

Staff Summary for August 14-15, 2024

9B. Marine Resources Committee (MRC)**Today's Item****Information** ☐**Action** ☒

Receive summary and consider approving recommendations from the July 17-18, 2024 committee meeting. Discuss referred topics and consider revisions to topics and timing.

Summary of Previous/Future Actions

- | | |
|---|---------------------------|
| • Previous MRC meeting | July 17-18, 2024; MRC |
| • Today consider MRC recommendations | August 14-15, 2024 |
| • Next MRC meeting | November 7, 2024; MRC |

Background

MRC works under Commission direction to set and accomplish its work plan. Today, the Commission will receive a report on the previous MRC meeting and recommendations, as well as provide direction for any referred topics and revisions to MRC topics and timing.

Previous Committee Meeting

MRC met on July 17 and 18 in Santa Rosa, with webinar and phone options. Official meeting minutes (video) are posted on the [Commission's YouTube page](#). A brief summary of each discussion topic is included in this document.

1. *Marine Protected Area (MPA) Regulation Change Petition Evaluation Process*

The Department completed and presented its Phase 1 evaluation of MPA petitions (see Exhibit 2 for background). Petitions were categorized into two groups (bins 1 and 2 for near-term and longer-term evaluation) based on criteria outlined in the 3-phased evaluation process (Exhibit 3). The Department's Phase 1 binning of the MPA petitions and rationale are in Exhibit 4 (also see the Department presentation from the MRC meeting in Exhibit 5). Following discussion, MRC developed a recommendation to support the Department's proposed Phase 1 categorization without changes.

Other key discussion points:

- **Next Steps for Evaluations.** The Department shared potential petition visualization and evaluation tools, and potential funding from the California Ocean Protection Council to update data in the tools.
- **Science Questions.** MRC explored potential science questions to support updated data and tools for use in the evaluations.
- **Petition Amendments.** Petitioners requested a process and timeline to submit petition amendments prior to Department evaluation. MRC requested staff follow-up to identify potential guidance for amending petitions.
- **Local Agency Outreach.** MRC requested that staff develop a letter to inform coastal cities about petitions and the engagement process, following requests from southern California cities.

Staff Summary for August 14-15, 2024

2. *Commercial California Halibut Fishery: Bycatch Evaluation for Fisheries Management*

Set Gill Net Bycatch Lessons Learned. The Department shared insights from evaluating bycatch in the commercial halibut set gill net fishery, the first fishery to use the master plan bycatch framework. Participants discussed lessons to apply for the next review – trawl bycatch.

Trawl Tow Time Assessment: As requested in March, the Department gave a report that analyzed trawl tow time distribution within and outside the California halibut trawl grounds.

3. *Market Squid Fishery Management and Fishery Management Plan Review*

The Department presented a report summarizing the Department Squid Fishery Advisory Committee review of California market squid fishery management and Department recommendations (Exhibit 5). A final discussion and potential MRC recommendation are scheduled for November 2024.

4. *Commercial Sea Urchin Regulations: Northern Fishery*

The Department presented commercial sea urchin regulation change recommendations for the northern fishery (north of San Luis Obispo/Monterey county line), including changes proposed in regulation change Petition 2023-04 (to add a fishing day and reopen the South Caspar Point closure). The Department proposed a modified reopening of the closure area (all except part of Caspar Cove where kelp restoration and recreational purple urchin removal are underway). Following discussion, MRC recommended moving forward with proposed regulation changes.

5. *Recreational Crab Trap Gear Options and Trap Validations*

The Department presented an overview of potential regulation changes to address gear and marine life entanglement concerns and create a new trap validation for commercial passenger fishing vessels. An MRC recommendation is anticipated in November 2024.

6. *Recreational Barred Sand Bass Fishery*

The Department presented an update on the declining recreational barred sand bass stock and supporting data. To address the issue, a working group of researchers, recreational fishery representatives, and stakeholders will form to jointly develop recreational fishery regulation recommendations; MRC will discuss those and potentially make recommendations at its November 2024 meeting.

7. *Electronic Recreational Fishing Report Cards*

The Department shared the purpose and an overview of the proposed report cards rulemaking. MRC developed a recommendation to initiate the rulemaking. *Update:* The Department has requested the Commission postpone the rulemaking.

8. *Staff and Agency Updates*

The California Ocean Protection Council gave updates on offshore wind development and public engagement opportunities for the draft 30x30 coastal evaluation framework. The Department Marine Region gave updates on both the red abalone recovery plan (statewide) development and commercial sea palm harvest regulations. Commission staff

Staff Summary for August 14-15, 2024

gave updates on interagency coordination and advancement of the new aquaculture leasing process, and public outreach for the Coastal Fishing Communities Project.

Committee Work Plan and Future Meetings

The updated MRC work plan (Exhibit 1) outlines topics and timelines for Commission-referred items, including MRC-proposed changes.

- *New Topic:* MRC expressed interest in discussing risk tolerance for re-opening any abalone fishery harvest while recovery plans are underway.
- *Two-Day November Meeting:* MRC agreed to recommend extending the next MRC meeting to two days to ensure time for both MPA petition evaluation discussions and other agenda items.

MRC Recommendations

There are four MRC recommendations for Commission consideration at this meeting:

1. *MPA petitions:* Support the Department-proposed categorization of MPA petitions in bin 1 (near-term evaluation) and bin 2 (longer term evaluation) as outlined in the Phase 1 evaluation.
2. *Commercial sea urchin:* Grant Petition 2023-04 with modifications to retain the South Caspar Point closure in the active kelp restoration area of Caspar Cove. Initiate the rulemaking process to consider the Department-recommended regulation changes, commencing with notice in December 2024.
3. *Work plan topics:* Refer the topic “*risk tolerance for re-opening abalone fishery harvest*” to MRC for discussion at the November MRC meeting, and approve the updated committee work plan.
4. *November meeting dates:* Add a second day to the November 7, 2024 MRC meeting on November 6 to ensure sufficient time for all proposed agenda items.

Significant Public Comments

1. **Phase 1 of MPA Petition Evaluation Process: Proposed Binning of Petitions**
 An NGO representative supports the Department’s Phase 1 binning and encourages prompt action to deny petitions in Bin 2 that seek additional closures, expressing concerns about the impact of potential divisiveness on the hard-earned MPA network buy-in during the MLPA Initiative planning process (Exhibit 7).
 Thirteen comments, summarized in Exhibit 2, were received by MRC in July, with many addressed to the Commission.
2. **Broader MPA Petition Evaluation Process**
 Nine expert scientists involved in MPA research jointly support maintaining and strengthening protections for California’s MPA network and ensuring effective enforcement and management (Exhibit 8).
 An ocean access advocacy organization expresses a concern that the petition evaluation process is inconsistent with the MPA master plan siting and modifying

Staff Summary for August 14-15, 2024

process, citing a lack of stakeholder engagement and funding to support evaluations, and requested a postponement of petition reviews (Exhibit 9).

Several organizations jointly offer input on the petition evaluation process, urging grounding decisions in science, avoiding weakening of the network, and ensuring prompt evaluation and comprehensive consideration of threats (exhibits 10 and 11). They provide research questions to consider during evaluations (Exhibit 10), oppose consideration of “controversy” within the evaluation criteria, and emphasize strengthening and expanding the network as a matter of policy (Exhibit 11).

3. Commercial sea urchin: A kelp restoration non-profit provides comments and questions related to the proposed urchin regulations and Department MRC presentation (Exhibit 12).

Recommendation

Commission staff: Approve the MRC recommendations, noting that the Commission is scheduled to consider action on Petition 2023-04 under Agenda Item 7 (Regulation Change Petitions) for this meeting. Approve the MRC work plan as reflected in Exhibit 1, including any changes identified during today’s meeting.

