, CA  
Michael Herbert, Rancho Cucamonga, CA  
Dianna McNair, Rancho Cucamonga, CA  
Vickie Reedy, Rancho Cucamonga, CA  
Laura Saint Martin, Rancho Cucamonga, CA  
Katina Vlastos, Rancho Cucamonga, CA  
Pete Childs, Rancho Mirage, CA  
Richard Gonzales, Rancho Mirage, CA  
John Varga, Rancho Mirage, CA  
Judy Bradford, Rancho Palos Verdes, CA  
Mary Schneider, Rancho Palos Verdes, CA  
Linda Webb, Rancho Palos Verdes, CA  
Kathy Dougherty, Rancho Santa Fe, CA  
Craig Fenech, Rancho Santa Fe, CA  
Allyson Finkel, Rancho Santa Margarita, CA  
Dionne Hofmeister, Rch Cucamonga, CA  
Yvonne Olivares, Rch Cucamonga, CA  
Susan Thompson, Rcho Sta Marg, CA  
Susan Emerson, Redding, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joyce Harris, Redding, CA

James Hastings, Redding, CA

Ann Lougee, Redding, CA

Neal Malmsten, Redding, CA

Andrea Dixon, Redlands, CA

Sean Hagstrom, Redlands, CA

Jayne Miller, Redlands, CA

Rhonda Stanton, Redlands, CA

Tracy Wise, Redlands, CA

Doug Bender, Redondo Beach, CA

Jade Hall, Redondo Beach, CA

Kathleen Jacecko, Redondo Beach, CA

Craig Masuoka, Redondo Beach, CA

Alie Rowen, Redondo Beach, CA

Don Schlossman, Redondo Beach, CA

Dayla Sims, Redondo Beach, CA

Kate Ashley, Redwood City, CA

Juliann Berman, Redwood City, CA

Kerry Boyd, Redwood City, CA

Daryl Carr, Redwood City, CA

Tiki Dare, Redwood City, CA

Lisa Gruman, Redwood City, CA

Jeffrey Hayden, Redwood City, CA

Thalia Lubin, Redwood City, CA

Elyce Melmon, Redwood City, CA

Bruce Storms, Redwood City, CA

John West, Redwood City, CA

Jeff Box, Redwood Valley, CA

Alisha Bettinsoli, Reedley, CA

Jl Angell, Rescue, CA

Rosa Baeza, Reseda, CA

Eugenia Buerklin, Reseda, CA

Christine Douglass, Reseda, CA

Sheila Fox, Reseda, CA

Katharine Greenebaum, Reseda, CA

Carlos Nunez, Reseda, CA

Bret Polish, Reseda, CA

Sandra Angell, Richmond, CA

Nancy Donald, Richmond, CA

Johanna Ferman, Richmond, CA

Robert Knorr, Richmond, CA

Kevin McKay, Richmond, CA

BILL PINKHAM, Richmond, CA

B Sandow, Richmond, CA

Michael Sholinbeck, Richmond, CA

Robert Thomas, Richmond, CA

Carol Dezellem, Ridgecrest, CA

Penelope LePome, Ridgecrest, CA

Pat Marshall, Rio Linda, CA

Bonnie Arbuckle, Riverbank, CA

Mike Acosta, Riverside, CA

Sherri Baker, Riverside, CA

Kay Downer, Riverside, CA

Ed Garcia, Riverside, CA

Michael Harrop, Riverside, CA

Susan Hemsley, Riverside, CA

Julie Holdridge-Prado, Riverside, CA

Patricia Knox, Riverside, CA

Catherine Mason, Riverside, CA

Pamela McDonald, Riverside, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Henry Rosenfeld, Riverside, CA  
Pam Schmitt, Riverside, CA  
James Toland, Riverside, CA  
Nisa Wallace, Riverside, CA  
Bernard Waltzer, Riverside, CA  
Reta Davis, Rocklin, CA  
Daniel McKeighen, Rocklin, CA  
Elaine Wander Leclair, Rodeo, CA  
Alan Bosch, Rohnert Park, CA  
Denise Brown, Rohnert Park, CA  
Sandra Lee, Rohnert Park, CA  
Susan Ott, Rohnert Park, CA  
Lawrence Joe, Rosemead, CA  
Abigail Davis, Roseville, CA  
Natalie Grand, Roseville, CA  
Glenda Hay, Roseville, CA  
Jamie Smith, Roseville, CA  
Ann Wasgatt, Roseville, CA  
Stephanie Legras, Ross, CA  
Helen Hooper, Rumsey, CA  
Shalomar Loving, Running Springs, CA  
Henryk Flashner, S Pasadena, CA  
Anders Olsson, S Pasadena, CA  
Seth Ackerman, Sacramento, CA  
James Adams, Sacramento, CA  
Todd Bloom, Sacramento, CA  
Robert Boughton, Sacramento, CA  
Maureen Burness, Sacramento, CA  
Faylene Carter, Sacramento, CA  
Sandy Commons, Sacramento, CA

Deborah Cosentino, Sacramento, CA  
Jim Deneff, Sacramento, CA  
Patty Dismukes, Sacramento, CA  
Mary Duplat, Sacramento, CA  
Georgia Econome, Sacramento, CA  
Cindy Ferguson, Sacramento, CA  
Natsuki Fukasawa, Sacramento, CA  
Jody Gordon, Sacramento, CA  
Alan Graham, Sacramento, CA  
Cynthia Gunston-Parks, Sacramento, CA  
Margaret Haines, Sacramento, CA  
Greg Hayes, Sacramento, CA  
Karen Jacques, Sacramento, CA  
Dwayne Johnson, Sacramento, CA  
Barbara Lucas, Sacramento, CA  
Carol Luery, Sacramento, CA  
Marshal McKitrick, Sacramento, CA  
Esther Mooncrest, Sacramento, CA  
Kiara Mowry, Sacramento, CA  
Sharon Nicodemus, Sacramento, CA  
Holly Nightingale, Sacramento, CA  
Jana Perinchief, Sacramento, CA  
Donald Porath, Sacramento, CA  
Stuart Reeves, Sacramento, CA  
Mark Reichel, Sacramento, CA  
Twyla Rowe, Sacramento, CA  
Darlene Ruiz, Sacramento, CA  
Renee Sankus, Sacramento, CA  
Joseph Sebastian, Sacramento, CA  
Fay Slaterp9, Sacramento, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gayle Smith, Sacramento, CA  
Sylvia Star, Sacramento, CA  
Joan Stults, Sacramento, CA  
Theresa Taylor, Sacramento, CA  
Deborah Thomson, Sacramento, CA  
Erh-Yen To, Sacramento, CA  
Ian Turner, Sacramento, CA  
Jillian Unger, Sacramento, CA  
Cara Vallot, Sacramento, CA  
Betty Wright, Sacramento, CA  
Sandra Young, Sacramento, CA  
Elizabeth Novak Milliken, Saint Helena, CA  
Richard Allen, Salinas, CA  
Dale Hillard, Salinas, CA  
David Prina, Salinas, CA  
Catherine Uchiyama, Salinas, CA  
Roseann Dal Bello, San Anselmo, CA  
Sherry Freeman, San Anselmo, CA  
Zoe Harris, San Anselmo, CA  
Catherine Loudis, San Anselmo, CA  
Sheila Mcclear, San Anselmo, CA  
Julia Riboli, San Anselmo, CA  
Genevieve Richardson, San Anselmo, CA  
Paula Spencer, San Anselmo, CA  
Bret Walburg, San Anselmo, CA  
April Wolcott, San Anselmo, CA  
Kristin Womack, San Anselmo, CA  
Deborah Bayne, San Bernardino, CA  
Eileen Bordy, San Bruno, CA  
Daniel Carrillo, San Bruno, CA

Elisse De Sio, San Carlos, CA  
George Ruiz, San Carlos, CA  
Anne Tartaglia, San Carlos, CA  
Lori Avakian, San Clemente, CA  
Kevin Bissonnette, San Clemente, CA  
Dennis Bright, San Clemente, CA  
Maryann LaNew, San Clemente, CA  
Marcela Vizcaya, San Clemente, CA  
Terri Wiley, San Clemente, CA  
Natalie Addleson, San Diego, CA  
Kimberly Alexander, San Diego, CA  
John Anderson, San Diego, CA  
Ian Bates, San Diego, CA  
Melissa Behar, San Diego, CA  
Victoria Bennett, San Diego, CA  
Sarah Black, San Diego, CA  
Joanne Britton, San Diego, CA  
Bonnie Burke, San Diego, CA  
Shereeliz Caldwell, San Diego, CA  
Suzan Candas, San Diego, CA  
Christopher Chatard, San Diego, CA  
Cecelia Conover, San Diego, CA  
Geoffrey Cook, San Diego, CA  
Andrew Corn, San Diego, CA  
Suzanne Daneshvari, San Diego, CA  
Sandra Dawes, San Diego, CA  
Britton Donaldson, San Diego, CA  
Sami Doski, San Diego, CA  
robert downey, San Diego, CA  
Rich Elam, San Diego, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Larry Emerson, San Diego, CA  
James Ferguson, San Diego, CA  
Terrance Gardner, San Diego, CA  
Henry Goff, San Diego, CA  
Dale Haas, San Diego, CA  
Barbara Hall, San Diego, CA  
Robin Halliday, San Diego, CA  
Brooke Harding, San Diego, CA  
Fiona Hardy, San Diego, CA  
Anne Harrington, San Diego, CA  
Joanie Hartman, San Diego, CA  
Steve Hartnett, San Diego, CA  
Robert Haselbeck, San Diego, CA  
David Haskins, San Diego, CA  
Joanne Hayakawa, San Diego, CA  
Dee Hayes, San Diego, CA  
Diana Henderson, San Diego, CA  
miguel and yolanda higuera, San Diego, CA  
Jane Illades, San Diego, CA  
Stephanie Jennings, San Diego, CA  
Michael A. Johnston, San Diego, CA  
Rebecca Kloker, San Diego, CA  
Julie Kolb, San Diego, CA  
Rochelle La Frinere, San Diego, CA  
John Landmann, San Diego, CA  
Dianne Lane, San Diego, CA  
Kira Lebowitz, San Diego, CA  
Diana Lee, San Diego, CA  
Furman Lee, San Diego, CA  
Don Leichtling, San Diego, CA

Lacey Levitt, San Diego, CA  
Mary Jo Lindstrom, San Diego, CA  
Dawna Mackedanz, San Diego, CA  
Paula Maglione, San Diego, CA  
Alicia Mangum, San Diego, CA  
Martin Marcus, San Diego, CA  
Krista Marx, San Diego, CA  
Carol Masterson, San Diego, CA  
Jacqueline McVicar, San Diego, CA  
Diana Meisenholder, San Diego, CA  
Mika Menasco, San Diego, CA  
Stephen Mitton, San Diego, CA  
David Montesi, San Diego, CA  
Pam Montroy, San Diego, CA  
Susan Oliver, San Diego, CA  
Beverly Rehm, San Diego, CA  
Robin Reinhart, San Diego, CA  
Thomas Roberts, San Diego, CA  
Jack Robertson, San Diego, CA  
Karen Roegner, San Diego, CA  
Barbara Schell, San Diego, CA  
Sid Shapiro, San Diego, CA  
Judy Shively, San Diego, CA  
Ian Silverman, San Diego, CA  
Doug Skeen, San Diego, CA  
Jan Smith, San Diego, CA  
Joan Spooner, San Diego, CA  
Brian Still, San Diego, CA  
Karen Summers, San Diego, CA  
Mary Talbot, San Diego, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Akiko Tamano, San Diego, CA  
Monica Valentino, San Diego, CA  
Leland Wessel, San Diego, CA  
Robert Wheeler, San Diego, CA  
Evan White, San Diego, CA  
Craig Woempner, San Diego, CA  
Lyssa Woo, San Diego, CA  
Tansy Woods, San Diego, CA  
William Woods, San Diego, CA  
Shandra Wright, San Diego, CA  
Nita Young, San Diego, CA  
Robert Alvarez, San Dimas, CA  
Arax Maksoudian, San Dimas, CA  
Tina Schrader, San Fernando, CA  
Richard Adhikari, San Francisco, CA  
Michael Anderson, San Francisco, CA  
cecilia azinger, San Francisco, CA  
Kimo Bailey, San Francisco, CA  
Rob Bain, San Francisco, CA  
Wilma Bass, San Francisco, CA  
Joan Becker, San Francisco, CA  
Gary Berger, San Francisco, CA  
Charlie Bergstedt, San Francisco, CA  
Charlene Biagi, San Francisco, CA  
Joseph Blum, San Francisco, CA  
Lisa Brinker, San Francisco, CA  
Betsy Brown, San Francisco, CA  
Daniel Celidonio, San Francisco, CA  
Ravi Chandra, San Francisco, CA  
S. Chapek, San Francisco, CA

Janet Chavez, San Francisco, CA  
Andrew Chou-Belden, San Francisco, CA  
Angel Clark, San Francisco, CA  
Helynn Coles, San Francisco, CA  
Barbara Conwell, San Francisco, CA  
Mike Dahlin, San Francisco, CA  
Sarah Date, San Francisco, CA  
Helen Davis, San Francisco, CA  
Christie Decker, San Francisco, CA  
L. Diaz, San Francisco, CA  
Lisa Disterheft, San Francisco, CA  
Judith Doane, San Francisco, CA  
Ramona Draeger, San Francisco, CA  
Jym Dyer, San Francisco, CA  
Irene Endrizzi, San Francisco, CA  
Patsy Fergusson, San Francisco, CA  
Michael Fleming, San Francisco, CA  
Buffy Francisco, San Francisco, CA  
Vince Gamboa, San Francisco, CA  
Ryan Gillette, San Francisco, CA  
Martha Goldin, San Francisco, CA  
Sharon Handa, San Francisco, CA  
Linda Hegenbarth, San Francisco, CA  
Kate Hellenga, San Francisco, CA  
PETER HEMENWAY, San Francisco, CA  
Leslie Hendricks, San Francisco, CA  
Birgit Hermann, San Francisco, CA  
Amanda Hirshon, San Francisco, CA  
Steven Holden, San Francisco, CA  
Lisa Honig, San Francisco, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Martin Horwitz, San Francisco, CA  
Nicole Hsu, San Francisco, CA  
Louise Itzler, San Francisco, CA  
talat jabbar, San Francisco, CA  
Constance Kao, San Francisco, CA  
Brendan Keenan, San Francisco, CA  
Michael Kemper, San Francisco, CA  
Betty Kissilove, San Francisco, CA  
Andria Knapp, San Francisco, CA  
Marko Knezevic, San Francisco, CA  
Ady Larsen, San Francisco, CA  
Jutta Leibrock, San Francisco, CA  
Kendrick Lewallen, San Francisco, CA  
Ruth Lym, San Francisco, CA  
James Mcandrew, San Francisco, CA  
Janet McGarry, San Francisco, CA  
Erin McMahon, San Francisco, CA  
Amy Montalvo, San Francisco, CA  
Paul Mooney, San Francisco, CA  
Gerald Moore, San Francisco, CA  
William Mora, San Francisco, CA  
Janine Moss, San Francisco, CA  
Amy Moy, San Francisco, CA  
Stephen Murphy, San Francisco, CA  
John Musgrove, San Francisco, CA  
Kevin Neeson, San Francisco, CA  
Komoot Ngaojutha, San Francisco, CA  
Karen Nicks, San Francisco, CA  
Maria Nowicki, San Francisco, CA  
John Oda, San Francisco, CA

Robert Peluso, San Francisco, CA  
elena pena, San Francisco, CA  
Eric Peterson, San Francisco, CA  
E. Phinney, San Francisco, CA  
Jackie Pomies, San Francisco, CA  
Roland Prijoles, San Francisco, CA  
Nancy Putney-Abernathy, San Francisco, CA  
Sean Quinn, San Francisco, CA  
Adrianna Quintero, San Francisco, CA  
Ruta Radzins, San Francisco, CA  
Sarah Reyes, San Francisco, CA  
Ivan Rhudick, San Francisco, CA  
Jonathan Roberts, San Francisco, CA  
Nora Roman, San Francisco, CA  
Roberto Romo, San Francisco, CA  
Jane Salvin, San Francisco, CA  
Natasha Saravanja, San Francisco, CA  
Laura Saunders, San Francisco, CA  
Brian Sawyer, San Francisco, CA  
Edie Schaffer, San Francisco, CA  
Judy Schultz, San Francisco, CA  
Jeanie Scott, San Francisco, CA  
Elena Seitz, San Francisco, CA  
Neil Sekhri, San Francisco, CA  
Peter Skala, San Francisco, CA  
Erin Smith, San Francisco, CA  
Todd Snyder, San Francisco, CA  
Michael Sobel, San Francisco, CA  
Martha Stabler, San Francisco, CA  
Tai Stillwater, San Francisco, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Stine, San Francisco, CA  
Priscilla Stoyanof, San Francisco, CA  
Joel Streicker, San Francisco, CA  
Edward Sullivan, San Francisco, CA  
Lucile J Taber, San Francisco, CA  
Stephen Talbot, San Francisco, CA  
Hong-An Truong, San Francisco, CA  
Justin Truong, San Francisco, CA  
Anthony Tupasi, San Francisco, CA  
Pamela Vaughn, San Francisco, CA  
Wolfgang Vermeer, San Francisco, CA  
Preethi Vijaykrishnan, San Francisco, CA  
Isabelle Wade, San Francisco, CA  
Henrietta Weiner, San Francisco, CA  
Linda Weiner, San Francisco, CA  
Stewart Wilber, San Francisco, CA  
Aimee Williams, San Francisco, CA  
Jennifer Willis, San Francisco, CA  
sandra yagi, San Francisco, CA  
Erin Yip, San Francisco, CA  
R. Zierikzee, San Francisco, CA  
Christine Zupanovich, San Francisco, CA  
Maxine Zylberberg, San Francisco, CA  
Seeyew Mo, San Francisco, CA  
A Eittinger, San Gabriel, CA  
David Turner, San Gabriel, CA  
Kristine Andarmani, San Jose, CA  
James Barrie, San Jose, CA  
Nancy Bell, San Jose, CA  
Sushma Bhatia, San Jose, CA

Andrew Boyle, San Jose, CA  
Colleen Cabot, San Jose, CA  
Mark Cabral, San Jose, CA  
Allan Campbell, San Jose, CA  
Thomas Carlino, San Jose, CA  
Debra Chong, San Jose, CA  
Eugene Chung, San Jose, CA  
Barbara Comiskey, San Jose, CA  
Lawrence Deng, San Jose, CA  
Ann Filor, San Jose, CA  
Judith Gibbons, San Jose, CA  
John Gilbert, San Jose, CA  
Winston Gould, San Jose, CA  
Marilyn Griffiths, San Jose, CA  
Scot Guenter, San Jose, CA  
William Henzel, San Jose, CA  
Maryanne Hoirup-Bacolod, San Jose, CA  
Meike Huizinga, San Jose, CA  
Dotti King, San Jose, CA  
David Laranjeira, San Jose, CA  
Robert Lord, San Jose, CA  
Natalie Mathison, San Jose, CA  
Richard McGowan, San Jose, CA  
Rosa Molina, San Jose, CA  
Yukie Murata, San Jose, CA  
Du Ng, San Jose, CA  
Keith Pedersen, San Jose, CA  
Sandra Perez, San Jose, CA  
Ronald Reber, San Jose, CA  
Elvia Reyna, San Jose, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Veronica Romero, San Jose, CA  
Donald Saito, San Jose, CA  
Tim Schwalbach, San Jose, CA  
Rocky Sharma, San Jose, CA  
Kelly Shepherd, San Jose, CA  
Star St John, San Jose, CA  
Georgiann Suhr, San Jose, CA  
Darlene Thorne, San Jose, CA  
Mark Verdi, San Jose, CA  
Nona Weiner, San Jose, CA  
Glenn Wheatland, San Jose, CA  
Jennifer Williams, San Jose, CA  
Jimmie Yonemoto, San Jose, CA  
Dave Beck, San Juan Capistrano, CA  
Kathy Fitzwater, San Juan Capistrano, CA  
Philip Fraser, San Juan Capistrano, CA  
Maria Menichini, San Juan Capistrano, CA  
Michael Rotcher, San Juan Capo, CA  
Brad Bowers, San Leandro, CA  
Aj Cho, San Leandro, CA  
Virginia Collins, San Leandro, CA  
Randy Epstein, San Leandro, CA  
Cicely Hart, San Leandro, CA  
John Moreau, San Leandro, CA  
Jo Quinlivan, San Leandro, CA  
Robert Thistlethwaite, San Leandro, CA  
Sydney Winsor, San Leandro, CA  
Carol Donovan, San Lorenzo, CA  
Helen Bankston, San Luis Obispo, CA  
Judith Anderson, San Luis Obispo, CA

William Donovan, San Luis Obispo, CA  
Raymond Ensing, San Luis Obispo, CA  
Pete Evans, San Luis Obispo, CA  
Judy Hornaday, San Luis Obispo, CA  
Maryan Infield, San Luis Obispo, CA  
Carrie Langner, San Luis Obispo, CA  
lauren Ornelas, San Luis Obispo, CA  
Duane Wall, San Luis Obispo, CA  
Anna Alessi, San Marcos, CA  
Leilani Hart, San Marcos, CA  
Silvia Memminger, San Marcos, CA  
Brooke Scruggs, San Marcos, CA  
Sandra Spaeth, San Marcos, CA  
Melba Alfaro, San Mateo, CA  
Steve Bianco, San Mateo, CA  
Belinda Chlouber, San Mateo, CA  
Gina Colangelo, San Mateo, CA  
Laurie Glatt, San Mateo, CA  
Stephen Gross, San Mateo, CA  
Nathan H., San Mateo, CA  
Kevin Hearle Ph.D., San Mateo, CA  
Christine Matsumotodeveau, San Mateo, CA  
Rae Sofos, San Mateo, CA  
Mary Vance, San Mateo, CA  
Linda Morgan, San Pablo, CA  
Rebecca Robinson, San Pablo, CA  
Carol Schaffer, San Pablo, CA  
Tom Earnist, San Pedro, CA  
Noel Gould, San Pedro, CA  
Tina Madden, San Pedro, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kendi Ravsten, San Pedro, CA  
Roman Reardon, San Pedro, CA  
Dana Weiser, San Pedro, CA  
Ellen Akre, San Rafael, CA  
Susan Berlin, San Rafael, CA  
Christina Bradley, San Rafael, CA  
Belle Dedioscohen, San Rafael, CA  
Eleanor Errante, San Rafael, CA  
Elizabeth Ferris, San Rafael, CA  
Susan Ghest, San Rafael, CA  
Alexandra Guenther, San Rafael, CA  
Margie Halladin, San Rafael, CA  
Isabel Hogan, San Rafael, CA  
Nancy Kozlenko, San Rafael, CA  
Dianne Morrison, San Rafael, CA  
Susan Peters, San Rafael, CA  
Lornaa Pickrell, San Rafael, CA  
Rus Postel, San Rafael, CA  
Judith Purdom, San Rafael, CA  
Sheri Remail, San Rafael, CA  
Josh Richter, San Rafael, CA  
Sandy Shapiro, San Rafael, CA  
Philip Simon, San Rafael, CA  
Robert Stark, San Rafael, CA  
Deborah Temple, San Rafael, CA  
John Tetzlaff, San Rafael, CA  
Mitchell Turpin, San Rafael, CA  
Alex Vollmer, San Rafael, CA  
Ruth Vosmek, San Rafael, CA  
Jeffrey Hemenez, San Ramon, CA

Kate Vermillion, San Ramon, CA  
Margaret Bendig, Santa Ana, CA  
Karrie Good, Santa Ana, CA  
Mike Honda, Santa Ana, CA  
Kristin Laughtin-Dunker, Santa Ana, CA  
Sandra Ortiz, Santa Ana, CA  
James Yacenda, Santa Ana, CA  
Janet Adelson, Santa Barbara, CA  
Dennis Allen, Santa Barbara, CA  
Rebecca Amundsen, Santa Barbara, CA  
Cindy Antonucci-Ameen, Santa Barbara, CA  
Nicholas Beeson, Santa Barbara, CA  
Lisabette Brinkman, Santa Barbara, CA  
Ellen Broidy, Santa Barbara, CA  
Shirley Cabeen, Santa Barbara, CA  
Carole Ann Cole, Santa Barbara, CA  
Ronit Corry, Santa Barbara, CA  
Alison Coutts-Jordan, Santa Barbara, CA  
Tara Cuellar, Santa Barbara, CA  
Catharine Edwardson, Santa Barbara, CA  
Christine Fedeli, Santa Barbara, CA  
Terry Frewin, Santa Barbara, CA  
Camille Gilbert, Santa Barbara, CA  
Kevin Hanley, Santa Barbara, CA  
Gillian Healed, Santa Barbara, CA  
Frode Holm, Santa Barbara, CA  
Lisa Hugo, Santa Barbara, CA  
Cynthia James, Santa Barbara, CA  
Judy Karin, Santa Barbara, CA  
Lisa Ann Kelly and Family, Santa Barbara, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Larry Koppelman, Santa Barbara, CA  
Betty Little, Santa Barbara, CA  
Geness L Lorien, Santa Barbara, CA  
Peter Melnick, Santa Barbara, CA  
Marlene Mills, Santa Barbara, CA  
Tosh Montee, Santa Barbara, CA  
Maureen Needham, Santa Barbara, CA  
Mary Nixon, Santa Barbara, CA  
Martha Noble, Santa Barbara, CA  
Michael Oconnell, Santa Barbara, CA  
Gail Osherenko, Santa Barbara, CA  
Halina Pinsker, Santa Barbara, CA  
Claudio Pollero, Santa Barbara, CA  
Peter Quimby, Santa Barbara, CA  
Michael Stowe, Santa Barbara, CA  
Richard Sutherland, Santa Barbara, CA  
Lynda Unterthiner, Santa Barbara, CA  
Angelika vonRoos, Santa Barbara, CA  
Sally Warner-Arnett, Santa Barbara, CA  
Mark Whitney, Santa Barbara, CA  
Bill Woodbridge, Santa Barbara, CA  
Theresa Yandell, Santa Barbara, CA  
Richard Yates, Santa Barbara, CA  
Jeanine Lee, Santa Clara, CA  
Cruz Medina, Santa Clara, CA  
Rosa Preciado, Santa Clara, CA  
Michelle Balady, Santa Clarita, CA  
James McKelvey, Santa Clarita, CA  
Gayle Vogel, Santa Clarita, CA  
Anita Wisch, Santa Clarita, CA

Milo Barisof, Santa Cruz, CA  
Len Beyea, Santa Cruz, CA  
Elaine Boles, Santa Cruz, CA  
Sandra Brown, Santa Cruz, CA  
Andrew Carman, Santa Cruz, CA  
Kathleen Caton, Santa Cruz, CA  
Jean Crossley, Santa Cruz, CA  
MarianKitty Dennis, Santa Cruz, CA  
Hepburn-Janour Ellis, Santa Cruz, CA  
Richard Gallo, Santa Cruz, CA  
Julie Hughes, Santa Cruz, CA  
Gail Jack, Santa Cruz, CA  
KEVIN KEEDY, Santa Cruz, CA  
Lizann Keyes, Santa Cruz, CA  
Mary Anne Kramer-Urner, Santa Cruz, CA  
Nancy Krusoe, Santa Cruz, CA  
Mary Kuntz-Cote, Santa Cruz, CA  
Sarah Limroth, Santa Cruz, CA  
Sheryl Loomis, Santa Cruz, CA  
Scott Malsom, Santa Cruz, CA  
Kevin Manning, Santa Cruz, CA  
Janice Manov, Santa Cruz, CA  
Karsten Mueller, Santa Cruz, CA  
Vivienne Orgel, Santa Cruz, CA  
Josh Pederson, Santa Cruz, CA  
Rebecca Peet, Santa Cruz, CA  
Ron Pomerantz, Santa Cruz, CA  
Elizabeth Potts, Santa Cruz, CA  
Benjamin Ramsden-Stein, Santa Cruz, CA  
Dave Rundio, Santa Cruz, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Scheller, Santa Cruz, CA  
Jonathan Scher, Santa Cruz, CA  
Kirsten Schwind, Santa Cruz, CA  
Laura Shaw, Santa Cruz, CA  
Pela Tomasello, Santa Cruz, CA  
Sylvia Vairo, Santa Cruz, CA  
Marilyn Veltrop, Santa Cruz, CA  
Patrice Wallace, Santa Cruz, CA  
Russell Weisz, Santa Cruz, CA  
Carlos Arnold, Santa Maria, CA  
Constance Ford, Santa Maria, CA  
Roger Hart, Santa Maria, CA  
Nancy Heck, Santa Maria, CA  
James Kitagawa, Santa Maria, CA  
Jim Mckinniss, Santa Maria, CA  
Kristina Allen, Santa Monica, CA  
Grisel Arriaga, Santa Monica, CA  
Karen Bailey, Santa Monica, CA  
Susan Black, Santa Monica, CA  
Emmanuelle Bourlier, Santa Monica, CA  
Chris Bradford, Santa Monica, CA  
Sherry Brouman, Santa Monica, CA  
Elizabeth Chang, Santa Monica, CA  
Phyllis Chavez, Santa Monica, CA  
Catherine Corwin, Santa Monica, CA  
Lauri Crane, Santa Monica, CA  
Linda Davis, Santa Monica, CA  
Guillemette Epailly, Santa Monica, CA  
Gina Garcia, Santa Monica, CA  
Mohammad Ghorbanali, Santa Monica, CA

Pris Haffenden, Santa Monica, CA  
Amelia Jones, Santa Monica, CA  
Patricia Joubert, Santa Monica, CA  
Kathy Knight, Santa Monica, CA  
Cathy Ladman, Santa Monica, CA  
Ralf Leeb, Santa Monica, CA  
Daryl Marsh, Santa Monica, CA  
Kristy Martin, Santa Monica, CA  
Anne Munitz, Santa Monica, CA  
Ted Myers, Santa Monica, CA  
Brian Olson, Santa Monica, CA  
Steven Perez, Santa Monica, CA  
Jerry Persky, Santa Monica, CA  
Jayne Pitchford, Santa Monica, CA  
Donna Presley, Santa Monica, CA  
Sophie Robertson, Santa Monica, CA  
Mary Romanek, Santa Monica, CA  
Adrian Roup, Santa Monica, CA  
D. Rowe, Santa Monica, CA  
Myra Schegloff, Santa Monica, CA  
Gary Shapiro, Santa Monica, CA  
Nancy Smith, Santa Monica, CA  
Roberto Tinti, Santa Monica, CA  
Frank Uddo, Santa Monica, CA  
Bobbygoode Zancan, Santa Monica, CA  
Harriet Zaretsky, Santa Monica, CA  
George Burnham, Santa Paula, CA  
Stephen Wolpin, Santa Paula, CA  
Cristina Amarillas, Santa Rosa, CA  
Paul Bishop, Santa Rosa, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Margaret Buhn, Santa Rosa, CA  
Sandra Capecci, Santa Rosa, CA  
Phallon Davis, Santa Rosa, CA  
Janet Drew, Santa Rosa, CA  
Richard Fairfield, Santa Rosa, CA  
Yona Flemming, Santa Rosa, CA  
Fred Friedland, Santa Rosa, CA  
Maureen Gevirtz, Santa Rosa, CA  
Penny Hamilton, Santa Rosa, CA  
Philip Hansten, Santa Rosa, CA  
Michael Hutchison, Santa Rosa, CA  
Robin Jurs, Santa Rosa, CA  
C Mcguirk, Santa Rosa, CA  
Bob Miller, Santa Rosa, CA  
Erin Moilanen, Santa Rosa, CA  
Richard Nolen, Santa Rosa, CA  
Norma Ortman, Santa Rosa, CA  
Shirley Phillips, Santa Rosa, CA  
Gary Pischke, Santa Rosa, CA  
Daniel Podell, Santa Rosa, CA  
Cindi Rivas, Santa Rosa, CA  
Joe Salazar, Santa Rosa, CA  
Gail Seymour, Santa Rosa, CA  
Marcia Sheaves, Santa Rosa, CA  
Olaina Silva, Santa Rosa, CA  
Paige Sobel, Santa Rosa, CA  
Anton Teytaud, Santa Rosa, CA  
David Vandever, Santa Rosa, CA  
April West, Santa Rosa, CA  
Rhea Zaks, Santa Rosa, CA

Sebastian Allinder, Santee, CA  
James Braun, Santee, CA  
Theresa McCarthy, Santee, CA  
Greg Denari, Saratoga, CA  
Mike Finck, Sausalito, CA  
Tricia Gellman, Sausalito, CA  
Evan Jane Kriss, Sausalito, CA  
Mary Mongan, Sausalito, CA  
Jason Tunnell, Sausalito, CA  
Margaret Ward, Sausalito, CA  
Rob Dun, Scotts Valley, CA  
Megan Hawk, Scotts Valley, CA  
Barry Buckheim, Seal Beach, CA  
Julie Ford, Seal Beach, CA  
Jillian Gallery, Seal Beach, CA  
Pamela Miller, Seal Beach, CA  
Brent Spencer, Seal Beach, CA  
Felicia Bander, Sebastopol, CA  
Edith Barry, Sebastopol, CA  
Jacqueline Braun, Sebastopol, CA  
Glenn Finch, Sebastopol, CA  
Anna Kaufman, Sebastopol, CA  
Joe LeBlanc, Sebastopol, CA  
William Olzman, Sebastopol, CA  
Tamara Voyles, Sebastopol, CA  
Amanda Zangara, Sebastopol, CA  
Mark Coller, Shasta Lake, CA  
Lisa Salazar, Shasta Lake, CA  
Gene Arias, Sherman Oaks, CA  
Carol Becker, Sherman Oaks, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Georgia Brewer, Sherman Oaks, CA  
Mark Fletcher, Sherman Oaks, CA  
Caroline Good, Sherman Oaks, CA  
Cathy Janacua, Sherman Oaks, CA  
Dwayne Jones, Sherman Oaks, CA  
Samar Lachini, Sherman Oaks, CA  
RICHARD AND SHARON MAYER, Sherman Oaks, CA  
Gaye Nelson, Sherman Oaks, CA  
Patrick Pade, Sherman Oaks, CA  
Amanda Palley, Sherman Oaks, CA  
Alison Reisel, Sherman Oaks, CA  
Patricia Ritter, Sherman Oaks, CA  
Mox Ruge, Sherman Oaks, CA  
Giuliano Sartori, Sherman Oaks, CA  
Kay Steele, Sherman Oaks, CA  
Leslie Tolan, Sherman Oaks, CA  
Sherri Donlon, Shingle Springs, CA  
Elizabeth Ball, Sierra Madre, CA  
Patricia Barron, Sierra Madre, CA  
Robert Buckner, Sierra Madre, CA  
Renee Cossutta, Sierra Madre, CA  
Jacqueline Fisher, Sierra Madre, CA  
John Lamb, Sierra Madre, CA  
Jill Sumiyasu, Sierra Madre, CA  
Natalie Garth, Silverado, CA  
Nina Macdonald, Silverado, CA  
Jerry Dewitt, Simi Valley, CA  
Gina Howell, Simi Valley, CA  
Katrina Livingston, Simi Valley, CA

K. C. Mccarthy, Simi Valley, CA  
Madison Mitchell, Simi Valley, CA  
Gulshan Oomerjee, Simi Valley, CA  
brooke schick, Simi Valley, CA  
Jessica Smith, Simi Valley, CA  
Laurie Neill, Smith River, CA  
Christy Bulskov, Solana Beach, CA  
Susan Kirkpatrick, Solana Beach, CA  
Sheila Silan, Somerset, CA  
Linda Whitney, Somerset, CA  
Diane Baarbera, Sonoma, CA  
Tarney Baldinger, Sonoma, CA  
Lana Bruski, Sonoma, CA  
Kate Farrell, Sonoma, CA  
John Feissel, Sonoma, CA  
Francesca Fifis, Sonoma, CA  
Avram Goldman, Sonoma, CA  
Kent Iverson, Sonoma, CA  
Barbara Jacobsen, Sonoma, CA  
Andrew Keasler, Sonoma, CA  
Kris Kelly, Sonoma, CA  
Elizabeth Vaughn, Sonoma, CA  
Shelley Winn, Sonoma, CA  
Michelle Allison, Sonora, CA  
Leslie Kowalczyk, Sonora, CA  
Sharon Rose, Sonora, CA  
Kathy Berry, Soquel, CA  
Robert Darcy, Soquel, CA  
Gary Landgrebe, Soquel, CA  
Pamela Machutt, Soquel, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Leslie Potenzo, Soquel, CA  
Cecelia Crane, South Lake Tahoe, CA  
Morgan Machen, South Lake Tahoe, CA  
Max Benavidez, South Pasadena, CA  
Norman Bentson, South Pasadena, CA  
Heather Clyde, South Pasadena, CA  
Kelly Finley, South Pasadena, CA  
Thomas Fong, South Pasadena, CA  
Sandra Kitto, South Pasadena, CA  
Joshua Klaparda, South Pasadena, CA  
Karin Manger, South Pasadena, CA  
Sandra Zicke, South San Francisco, CA  
Jennifer Bradford, Spring Valley, CA  
George Schieck, Spring Valley, CA  
Terrie Smith, Spring Valley, CA  
Toni Watson, Spring Valley, CA  
Rachel Gibson, Stanford, CA  
Monika Greenleaf, Stanford, CA  
Janice Beyer, Stockton, CA  
Jackie Bronder, Stockton, CA  
Paul Takhar, Stockton, CA  
Sheena Bhindie, Studio City, CA  
Christopher Brown, Studio City, CA  
Andrew Hyman, Studio City, CA  
Nancy Knipe, Studio City, CA  
Susan Lea, Studio City, CA  
Elisa Marsh, Studio City, CA  
Aaron Mendelsohn, Studio City, CA  
Suzanne Naegle, Studio City, CA  
Julie Skille, Studio City, CA

Natalia Spornik, Studio City, CA  
Jeremy Trimm, Suisun City, CA  
Robin Van Tassell, Summerland, CA  
Katharine Warner, Sunland, CA  
Kimberly Zimmerman, Sunland, CA  
Victoria Armigo, Sunnyvale, CA  
Scott Barlow, Sunnyvale, CA  
Ernest Boyd, Sunnyvale, CA  
Lenore Cohen, Sunnyvale, CA  
Susan Johnson, Sunnyvale, CA  
Liana Laskin, Sunnyvale, CA  
Iztok Marjanovic, Sunnyvale, CA  
Robert Park, Sunnyvale, CA  
Mark Philips, Sunnyvale, CA  
Bryan Richter, Sunnyvale, CA  
John Robbins, Sunnyvale, CA  
Kris Stadelman, Sunnyvale, CA  
Gerald Tinder, Sunnyvale, CA  
Rose-Marie Twu, Sunnyvale, CA  
Mary White, Sunnyvale, CA  
Sandra Hendricks, Sutter Creek, CA  
Delores Abramson, Sylmar, CA  
Diane Boucher, Sylmar, CA  
Paul Enders, Sylmar, CA  
Robert Iaccino, Sylmar, CA  
Nancy Nolen, Sylmar, CA  
Vicki Smith, Sylmar, CA  
Andrew Patton, Tahoe Vista, CA  
Frank Watts, Tahoe Vista, CA  
El. Pe., Talmage, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Louise Bianco, Tarzana, CA  
Cecly Corbett, Tarzana, CA  
Roger Hollander, Tarzana, CA  
Beth Hamilton, Tehachapi, CA  
Deborah Hand, Tehachapi, CA  
Gary Baker, Temecula, CA  
Richard Blain, Temecula, CA  
Holly Hall, Temecula, CA  
Sofia Okolowicz, Temecula, CA  
Anthony Terich, Temecula, CA  
Christine Lew, Temple City, CA  
Linda Skorheim, Temple City, CA  
Cassie A. Murphy, Templeton, CA  
Deborah Filipelli, PhD, The Sea Ranch, CA  
Victoria Behar, Thousand Oaks, CA  
Bob Fryer, Thousand Oaks, CA  
Ibia Gomez, Thousand Oaks, CA  
Marc Orfanos, Thousand Oaks, CA  
Katherine Strong, Thousand Oaks, CA  
Richard Sugerman, Thousand Oaks, CA  
Paul Teplitz, Thousand Oaks, CA  
Karissa Turner, Thousand Oaks, CA  
Douglas Foster, Three Rivers, CA  
Lorraine Grace, Tiburon, CA  
Timothy McCollum, Tollhouse, CA  
Marti Hale, Toluca Lake, CA  
Madelyn Hodges, Tomales, CA  
Donna Cetorelli, Topanga, CA  
Mae Hein, Topanga, CA  
Jon Povill, Topanga, CA

Nora Slattery, Topanga, CA  
Adrien Thein-Sandler, Topanga, CA  
Penelope Ward, Topanga, CA  
Ruth Ehrenberg, Torrance, CA  
Joyce Harrington, Torrance, CA  
Edwin Miller, Torrance, CA  
Faye Ryan, Torrance, CA  
Erin Suyehara, Torrance, CA  
Mary Walker, Torrance, CA  
Jinx Hydeman, Trabuco Canyon, CA  
Deborah Mueller, Trabuco Canyon, CA  
Karen Negus, Trabuco Canyon, CA  
Gloria Sefton, Trabuco Canyon, CA  
Vasuki Nijagal, Tracy, CA  
David Freeman, Truckee, CA  
Brett Bell, Tujunga, CA  
Darlene Goguen, Tujunga, CA  
Probyn Gregory, Tujunga, CA  
Charleen Schendel, Turlock, CA  
Everett A. Vieira III, Turlock, CA  
Perry Gx, Tustin, CA  
Veronica Noguer, Tustin, CA  
Jim Estus, Twentynine Palms, CA  
Jorge DeCecco, Ukiah, CA  
Tisha Douthwaite, Ukiah, CA  
Mary Gustafson, Ukiah, CA  
Lisa Hillegas, Ukiah, CA  
Judy Morgan, Ukiah, CA  
Raymond Radell, Ukiah, CA  
Ernest Walters, Union City, CA





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Courtney Christoffer, Upland, CA  
Kristen Osman, Upland, CA  
Yvonne Smith, Upland, CA  
Janet Sturgeon, Upland, CA  
Becky Cecena, Vacaville, CA  
Michael Heffernan, Vacaville, CA  
Lorraine Lowry, Vacaville, CA  
Adrienne. Micco, Vacaville, CA  
Carole Lutness, Valencia, CA  
Donald Van Santen, Valencia, CA  
Karen Black, Vallejo, CA  
Valerie Duda, Vallejo, CA  
Karen Eft, Vallejo, CA  
Jocelyn Graef, Vallejo, CA  
Ann Harrison, Vallejo, CA  
Lorri Humberd, Vallejo, CA  
David Macdonald, Vallejo, CA  
Diane Merrick, Vallejo, CA  
Marni Nacheff, Vallejo, CA  
Nikki Nafziger, Vallejo, CA  
Dave Smail, Vallejo, CA  
Carrie Trochet, Vallejo, CA  
Lenette Weishaar, Vallejo, CA  
Laura Diffenbaugh, Valley Springs, CA  
Gerald Vietor, Valley Springs, CA  
Laura Holmes, Valley Village, CA  
Darynne Jessler, Valley Village, CA  
Anne Kurtzman, Valley Village, CA  
Andrew Sigal, Valley Village, CA  
Stokes Stanzi, Valley Village, CA

Dianna Davidson, Van Nuys, CA  
Valerie Ferrante, Van Nuys, CA  
Mark Heiliger, Van Nuys, CA  
Susan Jones, Van Nuys, CA  
Janet Laur, Van Nuys, CA  
Vicki Modesti, Van Nuys, CA  
Ana Reedy, Van Nuys, CA  
P Soucek, Van Nuys, CA  
Ken Windrum, Van Nuys, CA  
Jesse Croxton, Venice, CA  
Ann Ducommun, Venice, CA  
Arnaud Dunoyer, Venice, CA  
Zoe Friedman, Venice, CA  
Frank Krentzman, Venice, CA  
Linda Laisure, Venice, CA  
Nancy Lombardi, Venice, CA  
Brendan Miller, Venice, CA  
Ruth Seroussi, Venice, CA  
Chris Tilly, Venice, CA  
Jamie Wolf, Venice, CA  
Farrah Zeigler, Venice, CA  
Robert Brunner, Ventura, CA  
Gary Channer, Ventura, CA  
David Cotner, Ventura, CA  
Laura Elam, Ventura, CA  
Jamie Green, Ventura, CA  
Suzanne Guthrie, Ventura, CA  
Helen Johnson, Ventura, CA  
Erin Kraus, Ventura, CA  
Elizabeth Ladiana, Ventura, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jan Langer, Ventura, CA  
Carrie Mc, Ventura, CA  
Jane Niehaus-Tull, Ventura, CA  
Mary Stanistreet, Ventura, CA  
Wendy Steiger, Ventura, CA  
Elaine Stephenson, Ventura, CA  
Krista Stevenson, Ventura, CA  
Chelsea Sutula, Ventura, CA  
Mike Trivich Trivich, Ventura, CA  
Melissa Vasconcellos, Ventura, CA  
LeAnn Walters, Ventura, CA  
Kathy Yeomans, Ventura, CA  
Carol Wiley, Victorville, CA  
Alonna Farrar, Vista, CA  
James Hagar, Vista, CA  
Joleen Hirscher, Vista, CA  
Trisha Pahmeier, Vista, CA  
Constance Youens, Vista, CA  
Keith Forrest, Volcano, CA  
Michael Shapiro, W. Hollywood, CA  
Chris Dissanayake, Walnut, CA  
Erfin Hartojo, Walnut, CA  
Rita Thio, Walnut, CA  
Sarah Adams, Walnut Creek, CA  
Ana Belle, Walnut Creek, CA  
Nancy Bocanegra, Walnut Creek, CA  
Susan Desmond, Walnut Creek, CA  
Lu Einer, Walnut Creek, CA  
Annette Eisenbergsmith, Walnut Creek, CA  
Julia Fuller, Walnut Creek, CA

Janicedotherighting Greenberg, Walnut Creek, CA  
Barbara Greenwood, Walnut Creek, CA  
Joan Johnston, Walnut Creek, CA  
Emmanuel Lagpacan, Walnut Creek, CA  
Barb Linc, Walnut Creek, CA  
Anne M Stewart, Walnut Creek, CA  
Ginger Megley, Walnut Creek, CA  
Patricia Raso, Walnut Creek, CA  
Stanley Smith, Walnut Creek, CA  
Nancy Thursby, Walnut Creek, CA  
Jan Warren, Walnut Creek, CA  
David Wendt, Walnut Creek, CA  
Virginia Wheaton, Walnut Creek, CA  
Randall Wiley, Walnut Creek, CA  
Pam Nelson, Warner Springs, CA  
Marguerite Barragan, Watsonville, CA  
Paul Cheney, Watsonville, CA  
Joe Gallagher, Watsonville, CA  
Ana Hernandez, Watsonville, CA  
Roberta Krenz, Watsonville, CA  
Laura Maitra, Watsonville, CA  
Steffany Mccabe, Watsonville, CA  
Sarah Peck, Watsonville, CA  
Celeste Stanik, Watsonville, CA  
Susan Hazard, Weaverville, CA  
Randolph Yates, Weaverville, CA  
John Brennan, Weed, CA  
John Allen, West Covina, CA  
Lauren Flahive, West Covina, CA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Meilee Langi, West Covina, CA  
Donald Overlin, West Covina, CA  
Fernando Ramirez, West Covina, CA  
Susan Zaragoza, West Covina, CA  
Rebecca Clark, West Hills, CA  
Paul Hogan, West Hills, CA  
Linda Howie, West Hills, CA  
Abbie Bernstein, West Hollywood, CA  
Howard H. Holmes, West Hollywood, CA  
Susan Mathison, West Hollywood, CA  
Christina Nillo, West Hollywood, CA  
Kathy Scher, West Hollywood, CA  
Dolores Scozzesi, West Hollywood, CA  
Jon Sperry, West Hollywood, CA  
Andrew Hamilton, West Sacramento, CA  
Signe Wetteland, West Sacramento, CA  
Barbara E., Westlake Village, CA  
Jeanne Harrison, Westlake Village, CA  
Lia Woodward, Westlake Village, CA  
Michael Lawler, Westminster, CA  
Brandon Lowentroun, Westminster, CA  
Tina Colafranceschi, Whithorn, CA  
Jo Beede, Whittier, CA  
Narcissa Enzmann, Whittier, CA  
Vanessa Leal, Whittier, CA  
Robert Palomino, Whittier, CA  
Jose Rodriguez, Whittier, CA  
Jan Joe, Windsor, CA  
Barbara Lyon, Windsor, CA  
Allison McConnell, Windsor, CA

Susan Bohannon, Winnetka, CA  
Andre Plessis, Winnetka, CA  
Caryn Banque, Woodland, CA  
Kay Bogart, Woodland, CA  
Donna Bousquet, Woodland, CA  
Sheri Masterson, Woodland, CA  
Ellie Slaven, Woodland, CA  
Gretchen Smurr, Woodland, CA  
Susan George-Rydberg, Woodland Hills, CA  
Bobbi Goldin, Woodland Hills, CA  
Michael Goldman, Woodland Hills, CA  
Willie Hill, Woodland Hills, CA  
Arax Lanman, Woodland Hills, CA  
Stephanie Larro, Woodland Hills, CA  
Lorraine Priceman, Woodland Hills, CA  
Victoria Riskin, Woodland Hills, CA  
Jollee Saphier, Woodland Hills, CA  
Marc Tarpenning, Woodside, CA  
Kathleen Fernandez, Yorba Linda, CA  
Peggie Kirkpatrick, Yorba Linda, CA  
Ben Mckinstry, Yorba Linda, CA  
Gabriel Graubner, Yountville, CA  
Carole Evers, Yucaipa, CA  
Kt Gates-Waldrup, Yucaipa, CA  
Jo Bollen, Yucca Valley, CA  
Rose Bachman, CA 90001  
Leonardo Corro, CA 90001  
Penelope Daily, CA 90001  
Adrian Juarez, CA 90001  
Denise Miceli, CA 90001