Exhibits

1. [MRC work plan](#), updated August 7, 2024
2. [Staff summary from July 2024 MRC meeting](#), Agenda Item 2, MPA Petitions Evaluation Process (*for background purposes only*; also available [online with exhibits](#))
3. [Department overview of the 3-phase approach to MPA petitions evaluation](#), received April 4, 2024
4. [Department draft Phase 1 characterization of MPA petitions](#), received June 27, 2024
5. [Department presentation on Phase 1 characterization of MPA petitions](#), given at July 17-18, 2024 MRC meeting
6. [Department report, Squid Fishery Advisory Committee Review of California Market Squid Fishery Management and Proposed Recommendations](#), received July 2024
7. [Email from Michael Quill](#), Marine Programs Director, Los Angeles Waterkeeper, received July 15, 2024
8. [Email from Dr. Nur Arafeh Dalmau](#), postdoctoral student, Hopkins Marine Station, Stanford University, on behalf of nine scientists, received June 17, 2024
9. [Email from Chris Killen](#), CEO, All Waters Protection and Access Coalition, received July 22, 2024
10. [Email from Emily Parker](#), Coastal and Marine Scientist, Heal the Bay, transmitting joint letter from 10 non-government organizations, received August 2, 2024
11. [Email from Sandy Aylesworth](#), Director, Pacific Initiative, Natural Resources Defense Council, transmitting joint letter from Natural Resources Defense Council, Azul, Environment California, and FishOn, received August 1, 2024

Staff Summary for August 14-15, 2024

12. [Email from Keith Rootsaert](#), Founder, Giant Giant Kelp Restoration Project, received July 19, 2024

Motion

Moved by _____ and seconded by _____ that the Commission approves the MRC recommendations from the July 17-18, 2024 meeting and approves changes to the work plan as discussed today.

California Fish and Game Commission Marine Resources Committee (MRC) Work Plan

Updated August 7, 2024

Note: Proposed changes to topics/timing are shown in blue underscore or strike-out font.

Topics	Category	Mar 2024	Jul 2024	Nov 2024
Planning Documents, Fishery Management Plans (FMPs)				
MLMA Master Plan for Fisheries – Implementation Updates	Plan Implementation			
Red Abalone Recovery Plan (statewide)	Recovery Plan		*	
- <u>Risk Tolerance for Reopening Red Abalone Fishery Harvest</u>	<u>Recovery/EFP</u>			<u>X</u>
California Halibut Fishery Management Review (CHal Review) – CHal Trawl Grounds Review	Management Review	X	*	
CHal Review – Bycatch Evaluation for Set Gill Net (Lessons Learned)	Management Review	X	X	
CHal Review – Bycatch Evaluation for Trawl Gear	Management Review			
Market Squid Fishery Management and FMP Review	Management/ FMP Review	X	X	X/R
Kelp Recovery and Management Plan (KRMP) Development	Recovery/ Management Plan			
Marine Protected Area (MPA) Network 2022 Decadal Management Review Implementation: <i>MPA Petitions</i>	Management Review	X	X/R	
Regulations				
Kelp and Algae Commercial Harvest – Sea Palm (<i>Postelsia</i>)	Commercial Take		*	X/R
Commercial Sea Urchin Fishing (Including Review of Petition 2023-04 for Fishery North of San Luis Obispo/Monterey County Line)	Commercial Take	X	X/R	
Recreational Crab Trap Gear Options and Trap Validation for Commercial Passenger Fishing Vessels	Recreational Take	*	X	X/R
Commercial Fisheries Logbook Forms and Fishing Block Charts	Commercial Take	X		
Electronic Recreational Fishing Report Cards Rulemaking	Recreational Take		X/R	
Recreational Barred Sand Bass Fishery	Recreational Take		X	X/R
Marine Aquaculture <u>and State Water Bottom Leases</u>				
Statewide Aquaculture Action Plan	Planning Document			
Status of Existing Leaseholder Requests	Current Leases	*		
Applications for New Leases	Lease Applications		*	X
Lease Best Management Practices Plans (Hold, TBD)	Leases–Regulatory			
Informational Topics <i>and/or</i> Emerging Management Issues				
Kelp Restoration and Recovery Tracking	Kelp			
Special Projects				
Coastal Fishing Communities Project	MRC Project		*	X
Experimental Fishing Permit (EFP) Program Research Projects – Box Crab EFP	EFP			X

Key: X = Discussion scheduled X/R = Recommendation may be developed and may move to Commission

* = Written or verbal agency update

Committee Staff Summary for July 17-18, 2024
For background purposes

2. Marine Protected Area (MPA) Regulation Change Petition Evaluation Process

Today's Item

Information ☐

Action ☒

Receive and discuss Department-proposed approach for draft binning of petitions for MPA regulation changes following the 2022 decadal management review of the MPA network and management program. (*Note: Comments about specific MPA petitions are being received under Agenda Item 3, this meeting.*)

Summary of Previous/Future Actions

- | | |
|---|----------------------------|
| • Commission received decadal management review report and Department presentation | February 8-9, 2023 |
| • Marine Resources Committee (MRC) discussed management review, forum, and proposed adaptive management recommendations; MRC recommendation | March 14 and 16, 2023; MRC |
| • Commission discussed management review and forum, and adopted MRC recommendation | April 19-20, 2023; MRC |
| • MRC discussed Department-proposed prioritization of adaptive management options; MRC recommendation | July 20, 2023; MRC |
| • Commission received 20 petitions for changes to MPA regulations | December 13-14, 2023; FGC |
| • Commission referred 20 MPA petitions to the Department for review and to MRC for discussion | February 14-15, 2024; FGC |
| • MRC received and discussed Department-proposed approach for reviewing and evaluating petitions for MPA regulation changes | March 19, 2024; MRC |
| • Today receive and discuss Department-proposed Phase 1 binning of MPA petitions | July 17, 2024; MRC |

Background

At its February 2024 meeting, the Commission referred 20 MPA regulation change petitions to the Department for review, evaluation, and recommendation. The Commission requested that the Department develop a proposed approach to evaluating the petitions, to support a discussion at the March 2024 MRC meeting.

At the March MRC meeting, the Department proposed a three-phase approach for evaluating MPA petition requests (Exhibit 1). Following public input and discussion, MRC recommended approving the Department's proposed evaluation framework and timeline; the Commission approved the approach at its meeting in April 2024 (Exhibit 2).

Update

In May, the Department completed Phase 1 of the three-phase approach; it then released a draft proposed Phase 1 binning of MPA petitions to California Native American tribes, and online for

Committee Staff Summary for July 17-18, 2024

For background purposes

public review via a [blog post](#) on May 31, 2024 (exhibits 3 and 4). The Commission requested feedback by the Commission's Marine Resources Committee public comment deadline of July 5. Through their distribution networks, Commission and California Ocean Protection Council staff helped to inform the public of available materials.

Binning Breakdown and Criteria

Petitions are categorized into two bins with different evaluation timelines: Bin 1 petitions are proposed for evaluation in the near-term, while Bin 2 petitions are proposed for evaluation in the longer-term.

For petitions to be evaluated in the near-term, the Department determined they must meet five criteria: (1) Policy direction is not needed; (2) the petition is within the Commission's authority; (3) immediate evaluation is possible; (4) limited clarification is needed from the petitioner; and (5) limited controversy is anticipated. See Exhibit 4 for tables identifying which petitions are proposed for which bin, with brief justifications.

Today's Meeting – July 17, 2024

Today, the Department will give a presentation to recap the three-phase evaluation process supported by the Commission, describe the Phase 1 binning process, and present the proposed binning of petitions (Exhibit 5). The Department presentation offers a potential "Roadmap for Today's Discussion":

- *Proposed bins and justifications*
 - Feedback on binning of petitions
 - Feedback on criteria, outcomes, and/or justifications
- *Evaluation process and timeline*
 - Phase 2: Individual actions
 - Policy guidance
 - Extent of evaluations and trade-offs
- *Next steps and MRC recommendations for August Commission meeting*

In addition to the proposed roadmap for today's discussion, MRC may wish to discuss and offer input on questions posed by stakeholders in written comments, such as:

- Does placement in Bin 1 imply a petition will be granted?
- What is the anticipated timeline for decisions on Bin 1 petitions?
- What does "obtaining additional policy guidance" entail?
- How would clarification from petitioners help inform the decision-making process?
- When and how will additional information be gathered to inform evaluations of Bin 2 petitions?
- How and when will stakeholders be engaged in discussions about Bin 2 petitions?