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michele Carrizalez, CA 90002

Julio Robledo, CA 90003

Vanessa Bayer, CA 90004

Shirley Hey, CA 90004

Glen Morgan, CA 90004

Grant Sloss, CA 90004

Jeremy Tague, CA 90004

Candy Kaiser, CA 90005

David Mack, CA 90005

Henry Muniz, CA 90005

Jorge Valle-Artiga, CA 90005

Michelle Rito, CA 90006

Tripti Kamath, CA 90007

Beth Palkovic, CA 90007

Joshua Yeargain, CA 90007

Gail Gentry, CA 90008

Fred Mosbey, CA 90008

Scott Baird, CA 90010

Jessie Hahn, CA 90010

Barbara Hoke, CA 90010

Hector Arroyo, CA 90011

Bruce Stout, CA 90011

Lisa Callahan, CA 90012

Wendy Vinglinsky, CA 90012

Narda Zacchino, CA 90012

Drex Heikes, CA 90013

Jolie Krance, CA 90013

J Magnuson, CA 90013

Adam Miller, CA 90013

Sigmund Palasek, CA 90013

Michael Vizcarrondo, CA 90013

Linda Desola, CA 90014

Andrew Matson, CA 90014

Glicelia Avila, CA 90015

Chad Sarver, CA 90015

Ricky Shum, CA 90015

Gary Williams, CA 90015

Theodore Burton, CA 90016

Michael Damanskis, CA 90016

Victoria Kemsley, CA 90016

Joan Benjamin, CA 90017

Lisa Shinavier, CA 90018

Jo Trigo, CA 90018

Sarah Boldt, CA 90019

Dejarne Bourne, CA 90019

Sharron Craig, CA 90019

Brian Dent, CA 90019

Uri Fleming, CA 90019

Jennifer Griffin, CA 90019

Julia Hasen, CA 90019

Ksenia Koban, CA 90019

Jane Martin, CA 90019

Jaimie Mullens, CA 90019

Thuyvan Nguyen, CA 90019

Kevin Proulx, CA 90019

Daniel Shapiro, CA 90019

Melody Thornton, CA 90019

Karen Tillman, CA 90019

Daniel Yoo, CA 90019

James Jackson, CA 90020



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gerald Park, CA 90020

Alexandra Weinberger, CA 90020

Amishi Shah, CA 90021

Mills Davis, CA 90022

Steven Baaden, CA 90024

Geoffrey Bogeaus, CA 90024

Geoff Bywater, CA 90024

Susan Friedman, CA 90024

Janet Hirsch, CA 90024

Melodie Hollander, CA 90024

Kiera Kosciulek, CA 90024

Christine Oldenbrook, CA 90024

Kevin Poirier, CA 90024

Wendy Richmond, CA 90024

Phillip Savenick, CA 90024

Joel Smith, CA 90024

Jeremy Vernon, CA 90024

Joseph Ziomek, CA 90024

Philip Bartolf, CA 90025

Phyllis Gabriel, CA 90025

Kathryn Hyder, CA 90025

Harriet Levine, CA 90025

Rachel McClard, CA 90025

Harvey Myman, CA 90025

John Stapleton, CA 90025

Danielle Stclair, CA 90025

Rosie Alvarenga, CA 90026

Rochelle Bassarear, CA 90026

Hugo Chavez, CA 90026

Danika Choe, CA 90026

Henry Estrada, CA 90026

Jonathan Gibson, CA 90026

Melissa Jones, CA 90026

Margaret Kingsbury, CA 90026

Raen Malone, CA 90026

Frances Maloney, CA 90026

Rebecca Rufer, CA 90026

Toby Tannenbaum, CA 90026

Alison Waller, CA 90026

Paul Brittain, CA 90027

Devlyn Corrigan, CA 90027

Morgan Doverpearl, CA 90027

Terri Foster, CA 90027

Kathryn Nelson, CA 90027

Jb Popplewell, CA 90027

Autumn Reeser, CA 90027

Manuel Rodriguez, CA 90027

Michele Sohnen, CA 90027

Zackary Taylor, CA 90027

Lisa Wallace, CA 90027

Lisa Carney, CA 90028

Melissa Gelmo, CA 90028

Kendra Miller, CA 90028

Coleen Novak, CA 90028

Morgan Bleuel, CA 90029

Suzanne Carney, CA 90029

Andrew Gage, CA 90029

Jessica Rosen, CA 90029

Gustavo Torres, CA 90029

Audrey Arkins, CA 90031





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Lourdes Beltran, CA 90031  
Nathana Schooler, CA 90031  
Misty Arceneaux, CA 90032  
Tony Beck, CA 90032  
Zoely Biel, CA 90032  
Raymond Dangelo, CA 90032  
Arturo Jauregui, CA 90032  
George Torres, CA 90032  
Jazmin Ortega, CA 90033  
Mitchell Roberts, CA 90033  
Annie Wong, CA 90033  
Victoria Brago, CA 90034  
Gonzalez Cani, CA 90034  
Stanley Coleite, CA 90034  
Cristina Cruz, CA 90034  
Claudia Garcia, CA 90034  
David Hawthorne, CA 90034  
Elisa Iovine, CA 90034  
Delia Lopez, CA 90034  
Annie Orange, CA 90034  
Nicole Pina, CA 90034  
Tucker Poindexter, CA 90034  
Michael Raileanu, CA 90034  
Collin Reynolds, CA 90034  
Elizabeth Rose, CA 90034  
Frank Sorkin, CA 90034  
Bernestine Taylor, CA 90034  
Brandon Vineyard, CA 90034  
Florence Williams, CA 90034  
Tricia Berman, CA 90035

Mitchell Cohen, CA 90035  
Andrew David, CA 90035  
Marcy Kelly, CA 90035  
Randall Leighton, CA 90035  
Steven Luftman, CA 90035  
Sara Mattison, CA 90035  
Jordyn Ostroff, CA 90035  
Brenda Rутtenberg, CA 90035  
Joan Sobel, CA 90035  
Crystal Us, CA 90035  
Stacy Barninger, CA 90036  
Lauren Bopp, CA 90036  
Jennifer Brett, CA 90036  
Anne Brilliant, CA 90036  
Claire Castle, CA 90036  
Paqueta Davis, CA 90036  
Marisa Duarte, CA 90036  
Alan Ehrlich, CA 90036  
Thomas Gossard, CA 90036  
Suzanna Griffith, CA 90036  
Henry Johnson, CA 90036  
Kevin Keenan, CA 90036  
Chad Kenward, CA 90036  
Anne Madariaga, CA 90036  
Gabrielle Mahdesian, CA 90036



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Eric Opanga, CA 90036  
Bill Petrotta, CA 90036  
Micah Pittard, CA 90036  
Cherie Sandum, CA 90036  
Rick Wartzman, CA 90036  
Gregory Mitchell, CA 90037  
Daniel Shaw, CA 90037  
Ellynn Brown, CA 90038  
Justin Horowitz, CA 90038  
Kenneth Rincon, CA 90038  
Dominick Romain, CA 90038  
Reiss Clauson-Wolf, CA 90039  
Sean Cooley, CA 90039  
Melodie Mcdaniel, CA 90039  
Paulina Quintana, CA 90039  
Erik Rhey, CA 90039  
Annelle Grajeda, CA 90040  
Pablo Vargas, CA 90040  
Francesca Fiorentini, CA 90041  
Teru Kanazawa, CA 90041  
Michael Nehring, CA 90041  
Paul Vallejo, CA 90041  
Jennifer Wilson, CA 90041  
Martamaria Cross, CA 90042  
Laura Cultrera, CA 90042  
Vincent Delley, CA 90042  
Ann Diederich, CA 90042  
Austin Flack, CA 90042  
Jacqueline Hardy, CA 90042  
Brendan Hughes, CA 90042

James Knudsen, CA 90042  
Michele Lavecchia, CA 90042  
Nancy Sharrett, CA 90042  
Yolanda Duvernay, CA 90043  
Carla Huckaby, CA 90043  
Janice Kingcade, CA 90043  
Emma Rivera, CA 90043  
Larry Roberson, CA 90043  
Teraesa Vinson, CA 90043  
Monique Browne, CA 90044  
Michael Hall, CA 90044  
Vincent Marzullo, CA 90044  
Diane Corbin, CA 90045  
Michael Eberly, CA 90045  
Shay Gipson, CA 90045  
Sasha Kushner, CA 90045  
Jason Phillips, CA 90045  
Robyn Rhinehart, CA 90045  
Lilian Salvatore, CA 90045  
Eleanor Schwartz, CA 90045  
Shannon Algeo, CA 90046  
sharon barber, CA 90046  
Nicholas Barlow, CA 90046  
Rusty Buchanan, CA 90046  
Peter Burns, CA 90046  
Laniesha Butler, CA 90046  
Monique Caulfield, CA 90046  
Sukee Chew, CA 90046  
Lisa Crilley, CA 90046  
Jonathan Darr, CA 90046



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kae Erickson, CA 90046

Taylor Forbes, CA 90046

Mary Haskell, CA 90046

Jason Hicks, CA 90046

Paula Hooks, CA 90046

Daniel Howell, CA 90046

Corey Jiannalone, CA 90046

Michael Kelleher, CA 90046

Rada Konvisser, CA 90046

Meredith Lovegrove, CA 90046

Christopher Mcfarland, CA 90046

Matthew Nolinleblanc, CA 90046

Nancy Priddy, CA 90046

Sydney Van Gorp, CA 90046

Linda Cryer, CA 90047

Claire Evans, CA 90047

Franklin Marline, CA 90047

Marvin Zacharie, CA 90047

Cayla Bonn, CA 90048

Lucy Bradley, CA 90048

James Forrester, CA 90048

Deborah Glass, CA 90048

Douglas Long, CA 90048

Eric Ortner, CA 90048

David Resnik, CA 90048

James Rounds, CA 90048

Stephen Viens, CA 90048

Charlene Williams, CA 90048

Susan Bleecher, CA 90049

Ronda Gomezquinones, CA 90049

Judith Gordon, CA 90049

Andrea Green, CA 90049

Nicole Hillebrandt, CA 90049

Steven Hitter, CA 90049

Theresa Kvale, CA 90049

Laurel Newbound, CA 90049

Katie Ng, CA 90049

Arnold Platzker, CA 90049

Paul Puri, CA 90049

Rebecca Sperber, CA 90049

Matthew Tolchin, CA 90049

Marshall King, CA 90056

Richard Krelle, CA 90056

Cynthia Mason, CA 90056

Andreda Pruitt, CA 90056

Sylvia Swilley, CA 90056

Carmencita Solidum, CA 90057

Cynthia Hawkins, CA 90059

Daniel Zepeda, CA 90059

Dana Hubert, CA 90061

Yanscy Flores, CA 90063

Beatriz Higuera, CA 90063

Kathy Rose, CA 90063

Nicole Bergelson, CA 90064

Thomas Byrnes, CA 90064

Shellie Collier, CA 90064

Karin Diskin, CA 90064

Karen Edgerton, CA 90064

Matthew Fillman, CA 90064

Jody Frank, CA 90064



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Gage, CA 90064  
Mark Hembree, CA 90064  
Linda Levy, CA 90064  
Jennie Maguen, CA 90064  
Michael McIntyre, CA 90064  
Susan Montgomery, CA 90064  
Barbara Satinover, CA 90064  
Michael Schaffer, CA 90064  
Cindy Sison, CA 90064  
Ruth Strauss MD, CA 90064  
Barbara Trelease, CA 90064  
Jill Uhlenkott, CA 90064  
Julie Ahlberg, CA 90065  
Maria Borden, CA 90065  
Lamar Damon, CA 90065  
Sarah Soquel Morhaim, CA 90065  
Arthur Shapiro, CA 90065  
Carlos Tobar, CA 90065  
Maria Warmoth, CA 90065  
Kelly Aeolan, CA 90066  
Ethan Arnold, CA 90066  
Peter Basch, CA 90066  
Barbara Berney, CA 90066  
Faith Brewer, CA 90066  
Stephanie Davis Don, CA 90066  
Sarah Epperson, CA 90066  
Timothy Groff, CA 90066  
Gilbert Guerra, CA 90066  
Akhil Gupta, CA 90066  
Camille Harris, CA 90066

Luann Jaffe, CA 90066  
Alex Kruglov, CA 90066  
Danielle Loefflad, CA 90066  
Sean Porter, CA 90066  
Eileen Selogie, CA 90066  
Sondra Yevette, CA 90066  
Robert Zaugh, CA 90066  
Morgan Chu, CA 90067  
Laura Cordovano, CA 90067  
Howard Fredman, CA 90067  
Stephanie Marshall, CA 90067  
Susan Rodriguez, CA 90067  
Shelly Rothschild, CA 90067  
Wesley Strick, CA 90067  
Jason Wallach, CA 90067  
Nancee Allen, CA 90068  
Lynn Collings, CA 90068  
Jodi Ehrlich, CA 90068  
Brian Henson, CA 90068  
Tim Long, CA 90068  
Kay Morris, CA 90068  
Shane Nguyen, CA 90068  
Jimmy Wachtel, CA 90068  
Wendy Alvarez, CA 90069  
Frank Baquero, CA 90069  
Daniel Cohen, CA 90069  
Nicole Cutright, CA 90069  
Wendy Lipin, CA 90069  
Jennifer Martin, CA 90069  
Kent McCallister, CA 90069



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jordan Rosenberg, CA 90069

Meir Shamy, CA 90069

Matthew Shields, CA 90069

Sara West, CA 90069

Tambi Yu, CA 90069

Robert Daly, CA 90077

Matthew Harrison, CA 90077

Richard Kipper, CA 90077

Francine Maisler, CA 90077

Stephen Sohmer, CA 90077

Amarjit Soni, CA 90077

Forrest Walsh, CA 90077

Jonathan Leahy, CA 90078

Kevin Chang, CA 90079

Jill Klein, CA 90093

Joan Shapiro, CA 90094

Laura Barajas, CA 90201

Juan Guerrero, CA 90201

Efrain Meda, CA 90201

Marie Sia, CA 90201

Lori Soto, CA 90201

Nestor Valencia, CA 90201

Sathara Duong, CA 90210

Jasmine Folden, CA 90210

Victoria Jahanmardi, CA 90210

Amir Kojoory, CA 90210

Eve Rodsky, CA 90210

Arnold Stiefel, CA 90210

Dawn Eliashiv, CA 90211

Alexandra Feldman, CA 90211

Marcie Alexander, CA 90212

Josh Millet, CA 90212

Shareef Aquil, CA 90220

Emily Ragobeer, CA 90220

Kelly Gardner, CA 90221

Stefanie Cleaver, CA 90222

Yolanda Melvinnelms, CA 90222

Brian Decato, CA 90230

Barbara Golbin, CA 90230

Patricia Hughes, CA 90230

Sharon Kerson, CA 90230

James Miller, CA 90230

Pat Nomura, CA 90230

Joanna Rowles, CA 90230

Glenn Stewart, CA 90230

Lilli Valtierra, CA 90230

Glenda Wina, CA 90230

Jeremy Zuniga, CA 90230

Bill Birdsall, CA 90232

Mark Galanty, CA 90232

Jonathan Glater, CA 90232

Jim Hornstein, CA 90232

Joy Kecken, CA 90232

Parisa Mirzadehgan, CA 90232

Helki Zeigler, CA 90239

Anita Boorman, CA 90240

Xavier Granados, CA 90240

Salvador Padill, CA 90240

Bernice Caan, CA 90241

Walter Connick, CA 90245





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Rhonda Haley, CA 90245

Chris Miller, CA 90245

Sarah Mosseller, CA 90245

Judy Smith, CA 90245

Gloria Telles, CA 90245

Diane Trevizo, CA 90245

Josephine Baltazar, CA 90249

Marion Dwyer, CA 90250

Julio Gavio, CA 90250

Ellen King, CA 90250

Megan Klein, CA 90250

Maureen Kleinman, CA 90250

Viki Short, CA 90250

Carl Weibel, CA 90250

David Adler, CA 90254

Megan Bowers, CA 90254

Chas Costello, CA 90254

Caitlin Dahl, CA 90254

Martin Fogel, CA 90254

Ann Gotthoffer, CA 90254

Carol Horne, CA 90254

Alicia Jones, CA 90254

Kimberly Legrand, CA 90254

Rosanna Savone, CA 90254

Angel Alva, CA 90260

Anthony Owens, CA 90260

Zenaida Alfaro, CA 90262

Tabitha Dileo, CA 90264

Robert Adler, CA 90265

Maureen De Koff, CA 90265

Jeff Eisen, CA 90265

Marla Hosie, CA 90265

Constance Shafran, CA 90265

Georgia Cano, CA 90266

Bradley Dodge, CA 90266

Carol Dormer, CA 90266

Ralph Goldstein, CA 90266

Otto Gudiel, CA 90266

Brittany Hilgendorf, CA 90266

Lynn Smith, CA 90266

Lisa Taub, CA 90266

Sara Thaves, CA 90266

Lynn Werner, CA 90266

Irene White, CA 90266

Dorothy Yungman, CA 90266

Brooke Covington, CA 90272

Kimberly Michel, CA 90272

Weston Naef, CA 90272

Leo Perez, CA 90272

Nora Perricone, CA 90272

Peter Rogers, CA 90272

Ellie Ross, CA 90272

Patricia Sinclair, CA 90272

Paul Solomon, CA 90272

Christine Steele, CA 90272

Michael Chiado, CA 90274

Michael Eicher, CA 90274

Janis Fitzsimmons, CA 90274

Arthur Friedman, CA 90274

Yvonne Godfrey, CA 90274



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Karen Govenar, CA 90274

Lawrence Maltz, CA 90274

Colleen MULLowney, CA 90274

Sandra Peck, CA 90274

Ellie Berkowitz, CA 90275

Virendra Kadakia, CA 90275

Louis Krouse, CA 90275

Mark Martinez, CA 90275

Teri Perez, CA 90275

Jason Rosenfeld, CA 90275

Sandra Brilliant, CA 90277

Christine Coffelt, CA 90277

Patrick Daley, CA 90277

Victoria DeFrank, CA 90277

Donna Haupt, CA 90277

Angelica Hurd, CA 90277

Carol Mckeown, CA 90277

Melanie Nelson, CA 90277

Pamela Popovich, CA 90277

Larry Styza, CA 90277

Marc Teitelbaum, CA 90277

Deborah Vaia, CA 90277

David Barnes, CA 90278

Nancy Bartolo, CA 90278

Juan Mansill, CA 90278

Nicole Smith, CA 90278

Daniel Wallace-Brewster, CA 90278

Sandra Flores, CA 90280

Marilyn Ball, CA 90290

Cynthia Hodnett, CA 90290

Angela Mogg, CA 90290

Coon Bruno, CA 90291

Naomi Saldana, CA 90291

Paula Silver, CA 90291

Donna Sylvester, CA 90291

Harbans Ahluwalia, CA 90292

Jason Bohrer, CA 90292

Kelli Cardiff, CA 90292

Jennifer Chiu, CA 90292

Kylie Clark, CA 90292

Courtney Nichols-Gould, CA 90292

Sanya Obsivac, CA 90292

Larry Otting, CA 90292

Michael Perry, CA 90292

Rainer Poertner, CA 90292

Scott Sewell, CA 90292

Nancy Wergeles, CA 90292

Richard Benzel, CA 90293

Louise Lance, CA 90293

Nicole Martinez, CA 90293

Bonnie Mishevich, CA 90293

Michelle Ouellet, CA 90293

Bob Oyama, CA 90293

Jennifer Rice, CA 90293

Stanley Sharpe, CA 90293

Amy Bell, CA 90301

Debra Lockie, CA 90301

Dawn Sitahal, CA 90301

Annie Flowal, CA 90302

Maria Marchand, CA 90302



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Roy Smith, CA 90302

Mar Sorell, CA 90302

Nathaniel Jemison, CA 90303

Cristobal Tostado, CA 90304

Kendall Dennis, CA 90305

Maria Morse, CA 90310

Claudine Gueniot, CA 90401

Brian Sutter, CA 90401

Kathryn Takis, CA 90401

Daniel Arkin, CA 90402

Dave Feldman, CA 90402

Ronni Kern, CA 90402

Frank Stiefel, CA 90402

Jaime Toporovich, CA 90402

Chares Brann, CA 90403

Frederick Carroll, CA 90403

Katie Corridan, CA 90403

Dorothy Froix, CA 90403

Lee Herschler, CA 90403

Sintra Martins, CA 90403

Helen Mccullough, CA 90403

Joe Orcutt, CA 90403

Nectar Redman, CA 90403

Jill Sharaf, CA 90403

Amy Williams, CA 90403

Stefanie Zuroff, CA 90403

Larena Allen, CA 90404

Joan Bee, CA 90404

Ingrid Debeus, CA 90404

Thomas Hawkins, CA 90404

Marlise Malkames, CA 90404

Mary Quinn, CA 90404

Sienna Sanders, CA 90404

Mary Vorasky, CA 90404

Bernard Alfs, CA 90405

Joe Alter, CA 90405

Toby Book, CA 90405

Barry Bunes, CA 90405

Peter Erskine, CA 90405

Linda Garrett, CA 90405

Dan Genetti, CA 90405

Jeffrey Hahn, CA 90405

PAMELA Lane, CA 90405

Erin Martin, CA 90405

Reid Mcglamery, CA 90405

Beverly Millson, CA 90405

Lisa Moseley, CA 90405

Lynn Peterson, CA 90405

Nancy Rosenblum, CA 90405

Mara Thompson, CA 90405

Ashley Wrobel, CA 90405

Tony Wu, CA 90405

Anne Yapple, CA 90405

Chris Hamayasu, CA 90501

Mitchell Hicks, CA 90501

Gregory Jacobs, CA 90501

Gail Nowak, CA 90501

Bryant Odega, CA 90501

Gloria Diaz, CA 90502

Rosemary Levenson, CA 90502



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Bobbi Scoville, CA 90502  
Michelle Hartman, CA 90503  
Judith Baer, CA 90505  
Garland Elaina, CA 90505  
Elizabeth Leung, CA 90505  
Simon Pang, CA 90505  
Asma Rasikh, CA 90505  
Michael Warner, CA 90505  
Bob Lewis, CA 90506  
Charlotte Borst, CA 90601  
Janine Gonzalez, CA 90601  
Robert King, CA 90601  
John Melendrez, CA 90602  
Delmira Miovsky, CA 90602  
Ralph Picon, CA 90602  
Thomas Riebs, CA 90602  
Jeff Palmer, CA 90603  
William Wong, CA 90603  
Michael Oppenheim, CA 90604  
Frank Samaniego, CA 90604  
Andrew Ytuarte, CA 90604  
Diane Zaha, CA 90604  
Genienne Gastelum, CA 90605  
Andrew Nguyen, CA 90605  
John Thomas, CA 90605  
Catherine Mcfall, CA 90606  
Michele Lujan, CA 90620  
Lisa Bearbower, CA 90630  
Amy Estrada, CA 90630  
Hilarie Favro, CA 90630

Christine Handson, CA 90630  
Connie Araujo, CA 90631  
Louis Estrada, CA 90631  
Christina Malm, CA 90631  
Alfred Velasco, CA 90631  
Sylvia Duran-Katnik, CA 90638  
Jorge Moreno, CA 90640  
Luis Parocua, CA 90640  
Priscilla Tostado, CA 90640  
Gloria Haley, CA 90650  
Henry Resendez, CA 90650  
Madeline Ayala, CA 90660  
Irma Barrios, CA 90660  
Stacey Esparza, CA 90660  
Victoria Rodriguez, CA 90660  
Laura Garcia, CA 90670  
Katherine Koh, CA 90670  
Luisa Acosta, CA 90680  
Eloisa Likens, CA 90701  
Sherry Barbour, CA 90703  
Antonino Castillo, CA 90703  
Stephen Hamrick, CA 90703  
Patricia Lozano, CA 90703  
Linda Rochin, CA 90703  
April Goebel, CA 90706  
Lee Orozco, CA 90706  
Rodrigo Vazquez, CA 90706  
Janet Kordich, CA 90710  
Lawrence Circosta, CA 90713  
Sharney Alvarez, CA 90715



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Frenee Dellosa, CA 90715  
Beverly Tolliver, CA 90715  
Patricia Hydo, CA 90717  
Colin Caesar, CA 90720  
Kelly Fleagle, CA 90720  
Jay Leibowitz, CA 90720  
Jimmy Sorensen, CA 90720  
Daniel Teran, CA 90720  
Melinda Porter, CA 90723  
Josue Garcia, CA 90731  
Janet Jackson, CA 90731  
Mark Latno, CA 90731  
Rosemary Locklear, CA 90731  
Kathleen Durazo, CA 90732  
Kerry Mcosker, CA 90732  
Peggy Morales, CA 90732  
Jason Buell, CA 90740  
Elda Lowe, CA 90740  
Roni Shevick, CA 90740  
Rebecca Wyatt, CA 90740  
Amanda Herring, CA 90742  
Elvia Maciel, CA 90744  
Crisostomo Caratao, CA 90745  
John Winston, CA 90745  
Dionecia Usher, CA 90746  
Harold Williams, CA 90746  
Sylvia Baker, CA 90755  
Donna Vaughan, CA 90755  
Jason Castner, CA 90802  
Alison Chabot, CA 90802

Lynda Crow, CA 90802  
Claus Jurgensen, CA 90802  
Matthew Lampe, CA 90802  
John Lowe, CA 90802  
William Moody, CA 90802  
Michael Moskowitz, CA 90802  
Nancy Oneill, CA 90802  
Gregory Pacificar, CA 90802  
Arnold Rosenberg, CA 90802  
Timothy Smith, CA 90802  
Krista Stoltz, CA 90802  
Bonnie Bishop, CA 90803  
Lisa Buchanan, CA 90803  
Shawn Lamont, CA 90803  
Krishna Manvi, CA 90803  
Debra Martin, CA 90803  
Anne Reggie, CA 90803  
Mark Rogers, CA 90803  
Michael Werner, CA 90803  
Kylee Yates, CA 90803  
Vicky Gutierrez, CA 90804  
Lena Serrano, CA 90804  
Terry Allen, CA 90805  
Chris Lauderdale, CA 90805  
Trulena Reed, CA 90805  
Rose Regalado, CA 90805  
Marvin Todd, CA 90805  
Brett Banditelli, CA 90806  
Sheryl Breault, CA 90806  
Linda Gore, CA 90806





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ian Cross, CA 90807  
Robert Hilty, CA 90807  
Mary Humme, CA 90807  
Loretta Klonecky, CA 90807  
Kent Lockart, CA 90807  
Sharon Mcdougal, CA 90807  
Robert Miller, CA 90807  
Okatch Otieno, CA 90807  
Denise Wallace, CA 90807  
Louise Cunningham, CA 90808  
Richard Kasube, CA 90808  
Elizabeth Kurila, CA 90808  
Patricia Martinez, CA 90808  
Adam Nelson, CA 90808  
Michelle Vasiloff, CA 90808  
Amy Williford, CA 90808  
Becky Wilson, CA 90808  
Travis Yarbrough, CA 90808  
Samantha Fabrigas, CA 90810  
Phoebe Nichols, CA 90810  
Alba Carlos, CA 90813  
David Navarro, CA 90813  
Guillermo Olarte, CA 90813  
Sharron Pannell, CA 90813  
Jack Dourigan, CA 90814  
Robert Loparo, CA 90814  
Courtnei Pugh, CA 90814  
Jason Suarez, CA 90814  
Stella Ursua, CA 90814  
Abigail Bradecich, CA 90815

Melanie Buckowski, CA 90815  
Chester Chebegia, CA 90815  
Sylvia Gyimesi, CA 90815  
Rhonda Weisenberger, CA 90815  
Bernard Adamczyk, CA 91001  
Ontresicia Averette, CA 91001  
Patricia Fielder, CA 91001  
Sheldon Halpern, CA 91001  
Sydney Harris, CA 91001  
Kenneth Jones, CA 91001  
Elsa Lopez McLeod, CA 91001  
Cate MatherS-Suter, CA 91001  
Scott Streicher, CA 91001  
Susan Lauer, CA 91006  
Steven Lee, CA 91006  
Joyce Sakai, CA 91006  
Albert Hu, CA 91007  
Guodi Sun, CA 91007  
Diane Coscarelli, CA 91010  
David Knapik, CA 91010  
Claudia Trefzger, CA 91010  
Dave Allen, CA 91011  
Joanne Doyle, CA 91011  
Tracey Welk, CA 91011  
Stephanie Farah, CA 91016  
Sandra Glaser, CA 91016  
Renee Lindsey, CA 91016  
Mary Lutz, CA 91016  
Wayne Prasertong, CA 91016  
Christine Pregent, CA 91016



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jon Sattler, CA 91016  
Rena Snider, CA 91016  
Ruben Valenzuela, CA 91016  
Kristen Cunningham, CA 91020  
Justin Smith, CA 91024  
Linda Bortell, CA 91030  
Gionne Bozzi, CA 91030  
Deirdre Brenner, CA 91030  
Kevin Fox, CA 91030  
Shandor Garrison, CA 91030  
Wes Kennedy, CA 91030  
Joseph Loo, CA 91030  
Bob Lynch, CA 91030  
Stephanie Rodriguez, CA 91030  
Robin A, CA 91040  
Mary Leask, CA 91040  
Stephanie Mines, CA 91041  
Cecelia Hall, CA 91042  
Suzan Ortmeier, CA 91042  
Leonard Hinzo, CA 91101  
David Mceliece, CA 91101  
Inna Sarac, CA 91101  
Jessica Servin, CA 91101  
Evelyn Zamora, CA 91101  
Garret Gervais, CA 91103  
Daniel Denoncourt, CA 91104  
Rudy Oclaray, CA 91104  
Sherri Solinger, CA 91104  
Melissa Afable, CA 91105  
Rosemary Distaso, CA 91105

Sable Hodson, CA 91105  
Susan Kalmanson, CA 91105  
Laila Karne, CA 91105  
Jose Marquez, CA 91105  
Susan Weber, CA 91105  
Thomas Castaneda, CA 91106  
Lyle Davis, CA 91106  
Courtney Sanford, CA 91106  
Patricia Tavera, CA 91106  
Richard von Ernst, CA 91106  
Daniel Kiczek, CA 91107  
Joan Money, CA 91107  
Scott Reed, CA 91108  
Jordan Sollitto, CA 91108  
Patrick Moloughney, CA 91117  
Julia Dennett, CA 91118  
Phillip Argento, CA 91199  
Kathleen Conroy, CA 91201  
Michael Lent, CA 91201  
Michael Fairman, CA 91202  
Eve Hinchcliffe, CA 91202  
Oscar Ibardolaza, CA 91202  
Mike Powers, CA 91202  
JOHN PAUL KARLIAK, CA 91205  
Charles Merman, CA 91205  
Madoka Minoff, CA 91205  
Greg Nash, CA 91205  
Yael Torbati, CA 91205  
Bonnie Benefield, CA 91206  
Barri Brown, CA 91206



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Janna Gosselin, CA 91206  
Samuel Jordan, CA 91206  
Robin Rose, CA 91206  
Johanna Shapiro, CA 91206  
Matthew Hancock, CA 91207  
Maya Gingery, CA 91208  
John Wagner, CA 91208  
Vahe Badalian, CA 91214  
Elizabeth Connors, CA 91214  
Alicia Elliott, CA 91214  
Rachel Mcdowell, CA 91214  
Belinda Smith, CA 91214  
James Vitek, CA 91214  
Warren Wolfswinkel, CA 91214  
Bonnie Aharoni, CA 91301  
Julie Burkert, CA 91301  
Harvey Davis, CA 91301  
Helen Dembski, CA 91301  
Laura Gilbard, CA 91301  
Karen Lijewski, CA 91301  
Kellee Mcdonald, CA 91301  
Nicolas Miller, CA 91301  
Mary Perezkorinko, CA 91301  
Deborah Raymond, CA 91301  
Kurt Teutsch, CA 91301  
Yaara Berdan, CA 91302  
Chittabhattacha Bhattacharya, CA 91302  
Kerry Ehrin, CA 91302  
James Estill, CA 91302  
Marcia Jones, CA 91302

Paul Malmont, CA 91302  
Marianne Price, CA 91302  
Snuffy Walden, CA 91302  
Marissa Espinoza, CA 91303  
Bernita Gross, CA 91303  
Kristina Hergot, CA 91304  
Ernest Hess, CA 91304  
Wendy Liebman, CA 91304  
Ernesto Lising, CA 91304  
Sandra Machado, CA 91304  
Lesley Webster, CA 91304  
Kirk Bales, CA 91306  
Collette Snoonian, CA 91306  
Charlesdelore Wilbert, CA 91306  
Garrett Clancy, CA 91307  
Katherine Eskey, CA 91307  
John Golden, CA 91307  
Deborah Hyde, CA 91307  
Zenia Lasola, CA 91307  
Lori Love, CA 91307  
Pamela Maggin, CA 91307  
Richard Naimy, CA 91307  
Philip Sager, CA 91307  
Miriam Bogler, CA 91311  
Cassandra Kubiak, CA 91311  
Lea Oliver, CA 91311  
Brian Patridge, CA 91311  
Juativa Spurlock, CA 91311  
Ann Bose, CA 91316  
Cindy Durian, CA 91316



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kenneth Zunder, CA 91316

Beth Kramer, CA 91320

Eugenio Rodriguez, CA 91320

Albert Sciamann, CA 91320

Cherie Wrigley, CA 91320

Fahim Aladin, CA 91321

Peggy Streid, CA 91321

Barbara Testa, CA 91321

Saul Candi, CA 91324

Rita Silverman, CA 91324

Erin Feaster, CA 91325

Frank Freeman, CA 91325

Cynthia Mendoza, CA 91325

Kelly Moore, CA 91325

Marion Pucci, CA 91325

Sharon Cho, CA 91326

Terrence Fischer, CA 91326

Leslie Ousdahl, CA 91326

Garrett Shorr, CA 91331

Erphan Delgir, CA 91335

Barbara Gershowitz, CA 91335

Daniel Greenbaum, CA 91335

Steven Kent, CA 91335

Betty Ross, CA 91335

Donna Silverman, CA 91335

Alma Melendez, CA 91340

Julia Arroyo, CA 91342

Diana Cabral, CA 91342

Anna Felix, CA 91342

Debra Lizarraga, CA 91342

Judy Courtney, CA 91343

Robin Dickerson, CA 91343

Gustavo Garcia, CA 91343

Robert Jones, CA 91343

Mohammed Manik, CA 91343

Chris Papio, CA 91343

Lewis Gruber, CA 91344

Lisa Jernagan, CA 91344

Margie Ridolfi, CA 91344

Jack Rorke, CA 91344

Debra Stafford, CA 91344

Albert Campbell, CA 91350

Victoria Davis, CA 91350

Richard Davis, CA 91351

Patrick Hayes, CA 91351

Tami Cox, CA 91354

Ellyn Frechette, CA 91354

Laura Lively, CA 91354

Zane Smythe, CA 91354

Monica Bellows, CA 91355

Julie Molinare, CA 91355

Mister Oshodi, CA 91355

Christopher Severance, CA 91355

Sarah Skilton, CA 91355

Linda Swartz, CA 91355

John Trudell, CA 91355

Ladae Bond, CA 91356

Michael Dibenedetto, CA 91356

Tina Glantz, CA 91356

Aaron Katz, CA 91356



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Peter Marafatsos, CA 91356

Eve Newton Gill, CA 91356

Sandra Orleans, CA 91356

Neil Reichline, CA 91356

Manindersethi Sethi, CA 91356

Neil Soltman, CA 91356

Walter Virginia, CA 91357

Arlene Bloom, CA 91360

Josie Borkan, CA 91360

Patricia Bowen, CA 91360

Ronald Clyburn, CA 91360

David Courtland, CA 91360

Karen Giacalone, CA 91360

Manuel Gonzalez-Olmo, CA 91360

Anna Matthews, CA 91360

Michael Pittas, CA 91360

Raquel Robinson, CA 91360

Gary Schattl, CA 91360

Kristin Dark, CA 91361

Lewis Fairley, CA 91361

Suzan Kavusi, CA 91361

Cindy Masci, CA 91361

Marianne Reeves, CA 91361

Andrea Richard, CA 91361

Ravi Sawhney, CA 91361

Suzette Sheweloff, CA 91361

Brigitte Cox, CA 91362

Karen Drees, CA 91362

Cyndi Ex, CA 91362

Debra Gass, CA 91362

Sara Hibbitts, CA 91362

Carl Josefsson, CA 91362

Maxine Raleigh, CA 91362

Paula Varblow, CA 91362

Jill Whitesides, CA 91362

Joey Dianda, CA 91364

John Edelston, CA 91364

Irene Escardo, CA 91364

Ardeshir Farah, CA 91364

Liz Golombek, CA 91364

Jeffrey Pittman, CA 91364

Karen Spencer, CA 91364

Sharla Bridgett, CA 91367

Deborah Cohen, CA 91367

Angela Deluca, CA 91367

Robert Dyck, CA 91367

John Elder, CA 91367

Lisa Insana, CA 91367

Charles Lagola, CA 91367

John Liddy, CA 91367

Christopher Matted, CA 91367

Luz Rockey, CA 91367

Melinda Romeo, CA 91367

Daniel Zagayer, CA 91367

John Billesdon, CA 91377

Margaret Han, CA 91377

Jana Hand, CA 91377

Samantha Hart, CA 91377

Amy Keys, CA 91377

David Robinson, CA 91377





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Miklos Wright, CA 91384

Rose Duarte, CA 91387

Lynn Farwell, CA 91387

Folahan Ogunyankin, CA 91387

Faith Jackson, CA 91394

Christina Anthony, CA 91401

Carolyn Collum, CA 91401

Lauren Dimascio Hilary, CA 91401

Alice Engelmann, CA 91401

Kathy Foley, CA 91401

Tanya Gradet, CA 91401

Jessica Hicks, CA 91401

Jodi Kustanovich, CA 91401

Brenda Miller, CA 91401

Corey Reed, CA 91401

Tami Tirgrath, CA 91401

Kathleen Gooley, CA 91402

Julie Peterson, CA 91402

Carol Baumzweiger, CA 91403

Rene Compean, CA 91403

Pete Decoste, CA 91403

David Frederick, CA 91403

Frances Garcia, CA 91403

Rome Mendheim, CA 91403

Emily Rehm, CA 91403

Nina Berry, CA 91405

Joann Gonzalez, CA 91405

Jeana Mamer, CA 91405

Maria Perez, CA 91405

Mary Pittelli, CA 91405

Brian Saulter, CA 91405

Andrea Tullio, CA 91405

Norma Castro, CA 91406

Melissa Elliott, CA 91406

Richard Follett, CA 91406

James Kimmel, CA 91406

Jean Mensing, CA 91406

Jenny Benjamin, CA 91411

Lilia Espino, CA 91411

Stephanie Hail, CA 91411

Melinda Liberatore, CA 91411

Rhonda Britten, CA 91423

Patrick Fabian, CA 91423

Chiara Gambini, CA 91423

Cheryl Kopitzke, CA 91423

Vicky Leiner, CA 91423

Hannah Lipow, CA 91423

Michael Mccoll, CA 91423

Chandra Padover, CA 91423

Stan Rogow, CA 91423

Sara White, CA 91423

K Andrews, CA 91436

Barbara Bresler, CA 91436

Tracy Danza, CA 91436

Tara Gallogly, CA 91436

Alan Gerson, CA 91436

Jamie Grossman, CA 91436

Hannah Mandel, CA 91436

David Miller, CA 91436

Katrina Parks, CA 91436



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gia Twine, CA 91436  
William Bilton, CA 91501  
Peter Carrisoza, CA 91501  
Norma Long Smith, CA 91501  
Sarah Min, CA 91501  
Penny Moore, CA 91501  
Barbara Chalsma, CA 91502  
Lonnie Schnell, CA 91502  
Ellen Burns, CA 91504  
Jb Dlugo, CA 91504  
Jane Gagle, CA 91504  
Gerardo Lorenz, CA 91504  
Denise Petski, CA 91504  
Lana Wilson, CA 91504  
Barbara Bali, CA 91505  
Ramona Banuelos, CA 91505  
Roberto Ceja, CA 91505  
Lydia Delaney, CA 91505  
Terry Gwilt, CA 91505  
Clayton Holt, CA 91505  
Cynthia Mazza, CA 91505  
Lynda Morris, CA 91505  
Christopher Nicholson, CA 91505  
Gloria Rodriguez, CA 91505  
Laura Strubing, CA 91505  
Carole Tyminski, CA 91505  
Peter Wood, CA 91505  
Lauren Dean, CA 91506  
Lindsey Gary, CA 91506  
Joseph Lafalce, CA 91506

Debbie Peterson, CA 91506  
Ada Suros, CA 91506  
Aaron Berjohn, CA 91601  
Carole Meyers, CA 91601  
Matthew Murphu, CA 91601  
Nicholas Schutz, CA 91601  
Greg French, CA 91602  
Catherine Genovese, CA 91602  
Pamela Hannah, CA 91602  
Julie James, CA 91602  
David Kemker, CA 91602  
Diane Wilson, CA 91602  
Jeff Aldrich, CA 91604  
Claire Austin, CA 91604  
Joshua Bobrowsky, CA 91604  
Monica Brown, CA 91604  
Sherri Elkaim, CA 91604  
Barbara Epstein, CA 91604  
Tim Farish, CA 91604  
F Forte, CA 91604  
Hayley Frazier, CA 91604  
Kellie Green, CA 91604  
Cynthia Hasday, CA 91604  
Alma Hernandez, CA 91604  
Masako Ichino, CA 91604  
Jeffrey Kaufman, CA 91604  
Amy Larkowski, CA 91604  
Christine Mantilla, CA 91604  
Mary Kay Griepentrog, CA 91605  
Anthony Karlic, CA 91605



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Richard Kelley, CA 91605  
Myrna Garcia, CA 91606  
Janet Hessert, CA 91606  
Pattie Tierce, CA 91606  
Carl Amodeo, CA 91607  
Toby Brody, CA 91607  
Chloe Castro, CA 91607  
Robert Laskin, CA 91607  
Timothy Malcolm, CA 91607  
Julie Shemitz, CA 91607  
Barbara Singer, CA 91607  
Daamen Krall, CA 91610  
Alba Boren, CA 91701  
Victoria Chestnut, CA 91701  
Michelle Dudek, CA 91701  
Beverly Pearson, CA 91701  
America Rivas, CA 91701  
Rose Blanco, CA 91702  
Ana Juarez, CA 91702  
Lisa Oakes, CA 91702  
Jon Sparks, CA 91702  
Gregory Vaniman, CA 91702  
Linda Bolella, CA 91706  
Lisa Cunningham, CA 91709  
Luis Nino, CA 91709  
Evangeline Obrero, CA 91709  
Pamela Pederson, CA 91709  
Artan Qerushi, CA 91709  
Agnes Ferrer, CA 91710  
Kimberly Goodwin, CA 91710

Gregory Lawson, CA 91710  
Cathy Mergaert, CA 91710  
Naomi Miller, CA 91710  
Bernard Karmatz, CA 91711  
Daeho Kim, CA 91711  
Mary Kraus, CA 91711  
Elizabeth Spinrads, CA 91711  
Christine Zivelonghi, CA 91711  
Michael Bond, CA 91722  
Michelle Cozad, CA 91722  
Carl Molitor, CA 91722  
Joyce Mitchell, CA 91723  
Steven Jimenez, CA 91724  
Dana Veit, CA 91724  
Gilbert Ahumada, CA 91730  
Karen Desimone, CA 91730  
Edward Hays, CA 91730  
Demetria Johnson, CA 91730  
Marva Taylor, CA 91730  
Phyllis White, CA 91730  
David Sandoval, CA 91732  
Cherie French, CA 91737  
Tammy Wilson, CA 91737  
Maria Mendoza, CA 91739  
Wanda Peyton, CA 91739  
Tedd Johnson, CA 91740  
Andy Wang, CA 91740  
Fred Beck, CA 91741  
Steven Concidine, CA 91741  
Kristine Nelson, CA 91741



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michael Carr, CA 91744  
Jacqueline Cellian, CA 91744  
Hector Estrada, CA 91744  
Enrique Duenas, CA 91745  
Irene Loh, CA 91745  
Rebecca Meyer, CA 91745  
Gabrielanthony Murillo, CA 91745  
Mary Rubalcava, CA 91746  
Marilyn Bidwell, CA 91750  
Dale Gibboney, CA 91750  
Bonnie Karlyle, CA 91750  
Martha Smith, CA 91750  
Kelly Whittington, CA 91750  
Warren Winter, CA 91750  
Matthew Leal, CA 91752  
Alysa Majer, CA 91752  
Yip Johnson, CA 91754  
Jack Loh, CA 91754  
Allan Shatkin, CA 91754  
Lucille Dimmick, CA 91761  
Mark Iannuzzo, CA 91761  
Marcia Sedillo, CA 91761  
Jerry Weems, CA 91761  
GEORGIANN SLINGERLAND, CA 91762  
Graciela Gambino, CA 91763  
Wendi Cate, CA 91764  
David Taylor, CA 91764  
Judith Aguilera, CA 91765  
Gary Davis, CA 91765  
Varun Dutt, CA 91765

Jean Garcia, CA 91765  
Samuel Johnson, CA 91765  
Greg Krayser, CA 91765  
Hugh Lawrence, CA 91765  
Mamie Lindsey, CA 91765  
So Pak, CA 91765  
Tammi Senzaki, CA 91765  
Rosa Lara, CA 91766  
Guillermo Monterroso, CA 91766  
William Pospishil, CA 91766  
Erlene Stevenson, CA 91766  
John Valadez, CA 91766  
Melissa Crowley, CA 91767  
Bryn Pellegrino, CA 91767  
Christianne Arouze, CA 91768  
Erlinda Fantauzzi, CA 91770  
Jose Meji, CA 91770  
Carol Bowe, CA 91773  
Remedios Gan, CA 91773  
Andrew Ortiz, CA 91773  
Nosakhare Oyemade, CA 91773  
Renee Taylor, CA 91773  
Edward Aguirre, CA 91775  
Brooks Atherton, CA 91776  
Arlene Rios, CA 91776  
Lynn Castro, CA 91780  
Agustin Jimenez, CA 91780  
Maria Skilbred, CA 91784  
Jaymi Abusham, CA 91786  
Socorro Garcia, CA 91786



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jeff McCall, CA 91786  
Marco Ramirez, CA 91786  
Ed Clemensen, CA 91789  
Vilma Takamine, CA 91789  
Carol Tang, CA 91789  
Gregory Newcomer, CA 91790  
Mary Silverstein, CA 91791  
Jeanne Ambriz, CA 91792  
Ariadna Arambula, CA 91801  
Daniella Cota, CA 91801  
Richard Spindler, CA 91801  
Erika Kao, CA 91802  
Lothar Imbior, CA 91803  
Tiffany Wardloveland, CA 91803  
Eduardo Becerra, CA 91902  
Richard Hanks, CA 91902  
France Williams, CA 91902  
Soledad Boucree, CA 91910  
Osadolor Godwin, CA 91910  
Blanca Lopez, CA 91910  
Jose Puente, CA 91910  
Elizabeth Verastigue, CA 91910  
Debra Ashley, CA 91911  
Maurice Gray, CA 91911  
Alan Palmer, CA 91911  
Wendy Shurelds, CA 91911  
Keith Hammond, CA 91913  
Seoul Holloway, CA 91913  
Hung Nguyen, CA 91913  
Vilma Clariza, CA 91915

Fernando Delgado, CA 91915  
George Hurt, CA 91915  
Linda Petty, CA 91915  
Kimberly Williams Kee, CA 91915  
Kevin Collier, CA 91935  
Fred Gordon, CA 91941  
Bebi Rosa, CA 91941  
John Barrios, CA 91942  
Mary Fay, CA 91942  
Mark Forte, CA 91942  
Chelsea Halpine Berger, CA 91942  
Susan Kawar, CA 91942  
Mimi Lev, CA 91942  
Barbara Lueder, CA 91942  
Marjorie McLaughlin, CA 91942  
Susan Mullaney, CA 91942  
Patricia Cortez, CA 91945  
Matt Niles, CA 91945  
Caitlin Wion, CA 91945  
Josefina Alvarado, CA 91950  
Patricia Salazar, CA 91950  
David Valladolid, CA 91950  
Angello Carlin, CA 91977  
Jason Heil, CA 91977  
Carrie Lopez, CA 91977  
Karen Simpson, CA 91977  
Delores Threatt, CA 91977  
Cheryl Carr, CA 91978  
Shawn Hanna, CA 92007  
Alana Howell, CA 92007