Committee Staff Summary for July 17-18, 2024
For background purposes

Significant Public Comments

MRC received 13 public comments by the comment deadline; they are briefly summarized here.

1. Four comment letters express support for the Department's proposed binning of specific petitions (*petitions 2023-15MPA, -16MPA, -22MPA, -24MPA, and -26MPA*).
 - a. One petitioner requests guidance to help petitioners move forward in Phase 2, and encourages local meetings to allow for public input throughout evaluation (Exhibit 9).
 - b. One commenter cites controversy over proposed reduction in protection as rationale for agreeing that two petitions belong in Bin 2 (Exhibit 10)
 - c. A commenter agreed with the Department's binning of Petition 2023-24MPA into Bin 2 and urges the Commission to consider the petition through the lens of the recently adopted Coastal Fishing Communities Policy, inviting further discussion (Exhibit 14).
 - d. The petitioner for 2023-26MPA submitted letters from NGOs, the City of Oceanside, City of San Diego, and numerous individuals, all agreeing with proposed placement in Bin 1 (Exhibit 6), and provides literature in support of the petition rationale.
2. Five commenters disagree with the Department's proposed binning of specific petitions (*petitions 2023-26MPA, -30MPA, and -31MPA*)
 - a. Representatives from the cities of Encinitas and Solana Beach (exhibits 7 and 8), and California State Parks (Exhibit 18) disagree with Bin 1 placement of Petition 2023-26MPA, requesting placement in Bin 2 for more in-depth review. They cite concerns about impacts to current uses and access, and urge continued outreach with cities, State Parks, stakeholders, and tribes. They also request a current biological survey, Encinitas requests a modification to the Swami's boundary shift, and the Solana Beach City Manager offers to meet with the Commission for further discussion, either on site or virtually (Exhibit 8).
 - b. A commenter supports moving petitions 2023-26 and 2023-31MPA from Bin 1 to Bin 2 to allow for greater stakeholder outreach (Exhibit 11).
 - c. Four recreational fishing and/or hunting organizations request that petitions 2023-30MPA and 2023-31MPA be moved from Bin 1 into Bin 2, due to concern over their proposals to limit recreational harvest (Exhibit 15).
3. Four letters provide general suggestions for the Department's proposed binning or the petition evaluation process.
 - a. A joint letter from four NGOs (Exhibit 13) and a joint letter from ten NGOs (Exhibit 16) support an adaptive management process that prioritizes strengthening the MPA network and considers broader threats to the ocean. Both appreciate the Department's transparent and proactive communication efforts. One of the letters recommends removing "controversy" from the list of evaluation metrics (Exhibit 13). The other urges a prompt evaluation process and identifies a series of questions and request the MRC to provide feedback at the meeting today (see Exhibit 16).
 - b. A California surf fishing organization supports the MPA network and a collaborative petition review and evaluation process (Exhibit 17).

Committee Staff Summary for July 17-18, 2024

For background purposes

- c. City of Laguna Beach representatives recommend developing a framework for local government involvement to facilitate MPA discussions more effectively at the local level and allow city councils to be impactful throughout the adaptive management process, specifically citing petitions 2023-24MPA and 2023-22MPA (Exhibit 12).

Commission staff also developed Exhibit 19 to organize the comments across seven themes as a quick reference guide.

Recommendation

Commission staff: Utilize the Department's roadmap to review the draft binning of petitions. Discuss concerns with and consider potential revision to binning or the placement of specific petitions; provide guidance on the next phases in the evaluation process including potential timelines; and identify any information needs to help the Department prepare for discussion at the August Commission meeting.

Department: Provide guidance on the binning of petitions, provide guidance related to the evaluation process and timeline, discuss next steps, and provide MRC recommendations for the discussion scheduled for the August Commission meeting.

Exhibits

1. Staff summary for Agenda Item 6, March 19, 2024 MRC meeting (*for background purposes only*)
2. Department memo with proposed Three-phase MPA petition evaluation process and timeline, dated April 2, 2024
3. Department memo transmitting proposed Phase 1 categorization of MPA petitions, dated June 27, 2024
4. Department document, *Draft Proposed Phase 1 Categorization of Marine Protected Area Petitions*, dated June 20, 2024
5. Department presentation regarding MPA binning
6. Sam Campbell, US Ocean Conservation Specialist, WILDCOAST, petitioner for petition 2023-26MPA, transmitting letters of support from NGOs, the cities of Oceanside and San Diego, and individuals (one with 60 signatures), and attached supporting literature, received July 2, 2024
7. Letter from Todd Mireau, Coastal Zone Program Administrator, City of Encinitas, regarding petition 2023-26MPA, received June 20, 2024
8. Email from Leslea Meyerhoff, transmitting letter from Alyssa Muto, City Manager, Solana Beach, regarding petition 2023-26MPA, received June 29, 2024
9. Letter from Blake Hermann, petitioner for petition 2023-15MPA, received June 25, 2024
10. Letter from Eric Praske, resident, Laguna Beach, regarding petitions 2023-22MPA, 2023-15MPA, and 2023-16MPA, received June 27, 2024
11. Email from Rick Duenas, resident, San Mateo County, regarding petitions 2023-26MPA and 2023-31MPA, received July 3, 2024

Committee Staff Summary for July 17-18, 2024

For background purposes

12. Email from Jeremy Frimond, Assistant City Manager, City of Laguna Beach, transmitting letters from Laguna Beach Mayor Sue Kempf and former Mayor Bob Whalen, received July 2, 2024
13. Email from Karla Garibay Garcia, transmitting a joint letter from Sandy Aylesworth, Director of Pacific Initiative, NRDC; Anupa Asokan, Founder and Director, Fish On; Tomas Valadez, California Policy Associate, Azul; and Laura Deehan, State Director, Environment California, received July 3, 2024
14. Email and letter from Donna Kalez, Chief Operating Officer, Dana Wharf Sportfishing and Whale Watching, received July 5, 2024
15. Email from Devin O'Dea, Western Policy & Conservation Manager, Backcountry Hunters and Anglers (BHA) transmitting a joint letter from BHA; Chris Killen, All Waters Protection & Access Coalition; Wayne Kotow, Executive Director, Coastal Conservation Association California; and Kevin Godes, Coastside Fishing Club, received July 5, 2024
16. Email from Emily Parker, Coastal and Marine Scientist, Heal the Bay, transmitting a joint letter from Heal the Bay and nine other NGOs, received July 5, 2024
17. Email from Kaspar Kazazian, California Surf Fishing, received July 3, 2024
18. Email from Carrie Benner, transmitting a letter from Darren Smith, Senior Environmental Scientist, California State Parks, San Diego Coast District, received July 5, 2024
19. Quick reference table identifying common themes in comments received, as summarized by Commission staff

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission support the Department's proposed draft placement and rationale for petitions in Bin 1 and Bin 2, with the following changes: _____.

Memorandum

Date: April 2, 2024

To: Melissa Miller-Henson
Executive Director
Fish and Game Commission

From: Charlton H. Bonham
Director

Subject: Proposed Marine Protected Area Petition Evaluation Process and Timeline

At their February 14-15, 2024, meeting, the California Fish and Game Commission (CFGF) referred 20 Marine Protected Area (MPA) regulation change petitions to the California Department of Fish and Wildlife (CDFW) for review, evaluation, and recommendation. In addition, the CFGF requested CDFW develop a proposed approach to evaluate the petitions to discuss at the Marine Resources Committee (MRC) meeting on March 19, 2024. After discussion and input from interested stakeholders, the MRC recommended approval of CDFW's proposed 3-phase approach to evaluate MPA petitions. The proposed approach is briefly described below and in the enclosed presentation that was provided to the MRC on March 19, 2024.

Proposed 3-Phase Approach to MPA Petition Evaluation

Phase 1: Petitions will be categorized into two bins using the criteria outlined below to determine which petitions can be evaluated in the near-term and which petitions will require additional policy guidance, information, and/or resources prior to evaluation.

- **Bin 1 petitions:** Petitions that can be evaluated in the *near-term* must meet all the following criteria:
 - Policy direction not needed for next phases.
 - Within CFGF authority.
 - Immediate evaluation possible.
 - Limited clarification needed from petitioner.
 - Limited controversy anticipated.
- **Bin 2 petitions:** Petitions that do not meet all the above criteria will be categorized into Bin 2. The analysis of these petitions will be more complex as they will require additional policy guidance, information, and/or resources before they can be evaluated. Due to the complexity of these petitions, these will be evaluated in the *longer term*.

Phase 2: Separate all Bin 1 petitions into individual actions and proceed to phase 3. Separate Bin 2 petitions into individual actions and identify additional policy guidance, information, and/or resources that are necessary to advance individual actions to phase 3.

Phase 3: Adaptive management evaluation and recommendations. Apply the evaluation framework approved by the CFGC to each petition action. The process will identify which petitions, and/or actions within each petition, would be recommended to be granted, denied, or considered through an alternative pathway.

Proposed MPA Petition Evaluation Anticipated Timeline

- **March-April 2024: Development of Evaluation Framework**
 - Receive and discuss proposed 3-phase evaluation process at the March 19 MRC and April 17 CFGC meetings.
- **April-August 2024: Phase 1— CDFW Sort Petitions into 2 Bins**
 - Discuss proposed bins at the July 18 MRC and August 14 CFGC meetings.
- **August 2024 and beyond: Phases 2 and 3—Separate petitions into individual actions**
 - Receive guidance on Bin 2 actions as needed.
 - Move forward with evaluation on both Bin 1 and 2 actions. Evaluation timelines for Bin 1 and Bin 2 actions will vary.

If you have any questions or need more information, please contact Dr. Craig Shuman, Marine Regional Manager, at (805) 568-1246.

Attachment 1: Proposed Marine Protected Area Petition Evaluation presentation.

Attachment 2: Evaluation Framework

ec: Jenn Eckerle, Deputy Secretary for Ocean and Coastal Policy
Natural Resources Agency

Craig Shuman, D. Env., Region Manager
Marine Region

Becky Ota, Environmental Program Manager
Marine Region

Stephen Wertz, Senior Environmental Scientist
Marine Region

Sara Worden, Environmental Scientist
Marine Region

Department of Fish and Wildlife: Summary of Marine Protected Area (MPA) Regulation Change Petition Framework Discussion

(07/27/23) Revised 08/10/23; Revised 8/17/23

At the California Fish and Game Commission's (CFGF) July 20, 2023 Marine Resources Committee (MRC) meeting, MRC, CFGF staff, California Department of Fish and Wildlife (CDFW) staff, and stakeholders discussed potential next steps in pursuing the MPA Decadal Management Review (DMR) report recommendations and goals. The discussion included a potential framework to assist in evaluation of petitions the CFGF may receive related to changes to the MPA network and management program. At the request of MRC, staff from CDFW summarized the input received at the July 20, 2023 MRC meeting regarding these MPA petition framework considerations.

Broadly, petitions submitted to the CFGF are evaluated on a case by case by basis. To help guide petition development and subsequent review by CDFW, the MRC received the following input for evaluating petitions related to MPAs:

- Compatible with the goals and guidelines of the Marine Life Protection Act (MLPA);
- Help advance one or more of the [six goals](#) of the MLPA;
- Garner strong community support; and/or
- Advance adaptive management recommendations under the cornerstones of MPA governance, MPA Management Program activities, and MPA Network Performance outlined in [DMR Table 6.1](#) to ensure that petitions meet MPA management priorities.

The MRC also received input organized by cornerstone as follows:

- MPA Governance:
 - Simplifies regulatory language or enhances public understanding
 - Addresses inaccuracies or discrepancies in regulations
 - Accounts for regional stakeholder group intent identified during the regional MLPA planning process (including MPA-specific goals/objectives and design considerations)
 - Accounts for CDFW's [MPA design and management feasibility guidelines](#)
 - Advances tribal stewardship and co-management, consistent with the CFGF [Co-Management Vision Statement and Definition](#)
 - Improves access for traditionally underserved or marginalized communities, consistent with the [CFGF Policy on Justice Equity, Diversity and Inclusion](#)
 - Acknowledges socio-economic implications, such as access for consumptive or non-consumptive users
- MPA Management Program Activities:
 - Clearly addresses or identifies scientific need for MPA Network based on best available science and scientific advancement since Network completion
 - Improves compliance and/or enforceability
- MPA Network Performance:
 - Maintains or enhances the protections and integrity of the MPA Network
 - Maintains or enhances habitat and species connectivity
 - Adheres to science guidelines, such as maintaining minimum size and spacing, and protection of diverse habitats
 - Enhances climate resilience and/or helps mitigate climate impacts

Memorandum

Date: June 27, 2024

To: Melissa Miller-Henson
Executive Director
Fish and Game Commission

From: Craig Shuman, D. Env. 
Marine Regional Manager

Subject: **Draft Proposed Phase 1 Categorization of Marine Protected Area Petitions**

At their February 14-15, 2024 meeting, the California Fish and Game Commission (CFGF) referred 20 MPA petitions received to the California Department of Fish and Wildlife (CDFW) for review, evaluation, and recommendation. In addition, they requested CDFW provide an administrative update at their March 19 Marine Resources Committee (MRC) meeting on the approach to evaluate the petitions. After discussion and input from interested stakeholders, the MRC recommended approval of CDFW's proposed 3-phase approach to evaluate petitions, and the CFGF approved the approach at their April 17 meeting. CDFW has completed Phase 1 of the 3-phase approach and will present the proposed draft binning at the July 17, 2024, MRC meeting.

Phase 1 petitions are categorized into two bins using the criteria outlined in the 3-phase approach to determine which petitions can be evaluated in the near-term (Bin 1) and which petitions will require additional policy guidance, information, and/or resources prior to evaluation (Bin 2). CDFW released the draft Phase 1 outcomes to California Native American tribes and the public on May 31, which includes tables that outline the proposed Bin 1 and Bin 2 petitions with brief justifications that describe why petitions are categorized into each bin.

If you have any questions or need more information, please contact Dr. Craig Shuman, Marine Regional Manager, at (805) 568-1246.

Attachment 1: 3-phase approach for MPA Petition review and evaluation

Attachment 2: Draft Proposed Phase 1 Categorization of Marine Protected Area Petition background, Bin 1 and Bin 2 tables, and brief justifications

Attachment 3: Power Point presentation outlining process, proposed binning, and next steps

cc: Jenn Eckerle, Deputy Secretary for Ocean and Coastal Policy
Natural Resources Agency

Stephen Wertz, Senior Environmental Scientist Supervisor
Marine Region

Draft Proposed Phase 1 Categorization of Marine Protected Area Petitions

In 2023, the California Department of Fish and Wildlife (CDFW) publicly released the first 10-year [comprehensive review](#) of California's Marine Protected Area (MPA) Network that included [28 adaptive management recommendations](#) prioritizing strategies for the next decade of MPA management. One of the near-term priority recommendations called for applying what was learned from the comprehensive management review to support proposed changes to the MPA Network and Management Program. To advance this recommendation, the California Fish and Game Commission (CFGC) requested that MPA regulation change petitions be submitted for their December 2023 meeting. CFGC received [20 petitions](#) with over 80 unique requests for changes to the MPA Network.

At their February 14-15, 2024 meeting, CFGC referred the 20 MPA petitions received to CDFW for review, evaluation, and recommendation. In addition, they requested CDFW provide an administrative update at their March 19 Marine Resources Committee (MRC) meeting on the approach they would take to evaluate the petitions. After discussion and input from interested stakeholders, the MRC recommended approval of CDFW's [proposed 3-phase approach](#) to evaluate MPA petitions, and the CFGC approved the approach at their April 17 meeting. CDFW has completed Phase 1 of the 3-phase approach and will present the proposed binning of petitions for discussion and consideration at the July MRC meeting. In addition to the MRC's regularly scheduled July 18 meeting, the CFGC approved a separate day on July 17 be added to the meeting for this discussion. There will be an update about the outcomes from this meeting at the August 14-15 CFGC meeting.