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Laurel Howard, CA 92008

Megan Rounds, CA 92008

William Betts, CA 92009

Linda Brenner, CA 92009

Rene Brunold, CA 92009

Megan Dewitt, CA 92009

Christine Dicken, CA 92009

Amal Ghazi, CA 92009

Tiffany Karnig, CA 92009

Judith King, CA 92009

Phillip Nguyen, CA 92009

Gina Pisello, CA 92009

Faramarz Rassouli, CA 92009

Jacqui Schneider, CA 92009

John Detreville, CA 92010

Veronica Glaser, CA 92010

Linda Vancea, CA 92010

Elizabeth Hamelin, CA 92011

Brenna Hardman, CA 92011

Cheryl Bianchi, CA 92014

Samuel Engel, CA 92014

John Erick, CA 92014

Janet Harris, CA 92014

Kay Hoeprich, CA 92014

Candace Lowry, CA 92014

Deanna Lucci, CA 92014

Rand Steiger, CA 92014

Marie Teehan, CA 92014

Kyle Williams, CA 92014

Robert Brandenburg, CA 92019

Tracy Clingan, CA 92019

Veronica Atilano, CA 92020

Dvora Fajerman, CA 92020

Frank Ferrone, CA 92020

Janet Kaiser, CA 92020

Edward Matus, CA 92021

Joan Monkman, CA 92021

Woody Wilson, CA 92021

Cynthia Clark, CA 92023

Misty Andersen, CA 92024

Caroline Augustine, CA 92024

Stephen Baldini, CA 92024

Michele Haber, CA 92024

Richard Hauger, CA 92024

Ann Irwin, CA 92024

Anand Janaswamy, CA 92024

Maureen Kowba, CA 92024

Sarah Mason, CA 92024

Laura Metzinger, CA 92024

Meaghan Oleary, CA 92024

Mark Sonnenshein, CA 92024

Karen Sulger, CA 92024

Ellen Trester, CA 92024

Susan Giroux, CA 92025

Timothy Jarrett, CA 92025

Carmen Ivins, CA 92026

Kimberly Marin, CA 92026

Julie Choi, CA 92027

Mitchell Green, CA 92027

George Kliassov, CA 92027



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Konstantin Sheverdyayev, CA 92027

Susan Beld, CA 92028

Patricia Eastman, CA 92028

Ernest Holburt, CA 92028

Richard Mannino, CA 92028

Diane Parker, CA 92028

Samuel Pietrofeso, CA 92028

Kenneth Samuels, CA 92028

Tom Simmons, CA 92028

Richard Beck, CA 92029

Thomas Hearn, CA 92029

Robert Knaier, CA 92029

Neal Henderson, CA 92030

Robert Blanchard, CA 92037

Barry Bloom, CA 92037

Elizabeth Boyer, CA 92037

Isabel Brown, CA 92037

Brian Campion, CA 92037

Gary Ferdman, CA 92037

Michelle Lerach, CA 92037

Megan Phelps, CA 92037

Oliver Polo, CA 92037

David Thompson, CA 92037

Christopher Jrfisher, CA 92038

Kirk Sword, CA 92040

Barbara Thompson, CA 92040

William Crawford, CA 92049

Thomas Gougherty, CA 92049

John Collins, CA 92052

Carolyn Boone, CA 92054

Susan Buckland, CA 92054

Joseph Calvino, CA 92054

Jason Edwards, CA 92054

John Engel, CA 92054

Patricia Hopper, CA 92054

Christopher Martin, CA 92054

Mark Minkler, CA 92054

Luke Tesluk, CA 92054

Rita Atkinson, CA 92056

William Boston, CA 92056

Rudy Carino, CA 92056

Thomas Labrot, CA 92056

Edward Mankowski, CA 92056

Julie Scott, CA 92056

Natalie Byler, CA 92057

Michael Caracappa, CA 92057

Mark Gillen, CA 92057

Eva Gonzalez, CA 92057

Frank Jacobs, CA 92057

Kelly Kissinger, CA 92057

Laurie Lister, CA 92057

Suzanne Schaefer, CA 92057

Michael Schwalbe, CA 92057

Beverly Stiles, CA 92057

Charlotte Turner, CA 92057

Victoria Volmer, CA 92057

Anna Hamrick, CA 92058

Adrienne Marraccini, CA 92058

Michele Engel, CA 92064

Tom Fahrnkopf, CA 92064



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Belinda Haire, CA 92064

Sharon Hanson, CA 92064

Pamela Keyser, CA 92064

Christopher Nielsen, CA 92064

Maria Stravelakis, CA 92064

Deborah Supergan, CA 92064

April West, CA 92064

Andrea Whitehill, CA 92064

Connie Bley, CA 92065

Eileen Coppola, CA 92065

Paul Firth, CA 92065

Sandra Smith, CA 92065

Michael Gelfand, CA 92067

Nannette Davis, CA 92069

Mary Houle, CA 92069

Howard Motyl, CA 92069

Christina Baumgardner, CA 92071

Darlene Jenkins, CA 92071

Hugo Lepur, CA 92071

Phillip Panuco, CA 92071

Viki Wong, CA 92071

Cathryn Bolt, CA 92075

Jean-Louis Saillet, CA 92075

Tauna Andreoli, CA 92078

Melanie Bennetts, CA 92078

Susan Bowers, CA 92078

Jessica Lynn, CA 92079

Alex Alavi, CA 92081

Annette Berg, CA 92081

Peter Boutte, CA 92081

Bonita Lang, CA 92081

Matilda McLaughlin, CA 92081

Michael Santucci, CA 92081

Rosemarie Bilandzija, CA 92082

Marcia Francis, CA 92083

Brenda Squires, CA 92083

Karen Eso, CA 92084

Marilyn Falsetti, CA 92084

Anne Ichord, CA 92084

Peter Jones, CA 92084

Shelley Markoscrivner, CA 92084

Julianne Howell, CA 92093

Steve Altman, CA 92101

Melissa Blackburn Joniaux, CA 92101

Christina Cole, CA 92101

Joe Cordileone, CA 92101

Drew Dunk, CA 92101

Joshua Gruenberg, CA 92101

Chana Grunvald, CA 92101

Ann Hart, CA 92101

Brad Herrin, CA 92101

Bruce Jaques, CA 92101

Jeff Jordan, CA 92101

Joshua Kuehler, CA 92101

Gregory Lockyer, CA 92101

Charley Myers, CA 92101

Henry Rosen, CA 92101

Jon Ruelle, CA 92101

Julie Smith, CA 92101

Kaylan Thornhill, CA 92101



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Keith Vandellen, CA 92101  
Kelly Vandenheuvel, CA 92101  
Leonard Flagg, CA 92102  
Christian Bulcao, CA 92103  
Elise Curry, CA 92103  
Bradley Foltz, CA 92103  
Wayne Maxwell, CA 92103  
Mary Padial, CA 92103  
Jack Ray, CA 92103  
Richard Thill, CA 92103  
Judybeth Tropp, CA 92103  
Viridiana Ayala, CA 92104  
Sands Chambers, CA 92104  
Amber Ferguson, CA 92104  
Derek Floyd, CA 92104  
Emily Greeno, CA 92104  
Susan Groves, CA 92104  
Janine Harty, CA 92104  
Albert Orcino, CA 92104  
Nancy Relaford, CA 92104  
Robert Silbaugh, CA 92104  
Todd Simpson, CA 92104  
Michelle Sullivan, CA 92104  
Lynne Graham, CA 92105  
Eric Green, CA 92105  
Margarita Jimenez, CA 92105  
Christopher Rocha, CA 92105  
Jennifer Boyd Mims, CA 92106  
Kirsten Chrisman, CA 92106  
Luther Lewis, CA 92106

John Silva, CA 92106  
Tasha White, CA 92106  
Cindy English, CA 92107  
Alison Gang, CA 92107  
Daniel Garcia, CA 92107  
Zac Garripoli, CA 92107  
Shanann Klaver, CA 92107  
Amber Rabon, CA 92107  
Jaime Bartholomew, CA 92108  
Edward Billard, CA 92108  
Sharon Brown, CA 92108  
Helios Gonzalez, CA 92108  
Lynn Jarman, CA 92108  
Kim Myers, CA 92108  
George Salcedo, CA 92108  
Alejandra Bobadilla, CA 92109  
Thomas Cooper, CA 92109  
Hillary Cowan, CA 92109  
Mary Oreilly, CA 92109  
Rogelio Quesada, CA 92109  
Arlina Whetstone, CA 92109  
Joseph Atkinson, CA 92110  
John Goodwin, CA 92110  
Jennifer Latta, CA 92110  
Jason Raymond, CA 92110  
John Seymour, CA 92110  
Barbara Thomas, CA 92110  
Janis Cadwallader, CA 92111  
John Comes, CA 92111  
Carolyn Floyd, CA 92111



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Debra Frischer, CA 92111  
Virginia Holcomb, CA 92111  
Yael Kosta, CA 92111  
Ana Saucedo, CA 92111  
Yolanda Peraza, CA 92113  
Yolandra Thrash, CA 92113  
REBECCA CORREA, CA 92114  
Vivian Griffin, CA 92114  
Kelly Wallace, CA 92114  
Forest Fischer, CA 92115  
Kelly Gavin, CA 92115  
Holly Hamilton, CA 92115  
Jerry Mackenzie, CA 92115  
Robert Snider, CA 92115  
Drew Gingrich, CA 92116  
Robert Hauer, CA 92116  
Paul Hemmerling, CA 92116  
Pfeiffer Ledjema, CA 92116  
Herbert Schwab, CA 92116  
Janeth Alvarez, CA 92117  
Gisela Baranda, CA 92117  
John Brady, CA 92117  
Tim Caulder, CA 92117  
David Fisher, CA 92117  
Barbara Rolando, CA 92117  
Greg Wong, CA 92117  
Anneilynn Wright, CA 92117  
Kevin Ashley, CA 92118  
Shane Chase, CA 92118  
Patti Flanagan, CA 92118

Ann Posthill, CA 92119  
Evangelina Woo, CA 92119  
Christopher Hall, CA 92120  
Kristina Isberg, CA 92120  
Kristin Anderson, CA 92121  
Michael Buckley, CA 92121  
John Ginn, CA 92121  
Kim Bolivar, CA 92122  
Anne Brinkman, CA 92122  
Christine Esau, CA 92122  
Paula Fitzgerald, CA 92122  
Nancy Kern, CA 92122  
Brandon Messerly, CA 92122  
Marie Minnick, CA 92122  
Rosemary Straley, CA 92122  
Andrew Utley, CA 92122  
Dina Beebe, CA 92123  
Loretta Lowery, CA 92123  
Martha Romero, CA 92123  
Arash Yarpezeshkan, CA 92123  
Glenn Buberl, CA 92124  
Anne Nohelty, CA 92124  
Margarita Badaraco, CA 92126  
Jennifer Betancourt, CA 92126  
Melissa Fraser, CA 92126  
Alfredo Iglesias, CA 92126  
Ann Rael, CA 92126  
Shawn Romero, CA 92126  
Debra Sigal, CA 92126  
Charles Smith, CA 92126





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Brenda Johnson, CA 92127

Kathleen Nahman, CA 92127

Nora Nido, CA 92127

Leslie Taylor, CA 92127

Anthony Franchino, CA 92128

Pat Lampasso, CA 92128

Mark Stutzman, CA 92128

Manisha Varaiya, CA 92128

Jacob Wheatley, CA 92128

Cynthia Fehrenbach, CA 92129

Nathalie Gill Podgorski, CA 92129

Katherine Holvoet, CA 92129

Taylor Israel, CA 92129

Courtney Kaull, CA 92129

Lindsay Moon, CA 92129

Debra Sammon, CA 92129

Sue Berard, CA 92130

Donna Durlak, CA 92130

Betty Garbutt, CA 92130

Genevieve Goldstone, CA 92130

Michael Hartogs, CA 92130

Charles Holland, CA 92130

Mario Petrocco, CA 92130

Deborah Wheeler, CA 92130

Matthew Hetrick, CA 92131

Ethan Marcus, CA 92131

Edlene Mckenzie, CA 92131

James Mullen, CA 92131

Robert Shull, CA 92131

Mayra Arellano, CA 92154

Valerie Haas, CA 92154

Kimberly Morgan, CA 92154

Andrea Stella, CA 92154

Larosa Watson, CA 92154

Carolyn Hollins, CA 92160

Susan Blum, CA 92166

Alex Munguia, CA 92193

Maria Eustice, CA 92201

Linda Harris, CA 92201

Patrick Knox, CA 92201

Jacqueline Lopez, CA 92201

Rhona Bader, CA 92203

Lori Dermer, CA 92203

Kathleen Murray, CA 92203

Francis Fashing, CA 92211

Norene Fremont-Bloom, CA 92211

Cheryl Matthews-Fullerton, CA 92211

Donna Mccloudy, CA 92211

Pam Parker, CA 92211

Frederick Schmidt, CA 92211

Earle Wolfe, CA 92211

Cheryl Hopkins, CA 92220

Lyn Johnson, CA 92220

Misty Lane, CA 92220

William Mccloud, CA 92220

Susan Bonner, CA 92223

Loui Cronholm, CA 92223

Anita Finkelstein, CA 92223

Janet Reed, CA 92223

Lori Robillard, CA 92223



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sylvia Diego, CA 92227  
Chryssa Brazil, CA 92234  
Heidi Holmes, CA 92234  
Edith Lascola, CA 92234  
Dale Meyer, CA 92234  
Donald Moore, CA 92234  
Scott Randall, CA 92234  
Victor Rodriguez, CA 92234  
Sydney Skosana, CA 92234  
Kent Taylor, CA 92234  
Sarah Vazquez, CA 92234  
Lilian Velasquez, CA 92234  
George Williamson, CA 92234  
Zee Wong, CA 92234  
Linda Bjornberg, CA 92240  
Ronald Scheer, CA 92240  
Victoria Escalante, CA 92243  
Akbar Zadeh, CA 92243  
Sandy Villa, CA 92251  
Mary Hitchcock, CA 92252  
Linda Perry, CA 92252  
Thomas Burbank, CA 92253  
Jackie Grenz, CA 92253  
Emmett Lewis, CA 92253  
Walter Nelson, CA 92253  
Sharon Prentice, CA 92253  
Jim Watson, CA 92253  
Nancy Woodruff, CA 92253  
Mark Chappell, CA 92256  
Jayne Combs, CA 92256

Michael Foster, CA 92256  
Gregory Bauer, CA 92260  
Sharon Beckman, CA 92260  
Frances Ferguson, CA 92260  
Shirley Findlay, CA 92260  
Genevieve Judge, CA 92260  
Barbara Marx, CA 92260  
Robert Nowie, CA 92260  
Ilene Schimmel, CA 92260  
Kimberly Valentine, CA 92260  
Myriam Westendorf, CA 92260  
Steven Bean, CA 92262  
Clayton Blackburn, CA 92262  
Robert Brandt, CA 92262  
Justin Ceeko, CA 92262  
Martin Foster, CA 92262  
Brandon Hoskins, CA 92262  
Brian Ingelson, CA 92262  
John Mahoney, CA 92262  
John Meyer, CA 92262  
Victor Pellegrini, CA 92262  
Vonne Ringle, CA 92262  
Julian Smariga, CA 92262  
David Wallace, CA 92262  
Richard Witzel, CA 92262  
Sally Goodman, CA 92263  
Rosemarie Olecki, CA 92263  
Jane Stampe, CA 92263  
Deanne Anders, CA 92264  
William Bodine, CA 92264



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Humfeld, CA 92264

Patricia Martin, CA 92264

Kathleen Mcelvarrgarrity, CA 92264

Philip Sacino, CA 92264

Mark Steffen, CA 92264

Leland Vandeventer, CA 92264

Abby Winston, CA 92264

Paul Addison, CA 92270

Shirelle Alexander, CA 92270

Judith Ankney, CA 92270

Bruce Flamenbaum, CA 92270

David Lacharite, CA 92270

Annamarie Viglizzo, CA 92270

Barbara Wiesen, CA 92270

Beth Windsor, CA 92270

Judy Wright, CA 92270

Susan Trexler, CA 92274

Lisa Ayres, CA 92276

Robert Hofmann, CA 92277

James Knight, CA 92277

Vanessa Souza, CA 92277

Laura Valentine, CA 92277

David Woods, CA 92277

Jace Ribblett, CA 92284

Ned Porter, CA 92308

Karen Proctor, CA 92313

Cindy Lalonde, CA 92315

Annette Johnson, CA 92316

Patricia Cuesta, CA 92317

Loretta Airaghi, CA 92321

Kofi Donkor, CA 92324

Megan Mescher, CA 92324

Kenneth Vandusen, CA 92325

Elsa Murdoch, CA 92333

Sunshyne Leyba, CA 92336

Franci Taylor, CA 92337

Margo Alexander, CA 92342

Holly Miller, CA 92345

Adriene Moore, CA 92345

Catherine Smith, CA 92345

Shelley Valadez, CA 92345

Nicholas Warino, CA 92345

Lynette Adelson, CA 92346

Barbara Leelhasuwan, CA 92346

Michela Ratto, CA 92346

Dean Sundquist, CA 92346

James Ferranti, CA 92352

David Bee, CA 92354

Richard Guth, CA 92354

Rivera Nivar, CA 92359

David Leonard, CA 92363

Urvashi Barua, CA 92373

Judith Whitehouse, CA 92373

Chris Clautice, CA 92374

Yolanda Garnicahickey, CA 92374

Keith Moore, CA 92374

Randy Morris, CA 92374

Alex Zhigimont, CA 92374

Toni Formby, CA 92376

Stephanie Gleason, CA 92376



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Adeline Rosales, CA 92376  
Cheryl Piri, CA 92378  
Rosalie Redmile, CA 92382  
Sarah Hatchell, CA 92386  
Connie Harris, CA 92392  
Juanita Murray, CA 92392  
Linda Neumaier, CA 92392  
Michael Oliver, CA 92392  
Eddie Smith, CA 92392  
Lydia Burks, CA 92394  
Roberto Cardenas, CA 92394  
Evelia Gomez, CA 92394  
Lee Arvinger, CA 92395  
Ariene Bennett, CA 92395  
Marsha Owens, CA 92395  
Sharon Dougherty, CA 92397  
Kathryn Boatman, CA 92399  
Gay Hardy, CA 92399  
Heather Longyear, CA 92399  
Helen Reynaud, CA 92399  
Severiana Jordan, CA 92404  
Susan Fleming, CA 92501  
Dianne Hughes, CA 92501  
Shavon Shegog, CA 92501  
Gabriel Flores, CA 92503  
Sandra Neal, CA 92503  
Kathy Sutherland, CA 92503  
Paula Allbeck, CA 92504  
Melissa Banda, CA 92504  
Jason Hackman, CA 92504

Ladanta Heriman, CA 92504  
Martin Martinez, CA 92504  
Tiffany Farr, CA 92505  
Juanita Mckenzie, CA 92505  
Kathy Mcneilly, CA 92505  
Kimberly Romero, CA 92505  
Jonathan Green, CA 92506  
Debra Rivera, CA 92506  
Robin Sinkhorn, CA 92506  
Stephanie Stolzenberg, CA 92506  
Glenn Williams, CA 92506  
Michael Esparza, CA 92507  
Nora Moti, CA 92507  
Natalie Ralston, CA 92507  
Emma Wilson, CA 92507  
Shihui Yang, CA 92507  
Ruth Lumsdon, CA 92508  
Ellen Schaub, CA 92508  
Suzanne Ramirez, CA 92509  
Lorena Torres, CA 92509  
Marty Torres, CA 92509  
Jayson Sandoval, CA 92517  
Ana Cotton, CA 92521  
George Rolla, CA 92530  
Linda Taylor, CA 92530  
Au Ngo, CA 92532  
Richard Provencio, CA 92532  
Sylvia Ross, CA 92532  
Debra Person, CA 92543  
Margaret Marsden, CA 92544



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Anthony Moya, CA 92544

Lisa Ostrow, CA 92544

Mark Branyon, CA 92548

Charles Meece, CA 92549

Paul Martin, CA 92553

Lilia Salais, CA 92553

Monica Woodward, CA 92553

Timothy Cobos, CA 92555

Carola Fabiola Galvez, CA 92555

David Hyde, CA 92557

Renee Osburn, CA 92557

Carlos Morfin, CA 92561

Shawn Hug, CA 92562

Jan Principe, CA 92562

Marsha Burkhalter, CA 92563

Chanstay Corlew, CA 92563

Robert Decubellis, CA 92563

Dorothy Gerard, CA 92563

Wilbur Miller, CA 92563

Paul Smith, CA 92563

Billie Kelpin, CA 92567

Linda Adams, CA 92570

Johnny James, CA 92570

Valerie Jones, CA 92570

Fred Pedregon, CA 92570

Robert Gyngard, CA 92582

Angela Johnson, CA 92582

Chris Amestoy, CA 92584

Karen Marshall, CA 92584

Dolore Scorzo, CA 92584

Charlotte Shifflet, CA 92584

Laurie Stuart, CA 92585

Debra Hall, CA 92586

Carol Luevano, CA 92586

Sheila Monaghandavis, CA 92586

Shari Palmer, CA 92586

Veronica Poss, CA 92586

Eileen Snow, CA 92586

Linda Sproul, CA 92587

John Pozza, CA 92590

Michael Vantrojen, CA 92590

Patsy Calderon, CA 92591

Marcos Camacho, CA 92591

Dolores Esparza, CA 92591

Peggy Hagberg, CA 92591

Josie Madrid, CA 92591

Charyl Malanaphy, CA 92591

Bethany Rogers, CA 92591

Judi Thompson, CA 92591

Robert Audibert, CA 92592

Angelo Lingos, CA 92592

Michael Maginski, CA 92592

Dina Meir, CA 92592

Paul Randall, CA 92592

Danielle Shirley, CA 92592

Mary Vann, CA 92592

Robbin Abeer, CA 92595

Gene Aurand, CA 92596

Kathleen Marquez, CA 92596

Richard Alegre, CA 92602





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Byrne, CA 92602  
Sarah Millerberg, CA 92602  
Neda Moayedi, CA 92602  
Phaeryn Sheehan, CA 92602  
Tom Wiedemann, CA 92602  
Youmin Zhao, CA 92602  
Earl Biven, CA 92603  
Paniz Ebrahimi, CA 92603  
Debi Lambert, CA 92603  
Jenny Lamott, CA 92603  
Peggy Meadows, CA 92604  
Gwen Oden, CA 92604  
Justin Stone, CA 92604  
Solaimani Ferri, CA 92606  
Susan Leinberger, CA 92606  
Douglas Mason, CA 92606  
Patricia Messerly, CA 92606  
Christine Penning, CA 92606  
Nicole Kroesen, CA 92610  
Kristen Allison, CA 92612  
Karen Barnett, CA 92612  
Paul Kiburis, CA 92612  
Christina Krause, CA 92612  
Frank McGill, CA 92612  
Lynnann Williamson, CA 92612  
Nira Brand, CA 92614  
Maria Centeno, CA 92614  
Raeleen Endo-Russell, CA 92614  
Lin Hong, CA 92614  
Tikiri Karunasundera, CA 92614

Steve Murow, CA 92614  
Lori Wallace, CA 92614  
Kathy White, CA 92614  
Adriana Briscoe, CA 92617  
Joanne Donovan, CA 92617  
Tira Palmquist, CA 92617  
Courtney Costello, CA 92618  
Serap Frautschy, CA 92618  
Jeffrey Reznic, CA 92618  
Behraam Baqai, CA 92620  
Michael Cobin, CA 92620  
Adrienne Escoe, CA 92620  
David Kapsner, CA 92620  
Rieva Lesonsky, CA 92620  
Mili Mehta, CA 92620  
Clare Greene, CA 92624  
Daniel Gil, CA 92625  
Joanne Hunt, CA 92625  
Patricia McCormick, CA 92625  
Bill Schenker, CA 92625  
Ruth Silver, CA 92625  
Tamar Wilson, CA 92625  
Robert Getter, CA 92626  
cristina mayer, CA 92626  
Philip McGovern, CA 92626  
Conor Sontag, CA 92626  
Larry Weinheimer, CA 92626  
Crystal Willis, CA 92626  
Gerardo Ambriz, CA 92627  
Steven Behrens, CA 92627



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Susan Forbath, CA 92627

Stephen Hennessey, CA 92627

Tracie Hoffman, CA 92627

Damian Perry, CA 92627

Laura Ricke, CA 92627

James Thomas, CA 92627

Donna Tranter, CA 92627

Axel Truwill, CA 92627

Janice Turner, CA 92627

Marie Wencel, CA 92627

Sherri Eaton, CA 92629

Jeff Fleming, CA 92629

Lisa Kopelman, CA 92629

John Kucera, CA 92629

Lisa Mckee, CA 92629

Richard Moran, CA 92629

Monte Yoder, CA 92629

Gretchen Adin, CA 92630

Linda Burkholder, CA 92630

Jose Cuevas, CA 92630

Michele Dinneen, CA 92630

irving engel, CA 92630

John Flora-Tostado, CA 92630

Elaine Froome, CA 92630

Connie Martin, CA 92630

Shaiko Mukurazhizha, CA 92630

Dejbakhsh Nader, CA 92630

Mary Brogdon, CA 92637

Debra David, CA 92637

Marilyn Giss, CA 92637

Ramesh Joshi, CA 92637

Anne Llewellyn, CA 92637

Debbie Lowe, CA 92637

Delilah Manary, CA 92637

Joseph Meyer, CA 92637

Barbara Sprayregen, CA 92637

Patricia Boyle, CA 92646

John Briody, CA 92646

Carol M. Correia, R.N., M.S., CA 92646

Mona Cortez, CA 92646

Kelly Elder, CA 92646

Ronald Gould, CA 92646

Steve Graham, CA 92646

Gabrielle Hass, CA 92646

Jennifer Jahnke, CA 92646

Sally Kanarek, CA 92646

suzanne lockhart, CA 92646

Maria Mastropaolo, CA 92646

Ginette Nourse, CA 92646

MOKHTAR SHAWKY, CA 92646

Kathy Wanchek, CA 92646

Lisa Welcher, CA 92646

Joseph Harris, CA 92647

Patrick Kennedy, CA 92647

David Kurien, CA 92647

Becky Roepke, CA 92647

Rosemary Rosales, CA 92647

Thomas Cammann, CA 92648

Kristine Cerone, CA 92648

Carole Fulford, CA 92648



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Eleanor Gruenebaum, CA 92648

Amy Hanson, CA 92648

Karen Kettler, CA 92648

Shelley Lowrey, CA 92648

Lisa Martinez, CA 92648

Timothy Murphy, CA 92648

Priscilla Taylor, CA 92648

Cheri Atkinson, CA 92649

Sarah Gibson, CA 92649

Tam Glunt, CA 92649

Randall Keeth, CA 92649

Rick Orr, CA 92649

Sarah Pirch, CA 92649

Rick Shearer, CA 92649

Tom Stanton, CA 92649

Sandra Hartness, CA 92651

Jolie Jensen, CA 92651

Glenna Lovett, CA 92651

Elsa Mitani, CA 92651

George Ripley, CA 92651

Alexander Rounaghi, CA 92651

Wendy Tenebaum, CA 92651

Lauren Dibiasi, CA 92653

Valerie Estrada, CA 92653

Ivo Gough Eschrich, CA 92653

Courtney Kim, CA 92653

Bertha Torres, CA 92653

Socorro Alvarez, CA 92655

Quy Bao, CA 92655

Martha Ramirez, CA 92655

Lorie Cohen, CA 92656

Anne Dalluge, CA 92656

Melissa Deveikis, CA 92656

Rachel Felix, CA 92656

Dru Kaplan, CA 92656

Elizabeth Mcgrath, CA 92656

Maria Perez, CA 92656

Todd Schoedel, CA 92656

Kevin Steele, CA 92656

Linda Westlake, CA 92656

Lawrence Kugelman, CA 92657

Eugene Spiritus, CA 92657

Kevin Vuchinich, CA 92657

Toni Antonacci, CA 92660

Goli Aydin, CA 92660

John Dickinson, CA 92660

Lauren Henry, CA 92660

Robert Herbst, CA 92660

Jan Luymes, CA 92660

Yolanda Mendiveles, CA 92660

Peggy Pugh, CA 92660

Robert Hampton, CA 92661

Cheryl Freeman, CA 92663

Gina Gunal, CA 92663

Bonnie Jeannette, CA 92663

William Kirwin, CA 92663

Holly Thibodeaux, CA 92663

Mike Willison, CA 92663

Sherry Price, CA 92672

Theresa Recht, CA 92672



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Leongah Wheeler, CA 92672

Barbara Bernal, CA 92673

Amanda Einhorn, CA 92673

James Guilfoil, CA 92673

Anthony Hewes, CA 92673

Ronald Koby, CA 92673

Jessica Labbe, CA 92673

Janet Leger, CA 92673

Andrew Lichty, CA 92673

John Mairs, CA 92673

Steven Bellomo, CA 92675

Kirsten Mickelson, CA 92675

Mark Perez, CA 92675

Mark Rodrigues, CA 92675

Nicole Herold, CA 92676

Rhonda Baron, CA 92677

James Birdsall, CA 92677

Rosalind Chasman, CA 92677

Ellen Eber, CA 92677

Jacob Faigin, CA 92677

Thomas Fitch, CA 92677

Tina Freeland, CA 92677

Lara Horgan, CA 92677

Bahman Joorabchi, CA 92677

Gary Olson, CA 92677

Nader Peikar, CA 92677

Anne Perry, CA 92677

Jeanine Roche, CA 92677

Sadia Siddiqui, CA 92677

David White, CA 92677

Greg Young, CA 92677

Vicki Iacono, CA 92678

Marian Ballog, CA 92679

Peggy Calcagnie, CA 92679

Colleen Daniel, CA 92679

Jeffrey Dreyer, CA 92679

Michelle Graham, CA 92679

Stacy Hagen, CA 92679

Josefina Azcona, CA 92683

Regina Christ, CA 92683

Peter Haaker, CA 92683

John Parry, CA 92683

Viet Pham, CA 92683

Gina Thompson, CA 92683

Catherine Besselmanhuescher, CA 92688

Robert Dorman, CA 92688

Purya Ghrabeti, CA 92688

Jennifer Jenrette, CA 92688

Erik Sandstrom, CA 92688

Phillip Woodham, CA 92688

Dorothy Andrews, CA 92691

Carolyn Cohn-Morros, CA 92691

Wesley Jung, CA 92691

Patrick Knotts, CA 92691

Priscilla Monroe, CA 92691

John Mooney, CA 92691

Amy Moore, CA 92691

Michael Sappingfield, CA 92691

Paul Swanson, CA 92691

Jolanta Woog, CA 92691



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Elizabeth Aronson, CA 92692  
Dixie Auringer, CA 92692  
Sher Azizi, CA 92692  
Kenneth Ballan, CA 92692  
Cheryl Boyett, CA 92692  
Jack Brumfield, CA 92692  
Joy Chart, CA 92692  
Hamid Fadavi, CA 92692  
Mary Glackin, CA 92692  
Robert Gonter, CA 92692  
Rita Knisely, CA 92692  
Diane Nixon, CA 92692  
Annette Ohuche, CA 92692  
Pamela Perry, CA 92692  
James Tam, CA 92692  
Mark Delaurence, CA 92694  
Susan Knapp, CA 92694  
Greg Prouty, CA 92694  
Jamie Browning, CA 92698  
Jesus Adorno, CA 92701  
Eliza Martinez, CA 92701  
Simone Ponce, CA 92701  
Robert Unetic, CA 92701  
Manuel Villalba, CA 92703  
Angel Cardoza, CA 92704  
Veronica Lopez, CA 92704  
Karen Allen, CA 92705  
Florence Bishop, CA 92705  
Robert Bowman, CA 92705  
Christe Bruderlin-Nelso, CA 92705

Kathleen Calder, CA 92705  
Santos Cortez, CA 92705  
Louise Davy, CA 92705  
Deborah Dean, CA 92705  
Paula Gelman, CA 92705  
Lydia Levin, CA 92705  
Cherie Phipps, CA 92705  
Maggie Ryan, CA 92705  
Trisha Shipcott, CA 92705  
Linda Warde, CA 92705  
Laura Atkinson, CA 92706  
Quan Dinh, CA 92706  
Paula Gates, CA 92706  
Natalie Rankin, CA 92706  
Donna Drizin, CA 92707  
Leanne Carter, CA 92708  
Gayle Fenton, CA 92708  
Heidi Nguyen, CA 92708  
Eileen Powell, CA 92708  
Gabriel Talavera, CA 92708  
Lee Fink, CA 92780  
Amy Greyson, CA 92780  
Doris Kollias, CA 92780  
Hillary Streichenberger, CA 92780  
Gordon Thomson, CA 92780  
Virginia Tibbetts, CA 92780  
Patricia Schuck, CA 92781  
Gonzalo Ferro, CA 92782  
Ronald Imus, CA 92782  
Susan Keefe, CA 92782





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Quang Wong, CA 92782  
Brian Dang, CA 92801  
Mary Delgado, CA 92801  
Schwanda Grant, CA 92801  
Jolynn Ibanez, CA 92801  
Farhana Rawnaq, CA 92804  
Doug Benoit, CA 92805  
Stephanie Butler, CA 92805  
David Cartwright, CA 92806  
C Ford, CA 92806  
Mario Gerace, CA 92807  
Kimberly Leshin, CA 92807  
Debra Martin, CA 92807  
K McDon, CA 92807  
Barry Staymates, CA 92807  
Lonnie Hahn, CA 92808  
Carole Tamme, CA 92808  
Linda Vanwormer, CA 92808  
Penny Bowman-Mcwright, CA 92821  
Bruce Laclair, CA 92821  
Shannon Morisako, CA 92821  
Lauren Perkins, CA 92821  
Joyce Wills, CA 92821  
Peter Lin, CA 92823  
William Lackey, CA 92825  
Maria Garcia, CA 92831  
Joanna Johnson, CA 92831  
Sandra Park, CA 92831  
Leo Song, CA 92831  
Kenny Tokusato, CA 92831

Bryan Barboz, CA 92832  
Julie Dufau, CA 92832  
Jennifer Egan, CA 92833  
Teresa Franco, CA 92833  
Ingrid Garner, CA 92835  
Kenneth Green, CA 92835  
Gavin Watt, CA 92835  
Mary Bollong, CA 92840  
Cathleen Cardoz, CA 92840  
Maria Espinoza, CA 92840  
Taryn Waddle, CA 92840  
Janice Smallwood, CA 92843  
Gonzalo Ortega, CA 92844  
Jennifer Vargas, CA 92845  
Cuba Munsey, CA 92856  
Green Charoletta, CA 92860  
Rosa Marquez, CA 92860  
Lorraine Gurnari, CA 92865  
Barbara Nelson, CA 92866  
Terry Nowotarski, CA 92866  
Valarie Brumfield, CA 92867  
Janelle Farkas, CA 92867  
Kazuo Furusawa, CA 92867  
Prarthana Mohan, CA 92867  
Janice Shelton, CA 92867  
Jared Mendez, CA 92868  
Tawny Robinson, CA 92868  
Alan Aidekman, CA 92869  
Ronald Dunbar, CA 92869  
Kathryn England, CA 92869



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Vicki James, CA 92869  
Saskia Knight, CA 92869  
Gary Manulkin, CA 92869  
Everett Martinez, CA 92869  
Thomas Rapport, CA 92869  
Charles Robinson, CA 92869  
Patricia Duffie, CA 92870  
Barbara Hearnnes, CA 92870  
Armando Morel, CA 92870  
Jacqueline Olivier, CA 92870  
David Hibbetts, CA 92879  
Anne Johnson, CA 92879  
Nora Gomez, CA 92880  
JEANINE MAHONEY, CA 92880  
Garrett Ball, CA 92881  
Paul Carmichael, CA 92881  
Charlie Lachance, CA 92881  
Peggy Mutsch, CA 92881  
Jill Ross, CA 92881  
Roseanna Barron, CA 92882  
Cynthia Chavez, CA 92882  
Lance Frantzich, CA 92882  
Catrina Paez, CA 92882  
Ruben Saldana, CA 92882  
Jackie Hearnns, CA 92883  
Linda Limberg, CA 92883  
Sally DePoy, CA 92887  
Jim Heaviside, CA 92887  
Marguerite Mulhall, CA 92887  
Jennifer Nichols, CA 92887

Heather Aebi, CA 93001  
Mike Blacker, CA 93001  
Caryn Carroll, CA 93001  
Dennis Hall, CA 93001  
Donald Hill, CA 93001  
Barbara Urban, CA 93001  
Timothy Vandehey, CA 93001  
Jojo Alvarez, CA 93003  
Bruce Barrios, CA 93003  
Carl Clapham, CA 93003  
Erica Connell, CA 93003  
Dorian Guerrero, CA 93003  
Marsha Morrow, CA 93003  
Sharon Anglum, CA 93004  
Stephen Ginn, CA 93004  
Rita Mercado, CA 93004  
Benjamin Ayala, CA 93010  
Margaret Doten, CA 93010  
Joan Handzel, CA 93010  
Melissa Reynolds, CA 93010  
Bob Rust, CA 93010  
Patricia Carney, CA 93012  
Gloria Deaton, CA 93012  
Dave McLaughlin, CA 93012  
Barbara Metier, CA 93012  
Meleese Seigler, CA 93012  
Kevin Smith, CA 93012  
Gregory Speth, CA 93012  
Margurite Stenberg, CA 93012  
Linda Hernandez, CA 93013



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gene Miller, CA 93013  
Jeanne Cantaro, CA 93015  
Marilyn Marme, CA 93021  
Tom Martinez, CA 93022  
Lanae Carter, CA 93023  
Robert Dodge, CA 93023  
Jan Helfrich, CA 93023  
Jinx Mccune, CA 93023  
Judy Rosenthal, CA 93023  
Sandra Rowse, CA 93023  
W Slaughter, CA 93023  
James Null, CA 93024  
Pearl Montorio, CA 93030  
Silvano Pivato, CA 93030  
Cheryl Daniels, CA 93033  
Victoria Borjesson, CA 93035  
Jennifer Clancy, CA 93035  
Kara Gastelum, CA 93035  
David Harper, CA 93035  
Alison Norris, CA 93035  
Dawn Oneill, CA 93035  
Robert Rubin, CA 93035  
Sylvia Salas, CA 93035  
Ritchie Wimberly, CA 93035  
Michael Combs, CA 93041  
Cynthia Aguilar, CA 93060  
Tony Luboff, CA 93060  
Joseph Simpson, CA 93060  
Claudia Eaton, CA 93063  
Henrik Larsen, CA 93063

Christopher Mcadamis, CA 93063  
Anthony Sgaraglino, CA 93063  
William Sutton, CA 93063  
Claude Cantin, CA 93065  
Barbara Cieslak, CA 93065  
Sandra Gill, CA 93065  
Joanne Hewitt, CA 93065  
Jamie Taylor, CA 93065  
Sanford Weisberg, CA 93065  
Kathleen Moacanin, CA 93066  
Jeffrey Graham, CA 93067  
Christine Dawkins, CA 93101  
Cris Hamilton, CA 93101  
Laura Knight, CA 93101  
Alaina Kwasizur, CA 93101  
Nancy Marriott, CA 93101  
Rita Moya, CA 93101  
Lin Rolens, CA 93101  
John Skotchdopole, CA 93101  
Barry Spector, CA 93101  
Karen Atkins, CA 93105  
Judy Cleary, CA 93105  
Anthony Fischer, CA 93105  
Kim Gross, CA 93105  
Andrew Bermant, CA 93108  
Amanda Berry, CA 93108  
Burks Hamner, CA 93108  
Patricia Hughes, CA 93108  
Margaret Pearson, CA 93108  
Dan Wright, CA 93108



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Vicky Blum, CA 93109

Katherine Bonfilio, CA 93109

Ted Chiles, CA 93109

Carolyn Sacks, CA 93109

Susan Bell, CA 93110

claudette roehrig, CA 93110

Theresa Sanitate, CA 93110

Rosemary Fatano, CA 93111

Teena Grant, CA 93111

Joanna Lara, CA 93111

James Sirianni, CA 93111

Ana Citrin, CA 93117

Frank Farwell, CA 93117

Kyle Furlong, CA 93117

Anelise Salvo, CA 93117

Inez Provencio, CA 93202

Jennifer House, CA 93221

Jack Lara, CA 93221

John Peters, CA 93222

Circe Cox, CA 93225

Emily Burnias, CA 93230

Sylvia Cordero, CA 93230

Tasha Mcirvin, CA 93240

Tracy Nardiello, CA 93247

Evelina Huizar, CA 93256

Carol Jett, CA 93257

Bonnie Karlea, CA 93257

Theodore Pizanis, CA 93257

Lauri Adair, CA 93263

Elenora Moats, CA 93263

Jerry Hawley, CA 93274

Sally Carter, CA 93277

Darrell Chudej, CA 93277

Angelina Eich, CA 93277

Karen Kirkpatrick, CA 93277

Diane Post, CA 93277

Susan Radtke, CA 93277

Adria Warren, CA 93277

Carol Harrison, CA 93279

Colleen Brelje, CA 93283

Marian Kuster, CA 93291

Linda Swaim, CA 93291

Abel Tavarez, CA 93291

Benjamin Newcomer, CA 93292

Marlina Aran, CA 93304

Karen Cooley, CA 93304

Barbara Mattick, CA 93304

Donald Bender, CA 93306

Belva Bradshaw, CA 93308

Miguel Mariscal, CA 93308

Janet Cogdill, CA 93309

Michelle Roberts, CA 93309

Ernest Solano, CA 93309

Fredrick Turner, CA 93309

Valerie Black, CA 93311

Lori Braschler, CA 93311

Yvonne Cavanagh, CA 93311

Marklewisbrown Heckendorn, CA 93311

Elizabeth Primrose, CA 93311

Priscilla Wright, CA 93311



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Casey Yeazel, CA 93311  
Becky Wright, CA 93312  
Val Barron, CA 93313  
Bonnie Gallegos, CA 93313  
Brian Russom, CA 93313  
Ricardo Salas, CA 93390  
Erin Englund, CA 93401  
Marilyn Farmer, CA 93401  
Sandra Giberson, CA 93401  
Vikas Jammalamadaka, CA 93401  
Joann Merver, CA 93401  
Susan Olson, CA 93401  
Patricia Robinson, CA 93401  
Judith Serafin, CA 93401  
William Tuculet, CA 93401  
Kara Woodruff, CA 93401  
Carolyn Porco, CA 93402  
Richard Schermerhorn, CA 93402  
Michelle Turner, CA 93402  
Christy Anderson, CA 93405  
Germaine Casola, CA 93405  
Thomas Flanigan, CA 93405  
Dee Ann Hairgrove, CA 93405  
Carol Sexton, CA 93405  
Nancy Holman, CA 93420  
Robin Werderits, CA 93420  
Michele Coombs, CA 93422  
Lynne Higgins, CA 93422  
Denise Nickeson, CA 93422  
Joseph Nickless, CA 93422

Rayna Ortizbochum, CA 93422  
Crissa Pisa, CA 93422  
Catherine Porter, CA 93422  
Harry Williamson, CA 93422  
Daniel Garcia, CA 93428  
Janet Lyon, CA 93428  
Suzann Love, CA 93430  
Judy Guarnera, CA 93433  
Judythe Guarnera, CA 93433  
Jennifer Mangum, CA 93433  
Peter Anderson, CA 93436  
Genese Izuno, CA 93436  
Frank Matela, CA 93436  
Leilani Mccullough, CA 93436  
Anita Withers, CA 93440  
Kim Barrett, CA 93442  
Robert Jonez, CA 93442  
Caroline Brower, CA 93444  
Lee Durard, CA 93444  
Ryan Tafoya, CA 93444  
Lynn Davis, CA 93446  
Nancy Jambor, CA 93446  
Robert Jordan, CA 93446  
Del Olds, CA 93446  
Dennis Olivier, CA 93446  
Donna Raymond, CA 93446  
Stuart Toomey, CA 93446  
Gary Wray, CA 93446  
Marcella Gelman, CA 93449  
Paul Vangerwen, CA 93449





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Gael Mueller, CA 93453  
Diana Corral, CA 93454  
Erika Culley, CA 93455  
Sharon Haneman, CA 93455  
Judith Lazzarini, CA 93455  
Pam Martin, CA 93455  
Larry Mcduff, CA 93455  
George Fischer, CA 93458  
Loren Duffy, CA 93460  
Michael Rhodes, CA 93460  
Rona Barrett, CA 93463  
Joyce Johnson, CA 93463  
John Porter, CA 93465  
Janet Kehlor, CA 93505  
Michael Glavin, CA 93510  
Sandra Gunther, CA 93510  
Steven Sheffield, CA 93510  
Karen Keehn, CA 93514  
Karyle Tong, CA 93514  
William Michael, CA 93526  
Damien Jacotin, CA 93527  
Joan Tetreault, CA 93531  
Matthew Britton, CA 93535  
Tiffany Countryman, CA 93535  
Ian Guyton, CA 93535  
Donna Mcnew, CA 93535  
Tanisha Rodriguez, CA 93535  
Carol Trees, CA 93535  
Virginia Arcos, CA 93536  
Clare Gmur, CA 93536

Gabriel Partida, CA 93536  
Madeline Ramirez, CA 93536  
Felicia Scott, CA 93536  
Judy Wickman, CA 93545  
Douglas Stewart, CA 93546  
Hoang Baumann, CA 93550  
Raymundo Perales, CA 93550  
Bonnie Vaughan, CA 93550  
Amina Vela, CA 93550  
Olivia Carchi, CA 93551  
Cuthbert Lawry, CA 93551  
Dennis Carey, CA 93552  
Cynthia Bradley, CA 93555  
Ashton Dunn, CA 93555  
Gaynell Schiller, CA 93555  
James Stanford, CA 93555  
Naomi Heinsma, CA 93556  
Adelle Gruett, CA 93561  
Denise Rowles, CA 93561  
Raymond Vaughn, CA 93561  
Duane Aitken, CA 93599  
Diane Curfman, CA 93611  
Elysia Dambrosia, CA 93611  
Cindy Farris, CA 93611  
Glen Westersund, CA 93611  
Jerry Walker, CA 93612  
Gale Okazaki Hugh, CA 93614  
Jim Betts, CA 93619  
Juan Garcia, CA 93619  
Denise Gravano, CA 93619



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Greg Griffin, CA 93619  
Carolyn Kraft, CA 93619  
Thomas Sims, CA 93619  
Judie Visser, CA 93619  
Julie Young, CA 93619  
Valerie Spongberg, CA 93631  
Judith Pucci, CA 93636  
Ben Graham, CA 93638  
Sharon Willy, CA 93643  
Polly Rotan, CA 93654  
Jordan Telford, CA 93657  
Sandra Barbo, CA 93662  
Gus Longoria, CA 93702  
Kate Mcknight, CA 93703  
Joseph Barron, CA 93704  
Janet Bray, CA 93704  
Ivy Darden, CA 93704  
Michael Garcia, CA 93704  
Adela Gonzalez, CA 93704  
P Hansen, CA 93704  
Joann Mccarthy, CA 93704  
Emily Vega, CA 93704  
Esperanza Velazco, CA 93704  
Kiki Wells, CA 93704  
Rene Cisneros, CA 93705  
Elizabeth Madrigal, CA 93705  
Paula Singer, CA 93705  
Nancy Godwin, CA 93710  
Elaine Cavitt, CA 93711  
Marsha Conant, CA 93711

Fredricka Del Carlo, CA 93711  
Geetanjali Srivastava, CA 93711  
Anne Staley, CA 93711  
Teddy Usude, CA 93711  
Roberta Atkinson, CA 93720  
Krista De La Torre, CA 93720  
Juan Herrera, CA 93720  
Cameron Rosso, CA 93720  
Erin Smith, CA 93720  
Doug Gordon, CA 93721  
Hannah Degroot, CA 93722  
Billie Hardcastle, CA 93722  
Roxanne Hinds, CA 93722  
Carla Manning, CA 93722  
Manuel Graves, CA 93723  
Mian Ijaz, CA 93725  
Barbara Ortiz, CA 93725  
Joyce Gonzalez, CA 93726  
Michael Mathies, CA 93726  
Bonnie Pavlovich, CA 93726  
Warren Vang, CA 93726  
Irma Vera, CA 93726  
Dawn Williams, CA 93726  
Samantha Perez, CA 93727  
Carlos Sanchez, CA 93727  
Lindsay Shaver, CA 93728  
Victor Bergman, CA 93729  
Leslie Hoyt, CA 93730  
Lloyd Wamhof, CA 93730  
Elaine Mcgraw, CA 93744



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Aramis Miller, CA 93747

Kate Innis, CA 93901

Gary Jones, CA 93901

S Norris, CA 93901

Barbie Souter, CA 93901

Marisol Gonzalez, CA 93905

Ben Carrillo, CA 93906

Rosa Dozal, CA 93906

Ronald Genauer, CA 93906

Elena Lagrimas, CA 93906

Mary Vought, CA 93906

Carl Hazen, CA 93907

Weston Miller, CA 93907

Janice Mulvey, CA 93907

Patricia Arias, CA 93908

Catherine Fanoë, CA 93908

Mary Eileen Kiniry, CA 93908

Pamela Snyder, CA 93908

Michael Weaver, CA 93922

Myrna Brandwein, CA 93923

Gary Jepson, CA 93923

Jenny Lutes, CA 93923

Diane Woodend, CA 93923

Kenneth McClintock, CA 93926

Curtis Mukes, CA 93933

Laura Allen, CA 93940

Elaine Bachmann, CA 93940

Steven Crain, CA 93940

Colleen Devlin, CA 93940

Roseanne Fischer, CA 93940

Sandra Fowler, CA 93940

Christopher Kneisley, CA 93940

Barbara Marron, CA 93940

Regina Marshall, CA 93940

Juan Rodriguez, CA 93940

Nina Rosete, CA 93940

Niccole Tiffany, CA 93940

Maureen Vieth, CA 93940

Elizabeth Weber, CA 93940

Marianne Grover, CA 93950

Linda Hylle, CA 93950

Janet MCGough, CA 93950

Donna Phillips, CA 93950

Angelique Simons, CA 93950

Maryadine Washington, CA 93955

Russell Kinley, CA 93960

Robert Gold, CA 94002

Robin Mckoy, CA 94002

Carol Molyneux, CA 94002

Kay Yoshida, CA 94002

Ann Whittemore, CA 94005

Mike Alleman, CA 94010

Maureen Boland, CA 94010

Peter Borocz, CA 94010

Sophie Colefoster, CA 94010

Richard Davis, CA 94010

Lynn Feeny, CA 94010

David Jen, CA 94010

Dotti Letourneau, CA 94010

Lenny Low, CA 94010



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ramon Maghsoudi, CA 94010  
Sidney Mobell, CA 94010  
William Pace, CA 94010  
Jennifer Parker, CA 94010  
Charlotte Petri, CA 94010  
Judy Swanson, CA 94010  
Gary Toothman, CA 94010  
Monroe Cooper, CA 94014  
Edwin Lansang, CA 94014  
Irene Marin, CA 94014  
Ana Montes, CA 94014  
Concepcion Cavales, CA 94015  
Kathleen Cunnie, CA 94015  
Kendra Elliott, CA 94015  
Rosario Polis, CA 94015  
Deborah Porter, CA 94017  
Tricia Dell, CA 94018  
Sabrina Jewell, CA 94019  
Lisa Mccaffrey, CA 94019  
Penny Oneal, CA 94019  
Sharon Ruhland, CA 94019  
Jenny Skoble, CA 94019  
Stephen Friedman, CA 94022  
Sheryl Heckman, CA 94022  
Mary Mills, CA 94022  
Elfi Montes, CA 94022  
Pam Rasmussen, CA 94022  
Francine Reynolds, CA 94022  
Mary Hall, CA 94024  
Barbara Mclellan, CA 94024