Petitions are categorized into two bins (Tables 1 and 2) using the criteria outlined below to determine which petitions can be evaluated in the near-term (Bin 1) and which petitions will require additional policy guidance, information, and/or resources prior to evaluation (Bin 2). The proposed binning of petitions by CDFW are recommendations for the MRC to consider at their July 17 meeting. It is anticipated the MRC will make a recommendation on the binning of petitions for the CFGC to consider at their August meeting. ***Inclusion in Bin 1 does not automatically mean the requests in any given petition will be granted.*** Following approval of the binning of petitions by CFGC, CDFW will move forward with the evaluation of Bin 1 petitions for subsequent discussion and consideration by the MRC and CFGC.

Bin 1: Petitions that can be evaluated in the ***near-term*** must meet all the following criteria:

- Policy direction not needed for next phases: The requested changes are consistent with existing policies regarding the MPA Network.
- Within CFGC authority: CFGC has clear regulatory authority over the changes requested in the MPA petitions.
- Immediate evaluation possible: Information and resources are available to evaluate petitions in the near-term
- Limited clarification needed from petitioner: The changes requested in the petitions are clear and understandable.
- Limited controversy anticipated: Changes that have limited impact on human uses and network design, such as minor boundary changes and/or updating regulatory language, are expected to cause limited controversy.



Bin 2: Petitions that do not meet all the above criteria are categorized into Bin 2. The analysis of these petitions will be more complex as they will likely require additional policy guidance, information, and/or resources *before* they move forward into the evaluation phase. Bin 2 petitions that could move forward based on CFGC guidance will be evaluated in the ***longer-term***. In addition, due to the larger breadth and scope of these petitions, they will likely require more extensive coordination with California Native American Tribes, other government agencies, partners, and stakeholders.

The tables below outline the proposed Bin 1 and Bin 2 petitions. There are brief justifications following each table that describe why a metric was met or not, and why petitions are categorized into Bin 1 or Bin 2. CFGC is seeking feedback on the draft proposed binning of petitions into either Bin 1 or Bin 2. Comments should be sent directly to CFGC to inform the discussions scheduled for July 17, 2024 at the MRC meeting. Written comments must be received by CFGC by July 5 to be included in the July MRC meeting materials. The CFGC website includes [instructions for how to submit written comments](#) and a [schedule of upcoming Commission meetings](#).



Table 1: Proposed Bin 1 Petitions. N=No, Y=Yes. Y/N in the “Within CFGC Authority?” column indicates that some of the actions proposed in the petition do fall within the regulatory authority of the CFGC, while others are non-regulatory requests. MPA designations state marine reserve (SMR), state marine conservation area (SMCA).

CFGC Tracking No.	Name of Petitioner	Short Description	Policy guidance needed?	Within CFGC Authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-22MPA	Wendy Berube, Orange County Coast Keeper	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)	N	Y/N	Y	N	Y
2023-25MPA	Burton Miller	Change color designation of Blue Cavern Onshore and Casino Point SMCAs, change boundary of Long Point SMR, and remove allowance for feeding fish and Lover's Cove and Casino Point SMCAs.	N	Y/N	Y	N	Y
2023-26MPA	Lisa Gilfilan, WILDCOAST	Shift Swami's SMCA south from the lifeguard tower to the State/Solana Beach line to cover tidepools on the south side and change map color of no-take SMCAs at Batiquitos Lagoon, San Elijo Lagoon, and Famosa Slough from purple to red.	N	Y/N	Y	N	Y
2023-30MPA_1	Robert Jamgochian	Change gear restrictions within Big River SMCA to only allow Type A hoop nets that are compatible 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.	N	Y	Y	N	Y
2023-31MPA_1	Ashley Eagle-Gibbs, Environmental Action Committee of West Marin	Subsume Drake's Estero SMCA into Estero de Limantour SMR to create a single SMR.	N	Y	Y	N	Y



Justifications for Proposed Bin 1 Petitions

Proposed Bin 1 petitions do not need policy direction from the CFGC to move forward with evaluation, are within CFGC regulatory authority, can be evaluated in the near-term, require minimal follow-up with the petitioner, and limited controversy is anticipated regarding petition requests. Justifications for each criterion are outlined below.

Petition Number: 2023-22MPA

Petitioner: Wendy Berube, Orange County Coastkeeper

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from CFGC.
- **Does the petition fall within CFGC regulatory authority? (Y/N):**
 - Modifying the descriptions of specific MPAs and updating regulatory language are within CFGC authority.
 - Changing the color of a purple no-take SMCA to red *on outreach materials only* is a non-regulatory request. However, alternative pathways for this and other similar non-regulatory requests may be explored as a part of the 3-phase approach to evaluate petitions.
- **Is immediate evaluation possible? (Y):** Related information and data needed to evaluate petition are currently available.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (Y):** Limited controversy anticipated because the requested changes are to simplify and clarify regulatory language.

Petition Number: 2023-25MPA

Petitioner: Burton Miller

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from CFGC.
- **Does the petition fall within CFGC regulatory authority? (Y/N):**
 - Boundary clarification at Long Point SMR, and the proposed removal of fish feeding from the regulations all fall within the CFGC's authority.
 - Changing the color of a purple no-take SMCA to red *on outreach materials only* is a non-regulatory request. However, alternative pathways for this and other similar non-regulatory requests may be explored as a part of the 3-phase approach to evaluate petitions.
- **Is immediate evaluation possible? (Y):** Related information and data needed to evaluate petition are currently available.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (Y):** Limited local controversy is anticipated regarding the request to end fish feeding within the Lover's Cove and Casino Point SMCAs.



Petition Number: 2023-26MPA

Petitioner: Lisa Gilfillan, WILDCOAST

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from CFGC.
- **Does the petition fall within CFGC regulatory authority? (Y/N):**
 - Changing the boundaries of an MPA is within CFGC authority.
 - Changing the color of a purple no-take SMCA to red *on outreach materials only* is a non-regulatory request. However, alternative pathways for this and other similar non-regulatory requests may be explored as a part of the 3-phase approach to evaluate petitions.
- **Is immediate evaluation possible? (Y):** Related information and data needed to evaluate petition are currently available.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (Y):** Limited local controversy is anticipated regarding the proposed boundary shift.

Petition Number: 2023-30MPA

Petitioner: Robert Jamgochian

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from CFGC.
- **Does the petition fall within CFGC regulatory authority? (Y):** The proposed amendments to the allowed take and gear type are within CFGC authority.
- **Is immediate evaluation possible? (Y):** Related information and data needed to evaluate petition are currently available.
- **Is clarification needed from the petitioner? (N):** Limited clarification with the petitioner may be necessary to determine the request for Type A hoop nets only.
- **Is limited controversy anticipated? (Y):** Limited local controversy is anticipated regarding proposed change in Dungeness crab take regulations.

Petition Number: 2023-31MPA

Petitioner: Ashley-Eagle Gibbs, Environmental Action Committee of West Marin

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from the CFGC. The requested redesignation aligns with the intent of this MPA identified during the north central coast marine life protection act (MLPA) Initiative design and siting process to redesignate as an SMR once the pre-existing aquaculture lease was terminated.
- **Does the petition fall within CFGC regulatory authority? (Y):** The proposed amendments to the allowed take and gear type are within CFGC authority.
- **Is immediate evaluation possible? (Y):** Related information and data needed to evaluate petition are currently available.



- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (Y):** Limited local controversy regarding ending recreational clamming. This petition is consistent with the recommendation of the northcentral coast MLPA regional stakeholder group at the end of the MLPA Initiative design and siting process.



Table 2: Proposed Bin 2 Petitions. N=No, Y=Yes. Y/N in the “Within CFGC Authority?” column indicates that some of the actions proposed in the petition do fall within the regulatory authority of the CFGC, while others are non-regulatory requests. MPA designations state marine reserve (SMR), state marine conservation area (SMCA).

CFGC Tracking No.	Name of Petitioner	Short Description	Policy guidance needed?	Within FGC Authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-14MPA	David Goldberg, California Sea Urchin Commission	Allow commercial take of sea urchins in 9 SMCAs.	Y	Y	N	N	N
2023-15MPA	Blake Hermann	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.	Y	Y	N	N	N
2023-16MPA	Richard Ogg	Reclassify Stewarts Point and Bodega Head SMRs and SMCAs to allow commercial take of salmon by trolling.	Y	Y	N	N	N
2023-18MPA	Greg Helms	Create small SMCA within Vandenberg SMR; modify multiple MPAs within the Santa Barbara Channel to allow range of activities, from changes to take of natural resources restrictions to vessel landing requirements.	Y	Y/N	N	N	N
2023-19MPA	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	Designate new Chitaqwi SMCA with a tribal take-exemption for the Santa Ynez Band of Chumash Indians along the central coast.	Y	Y	N	Y	N
2023-20MPA	Sam Cohen, Santa Ynez Band of Chumash Mission Indians	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.	Y	Y	N	Y	N
2023-21MPA	Rosa Laucci, Tolowa Dee-ni' Nation	Modify take allowances in Pyramid Point SMCA to no-take with tribal exemption and change northern boundary to align with California/Oregon border.	Y	Y	N	Y	N



CFGC Tracking No.	Name of Petitioner	Short Description	Policy guidance needed?	Within FGC Authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-23MPA	Keith Rootsart, Giant Giant Kelp	Reclassify three SMCAs as SMRs, 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 at restoration sites, establishing a new process for restoration permits in DFW SCP program, designating "adopted reefs," and others.	Y	Y/N	N	Y	N
2023-24MPA	Mike Beanan, Laguna Bluebelt Coalition	Extend Laguna no-take SMCA southern boundary to the southern border of City of Laguna Beach, which will require modification of northern boundary of Dana Point SMCA.	N	Y	N	N	N
2023-27MPA	Azsha Hudson, Environmental Defense Center	Reclassify Anacapa SMCA as an SMR or reclassify the portion of the SMCA from shore to at least 30 meters deep.	Y	Y	N	N	N
2023-28MPA	Lisa Suatoni, Natural Resources Defense Council	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 purposes.	Y	Y	N	N	N
2023-29MPA_1	Lisa Suatoni, Natural Resources Defense Council	Designate Mishopshno SMCA, a California-Chumash co-management MPA that allows take by members of Santa Ynez Band of Chumash Indians for traditional, ceremonial, cultural, and subsistence purposes.	Y	Y	N	Y	N
2023-32MPA_1	Ashley Eagle-Gibbs, Environmental Action Committee of West Marin	Change Duxbury Reef SMCA to an SMR, extend the southern boundary further south, and extend the northern boundary to the Double Point Special Closure.	Y	Y	N	N	N
2023-33MPA_1	Laura Deehan, Environmental California Research and Policy Center and Azul	Expand boundaries of SMCAs and SMRs, and designate new MPA.	Y	Y	N	N	N



CFGF Tracking No.	Name of Petitioner	Short Description	Policy guidance needed?	Within FGC Authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-34MPA_1	Laura Deehan, Environmental California Research and Policy Center and Azul	Reclassify Point Buchon SMCA as an SMR, and modify regulations of Farnsworth Onshore and Offshore SMCAs to allow only recreational spearfishing.	Y	Y	N	N	N



Justifications for Proposed Bin 2 Petitions

Petitions that do not meet the above criteria for Bin 1 petitions are categorized into Bin 2. The analysis of these petitions will be more complex as they will likely require additional policy guidance, information, and/or resources, before they can be evaluated. Below are brief justifications that describe why a metric was met or not.

Petition Number: 2023-14MPA

Petitioner: David Goldenberg, California Sea Urchin Commission

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding changing take regulations in SMCAs over a large geographic scale.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):**
 - Requested changes will require coordination with other management priorities such as the Kelp Restoration, Recovery, and Management Plan (KRMP) and updates to invertebrate take regulations.
 - A more in-depth examination of the original MPA design guidance will be needed for this petition before staff can analyze the proposed change.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Changing take regulations in several MPAs statewide is likely to be controversial.

Petition Number: 2023-15MPA

Petitioner: Blake Hermann

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding re-designation of entire SMRs into SMCAs.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Requested changes will require in-depth analysis of many resources and extensive coordination with external partners, including but not limited to the Channel Islands National Marine Sanctuaries, National Parks Service, and National Marine Fisheries Service.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Redesignating SMRs to SMCAs is likely to be controversial.

Petition Number: 2023-16MPA

Petitioner: Richard Ogg

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding re-designation of entire SMRs to SMCAs.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.



- **Is immediate evaluation possible? (N):** Requested changes will require coordination with other management efforts regarding the ocean salmon fishery.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Redesignating SMRs to SMCAs is likely to be controversial.

Petition Number: 2023-18MPA

Petitioner: Greg Helms

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding partial designation change of an SMR to an SMCA and modifications to special closures.
- **Does the petition fall within CFGC regulatory authority? (Y/N):**
 - Creation of an SMCA and modifications to, or removal of, an existing state MPA or special closure are within CFGC authority.
 - Continued support of M2 radar is a non-regulatory request. Changing the color of a purple, no-take SMCAs to red *on outreach materials only* is a non-regulatory request. However, alternative pathways for this and other similar non-regulatory requests may be explored as a part of the 3-phase approach to evaluate petitions.
- **Is immediate evaluation possible? (N):** Evaluation of this petition will require coordination with many external partners including National Marine Sanctuaries and the National Park Service. A more in-depth examination of the original MPA design guidance will also be needed to analyze the proposed changes.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** The partial redesignation and changes to special closures around the Channel Islands are likely to be controversial.

Petition Number: 2023-19MPA

Petitioner: Sam Cohen, Santa Ynez Band of Chumash Mission Indians

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding approach to co-management of MPAs with California Native American Tribes and creation of new MPAs.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Requested changes will require coordination with the California Natural Resources Agency, other state and federal agencies, local jurisdictions, and other partners regarding policies for co-management of the state's natural resources with California Native American Tribes.
- **Is clarification needed from the petitioner? (Y):** Additional clarification needed from the petitioner regarding the definition of tribal co-management in the context of this petition and proposed regulation changes.
- **Is limited controversy anticipated? (N):** Establishing a new MPA is likely to be controversial.



Petition Number: 2023-20MPA

Petitioner: Sam Cohen, Santa Ynez Band of Chumash Mission Indians

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance on approach to co-management of MPAs with California Native American Tribes and changes in take regulations of an SMCA.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Requested changes will require coordination with the California Natural Resources Agency, other state and federal agencies, local jurisdictions, and other partners regarding policies for co-management of the state's natural resources with California Native American Tribes.
- **Is clarification needed from the petitioner? (Y):** Significant clarification is needed from the petitioner regarding the definition of tribal co-management in the context of this petition.
- **Is limited controversy anticipated? (N):** Decreasing the level of protection of an SMCA and proposed differences in take allowances by diverse sectors are likely to be controversial.

Petition Number: 2023-21MPA

Petitioner: Rosa Laucci, Tolowa Dee-ni' Nation

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance on approach to co-management of MPAs with California Native American Tribes and the creation of a tribal take-only MPA.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Requested changes will require coordination with the California Natural Resources Agency, other state and federal agencies, local jurisdictions, and other partners regarding policies for co-management of the state's natural resources with California Native American Tribes.
- **Is clarification needed from the petitioner? (Y):** Clarification is needed from the petitioner about the tribal take exemption.
- **Is limited controversy anticipated? (N):** Creating a tribal-take only MPA and proposed differences in take allowances by diverse sectors are likely to be controversial.

Petition Number: 2023-23MPA

Petitioner: Keith Rootsart, Giant Kelp Restoration

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding redesignation of entire MPAs and creation of new MPAs.
- **Does the petition fall within CFGC regulatory authority? (Y/N):** Several requested changes are within CFGC authority, while many are non-regulatory requests.
- **Is immediate evaluation possible? (N):** Several requested changes will require coordination with other management priorities such as the KRMP and updates to statewide invertebrate take regulations. Evaluation of the requested changes will require in-depth analysis and coordination with many partners including National Marine Sanctuaries and several other state agencies.
- **Is clarification needed from the petitioner? (Y):** The scope of changes requested in this petition are extensive and complex and will require extensive coordination with the petitioner.



- **Is limited controversy anticipated? (N):** Establishment of new MPAs is likely to be controversial. Stakeholders in the Monterey area have consistently provided public comments on prior CFGC actions like those proposed within the petition, indicating a high degree of anticipated controversy on other petition components.