Cynthia Sweeney, CA 94024  
Leslie Alston, CA 94025  
Dimitra Anderson, CA 94025  
John Beardslee, CA 94025  
Nancy Bush, CA 94025  
Kevin Collins, CA 94025  
William Dower, CA 94025  
Susan Freyberg, CA 94025  
Judith Kleinberg, CA 94025  
Jennie Kosko, CA 94025  
Marissa Pike, CA 94025  
Kathleen Riggins, CA 94025  
Marilyn Spence, CA 94025  
Polly Wingfield, CA 94025  
Tom Gelbach, CA 94027  
Tom Hutton, CA 94027  
Stacey Kertsman, CA 94027  
Anne Peterson, CA 94027  
Deborah Pinkston, CA 94027  
David Popowitz, CA 94027  
Nina Else, CA 94028  
Danielle Guttman, CA 94028  
Paul Helce, CA 94028  
Judy Klein, CA 94028  
Helge Ternsten, CA 94028  
Thomas Lightner, CA 94030  
Ann Oleary, CA 94030  
Yolanda Parker, CA 94030  
Caitlin Reavey, CA 94030  
Stephanie Allen, CA 94035



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Joseph Armstead, CA 94040

Corinne Callan, CA 94040

Richard Curtis, CA 94040

Ann Kato, CA 94041

Shreyes Seshasai, CA 94041

Peter Spangler, CA 94041

Joyce Tucker, CA 94041

Samantha Bears, CA 94043

Abigail Clark, CA 94043

Carole Flores, CA 94043

Walter Goode, CA 94043

Rebecca Jensen, CA 94043

Brittany Mcdonald, CA 94043

Saghi Moghadam, CA 94043

Evelyn Nordberg, CA 94043

Laurie Palmer, CA 94043

Bernie Rodgers, CA 94043

Karen Brandenberger, CA 94044

Caroline Herter, CA 94044

Nichole Herttua, CA 94044

Robert Meyerson, CA 94044

Laurel Patton, CA 94044

Beth Smerdon, CA 94044

Maryann Campion, CA 94061

Anna Engstrom, CA 94061

Ralph Fallant, CA 94061

Judith Gutierrez, CA 94061

Cheryl Macgregor, CA 94061

Gail Pomerantz, CA 94061

Susan Scott, CA 94061

Mark Siegel, CA 94061

Lora Angelot, CA 94062

Daniel Gibson, CA 94062

Brandon Rule, CA 94062

Melinda Davis, CA 94063

Paulette Elliott, CA 94063

Michele Kuperus, CA 94063

Marla Weber, CA 94063

Ana Oyuela, CA 94064

Michael Rogers, CA 94065

Manique Wijewardena Bloom, CA 94065

Corrine Aragon, CA 94066

Cheryl Hernandez, CA 94066

Kathy Rinetti, CA 94066

Jessica Williams, CA 94066

Mark Albertson, CA 94070

Vivian Brates, CA 94070

Arnulfo Ferfas, CA 94070

Helen Flynn, CA 94070

Marie Monohan, CA 94070

Gregory Brown, CA 94080

Barbara Butler, CA 94080

Caroline Dunn, CA 94080

Robert Merchan, CA 94080

Tom Mullen, CA 94080

Amy Nolan, CA 94080

Colleen Raymond, CA 94080

Raul Reyes, CA 94080

David Taylor, CA 94080

Judy Wedekind, CA 94080





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Thomas Williams, CA 94080

Prince Bibee, CA 94085

Michael Carder, CA 94085

Elisabeth Cone, CA 94086

Michael Goltzer, CA 94086

Russell Hudson, CA 94086

William Jenkins, CA 94086

Alec Reitter, CA 94086

Kathleen Tomari, CA 94086

Hao Zhou, CA 94086

Janice Boothe, CA 94087

Carl Cheng, CA 94087

Paul Falworth, CA 94087

Jan Looney, CA 94087

Marilyn Wendler, CA 94087

Alison White, CA 94087

Joseph Batchelder, CA 94089

Michelle Rifkin, CA 94089

Anne Farrah, CA 94102

Allegra Fortunati, CA 94102

Andrea Gomez, CA 94102

Valerie Gruber, CA 94102

William Heaps, CA 94102

Jennifer Levin, CA 94102

Carol Sexton, CA 94102

Bradley Wiedmaier, CA 94102

Rachel Becker, CA 94103

Amy Dipasquale, CA 94103

Derek Dukes, CA 94103

Lucas Foglia, CA 94103

Elisha Greenwell, CA 94103

Chris Hipps, CA 94103

Eamonn Kelly, CA 94103

Bonnie Rose, CA 94103

Victoria Rouse, CA 94103

Shelley Sandusky, CA 94103

Andrea Segura Smith, CA 94103

Sarah Vickers, CA 94103

Margaret Jacobberger, CA 94105

Dulcie Arnold, CA 94107

Natasha Arroyo, CA 94107

Toby Barlow, CA 94107

Michael Bergelson, CA 94107

Katherine Bowdish, CA 94107

Cassandra Caputo, CA 94107

Susan Cote, CA 94107

John Croizat, CA 94107

Martha Dean, CA 94107

Barbara Dickinson, CA 94107

Arthur Dixon, CA 94107

Jeffrey Galyon, CA 94107

Vera Grey, CA 94107

Amy Grigsby, CA 94107

Tal Hutchins, CA 94107

Kody Kilcrease, CA 94107

Joy M, CA 94107

Sally Mccarty, CA 94107

Elizabeth Mcnichols, CA 94107

Robyn Miles, CA 94107

Veronica Munoz, CA 94107



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Steven Phillips, CA 94107

David Ropp, CA 94107

Sudesh Singh, CA 94107

Helen Soboski, CA 94107

Ann Spivack, CA 94107

Don Spradlin, CA 94107

Emily Zing, CA 94107

Maria Boutacoff, CA 94108

Gary Cne, CA 94108

Alison Hightower, CA 94108

Howard Holderness, CA 94108

Kirsten Strobel, CA 94108

Rose Abril, CA 94109

Michael Andow, CA 94109

Allison Brown, CA 94109

Roberta Buell, CA 94109

Matthew Castillon, CA 94109

Mary Cody, CA 94109

Gail Defferari, CA 94109

David Goff, CA 94109

Melissa Grindstaff, CA 94109

Robert Hall, CA 94109

Doreen Horowitz, CA 94109

Louise Lowry, CA 94109

Timothy Lucas, CA 94109

Robert Panozzo, CA 94109

Jennie Parrilla, CA 94109

Nicole Pitarre, CA 94109

Jeanne Rizzo, CA 94109

Fred Sherman, CA 94109

Julie Tang, CA 94109

Jennifer Wang, CA 94109

Helene Wenzel, CA 94109

Nancy Williams, CA 94109

Ane Becker, CA 94110

Josephine Bellaco, CA 94110

Lisabeth Castro-Smyth, CA 94110

Patricia Cotter, CA 94110

Suzanne Deblois, CA 94110

Dale Disney, CA 94110

Erika Ehmsen, CA 94110

John Fenno, CA 94110

Consuelo Ferreira, CA 94110

Stuart Gurtman, CA 94110

Charles Hemminger, CA 94110

Connie Hendrix, CA 94110

Ester Hernandez, CA 94110

Mirna Jiron, CA 94110

Benjamin Kim, CA 94110

Nate Koechley, CA 94110

Efrem Korngold, CA 94110

Eric Lamothe, CA 94110

Peter Mattsson, CA 94110

Lisa Messano, CA 94110

Carol O'Donovan, CA 94110

Jodi Perelman, CA 94110

Nicole Petrak, CA 94110

Felisa Preskill, CA 94110

Lori Sinsley, CA 94110

Suzanne Spong, CA 94110



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Samuel Stone, CA 94110

Melinda Sullivan, CA 94110

Sasha Wisotsky, CA 94110

Ellen Embry, CA 94111

Barnett Klane, CA 94111

Jared Loewen, CA 94111

Jessica Silvestro, CA 94111

Charlie Stone, CA 94111

Jason Wallach, CA 94111

Brigitte Davila, CA 94112

Dernelio Echevoyen, CA 94112

George Engler, CA 94112

Herbert Jeong, CA 94112

Joe Litehiser, CA 94112

Sarah Machugh, CA 94112

Colby Ostberg, CA 94112

Sara Scanlan, CA 94112

Irene Smith, CA 94112

Robert Strawder, CA 94112

Joaquin Torres, CA 94112

Irene Zbiczak, CA 94112

Mark Ziegler, CA 94112

Michelle Birch, CA 94114

John Brooks, CA 94114

Steven Brown, CA 94114

Laurie Bushman, CA 94114

Lawrence Crickenberger, CA 94114

Gianna Defilippis, CA 94114

Susan Epstein, CA 94114

Helen Ferentinos, CA 94114

Richard Fouts, CA 94114

Stacey Lamirand, CA 94114

Dean Larson, CA 94114

Frank Latko, CA 94114

James Mchugh, CA 94114

Jeffrey Mitchell, CA 94114

Irma Perez, CA 94114

Ruben Perez, CA 94114

Jody Reichel, CA 94114

Robin Rome, CA 94114

Donald Schwarcz, CA 94114

Robert Scott, CA 94114

Edith Souter, CA 94114

Adam Sterling, CA 94114

Dale Tegman, CA 94114

John Wilkie, CA 94114

Christian Williams, CA 94114

Kathleen Yatskan, CA 94114

Nanette Bisher, CA 94115

Alejandra Calderon, CA 94115

Joanna Horsfall, CA 94115

David Isljamovski, CA 94115

Shan Kaur, CA 94115

Gerd Mairandres, CA 94115

Emily Martinez, CA 94115

Maureen Miller, CA 94115

Susan Miller, CA 94115

T o'Shea, CA 94115

Terri Perozzi, CA 94115

Sudie Sides, CA 94115



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Robert Starkey, CA 94115  
James Walter, CA 94115  
Amy Widdowson, CA 94115  
Yevgenia Altman, CA 94116  
Bryan Boyle, CA 94116  
Max Kwok, CA 94116  
Carlos Lazo, CA 94116  
Diana Puig, CA 94116  
Mary Shays, CA 94116  
Monique Aas, CA 94117  
Tyler Altrup, CA 94117  
Jennifer Brown, CA 94117  
Brina Bujkovsky, CA 94117  
Nicole Censani, CA 94117  
Don Ehrlich, CA 94117  
Elana Feinberg, CA 94117  
Melinda Frenkel, CA 94117  
Stephen Hartman, CA 94117  
Stephen Herman, CA 94117  
Anna Ioakimedes, CA 94117  
Courtney Iwanaga, CA 94117  
Deborah Jaffe, CA 94117  
Pam Kalinowski, CA 94117  
Takahiro Kawaguchi, CA 94117  
Joe Mullin, CA 94117  
Thomas Munn, CA 94117  
Travis Peterson, CA 94117  
Alexander Pollen, CA 94117  
Belinda Presser, CA 94117  
Kevin Rasmussen, CA 94117

Stephen Rosenbaum, CA 94117  
Aaron Sagin, CA 94117  
Susanna Shimizu, CA 94117  
Anne Sunderland, CA 94117  
David Tang, CA 94117  
Renee Ward, CA 94117  
Tomohisa Watanabe, CA 94117  
Deb Zipp, CA 94117  
Katie Albright, CA 94118  
John Ball, CA 94118  
John Beebe, CA 94118  
Andrew Blackwell, CA 94118  
Benjamin Byrne, CA 94118  
Nicholas Goncharoff, CA 94118  
Robin Greg, CA 94118  
Terrel Hutton, CA 94118  
Christopher Keyes, CA 94118  
Faith Lubber, CA 94118  
Teya Neff, CA 94118  
William Pearson, CA 94118  
Kerry Philp, CA 94118  
Michael Pinell, CA 94118  
Patti Prichard, CA 94118  
Peter Roopnarine, CA 94118  
Kyra Vargas, CA 94118  
Michele Bronson, CA 94121  
Michael Coletta, CA 94121  
Kristina Dahl, CA 94121  
Rikki De Wit, CA 94121  
Paul Kirkland, CA 94121



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Maryjo Tisor, CA 94121  
Sandra Ackers, CA 94122  
Jessica Bayer, CA 94122  
Myriam Delajara, CA 94122  
Michael Fuchs, CA 94122  
Jeff Ishizu, CA 94122  
Diane Joneslowrey, CA 94122  
Courtney Ryan, CA 94122  
Anita Sigurdson, CA 94122  
Laura Webber, CA 94122  
Julie Baeder, CA 94123  
Mike Gardner, CA 94123  
Martin Gellen, CA 94123  
Catherine Howley, CA 94123  
Hayley Johnson, CA 94123  
Robert Mcgown, CA 94123  
Avia Mendez, CA 94123  
Janice Moore, CA 94123  
Russ Rogers, CA 94123  
Luis Uribe, CA 94123  
Miguel Galarza, CA 94124  
Angelique Vonhalle, CA 94124  
Allison Brown, CA 94127  
Edith Matulac, CA 94127  
Allison Metz, CA 94127  
Dieter Meyerhoff, CA 94127  
Michelle Childs, CA 94129  
Robin Cornwell, CA 94129  
Twonnette Pack, CA 94130  
Ernesto Alfaro, CA 94131

Gerald Buss, CA 94131  
Tod Elkins, CA 94131  
Howard Fallon, CA 94131  
Kieran Hannon, CA 94131  
Alexis Panzer, CA 94131  
Ashley Pittson, CA 94131  
Michael Shpizner, CA 94131  
Steffany Dignum, CA 94132  
Youngha Lee, CA 94132  
Nancy Mace, CA 94132  
Rebecca Nepales, CA 94132  
Michele Perlmutter, CA 94132  
Jess Wells, CA 94132  
Susan Adams, CA 94133  
Emley Barbara, CA 94133  
Michael Brunner, CA 94133  
Linda Burke, CA 94133  
Stacy Coghlan, CA 94133  
Tom Edgar, CA 94133  
Haideen Anderson, CA 94134  
Michelle Biondini, CA 94134  
Mitch Clark, CA 94134  
Rolando Nunez Baza, CA 94134  
Jaime Osorio, CA 94134  
Michael Walsh, CA 94140  
Robert Tessler, CA 94143  
Maira Matsui, CA 94158  
Kimberly Parolari, CA 94164  
Takhong Guan, CA 94301  
Gregory Hosono, CA 94301





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Nemerov, CA 94301

Ann Phares, CA 94301

Josh Rubietta, CA 94301

Margaret Simmons, CA 94301

Brian Goncher, CA 94303

Rick Jew, CA 94303

Lachen Pence, CA 94303

Thomas Snodgrass, CA 94303

Jj Davis, CA 94304

David Keefer, CA 94305

Barbara Wada, CA 94305

Irene Wapnir, CA 94305

Paul Cegielski, CA 94306

Sarah Cornwell, CA 94306

Megan Dunn, CA 94306

Kevin Hurley, CA 94306

Robert Klein, CA 94306

David Morandi, CA 94306

Joel Rosenberg, CA 94306

Ilya Veygman, CA 94306

Jay Levin, CA 94401

Natalia Nicholson, CA 94401

Tomasi Toki, CA 94401

Amber Farinha, CA 94402

Cynthia Ladd, CA 94402

Elizabeth Landsverk, CA 94402

Julie Neale, CA 94402

Benjamin Rubenstein, CA 94402

Sheila Sandow, CA 94402

Ross Weiner, CA 94402

Karen Biggers, CA 94403

Grace Hassid, CA 94403

Jane Mc Creary, CA 94403

Marianda Fahrnbruch, CA 94404

Nicole Gregory, CA 94404

Jennifer Sand, CA 94404

George Vail, CA 94404

Roxana Wales, CA 94404

John Chase, CA 94501

Anthony Dimaano, CA 94501

Benjamin Finkenbinder, CA 94501

Carlanne Foushee, CA 94501

Jeannine Gravem, CA 94501

Spencer Gross, CA 94501

Jill Hartman, CA 94501

Lori Hitchcock, CA 94501

Judith Hoff, CA 94501

Amba Johnson, CA 94501

Mary Larivers, CA 94501

Jessica Lilie, CA 94501

Erika Monterroza, CA 94501

Kelly Peterson, CA 94501

Anna Rossi, CA 94501

Claire Splan, CA 94501

Oscar Trevino, CA 94501

Linda Yang, CA 94501

Choni Yangzom, CA 94501

Cynthia Brashaun, CA 94502

Andrew Cohen, CA 94502

Cheryl Jones, CA 94502



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Frances Shipilov, CA 94505

Steve Filson, CA 94506

Lori Garcia, CA 94506

Elizabeth Ng, CA 94506

Mark Wolfe, CA 94506

Raymond Cocchi, CA 94507

Fred Pazos, CA 94507

Richard Harrison, CA 94508

Kenneth Moll, CA 94508

Robert Stelling, CA 94508

Andre Clark, CA 94509

Terry Lakin, CA 94509

Juanita Patton-Alexandr, CA 94509

Teresa Pedras, CA 94509

Aida Rubio, CA 94509

Kornelia Strong, CA 94509

Michael Young, CA 94509

Elizabeth Nolan, CA 94510

Harry Andujar, CA 94513

Randa Awwad, CA 94513

Donald Burrow, CA 94513

Heather Partid, CA 94513

Jack Martin, CA 94515

Marcia Carrasco, CA 94517

Terry Barger, CA 94518

Michelle Curran, CA 94518

Jose Garcia, CA 94518

Ignacio Sanchez Hernandez, CA 94518

Casey Sasser, CA 94518

Christine Swieszcz, CA 94518

KATHERINE UTCHEN, CA 94518

Patricia Brinton, CA 94519

Louis Dreyer, CA 94519

Samantha Fields, CA 94519

Megan Hallahan, CA 94519

Lisa Salbato, CA 94519

Melanie Thompson, CA 94519

Ann Collins, CA 94520

Salma Noor, CA 94520

Ellen Barrons, CA 94521

David Belli, CA 94521

Kimberly Espina, CA 94521

Craig Fleming, CA 94521

William Guthreau, CA 94521

Kevin Murphy, CA 94521

Richard Villalobos, CA 94521

Nicholas Kennen, CA 94523

James Phelan, CA 94523

Bruce Presnick, CA 94523

Iris Segal, CA 94523

Debra Stanley, CA 94523

Cathy Teegardin, CA 94523

Stephen Wilde, CA 94523

Erin Foley, CA 94526

Kevin Walker, CA 94526

Michele Ward, CA 94526

Chris Winter, CA 94526

Norman Bookstein, CA 94530

Betty Buginas, CA 94530

Jane Davis, CA 94530



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jennifer Kawar, CA 94530

Robert Maccoun, CA 94530

Monica Montgomery, CA 94530

Lisa Schoof, CA 94530

William Scott, CA 94530

Jemma Williams, CA 94530

Ruben Apodaca, CA 94531

Barbara Heredia, CA 94531

Connie Roark, CA 94531

Tonya Alston, CA 94533

Larry Bluford, CA 94533

Guadalupe Castro, CA 94533

Danielle Fischer, CA 94533

Myra Somerville, CA 94533

Steve Anaya, CA 94534

Lori Byrd, CA 94534

Samuel Catani, CA 94534

Robyn Collins, CA 94534

Everett Wood, CA 94534

Catherine Foster, CA 94536

Nicholas Horn, CA 94536

James Jensen, CA 94536

Richard Jones, CA 94536

Tamari Kirtadze, CA 94536

Elizabeth Knight, CA 94536

Eleanor Lykins, CA 94536

Alexis Madrid, CA 94536

Janet Quilici, CA 94536

George Avila, CA 94538

Venkata Balaji, CA 94538

Kristie Bihl, CA 94538

Andrew Strommen, CA 94538

Derrick Watson, CA 94538

Gilbert Doan, CA 94539

Valerie Kavlick, CA 94539

Matthew McGinty, CA 94539

Shubhang Varma, CA 94539

Erlinda Flores, CA 94540

Catherine Ruesz, CA 94540

Bill Bradley, CA 94541

Kevin Burns, CA 94541

Adriana Gilmete, CA 94541

Sarah White, CA 94541

Kathleen Affleck, CA 94542

Jacki Anderson, CA 94542

Sandra Huffman, CA 94542

Elaine Jonesayer, CA 94542

Stephen Miller, CA 94542

Carol Morgan, CA 94542

Craig Browning, CA 94544

Patricia Smith, CA 94544

Carlos Uriarte, CA 94544

Earlene Wiley, CA 94544

Faisal Hamid, CA 94545

Alice Kemp, CA 94545

Joan Smith, CA 94545

David Butner, CA 94546

Edward Byrne, CA 94546

Lou Johnstone, CA 94546

Yvonne Jones, CA 94546



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Steve Lewis, CA 94546  
Katherine Sullivan, CA 94546  
Christine The, CA 94546  
James Wildeman, CA 94546  
Allison Montgomery, CA 94547  
Thomas Bishop, CA 94549  
David Chiappetta, CA 94549  
Julie Jarratt, CA 94549  
Tim Lynch, CA 94549  
Kathleen Marshall, CA 94549  
Nick Pasto, CA 94549  
Kathleen Penn, CA 94549  
Jessica Uppal, CA 94549  
Cynthia Benson, CA 94550  
Mark Cameron, CA 94550  
James Krossa, CA 94550  
Jesse Palma, CA 94550  
Marisa Balfour, CA 94551  
Yvonne Konneker, CA 94551  
Pamela Miller, CA 94551  
Michael Reed, CA 94551  
Melissa Wilson, CA 94551  
Edward Molyneaux, CA 94552  
Sonja Neal, CA 94552  
Santha Pisharody, CA 94552  
Pickens Saxton, CA 94552  
Sondra Yellen, CA 94552  
Eva Antilla, CA 94553  
Sharon Cravanas, CA 94553  
Deborah Cuevas, CA 94553

Terry Flaherty, CA 94553  
Steven Freedman, CA 94553  
Hope Garcia, CA 94553  
Richard Keenley, CA 94553  
Shirley Mcelhattan, CA 94553  
Carole Nacon, CA 94553  
Kathleen Nichols, CA 94553  
Courtney O'Brien, CA 94553  
Virginia Pursley, CA 94553  
Monica Rinna, CA 94553  
Mark Salimbeve, CA 94553  
Lisa Songster, CA 94553  
Carol Sprecher, CA 94553  
James Swide, CA 94553  
Maurice Turrieta, CA 94553  
Dolores Velasco, CA 94553  
Janet Volkar, CA 94553  
Ajay Aggrwal, CA 94555  
Subbiah Kandasamy, CA 94555  
Ralph Thomas, CA 94555  
Gregory Watkins, CA 94556  
Alex Alpert, CA 94558  
Kira Ballotta, CA 94558  
Oscar Castelo, CA 94558  
Kris Freewoman, CA 94558  
Tony Heinricher, CA 94558  
Christopher Hoel, CA 94558  
Linda Inlay, CA 94558  
Nancy Nauman, CA 94558  
Jeff Prather, CA 94558



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Kendra Schalk, CA 94558  
Alice Shearon, CA 94558  
William Wendt, CA 94558  
Kathryn Corna, CA 94559  
Daniel Johns, CA 94559  
Brian Nuss, CA 94559  
Becky Peterson, CA 94559  
Carolyn Sanchez, CA 94559  
William Lockwood, CA 94560  
Harral Robin, CA 94560  
Nathalie Lezama-Ferro, CA 94561  
John Zamora, CA 94561  
Kathleen Dell'Aquila, CA 94563  
Kyle Faulker, CA 94563  
Lynn Uzzo, CA 94563  
Ronald Wallace, CA 94563  
Emily Wu, CA 94563  
Ann Clay, CA 94564  
Linda Katz, CA 94564  
Cherry Molinari, CA 94564  
Jasmine Smith, CA 94564  
Katherine Dilao, CA 94565  
Randall Gutierrez, CA 94565  
Lisa Maule, CA 94565  
Jennifer Achtert, CA 94566  
Ede Bruce, CA 94566  
Leonore Cusenza, CA 94566  
Sriram Garimella, CA 94566  
Linda Jordan, CA 94566  
Serena Klimek, CA 94566

Sharon Marshall, CA 94566  
Anil Mirchandani, CA 94566  
Kori Neilsen, CA 94566  
Robert Shenon, CA 94566  
Sheila Thompson, CA 94566  
Vito Tragni, CA 94566  
Pegah Barzegar, CA 94568  
Michele Day, CA 94568  
Laurie Grand, CA 94568  
Glenda Leatherman, CA 94568  
Sam Mohanta, CA 94568  
Linda Ballard, CA 94571  
Joseph Pinkney, CA 94571  
Justine Tenzeldam, CA 94572  
Ann Estrada, CA 94574  
Elaine Honig, CA 94574  
Dawn Leininger, CA 94574  
John Quinn, CA 94574  
Miriam Delagrange, CA 94577  
Anita Hong, CA 94577  
Patricia Kilroe, CA 94577  
Kerry Kurtz, CA 94577  
Don Magnifico, CA 94577  
Ilana Marcucci-Morris, CA 94577  
Edward Strickland, CA 94577  
Soraya Rahami, CA 94578  
Mattie Turner, CA 94578  
Karin Flores, CA 94579  
Dori Grandbois, CA 94579  
Mike Lanfear, CA 94580





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Akira Sasaki, CA 94582  
Julie Buchanan, CA 94583  
Sharon Donovan, CA 94583  
Mona Epstein, CA 94583  
Jana Johnson, CA 94583  
John Moore, CA 94583  
Penny Wolfsohn, CA 94583  
Vicky Clayton, CA 94585  
Russell Jordan, CA 94586  
Michael Mitchell, CA 94586  
Todd Benson, CA 94587  
Daniel Chaja, CA 94587  
Aaron Christianson, CA 94587  
Michael Guevara, CA 94587  
Schola Idem, CA 94587  
Dorothy Jones, CA 94587  
Susan Lydick, CA 94587  
Rick Munoz, CA 94587  
Robin Talbott, CA 94587  
James Woodhead, CA 94587  
Alex Briones, CA 94588  
Michelle Lee, CA 94588  
June Lister, CA 94588  
Heidi Mcfadden, CA 94588  
David Telles, CA 94588  
Vicky Fagan, CA 94589  
Craig Christena, CA 94590  
Amy Combs, CA 94590  
Jimmy Genn, CA 94590  
Sheri Jepperson, CA 94590

Alan Kimelman, CA 94590  
Randall Koch, CA 94590  
Robert Lewis, CA 94590  
Kevin Radley, CA 94590  
James Worthen, CA 94590  
Natalia Zuniga, CA 94590  
John Lawson, CA 94591  
Steven Pasquale, CA 94591  
Amelia Smith, CA 94591  
Shannon Williams, CA 94591  
Susan Williams, CA 94591  
Paul Roberts, CA 94592  
Kendra Berch, CA 94595  
Steven Freemire, CA 94595  
Stephanie Johnsonbaugh, CA 94595  
Elizabeth Johnston, CA 94595  
Drue Kramer, CA 94595  
Marie Krausova, CA 94595  
Nora Lapointe, CA 94595  
David McMurry, CA 94595  
Irene Wong, CA 94595  
Robert Beavers, CA 94596  
Karen Davey, CA 94596  
Susan Iwamoto, CA 94596  
Matthew Lawson, CA 94596  
Randall Thompson, CA 94596  
Kristy Wheeler, CA 94596  
Robin Wolf, CA 94596  
jane Corcoran, CA 94597  
Paul Gommel, CA 94597



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Cary Hellman, CA 94597

Elliott Leas, CA 94597

Danny Fried, CA 94598

John Hall, CA 94598

Allen Krimmel, CA 94598

Stewart Nakamura, CA 94598

Michael Strong, CA 94598

Lori Thomas, CA 94598

Omar Alaji, CA 94601

Nancy Broderick, CA 94601

Theresa Catlin, CA 94601

Cheri King, CA 94601

Mark Gilley, CA 94602

Edward Grigas, CA 94602

Jes Levine, CA 94602

Natasha Middleton, CA 94602

Brook Stern, CA 94602

Bonnie Stewart, CA 94602

Barbara Szudy, CA 94602

Gerrie Washburn, CA 94602

Karl Zitzow, CA 94602

Russell Blume, CA 94605

Dennie Cambitsis, CA 94605

Charlotte Campbell, CA 94605

Betty Mechles, CA 94605

Linda Petersen, CA 94605

Judith Rowan, CA 94606

Hoang Vuong, CA 94606

Jack Whiteford, CA 94606

Sue Ballinger, CA 94607

Odell Gibbs, CA 94607

Matthew Maltbie, CA 94607

Gregory Owens, CA 94607

Jill Shortley, CA 94607

Vani Singleton, CA 94607

Joanne Dickerson, CA 94608

Ben Ezeokoli, CA 94608

Daniel Gamboa, CA 94608

Peter Glazer, CA 94608

Michaele Smith, CA 94608

Alfred Edwards, CA 94609

Cassie Lopez, CA 94609

Stephanie Orozco, CA 94609

Kay Shearer, CA 94609

Dustin Smith, CA 94609

Jane Smith, CA 94609

Abdulaziz Alkhamri, CA 94610

Dale Bachman, CA 94610

Joanna Black, CA 94610

Shannon Coleman, CA 94610

Tracey Corder, CA 94610

Dias Cynthia, CA 94610

Marilyn Flower, CA 94610

Jim Hickman, CA 94610

Jewel Jauregui, CA 94610

Patricia Littlefield, CA 94610

Sabrina Moreno, CA 94610

Yeh Ray, CA 94610

Molly Sims, CA 94610

Peter Takeuchi, CA 94610



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Ceil Tilney, CA 94610  
Endrias Yohannes, CA 94610  
David Arndt, CA 94611  
Ada Burko, CA 94611  
Blue Figueroa, CA 94611  
Adella Gaston, CA 94611  
Glen Hughes, CA 94611  
Sarah Karlinsky, CA 94611  
Michael Lamp, CA 94611  
Meg Mcadam, CA 94611  
Pamela Mercer, CA 94611  
Daniel Newbrun, CA 94611  
Terry Roemer, CA 94611  
Suzanne Rowell, CA 94611  
Dawn Warriner, CA 94611  
Thomas Wright, CA 94611  
Philip Zymet, CA 94611  
Kevin Bean, CA 94612  
Ernest Gundling, CA 94612  
Penny Kreitzer, CA 94612  
Lynda Morgan, CA 94612  
Joseph Quisol, CA 94612  
Peter Abel, CA 94618  
Nicole Delger, CA 94618  
Tracey Grossbach, CA 94618  
Paula Hamilton, CA 94618  
Lisa Kermish, CA 94618  
Carl Resnikoff, CA 94618  
Katrina Saba, CA 94618  
Fran Solomon, CA 94618

Elizabeth Vanbenschoten, CA 94618  
Ayanna Bennett, CA 94619  
Diane Garner, CA 94619  
Margaret Hu, CA 94619  
Jacqueline Joseph-Veal, CA 94619  
John Lee, CA 94619  
Stuart Liroff, CA 94619  
Sylvia Mcdaniel, CA 94619  
Erin Miller, CA 94619  
Meagan Mitchell, CA 94619  
Robin Rosario, CA 94619  
Thomas Swift, CA 94619  
Susan Kaplan, CA 94702  
Devon Lake, CA 94702  
Ary Amerikaner, CA 94703  
Sarah Crabtree, CA 94703  
Brian Linde, CA 94703  
Katherine Paur, CA 94703  
Leah Simonweisberg, CA 94703  
Vicki Sommer, CA 94703  
Moulitsas Markos, CA 94704  
Paul Mccold, CA 94704  
Rohit Agrawal, CA 94705  
Chris Averett, CA 94705  
Helen Kim, CA 94705  
Thomas Leong, CA 94705  
Lisa Valentine, CA 94705  
William Veale, CA 94705  
Miles Culpepper, CA 94706  
Rande Johnson, CA 94706



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Lise Narath, CA 94706  
Richard Wong, CA 94706  
Kenneth Hempel, CA 94707  
Susanne Huttner, CA 94707  
Gail Miles, CA 94707  
Paul Gill, CA 94708  
Rose Morrell, CA 94708  
David Bank, CA 94709  
Nancy Denero, CA 94709  
Guy Isely, CA 94709  
Stephen Levine, CA 94709  
Laurie Loftus, CA 94710  
Clara Mclean, CA 94710  
Summer Oram, CA 94710  
Lydia Anderson, CA 94801  
Frank Andrade, CA 94801  
Susan Binder, CA 94801  
Marsha Tomassi, CA 94801  
Sharon Waterman, CA 94801  
Lizabeth Asami, CA 94803  
Diane Harris, CA 94803  
Willie Jackson, CA 94803  
Martha Acosta, CA 94804  
Ian Carey, CA 94804  
Shannon Erby, CA 94804  
Gary Frank, CA 94804  
Nancy Gruver, CA 94804  
Raleigh Latham, CA 94804  
Leatrice Lyon, CA 94804  
Elizabeth Masterson, CA 94804

Lynne Maylath, CA 94804  
Barbara Needell, CA 94804  
Craig Parada, CA 94804  
Marsha Vaughn, CA 94804  
Amanda Bowens, CA 94805  
Serena Donovan, CA 94805  
Ruth Levin, CA 94805  
Katherine Ralph, CA 94805  
Michele Rappaport, CA 94805  
Joseph Sosensky, CA 94805  
Patsy Stubbs, CA 94805  
Darrione Glover, CA 94806  
Martin Goldie, CA 94806  
Sam Maxie, CA 94806  
Katherine Beacock, CA 94901  
Jeanne Brophy, CA 94901  
Rose Hunter, CA 94901  
Mari Johnson, CA 94901  
Dorothy Jones, CA 94901  
Veronica Kirkpatrick, CA 94901  
Barbara Levinson, CA 94901  
Alexa Lucas, CA 94901  
Sara Marchi, CA 94901  
Anna Melillo, CA 94901  
Miguel Ohara, CA 94901  
Kathleen Pallie, CA 94901  
Craig Shinnfield, CA 94901  
Richard Britton, CA 94903  
Marilynne Chophel, CA 94903  
Christopher Fadeff, CA 94903



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Walter Searway, CA 94903

Constance Sewing, CA 94903

Adam Silver, CA 94903

Cathy Tennant, CA 94903

Alfred Wallace, CA 94903

Brian Gleeson, CA 94904

Richard Lawrence, CA 94904

Emily Neill, CA 94904

Tanja Ross, CA 94904

Laura Talmus, CA 94904

Janet Wiginton, CA 94904

Lisa Flannigan, CA 94912

Janet Weil, CA 94920

Godie Gale, CA 94923

Joseph Straton, CA 94924

Leslie Baker, CA 94925

Glenda Corning, CA 94925

Candice Crider, CA 94925

Lori Saltveit, CA 94925

Sergio Canavati De La Torre, CA 94928

Pamela Feltrop, CA 94928

Timothy Griesser, CA 94928

Deanna Harmon, CA 94928

Tyson Hill, CA 94928

William Patterson, CA 94928

Bill Uriarte, CA 94928

Connie Varela, CA 94928

Latonia Wilson, CA 94928

Radha Blackman, CA 94930

Derek Johnson, CA 94930

Maureen Kroll, CA 94930

Larry Norall, CA 94930

Ashley Simon, CA 94930

Genevieve Sollecito, CA 94930

Gwen Wilson, CA 94930

Harry Boatright, CA 94931

Barbara Drago, CA 94931

Marilee Maertz, CA 94931

Ellen Miller, CA 94931

Janice Miskel, CA 94931

Deborah Prince, CA 94931

cindy wespestad, CA 94937

Monica Dehghan, CA 94939

Bugra Bakan, CA 94941

Christine Brandt, CA 94941

Jack Clapper, CA 94941

David Crockett, CA 94941

Melissa Damore, CA 94941

Sandra Godwin, CA 94941

Karen Henry, CA 94941

Margie Herman, CA 94941

Linda Lam, CA 94941

John Levin, CA 94941

Andrew Mcwhorter, CA 94941

Marina Multhaup, CA 94941

Lauren Parsons, CA 94941

Fredric Sherman, CA 94941

Allison Youngling, CA 94941

Ben Zelazny, CA 94941

Melissa Armoza, CA 94945





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Francesca Bell, CA 94945

Scott Kohn, CA 94945

Tamami Tokutake, CA 94945

Meredith Vecchio, CA 94945

Silverman Lj, CA 94947

Karen Lynch, CA 94947

Karen Marks, CA 94947

Pauline Ridyard, CA 94947

Heather Sargent, CA 94947

Clive Burton, CA 94949

Macgregor Goodhart, CA 94949

Marcia Mclean, CA 94949

William Schultz, CA 94949

Erica Blaauw, CA 94952

Elenoa Komaisavai, CA 94952

Laurie Roth, CA 94952

Linda Book, CA 94954

Whitney Charles, CA 94954

Janet Fauerso, CA 94954

Stephanie Fuelling, CA 94954

Deb Haynes, CA 94954

Rickie Marecek, CA 94954

Sandra Parrett, CA 94954

Nancy Raw, CA 94954

Martha Frankel, CA 94956

Ann Griffin, CA 94956

Kristi Patterson, CA 94956

Terri Boutwell Boutwell, CA 94960

Michael Clark, CA 94960

Cara Derham, CA 94960

Paige Dickow, CA 94960

Angie Flynn, CA 94960

jane hall, CA 94960

John Lacy, CA 94960

Benhur Mesfin, CA 94960

Cynthia Rangaves, CA 94960

Kevin Spera, CA 94960

Elizabeth King, CA 94965

Aisha Stephenson, CA 94965

Jack Freckmann, CA 94973

Douglas Blaisdell, CA 95003

Robert Burkhart, CA 95003

Joseph Crossen, CA 95003

John Kelbert, CA 95003

Thomas Millman, CA 95003

Chris Scalzo, CA 95003

Dan Barnett, CA 95005

Roger Dunn, CA 95005

Erin Rogers, CA 95005

Heather Vinson, CA 95006

Sandra Harrington, CA 95008

Ricardo Herrera, CA 95008

Susan Rhodes, CA 95008

Amr Salahieh, CA 95008

Tena Taormina, CA 95008

Christine Weng, CA 95008

Catherine Dobbins, CA 95010

Mary Reilly, CA 95010

Deborah Secrest, CA 95010

Mary January, CA 95014



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Babu Nott, CA 95014  
Umesh Patil, CA 95014  
Don Sun, CA 95014  
Mariah Waite, CA 95014  
Gerry Gerringer, CA 95018  
Eric Welty, CA 95018  
Alan Kabert, CA 95020  
Ygnacia Rivas, CA 95020  
Carol Tolbert, CA 95020  
Lawrence Turk, CA 95020  
Glynis Crabb, CA 95023  
David Pollard, CA 95023  
Sue Tatro, CA 95023  
Alison Brewer, CA 95030  
Kimberli Doty, CA 95030  
Deborah Goldsmith, CA 95030  
Jennifer Shepherd, CA 95030  
Maryellen Burr, CA 95032  
Tracey Fisher, CA 95032  
Mft Maxwell, CA 95032  
Pamela Price-Hawley, CA 95032  
Sharon Roth, CA 95032  
Michael Turpin, CA 95032  
William Adams, CA 95033  
Robert Boatright, CA 95033  
Denise Devlin, CA 95033  
Lee Simmons, CA 95033  
Matthew Baltar, CA 95035  
Ronald Harris, CA 95035  
Rebecca Jacobs, CA 95035

Thuy Le, CA 95035  
Anthony Miller, CA 95035  
Wendy Stegeman, CA 95035  
Karen Caruana, CA 95037  
Joseph Charfauros, CA 95037  
Orlando Davisson, CA 95037  
Richard Overstreet, CA 95037  
Brenda Sass, CA 95037  
Anna Jenkins, CA 95046  
Andrea Beswetherick, CA 95050  
Rachelle Couture, CA 95050  
Sherry Ernst, CA 95050  
donna gatson, CA 95050  
Amy Gies, CA 95050  
Kim Gray, CA 95050  
Barbara Hartman, CA 95050  
Kellan Mcnamara, CA 95050  
Benjamin Williams, CA 95050  
Theresa Bashyam, CA 95051  
David Holmby, CA 95051  
David Ilumin, CA 95051  
Adi Ogle, CA 95051  
Derrick Chang, CA 95054  
Mark Shimrock, CA 95054  
Larry Smith, CA 95054  
Karen Berlin, CA 95060  
Mckenna Booth, CA 95060  
Wendy Chapman, CA 95060  
Roger Emanuels, CA 95060  
Elizabeth Hagan, CA 95060



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Stephen Kleshinski, CA 95060  
Laurie Longenecker, CA 95060  
Margaret Nelson, CA 95060  
Rebecca Nolan, CA 95060  
Donald Payne, CA 95060  
Lelah Riccio, CA 95060  
Diane Sipkin, CA 95060  
Caroline Spurgin, CA 95060  
Craig Venable, CA 95060  
Chris Wentzien, CA 95060  
Susan Zevanove, CA 95060  
Armando Arias, CA 95062  
William Farrington, CA 95062  
Russell Frye, CA 95062  
Robin Lysne, CA 95062  
Claudio Perez, CA 95062  
Julia Pinsky, CA 95062  
Heidi Rielly, CA 95062  
Anita Sandman, CA 95062  
Susan Walton, CA 95062  
William Wright, CA 95062  
Jonathan Fox, CA 95064  
Shankari Patel, CA 95064  
Lee Ritscher, CA 95064  
John Laurent, CA 95066  
James Hopkins, CA 95070  
Christine Hurd, CA 95070  
David Scott, CA 95070  
Alayne Meeks, CA 95073  
Bruno Casillas, CA 95076

Michael Cruddas, CA 95076  
LOIS HAGEN, CA 95076  
Patti Jadrich, CA 95076  
Victor Kimura, CA 95076  
Barbara Knapp, CA 95076  
Lee Rhoades, CA 95076  
Berta Rodriguez, CA 95076  
Robert Shacklett, CA 95076  
Cristina Kochevar, CA 95077  
Sandra Jackson, CA 95101  
Keith Berger, CA 95110  
Amanda Georges, CA 95110  
Kevin Hughes, CA 95110  
Richard Saunders, CA 95110  
Jason Syu, CA 95110  
Rochelle Velazquez, CA 95110  
Robert Hatch, CA 95111  
Joel Wachs, CA 95111  
Lori Gilliar, CA 95112  
Una Mendoza, CA 95112  
Katherine Mirassou, CA 95112  
Armando Cabrales, CA 95116  
Phuc Le, CA 95116  
Olympia Williams, CA 95116  
Marty Brill, CA 95117  
Stephen Hartzell, CA 95117  
Rosario Herrera, CA 95117  
Charles Beazell, CA 95118  
Gloria Brown, CA 95118  
Jill Levy, CA 95118



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Thomas Logan, CA 95118  
Medhat Matter, CA 95119  
Sherri Enzmingler, CA 95120  
Patricia Lockyer, CA 95120  
Robert Murua, CA 95120  
Pollyanna Pixton, CA 95120  
Lisa Vasquez, CA 95120  
Lisa Ayala, CA 95121  
Tho Nguyen, CA 95121  
Elizabeth Shaw, CA 95121  
Le Tan, CA 95121  
Kimberlee Cowan, CA 95123  
Marcia Harper, CA 95123  
Gbvivek Li, CA 95123  
Rowena Pelczynski, CA 95123  
Elizabeth Tritch, CA 95123  
Sharlene Valencia, CA 95123  
Zachary Vaughn, CA 95123  
Zonia Caceres, CA 95124  
Fernando Chavez, CA 95124  
Mark Jansen, CA 95124  
Heather Peters, CA 95124  
Jennifer Petroff, CA 95124  
Anette Reeves, CA 95124  
David Sylvia, CA 95124  
Jeromy Carssow, CA 95125  
Denise Cranney, CA 95125  
Larry Engstro, CA 95125  
Mahmoud Gahrahmat, CA 95125  
Julianita Maestas, CA 95125

Erin Sarpa, CA 95125  
Sonja Scheelke, CA 95125  
Benjamin Trumbull, CA 95125  
Lindsey Adams, CA 95126  
Fernando Chavez, CA 95126  
Gregory Cohen, CA 95126  
Frank Farris, CA 95126  
Cecila Macias, CA 95126  
Stephanie Taylor, CA 95126  
Zeenat Vastrad, CA 95126  
Laura Gambelin, CA 95127  
Hossein Akbari, CA 95128  
Rick Grassadonia, CA 95128  
Candice Piper, CA 95128  
Virginia Wilson, CA 95128  
Akruti Gupta, CA 95129  
Roseanne Becher, CA 95130  
Amanda Micheli, CA 95130  
Linda Kitchen, CA 95131  
Erik Sanjurjo, CA 95132  
Dominique Yarritu, CA 95132  
Laura Bader, CA 95133  
Greka Badilla, CA 95133  
Elena Cacace, CA 95134  
Cheryl Culclager, CA 95134  
Susan Kincaid, CA 95134  
Lawrence Tutino, CA 95134  
Renee Delacruz, CA 95136  
Douglas Easley, CA 95136  
Rolwin Lewis, CA 95136