Petition Number: 2023-24MPA

Petitioner: Mike Beanan, Laguna Bluebelt Coalition

- **Is policy guidance needed for the next phase of evaluation? (N):** Changes requested do not require policy guidance from the CFGC.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** A more in-depth examination of the original MPA design guidance will be needed for this petition to analyze the proposed change.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Public comments/letters have already been received by CDFW and CFGC about this petition, indicating a high degree of anticipated controversy.

Petition Number: 2023-27MPA

Petitioner: Azsha Hudson, Environmental Defense Center

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding re-designation of SMCA to SMR. The requested change does not align with the intent of this MPA identified during the Channel Islands planning process and would affect current tribal take allowances.
- **Does the petition fall within CFGC regulatory Authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Evaluation of this petition will require coordination with the Santa Ynez Band of Chumash Mission Indians and many external partners including National Marine Sanctuaries, National Marine Fisheries Service, and the National Park Service. A more in-depth examination of the original MPA design guidance will also be needed to analyze the proposed changes.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Re-designation of entire MPA, effects on tribal take exemptions, and effects of proposed changes to the commercial and recreational lobster fisheries are likely to be controversial.

Petition Number: 2023-28MPA

Petitioner: Lisa Suatoni, Natural Resources Defense Council

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding the creation of new MPAs.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.



- **Is immediate evaluation possible? (N):** Requested changes will require coordination with the California Natural Resources Agency, other state and federal agencies, local jurisdictions, and other partners regarding policies for co-management of the state's natural resources with California Native American Tribes.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Establishment of a new MPA is likely to be controversial.

Petition Number: 2023-29MPA

Petitioner: Lisa Suatoni, Natural Resources Defense Council

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding the creation of new MPAs.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Requested changes will require coordination with the California Natural Resources Agency, other state and federal agencies, local jurisdictions, and other partners regarding policies for co-management of the state's natural resources with California Native American Tribes. A more in-depth examination of the original MPA design guidance will be needed for this petition before staff can analyze the proposed change.
- **Is clarification needed from the petitioner? (Y):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Establishment of a new MPA is likely to be controversial.

Petition Number: 2023-32MPA

Petitioner: Ashley Eagle-Gibbs, Environmental Action Committee of West Marin

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding the redesignation of an SMCA to an SMR that does not align with MLPA design process intent of the MPA and expansion of the existing MPA.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** A more in-depth examination of the original MPA science design guidance will be needed to analyze the proposed change.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Due to this site being a popular area for human use, a designation change and boundary expansion are likely to be controversial.

Petition Number: 2023-33MPA

Petitioner: Laura Deehan, Environment California Research and Policy Center and Azul

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance regarding the redesignations of SMCAs to an SMRs that do not align with MLPA design process intent of the MPA, creation of a new MPA, and expansion of existing MPAs.



- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Because this petition's stated intent is to assist in kelp forest recovery, this petition will need to be evaluated in concert with the KRMP, which is not yet complete.
- **Is clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N)** Creation of a new MPA and large expansion of existing MPAs are likely to be controversial. There has already been significant local stakeholder discussion regarding the proposed Pleasure Point MPA in Santa Cruz County.

Petition Number: 2023-34MPA

Petitioner: Laura Deehan, Environment California Research and Policy Center and Azul

- **Is policy guidance needed for the next phase of evaluation? (Y):** Requires guidance on the redesignation of the SMCA to an SMR that does not align with MLPA design process intent of the MPA.
- **Does the petition fall within CFGC regulatory authority? (Y):** All requested regulatory changes are within CFGC authority.
- **Is immediate evaluation possible? (N):** Analysis will require a more in-depth examination of the original MPA design guidance regarding the proposed changes.
- **Is Clarification needed from the petitioner? (N):** Changes requested are straightforward and do not require detailed clarification from petitioner.
- **Is limited controversy anticipated? (N):** Anticipated to be highly controversial with the recreational and commercial fishing communities in the areas of the proposed changes.





Draft Phase 1 Proposed Marine Protected Area Petition Bins

17 July 2024

Presented to:

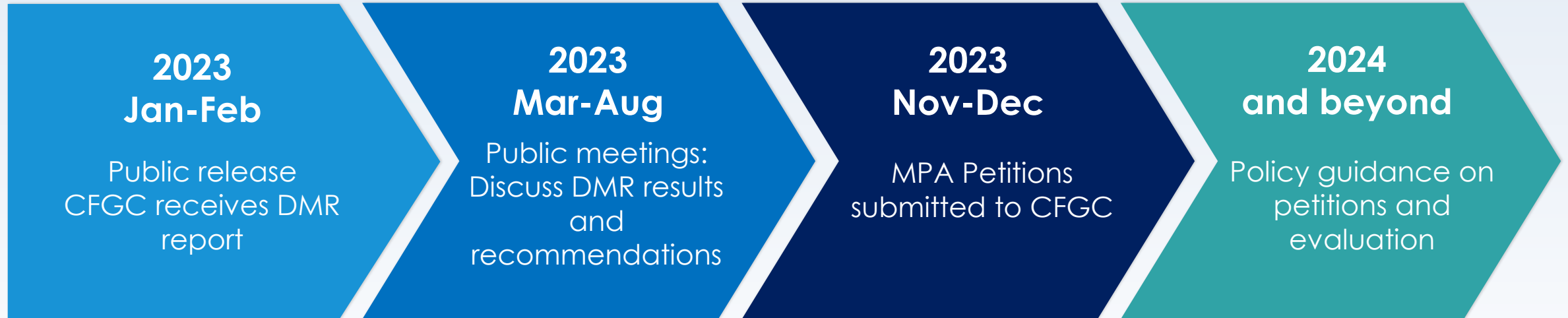
Marine Resources Committee
California Fish and Game Commission

Presented by:

Dr. Craig Shuman
Marine Regional Manager



How We Got Here: DMR Report and Petition Timeline



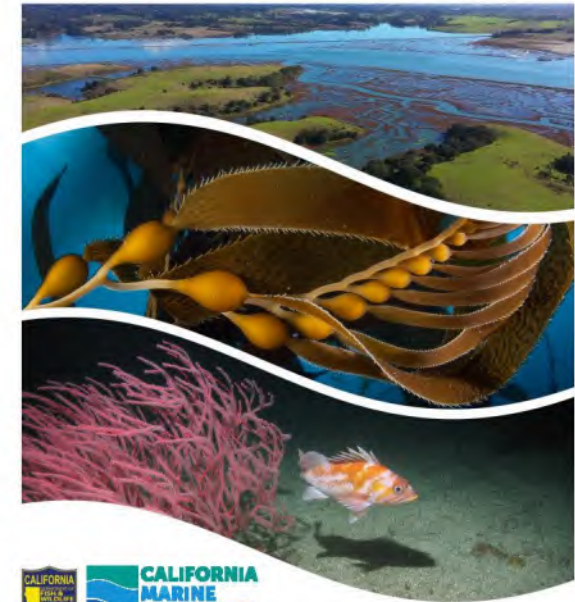
CFGF=California Fish and Game Commission
CDFW=California Department of Fish and Wildlife
DMR=Decadal Management Review



Petitions for Proposed MPA Network Changes

- CFGC received **20 petitions** to change MPAs at the December 2023 meeting
- **16 individual organizations** submitted petitions
- Petitions include **80+ proposed petition actions**
- **49+ MPAs and special closures affected** by proposals

California's Marine Protected Area Network **DECADAL MANAGEMENT REVIEW**



2022



Where We Are: MPA Petition Process 2024

**2024
and beyond**

Policy guidance on
petitions and
evaluation

- **February 2024** - CFGC referred all petitions to CDFW for evaluation
- **March 2024** – CDFW proposed 3-phased approach to petition evaluation process
- **April 2024** – CFGC accepted CDFW's approach
- **May 2024** – CDFW released a blog with the draft petition binning for public review
- **July 2024** - Marine Resources Committee discussion