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

John Villasenor, CA 95136

Yvonne French, CA 95138

Daphne Renelle, CA 95139

Jessica Lucas, CA 95148

Minda Vasquez, CA 95148

Halle Weingarten, CA 95148

David Saltman, CA 95150

Thomas Shephard, CA 95201

Cristina Villalvazo, CA 95203

James Mason, CA 95204

Dana Murdock, CA 95204

Ernest Vasti, CA 95204

Jose Duran, CA 95206

Walter Hastings, CA 95206

Oscar Hernandez, CA 95206

Becky Teberg, CA 95206

Helen Botiller, CA 95207

Paulette Castellanos, CA 95207

Cole Elliott, CA 95207

Rachel Lee, CA 95207

Ksybella Pope Sears, CA 95207

William Siegel, CA 95207

Cynthia Summers, CA 95207

Michael Gilayeneh, CA 95209

Evelyn Ryan, CA 95209

Gay King, CA 95210

Salvador Yadao, CA 95210

Joseph Cartagenas, CA 95212

William Fattarsi, CA 95219

Clinton Lukeroth, CA 95219

Damali Robertson, CA 95219

Thomas Cahill, CA 95223

Traci Adams, CA 95240

Michael Robinson, CA 95240

Randy Reeves, CA 95242

Charnette Boylan, CA 95249

Jessica Lindahl, CA 95257

Camilo Soto, CA 95301

Crystal King, CA 95305

Tanya Edwards, CA 95307

Margi Tanner, CA 95311

Thomas Bundy, CA 95316

Jamie Sims, CA 95320

Doral Gonzales, CA 95322

Julie Wilcox, CA 95327

Kathryn Gomes, CA 95336

Allen Wittenberger, CA 95336

Ron Bledsoe, CA 95337

John Hulbert, CA 95338

Jennifer Anderson, CA 95340

Janet Mccabe, CA 95340

Juan Villegas, CA 95340

Doreen Kuneck, CA 95341

Rebecca Graves, CA 95348

Lynn Kateley, CA 95348

Norene Austin, CA 95350

Vernon Hartwell, CA 95350

Ami Mishler, CA 95350

Randy Sanchez Landa, CA 95350

Leticia Venegas, CA 95351





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Michael Abbott, CA 95354

Lisa Arnold, CA 95354

Regina Brennan, CA 95354

Emanuel Cardoso, CA 95354

Minerva Perez, CA 95354

Margaret Beck, CA 95355

Karole Britton, CA 95355

Wendy Bryson, CA 95355

Paula Crowther, CA 95355

Mark Wilbur, CA 95355

Carol Bulman, CA 95356

Jeri Johnson, CA 95356

Hugo Patino, CA 95356

Phillip Somers, CA 95356

Jerry Weimer, CA 95356

Eugenia Bentayeb, CA 95360

Lauren Noble, CA 95361

Leanne Baker, CA 95366

Misael Avila, CA 95367

Mike Jackson, CA 95367

Patrick Webster, CA 95368

Roy Bartholomew, CA 95370

Emily Branscum, CA 95370

Carol Mckee, CA 95370

Lavada Sullivan, CA 95370

Julie Harris, CA 95372

DAWN BILL, CA 95376

Anna Dearlove, CA 95376

Dave Groves, CA 95376

Vicki Ramirez, CA 95376

Ralph Jones, CA 95377

Keith Loche, CA 95377

Teri Hines, CA 95380

Kathleen Tullio, CA 95382

Catherine Jones, CA 95383

Chelsea Horvath, CA 95386

Javier Soliz, CA 95391

Randi Cornwall, CA 95401

Heather Hardcastle, CA 95401

Donna Parker, CA 95401

Lynn Sarrade, CA 95401

Viorica Sebestin, CA 95401

Ronald White, CA 95401

Charles Hughes, CA 95402

Pamela Benz, CA 95403

Kim Marbury, CA 95403

Carol Pagal, CA 95403

Sheila Robinson, CA 95403

Laurelyn Andrew, CA 95404

Jane Campbell, CA 95404

Susan Gentile, CA 95404

Dennis Goodrow, CA 95404

Kelly Jenkins, CA 95404

Lawrence Natalini, CA 95404

Jennifer Vala, CA 95404

Kevin White, CA 95404

Michael Wilde, CA 95404

Peggy Albright, CA 95405

Sally Downs-Phoenix, CA 95405

Amy Forlan, CA 95405



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Keith Hallock, CA 95405

Nadenia Newkirk, CA 95405

Wayne Seden, CA 95405

Diana Rae, CA 95407

Renate Fassbender, CA 95409

Patricia Holladay, CA 95409

Frank Longoria, CA 95409

Alan Schackman, CA 95409

Paul Schwartz, CA 95409

Andrea Weinstein, CA 95409

Kaytlin Bennett, CA 95421

Karen Walker, CA 95436

Mary Desautels, CA 95437

Charles Fleischman, CA 95437

TIMOTHY HALL, CA 95437

Timothy Perry, CA 95437

Norma Watkins, CA 95437

Lana Karhu, CA 95444

Antoinette Lang, CA 95445

Paul Mcknight, CA 95446

Katherine Lacy, CA 95448

Garrick Maul, CA 95448

Bonita Munoz, CA 95448

Elizabeth Schuiling, CA 95448

Sharon Stinson, CA 95448

Sally Weed, CA 95448

paul carlsen, CA 95451

Robert Laubach, CA 95451

Kathleen Shanklin, CA 95452

Hedy Montoya, CA 95453

Barbara Mccoid, CA 95461

Lorin Mcclendon, CA 95464

Lori Platt, CA 95470

Diane Estrin, CA 95472

Kevin Kraynak, CA 95472

Devra Newhouse, CA 95472

Christopher Orsine, CA 95472

Gregory Bowman, CA 95476

Carlile Breeze, CA 95476

colleen carrano, CA 95476

Kimberly Enzensperger, CA 95476

Susan Lucas-Conwell, CA 95476

Rene Parker, CA 95476

Charles Williams, CA 95476

Adrienne Doss, CA 95492

Gary Johanson, CA 95492

Shirley Jones, CA 95492

Scott Snow, CA 95492

Crista Truex, CA 95501

Robert Pitts, CA 95503

Jill Williams, CA 95503

Charles Dory, CA 95519

Ashley Kane, CA 95519

Scott Sway, CA 95519

Virginia Rogers, CA 95521

Marian Bogdanyi, CA 95536

Emily Silver, CA 95536

Pamela Bellah, CA 95540

Michael Thompson, CA 95542

Pamela Lutchen, CA 95554



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jason Hachtel, CA 95562

Brian Dadisman, CA 95567

Karen Dillon, CA 95567

Fran Cvitkovich, CA 95570

Ellen Drury, CA 95570

Patricia Strepy, CA 95570

Joan Beesley, CA 95602

Thomas Neary, CA 95602

Nicolas Bellanca, CA 95603

Barbara Grandstaff, CA 95603

Glen Kramer, CA 95603

Helen Melick, CA 95603

Claude Davis, CA 95604

Terre Davis, CA 95604

Robyn Pask, CA 95604

Brian Belluomini, CA 95608

Tawasky Carter, CA 95608

Jamie Elverum, CA 95608

Sally Lee, CA 95608

George Leidy, CA 95608

Russell Lobue, CA 95608

Barbara Owens, CA 95608

Terry White, CA 95608

Linda Coffman, CA 95610

Pamela Rubitsky, CA 95610

Daniel Anderson, CA 95616

Helen Barbe, CA 95616

Carol Biancalana, CA 95616

Leslie Gordon, CA 95616

Rebecka Hagerty, CA 95616

Robert Halferty, CA 95616

Gautam Jagannath, CA 95616

Nancy Kirk, CA 95616

Barbara Renwick, CA 95616

Laura Routh, CA 95616

Charla Salcido, CA 95616

Sylvia Sensiper, CA 95616

Marilyn Stratton, CA 95616

Steven Weiss, CA 95616

Marian Zingaro, CA 95616

Colleen Clancy, CA 95618

James Danzer, CA 95618

Anett Evans, CA 95618

Joseph Green, CA 95618

Elaine Bishop, CA 95620

Katherine James, CA 95620

Miguel Oropeza, CA 95620

James Stevens, CA 95620

Linda Moffatt, CA 95621

Karen Perry, CA 95621

Georgia Tardy, CA 95621

Stephanie Batey, CA 95624

John Camarra, CA 95624

Erin Dant, CA 95624

David Quecke, CA 95624

Michael Radam, CA 95624

James Walls, CA 95624

Javier Lerma, CA 95626

Sandra Reed, CA 95627

Lynn Rolston, CA 95627



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Benny Barrios, CA 95628  
Albert Cheung, CA 95628  
Carrie Culver, CA 95628  
Darius Davenport, CA 95628  
Karen Hallagan, CA 95628  
Kathy Kilpatrick, CA 95628  
Susan Neal, CA 95628  
David Neff, CA 95628  
Coleman Newell, CA 95628  
Jonathan Sachs, CA 95628  
Kirsten Votaw, CA 95628  
Dianna Batt, CA 95630  
Soyab Huseinbhai, CA 95630  
Frank Jacobs, CA 95630  
Patrick Kelly, CA 95630  
James Marsh, CA 95630  
Michele Smith, CA 95630  
John Thomas, CA 95630  
Laural Hockenson, CA 95633  
Charlyn Parker, CA 95638  
Cheryl Bozzie, CA 95640  
Jacqueline Butler, CA 95648  
Leslie Cappelletti, CA 95648  
Robert Christopherson, CA 95648  
Theodore Cohen, CA 95648  
B Franks, CA 95648  
Susan Hannah, CA 95648  
Patricia Malberg, CA 95648  
Donald Rives, CA 95648  
Leslie Uyeno, CA 95648

Brooke Allison, CA 95650  
Janis Jones, CA 95650  
Michael Neal, CA 95650  
Pamela Richards, CA 95650  
Patrick Sayer, CA 95650  
Dana Stone, CA 95650  
Gloria Omania, CA 95651  
Lorraine Osborn, CA 95660  
Janis Arredondo, CA 95661  
F Chalmers, CA 95661  
Paul Fisher, CA 95661  
Joyce Frederick, CA 95661  
Sheryl Gray, CA 95661  
Kia Hatch, CA 95661  
Brooke Whitlock, CA 95661  
Lynn Yamamoto, CA 95661  
Dan Durrant, CA 95662  
Judy Elston, CA 95662  
Brett Pittman, CA 95664  
Jacob Rosano, CA 95664  
Mary Hickcox, CA 95665  
William Dye, CA 95666  
Shirley Trent, CA 95666  
Susan Turner, CA 95666  
Julie Collier, CA 95667  
Alison Gimpel, CA 95667  
Mark Thoma, CA 95667  
Michaele Beebe, CA 95670  
Dale Hatt, CA 95670  
Jane Pearce, CA 95670



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Purvis, CA 95670  
Mary Yaryan, CA 95670  
Owen Davies, CA 95672  
Cheryl Abernathy, CA 95673  
Jennifer Wells, CA 95674  
Lana Gartin, CA 95677  
Jill Matney, CA 95677  
Mary Pitcher, CA 95677  
Melinda Wetzel, CA 95677  
Ellen Debachriley, CA 95678  
Donald Hall, CA 95678  
Cheri Jump, CA 95678  
Pamela Lundgren, CA 95678  
Helane Seikaly, CA 95678  
Sylvia Escobar, CA 95682  
Patricia Felten, CA 95682  
Diane Shoff, CA 95682  
Sally White, CA 95683  
James Perry, CA 95685  
Teresa Cospers, CA 95687  
Daunna Harris, CA 95687  
Denise Peebles, CA 95687  
Joyce Pippen, CA 95687  
Richard Potts, CA 95687  
Megan Kaufman, CA 95688  
Mark Richard, CA 95688  
Derek Backus, CA 95691  
Terri Mccall, CA 95691  
Brad Pedersen, CA 95691  
Barbara Winter, CA 95691

Reuben Schilling, CA 95694  
Deanna Petersen, CA 95695  
Robert Pratt, CA 95695  
Christine Russell, CA 95695  
Lori Shaw, CA 95695  
Jennifer Cantrell, CA 95701  
Adrienne Arnold, CA 95722  
Carol Bellamy, CA 95722  
Michael Vonada, CA 95726  
Cynthia Weight, CA 95741  
Cindy Colosimo, CA 95742  
Marcia Hager, CA 95742  
Patricia Williams, CA 95742  
Kristy Muller, CA 95746  
Mona Reyes, CA 95746  
Leanna Wedel, CA 95746  
Rebecca Acosta, CA 95747  
Anne Barrett, CA 95747  
Susan Edie, CA 95747  
Julie Galliano, CA 95747  
Chinnaian Jawahar, CA 95747  
Christopher Kent, CA 95747  
Kathleen Maccoll, CA 95747  
Jaclyn Moreno, CA 95747  
Beverly Nesmith, CA 95747  
Janine Preston, CA 95747  
Frankie Schesser, CA 95747  
Kim Anderson, CA 95758  
John Caldwell, CA 95758  
Rydell Gibson, CA 95758





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Jen Teyler, CA 95758

Olivia Willis, CA 95758

Ross Woodman, CA 95758

Aaron Anderson, CA 95762

Mary Lou Gattuso, CA 95762

Lauren Gould, CA 95762

Rhonda Grider, CA 95762

Vikki Lewis, CA 95762

Cassandra Aceves, CA 95765

Susan Andrews, CA 95765

Kathleen Doerr, CA 95765

Kenneth Lembach, CA 95765

Tom McMahon, CA 95765

Richard Riley, CA 95765

Noreene Shaffer, CA 95765

David Kumar, CA 95776

Dennis Wilson, CA 95798

Gil Caravantes, CA 95811

Philip Harvey, CA 95811

Benjamin Lesenana, CA 95812

Monique Polk, CA 95812

Jacob Whitaker, CA 95812

Sherri Cizad, CA 95814

Arnold Holm, CA 95814

Karen Lemmons, CA 95814

John Weems, CA 95814

Katherine Craig, CA 95815

Lindsay Bennett, CA 95816

Patrice Davis, CA 95816

Janet Geiger, CA 95816

Walter H. Loving Iii, CA 95816

Barb Thalacker, CA 95816

Eric Waddell, CA 95816

Chris Weare, CA 95816

Haley Williams, CA 95816

Robert Yee, CA 95816

Judy Brush, CA 95818

Janet Cassie, CA 95818

Phoebe Celestin, CA 95818

Aaron Stillwell, CA 95818

William Aguirre, CA 95819

Kathleen Cook, CA 95819

Connie Emerson, CA 95819

Wayne Mcguirt, CA 95819

Kristina Palmer, CA 95819

Paul Hanson, CA 95820

Dale King, CA 95820

Samantha Ramsey, CA 95820

Sasha Wisotsky, CA 95820

Margaret Hodo, CA 95821

Patricia Lawson, CA 95821

Deniece Radan, CA 95821

Joan Batie, CA 95822

Matthew Carrigan, CA 95822

terri clark, CA 95822

Myriam Levy, CA 95822

Zak Venegas, CA 95822

Daniel Weitzman, CA 95822

Dayle Thompson, CA 95823

Frank Torres, CA 95824



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Mary Bear, CA 95825  
Jerry Beeler, CA 95825  
Linda Budd, CA 95825  
Diane Delaney, CA 95825  
Penny Ellison, CA 95825  
Polly Kleinberg, CA 95825  
Tim Reese, CA 95825  
Julia Winston, CA 95825  
Bibiana Alvarez, CA 95826  
Brenda Heath, CA 95826  
Linda Moulton, CA 95826  
Gary Pennington, CA 95826  
Cherise Zufelt, CA 95826  
Sharon Craig, CA 95828  
Maria Dedet, CA 95828  
Victoria Mcilwain, CA 95828  
Dale McKinney, CA 95828  
Sara Mira, CA 95828  
Elizabeth Adams, CA 95829  
Johnny Chong, CA 95829  
Erika Hughes, CA 95829  
Charles Martin, CA 95831  
Rella Remedios, CA 95831  
Suzanne Thompson, CA 95831  
Justin Wentzel, CA 95831  
Susan Williams, CA 95831  
Theresa Lose, CA 95832  
Daniel Albert, CA 95833  
Alain Conder, CA 95833  
Sue Considine, CA 95833

Gina Dasilva, CA 95833  
Justin Kennedy, CA 95833  
Victor Mora, CA 95833  
John Cronin, CA 95834  
Roy Harrell, CA 95834  
Mark Thorsell, CA 95834  
Mark Viviano, CA 95834  
Raymond Cadei, CA 95835  
Alverta Harty, CA 95835  
Bonnie March, CA 95835  
Tammy Pappas, CA 95835  
Susan Persons, CA 95835  
Madalynn Rucker, CA 95835  
Merry Gaskill, CA 95838  
Michael Obrien, CA 95841  
Lauren Musgrove, CA 95842  
Ellen Read, CA 95842  
Kathleen Rubin, CA 95842  
Melissa Macias, CA 95843  
Rob Woods, CA 95843  
Robert Yount, CA 95843  
Ayanna Crenshaw, CA 95852  
Robyn Delong, CA 95864  
Autumn Finnerty, CA 95864  
Leslie Holzman, CA 95864  
Mary Huttner, CA 95864  
Gabriel Maiol, CA 95864  
Hattie Bains, CA 95901  
Denise Bays, CA 95901  
Shelley Lehman, CA 95918



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Sylvie Allione, CA 95926  
Barbara Bertapelle, CA 95926  
Teresa Gisske, CA 95926  
John Martin, CA 95926  
Lynn Millon, CA 95926  
Susan Prescott, CA 95926  
Genevieve Smith, CA 95926  
Richard Snodgrass, CA 95926  
Gary Wilson, CA 95926  
Darin Bolt, CA 95928  
Rebecca Brunelli, CA 95928  
Sonya Huss, CA 95928  
Michelle Mcgivern, CA 95928  
Cameron Pearson, CA 95928  
Traci Burnham, CA 95937  
Sharon Deal, CA 95945  
Ella Lerche, CA 95945  
Laura Morton, CA 95945  
Terence Young, CA 95945  
Lindsey Buis-Kelley, CA 95947  
Susan Ingrey, CA 95947  
Victor Doherty, CA 95949  
Brian Kilcourse, CA 95949  
Laura Mcnaughton, CA 95949  
Patricia Loera, CA 95951  
Linda Evans, CA 95953  
Anita King, CA 95954  
Sue McClinton, CA 95954  
Jonathan Blinder, CA 95959  
Stephanie Howerton, CA 95959

Marilyn Mociun, CA 95959  
Tammi Taber, CA 95961  
Terry Fountain, CA 95963  
Linda Waddell, CA 95966  
Robert Melera, CA 95968  
David Nemat-Nasser, CA 95973  
Melissa Wheeler, CA 95977  
Ryan Mc Kindles, CA 95981  
Jana Rigsby, CA 95991  
Lynn Arp, CA 95993  
Doug Gibbs, CA 95993  
Marilyn Scott, CA 95993  
Kathleen Lowrance, CA 96001  
Nelda Mayo, CA 96001  
Sara Nichols, CA 96001  
Ashley Raimondi, CA 96001  
Anna Ratner, CA 96001  
Tammi Garber, CA 96002  
Angelica Huerta, CA 96002  
Keith Brookshaw, CA 96003  
Jacquelyn Carr, CA 96003  
Constance Laughlin, CA 96003  
Keith Melton, CA 96003  
Kim Tyler, CA 96003  
John Hayes, CA 96007  
Dalton Boecking, CA 96019  
Debbie Bailey, CA 96022  
Kathryn Richards, CA 96022  
Toni Wyro, CA 96032  
Valerie Allison, CA 96067



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Karen Holmes, CA 96067

Jill Phillips, CA 96067

Paula Bibb, CA 96073

Kenneth Towle, CA 96073

Patricia Heiman, CA 96094

Randall Peterson, CA 96094

Martin Rosen, CA 96109

Barbar Bannar, CA 96150

Abby Pappenfus, CA 96150

Hailey Brewer, CA 96161

Carrie Haines, CA 96161

Ahrin Koppel, CA 96161

Violet Nakayama, CA 96161

James Wiesner, CO 92024

Janel Jung, IA 94107

Beth Rimanoczy, IN 948

Sandra Obrien, Anchorage, AK

Mela Arevalo, Juneau, AK

Lola Collins, Anniston, AL

Zakia Kator, Corona, AL

Roxanne Moran, Harrison, AR

Rita Redmond, Avondale, AZ

Jay Luna, Phoenix, AZ

John Stoneham, Prescott, AZ

Michelle Garcia, Prescott Valley, AZ

John Harrison, Scottsdale, AZ

Leslie Janik, Surprise, AZ

Catherine Studer, Tucson, AZ

Thomas Gordon, Denver, CO

Pat Kelly, Denver, CO

Torunn Sivesind, Denver, CO

Lael Mccoy, Golden, CO

Mark Selak, Parker, CO

Sarah Kincaid, Wheat Ridge, CO

Wendy Novick, Orange, CT

Jay Weinman, Redding, CT

Blair Bowie, Washington, DC

Lois Fishman, Washington, DC

Michael Kharfen, Washington, DC

Lauren Miller, Washington, DC

Betty Southard, Largo, FL

Pavelly Moure, Lehigh Acres, FL

Horacio Arce, Miami, FL

Glenn Joyner, Orlando, FL

Justina Powell, Pembroke Pines, FL

Ken Beer, Port Saint Lucie, FL

Edward Klein, Vero Beach, FL

Marilyn Saffer, West Palm Beach, FL

Alice Gray, Atlanta, GA

Kaiulani Conner, Haiku, HI

Tamara Todd, Hilo, HI

Linda Orr, Kailua Kona, HI

Elissa Kline, Hailey, ID

Sherry Chandos, Chicago, IL

John Garcia, Chicago, IL

Maureen Graves, Chicago, IL

Melissa Bailey, Columbus, IL

Jeffrey Scott, Granite City, IL

Robyn Donaldson, Hazel Crest, IL

Raymond Ryals, Libertyville, IL



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

David Fox, Wheaton, IL  
Lilian Hsu, Amherst, MA  
Matthew Dixon, Boston, MA  
Jasi Walker, Boston, MA  
Kori Hitchcock, Brookline, MA  
Srivatsa Manjunath, Chelmsford, MA  
Susana Carranza, Melrose, MA  
Jeanne Markel, Osterville, MA  
Jack Cheng, Waban, MA  
Stefanie Moore, Baltimore, MD  
Sangeetha Menon, Columbia, MD  
Jim Arney, Ellicott City, MD  
Paul Sivak, Parkville, MD  
Susan Buck, Rockville, MD  
Scott Jacobs, Takoma Park, MD  
Heidi Turner, Calais, ME  
Steven Shane, South Portland, ME  
Gregory Fox, Ann Arbor, MI  
Judy Rodrigues, Belmont, MI  
Cheryl Vaughn, Brighton, MI  
Michelle Moustakas, Canton, MI  
Kate McClanaghan, Detroit, MI  
Julio Marquez, Mount Pleasant, MI  
Michael Cohen, Royal Oak, MI  
Lisa Jacobs, Springport, MI  
Eva Bagen, Eden Prairie, MN  
Brian Breheny, Minneapolis, MN  
Pearce Bunting, Minneapolis, MN  
Alex Sachs, Kansas City, MO  
Juanita Hennessey, Durham, NC

Justin DeWaele, Wilmington, NC  
Katrina Church, Winston Salem, NC  
Kathleen Matz, East Hampstead, NH  
Jonathan Stephenson, Lyndeborough, NH  
Thomas Jesse, Wilton, NH  
Melissa Campbell, Millburn, NJ  
Kanan Gubins, Moorestown, NJ  
John Fasone, Verona, NJ  
Judy Acereto, Albuquerque, NM  
Lance Hurtubise, Albuquerque, NM  
Sarah Levalley, Albuquerque, NM  
Emily J Stafford, Albuquerque, NM  
John Fleischhauer, Corrales, NM  
Arthur Barcinas, Santa Fe, NM  
Marilyn Hood, Las Vegas, NV  
Judith Anderson, Reno, NV  
Valli Camiller, Verdi, NV  
Omari Smith, Beacon, NY  
Richard Knapp, Bronx, NY  
Ray Dantuono, Brooklyn, NY  
Ben Graney, Brooklyn, NY  
Brandon Hall, Brooklyn, NY  
Jason Weiss, Brooklyn, NY  
Patty Cornell, Cazenovia, NY  
Ronald Zumwalt, Chappaqua, NY  
Richard Loftus, Cooperstown, NY  
Carolyn Ramsay, New York, NY  
Kelly Ford, Saint Albans, NY  
Charles Knight, Seneca Falls, NY  
Carolyn Abbey, Columbus, OH





3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Christopher Burgess, Columbus, OH

Joyce Wagner, Dayton, OH

Jennifer Mariotti, Bend, OR

Edward Ehrhart, Eugene, OR

Ann Mounce, Grants Pass, OR

Kelly Villarreal, La Pine, OR

Sean Becker, Lake Oswego, OR

Caitlin French, Lake Oswego, OR

Tammy Carpenter, Portland, OR

Emily Howell, Portland, OR

Evan Ingle, Portland, OR

Patricia Iwata, Portland, OR

Kathryn Kucinski, Portland, OR

Ann Lyon, Portland, OR

Soohyen Park, Portland, OR

David Samuels, Portland, OR

Joseph Sharp, Portland, OR

Sally Travi, Portland, OR

Martin Vazquez, Portland, OR

Idabelle Fosse, Salem, OR

John Saffell, Tazana, OR

Richard Colisch, Tualatin, OR

Judith Terry, Veneta, OR

Barbara Tabler, West Linn, OR

Travis Beller, Allentown, PA

Carl Griffin, Downingtown, PA

Jaime West, Greensburg, PA

Peter Dualacher, Havertown, PA

Kim Allen, Norristown, PA

Joyce Leasher, North Wales, PA

Jenny Littleton, Richboro, PA

M. Colette Plum, Rutledge, PA

Linda Hoffman, Telford, PA

Brian Houghtaling, Wellsboro, PA

LEROY BENNETT, Middletown, RI

Laurie Masterson, Warwick, RI

Maria Guillen, Bluffton, SC

Natilee Duning, Brentwood, TN

Ian Salter, Clarksville, TN

Lesley Wood, Knoxville, TN

James Nicol, Aledo, TX

Madelyn Bernstein, Austin, TX

Darryl Crawford, Austin, TX

Jessica Lorenzana, Austin, TX

Joe Nation, Austin, TX

Kristen Schumacher, Bandera, TX

Pamela Burnham, Cedar Park, TX

Richard Robinson, Corpus Christi, TX

Aaron Weinstein, Dallas, TX

Madalyn Martinez, Denton, TX

Michael Patton, Flatonia, TX

Pandora Angelisanti, Harker Heights, TX

Mason Jones, Lubbock, TX

Victoria Glass, McAllen, TX

David Schwartz, Sachse, TX

Pam Fox, San Antonio, TX

William Sibley, San Antonio, TX

Ed Nobis, Salt Lake City, UT

Elissa Smith, Alexandria, VA

Jerry Turney, Midlothian, VA



3435 Wilshire Blvd., Ste. 385  
Los Angeles, CA 90010  
(213) 251-3688

Danielle Sorahan, Vienna, VA

Jane Riedel, Orwell, VT

James Mackinnon, Richford, VT

Anne Bower, S Pomfret, VT

Caroline Coker Mckie, Bainbridge Island, WA

Michael Rosenthal, Bainbridge Island, WA

Pat Schaechter, Bellevue, WA

SHARYN MARTIN, Bellingham, WA

Larry Hejny, Grants Pass, WA

Andrew Struck, Kent, WA

Eric Simila, Kingston, WA

Turner Erin, Kirkland, WA

Chris Diehl, Mercer Island, WA

Karen Crum, Poulsbo, WA

Kevin Bertrand, Pullman, WA

Paul Jonas, Redmond, WA

Che Anselmo, Seattle, WA

Elisabeth Crabtree, Seattle, WA

David Dresser, Seattle, WA

Benjamin Park, Seattle, WA

Nina Simonds, Seattle, WA

Jonah Weikert, Seattle, WA

Lynn Johnson, Spokane, WA

Gwenvere Modica, Spokane, WA

Whitney Parker, Vancouver, WA

Kathy Wolchick, Vashon, WA

Kay Gore, White Salmon, WA

Laura Landreth, Balsam Lake, WI

Dorcas Jones, Fairfield, WI

Ruth Crump, Madison, WI

Earl Green, Madison, WI

Sam Egan, Milwaukee, WI

Alzina Davenport, Jackson, WY

## California Fish and Game Commission

### Significant Comments Received for the February 14-15, 2024 Commission Meeting Related to Agenda Item 10, Regulation Change Petitions (Marine)

The Commission received twenty-six comment letters related to regulation change petitions related to marine protected areas (MPAs), which are organized by petition and comments that express support, opposition, or suggestions. Department = California Department of Fish and Wildlife, SMCA = state marine conservation area, SMR = state marine reserve.

1. *Support for Petition 2023-15MPA*: Three comment letters, including two from individuals (see example in Exhibit 1) and one from the original petitioner (Exhibit 2), support the proposed allowance of pelagic finfish in some Channel Islands SMRs. The petitioner contends that the changes align with the existing goals of the MPA network and highlights an online petition with over 1,100 signatures, including comments from researchers and commercial and recreational fishers, all expressing their support for the proposed changes.
2. *Opposition for Petition 2023-15MPA and 2023-16MPA*: One individual opposes both petitions that propose new take within several SMRs. They believe these petitions are inconsistent with the guiding principles outlined by the Commission and the Department along with the state's 30x30 initiative (Exhibit 3).
3. *Support for Petition 2023-24MPA*: Nine comment letters, including one from a non-governmental organization (NGO) (Exhibit 4) and eight from individuals (Exhibit 5), support the proposed southern boundary extension of the Laguna Beach no-take SMCA. They express that the increased protection would further protect the kelp forest off Dana Point.
4. *Opposition for Petition 2023-24MPA*: Two individuals oppose the proposed southern boundary extension of the Laguna Beach no-take SMCA (exhibits 6 and 7). Both commentators express the importance of keeping the area open for fishing due to its accessibility for elderly individuals and children, as well as those from a lower economic status. In addition, one owner of a sportfishing and whale watching vessel, expresses their concern about the potential economic ramifications on their community.
5. *Support for Petition 2023-28MPA*: A joint letter consisting of 26 NGOs offer their support to designate a new SMR at Point Sal, or an SMCA that exempts take by local indigenous communities and/or tribes for cultural and subsistence purposes. They assert that a new MPA in this area would bolster resiliency of the MPA network, provide refuge for marine life, and foster interagency collaboration for improved coastal access (Exhibit 8).
6. *Suggestions for Petition 2023-29MPA*: A city and a special district both submitted letters offering suggestions and considerations for the petition. The City of Carpinteria seeks assurances that the proposed Mishopshno SMCA will not interfere with citizens' access to the coastal area, hinder jurisdictional complexities related to submerged lands, or interfere with the Carpinteria Living Shoreline Project and other maintenance activities (Exhibit 9). The Santa Barbara County Flood Control and Water Conservation District expresses concern about the potential unintended consequences of the proposed Mishopshno SMCA on the County's public safety obligations. The District recommends excluding the Carpinteria Salt Marsh and a stretch of coastline from the SMCA proposal to avoid hindering crucial public works operations, emergency responses, and coastal programs (Exhibit 10).
7. *Opposition for Petition 2023-29MPA*: One individual opposes the proposed Mishopshno

SMCA, stating that the economic impacts outlined in the application fails to consider existing commercial kelp harvest. They state that kelp beds within the proposed area have been historically used for harvest and are presently part of commercial mechanical kelp harvest operations authorized in a Commission-approved mechanical kelp harvesting plan (Exhibit 11).

8. *Support for Petition 2023-31MPA*: A comment letter from the petitioner includes additional support for a classification change of Drakes Estero from an SMCA to an SMR, with the potential to combine it with the Estero de Limantour SMR. The commenters emphasize the changing conditions at Drakes Estero, citing recommendations from the [Marine Life Protection Act Initiative] Blue Ribbon Task Force, National Park Service actions, and data from Marin MPA Watch. They raise concerns about repeated instances of high recreational take, which they believe equates to a small quasi-commercial operation. In addition, the petitioner attaches a joint letter of support from 14 NGOs, one of which is the Huukuiko, Inc., Coast Miwok Tribal Non-profit (Exhibit 12).
9. *Support for Petition 2023-32MPA*: One individual supports the proposed northward and southward expansions of Duxbury Reef along with the classification change from an SMCA to an SMR in order to protect the rocky intertidal zone (Exhibit 13). In addition, a comment letter was received from the petitioner that provides additional rationale for the proposed changes. The petitioner highlights the significance of the petition to enhance enforcement efforts, eliminate confusion, and align with governance principles. In addition, the petitioner attached three letters of support from two individuals and a joint letter of support from 14 NGOs, one of which is the Huukuiko, Inc., Coast Miwok Tribal Non-profit (Exhibit 14).
10. *Opposition for Petition 2023-33MPA*: Two individuals oppose the proposed expansion of 6 MPAs (5 in the southern region and 1 in the central region) and proposed new MPA in the central region. One of the individuals expresses concern about the economic impacts of this petition on commercial kelp harvest, which the petition does not acknowledge; the commenter specifically noted that the proposed expansion of the Point Conception SMR would overlap with commercially-important kelp administrative beds where current harvest is authorized in the commentator's Commission-approved mechanical kelp harvesting plan (see example in Exhibit 15).
11. Ten NGOs submit a joint letter urging the Commission to only consider petitions that enhance and strengthen protections while rejecting petitions that might weaken or reduce protections. They highlight the comprehensive, science-backed design process of the MPA network conducted from 2004 to 2012 and emphasize its success over the past decade. They stress the need for adaptive management to address spatial and temporal variability, and emphasize that the network's benefits will continue to accrue over time (Exhibit 16).
12. Three sportfishing NGOs submit a joint letter offering their recommendations of deny or refer for all submitted petitions. They raise concerns about the petitions that restrict fishing access, arguing that many lack scientific support and could adversely affect coastal traditions. Additionally, they emphasize the value of low-impact activities like shore fishing for diverse communities and urges the Commission to consider historically-marginalized groups when considering any expansion in the MPA network (Exhibit 17).
13. The MPA Collaborative Network submitted their table of regulation recommendations vetted through the 14 county-based MPA collaboratives (Exhibit 18).

## Exhibits

1. [Email from Sean Burke, Captain of the Fishing Vessel Pilikia, received January 28, 2024](#)
2. [Email from Blake Hermann, received December 22, 2023](#)
3. [Emailed letter from Eric Praske, received January 31, 2024](#)
4. [Emailed letter from Nickolaus Sackett, Social Compassion in Legislation, received January 24, 2024](#)
5. [Email from Jinger Wallace, received January 25, 2024](#)
6. [Email from Jeffrey Gunther, received January 30, 2024](#)
7. [Emailed letter from Donna Kalez, Dana Wharf Sportfishing and Whale Watching, received January 31, 2024](#)
8. [Email from Robert Vergara, Natural Resources Defense Council, transmitting joint letter from 26 non-governmental organizations \(NGOs\), received February 1, 2024](#)
9. [Emailed letter from Erin Maker, City of Carpinteria, received January 31, 2024](#)
10. [Emailed letter from Andrew Raff, Santa Barbara County Flood Control and Water Conservation District and Water Agency, received January 17, 2024](#)
11. [Email from Doug Bush, The Cultured Abalone Farm, received January 26, 2024](#)
12. [Emailed letter from Ashley Eagle Gibbs, Environmental Action Committee of West Marin, received February 1, 2024](#)
13. [Email from Mary Jane Schramm, International Ocean Film Foundation, received January 31, 2024](#)
14. [Emailed letter from Ashley Eagle Gibbs, Environmental Action Committee of West Marin, received February 1, 2024](#)
15. [Email from Doug Bush, The Cultured Abalone Farm, received January 26, 2024](#)
16. [Emailed letter from Rikki Eriksen, California Marine Sanctuary Foundation, transmitting joint letter from ten NGOs, received February 1, 2024](#)
17. [Emailed letter from Devin O’Dea, Backcountry Hunters and Anglers, transmitting joint letter from three sportfishing organizations, received February 1, 2024](#)
18. [Email from Aubrie Fowler, MPA Collaborative Network, transmitting table of MPA Collaborative Network-vetted regulation recommendations, received January 31, 2024](#)



**From:** Sean Burke <[REDACTED]>  
**Sent:** Sunday, January 28, 2024 01:07 PM  
**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Subject:** Petition 2023 -15MPA

To whom it may concern,  
If anything this petition may have some success in informing the Wardens w/ their continued lack of knowledge w/ the Harpoon fishery . Trust me I know and so does Officer Sean Stanton.  
Focus your time and our taxpayer money on proper enforcement that make's a difference towards conservation . Patrolling imaginary borders and buffer zones makes no sense w/ anything swordfish .  
There are no fences for Xiphias gladius .  
Pass this petition .

Capt. Sean Burke  
F/V PILIKIA  
#1134177  
F&G 03176

**From:** Blake Hermann <[REDACTED]>  
**Sent:** Friday, December 22, 2023 11:07 AM  
**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Subject:** Supplemental Comment on MPA Petition 2023-15MPA

Hello,  
Please see the attached document, supplemental comment of MPA Petition 2023-15MPA.

Thank you,  
Blake Hermann

Dear Commission,

It is my community's belief that the changes requested in this petition are not only reasonable but justified under the current goals of the network. The petition lays out no new ideas or concepts, but is rather grounded in the framework of the MPA network and the goals it, and the commission, have set. This includes the goals of the founding MPA Documents for the Channel Islands, the 2016 MPA Master Plan, and comments on previously submitted petitions stating MPAs are not designed to protect pelagic or highly migratory species. The proposed HMS limited-take areas would allow for sustainable fisheries to follow HMS into these areas, while still protecting the local ecosystems and not erasing any existing protections on the local, non-pelagic ecosystems the MPAs are intended for. These areas would serve as glowing examples of conservation without the complete shutdown of reasonable fishing access for HMS as they randomly pass through the MPA network.

This change would demonstrate the necessary balance we must achieve moving into the future. Targeted conservation efforts catered towards groups of similarly behaving species (pelagic vs non-pelagic) is a goal we must strive for, rather than the broad approach these three MPAs are currently following.

If made, the changes would equalize the wide gap in no-take MPAs specifically around the Channel Islands Park. Currently, of the 21% of the park that is under some protection, 96% are no-take MPAs. When compared to the 60% of no-take MPAs elsewhere in the State we can see this disparity in full effect. This change would not only help remedy that disparity, but would show the stakeholders the commission's willingness to make reasonable HMS allowance in an area currently saturated with no-take MPAs. Additionally, the proposed changes will provide new research opportunities for observing previous no-take areas open to HMS (a topic that has never been researched before).

In the case of enforcement, these changes will result in little to no difference in enforcement effort. Regardless of regulation, no-take or limited-take, officers will continue to inspect vessels inside of a closure for violations. The only difference under limited-take areas is the small list of allowances that would not result in a citation. Under current no-take rules, any fishing activity or fish onboard results in a citation. Under the proposed limited-take rule, only some types of fishing and species of fish may be legally possessed. For enforcement, almost no changes in procedure are required.

Option 2 of this petition proposes changes that are best suited for the 3 MPAs in question: The Footprint, Gull Island, and Santa Barbara Island (SBI). Allowing HMS limited-take with CPS possession for baitfish enables anglers with the opportunity to track HMS as they move through these areas with the currents, while still safeguarding any local, non-pelagic species (such as groundfish), thereby preserving the original intentions of these MPAs.

An online petition, signable by the public, was recently made available (found here: <https://chnng.it/2wy2dHSS6r>). After just one month, the petition garnered over 1,100 signatures and produced comments that the public wishes the Commission to hear (Signature list can be provided if desired). Below are just some of the comments from researchers, and commercial and recreational anglers.

- Richard Cravey commented: "I sportfish and also worked on the CCFRP project out of Scripps Institution of Oceanography at UC San Diego. I recognize the importance and efficacy of

protecting habitat for residential species of fishes like rockfish, wrasses, etc. but I see mismanagement of highly migratory species like jacks and tunas. I believe amendments to the MPAs are a viable way to improve the mismanagement of those species that are not in need of protection through the MPA network.”

- Wes Pierson commented: “I believe these changes make sense to the fishery while still providing protection to non-migratory species the MPA was designed for.”
- Vinnie Vernola commented: “It will give valuable access to fish swordfish and bluefin tuna that frequent these MPAs year after year. Since these fish migrate and do not live or stay in these areas as their permanent home it should not affect populations in my belief.”
- Bryce Hermann commented: “Highly migratory species, migrate large spans of areas sometimes even coast to coast. I believe this will still protect the ground fish which the closures were meant for in the first place but give us an opportunity to target some of the HMS species certain times of the year as they pass through.”
- Mark Litwiler commented: “I’m signing because changing these closures makes sense and it still allows the fish that need protection to remain safe but opens new area for recreational and clean harvest commercial fishing to take place on the migratory species. It would spread out the area fishable and lessen the pressure as well on the migratory fish that get harvested.”
- Taylor Sanford commented: “I’m in support of commercial and sport fishing in these areas as it will benefit the science and knowledge of fish in the area, feed the community, and boost the tourism economy in the surrounding areas.”

Thank you for your consideration,

Blake Hermann

**From:** Eric Praske <[REDACTED]>  
**Sent:** Wednesday, January 31, 2024 6:55 PM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** FGC agenda item 10 comment letter

Hello,

I am submitting the attached comment letter regarding agenda item 10 on the FGC February meeting agenda.

Eric Praske



Dear California Fish and Game Commissioners,

I urge the FGC to deny petitions 2023-15MPA and 2023-16MPA, which propose the conversion of State Marine Reserves (SMRs) into take-allowed State Marine Conservation Areas (SMCAs). Granting these petitions would establish a perilous precedent, signaling to the fishing community that the Fish and Game Commission (FGC) may entertain further conversions of SMRs, thereby jeopardizing the foundational role they play in California's Marine Protected Area (MPA) Network.

**California's MPA Network relies heavily on the robust protections afforded by SMRs and no-take SMCAs, which collectively comprise less than 10% of state waters.** Highly mobile pelagic species frequently traverse MPA boundaries and are statistically more likely to exist in the remaining 90% of state waters that allow take. Moreover, many of these species are more likely to inhabit federal waters, where the coverage of no-take MPAs is significantly lower compared to state waters. There are ample opportunities to fish for pelagic species in both federal and state waters without compromising protections in existing no-take MPAs. The petitioners therefore fail to present a compelling reason to warrant jeopardizing the integrity of SMRs.

**These petitions directly contradict the MPA Petition Guiding Principles established during the July 2023 Marine Resources Committee meeting.** Specifically, the Guiding Principles emphasize that successful MPA petitions should "maintain or enhance the protections and integrity of the MPA Network."<sup>1</sup> Petitions 2023-15MPA and 2023-16MPA fail to meet this standard, as they do not contribute to the enhancement of protections within MPAs. On the contrary, the conversion of cornerstone SMRs into less protected SMCAs threatens the integrity of the MPA Network. Furthermore, these petitions are incongruent with California's 30x30 initiative, which aims to strengthen rather than weaken marine protections.

**Granting these petitions would compromise MPA enforcement.** Shore-based observers, as well as technologies such as Marine Monitor,<sup>2</sup> will not be able to distinguish vessels that are fishing for pelagics from those that are fishing for prohibited species. While Wildlife Officers possess the authority to inspect catches onboard vessels, ordinary citizens and Allied Agencies — often responsible for reporting the majority of MPA violations — are not empowered to do so. Therefore, citizens and Allied Agencies will be less likely to report and/or contact potential violators as there will be uncertainty as to which species is being targeted by the fishermen onboard a vessel. This impedes the effectiveness of MPA enforcement.

In conclusion, I strongly urge the FGC to deny Petitions 2023-15MPA and 2023-16MPA in order to safeguard the integrity and effectiveness of California's MPA Network. Your commitment to upholding the principles that underpin the MPA Network is crucial for the conservation of our marine ecosystems and the sustainable management of California's fisheries.

Thank you for your attention to this matter.

Sincerely,



Eric Praske

Laguna Beach

---

<sup>1</sup> Summary of Marine Protected Area (MPA) Regulation Change Petition Framework Discussion.

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=214928&inline>

<sup>2</sup> <https://protectedseas.net/>



**SCIL**  
Social Compassion  
in Legislation

January 24, 2024

Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**RE: Decadal Management Review – Petition for regulation change -tracking number 2023-24MPA): SUPPORT**

Dear Commissioners:

Social Compassion in Legislation is writing to respectfully urge the Commission to accept the 2023-24MPA petition submitted by the Laguna Bluebelt Coalition to extend the Laguna Beach SMCA no-take regulation down to the southern border of the city of Laguna Beach.

Beyond the difficulties in enforcing the different rules within the same city limits, as outlined in the petition, and which would be relieved if this petition is accepted, it is imperative that we protect our marine ecosystems to the level that is commiserate with their sensitivity and importance to biodiversity.

The critical habitat provided by kelp forests for many species is essential for those species to thrive and contribute to the health of our ocean. It is time to fully protect this habitat by making it a no-take area. Additionally, by extending the no-take area, we will be removing deadly obstacles for migrating whales, which are known to come very close to shore.

We applaud the state's management of our marine protected areas and marine conservation areas. Our coastal city relies on the MPAs and SMCAs to keep our oceans clean, marine ecosystems vibrant, beaches beautiful, and economy thriving. We are always striving to be better stewards of our environment, and as such, we strongly believe that this request is imperative to the protection of our marine areas.

For these reasons, we urge the Commission to accept petition 2023-24MPA.

Sincerely,

Nickolaus Sackett  
Director of Legislative Affairs  
Social Compassion in Legislation

January 25, 2024

California Fish and Wildlife Commission

Sacramento, CA 94244-2090

Email: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)

SUBJECT: MPA Boundary Revision #2023-24MPA Laguna Beach

Dear Commissioners,

I am writing in support of boundary revision #2023-24MPA for the Laguna Beach Marine Protected Area(s). Specifically, as the City of Laguna Beach has annexed all the beaches south of the current SMCA No-Take Boundary at Aliso Beach in March 2023, there is the need and opportunity to have one clear single MPA classification for the public to understand for the entire city limits. The current tri-colored classifications of Red, Purple and Blue MPAs have left the public confused. It is appropriate for this and for other reasons to extend Laguna's MPA to the southern city limit at Three Arch Bay (TAB). This will aid enforcement by helping the public understand critical regulations to protect and restore California's marine life.

Furthermore, as commercial and recreational fishing are permitted at the southern portion of Laguna surrounding Three Arch Bay (TAB), residents have experienced with dismay the depletion of marine life along their coast. I have personally seen and read social media posts of teams of jet ski fishing club enthusiasts arrive to take fish in that area to the maximum allowable and possibly beyond. Please consider as well that Dana Wharf which offers day boat charters out of Dana Point now often go to Three Arch Bay and 1000 Steps areas for fishing. This impact has further decreased marine life and biodiversity in these waters created by overfishing.

This section of Laguna Beach is one of the gems found along California's coast which deserves our protection. The City's most southern area has unique steep, deep bluffs offering immediate deep coves, such as Whale Cove, and rocky reefs. As an essential fish habitat, it provides all of the most important features identified as priorities for MPAs. From 1000 Steps to Three Arch Bay (TAB), the area contains magnificent kelp forests and striking marine life which have become threatened from overfishing.

Since the implementation of California's MPA network, Laguna Beach has invested significant resources and continues as a community to work hard to be a good partner with the Fish & Wildlife Commission and Staff to restore these rare, vitally important California resources and marine life.

Let's not lose this important opportunity to save one of California's rare habitats.

Sincerely,

Jinger Wallace

Laguna Beach, CA 92651

**From:** JEFFREY GUNTHER <[REDACTED]>

**Sent:** Tuesday, January 30, 2024 07:55 AM

**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>

**Subject:** Opposition to Petition re MLPA Laguna Beach Fishing Area

PLEASE NOTE: I am a resident and a primarily catch and release sport fisherman. I am acutely aware and concerned about our environment. Since my retirement as a Judge of the California Superior Court, I go fishing on the boats operated by Dana Wharf at least twice a week. I have also personally and actively participated in each of the yearly CCRFP studies administered by UC San Diego to monitor the impact of MLPA on the San Diego area.

I **do NOT support the petition** to expand the Laguna Beach SMCA - No Take- the "blue area" . I believe MORE STUDY should be devoted to the area the current Petition involves. To my knowledge and study, there has been only ONE day of investigation and that occurred in 2017. It should be noted, that under current regulations, we have had the ability to fish in this area covered by the petition since the Laguna Beach MLPA closure started. It is important that the option to fish in this area continues to remain open for the following reasons: Elderly people like myself (I am 78 years old) do not have the strength or stamina to go on all day or multi day fishing trips; Young Kids, like my grandchildren, equally have such encumbrances. The current regulations allow fishing in the local blue area—while the boats don't fish there often it is important to have this area remain open as an option. To close it would have serious adverse impact on the older and younger population.

Please note that under current research, there is no scientific reason to close more of the coast; instead, why not focus on more research to find out what action is truly needed. This petition is premature and not well thought out !!!

As a recreational fisherman who has been on many fishing trips and has also participated on CCFRP trips in other areas I have seen first hand how the closures have worked. The studies have shown, and my personal observations have confirmed, there is no scientific reason to close more. All that would be accomplished would be to adversely impact and have a chilling affect on the ability for seniors and children and low income people to enjoy this wonderful local recreational opportunity of sportfishing.

I would like to further note that the captains and crews of the Dana Wharf Fishing and Whale Watching always protect and do not overfish the current areas. Clients are encouraged to catch and release. Undersized fish are carefully and safely returned to the sea. They also provide a valuable opportunity for visitors to our area to experience the joys of fishing on affordable local outings. If the area covered by the petition is closed this will all be lost.

For all of the aforementioned reasons I OPPOSE the petition and urge further study be implemented.

Sincerely, Jeffrey Gunther

**From:** Donna Kalez <[REDACTED]>

**Sent:** Wednesday, January 31, 2024 11:10 AM

**To:** FGC <FGC@fgc.ca.gov>

**Subject:** Please see attached letter we oppose Petition No. 2023-24MPA

This letter is our formal opposition to any expansion of the MLPA in general ,but most specifically the Laguna Beach SMR.

Thank you ,

Donna Kalez, COO

Dana Wharf Sportfishing & Whale Watching

34675 Golden Lantern

Dana Point, Ca. 92629

949.496.5794 ext 116

[www.danawharf.com](http://www.danawharf.com)

[www.linktr.ee/danawharf](http://www.linktr.ee/danawharf)

**Dana Point : The Dolphin & Whale Watching Capital of the World ®**

Keep in touch: [Twitter](#) , [Facebook](#) , [Instagram](#) , [You Tube](#)

Chair: Festival of Whales Foundation

**Oceanside Adventures**

**256 Harbor Dr. South**

**Oceanside, Ca 92054**

[www.oceansidewhalewatching.com](http://www.oceansidewhalewatching.com)





34675 Golden Lantern  
Dana Point, Ca. 92629

1/30/23

California Fish and Game Commission

Subject: Concerns Regarding MLPA Decadal Review Petition submittals.

Dear Fish and Game Commission,

I am writing to express my deep concerns regarding the MLPA Decadal review and the petition 2023-24 to expand the closures in the coastal area of Laguna Beach in Orange County. As a long-standing business owner for over 50 years , Dana Wharf Sportfishing and Whale Watching, a business started by my father Don Hansen, I feel compelled to share my perspective on this matter.

Since 1971, Dana Wharf Sportfishing and Whale Watching has been an integral part of the Dana Point community, providing daily fishing trips from Dana Point Harbor. Over the past 12 years, we have diligently followed the rules and adapted to the closure of a significant fishing area in Laguna Beach immediately to the north of our Harbor due to the MLPA implementation. While we fish in the waters off San Clemente to our south as well as waters off shore on our longer trips. The proposed expansion of the closure areas in Laguna Beach includes highly popular spots for both commercial and recreational fishing for our shorter trips.

Expanding the Marine Protected Areas (MLPA) in these areas would have devastating consequences for the livelihoods of local fishermen, my business, and the well-being of our employees and patrons. Having efficient, equitable access to good fishing spots close to our location is essential for individuals who may not be able to take longer trips for many reasons including special needs, children, seniors and those who cannot afford longer trips to catch their fish. Shorter trips not only provide more affordable options but also cater to individuals who cannot be on a boat for an extended period.

The proposed expanded areas would not allow us to provide enjoyable fishing experiences without requiring extensive travel, it would limit our access and take away vital options to the fishery. It is crucial to consider that the Marine Life Protection Act was implemented with strict guidelines for determining closure areas along our coast; it is a network of protected areas . I

can assure you that the MLPA was a long and painful process for all involved. Accepting a petition to expand an area that does not warrant expansion would not align with the original intent of the act. Instead, we should focus on conducting more long-term monitoring and comprehensive surveys to better understand the current state of the fishery in the closure area. We should be supporting science and adaptive management.

Dana Wharf Sportfishing and Whale Watching has been a steadfast partner in adapting to the MLPA closure. We employ 50 individuals who make a living on the water, through both fishing and whale watching activities. When evaluating petitions, I implore you to prioritize the use of scientific data and consider the economic and social impact on the community.

Thank you for your attention to this matter. I trust that you will carefully consider the concerns raised by the fishing industry and the local community in your decision-making process as you manage the MLPA process and prepare for the next 10 years <https://wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan> . Should you require any additional information or wish to discuss this matter further, please do not hesitate to contact me at 949.496.5794 ext 7.

Sincerely,



Donna Kalez

Owner

Dana Wharf Sportfishing and Whale Watching

**From:** Vergara, Rob <[REDACTED]>

**Sent:** Thursday, February 1, 2024 4:20 PM

**To:** FGC <FGC@fgc.ca.gov>

**Cc:** Suatoni, Lisa <[REDACTED]>; [REDACTED]

**Subject:** Support Letter for Point Sal SMR Petition

Hello,

I have attached a written comment to support our petition to this email. Please let me know if anything else is needed from my end.

Thank you in advance!

Best,

Rob

**ROBERT VERGARA**

*Roger Arliner Young (RAY) Ocean Conservation Fellow*

NATURAL RESOURCES DEFENSE COUNCIL

111 SUTTER ST, FLOORS 20 & 21  
SAN FRANCISCO, CA 94104

[RVERGARA@NRDC.ORG](mailto:RVERGARA@NRDC.ORG)

[NRDC.ORG](http://NRDC.ORG)







February 1, 2024

Eric Sklar, President  
 California Fish and Game Commission  
 715 P Street, 16th Floor  
 Sacramento, CA 95814

**Re: Decadal Management Review Marine Protected Areas Petition Process: Point Sal, CA**

Dear President Sklar and Honorable Commissioners:

Thank you for receiving petition 2023-28MPA for regulatory changes to the Marine Protected Area (MPA) network, one of the adaptive management recommendations from the first MPA Decadal Management Review (DMR). The undersigned organizations maintain their strong support for the designation of a new State Marine Reserve or a State Marine Conservation Area with exception for cultural and subsistence take by local Indigenous communities and/or Tribes around Point Sal.

Point Sal is an ecologically rich promontory along the Santa Barbara County coastline that supports a biodiverse marine ecosystem and houses critical habitat for seabirds and marine mammals alike. The waters around Point Sal encompass a lush selection of aquatic communities, including robust kelp beds and rich tidepools, along with habitats that sustain iconic marine mammals such as humpback whales, sea otters, sea lions, and even a biologically important feeding area for endangered blue whales. Most importantly, Point Sal holds historical and cultural significance for the heritage of the Chumash people, with evidence of their inhabitation of the area being as recent as 250 years ago and as far back as 4,800 years ago.

This area's environmental merits, along with its deep ties to the traditional stewards of this land, reinforce the pressing need to accept or evaluate the implementation of a new MPA to protect an

ecologically and culturally significant part of our state's iconic coastline. Implementing a Point Sal SMR/Tribal-exempt SMCA will boost the resilience of the MPA network by providing a refuge for marine life from ocean disturbances and future development. Furthermore, establishing a new MPA at this site provides an opportunity for interagency collaboration to improve coastal access for local communities such as Guadalupe and Santa Maria. The main access road to the adjacent Point Sal State Beach has been out of commission since 1998, preventing local ocean users from accessing this vibrant piece of coastline. There are a wide range of nonconsumptive, nonpolluting activities for ocean users to enjoy the benefits of our ocean which comply with the protections of an SMR or Tribal-exempt SMCA. Through this petition, we aim to increase equitable access to coastal resources for the communities surrounding the proposed protected area. All in all, preserving these waters aligns strongly with goals 1, 2, 3, and 6 of the Marine Life Protection Act, the DMR goals of refining MPA Network Design and promoting Climate Resilience and Adaptation, and incorporating the objectives of Recommendations 4(b), 8, and 24 as listed in Appendix A.

We deeply appreciate the Commission's continued efforts to promote and champion the conservation of California's precious marine resources. Accepting or deferring this petition for further evaluation by the California Department of Fish and Wildlife (CDFW) will contribute towards a stronger MPA network and a resilient, thriving coastal ecosystem that can withstand future stressors such as climate change and ocean crowding. We respectfully urge the Commission to pursue ambitious ocean conservation actions like this petition as this process moves forward. Thank you for your consideration.

Sincerely,

Dennis Arguelles  
Southern California Director  
National Parks Conservation Association

Matthew Baker  
Policy Director  
Planning and Conservation League

Steve Bardwell  
President  
Morongo Basin Conservation Association

Barbara Brydolf  
President  
California Native Plant Society Alta Peak Chapter

Andrew Christie  
Chapter Director  
Sierra Club Santa Lucia Chapter

Joe Connett

Member  
Sierra Club Santa Barbara-Ventura Chapter

Laura Cunningham  
California Director  
Western Watersheds Project

Laura Deehan  
State Director  
Environment California Research and Policy Center

Rikki Eriksen  
Director of Marine Spatial Ecology  
California Marine Sanctuary Foundation

Pamela Flick  
California Program Director  
Defenders of Wildlife

Mia Glover  
Program Manager  
Inland Ocean Coalition

Hillary Hauser  
Executive Director  
Heal the Ocean

Pamela Heatherington  
Board of Directors  
Environmental Center of San Diego

Azsha Hudson  
Marine Conservation Analyst  
Environmental Defense Center

Susan Jordan  
Executive Director  
California Coastal Protection Network

Angela Kemsley  
Conservation Director  
WILDCOAST

Lance Morgan  
President  
Marine Conservation Institute



Sharon Musa  
Urban to Wild Los Angeles Program Manager  
The Wilderness Society

Manuel Oliva  
Chief Executive Officer  
Point Blue Conservation

Robin Pelc  
Principal Scientist  
SeaChange Scientific Consulting, LLC

Teresa Romero  
President  
Native Coast Action Network

Keith Shattenkirk  
Program Officer  
Patagonia

Dan Silver  
Executive Director  
Endangered Habitats League

Tomas Valadez  
California Policy Associate  
Azul

Robert Vergara  
Roger Arliner Young (RAY) Ocean Conservation Fellow  
Natural Resources Defense Council

Erin Woolley  
Senior Policy Strategist  
Sierra Club California

**From:** Erin Maker <[REDACTED]>

**Sent:** Wednesday, January 31, 2024 3:13 PM

**To:** FGC <FGC@fgc.ca.gov>

**Cc:** Nick Bobroff <[REDACTED]>; John Ilasin <[REDACTED]>; Michael Ramirez <[REDACTED]>

**Subject:** City of Carpinteria Comments RE: Agenda Item 10 Petition 2023-29MPA

Good afternoon,

Please find attached the City of Carpinteria's comments regarding Agenda Item 10 on the Fish and Game Commission's February agenda.

Thank you,

**Erin Maker**

Environmental Program Manager  
Sustainability Division

**Phone:** [REDACTED]  
[REDACTED]  
[REDACTED]



[www.carpinteriaca.gov](http://www.carpinteriaca.gov)



# CITY of CARPINTERIA, CALIFORNIA



January 31, 2024

CA Fish and Game Commission  
P.O. Box 944209,  
Sacramento, CA 94244-2090

RE: Proposed Mishopshno State Marine Conservation Area

Dear Commissioners,

Thank you for the opportunity to comment on the proposed Mishopshno State Marine Conservation Area (SMCA), as submitted by the National Resources Defense Council. We appreciate the chance to provide feedback on this important initiative aimed at preserving our coastal marine environment. The proposed SMCA would extend from north of Loon Point to the easternmost boundary of Carpinteria City Beach, with the intention of prohibiting the take of all living, geological, or cultural marine resources.

The City of Carpinteria recognizes the importance of preserving local natural resources and recognizes the significance of the coastal marine area, including the Carpinteria Reef, in providing diverse habitat for numerous species. However, the City seeks assurances that establishment of the Mishopshno SMCA will not interfere with existing City operations or preclude local citizens from accessing and enjoying the coastal marine area.

The City offers the following specific comments on the proposed SCMA:

1. **Subsistence Fishing/Recreational Fishing:** The Mishopshno SMCA provides a narrow exemption to the take regulations only for the federally recognized tribe of the Santa Ynez Band of Chumash Indians. The City is concerned this exemption is too narrow and blocks access to those subsistence and recreational fishermen who currently depend on the coast and local marine resources within the proposed SMCA area. The City believes it is essential to highlight the importance of access for individuals who may not have access to other fishing areas due to limitations such as mobility or transportation constraints. Providing opportunities for subsistence and recreational fishing within the proposed SMCA is crucial for ensuring equitable access to marine resources.
2. **Submerged Lands:** The City is unique in that a majority of its land area (4.7 square miles of the total 7.3 square mile area of the city) is in tidelands that extend from the shoreline a distance of two miles offshore. The City has approximately 2.5 miles of shoreline within the city limits (see attached map). This presents a unique situation that

must be carefully considered in the establishment of the Mishopshno SMCA. While the California Department of Fish and Wildlife retains authority over marine resources, it is important to acknowledge the jurisdictional complexities and ensure clarity in the management of these submerged lands within the MPA framework.

**Operations and Maintenance:** Carpinteria City Beach is highly impacted by coastal threats, such as coastal erosion, interrupted sediment transport due to creek channelization and upstream debris basins. Such threats have led to the decline of some native beach species and the loss of important ecosystem functions. Dunes and other beach habitats are critical in managing sand transport along the shoreline to create resilient beach morphologies, which can naturally adapt to the impacts of climate change. These systems can offer a nature-based adaptation approach, or living shoreline, as a form of protection for our coastlines. By restoring natural processes to the City's beaches, the Carpinteria Living Shoreline Project<sup>1</sup> aims to improve shoreline resiliency, protect landward development and infrastructure, and restore ecological functions as well as serve as a model for similar projects statewide. As currently proposed, the Mishopshno SMCA would interfere with the City's proposed Living Shoreline project and other beach maintenance, berm construction, and flood control projects. These projects are essential to preserve beach resources and to protect the City's infrastructure and private property from sea level rise and coastal flooding. We urge thorough consideration of existing City operations and maintenance activities within the proposed SMCA.

The Carpinteria City Beach is a popular public beach near an urban population center that has been and is currently used for a variety of different recreational activities. The City of Carpinteria is committed to working collaboratively towards the establishment of the Mishopshno SMCA, with careful consideration given to the concerns and priorities outlined above. As currently proposed, however, the Mishopshno SMCA is unnecessarily restrictive and should either be moved or modified to match all stakeholder interests and the practical realities of the area. Given the complexities of the proposal, we recommend the Mishopshno SMCA proposal be deferred to the California Department of Fish and Wildlife for further evaluation and public comment before final approval.

We look forward to continued engagement in this process to ensure the successful conservation and sustainable management of our coastal marine resources. Thank you for considering our comments and for your dedication to the protection of our natural environment. Please contact me if you have any questions at [REDACTED] [REDACTED]

Sincerely,

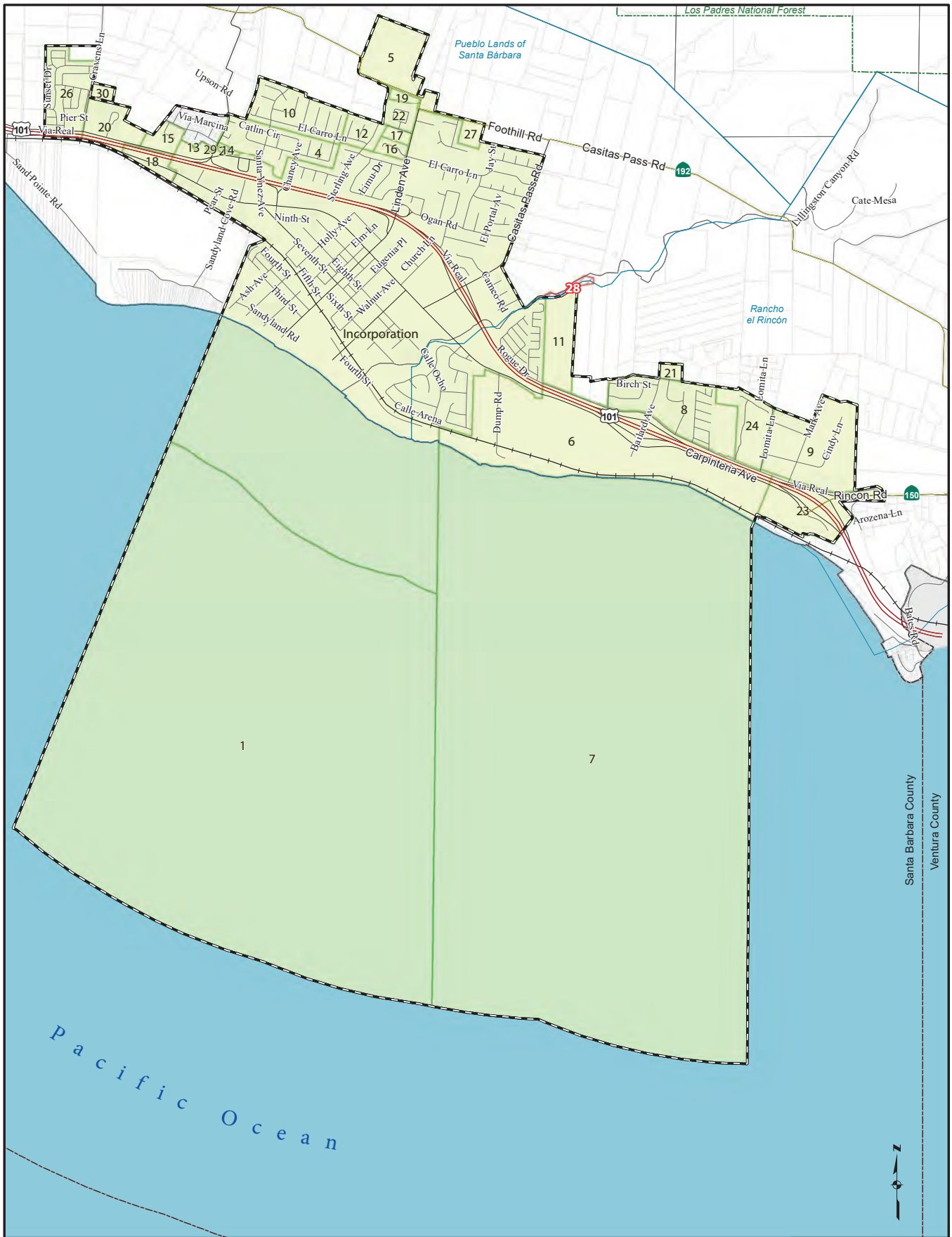


Erin Maker  
Environmental Program Manager

---

<sup>1</sup> Carpinteria Living Shoreline Project: <https://carpinteriaca.gov/public-works/engineering-division/living-shoreline/>

cc: Michael Ramirez, City Manager  
John Ilasin, Public Works Director  
Nick Bobroff, Community Development Director



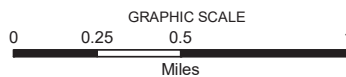
# City of Carpinteria

Compiled by the Office of the County Surveyor in November of 2020.  
 Incorporated 9/27/1965 by County Resolution 24988.  
 Last Action: 30, Green Heron Springs Annex, LAFCO 09-04, 07/08/2010.  
 Sphere: 11/4/2010. See Boundary Activity Table at  
<http://www.countyofsb.org/pwd/pwsurveyor.aspx?id=5118>

A missing number means no completion information was found for a proposed boundary change.  
 NOTICE OF DISCLAIMER: This data is for reference only. Although every effort has been made to ensure the accuracy of information, errors and conditions originating from physical sources used to develop the database may be reflected in this data. Santa Barbara County shall not be liable for any errors, omissions, or damages that result from inappropriate use of this document. No level of accuracy is claimed for the boundary lines shown hereon and lines should not be used to obtain coordinate values, bearings or distances.

### Legend

- Freeways
- Highways
- Roads
- Railroads
- Parcels
- Sections
- Ranchos and Townships
- Los Padres National Forest
- County Boundary
- Sphere of Influence
- Annexation
- Incorporation
- Detachment



Vicinity Map - Not to scale



**From:** Andrew Raaf <[REDACTED]>  
**Sent:** Wednesday, January 17, 2024 03:38 PM  
**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Subject:** Mishopsho MPA proposal

Hello, please find the attached comment letter regarding the recent MPA proposals. Best,

**Andrew Raaf** - [REDACTED]  
Environmental Manager  
Santa Barbara County Flood Control District  
Cell: 805-722-7250  
Fax: 805-568-3434

130 E Victoria Street, Suite 200  
Santa Barbara, CA 93101



# Santa Barbara County Flood Control & Water Conservation District and Water Agency

130 E. Victoria Street, Suite 200, Santa Barbara, California 93101  
(805) 568-3440 FAX: (805) 568-3434  
Web: <http://www.countyofsb.org/pwd/water>

Scott McGolpin  
Public Works Director

Walter Rubalcava  
Deputy Public Works Director

January 17, 2024

RE: Proposed Mishopshno SMCA 2023-29MPA

TO: Fish and Game Commission and involved participants:

Thank you for the opportunity to comment on the recent MPA petitions.

Santa Barbara County Flood Control District does not generally take a position on fishing regulations; however the proposed boundaries and restrictions of the Mishopshno SMCA may have unintended consequences on the County's public safety obligations.

Carpinteria Salt Marsh, which I understand to be included in the proposed SMCA regulations, is a UC Natural Reserve and a cooperatively managed community drainage feature. The Salt Marsh serves an integral role in the Carpinteria Valley Watershed Project; as a managed ecosystem the Marsh requires periodic dredging and maintenance. Any proposed restrictions associated with SMCA designation should accommodate ongoing maintenance dredging and operations to retain public safety and to restore tidal influence to the Marsh. In 2023, for example, the marsh channels filled with sediment which eliminated most of the open-water habitat available to fish and other aquatic species. After dredging was performed to restore open water channels, we noted leopard sharks and striped mullet returning to the marsh almost immediately.

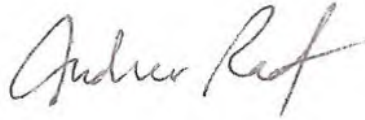
Carpinteria Salt Marsh is already a no-fishing zone due to its status as a UC Natural Reserve; the SMCA designation would not impart any additional environmentally protective status but could encumber operations and research projects already underway.

The area proposed for Mishopshno SMCA also includes nearshore waters at the Marsh mouth and eastward through Carpinteria City beaches. The nearshore waters at the Marsh mouth and Carpinteria beach access points are designated operational areas for flood control maintenance such as dredging and beach-sediment operations. While it is unclear what effect the SMCA designation may have on dredge discharge and beach operations, we are concerned that the designation may encumber important public safety efforts, beach nourishment, emergency operations, sea-level rise adaptation, dune restoration, and coastal flood response programs that have taken years to develop.

The County Public Works Department's recommendation would be to exclude Carpinteria Salt Marsh and the  $\frac{3}{4}$  mile stretch of coastline from the Marsh mouth to Linden Ave beach from the SMCA proposal. The remaining

boundary of the proposed SMCA would still serve the intended purposes of the SMCA while not impeding important public works operations for the County and City of Carpinteria.

Thank you,

A handwritten signature in cursive script that reads "Andrew Raaf". The signature is written in dark ink on a white background.

**Andrew Raaf** - [REDACTED]  
Environmental Manager  
Santa Barbara County Flood Control District  
Fax: 805-568-3434

**From:** Doug Bush <[REDACTED]>  
**Sent:** Friday, January 26, 2024 10:41 AM  
**To:** Wildlife Kelp <[REDACTED]>  
**Cc:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Subject:** petition 2023-29MPA

Please be aware that there is a petition for consideration in the Feb FGC meeting 2023-29MPA to create a new MPA in the Summerland and Carpinteria area. The economic impacts considered in the application do not make any consideration of kelp harvest. There are beds in that proposed area that have been historically used for harvest and are presently included in our FGC approved mechanical kelp harvesting plan. Please ensure that this information is included in the binder and should require that this petition cannot proceed without further consideration by affected stakeholders.

---

*douglas bush  
managing member/gm  
the cultured abalone farm, llc*

[REDACTED]



February 1, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re: **Comments on Fish and Game Commission February Agenda Item 10(B) XVII Petition No. 2023-31MPA**, EAC's Petition for Regulation Change at Drakes Estero

Dear President Sklar and Commissioners,

The Environmental Action Committee of West Marin (EAC) respectfully submits this letter along with Attachment 1 for your consideration for **Petition No. 2023-31MPA**, which requests a designation change for Drakes Estero from a State Marine Conservation Area (SMCA) to a State Marine Reserve (SMR) and your consideration to combine Drakes Estero with Estero de Limantour SMR as a single SMR.

**I. Additional Support Received for Regulation Change at Duxbury Reef**

Our original petition, submitted November 30, 2023, included support from organizations who operate at the national, state, and local level. These organizations' interests involve marine habitat protection, restoration, access, and education. We also submitted individual letters demonstrating support for the petition from the National Park Service, Marin County Supervisor President Dennis Rodoni, and former National Park Service Senior Science Advisor, Sarah Allen, PhD. In addition, as stated in our original petition, there was a full consensus in support of our petition at the August 24, 2023, Golden Gate MPA Collaborative meeting.

We now supplement our initial submission with additional points to consider, as well as additional organizational support for strengthening marine protected area (MPA) protection at Drakes Estero. (*See Attachment 1*). Note that the Attachment also includes support from Joe Sanchez, President of Huukuiko, Inc., Coast Miwok Tribal Non-profit.<sup>1</sup>

**Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

**Staff**

Ashley Eagle-Gibbs, Esq.  
*Executive Director*

Leslie Adler-Ivanbrook  
*Program Director*

Grace Milstein  
*Communications Associate*

Madeline Nieto Hope  
*Program Coordinator*

Jessica Taylor  
*Development Director*

Celine Underwood  
*Operations Director*

Patricia Wimpfheimer  
*Bookkeeper*

<sup>1</sup> Coast Miwok Tribal Council of Marin, available at: <https://www.coastmiwokofmarin.org/index.html>.

## II. Reiteration of Conditions Change at Drakes Estero Demonstrating a Need for Regulation Change

Our submitted petition relies on recommendations from the Blue Ribbon Task Force, the National Park Service, the need for consistency with the Phillip Burton Wilderness Area, and data collected from Marin MPA Watch. In 2008, the Integrated Preferred Alternative presented by the Blue Ribbon Task Force stated, “**if at any time it becomes feasible to create an SMR at Drakes Estero, this proposal recommends doing so.**”<sup>2</sup> The 2012 expansion of the Phillip Burton Wilderness Area into Drakes Estero by the National Park Service makes an SMR designation in Drakes Estero not only feasible, but consistent with requirements promulgated by The Wilderness Act.<sup>3</sup>

“Wilderness” within the Wilderness Act is defined as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”<sup>4</sup> Practically, it is the responsibility of agencies administering areas designated as wilderness to “preserve the wilderness character” in a manner consistent with the “purposes for which it may have been established.”<sup>5</sup> This includes a prohibition on “commercial enterprise” and “no use of motor vehicles, motorized equipment or motorboats... no other form of mechanical transport, and no structure or installation” within wilderness areas, “except as necessary to meet minimum requirements for the administration of the area.”<sup>6</sup>

As included in our petition submission, the removal of the commercial oyster operations at Drakes Estero and the federal designation of Marine Wilderness creates appropriate circumstances to redesignate Drakes Estero as an SMR. An SMR designation is consistent with the National Park Service’s completion of their estuary restoration project and reflective of the important habitat composing the wilderness area.

As included in our petition submission, Marin MPA Watch has observed through review of camera data repeated instances on consecutive days of a group of vehicles arriving in SUVs at Drakes Estero. This group carries coolers/buckets/oyster tubes into and from kayaks, which are presumably used to collect sea life. While the recreational take of clams is permitted within the SMCA,<sup>7</sup> the scale of the repeated use suggests a small commercial operation. While rare, motorized boats have also been used there. These activities are difficult to enforce and are not consistent with the highest level of protection in accordance with the Wilderness Act.

Additionally, there is no clear physical delineation between the Drakes Estero SMCA and the Estero de Limantour SMR, which potentially leads to instances of poaching in the SMR. This further complicates enforcement. Enforcement would be efficient by unifying the SMRs to create a contiguous no-take reserve.

---

<sup>2</sup> *Side-by-Side Comparison (maps and proposed regulations) of the North Central Coast Marine Protected Area (MPA) Proposals 0 (existing MPAs), 1-3, 2-XA, 4 and Integrated Preferred Alternative: Subregion 3: Bodega Head to Double Point* at 5, (April 30, 2008), available at [https://drive.google.com/file/d/132etwbkrP5zkNhsBqn\\_mxAlVtWk8e69a/view?usp=sharing](https://drive.google.com/file/d/132etwbkrP5zkNhsBqn_mxAlVtWk8e69a/view?usp=sharing); See also *California MLPA North Central Coast Project Integrated Preferred Alternative Marine Protected Area (MPA) Proposal* at 13-14, (April 27, 2008), available at [https://drive.google.com/file/d/15PQ-D1sPJ94dnUBy8o\\_tBAHgkP96YcY6/view?usp=sharing](https://drive.google.com/file/d/15PQ-D1sPJ94dnUBy8o_tBAHgkP96YcY6/view?usp=sharing).

<sup>3</sup> 16 U.S.C. § 1131-1136.

<sup>4</sup> 16 U.S.C. § 1131(c).

<sup>5</sup> 16 U.S.C. § 1133(b).

<sup>6</sup> 16 U.S.C. § 1133(c).

<sup>7</sup> 14 Cal. Code Regs. § 632(b)(47)(B).



### **III. Conclusion**

Thank you for your consideration of our petition submission and this supplemental information. Please contact me with any questions, and we look forward to the February meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Ashley Eagle-Gibbs".

Ashley Eagle-Gibbs, Esq.  
Executive Director

Attachment 1

# **ATTACHMENT 1**



February 1, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re: Support for **Petition No. 2023-31MPA**, Environmental Action Committee of West Marin (EAC)  
Petition to the California Fish and Game Commission for regulation change at Drakes Estero SMCA

Dear President Sklar and Commissioners,

The undersigned organizations submit these comments in support of EAC's petition regarding changes to the regulations for Drakes Estero State Marine Conservation Area (SMCA); petition no. 2023-31MPA. The undersigned organizations are committed to coastal protection and the marine protected area (MPA) network.

Drakes Estero contains one of the last fully intact wetlands in the state of California, is a biologically rich estuary that consists of extensive eelgrass beds, tidal flats, wetlands, sand bars, and open water that supports a variety of fish, invertebrates, shorebirds, waders, waterfowl, and mammals including harbor seals and river otters.

Currently, in Drakes Estero, it is lawful to recreationally harvest clams. To more effectively protect Drakes Estero's biologically rich marine life for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" (e.g., harvest, disturbance, and collection) to Drakes Estero's habitat and species, we urge the California Fish and Game Commission to modify the existing SMCA regulation by **changing the designation of Drakes Estero from SMCA to State Marine Reserve (SMR)** as described in California Code of Regulations (CCR) Title 14 § 632(a)(1)(A), in which no take is allowed.<sup>1</sup>

Drakes Estero SMCA was established in 2010 at a time when a commercial aquaculture operation was in business. As referenced in the National Park Service support letter, the 2010 designation as SMCA relied on the presence of commercial aquaculture operations. Department of Interior authorization of commercial aquaculture ended in 2012, and operations ceased in 2014. Drakes Estero was designated as Marine Wilderness in 2012. Following the Marine Wilderness designation, the Point Reyes National Seashore completed an expensive

---

<sup>1</sup> Protection of Resources in MPAs and MMAs, as defined in Public Resources Code Section 36710: (A) State Marine Reserves: In a state marine reserve, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a scientific collecting permit issued by the department pursuant to Section 650 or specific authorization from the commission for research, restoration, or monitoring purposes.

restoration project in the waters of Drakes Estero.

The SMCA regulations at Drakes Estero allow for the harvest of clams. Currently, recreational take of shellfish sometimes occurs, though it requires long kayak trips in the wilderness area with no cell service and limited emergency response. Because the commercial aquaculture no longer exists, stronger protection afforded by establishing it as an SMR would align with its pristine condition and its connectivity with adjacent Estero de Limantour SMR and Point Reyes SMR and would protect the highly sensitive estuarine ecosystem, including extensive harbor seal pupping and haul out areas.

We enthusiastically support California's MPA Network. In the case of Drakes Estero, we assert that strengthened protection is urgently needed to preserve the estuary's marine life and habitat for future generations.

Sincerely,

Deb Castellana Director of Strategic Alliances Mission Blue	Chance Cutrano Director of Programs Resource Renewal Institute
Laura Deehan State Director Environment California Research and Policy Center	Neal Desai Senior Program Director, Pacific Region National Parks Conservation Association
Rikki Eriksen, Ph.D. Director of Marine Programs California Marine Sanctuary Foundation	Suzanne Hume Educational Director & Founder CleanEarth4Kids.org
Megan Isadore Executive Director River Otter Ecology Project	Barbara Salzman President Marin Audubon Society
Scott D. Sampson, Ph.D. Executive Director California Academy of Sciences	Joe Sanchez President Huukuiko, Inc.
Terri Thomas President Marin Conservation League	Tomas Valadez California Policy Associate Azul
Robert Vergara Roger Arliner Young (RAY) Ocean Conservation Fellow Natural Resources Defense Council	Laura Walsh California Policy Manager Surfrider Foundation

**From:** Mary Jane Schramm <[REDACTED]>  
**Sent:** Wednesday, January 31, 2024 3:58 PM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** Comment in support of Duxbury Reef expansion and reclassification

Att: Eric Sklar, President  
California Fish & Game Commission

Good day, Mr. Sklar,

I request approval of the following February agenda items:

[Petition 2023-32MPA: Reclassify Duxbury Reef SMCA as an SMR and expand northern and southern boundaries](#)

Duxbury Reef's northward and southward expansions, coupled with a SMR no-take designation, would protect the health and integrity of species intertidal assemblages. Past visitation and extraction have been very destructive, and relief from those stressors would be advisable, especially in light of increasing climate disruption. The rocky intertidal zone has been a valuable indicator of ocean conditions and climate change impacts. Scientists have documented an increase in habitat shift for southerly species into our northern coastal zone. Areas like Duxbury function as *de facto* early warning systems that can reflect climate and invasive species impacts. This area can be easily accessed and monitored, and ongoing studies can reveal with specificity those species and ecosystem linkages that are being most affected by climate and usage impacts.

Regarding extraction, a SMR no-take status will eliminate visitor uncertainty about species and sites that are no-take zones. It should also enhance effective enforcement by both NOAA's Office of Law Enforcement and state enforcement officers.

Thank you for the opportunity to comment on this proposal.

Sincerely,

Mary Jane Schramm

*Mary Jane Schramm*

*Marine Life Naturalist & Communications  
Jurist, International Ocean Film Foundation*



*They say the sea is cold, but the sea contains the hottest blood of all.* - D.H. Lawrence, "Whales Weep Not





February 1, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re: **Comments on Fish and Game Commission February Agenda Item 10(B) XVIII Petition No. 2023-32MPA**, EAC's Petition for Regulation Change at Duxbury Reef

**Board of Directors**

Bridger Mitchell, Ph.D.  
*President*

Ken Drexler, Esq.  
*Vice-President*

Mairi Pileggi, Ph.D.  
*Treasurer*

Cynthia Lloyd, Ph.D.  
*Secretary*

Terence Carroll  
*Director*

Sarah Killingsworth, Esq.  
*Director*

Jerry Meral, Ph.D.  
*Director*

Patty Neubacher  
*Director*

David Weinsoff, Esq.  
*Director*

David Wimpfheimer  
*Director*

**Staff**

Ashley Eagle-Gibbs, Esq.  
*Executive Director*

Leslie Adler-Ivanbrook  
*Program Director*

Grace Milstein  
*Communications Associate*

Madeline Nieto Hope  
*Program Coordinator*

Jessica Taylor  
*Development Director*

Celine Underwood  
*Operations Director*

Patricia Wimpfheimer  
*Bookkeeper*

Dear President Sklar and Commissioners,

The Environmental Action Committee of West Marin (EAC) respectfully submits this letter along with its attachments for your consideration for **Petition No. 2023-32MPA**, which requests boundary expansion for Duxbury Reef to the north and south, as well as a designation change from a State Marine Conservation Area (SMCA) to a State Marine Reserve (SMR).

**I. Additional Support Received for Regulation Change at Duxbury Reef**

Our petition, submitted November 30, 2023, included support from organizations who operate at the national, state, and local level. These organizations' interests involve marine habitat protection, restoration, access, and education. We also submitted individual letters demonstrating support for the petition from federal management agencies,<sup>1</sup> county officials,<sup>2</sup> marine ecology experts,<sup>3</sup> fishers,<sup>4</sup> educators,<sup>5</sup> agency advisors<sup>6</sup>, and community members.<sup>7</sup> We also submitted letters of support from local residents.<sup>8</sup>

We now supplement the ongoing support with additional points to consider, as well as additional coastal, marine, tribal interest group and community member support for strengthening marine protected area (MPA) protection at Duxbury Reef. (*See Attachments 1-3*). Note that Attachment 3 includes support from Joe Sanchez, President of Huukuiko, Inc., Coast Miwok Tribal Non-profit.<sup>9</sup>

<sup>1</sup> Letters from federal management agencies include the National Park Service and Greater Farallones and Cordell Bank National Marine Sanctuaries.

<sup>2</sup> Letters from county officials include Marin County Supervisor President Dennis Rodoni and Marin County Parks and Open Space Director Max Korten.

<sup>3</sup> Letter from College of Marin Professor, Joe Mueller.

<sup>4</sup> Letter from Fisher Josh Churchman.

<sup>5</sup> Individual letters from Duxbury Docents and educators Kent Khtikian, Lily Rosenman, Bridgit Bartholome, Laura Lee Miller, and Courtney Barend.

<sup>6</sup> Letter from former National Park Service Senior Science Advisor, Sarah Allen, PhD.

<sup>7</sup> Letter from Marine Mammal Center Chief External Relations Officer, Jeffrey Boehm

<sup>8</sup> Sign-on letter by 150 community members and individuals that visit Duxbury Reef.

<sup>9</sup> Coast Miwok Tribal Council of Marin, available at: <https://www.coastmiwokofmarin.org/index.html>.

## II. Additional Support Demonstrating a Need for Regulation Change at Duxbury Reef

Duxbury Reef habitat and marine life is highly vulnerable and experiences visible stress from environmental factors and human visitation including tidepooling and collecting. This is supported by existing literature and assessments of rocky intertidal areas. For example, the Topic Briefing on Rocky Shores, provided at the Greater Farallones National Marine Sanctuary Advisory Council meeting on December 15, 2023 stated that:

Rocky intertidal habitat has a high vulnerability score based on high exposure to increased air and sea temperatures, changes in precipitation, salinity, pH, sea level rise and debris flow from storms; high sensitivity to increased sea surface temperature, sea level rise, disturbance regimes, and recreation (trampling); and high adaptive capacity (a decrease from very high) due to documented impacts from MHW [marine heatwave] events. The vulnerability of rocky intertidal habitat increased since the original assessment, due to documented disruptions from the marine heatwave including temperature stress and cascading impacts of changes to key species (seastars, intertidal kelp, urchins).<sup>10</sup>

In consideration of Duxbury Reef's increasing vulnerability and significance to the North Central coastal region, our petition requested changes to the MPA regulations at Duxbury Reef based on the assertions that:

- (1) The entirety of the Duxbury Reef habitat to the south and north should be included within the Duxbury Reef MPA and,
- (2) Limited take in this rocky intertidal SMCA causes confusion regarding what constitutes permitted take, resulting in excess potential poaching and harm to Duxbury Reef's highly vulnerable marine life.

Our requested changes are also supported by the decadal management review analysis. In the 2022 report, it is indicated that, "[s]pecies diversity in rocky intertidal habitats was higher inside MPAs over time than reference sites", which supports the need to expand boundaries to maintain biodiversity.<sup>11</sup> The importance of rocky intertidal habitat connectivity was also highlighted.<sup>12</sup> The report also indicated increased visitation during the pandemic to these types of habitat areas.<sup>13</sup>

### A. Significance of a Northern & Southern Boundary Expansion.

Our submitted petition demonstrated that the vulnerable and highly sensitive Duxbury Reef intertidal habitat extends both north and south of the current MPA boundaries for Duxbury Reef. This is supported with the inclusion of maps and letters of support from experts. Of particular concern is Marin MPA Watch data finding regular instances of individuals handling and collecting marine life, including with buckets entering the MPA. Additional impact occurs from visitors accessing the contiguous habitat beyond the MPA boundaries, collecting sea life not permitted within the MPA, and then re-entering the MPA with that sea life before leaving the area. This is in addition to regular invertebrate and wildlife disturbances observed within the ecologically contiguous

---

<sup>10</sup> Greater Farallones National Marine Sanctuary Advisory Council, *Resolution No. SAC-192-2023*, (December 15, 2023), available at <https://nmsfarallones.blob.core.windows.net/farallones-prod/media/docs/202312-resolution-to-support-staff-recommendations-within-the-rocky-shores.pdf>.

<sup>11</sup> California Department of Fish and Wildlife, *California's Marine Protected Area Network Decadal Management Review* at 40, (2022), available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=209209&inline>.

<sup>12</sup> *Id.* at 100. This was also highlighted as a goal of the CDFW MPA Petition Process Guiding Principles.

<sup>13</sup> *Id.* at 89.

habitat that falls outside of the northern and southern boundaries. These repeated incidents, along with MPA implementation guidelines set out by the California Department of Fish and Wildlife (CDFW) in the 2016 Master Plan [hereinafter “Master Plan”], support a boundary expansion, consistent with the goals of the Marine Life Protection Act (MLPA), specifically goals 1-4.

The CDFW 2016 Master Plan for all MPAs under the MLPA found that “intertidal zones” were recommended habitat in the initial implementation period between 2004-2012 and continue to be a primary habitat of concern today.<sup>14</sup> The Master Plan provides guidance consistent with a boundary expansion which would include the entirety of the ecologically contiguous habitat. This is very similar to what was originally proposed<sup>15</sup> in 2008 by two separate proposals: one representing cross-interest groups<sup>16</sup> and the other from conservation groups.<sup>17</sup> Inclusion of the full habitat proposal was rejected late in the process.

The Master Plan recognizes intertidal zones as “difficult to define,” but does provide guidance for boundaries containing such habitat.<sup>18</sup> For example:

- The use of major lines of latitude and longitude for MPA boundaries is encouraged *except* when those lines ‘split’ a beach or rocky intertidal area with heavy consumptive use.”<sup>19</sup>
- Boundaries should be easily understood by visitors on the ground through the use of recognizable “landmarks.”<sup>20</sup>
- Boundaries should extend “from the intertidal zone to deep waters offshore... if intertidal protection is desired.”<sup>21</sup>

Additionally, the Assessment of Rocky Intertidal habitats for the California MPA Monitoring Program for the DMR cited the rarity of rocky intertidal habitat types and the need to protect them:

---

<sup>14</sup> California Department of Fish and Wildlife, *California Marine Life Protection Act Master Plan for Marine Protected Areas* [hereinafter after “*Master Plan*”], appendix A at 9, 37, (Adopted by the California Fish and Game Commission on August 24, 2016), available at <https://wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan>.

<sup>15</sup> The historical documents and map show similar boundary proposals to our Northern boundary extension request. The original conservation and cross-interest proposals encompassed a larger geographic area than what was put into regulation, thus proposing to include more contiguous ecological habitat.

<sup>16</sup> *California MLPA North Central Coast Project Narrative Rationale for NCCRSR Proposal (Round 3) Proposal 1-3*, (March 19, 2008), available at <https://drive.google.com/file/d/17Mt2S0E191b7poQOBvlVRPXlvepudfBD/view?usp=sharing>; See also *California MLPA North Central Coast Project Regional Stakeholder Group (NCCRSR) Marine Protected Area (MPA) Proposal 1-3* at 13-14, (May 27, 2008), available at [https://drive.google.com/file/d/1a4eV4EBro5kHTTSb\\_YfbED7lyKN5DFKP/view?usp=sharing](https://drive.google.com/file/d/1a4eV4EBro5kHTTSb_YfbED7lyKN5DFKP/view?usp=sharing); See also *Side-by-Side Comparison (maps and proposed regulations) of the North Central Coast Marine Protected Area (MPA) Proposals 0 (existing MPAs), 1-3, 2-XA, 4 and Integrated Preferred Alternative: Subregion 4: Double Point to Point San Pedro*, (April 30, 2008), available at [https://drive.google.com/file/d/1Omgh80BBpHV9O6\\_HefFy5HPRN3F8mPOr/view?usp=sharing](https://drive.google.com/file/d/1Omgh80BBpHV9O6_HefFy5HPRN3F8mPOr/view?usp=sharing).

<sup>17</sup> *California MLPA North Central Coast Project Narrative Rationale for North Coast Central Coast Regional Stakeholder Group (NCCRSR) Marine Protected Area (MPA) Proposal 4*, (March 27, 2008), available at [https://drive.google.com/file/d/1cfnGtYg\\_2CQHNDK0ffSEvQn9xjQU8qJA/view?usp=sharing](https://drive.google.com/file/d/1cfnGtYg_2CQHNDK0ffSEvQn9xjQU8qJA/view?usp=sharing); See also *California MLPA North Central Coast Project Regional Stakeholder Group (NCCRSR) Marine Protected Area (MPA) Proposal 4* at 7-10, (May 22, 2008), available at <https://drive.google.com/file/d/1ZQWKGnlokRhq1jRrnmYApGPDf9x4Py0M/view?usp=sharing>; See also *Side-by-Side Comparison (maps and proposed regulations) of the North Central Coast Marine Protected Area (MPA) Proposals 0 (existing MPAs), 1-3, 2-XA, 4 and Integrated Preferred Alternative: Subregion 3: Bodega Head to Double Point*, (April 30, 2008), available at [https://drive.google.com/file/d/132etwbkrP5zkNhsBqn\\_mxAlVtWk8e69a/view?usp=sharing](https://drive.google.com/file/d/132etwbkrP5zkNhsBqn_mxAlVtWk8e69a/view?usp=sharing).

<sup>18</sup> *Master Plan*. appendix A at 23.

<sup>19</sup> *Id.* appendix A at 20, 23 (emphasis added).

<sup>20</sup> *Id.* appendix A at 20, 23, 33, 35.

<sup>21</sup> *Id.* appendix A at 23.

Although seeming ubiquitous, rocky intertidal ecosystems exist as a narrow linear feature. Based on extensive mapping by our MARINE (Multi Agency Rocky Intertidal Network; <https://marine.ucsc.edu/>) surveys, the estimate of rocky intertidal habitat in our state is only ~5 square kilometers. This small overall footprint designates rocky intertidal habitats as the rarest of ecosystem types and makes them particularly sensitive and vulnerable to anthropogenic disturbances. Based on vulnerability and threats from numerous sources of anthropogenic stresses, the rocky intertidal ecosystem was targeted for protection in the MLPA Master Plan.<sup>22</sup>

Taken together, these recommendations provide that intertidal habitat should be fully connected, especially in an area like Duxbury Reef which experiences high visitation. Instead, the Master Plan recommends that the Fish and Game Commission err on the side of caution in favor of intertidal habitat protection. The current boundaries of the Duxbury Reef MPA, a site of significant intertidal habitat, do not fully reflect this because portions of the intertidal habitat fall outside of the MPA.

In a study led by researchers at UC Santa Cruz, and in collaboration with the Ocean Protection Council through UC Sea Grant California, data collected on intertidal habitat population, community, and species distribution changes, and other potential network-level effects on intertidal habitats found that the intertidal habitat sites inside of MPAs are showing greater resiliency to disturbance from human activity and climate change.<sup>23</sup> Therefore, given the increasing and particular vulnerability of rocky intertidal habitats from human activity in combination with environmental stresses make the case to include the southern and northern parts of the reef in the MPA more urgent.

### **B. An SMR Designation Would Prevent Excess Harm to the Reef.**

Our petition submission contained Marin MPA Watch Data which recorded increased incidents of take within Duxbury Reef in recent years and at levels much greater than other Marin MPA Watch survey sites. A designation change from a SMCA to a SMR would create a real and observable positive impact on the protection of the highly vulnerable habitat. Letters of support submitted previously and with this letter explain personal and repeated observations by docents and professionals that demonstrate the confusion by reef visitors when they see fishing occurring on the reef, and also explain how some fishers harvest invertebrates there for bait. Additionally, Attachment 1 details an example of fisher people planning to sell their catch, thereby making their activity commercial fishing, an obvious violation of the existing regulations. The same letter also indicates particular damage and confusion related to poke pole fishing, which occurs in the deepest tidepool, and is currently permitted in the SMCA.

---

<sup>22</sup> Raimond *et al.* *Assessment of Rocky Intertidal habitats for the California Marine Protected Area Monitoring Program: Decadal report* at 10-11, (January 12, 2022), available at <https://caseagrants.ucsd.edu/news/california-marine-protected-area-long-term-monitoring-program-final-reports-2019-2021#California%20Collaborative%20Fisheries%20Research%20Program>.

<sup>23</sup> *Id.* at 2-4; *See also* Caitlin Scully, *California Marine Protected Area Long Term Monitoring Program Final Reports*, (January 24, 2022), available at <https://caseagrants.ucsd.edu/news/california-marine-protected-area-long-term-monitoring-program-final-reports-2019-2021#California%20Collaborative%20Fisheries%20Research%20Program>.

### **C. The SMR Designation Would Ease Enforcement Efforts.**

The simplified proposed regulatory change to SMR would help to eliminate confusion and ease enforcement efforts, which was identified as a governance guiding principle by CDFW as part of the public petition process.<sup>24</sup> Unfortunately, visitors see legal taking occurring within the current SMCA and assume that taking of anything is allowed.

### **D. Fully Protected MPAs are More Successful.**

Two journal articles (referenced below) support the idea that full MPA protection is more successful socially and ecologically than partial protection.<sup>25</sup> This is not to say that all SMCAs should become SMRs, but for specific highly vulnerable rocky intertidal habitats like Duxbury Reef, eliminating fishing from shore and on the reef would have a positive impact on the rocky intertidal marine life by making the no-take designation much easier to understand by visitors, thus reducing take and harm to marine life. At the same time, the relative impact of socio-economic loss of recreational fishing or consumptive use would be limited. Personal observations expressed in Attachment 2 indicate that recreational fishing at Duxbury Reef is fairly limited. In addition, even with the proposed change, there will continue to be local areas where recreational shore fishing can take place.<sup>26</sup>

While the focus of our petition has been on local support and scientific research, we highlight a couple relevant studies that speak to the value of full protection.

#### ***No-take Marine Reserves are the Most Effective Protected Areas in the Ocean.***

A 2017 journal article focuses on the direct fish biomass effect of full protection versus partial protection worldwide. The article explains that there is a greater biomass in marine reserves versus partial protection, and recovery is stronger, also conveying ecological benefits.<sup>27</sup>

#### ***Evaluating the Social and Ecological Effectiveness of Partially Protected Marine Areas.***

A 2021 Australian based article is applicable to our requested designation change at Duxbury Reef. It concludes that partially protected areas create an illusion of protection and consume scarce conservation resources yet provide little or no social or ecological gain over open areas. Fully protected areas, by contrast, have more fish species and biomass and are well understood, supported, and valued by the public. They are perceived to have better marine life and are improving over time in keeping with actual ecological results. The article concludes by stating conservation outcomes can be improved by upgrading partially protected areas to higher levels of protection including conversion to fully protected areas.<sup>28</sup>

---

<sup>24</sup> Department of Fish and Wildlife: Summary of Marine Protected Area (MPA) Regulation Change Petition Framework Discussion, (Revised August 17, 2023), available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=216395&inline>.

<sup>25</sup> See also group NGO letter dated February 1, 2024 submitted on this topic in support of the MPA network.

<sup>26</sup> For example, see CDFW, California Beach Fishing, <https://wildlife.ca.gov/Fishing/Ocean/Beach-Fishing#570623356-marin-county>. There are also locations in San Francisco Bay (see Attachment 1) and adjacent counties.

<sup>27</sup> Enric Sala, Sylvaine Giakoumi, *No-take marine reserves are the most effective protected areas in the ocean*, 75 ICES Journal of Marine Science at 1166–1168 (2018), <https://doi.org/10.1093/icesjms/fsx059>.

<sup>28</sup> Turnbull JW, Johnston EL, Clark GF, *Evaluating the social and ecological effectiveness of partially protected marine areas*. 35 Conservation Biology at 921–32 (2021), <https://doi.org/10.1111/cobi.13677>.

### **III. Conclusion**

Thank you for your consideration of our petition submission and this supplemental information. Please contact me with any questions, and we look forward to the February meeting.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ashley Eagle-Gibbs".

Ashley Eagle-Gibbs, Esq.  
Executive Director

Attachments 1-3



# **ATTACHMENT 1**

Kent Khtikian

email: [REDACTED]

telephone: [REDACTED]

January 27, 2024

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Supplemental Statement in Support of  
Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the Petition For Regulation Change submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area. This letter is intended to supplement the letter from me addressed to you dated July 3, 2023, which is "Attachment 9" to EAC's Petition, and should be considered in conjunction with my July 3, 2023 letter.

**I**

In my July 3, 2023 letter I stated:

"When speaking with visitors, who have been engaged in non-consumptive, casual or recreational collecting, I have consistently heard confusion about what is or is not allowed within the current SMCA. Visitors see legal taking occurring within the current SMCA and assume that taking of anything is allowed. In addition, when permitted taking is observed, the ability of docents to protect the SMCA from not only recreational collecting, but also to minimize the usually unintended negative impacts of trampling, moving rocks for viewing, and temporarily removing animals from tide pools.... Visitors compare, rationalize and measure their own trampling, invertebrate handling or collecting, and rock-overturning activity against the permitted taking. Simply put, continuing to permit some taking from Duxbury undermines the realization of the Commission's proscription that 'it is unlawful to injure, damage, take, or possess any living ... marine resource' (14 C.C.R. § 632(a)(1)) that is not otherwise excepted from taking in the Duxbury SMCA."

- Attachment 9 at pp 1-2.

The following is offered as but one example of the general problem described above as related to only one species, *Cebidichthys violaceus*, on Duxbury Reef.

Pursuant to the regulatory parameters currently applicable to the Duxbury Marine Conservation Area, poke-pole fishing is permitted for the eel-like *Cebidichthys violaceus* (aka



Monkeyface Pricklebacks). At Duxbury *C. violaceus* is present in the lowest intertidal pools. The most common spot for the poke-pole fishing for *C. violaceus* is in a single large pool directly offshore from the base of the Agate Beach parking lot path, in the middle of the area in which occurs approximately 80% of visitors' intertidal exploration. The people fishing are often wearing thigh-high wading boots and stand knee deep in the pool for part of their angling time. The most significant problem posed by this activity is the several confusions it causes. For example, visitors who have been engaged in non-commercial collecting believe that their minor collecting is permitted because they see, or have seen on a previous visit, the poke-pole fishing - "if that fellow can poke a pole around in the pool with a hook on the end and take out those eels, why can't I [or my kid] take a few crabs away?" As a further example, visitors think that taking invertebrates is permitted as the *C. violaceus* which they see the fisher people catching appears to most people to be an invertebrate eel and not a "finfish".

This same confusion also precipitates from visitors seeing shore-based line fishing.

In addition, to the extent that this type of fishing often entails some period of standing in the pool, it is very probable that it results in invertebrate trampling difficult to measure as it occurs in pools that are relatively deep and only accessible during the lowest tides. I would note that I have been engaged in the MARINE intertidal surveys for the past 10 years at 4 different sites in Marin County and 1 on Alcatraz, and none of our survey transects run through pools as deep as the *C. violaceus* fishing spots on Duxbury because such a pool is simply too deep to be a practical survey area.

Finally, it might be noted that peak spawning time for *C. violaceus* is from February to April. After mating, the female deposits her eggs in a mass on very low intertidal and subtidal rocky crevices. *C. violaceus* will then curl itself around the eggs to protect them. This egg-laying and protecting activity occurs at Duxbury under the very ledges in those pools where this species is sought by fisher people. I would further note on one occasion when I asked about the number of *C. violaceus* that were being taken, the three fisher people I was then speaking with told me that they were going to sell them to a restaurant in San Francisco.

If all on-shore fishing is prohibited on Duxbury Reef, many alternatives to Duxbury Reef exist for people interested in fishing for *C. violaceus* as this species is widely found on the California Coast, including in numerous locations on the San Francisco waterfront in San Francisco Bay.

#### **References:**

Eschmeyer, W.N., E.S. Herald and H. Hammann, A Field Guide to Pacific Coast Fishes of North America. 1983. Boston (MA): Houghton Mifflin Company

"*Cebidichthys violaceus*" in FishBase, June 2023 version, at <https://www.fishbase.org/summary/SpeciesSummary.php?ID=3779&genusname=Cebidichthys&speciesname=violaceus&AT=Cebidichthys+violaceus&lang=English>

"Net Gains", The New York Times Magazine, May 6, 2012 at <https://archive.nytimes.com/www.nytimes.com/interactive/2012/05/06/t-magazine/06remix-selby.html>



## II

In my July 3, 2023 letter I stated:

“ Other species I have seen on the Southern Reef Extension are now relatively rare, but had once been more numerous, on the more frequently visited part of the reef - within the current SMCA - due to collecting/poaching of that species itself (e.g. *Lottia gigantea* (Owl Limpet))....”

- Attachment 9 at p 2.

The following is offered as but one example of the general problem described above as related to only one species, *Lottia gigantea*, on Duxbury Reef.

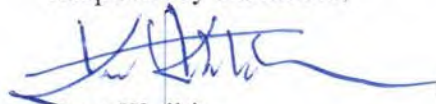
*Lottia gigantea* (Owl Limpet) is substantially larger (to 10 cm diameter) than any other species of limpet on Duxbury Reef. *L. gigantea* is normally on relatively steep, surf-beaten rock faces in the high and middle intertidal zone. The larger specimens are 10 to 15 years old. In the Duxbury SMCA, in the past they were common on the West face of the large intertidal berm that extends Southward from the base of the parking lot trail. On those occasions on which I have observed shore-based fishing, it is often done from the section of that berm on which the *L. gigantea* had been found. I have observed that specimens that were present one day, followed by fishing on the section of the berm where they had been located, were gone when I returned several days later. The berms were not exposed to any unusual wave force in the intervening days. This happened several times. There are now no *L. gigantea* on one portion of the berm on which there had been over 10 previously. Their numbers have not decreased on other more remote and difficult to access parts of the berm on which I have not seen any shore-based fishing. In addition, their numbers appear to be unchanged in other locations in which there has been no shore-based fishing observed by me. Therefore, I believe that there is a correlation between the shore-based fishing and the removal of the protected *L. gigantea* and that they can only be protected by prohibiting shore-based fishing on Duxbury Reef.

### References:

Morris, R.H., D.P. Abbott, E.C. Haderlie, Intertidal Invertebrates of California. 1980. Stanford (CA), Stanford University Press.

I am available to answer any questions and provide further information regarding any of the matters mentioned in either this letter or in my letter dated July 3, 2023.

Respectfully submitted,



Kent Khtikian

cc. Ashley Eagle-Gibbs, EAC

# **ATTACHMENT 2**

Colleen Hicks

email: [REDACTED].commailto:[REDACTED]

telephone: [REDACTED]

January 27, 2024

via email ([fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)) & U.S. Mail

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Petition for modification of Duxbury Reef Marine Protected Area**

Dear President Sklar and Honorable Commissioners,

I am writing to you in support of the petition submitted to you by the Environmental Action Committee of West Marin ("EAC") regarding the Duxbury Reef Marine Protected Area.

**My experience/background relevant to this matter.**

I have continuously been a full-time resident of Bolinas for approximately 55 years from 1968 to the present. I am of Cherokee and Lakota lineage. From 2005 to 2017 I was the Executive Director of the Museum Of The American Indian ("MAI") in Novato, California. My duties as Executive Director of the MAI included: creating, planning and curating exhibits, educational programs, educational resources, and live events; writing and editing MAI's newsletter; and, other responsibilities all related to informing the public of the values, culture and history of Indigenous Peoples of Northern California. Those duties all required a knowledge of the past and present practices, culture, values, and interests of Indigenous Peoples of the Americas generally and Indigenous Peoples of Northern California more specifically. The museum had over 4,000 school children visit every year to learn about native life ways, which included respect and care for the Earth. We taught the school children that it is our duty to preserve the land for future generations as we were taught by our ancestors.

During my 55 years in Bolinas I have spent literally 1,000s of hours on Duxbury Reef, including on the northern portion of the current Duxbury Reef Marine Protected Area that comprises the shoreline of the former RCA broadcasting facility (now occupied by Commonweal).

For the reasons stated below, I strongly believe that in order to preserve unimpaired the ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations and to minimize the negative impacts of visitors to Duxbury Reef's intertidal habitat and species all three of the following additions to and modifications of the Duxbury Reef State Marine Conservation Area ("SMCA") which EAC has requested should be approved by the Commission.

I believe that designating the entirety of Duxbury Reef, including both the "Northern



and Southern Reef Extensions”, as a State Marine Reserve is consistent with and will promote the interests and values of Indigenous Peoples of Northern California, and will not negatively impact that community.

**1. Change the designation of the Duxbury Reef State Marine Conservation Area to a “State Marine Reserve”.**

Designating as a State Marine Reserve the entirety of the both the current Duxbury MPA and the Duxbury MPA expanded to the North and South as requested by EAC, is imperative. I understand that a designation of Duxbury Reef as a “State Marine Reserve” will prohibit all taking (including all fishing from shore), damage, injury or possession of any living, geological or cultural marine resource, except under a scientific collecting permit for authorized research, restoration or monitoring, whereas in Duxbury’s current designation as a State Marine Conservation Area fishing from shore is permitted and some species are unprotected. The designation of the entirety of Duxbury Reef as a State Marine Reserve is consistent with and will promote the interests and values of Indigenous Peoples of Northern California, and will not negatively impact that community.

I have observed that fishing from the shore has become less frequent over the years. It still occurs but I do not recall seeing any people who made return trips to Duxbury for shore fishing in the past 6 or so years. I believe that such a change would only improve the condition of the reef, in some part by the reduction of that now-allowed taking, but also because of the effect that observing that fishing probably has on the behavior of the recreational, non-fishing visitors.

I have observed that the number of recreational visitors to the Duxbury MPA dramatically increased beginning in 2017. It is my impression that the increase in average visitation to Duxbury Reef in the past 6 years is far larger than the increase in the average visitation during any other 6-year period during the 49 years preceding 2017. The time for increasing the protection of Duxbury Reef is now.

**2. Extend the southern boundary of the Duxbury Marine Protected Area to the most southerly tip of Duxbury Reef exposed at mean lower low water (the “Southern Reef Extension”) and designate the entire Reef as a State Marine Reserve**

I understand that at this time the Southern Reef Extension is outside of and unprotected by the current SMCA. I understand that this unprotected area constitutes about 5/6's of that portion of Duxbury Reef extending off the southern tip of the Bolinas peninsula.

I have wandered out into the intertidal area of the southernmost part of the reef from time to time, simply for the pleasure of being there. It is truly an uncommon biological wonderland. I do not recall that I have ever observed any shore-based fishing occurring on the Southern Reef Extension. This part of the reef should be included in the expanded boundaries of a Duxbury Reef State Marine Reserve.

**3. Extend the northern boundary of the Duxbury MPA to the Double Point/Stormy Stack Special Closure, that is the northern point of the area known as Double Point (the “Northern Reef Extension”) and designate the entire Reef as a State Marine Reserve**

I understand that the Northern Reef Extension is outside of and unprotected by the current SMCA. It is my understanding that this unprotected area commences at the North boundary of the current SMCA, roughly at the outfall of Arroyo Hondo Creek, and would extend to the northern point of Double Point.

I am not aware of anyone fishing from shore, either recreationally or commercially, in the area of the Northern Reef Extension.

I have also explored the intertidal area of the Northern Reef Extension from time to time. It is pristine and rich with many species. It makes no sense to me that this and the Southern Reef Extension, both fragile ecological areas, have not been included in the Duxbury Reef Marine Protected Area. Both should now be included in an expanded State Marine Reserve.

**Summary**

In order to preserve without further impairment, and to correct harm that has been previously done to, the intertidal ecosystem of Duxbury Reef for the enjoyment, education and inspiration of current and future generations all three of the above-described additions to and modifications of the Duxbury Reef State Marine Conservation Area proposed by EAC should be approved by the Commission.

Respectfully submitted,



Colleen Hicks

cc. Kent Khtikian

# **ATTACHMENT 3**





February 1, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Via Electronic Mail: fgc@fgc.ca.gov*

Re: Support for **Petition No. 2023-32MPA**, Environmental Action Committee of West Marin (EAC)  
Petition for Regulation Change at Duxbury Reef

Dear President Sklar and Commissioners,

The undersigned organizations submit these comments in support of EAC's petition regarding changes to the regulations for the Duxbury Reef State Marine Conservation Area (SMCA); petition no. 2023-32MPA. The undersigned organizations are committed to coastal protection and the marine protected area (MPA) network.

Duxbury Reef's shale reef supports a complex and rich ecosystem of over 100 species of invertebrates, marine algae, and plants, plus associated finfish and avian species. Its broad, flat slope affords easy access to rocky intertidal tidepools which are visited by many people throughout the year, and used as outdoor classrooms for students from primary school to the university level. On some days, there can be hundreds of visitors at Duxbury Reef, including many visitors from other states and countries.

To help preserve the ecosystem of Duxbury Reef for the enjoyment, education, and inspiration of current and future generations, and to minimize the negative impacts of "take" to Duxbury Reef's vulnerable intertidal habitat and species, we urge the California Fish and Game Commission to modify the existing Duxbury Reef SMCA regulations with the following changes proposed by EAC:

1. **Change the Duxbury Reef SMCA designation to State Marine Reserve (SMR)** in which no take would be allowed, to more fully protect vulnerable marine species at risk of impacts from take. This would eliminate the existing public confusion and enforcement challenge related to the current allowance of some take. Redesignating Duxbury to an SMR is of vital importance.
2. **Extend the southern boundary of the Duxbury MPA** to the most southerly tip of Duxbury Reef exposed at mean lower low water. That is, protect the whole reef to a point at approximately 37° 53.1315' N. latitude, 122° 41.7549' W. longitude, to include the southern reef area which is contiguous with the rest of the MPA, and ecologically sensitive yet currently unprotected.

- 3. Extend the northern boundary of the Duxbury Reef MPA** protections to the Double Point/Stormy Stack Special Closure as described in CCR Title 14 § 632(b)(49) to protect contiguous, more pristine reef habitat to the north which is ecologically connected to the current SMCA, but which is at risk of being degraded.

We enthusiastically support California’s MPA Network. In the case of Duxbury Reef, we assert that strengthened protections are urgently needed to preserve the reef’s biodiverse marine life for future generations, considering public confusion about allowable take, as well as the lack of any protection of the southern and northern sections of the reef habitat, all in combination with changing ocean and climate conditions including sea level rise that add further stress on sensitive marine creatures and alter the habitat.

Sincerely,

Deb Castellana Director of Strategic Alliances Mission Blue	Chance Cutrano Director of Programs Resource Renewal Institute
Laura Deehan State Director Environment California Research and Policy Center	Neal Desai Senior Program Director, Pacific Region National Parks Conservation Association
Rikki Eriksen, Ph.D. Director of Marine Programs California Marine Sanctuary Foundation	Suzanne Hume Educational Director & Founder CleanEarth4Kids.org
Megan Isadore Executive Director River Otter Ecology Project	Barbara Salzman President Marin Audubon Society
Scott D. Sampson, Ph.D. Executive Director California Academy of Sciences	Joe Sanchez President Huukuiko, Inc.
Terri Thomas President Marin Conservation League	Tomas Valadez California Policy Associate Azul
Robert Vergara Roger Arliner Young (RAY) Ocean Conservation Fellow Natural Resources Defense Council	Laura Walsh California Policy Manager Surfrider Foundation

**From:** Doug Bush <[REDACTED]>  
**Sent:** Friday, January 26, 2024 10:48 AM  
**To:** Wildlife Kelp <[REDACTED]>  
**Cc:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Subject:** 2023-33MPA

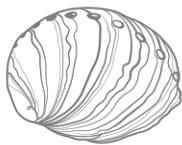
Please be aware that there is a petition for consideration in the Feb FGC meeting 2023-33MPA to expand existing MPAs in several locations on the CA coast for the explicit purpose of kelp forest habitat preservation. The economic impacts considered in the application do not make any consideration of kelp harvest. Specifically, expansion of the Pt Conception SMR is proposed for 14.6 sq miles to the east. This proposed area has historically been used for harvest and is presently included in our FGC approved mechanical kelp harvesting plan.

This bed is a key element of our kelp harvesting security and contingency and including this area in an expanded SMR would have a significant negative effect on our operations.

Please ensure that this information is included in the binder and should require that this petition cannot proceed without further consideration by affected stakeholders.

---

*douglas bush*  
*managing member/gm*  
*the cultured abalone farm, llc*  
c. [REDACTED]



THE CULTURED ABALONE FARM  
Santa Barbara, California



---

**From:** Rikki Eriksen <[REDACTED]>  
**Sent:** Thursday, February 1, 2024 12:05 PM  
**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>  
**Cc:** [REDACTED] <[REDACTED]>  
**Subject:** Additional sign ons

Hello,

Please accept this letter for the upcoming FGC meeting in replacement for the one sent a few moments ago. Thank you. Rikki

Rikki Eriksen, Ph.D.  
California Marine Sanctuary Foundation  
Marine Ecologist  
Director of Marine Programs  
[REDACTED]

*Unless someone like you  
Cares a whole awful lot  
Nothing is going to get better  
Its simply not...  
Dr. Seuss, The Lorax*

<image002.jpg>

**Please note change of last name from Grober-Dunsmore.**

**Please visit the California MPAs website for more information and resources to support marine protected areas education and outreach: [www.californiampas.org](http://www.californiampas.org)**

><(((e>` . . . . . ^^^ . . . . . ^^^ . . . . . ,><(((e>



February 1, 2024

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090  
*Submitted electronically via [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

**RE: Comments on Fish and Game Commission February 14-15 Meeting Agenda Item 10(B) - Previously Received Petitions, Marine Protected Areas**

Dear President Sklar and Honorable Commissioners:

The undersigned non-profit organizations have decades of collective experience working on marine protected area (MPA) management, research, compliance, education, and outreach and are dedicated to ocean protection and the implementation of California’s MPA Network. We celebrate California’s MPA network and submit this letter to urge Commissioners and staff to only consider actions to improve and strengthen protections and to reject petitions that seek weakened or reduced protections.

Over an eight year period from 2004-2012, California conducted an unprecedented MPA design and adoption process supported by the best readily available science and informed by the input of hundreds of stakeholders, agency partners, Tribal governments, and others. The MPA network that was completed in 2012 reflected extensive political compromise and was carefully designed to accommodate a wide range of human interests — including access and equity for both consumptive and non-consumptive human use — and improved protection for ocean habitats and ecological communities. Notably, nearly all the original stakeholders submitted MPA network designs based on a backbone of State Marine Reserves (SMR), seeking to meet the broad ecosystem and biodiversity protection goals of the Marine Life Protection Act (MLPA). The SMR backbone remains an imperative today.

A decade has passed since California designated the MPA network, and it is performing as intended according to extensive scientific research as part of the Decadal Management Review (DMR) conducted by the California Department of Fish and Wildlife. The state now has the opportunity to make improvements to enforcement and other management issues that have emerged since the original designation, while building on the existing MPA network. We urge the Fish and Game Commission to review and perfect regulations and enforcement efforts to improve, *not weaken*, the network.

## California's MPA Network is Already Performing Well

California's MPA network is a globally recognized success: The network is now in its final stages of review for inclusion as an [IUCN Green List](#) site, which will make it the first Green Listed site in the United States and the first scientifically-designed MPA network on the list. Extensive research has been collected as part of the DMR to illustrate that our MPA network is indeed achieving the goals it was designed to achieve.

In nearshore rocky reef systems, for instance, scientific analyses in the DMR show that “fish were bigger and more abundant inside MPAs than in reference sites across the state” and that “more than 70% of fish species observed were larger in both size and numbers inside MPAs.”<sup>1</sup> Increases in biodiversity were shown across the state and across different habitat types. In addition, the DMR found evidence that individual MPAs maintained connectivity, indicating that our MPAs are indeed functioning as a network.

A visit to one of the state's MPA's will likely quickly reveal that life inside MPAs is more abundant than outside MPAs, but research on specific MPAs tells the same story. The North Central Coast's Sea Lion Cove State Marine Conservation Area was created in 2009 in part to protect an important abalone nursery. Within five years of its designation populations of red abalone had experienced a “sharp increase.”<sup>2</sup> The stunning Point Lobos Marine Reserve, first protected in 1974, has shown how marine life can rebound with full protections. Research on Point Lobos found that sites protected for at least 25 years had significantly larger black abalone individuals and significantly more red abalone than unprotected areas, additionally this

---

<sup>1</sup> California's Marine Protected Area Decadal Management Review, 2022, page 32

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=209209&inline>

<sup>2</sup> California Ocean Science Trust and California Department of Fish and Wildlife and Ocean Protection Council, *State of the California North Central Coast A Summary of the Marine Protected Area Monitoring Program 2010-2015*, archived at

<https://web.archive.org/web/20200709204815/https://og-production-open-data-cnra-892364687672.s3.amazonaws.com/resources/953d0edd-7d41-4558-9bb6-3242eb3cec93/ncc-state-of-the-region-report-nov-2015.pdf?Signature=pi6p5Wt26uUgb%2FTz23Fsbme9GGI%3D&Expires=1594331282&AWSAccessKeyId=AKIAJJIENTAPKHZMIPXQ>

, 5.

ecosystem today supports more than 300 species of birds, which rely on the health of the corals, kelp and fish in the ecosystem.<sup>3</sup>

On top of the network already resulting in increased fish abundance, population, size, and density, there has been no evidence of economic loss as a result of the MPA network. With over 3 million recreational anglers enjoying California's ocean in 2022, our MPAs are also meeting their goal of "improving recreational opportunities provided by marine ecosystems."

## **The Full Benefits of the Network Will Take Time to Appear**

The first 10 years of the MPA network have already shown signs of early success but in temperate marine ecosystems like California, MPAs take time to demonstrate their full effects. In one meta analysis of MPAs, researchers found that the average time for indirect effects that can be expected to occur through cascading trophic interactions took 13 years or more to develop.<sup>4,5</sup> Research from Point Lobos and Point Buchon no-take reserves indicate that biomass per unit effort increased since implementation, indicating that benefits from these MPAs are still accumulating, even 14 years after fishing was prohibited inside the MPA<sup>6,7</sup>. While targeted species are expected to respond to MPA protections first, broader ecosystem benefits will follow as MPA protections mature.

The positive responses in fish biomass that the California MPA network has already been found to have via the DMR research described above were described as being related to MPA age<sup>8</sup>, consistent with international research findings. Such positive findings are evident even within protection case studies in California. Given that the California MPA network is only 10 years old, we look forward to witnessing increased benefits for Californians and our marine ecosystem in the future.

## **Adaptive Management is Critical**

Marine systems are spatially and temporally variable. Additionally, major oceanographic events have occurred since the designation of California's MPA network ten years ago. In other words, the MPA network spans a large area in a dynamic environment, and is therefore susceptible to change from a variety of stressors. California's MPA network can contribute to ecosystem

---

<sup>3</sup><https://news.mongabay.com/2022/12/californias-network-of-marine-protected-areas-must-be-strengthened-and-expanded-commentary/#:~:text=The%20Point%20Lobos%20State%20Marine,to%20Point%20Lobos%27%20rocky%20shoreline.>

<sup>4</sup> <http://www.pnas.org/doi/full/10.1073/pnas.0908012107>

<sup>5</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0022098107000962?via%3Dihub>

<sup>6</sup> <https://www.sciencedirect.com/science/article/pii/S0006320722000994#bb0180>

<sup>7</sup> <https://www.sciencedirect.com/science/article/pii/S0006320722000994#bb0235>

<sup>8</sup> Ibid

resilience in the face of ongoing widespread impacts such as climate change by protecting biodiversity and supporting adaptation in the face of increased stressors.<sup>9</sup>

We need adaptive management to review and improve the MPA network, but California cannot risk losing the benefits we worked so hard to achieve. Adaptive management is intended to inform science based decision making, and the science indicates that the Network is working. We should not change our approach in the middle of the process when all indicators point to the process working as designed. The MLPA warns that without adequate regulations or enforcement, MPAs provide “an illusion of protection,” and that no-take reserves are “critical for protections.”

## Conclusion

We strongly urge the Commission to not approve any petitions that request a decrease in protection of the MPA network and to only consider petitions that strengthen or improve the network. Thank you for your dedication to protecting California’s invaluable marine ecosystems and for the opportunity to comment.

Sincerely,

Rikki Eriksen, Ph.D.  
Director of Marine Programs  
California Marine Sanctuary Foundation

Laura Walsh  
California Policy Manager  
Surfrider Foundation

Emily Parker  
Coastal and Marine Scientist  
Heal the Bay

Greg Helms  
Manager, Fish Conservation Program  
Ocean Conservancy

Ashley Eagle-Gibbs, Esq.  
Executive Director

---

<sup>9</sup> Climate Resilience and California’s MPA Network, 2021,  
[https://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20210615/Item3\\_Climate\\_Resilience\\_and\\_Californias\\_MPA\\_Network\\_2021.pdf](https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20210615/Item3_Climate_Resilience_and_Californias_MPA_Network_2021.pdf)



Environmental Action Committee of West Marin

Linda Krop  
Chief Counsel  
Environmental Defense Center

Lisa Gilfillan  
Conservation Manager  
WILDCOAST  
Michael Quill  
Marine Programs Director  
Los Angeles Waterkeeper

Ray Hiemstra  
Associate Director  
Orange County Coastkeeper

Emily Parker  
Marine Scientist  
Heal the Bay

**From:** Devin O'Dea <[REDACTED]>

**Sent:** Thursday, February 1, 2024 04:10 PM

**To:** FGC <[FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov)>

**Cc:** Mark Smith <[REDACTED]>; Wayne Kotow <[REDACTED]>; Keely Hopkins <[REDACTED]>; California Chapter <[REDACTED]>

**Subject:** Discussion Item 10 - Regulation change petitions (marine)

Dear Commission Staff,

Please accept the attached comment letter on behalf of Backcountry Hunters & Anglers, the Coastal Conservation Association of California, and the Congressional Sportsman's Foundation pertaining to Discussion Item 10 at the upcoming Fish & Game Commission meeting.

Thank you,



**Devin O'Dea** | Western Policy & Conservation Manager

Backcountry Hunters & Anglers

Phone: (415) 246-5329

[www.backcountryhunters.org](http://www.backcountryhunters.org)





**BACKCOUNTRY  
HUNTERS & ANGLERS  
CALIFORNIA**



February 1, 2024

California Fish and Game Commission  
715 P Street, 16th Floor,  
Sacramento, CA 95814

**RE: Discussion Item 10 - Regulation change petitions (marine)**

Dear President Sklar, Vice President Zavaleta & Commissioners,

We appreciate the opportunity to comment on the numerous petitions under consideration at the February meeting of the California Fish & Game Commission, and we offer the perspective of the many hundred thousand supporters of our organizations to the Commission. We express grave concerns regarding several of the proposals to eliminate fishing access along large stretches of the California coast and argue that many of the petitions lack adequate scientific support and documentation to substantiate their positions.

The Decadal Management Review (DMR) of the Marine Protected Area Network (MPA) has offered important insights for MPA managers to help shape the adaptive management of MPA regulations, including promising research that MPAs may increase biomass and provide resiliency against the impacts of a changing climate for some species. The intent of the Marine Life Protection Act (MLPA) and the stewardship of our coastal resources are of paramount importance to California's heritage. However, these laudable goals and conservation benchmarks should not preclude access to harvest coastal foods where state and federal fisheries managers have demonstrated robust and resilient fish stocks without any current threat of overfishing, nor for those species where targeted fishing and active management would benefit the overall ecosystem balance.

There are numerous, seemingly well-intentioned petitions currently before the Fish & Game Commission that seek to preserve California's coastal waters citing anthropogenic impacts to biodiversity and ecosystems such as pollution, rising sea temperatures, disease, development and overfishing. While we support the intent to safeguard our fish stocks, biodiversity, and ecosystem integrity, we strongly disagree with the all-or-nothing approach adopted by many of the petitioners who proffer the wholesale elimination of fishing access without adequate scientific rationale or the acknowledgement of regulatory mechanisms already in place such as those established by the Magnuson-Stevens Fishery Conservation and Management Act working through the Pacific Fisheries Management Council, National Oceanic and Atmospheric Administration (NOAA) Fisheries, the California Department of Fish and Wildlife (CDFW), the Fish & Game Commission, and the additional state/federal laws and agencies dedicated to this task. Simply put, many of the petitions referenced below seek to advance preservation at all costs, pushing for wholesale closures that circumvent the regulatory processes already in place, ultimately bludgeoning access for the diverse angling communities that have revered these coastal traditions for generations.

Anglers and consumptive users will often be the first and loudest voices to advocate for restrictions or even closures to ensure the sustainability of a fishery, as evidenced by the numerous fishing groups and organizations advocating for the closure of the 2023 salmon season following the data and dismal projections provided by the Pacific Fisheries Management Council and CDFW. However, a Californian

constitutional right to fish seems to stand in conflict with the presumption that restriction of access is permissible where there is a lack of scientific evidence or data to justify the closure. Section 1, Article 25 of the California Constitution states, “the people shall have the right to fish upon and from the public lands of the State and in the waters thereof,” and the courts in *re Quinn* (1973) defined “public lands of the state” referenced in this article to include “access to fish in the inland streams and coastal waters of the state.”

Shore fishing, diving/spearfishing, kayak/boat fishing and coastal gathering are low impact activities that reflect the broad spectrum of California’s diverse community and constitute a valuable resource for individuals across the economic divide to access nature and provide food for their families. We encourage the Commission and MPA managers to consider the numerous communities that enjoy the state’s many sustainable food resources when considering protections and recommendations that might unnecessarily exclude these groups. We feel that these considerations are in line with the California Natural Resources Agency’s Outdoors for All initiative and its commitment in the Pathways to 30x30 document to “implement projects that do no further harm or pose unintended consequences to historically marginalized communities.”<sup>1</sup> Specifically, we wish to highlight this issue with regards to the expansion of California’s MPA network which restricts shore-based diving, foraging, and fishing access for all Californians – especially historically marginalized communities, communities of color and Native American tribes. From California’s Constitutional Right to Fish:

Anglers from historically marginalized communities may be less able to travel to fishing locations and are more likely to require shore access, as opposed to access from a boat. Anglers in communities like this need accessible shore-fishing, particularly given the importance of subsistence fishing in poorer communities. Moreover, fishing opportunities offer physical and psychological benefits to disadvantaged communities, not just access to fish as food.<sup>2</sup>

It is within this context that we urge the Commission to take the following actions with regards to the petitions they have received.

**Petition 2023-14MPA:** *Allow commercial take of red sea urchins in nine state marine conservation areas (SMCAs)*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-15MPA:** *Reclassify three northern Channel Islands state marine reserves (SMRs) to SMCAs and allow take of highly migratory species, pelagic finfish, and/or coastal pelagic finfish*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation, but are encouraged by the proposal and the potential opportunity to gather more data on limited take MPAs and long-term MPA monitoring at the Channels Islands.

---

<sup>1</sup> [https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/30-by-30/Final\\_Pathwaysto30x30\\_042022\\_508.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/30-by-30/Final_Pathwaysto30x30_042022_508.pdf)

<sup>2</sup> Coats, Francis, and Karrigan Bork. “CALIFORNIA’S CONSTITUTIONAL RIGHT TO FISH.” *Environmental Law*, vol. 51, no. 4, 2021, pp. 1085–147. *JSTOR*, <https://www.jstor.org/stable/48647570>. Accessed 22 Mar. 2023.

**Petition 2023-16MPA:** *Reclassify Stewarts Point and Bodega Head SMRs to SMCAs and allow commercial take of salmon.*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-18MPA:** *Modify allowed uses for four marine protected areas (MPAs) in Santa Barbara Channel and eliminate two special closures.*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-19MPA:** *Designate new "Chitqawi" SMCA near Morro Bay for California-Chumash co-management*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-20MPA:** *Reclassify and rename Point Buchon SMR to "Chumash SMCA" for co-management with tribal take exemption.*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-21MPA:** *Modify Pyramid Point SMCA to remove recreational take of surf smelt and allow tribal take exemption for Tolowa Dee-ni' Nation.*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-22MPA:** *Define "rocky intertidal zone," add research, monitoring, restoration and education allowance, and clarify protections in several Orange County MPAs.*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation.

**Petition 2023-23MPA:** *Reclassify three SMCAs to SMRs, designate one new SMR in Monterey, and make various changes related to kelp restoration.*

We recommend the Commission deny this petition.

While the petitioner's intent to restore kelp forests and ecosystem integrity at tankers reef and in the surrounding waters is laudable, this broadly proscriptive petition would unnecessarily restrict access for anglers where there is no clear scientific rationale. In fact, the petitioner submitted a very similar petition seeking to close access for groundfish along a large stretch of the coast in this region in 2023 which the Department of Fish & Wildlife rejected citing a lack of scientific evidence to support the claim. We support the ongoing efforts to restore kelp forests through urchin culling and other means, however we oppose reclassifying these SMCAs to SMRs and the establishment of a new SMR in Monterey.

**Petition 2023-24MPA:** *Expand Laguna Beach no-take SMCA southward to border of City of Laguna Beach and modify Dana Point SMCA boundaries*

We recommend the Commission deny this petition.

We oppose this petition on the basis that it lacks scientific documentation or justification to eliminate fishing access in the proposed area. The petitioner argues primarily for administrative ease that the no-take closure be extended to the edge of city limits. During the implementation of the MLPA, MPAs were sited utilizing careful selection criteria based on habitat type, proximity from other MPAs, impact to communities and more. The petitioner argues that all beaches within the City of Laguna Beach should be no-take MPAs in order to streamline enforcement and that homeowners “feel that it is not equitable to have only the north and central beaches protected.” It should be noted that the petitioner also states clearly in the Economic or Fiscal Impact section of the petition that “estimated resident property values gain an increase of 20% from proximity to a fully protected MPA” which may explain more robust support from the city and homeowners.

The petitioner also cites kelp forest health as justification for eliminating fishing access, however the 100 + page report included with the petition doesn't reference fishing pressure or boat activity with regards to kelp forest health and instead focuses on water temperature, nutrients, wave height, upwelling, rainfall and other stressors. As such, we recommend the Commission deny this petition since there is no scientific documentation to support its claims, and it would only negatively impact anglers who would be forced to travel further to reach fishing grounds.

**Petition 2023-27MPA:** *Reclassify a portion or all of Anacapa SMCA to an SMR to protect eelgrass*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation. We recognize the value of eelgrass beds for overall ecosystem health and habitat; however, it should be noted that many recreational anglers who target pelagic fish do not anchor and instead prefer to drift fish or troll instead which would have zero impact on the bottom habitat and eelgrass.

**Petition 2023-28MPA:** *Designate a new SMR at Point Sal, or designate as an SMCA with a tribal take exemption based on tribal consultation*

We recommend the Commission deny this petition.

While the petitioner takes time to identify the important habitat types, larval transport zones, and cultural significance of the Point Sal area, and they reference potential threats to the region from coastal development and industry, they fail to elaborate in any substantive way why fishing access should be removed from this wild and iconic central coast fishing destination. The petitioner states: “current [commercial] fishing in the proposed area is limited, likely due to its considerable distance from nearest port areas of Morro Bay and Santa Barbara.” They also admit that they have no data or analysis with regards to recreational fishing and state, “our request to CDFW for recreational fishing data from this area was being processed at time of submission; we will evaluate the potential impact to recreational fishers and submit it to the state following receipt of the requested data.”

A limited google search of “Point Sal fishing” also uncovers a large number of recreational fishing blogs and videos detailing the remote and adventurous hike to fish this area from a diverse population of anglers. In 2023 one blogger wrote, “had a great time hiking miles and miles and miles to fish Point Sal with Martin Mansera from Mansera Outdoors... It's such a remote location and so difficult to access, it



makes for a really rad adventure.” Recreational fishing trips to the area by boat are also common, and fishing is noted in nearly every travel guide or city/county website that talks about visiting Point Sal.

Regarding access and disadvantaged communities, the petitioner writes, “the California Environmental Protection Agency identifies the adjacent city of Guadalupe as “disadvantaged” under CA Senate Bill 535, and their synthesis of environmental and socioeconomic indicators further reveals that Guadalupe – alongside Santa Maria and Lompoc – are underprivileged communities that experience significant cumulative impacts from pollution. Given these communities’ close proximity to Point Sal, implementing an SMR at the proposed site could enhance access for disadvantaged populations to valuable coastal resources and fishing opportunities.”

To justify this confounding claim that removing fishing access could somehow *enhance fishing opportunities* for disadvantaged communities, the petitioner cites a study of commercial lobster fishing and the concept of “spillover.” They write, “California’s MPAs have been shown to increase the biomass of fishery-targeted species and promote “spillover” into nearby coastal areas, benefitting nearby fishing grounds.”

Spillover and the positive impacts to fisheries located in waters adjacent to MPAs are often referenced in association with the MPA network, and the limited, initial science has demonstrated some positive correlations with spillover of invertebrates like lobsters to adjacent fishing grounds in select study areas and commercial fishing for tuna in Hawaii. However, there remains an opportunity to further study this hypothesis and to promote scientific research that successfully documents spillover of targeted finfish across the MPA network in California. Some data from MPA monitoring along the Central California Coast indicated limited evidence of spillover from targeted finfish that were tagged and recaptured at a later point during the study period as evidenced from the Starr et al study: Variation in Responses of Fishes across Multiple Reserves within a Network of Marine Protected Areas in Temperate Waters:

As of July 2014, a total of 251 individual tag recaptures have been reported (Table 8). Tagged fishes were recaptured by commercial and recreational hook-and-line fishermen, commercial trap fishermen, SCUBA divers, and during our fishing surveys. Of all the tagged fishes recapture and reported, 71% were recaptured in the same site and grid cell as they were released, and 22% of recaptured fishes were caught within the same site but outside the original grid cell where they were released. Only 18 fish, or 7% of the recaptured fishes, were recaptured beyond the boundaries of the MPA or REF site in which they were released. The mean net distance moved by eight of nine species recaptured was less than half the length of the MPAs we studied.<sup>3</sup>

While we do not seek to draw conclusions regarding the overall merits of spillover to adjacent fisheries from the results of one study, we do encourage additional research to evaluate the impacts that MPAs have on local fisheries and fisheries as a whole, especially within the context of varied siting and disparate habitat types evidenced across the MPA network. As the Forcada study indicated, “We conclude that spillover effects are not a universal consequence of siting MPAs in temperate waters and they are related to the distribution of habitats inside and around MPAs.” (Forcada et al., 2009).

Due to the limited scientific understanding of spillover as it relates to the Marine Protected Area Network as a whole, especially with regards to finfish which would be the primary target of recreational shore and

---

<sup>3</sup> 4 Starr RM, Wendt DE, Barnes CL, Marks CI, Malone D, et al. (2015) Variation in Responses of Fishes across Multiple Reserves within a Network of Marine Protected Areas in Temperate Waters. PLOS ONE 10(3): e0118502. <https://doi.org/10.1371/journal.pone.0118502>

boat-based anglers at Point Sal, we disagree with the petitioner’s logical assumptions and the argument as a whole. In fact, when considered in the context presented from the *Constitutional Right to Fish* article, the discussion is turned on its head entirely. “Anglers from historically marginalized communities may be less able to travel to fishing locations and are more likely to require shore access, as opposed to access from a boat. Anglers in communities like this need accessible shore-fishing, particularly given the importance of subsistence fishing in poorer communities.”<sup>4</sup>

With the two large no-take SMRs located just South of this newly proposed MPA (Vandenberg SMR & Point Conception SMR) and Point Buchon to the North, it would seem the opportunities to fish and forage the coast for residents of Guadalupe, Lompoc and Santa Maria are already few and far between. In fact, in 2022 the City of Lompoc petitioned the Fish & Game Commission to allow for shore-fishing access along a ½ mile stretch of beach with in the Vandenberg SMR, citing a lack of access to historic fishing grounds for the local communities.

We share the petitioner’s concerns regarding habitat disruption from off-shore energy production and the associated infrastructure, however, we note the likely establishment of the Chumash Heritage National Marine Sanctuary (CHNMS) designation which would effectively curtail any development or offshore energy production in this region. Planning for the CHNMS has included fishing access as a key component of the proposed designation.

As a result, we recommend the Commission deny this petition.

**Petition 2023-29MPA:** *Designate a new SMCA with a tribal take exemption for and co-management with Santa Ynez Band of Chumash Indians in Santa Barbara*

We recommend the Commission deny this petition.

We oppose the petitioner’s request to designate a new, no-take SMCA in Carpinteria for several reasons. First, the petitioner argues that spacing and connectivity is a key concern in this location with the distance between the Campus Point and Point Dume SMCAs at 64 nautical miles (nm) instead of the recommended 54 nm to ensure ecological connectivity. When this request is examined within the broader context of MPA siting, it is clear that the target spacing between MPAs could be easily achieved by moving the Campus Point SMCA South or the Point Dume SMCA North, since both are located well-within the recommended 54nm from adjacent MPAs on either side.

Additionally, the petitioner cites the location as important nursery habitat for juvenile great white sharks as justification for establishing a no-take SMR. They write, “Research conducted in the Southern California Bight has found that fisheries bycatch is likely the main source of mortality for JWS.” However, the article they cite to support this claim, John F. Benson et. al., discloses that for great white sharks they captured and tagged, “mortality risk was substantially greater off the coast of Baja, Mexico compared with California.” Importantly, the research paper also states, “that incidental gillnet capture continues to be the primary source of mortality for juveniles. The lower mortality risk we documented in California waters suggests that full closure of gillnet fishing close to shore is a more effective management strategy than simply banning targeted fishing to reduce mortality risk due to bycatch.”<sup>5</sup>

---

<sup>4</sup> Coats, Francis, and Karrigan Bork. “CALIFORNIA’S CONSTITUTIONAL RIGHT TO FISH.” *Environmental Law*, vol. 51, no. 4, 2021, pp. 1085–147. *JSTOR*, <https://www.jstor.org/stable/48647570>. Accessed 22 Mar. 2023.

<sup>5</sup> Benson JF, Jorgensen SJ, O’Sullivan JB, et al. Juvenile survival, competing risks, and spatial variation in mortality risk of a marine apex predator. *J Appl Ecol*. 2018; 55: 2888–2897. <https://doi.org/10.1111/1365-2664.13158>

As the petitioner is undoubtedly aware, gillnet fishing is banned in state waters and therefore the proposed MPA would have no impact on the gillnet fishery or likely the mortality risk to great white sharks.

The petitioner notes the location's popularity with recreational lobster divers and the likely opposition from stakeholders who would oppose the additional loss of access. The mortality risk to great white sharks from the recreational lobster fishery is zero, similar to the risk from spearfishing, yet the petitioner seeks to eliminate access entirely without providing any scientific rationale for the closure. As a result, we request that the Commission deny this petition.

**Petition 2023-31MPA:** *Reclassify Drakes Estero SMCA to an SMR and combine with Estero de Limantour SMR as a single SMR:*

We recommend referring this petition to the Department of Fish & Wildlife for review and recommendation but encourage the Commission to maintain access for clamming unless there is a clear threat to the fishery or surrounding ecosystem.

It is worth noting that the National Park Service mentions in their comment letter that the area is now Congressionally Designated Wilderness and that "recreational take of shellfish appears to be very rare, [and] requires long kayak trips in wilderness area." Just because something is difficult doesn't mean it should be illegal.

**Petition 2023-32MPA:** *Reclassify Duxbury Reef SMCA as an SMR and expand northern and southern boundaries*

We recommend that the Commission deny or refer this petition to the Department of Fish & Wildlife for review and recommendation but emphasize maintaining fishing access for local communities at Duxbury Reef. The vast majority of complaints regarding Duxbury reef are related to enforcement and compliance, rather than a scientific justification for eliminating access. Shore fishing is an important past-time for the diverse communities that comprise the North Bay Area, and removing access to a popular fishing destination should not be justified simply based on the actions of a few bad apples.

**Petition 2023-33MPA:** *Expand the boundaries of five SMRs and one SMCA, and designate a new SMR off Pleasure Point, in Santa Cruz*

We recommend that this petition be denied or referred to the Department of Fish & Wildlife for review and recommendation due to its broad scope and complexity. The petitioner seeks to enhance protections for kelp forests, but does so with an overly broad brush. Rather than advocating for reducing fishing pressure for predators of kelp grazers, like lobster and sheepshead, the petition advocates for the closure of all fishing, including the harvest of grazer species like urchins that have been documented to decimate kelp forests.

The petitioner argues that eliminating fishing pressure within the proposed MPA areas would somehow bolster kelp populations, but the claim is not well documented by scientific research in this petition. A noteworthy case study, by comparison, is the ongoing Tanker's Reef kelp restoration project, where volunteers have been culling purple urchins within study plots and tracking kelp recovery within the study area and a control site nearby. The initial data for the last three years shows a clear correlation between the removal of purple urchins and kelp recovery in the study plot with no kelp recovery in the adjacent control where urchins were not removed. Fishing is permitted in the Tanker's reef area, however, in adjacent MPA's that have not permitted active restoration and where fishing is not allowed, urchin barons persist and kelp recovery remains minimal.

Kelp forest health and resiliency is a complex and multi-variable equation that can be impacted by numerous factors including water temperature, disease, pollution, algal blooms, wave energy, commercial harvest and more. We support efforts to restore kelp forests across the coast and recognize the role they play in the overall ecosystem health of fisheries, especially the abalone fishery that remains closed until 2026. We urge caution, however where broad fishing closures are enacted in the attempt to solve a problem that requires a more nuanced and carefully crafted multidisciplinary approach.

It should also be noted that the petitioner indicates support for recreational hook and line fishing and spearfishing as an acceptable alternative in several of the MPAs referenced in the petition.

**Petition 2023-34MPA:** *Reclassify Point Buchon SMCA to an SMR and modify take at Farnsworth Onshore and Offshore SMCAs to only allow recreational spearfishing.*

We recommend that the Commission deny this petition and we emphasize the substantial impacts to current fishing access. The petitioner argues that since the salmon season was closed in 2023 it will likely be closed in perpetuity, which would justify eliminating salmon and albacore fishing access at the Point Buchon SMCA. Salmon populations often decrease during drought years and can rebound with increased precipitation or water allocation as was the case in 2008 and 2009 when the fishery was closed and then reopened. We are cautiously optimistic that the salmon numbers will once again bounce back following the increased precipitation received over the past two years.

In the draft Pathways to 30x30 document, the CNRA writes: “It should be noted that limited-take State MPAs provide an excellent model for other jurisdictions looking to balance biodiversity conservation with sustainable well-managed commercial and recreational fishing.” We feel that reclassifying the Point Buchon SMCA as an SMR and eliminating fishing in this area would be inappropriate; however, we support any attempts to improve enforcement and compliance with existing regulations.

Furthermore, the proposal to modify take at Farnsworth Onshore and Offshore SMCAs would disproportionately impact a broad variety and collection of user groups who may not be physically able or inclined to spearfish. For this reason and the lack of concrete scientific data to justify the additional restrictions, we recommend the Commission deny this petition.

Sincerely,

Devin O’Dea  
Western Policy & Conservation Manager  
Backcountry Hunters & Anglers

Wayne Kotow  
Executive Director  
Coastal Conservation Association California

Keely Hopkins  
Western States Manager  
Congressional Sportsman’s Foundation

**From:** Aubrie Fowler <[REDACTED]>  
**Sent:** Wednesday, January 31, 2024 5:12 PM  
**To:** FGC <FGC@fgc.ca.gov>; Ashcraft, Susan@FGC <[REDACTED]>  
**Cc:** Calla Allison <[REDACTED]>; Claire Arre <[REDACTED]>; Jamie Blatter <[REDACTED]>  
**Subject:** FGC Meeting Binder Submission

Hi Susan and Commission staff,

Please see the attached exhibit (saved as a PDF and Excel sheet, whichever formatting is preferred) to please be added to the meeting binder for the February Fish and Game Commission meeting on 2/14-2/15/2024.

The link to the Google sheet can be found [here](#) as well; this was the format that the MPA Collaborative Vetted Regulation Recommendations was previously shared with Commission and Department staff.

Please let me know if there's more context you need from me.

Thank you,  
Aubrie

**Aubrie Fowler** (she/her)  
South Coast Specialist  
[MPA Collaborative Network](#)  
cell: [REDACTED]  
[Sign-up for our Quarterly Newsletter](#)  
[Find and join your local Collaborative](#)

County	MPA	Current Regs Summarized	Compliance concerns and/or management problem identified	Regulation Recommendation for Adaptive Management	Consensus?	Justification	Supporting Management Suggestion	Petitioner Lead	Contact Information	Recommendation Category	Designation Change?
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Onshore and offshore hook and line fishing, collecting sand crabs as bait, kayak fishers, violations from boaters registered in both CA and OR	Remove allowance for surf smelt by dip net or Hawaiian type throw net; Change to No-Take SMCA with Tribal exemption for Tolowa Dee-ni'	Yes	Smelt is culturally important species to Tolowa and No Take designation will be clearer to public, reducing violations	Signs being vandalized, ripped out. Outreach to gain compliance needed (Guardian Watchmen)	Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Take Allowance Change	Yes, from SMCA to No-Take SMCA with Tribal exemption
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Elk Valley Rancheria is interested in exploring the possibility of being included in exempt status	Add Elk Valley Rancheria to exempt Tribes if requested by Tribal Council	Yes	Elk Valley Rancheria has ancestral ties to the area				Take Allowance Change	
Del Norte	<a href="#">Pyramid Point SMCA</a>	Rec take of surf smelt by dip net or Hawaiian type throw net. Tolowa Dee-ni' exempt	Boundary is in Oregon	Change northern boundary to align with recognized California/Oregon state line	Yes	Original boundary used a mapping system that does not align with on-the-ground state line.		Tolowa Dee-ni' Nation	rosa.laucci@tolowa.com	Boundary Change	
Del Norte	<a href="#">Point St. George Offshore Reef SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Elk Valley and Tolowa Dee-ni' exempt		No change	Yes						
Del Norte	<a href="#">Sea Lion Rock Special Closure</a>	300'	No data	No change	Yes						
Del Norte	<a href="#">Castle Rock Special Closure</a>	300'	Poke poling at Preston Island and Battery Point and Hook Finger Point during extremely low tides. Kayaks near closure	No change	Yes						
Del Norte	<a href="#">False Klamath Rock Special Closure</a>	300' from 3/1-8/31	Low flyovers by US Coast Guard helicopter. Kayaks near closure, kaking kelp. Dogs off leash	No change	Yes		Signs needed at Wilson Creek. Potential site for CoastSnap to crowdsource changes around rock				
Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt	Hook and line fishing and take of sand crabs regularly occur, especially at southern boundary Gold Bluffs beach traditional smelt camp Track amount of surf smelt taken (25 lbs current limit). Hawaiian Type throw net inappropriate	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor Surf smelt as a part of state monitoring plan.			Language Change	



Humboldt	<a href="#">Reading Rock SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Trinidad, Resighini and Yurok exempt		Recommend implementing limits on commercial take of surf smelt	Yes	Culturally important species				Take Allowance Change	
Humboldt	<a href="#">Reading Rock SMR</a>	No Take	Drifting commercial crab pots	No change	Yes						
Humboldt	<a href="#">Samoa SMCA</a>	Rec take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear; surf smelt by dip net; Dungeness crab by trap. Wiyot exempt	Difficult to determine boundaries	Work with California Tribes and indigenous people to change "Hawaiian type throw net" to a term that is more reflective of Indigenous Californian net based take methods	Yes	Reference to Hawaiian nets when indigenous terms exist for this take type is inappropriate and disrespectful	Monitor recreational and commercial (through landing/block reports) take of salmon by troll and surf smelt by dip net and assess effect on population; Signs with you are here map at Mad River			Language Change	
Humboldt	<a href="#">South Humboldt Bay SMRMA</a>	No Take except waterfowl may be taken. Wiyot exempt	Invasive grasses, loss of eelgrass, general threats to habitat. Non Tribal members clamming. Difficult to identify boundaries within South Humboldt Bay	Determine reason it does not extend to southern water's edge and extend if no reason	Yes	Clearer for outreach purposes to say from southern end of bay to 2nd hunter pull out	Direct enforcement to look for unlawful clamming			Boundary Change	
Humboldt	<a href="#">Sugarloaf Island Special Closure</a>	300'		No change	Yes						
Humboldt	<a href="#">South Cape Mendocino SMR</a>	No Take	Minimal patrol	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by LED				
Humboldt	<a href="#">Steamboat Rock Special Closure</a>	300' 3/1-8/31	Confusion on when it is open to swim out to and when it is closed	No change	Yes		Sign that highlights special closure and closure dates				
Humboldt	<a href="#">Mattole Canyon SMR</a>	No Take	Minimal patrol. Some commercial crab pots observed during USCG flyover	No change	Yes		Develop a plan for evaluating remote area MPAs to determine impact, such as temporary M2 radar/drone surveillance; support southern Humboldt patrol by law enforcement division				
Humboldt	<a href="#">Sea Lion Gulch SMR</a>	No Take	Backpackers harvest mussels along entire Lost Coast Trail; people getting too close to new elephant seal colony. No cell connectivity to determine boundaries of MPA	Move southern boundary south to Cooskie Creek	BLM support but need fisher input	Creek is more identifiable feature for land based outreach to fishers hiking the Lost Coast Trail				Boundary Change	

Humboldt	<a href="#">Big Flat SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap. Multiple Tribes exempt	Backpackers harvest mussels along entire Lost Coast Trail; surf fishing occurs at Miller Flat. No cell connectivity to determine boundaries of MPA	No change	Yes		More outreach needed for fishers hiking lost coast. Include more detailed information in BLM Lost Coast map				
Mendocino	<a href="#">Double Cone Rock SMCA</a>	Rec take of salmon by trolling; Dungeness crab by trap, hoop net or hand. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Unknown. Limited patrol. Report of excessive urchin and need for grazer suppression.	Reassess restoration policy in SMCAs impacted by climate change/kelp loss	Yes	Loss of kelp habitat needs to be addressed in this SMCA	Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Vizcaino Rock Special Closure</a>	300' 3/1-8/31		No change	Yes						
Mendocino	<a href="#">Ten Mile SMR</a>	No Take	Primary concern is shore-based fishing (rod and reel at seaside creek beach). Recreational fishers take rockfish and lingcod, crab pots "walk themselves" into MPA at southern boundary. Dogs off leash	No change	Yes		OK/boundary sign needed at northern boundary. Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Beach SMCA</a>	Rec take of Dungeness crab by trap, hoop net or hand. Commercial take of Dungeness crab by trap. Many Tribes exempt	Unlawful take of fish (rockfish, lingcod); dogs off leash in snowy plover habitat. Potential sand dump site south side of Ten Mile Beach	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">Ten Mile Estuary SMCA</a>	Waterfowl may be taken. Many Tribes exempt	Limited access for fishers	No change	Yes		Simplify outreach language around MPA clusters				
Mendocino	<a href="#">MacKerricher SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Multiple violations occur daily since closest to Fort Bragg city center (general fish and game code violations). North boundary (Laguna Point) hotspot for intertidal take	Add protection for intertidal zone, per State Parks, in support for protection of the resource and ease of enforcement/outreach	Many in support but no full consensus	There are limited areas in the county to lawfully take intertidal animals such as mussels, turban snails, limpets, etc.	More enforcement support needed due to limited State Parks personnel. Focus on tidepool education. Intertidal specific take signs are needed	State Parks pending review		Take Allowance Change	
Mendocino	<a href="#">Point Cabrillo SMR</a>	No Take	Lighthouse sees lots of boats fishing offshore of Frolic Cove on northern end of Point Cabrillo SMR or inside	No change	Yes		OK boundary signs would be beneficial on both boundaries for kayak fishing				
Mendocino	<a href="#">Russian Gulch SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	General fish and game code violations	No change	Yes						

Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Increased use for swimming and recreation has led to safety concerns, including close calls between swimmers and hunters. Swimmers mixing with motorized boats may lead to accidents	Hunting should be prohibited due to high public use/public safety issues, per State Parks	Yes	Community reported incidents of near misses between hunters/boaters and swimmers		State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Big River Estuary SMCA</a>	Rec take of surfperch by hook and line from shore only and Dungeness crab by hoop net or hand. Many Tribes exempt. Waterfowl may be taken	Can MPA restrict motorized vessels if not ecological reserve?	Restrict all motorized vessels with allowance for public safety, per State Parks	Yes, with clarification that motorized vessels are only restricted going east (up river)	West access from launch should be allowed for boaters going out to ocean	Data on crab fishery is needed to determine whether allowance is sustainable. Need clear signage restricting snare traps. Pick up after dog signs needed	State Parks pending review		Allowed Activity Change	
Mendocino	<a href="#">Van Damme SMCA</a>	All rec take allowed. Commercial take allowed except for bull kelp and giant kelp	Overtake and take of undersize fish	No change	Yes						
Mendocino	<a href="#">Navarro River Estuary SMCA</a>	Rec take of salmonoids by hook and line. Many Tribes exempt. Waterfowl may be taken	People illegally breach sandbar (but outside MPA?)	No change	Yes						
Mendocino	<a href="#">Point Arena SMR</a>	No Take	Fishing in SMR reported by lighthouse manager	No change	Yes		OK boundary signs needed				
Mendocino	<a href="#">Point Arena SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear		No change	Yes						
Mendocino	<a href="#">Sea Lion Cove</a>	Rec and commercial take of finfish	Urchin barrens	Reassess restoration policy in SMCAs impacted by climate change/kelp loss	Yes		Allow for restoration work/grazer suppression to address urchin barrens (reds and purples)	California Sea Urchin Commission - allow for commercial take of urchin		Other	
Mendocino	<a href="#">Saunders Reef SMCA</a>	Rec take of salmon by trolling. Commercial take of salmon with troll fishing gear and urchin	Citations issued for people diving and taking at Schooner Gulch; illegal shore fishing from Hearn Gulch	No change	Yes		Additional enforcement personnel/efforts are needed				
Sonoma	<a href="#">Del Mar Landing SMR</a>	No Take	Fishing at north end	No change	Yes		Trail pamphlets with MPA information				
Sonoma	<a href="#">Stewarts Point SMR</a>	No Take	Poaching at 3 mile line. Difficult for fishers to determine where 3 mile line is and difficult to enforce from land	Allow for trolling of salmon. Change to SMCA?	No. Discussed with no strong opposition but more info needed	Impact to commercial salmon fishing can be addressed with minimal impact to other resources	More signage needed at public access points			Take Allowance Change	Yes, would change SMR to SMCA. No consensus
Sonoma	<a href="#">Stewarts Point SMCA</a>	Rec take from shore only of marine aquatic plants other than sea palm, marine invertebrates, finfish by hook and line, surf smelt by beach net, species authorized by hand-held dip net	Tribal based MPA	Prohibit all take and add Kashia Pomo to Tribal exemptions to make affirmative rights of Tribal Members re: collection, harvesting, and research	Yes	MPA is only accessed by Kashia Tribal members from shore (owned by Tribe) so would be same protection while acknowledging Tribal rights				Take Allowance Change	Yes, change from SMCA to No-Take SMCA with Tribal exemption

Sonoma	<a href="#">Salt Point SMCA</a>	Recreational take of abalone and finfish allowed	Take of abalone during closure; poaching of intertidal species. Confusion regarding intertidal take	No change	Yes		Needs more signage on collecting/take of shellfish and other non finfish				
Sonoma	<a href="#">Gerstle Cove SMR</a>	No Take	Excessive intertidal take. Rec fishers fishing the line	No change	Yes		Need for good tidepooler rules signs to address harmful tidepooling				
Sonoma	<a href="#">Russian River SMRMA</a>	No take except waterfowl may be taken	Marine mammal disturbance occurring. County of Sonoma needs to conduct restoration work as part of management plan	Allow for restoration work in SMRMA	Yes	Restoration will not impact haul out sites, marine mammals or birds				Other	
Sonoma	<a href="#">Russian River SMCA</a>	Rec take of Dungeness crab by trap, and surf smelt by hand-held dip net or beach net. Commercial take of Dungeness crab by trap	Illegal onshore and offshore fishing; seal disturbance "seal selfies" near Goat Rock. Trash/dogs off leash	No change	Yes		More outreach for out of town fishers/permanent signage				
Sonoma	<a href="#">Bodega Head SMR</a>	No Take	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes	Would require new outreach					
Sonoma/Marin	<a href="#">Bodega Head SMCA</a>	Rec take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net. Commercial take of pelagic finfish by troll fishing gear and round haul net, Dungeness crab by trap, and market squid by round haul net	Take of rockfish and trolling for salmon; fishing on northern boundary off rocks Difficult "fan" shape and hard to identify northern boundary makes enforcement difficult	No change	Yes						
Sonoma/Marin	<a href="#">Estero Americano SMRMA</a>	No take except waterfowl may be taken	Confusion as to boundary "high tide line" and who manages strip of beach between ocean and estuary that is often closed; Difficulty identifying eastern boundary. No way to see boundary from shore	No change	Yes		More signs needed at access points here to address compliance concerns				
Marin	<a href="#">Estero de San Antonio SMRMA</a>	No take except waterfowl may be taken	Some take (animal remains) and illegal fishing	No change	Yes						
Marin	<a href="#">Point Reyes SMR</a>	No take	Sand dollar and fossil take, rod and reel fishing from vessels, party boats troll for salmon; violations are limited offshore	No change	Yes		Signage and more enforcement needed, especially at Drakes Beach and Coast Guard Station. Consolidated mixed messaging signs, with dog information.				

Marin	<a href="#">Point Reyes SMCA</a>	Rec take of salmon by trolling and Dungeness crab by trap. Commercial take of salmon with troll fishing gear and Dungeness crab by trap	Commercial crabbers set coonstripe shrimp traps on top of crab traps; Boundaries in MPA cluster hard to identify; NPS jurisdiction limited to	No change	Yes						
Marin	<a href="#">Point Reyes Headlands Special Closure</a>	No access from mean high tide line to a distance of 1000 feet seaward	Recreational vessels fishing in summer; Disturbance spiked in 2020; USFW continues to monitor this area	No change at this time	Yes	Might need to revisit making adjustments in the future if data shows changes/increases in disturbance					
Marin	<a href="#">Estero de Limantour SMR</a>	No take	Difficult to determine boundary between SMR and Drakes Estero SMCA makes enforcement difficult. There are suspicions that poaching of clams occurs in the SMR from people on kayaks from Drakes Estero	Extend SMR designation all the way into Drakes Estero	Yes	NPS in support of expanding SMR because federally designated wilderness, major harbor seal haul out, and critical nursery habitat for leopard shark and bay rays		EAC Marin with NPS letter of support		Boundary Change	
Marin	<a href="#">Drakes Estero SMCA</a>	The recreational take of clams is allowed	Difficult to determine boundary line between Drakes Estero SMCA and Estero de Limantour SMR leading to poaching. Cows accessing/pooping from NPS ranch leased land	Prohibit clamming in Drakes Estero SMCA. Merge with Estero de Limantour SMR.	Yes	SMCA designation was originally due to oyster farm that is no longer there. NPS in support of making into a SMR due to federally designated wilderness area	Give people direction/ outreach materials on where they CAN clam safely	EAC Marin with NPS letter of support		Take Allowance Change	Yes, change from SMCA to SMR
Marin	<a href="#">Point Resistance Rock Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels. USFW monitoring area.	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach					
Marin	<a href="#">Double Point/Stormy Stack Special Closure</a>	No access from mean high tide line to a distance of 300 feet seaward of rock	Seabird flushing by vessels and surfers, who enter harbor seal rookery. Increased visitation due to people hiking to Alamere Falls	No change	Yes	GFNMS thinks current regulations are good, very important to their mission and public outreach and don't want to extend to shore to allow shore access	Put signs with regulations and text about importance of special closure at trailhead; more outreach to boaters about special closures needed				

Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Difficult to enforce and outreach about why you can take finfish but not invertebrates. Beach Watch data at this site for 30 years show slight decrease in activities in last 10 years, but take of invertebrates has been observed, and the Greater Farallones National Marine Sanctuary Superintendent has provided information about the need to consider additional conservation measures at Duxbury Reef. Maria Brown (NMS) submitted a letter saying Duxbury Reef would benefit from increased protection of unique and important habitat of entire reef (largest shale reef in N. America). EAC MPA Watch data shows	Change to SMR because of difficulty of interpretation and enforcement. Extend southern boundary further out to sea (south) and northern boundary to Double Point to fully cover reef	No	No agreement on extending boundaries to cover the reef and changing to SMR. More research needed on benefits of changing existing ribbon from SMCA to SMR; Might be important fishing access point for public	More signs needed and more support for onsite education and enforcement from CDFW to agate beach and land-side terrestrial Duxbury	EAC Marin	Take Allowance Change	Yes, would change SMCA to SMR. No consensus
Marin	<a href="#">Duxbury Reef SMCA</a>	Recreational take of finfish from shore and abalone* is allowed	Heavy use and impacts, intertidal take – buckets and tools (e.g., crow bars, tire jacks) used to take black turban snails and purple urchin that are nestled into cracks. People need to break the reef to get to purple urchin	Potential compromise would be to add specific tidepool protections, similar to OC	TBD	NMS would like to continue conversation to explore potential compromises	Research other tidepool docent programs in MPAs with mixed use of allowed fishing/tidepool protections		Language Change	
San Francisco	<a href="#">North Farallon Islands SMR</a>	No Take	Commercial crab case here	No change	Yes	More data needed for this MPA cluster	Increase CDFW LED patrols during peak months. Need for CCFRP program here			
San Francisco	<a href="#">North Farallon Islands Special Closure</a>	No vessel shall be operated or anchored at any time from the mean high tide line to a distance of 1000 feet seaward of the mean lower low tide line of any shoreline of North Farallon Island, or to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of the remaining three southern islets		No change	Yes					



San Francisco	<a href="#">Southeast Farallon Islands SMR</a>	No Take	Small recreational boats. A number of encroachments occur into SMR during better weather months	No change	Yes		Increase patrols from LED and consider M2 radar at this location				
San Francisco	<a href="#">Southeast Farallon Islands SMCA</a>	Recreational take of salmon by trolling and commercial take of salmon by troll fishing gear	Salmon fishers use salmon gear to fish for halibut	No change	Yes						
San Francisco	<a href="#">Southeast Farallon Islands Special Closure</a>	Closed 300 feet seaward year-round, except Fisherman's Bay to East Landing, southeastern tip of the island and southeastern side of Saddle (Seal) Rock, which is closed from December 1 through September 14. 5 mile per hour speed limit 1000 ft seaward of mean lower low tide of any shoreline Exhaust system requirements for commercial dive boats	Boats cut across the special closure	No change	Yes		Precedes MLPA process, careful consideration went into crafting special closure regulations				
San Mateo	<a href="#">Egg (Devil's Slide) Rock to Devil's Slide Special Closure</a>	A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of any of the three rocks comprising Egg (Devil's Slide) Rock; Transit in between the rock and the mainland between these points is prohibited at any time.	Reported violations include fishing boats inside boundaries and low flying aircraft/drones	Change name to "Devil's Slide Special Closure"	Yes		Egg rock is no longer a name used/recognized locally. Devil's Slide is more appropriate and simpler for outreach				Language Change
San Mateo	<a href="#">Montara SMR</a>	No Take	A top cited MPA in Central Coast, highest in San Mateo; fishing offshore and tidepool take; Difficulty interpreting southern boundary	Move Montara SMR onshore southern boundary to current Pillar Point SMCA southern boundary (north end of Maverick's Beach), then extending out to current offshore southern SMR boundary point	Yes		Easier for enforcement and makes SMR boundaries consistent with Fitzgerald Marine Reserve boundaries				Boundary Change

San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net Dungeness crab by trap, and market squid by round haul net is allowed.	Unclear boundary leads to poaching in intertidal Difficult for local law enforcement to ensure compliance of tidepool take regulations due to high volume of consumptive visitors	Extend southern SMCA boundary further south to edge of harbor jetty, extending out to existing offshore southern point. Onshore northern boundary would be same as Montara SMR onshore southern boundary	Yes	Would cover entire reef in MPA for ease of allied agency outreach and enforcement.				Boundary Change	
San Mateo	<a href="#">Pillar Point SMCA</a>	The recreational take of pelagic finfish by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish by troll or round haul net Dungeness crab by trap, and market squid by round haul net is allowed.		Change regulations to allow for recreational hook and line take of finfish from shore and take of mussels, crabs, snails and seaweeds for equity and access purposes	Yes	Allowing for shore based hook and line and some intertidal take maintains access for consumptive users while applying some protection for a heavily impacted habitat				Take Allowance Change	
San Mateo/Santa Cruz	<a href="#">Año Nuevo SMR</a>	No Take	Unlawful take of snails; fishing; wildlife disturbance. Boats driving squid out of MPA. Confusion because sign at top of trail to Greyhound Rock says fishing beach but must go left at bottom to legally fish	Move southern boundary line to have whole of Greyhound Rock in SMR	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Clearer boundary makes enforcement easier	Ensure sign with map at bottom of trail. Utilize social/digital/traditional media for public outreach	State Parks pending review		Boundary Change	
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Take of mussels at southern boundary Confusion with Año Nuevo SMR boundary/whether fishing is allowed at Greyhound Rock Split between 2 counties	Move northern boundary line to have whole of Greyhound Rock outside of SMCA and in SMR; Move southern boundary south to beginning of Scott Creek bridge	Yes, at both Santa Cruz and San Mateo Collaborative meetings	Reef should be fully protected or fully open. Preference to cover reef but either way will have clearer boundary for outreach/enforcement. Move of southern boundary would cover reef to address intertidal impacts	Need for sign with map at Scotts Creek	State Parks pending review		Boundary Change	
San Mateo/Santa Cruz	<a href="#">Greyhound Rock SMCA</a>	Rec take of giant kelp by hand harvest only, market squid, salmon. Other finfish by hook and line only from shore. Commercial take of giant kelp by hand harvest only, salmon and market squid	Confusing regulations	Replace comma with semi-colon in regulations after "giant kelp by hand harvest only", or otherwise edit	Yes	Clearer language needed to clarify you are not required to catch salmon and squid by hand harvest only		State Parks pending review		Language Change	Section 100 change
Santa Cruz	<a href="#">Natural Bridges SMR</a>	No Take	Hard to identify boundaries; safety concerns with fishers and swimmers at Natural Bridges State Park beach	Shift both boundaries south to more identifiable features (4 mile point and Natural Bridge)	Yes	State Parks would like SMR to cover the beach at Natural Bridges SP for public safety reasons	Need for interpretive signs with maps/good tidepooler rules, why MPAs, etc.	State Parks pending review		Boundary Change	
Santa Cruz	<a href="#">Soquel Canyon SMCA</a>	Rec and commercial take of pelagic finfish	Split between 2 counties	No change	Yes						

Monterey	<a href="#">Elkhorn Slough SMR</a>	No Take	Fishing occurs regularly at Kirby Park pier/dock, was originally built for fishers with disabilities with SFRA grant. Inconsistent enforcement.	Move northern boundary south of Kirby Park pier/dock. Shift entire MPA to maintain size	Yes, at both Santa Cruz and Monterey Collaborative meetings	Opens fishing area as originally intended to limit poaching; supports increased enforcement presence in area	If Kirby is open, must be concerted cross-jurisdictional effort to enforce shore waste of fish/debris and other F&G Code violations. Need for good fishing practices outreach	Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550(a)].	Difficult to determine where SMR/SMCA boundary is (i.e., where kayak fishers can no longer fish).	Move SMR line to bird watching platform (eastern side)	Yes, at both Santa Cruz and Monterey Collaborative meetings	Bird watching platform provides a clear boundary for shore and kayak fishers and would maintain size of SMR with shift off Kirby		Elkhorn Slough Foundation		Boundary Change	
Monterey	<a href="#">Elkhorn Slough SMCA</a>	The recreational take of finfish by hook and line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area [subsection 550(a)].	Clamming disturbs sea otter rafts. Huge amounts of trash (fishing receptacles full)	Removing allowance for clamming to address impact to otters and human health considerations	Maybe?	Need more info on impact to recreational clambers and safety of consuming clams	Need for more trash receptacles/removal	Elkhorn Slough Foundation		Take Allowance Change	
Monterey	<a href="#">Moro Cojo Slough State Marine Reserve</a>	No take	Some access on eastern end. Agricultural influence. Elkhorn Slough NERR in support of no change	No change	Yes						
Monterey/Santa Cruz	<a href="#">Soquel Canyon State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially illegally set crab traps (commercial) and rockfish take (recreational). Whale disturbance. More impact due to depth restrictions lifted	No change	Yes						
Monterey	<a href="#">Portuguese Ledge State Marine Conservation Area</a>	Recreational and commercial take of pelagic finfish is allowed	Many violations, especially rockfish take (recreational). Whale disturbance	No change	Yes						
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	Fishing debris from Coast Guard pier. Abalone and other intertidal poaching at breakwater	Explore regulations to limit fishing gear loss from Coast Guard pier (such as requiring use of breakaway leaders or no braided line)	Yes	Fishing gear loss impacts wildlife, habitat, and safety of divers due to entanglement	Partner with MBNMS on outreach of litter/delict fishing gear			Language Change	
Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR and join with Lovers Point Julia Platt SMR	Maybe	No strong opposition but no fishing reps present		Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR

Monterey	<a href="#">Edward F. Ricketts State Marine Conservation Area</a>	Recreational take of finfish by hook and line. Commercial take of giant kelp and bull kelp by hand		Allow restoration/urchin culling without requiring SCP	No	May lead to destruction of healthy urchins		Giant Giant Kelp Restoration Project (G2KR) - applies to Ed Ricketts, PG Gardens, and Carmel Bay SMCAs, and will include suggestion for buoys on sites		Other	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take	Fishing off Lovers Point rocks, undersize and immature fish, spearfishers and fishing boats catch halibut, illegal tidepool take; confusion around northern boundary line	Move southern boundary line so Lovers Point is either all in or all out (with preference for all in reserve)	No	Disagreement about where to move line	Boundary marker or fishing/no fishing arrow sign needed if boundary doesn't change			Boundary Change	
Monterey	<a href="#">Lovers Point- Julia Platt State Marine Reserve</a>	No Take		Move southern boundary to end of Lovers Point, splitting point equally in half	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Spearfishing violations, especially from kayaks and dinghies; illegal take of scallops and crustaceans; undersize and immature fish taken Point Pinos is key oystercatcher nesting habitat	Move both boundary lines so Lovers Point and Point Pinos are all out of SMCA and in SMRs because both are key oystercatcher nesting sites	No	Rock outcropping and buoy at Point Pinos (southern boundary) are currently good boundary indicators for boaters				Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand		Move northern boundary to end of Lovers Point	Yes	Fishing/No fishing arrow signs would make sense/be more accurate	Fishing/no fishing arrow sign needed at Lovers Point and Point Pinos			Boundary Change	
Monterey	<a href="#">Pacific Grove Marine Gardens State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	New regulations may restrict fishing for rockfish from boat close to shore after October 1	Change to SMR, join with Lovers Point SMR	Maybe	No strong opposition but no fishing reps present		Giant Giant Kelp Restoration Project (G2KR)		Take Allowance Change	Yes, would change from SMCA to SMR
Monterey	<a href="#">Asilomar State Marine Reserve</a>	No Take	Onshore and offshore fishing common, hook and line from nooks and crannies; harmful tidepooling, tidepool take; wildlife disturbance common Northern boundary at Point Pinos is confusing, splits rocks in half	No change	Yes		Fishing/No Fishing arrow signs needed at Point Pinos				
Monterey	<a href="#">Carmel Pinnacles State Marine Reserve</a>	No Take	Offshore violations common	No change	Yes						
Monterey	<a href="#">Carmel Bay State Marine Conservation Area</a>	Recreational take of finfish. Commercial take of giant kelp and bull kelp by hand	Intertidal take common, including abalone and mussels. Golf balls go into MPA and are not collected. Some kelp take at Stillwater Cove	No change	Yes		Work with Pebble Beach on reducing golf ball litter either through requiring biodegradable balls at key holes or ensuring balls are collected by divers				
Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take	Take occurs. Boundaries are confusing	No change	Yes						

Monterey	<a href="#">Point Lobos State Marine Reserve</a>	No Take		Allow restoration/urchin culling	No	Difficult for enforcement/interpretation in no-take area		Giant Kelp Restoration Project (G2KR)		Other	
Monterey	<a href="#">Point Lobos State Marine Conservation Area</a>	Recreational take of salmon and albacore and the commercial take of salmon, albacore, and spot prawn is allowed		No change	Yes						
Monterey	<a href="#">Point Sur State Marine Reserve</a>	No Take	Violations common between SMR and SMCA, southern corner is hard to enforce. Abalone case reported	Encompass the whole coastline of Point Sur in MPA	No	Keep boundaries as is				Boundary Change	
Monterey	<a href="#">Point Sur State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore		Add bluefin tuna to list of species allowed for take	No	Lessens protection				Take Allowance Change	
Monterey	<a href="#">Big Creek State Marine Reserve</a>	No Take	L-shape of SMR within SMCA is confusing	No change	Yes						
Monterey	<a href="#">Big Creek State Marine Conservation Area</a>	Recreational take of salmon and albacore. Commercial take of salmon, albacore	Potential unlawful fishing off Marine Lab	No change	Yes						
San Luis Obispo	<a href="#">Piedras Blancas State Marine Reserve</a>	No take	Missing signs. Onshore fishing violations (poaching mussels at Point Sierra Nevada). Wildlife disturbance. Extreme angle makes kayak fishers look like they are fishing in SMR	No change	Yes		Use boundary images on signs to help reference angle at pullout.				
San Luis Obispo	<a href="#">Piedras Blancas State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore	Occasional poaching observed. Fishing for rockfish. No albacore, limited salmon observed by fishers/wardens	No change	Yes						
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Harmful tidepooling occurring throughout MPA. Difficult to message good tidepooler rules without designated protections	Add tidepool protection language similar to Crystal Cove and Dana Point SMCA	Yes	Would make it easier to message about responsible tidepooling and reduce inadvertent take	Tools for existing SP tidepool docent program needed here, such as Natural Bridges State Park tidepool cart	State Parks pending review; Environment California?		Take Allowance Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching by kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection and cover some kelp habitat	Yes	Maybe some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">Cambria State Marine Conservation Area</a>	All recreational take is allowed	No commercial take allowed but there is an existing kelp lease?	Remove kelp lease 209 OR clarify that lease holder cannot harvest within Cambria SMCA	Yes	Commercial harvest of kelp is incompatible with MPA regulations that allow recreational take only		Environment California?		Other	

San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease	Boundary between Cambria SMCA and White Rock SMCA is confusing, leading to accidental poaching of kayak fishers putting in at boundary at Wedgewood	Shift White Rock SMCA northern boundary to end of neighborhood at Lampton Park. Shift southern boundary south 1/2 mile accordingly to not lose any protection	Yes	May be some pushback from commercial live rockfish fishery for southern shift but recreational anglers in support		Environment California?		Boundary Change	
San Luis Obispo	<a href="#">White Rock State Marine Conservation Area</a>	Commercial take of giant kelp and bull kelp with valid lease		Prohibit commercial take of giant kelp and bull kelp with valid lease and change to an SMR	Yes	Original intent was a reserve but there was existing kelp lease. Current lease holder is fine with relinquishing/ disallowing take of kelp		Environment California?		Take Allowance Change	Yes, would change from SMCA to SMR
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Poaching occurs at southern side that does not allow take of finfish. Line is confusing and unclear on maps and outreach materials. Illegal invertebrate take (e.g., sea stars at jetty, ghost shrimp at Windy Cove). Signs needed at blue pier	Shift no fishing boundary 150 yds north to public access at Pasadena Park (between Santa Ysabel and Baywood Way)	Yes	Makes it easier for county to manage and educate more accurately about fishing/no fishing line	Signs needed, especially at Blue Pier. County can install sign at Pasadena Park			Boundary Change	
San Luis Obispo	<a href="#">Morro Bay State Marine Recreational Management Area</a>	Waterfowl hunting allowed. Recreational take of finfish north of line at Pasadena Point. Aquaculture allowed	Hunting "within" a bird sanctuary (City of Morro Bay) is confusing, safety concerns for paddlers with increased visitors who are unaware hunting is allowed. Concern about safety issues around hunting around neighborhoods. Trampling of plants occur on shoreline in Baywood Park.	No change to regulations at this time	Yes	Important hunting area. Confusion should be addressed through outreach	Overlay hunting map on SMRMA for outreach purposes Mixed message signs/more education needed about estuary impacts/erosion: "tread lightly" in Los Osos				
San Luis Obispo	<a href="#">Morro Bay State Marine Reserve</a>	No Take	Some hunting violations, hugging line; Boardwalks work to protect birds! Might be good to have one at Baywood Park at 1st Street	No change (reluctantly)	Yes	Some desire to extend SMR west and into bottom part of bay beneath Baywood Peninsula but do not want to impede on aquaculture	More education and outreach needed				
San Luis Obispo	<a href="#">Point Buchon State Marine Reserve</a>	No Take	Regular poaching offshore, trolling, and stopping to drop a line in water. Busiest MPA in SLO, most violations observed/cited	Move northern boundary to actual Point Buchon	Yes	Clearer boundary for fishers coming from Port San Luis	Boundary marker needed here. Make "flagpole" more visible (hang flag?) if boundary doesn't change	State Parks pending review		Boundary Change	
San Luis Obispo	<a href="#">Point Buchon State Marine Conservation Area</a>	Recreational and commercial take of salmon and albacore allowed	Regular poaching, rockfish and lingcod, maybe some squid boats?	No change	Yes						



Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take	Vandenberg Space Force Base (VSFB) allows active-duty officers, their dependents/families, and guests to fish off Vandenberg. Leads to confusion since officially a no-take area. Regulations should match take allowed. Petition has been submitted by City of Lompoc to allow shore fishing at Surf Beach	Change designation to SMCA that allows hook and line for finfish from shore only	Yes	Would increase actual protection due to past 5 Base Commanders' decision to allow all legal take on base and would address equity concerns by allowing access for non-military at Surf Beach		Greg Helms to propose intertidal ribbon	Take Allowance Change	Yes, would change from SMR to SMCA
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Vandenberg SMR</a>	No Take		Reevaluate MOA with VSFB that is being interpreted as allowing for full military recreational take in a no-take SMR	No, not needed if designation is changed to SMCA	Vandenberg conservation officer will enforce updated take regs on military personnel			Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Point Conception SMR</a>	No Take	Recent groundfish case. Difficult for enforcement to access from land through Dangermond Preserve. M2 radar at Pt. Conception shows a lot of boating activity, may	No change	Yes		Provide continued support for M2 radar with ground truthing and continued coordination/info sharing between agencies			
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Kashlayit SMCA</a>	Rec take of finfish, invertebrates (except rock scallops and mussels) and giant kelp by hand harvest. Santa Ynez band of Chumash exempt	Illegal and dangerous access down the bluffs on Gaviota. Fishing without a license. Access issues for pier fishers with Gaviota pier closed. Difficult to interpret	Reword regulations for clarity of outreach: "Recreational take of finfish, invertebrates, and giant kelp allowed"	Yes	Simpler regulations will make outreach easier, increasing compliance, with minimal impacts to the resources	Have FGC/State push for pier repair at Gaviota Pier (SB County/State Parks) for safety/access reasons	State Parks pending review/Greg Helms	Language Change	Section 100 change
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Naples SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of giant kelp by hand or mechanical harvest. Santa Ynez Band of Chumash exempt	Hook and line fishing and access issues occur here, and most days there are at least two vehicles for fishing or surfing parked near Naples. Impact to hook and line fishers	Add hook and line to allowed method of take	No	Numbers/impact/level of take different between hook and line and spearfishing. Would drastically reduce protection			Take Allowance Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Campus Point No-Take SMCA</a>	No Take	Onshore and offshore hook and line fishing continues to be observed	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms	Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take	Trespassing (e.g., illegal swimming, dogs). People occasionally use nets to fish here and/or fish off bridges at the finger boundaries of the slough. Dumping of sediment still occurs in Goleta Bay	Consider water quality designation for Goleta Bay	Yes	Goleta Bay is between two MPAs and there is a need to address impacts of sediment dumping to subsistence fishers off Goleta Pier		Greg Helms	Other	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Goleta Slough No-Take SMCA</a>	No Take		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		Greg Helms	Other	

Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Richardson Rock SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">San Miguel Island Special Closure</a>	Allowance for sea urchin divers between Castle Rock and Judith Rock SMR western boundary (Point Bennet) between 3/15-4/30 and 10/1-12/15.	Commercial urchin poaching. Purpose to reduce disturbance to pinniped populations. Is closure still necessary? Point Bennet has one of the largest pinniped (six species) rookeries on the West Coast of North America	Reevaluate need for special closure (SC); Clean up language to address confusion between 300 yards describing SC and 100 yards keeping boats from whole Island 102 A.1.(a)	Yes		M2 radar at NMFS marine mammal station	Greg Helms		Language Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Harris Point SFMR</a>	No Take	CDFW sees some fishers that are taking from shore, although it is not common	No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Judith Rock SFMR</a>	No Take		No change	Yes		Use land-based range markers (e.g., O & K) to mark boundaries				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Carrington Point SMR</a>	No Take	Confusing angle relative to pier	No change	Yes	NPS outreach on angle has been good	More permanent boundary markers/signage is needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Skunk Point SMR</a>	No Take	Difficult to determine how far offshore boats are (in or out)	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">South Point SFMR</a>	No Take		No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Painted Cave SMCA</a>	Rec take of spiny lobster and pelagic finfish	People are taking non-pelagic fish species, rockfish, California sheephead, and live fish	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Gull Island SFMR</a>	No Take		Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Scorpion SFMR</a>	No Take	Fishing/take in little coves at eastern boundaries. Lobster traps	No change	Yes		More on-island enforcement presence needed				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/31	Brown pelican area makes it difficult for Island Packers and others to land legally at Frenchy's	Add exemption to allow access/landing Frenchy's Cove	Yes	Intent was to allow landing at Frenchy's Cove but aligning brown pelican closure with SMR/SMCA boundary closed off access to safe landing		Greg Helms		Allowed Activity Change	
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island Special Closure</a>	No net or trap may be used in waters less than 20 feet deep. Brown Pelican closure from Portuguese Rock to Frenchy's Cove 1/1-10/32	Depth hard to enforce due to sheer drop off from island	Reassess need for Special Closure and consider removing if not justified	Yes	May only need brown pelican closure rather than full island special closure to protect seabirds		Greg Helms		Allowed Activity Change	Yes, would remove special closure

Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMCA</a>	Rec take of spiny lobster and pelagic finfish. Commercial take of spiny lobster. Santa Ynez Band of Chumash exempt	Confusion regarding what "pelagic" means may lead to unlawful take	No change	Yes		Outreach needed around pelagics				
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Anacapa Island SFMR</a>	No Take	Violations for unlawful take	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Footprint SFMR</a>	No Take	Lots of violations. Boats drift in because they cannot anchor	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed				Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Begg Rock SMR</a>	No Take	The MPA violations here are commercial and come from experienced	No change	Yes						
Santa Barbara and Ventura (Santa Barbara Channel)	<a href="#">Santa Barbara Island SFMR</a>	No Take	Osborne Bank. CPFV/commercial lobster poaching. Overlapping jurisdictions	Have state discuss with NMS changing federal area to FMCA to allow for take of pelagics	No	More data/justification needed	M2 radar needed to monitor remote MPA			Take Allowance Change	Yes, would turn federal MRs into federal MCAs. No consensus
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt	Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of Swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	State Parks pending review; Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. Santa Ynez band exempt		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Point Dume SMR</a>	No Take	Angle of eastern boundary is confusing/extends due west and is close to shore	No change	Yes		Use of surveyed boundary images in outreach can help address confusion with eastern boundary at Paradise Cove				
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Frequent noncompliance with MPAs and limited enforcement	No change	Yes		Additional enforcement personnel/efforts are needed				
Los Angeles (Mainland)	<a href="#">Point Vicente No-Take SMCA</a>	No Take	Confusion of significance of purple designation	Keep allowance for maintenance but change color from purple to red for ease of public interpretation	Yes	Easier to explain "no take" if consistent with red SMR				Other	

Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat	Harmful tidepooling impacts/take from tidepools. Frequent noncompliance with MPAs and limited enforcement	Delete allowance for commercial take of swordfish by harpoon	Yes	Swordfish fishing does not occur that close to shore	Additional enforcement personnel/efforts are needed	Heal the Bay		Take Allowance Change	
Los Angeles (Mainland)	<a href="#">Abalone Cove SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net. Commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat		Allow hook and line fishing for allowed method of take of white seabass and pelagic finfish	No	Lessening of protection/unclear impacts				Take Allowance Change	
Los Angeles (Catalina Island)	<a href="#">Arrow Point to Lion Head Point SMCA</a>	All rec and commercial take allowed. Take of invertebrates prohibited	Poaching lobster and abalone. Hoop nets. Difficult to identify 1,000 feet from shore at Indian/Endemic Rock	No change	Yes		Need for a locally managed (research) buoy to mark 1,000 feet point				
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Onshore No-Take SMCA</a>	No Take. No anchor area in original refuge boundaries	Fishing/using hoop nets close to shore at Big Fisherman Cove. Poaching at Yellowtail Point and Bird Rock; Confusion around no anchor zone	Change purple to red for outreach purposes	Yes, only if all current maintenance/access activities are still allowed	Easier to explain "no take" if consistent with red SMR	Need for some boundary marker at Yellowtail Point. MPA Watch transect would help identify use/ compliance issues here			Other	
Los Angeles (Catalina Island)	<a href="#">Blue Cavern Offshore SMCA</a>	Rec take of pelagic finfish by hook and line and spearfishing and white seabass by spearfishing and market squid by hand held dip net. Commercial take of pelagic finfish by hook and line and swordfish by harpoon	Take via illegal gear types	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Long Point SMR</a>	No Take	Trolling through MPA occurs. Misconception that MPA is only close to shore. Rental boats go past Long Point and fish	Make a distance from shore rather than lat/long for ease of outreach. Cut off corner and flip and move west (offshore) to maintain size	Yes	Clearer outreach to trollers to stay certain distance from shore, IF maintains size				Boundary Change	
Los Angeles (Catalina Island)	<a href="#">Lover's Cove SMCA</a>	Rec take by hook and line from the Cabrillo Mole is allowed. Feeding fish allowed	Fishing from shore at the ramp near the Mole. Angle is difficult at eastern boundary. Food torpedoes are shot from tourist subs to attract fish to windows	Remove allowance for feeding of fish	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite				Allowed Activity Change	
Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed	Boundaries don't match dive park buoys. Feeding fish may be incompatible use. 40-50' depth at MPA line.	Remove allowance for feeding of fish.	Yes	Against intent of MLPA, affecting behavior of fish/habitat; public safety issue as fish become more aggressive and bite	Might need to utilize a weaning off process for fish used to being fed			Allowed Activity Change	

Los Angeles (Catalina Island)	<a href="#">Casino Point No-Take SMCA</a>	No Take. Feeding fish allowed		Change purple to red for outreach purposes for outreach	Yes	Easier to explain "no take" if consistent with red SMR				Other	
Los Angeles (Catalina Island)	<a href="#">Farnsworth Onshore SMCA</a>	Rec take by spearfishing of white seabass and pelagic finfish; marline, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	More difficult to assess whether poaching is occurring on the backside. Challenging/confusing for fishers	No change	Yes				More outreach to fishers needed on why deep habitat/fish are protected here		
Los Angeles (Catalina Island)	<a href="#">Farnsworth Offshore SMCA</a>	Rec take of pelagic finfish by hook and line or by spearfishing; white seabass by spearfishing; marlin, tunas and dorado by trolling and market squid by hand held dip net. Commercial take of swordfish by harpoon, coastal pelagics by roundhaul net, brail gear and light boat	CPFVs (party boats) are seen illegally fishing in Farnsworth Offshore SMCA, moving out if they see the CDFW patrol boat approaching. Regs restricting take of rockfish can be confusing for fishers/challenging to prove rockfish on board was taken outside	No change	Yes						
Los Angeles (Catalina Island)	<a href="#">Cat Harbor SMCA</a>	Rec take of finfish by hook and line or by spearfishing, market squid by hook and line, and spiny lobster and sea urchin. Commercial take of sea cucumbers by diving only and spiny lobster and sea urchin. Aquaculture of finfish	Some take of undersized fish	No change	Yes						
Orange	<a href="#">Bolsa Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Confusion between Bolsa Bay and Bolsa Chica Basin MPAs	Potentially combine Bolsa Bay with Bolsa Chica Basin MPAs?	No	State Lands requirement to have fishing				Boundary Change	Yes, would change from SMCA to SMR. No consensus
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Water management infrastructure is failing - needs management and repairs. Shoaling and potential closing of inlet - need cost effective alternative to dredging and \$ to implement. Could ultimately change boundaries of MPAs	MPA should cover all waters in ecological reserve. Move northeastern boundary to Graham	Yes	Makes enforcement easier so CDFW can cite for unlawful fishing using 632 instead of no trespassing		OC Coastkeeper	Wendy Berube	Boundary Change	
Orange	<a href="#">Bolsa Chica Basin No-Take SMCA</a>	No Take. Allows for maintenance of artificial structures	Confusion between Bolsa Bay and Bolsa Chica Basin MPA regulations and whether take is allowed. Bridge inconsistency	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR		OC Coastkeeper	Wendy Berube	Other	

Orange	<a href="#">Upper Newport Bay SMCA</a>	Rec take of finfish by hook and line from shore in designated areas only	Ecological Reserve and MPA overlapping jurisdiction. Fishing from floats by PCH bridge and using gill nets at Jamboree	No change	Yes		Harbor and estuary signs needed at Newport Dunes. Additional enforcement personnel/efforts are needed				
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat	Harmful tidepooling and undersized lobster. Nighttime poaching. Angle is difficult at southern boundary	Better define tidepool definition to encompass rocky intertidal habitat	Yes	"Area encompassing the rocky pools" is confusing, makes it sounds like it is only the pools, not intertidal zone when dry	Night vision for State Parks officers to address nighttime poaching	State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Crystal Cove SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat		Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		State Parks pending review; OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Laguna Beach SMR</a>	No Take	Poaching in gated/private communities; angle is difficult at northern boundary	No change	Yes		More enforcement needed in private community. Bring back community scientist/anglers (i.e., CCFRP) to OC				
Orange	<a href="#">Laguna Beach No-Take SMCA</a>	No Take. Maintenance allowed	Angle is difficult at southern boundary	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR	Produce map that has layer that shows allowed maintenance/artificial structures and scientific take	OC Coastkeeper	Wendy Berube	Other	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected	Fishing without a license. Night poaching at 3 Arch. Take of limpets at north end. Shift in fishing pressure. Angle is difficult at southern boundary. Harmful tidepooling	Add "non-living, geological or cultural" marine resource to tidepool take prohibition for consistency with 632(a)1(C)	Yes	Clarifies tidepool protections to include rocks and shells		OC Coastkeeper	Wendy Berube	Language Change	
Orange	<a href="#">Dana Point SMCA</a>	Rec take of finfish by hook and line or by spearfishing and spiny lobster and sea urchin. Commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species by round haul net, brail gear and light boat. Tidepools protected		Better define tidepool definition to encompass rocky intertidal habitat or utilize a different term.	Yes	Tidepools are specific to pools but intertidal habitats protected can be free of pools in some cases. "Area encompassing the rocky pools" is unclear whether all rocky intertidal habitat is included here.		OC Coastkeeper	Wendy Berube	Language Change	
San Diego	<a href="#">Batiqitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve regulations west of 5 and MPA regulations east of 5	Expand SMCA west of I-5 bridge to encompass all of ecological reserve	No	Expands MPA size, unclear on impacts to recreational fishing				Boundary Change	



San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change to blue SMCA with designated fishing areas	Maybe	If does not reduce fishing opportunities under I-5 and 101 bridges, or lessen existing protections				Take Allowance Change	Yes, would change from No-Take SMCA to SMCA
San Diego	<a href="#">Baticuitos Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes if boundaries remain the same	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish	Harmful tidepooling, especially at Seaside reef. Enforcement for take of lobster is hard at southern boundary since it splits 2 jurisdictions and the reef (hard to know where they are actually taking from and who is responsible for enforcing what.)	Move southern boundary to jurisdictional boundary between State Parks and City of Solana Beach for full tidepool protection of reef	No	Increases size of MPA, reducing fishing access, and may impact take of halibut				Boundary Change	
San Diego	<a href="#">Swami's SMCA</a>	Rec take by hook and line from shore and rec take by spearfishing of white seabass and pelagic finfish		Shift entire shape south (lifeguard tower to state/Solana Beach line to cover tidepool on south side)	Yes	Compromise. Keeps same size MPA but covers impacted tidepool area on southern boundary. Lifeguard tower clear boundary at north end		State Parks pending review; Wildcoast		Boundary Change	
San Diego	<a href="#">San Elijo Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited	Lots of people fishing at entrance to San Elijo lagoon under bridge and in channel	Move boundary to west side of the bridge (prohibiting fishing under the bridge) as long as accommodations are allowed for dredging	Yes	Signs are currently posted on west side of bridge to prohibit people from entering the San Elijo Lagoon. Makes outreach clearer		State Parks pending review; Wildcoast		Boundary Change	
San Diego	<a href="#">San Elijo Lagoon No-Take SMCA</a>	No take. Boating, swimming, wading and diving prohibited		Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">San Dieguito Lagoon SMCA</a>	Rec take of finfish by hook and line from shore. Boating, swimming, wading and diving prohibited	Confusion between ecological reserve boundaries and regulations and MPA boundaries and regulations. Speculation that extent of water has changed since restoration. Original intent of 632 was to align with 630 in overlapping waters. Non-MPA areas are more restrictive which leads to confusion	Have MPA cover all water within ecological reserve.	Need more information	Check with Joint Power authority because would lessen protections if SMCA (that allows fishing) is expanded to all state waters		Sea level rise impacts should be considered		Boundary Change	
San Diego	<a href="#">San Diego-Scripps Coastal SMCA</a>	Rec take of coastal pelagic species, except market squid, by hook and line only	Harmful tidepooling. People using gear types for fishing for species other than coastal pelagics but gear type cannot assume intent. Makes enforcement difficult. Also safety concerns with surf casters into high use swim/surf area	Add, "except from shore" to prohibit surf hook and line	Yes	Surf fishing from shore causes safety concerns (hooks getting caught on surfers/swimmers). Still allows kayakers to fish for bait fish on way out, which was original intent				Take Allowance Change	

San Diego	<a href="#">Matlahuayl SMR</a>	No Take	Harmful tidepooling. Kayak fishing. Caves are being defaced/graffitied	Add place name (La Jolla) to traditional Kumeyaay name (Matlahuayl)	No	Keep Kumeyaay name only for Tribal acknowledgement. Would also add confusion between other La Jolla MPAs	More focused patrols on caves in La Jolla to address littering/defacement of MPA			Language Change	
San Diego	<a href="#">South La Jolla SMR</a>	No Take	Most highly cited MPA. Poaching of lobster and offshore fishing. Harmful tidepooling. Challenges of parking and access (coastline related challenges due to sea level rise, climate disturbance)	No change	Yes	Focus on local management/outreach/enforcement	Need for more focus on tidepools (outreach/enforcement). More staff for allied agencies to help enforce. Encourage city to maintain safe accessways and deal with coastal erosion problems. More education on marine mammal disturbance				
San Diego	<a href="#">South La Jolla SMCA</a>	Rec take of pelagic finfish by hook and line only		No change	Yes						
San Diego	<a href="#">Famosa Slough No Take SMCA</a>	No Take	Homeless encampments. Construction run-off. Dogs and cats disturbing birds	Change purple to red for outreach purposes	Yes	Easier to explain "no take" if consistent with red SMR				Other	
San Diego	<a href="#">Cabrillo SMR</a>	No Take	Harmful tidepooling. Offshore boats but NPS unable to contact other than through megaphone	Work with Kumeyaay to rename MPA to traditional Kumeyaay name	Yes	Kumeyaay name exists for this location. Need to confirm spelling	Additional enforcement personnel/efforts are needed			Language Change	
San Diego	<a href="#">Tijuana River Estuary SMCA</a>	Rec take of coastal pelagic species, except market squid, by hand held dip net. Commercial take of coastal pelagics, except market squid by round haul net	Difficult take regulations to interpret in the field and take by hand held dip net not really occurring, per Imperial Beach lifeguards	No change							

Cell: K138

Note: was not sure about this categorization

-MPA Collaborative