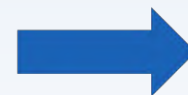


Petition Evaluation Framework: 3-phase Approach

Phase 1: Bin whole petitions



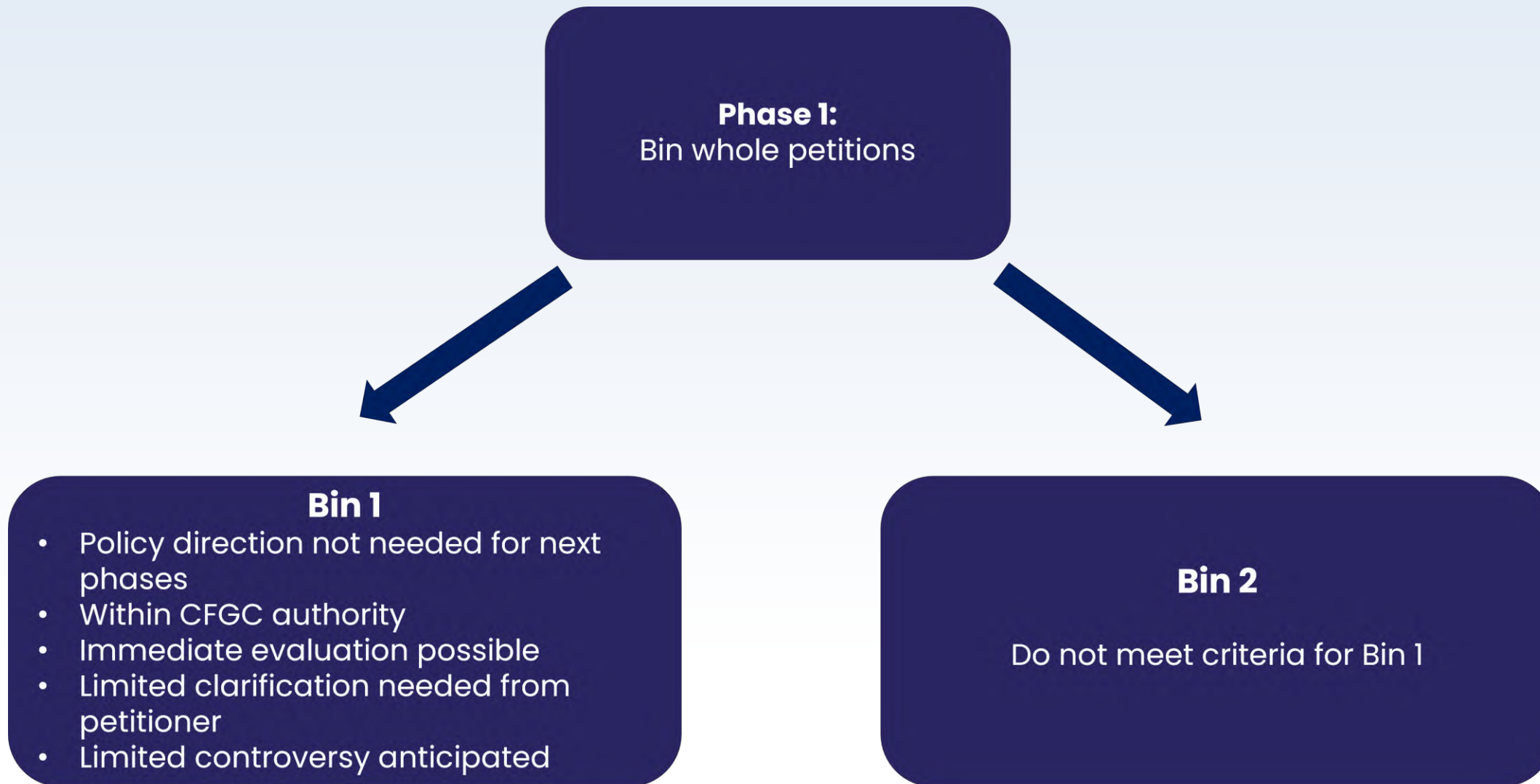
Phase 2: Separate petitions into individual actions to determine evaluation pathway



Phase 3: Adaptive management evaluation and recommendations



Phase 1: Bin Whole Petitions





Draft Proposed Bin 1 Petitions

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-22MPA	Orange County MPAs; change color coding on outreach maps, update regulatory language	N	Y/N	Y	N	Y
2023-25MPA	Catalina Island MPAs; change color coding on outreach maps, remove fish feeding; boundary update	N	Y/N	Y	N	Y
2023-26MPA	San Diego County MPAs; change color coding on outreach maps; Swami's SMCA boundary shift	N	Y/N	Y	N	Y
2023-30MPA_1	Big River SMCA; change Dungeness crab gear and take limits	N	Y	Y	N	Y
2023-31MPA_1	Drake's Estero SMCA; subsume into Estero de Limantour SMR	N	Y	Y	N	Y



Draft Proposed Bin 2 Petitions (1 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-14MPA	Allow commercial take of sea urchins in 9 SMCAs	Y	Y	N	N	N
2023-15MPA	Northern Channel Island MPAs; allow take of highly migratory species; pelagic finfish	Y	Y	N	N	N
2023-16MPA	Bodega Head and Stewarts Point SMRs; redesignate to SMCAs to allow commercial salmon trolling	Y	Y	N	N	N
2023-18MPA	Santa Barbara County MPAs; modify take allowances; modify special closures; create small SMCA within Vandenberg SMR	Y	Y/N	N	N	N
2023-19MPA	Designate new tribal SMCA with take exemption for the Santa Ynez Band of Chumash Mission Indians	Y	Y	N	Y	N



Draft Proposed Bin 2 Petitions (2 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-20MPA	Point Buchon MPAs; tribal take exemption for Santa Ynez Band of Chumash Mission Indians, boundary shift	Y	Y	N	Y	N
2023-21MPA	Pyramid Point SMCA; tribal take only for Tolowa Dee-ni' Nation, boundary adjustment	Y	Y	N	Y	N
2023-23MPA	Monterey County MPAs; designation changes, new permitting process, various other activities	Y	Y/N	N	Y	N
2023-24MPA	Laguna Beach no-take SMCA boundary shift	N	Y	N	N	N
2023-27MPA	Anacapa SMCA; redesignation to SMR, or partial redesignation	Y	Y	N	N	N



Draft Proposed Bin 2 Petitions (3 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-28MPA	San Luis Obispo County; new MPA near Point Sal	Y	Y	N	N	N
2023-29MPA_1	Santa Barbara County; new tribal co-management MPA with Santa Ynez Band of Mission Indians	Y	Y	N	Y	N
2023-32MPA_1	Duxbury Reef SMCA; redesignate to SMR and expand boundaries	Y	Y	N	N	N
2023 33MPA_1	Expand boundaries of multiple SMCAs and SMRs; designate new MPA	Y	Y	N	N	N
2023-34MPA_1	Redesignate Point Buchon SMCA to SMR; modify take allowances in Farnsworth SMCAs	Y	Y	N	N	N



Next Steps: Implement DMR Recommendations

Near-Term (ongoing – 2 years)

- Rec 1: Improve state agencies tribal engagement
- Rec 4: Apply Review knowledge to Network/Management changes ★
- Rec 7: Expand outreach and education materials
- Rec 9: Continue OPC coordination
- Rec 10: Improve coordination across Management Program pillars
- Rec 11: Update Action Plan
- Rec 16: More targeted outreach to specific audiences
- Rec 17: Improve SCP process
- Rec 18: Use policy to review MPA restoration/mitigation efforts
- Rec 20: Increase enforcement capacity
- Rec 21: Enhance citation record keeping and management
- Rec 25: Implement MPA climate change research
- Rec 27: Improve understanding of MPA effects on fisheries

Mid-Term (2 – 5 years)

- Rec 2: Create pathway to tribal MPA management
- Rec 3: Build tribal capacity to participate in MPA management
- Rec 6: Include and fund more diverse researchers and stakeholders
- Rec 8: Evaluate MPA accessibility
- Rec 12: Improve understanding of human dimensions
- Rec 13: Explore innovative technologies
- Rec 14: Develop MPA community science strategy
- Rec 15: Evaluate Outreach needs and resource effectiveness
- Rec 22: Increase knowledge on MPA judicial outcomes
- Rec 23: Examine MPA Network design attribute more effectively
- Rec 26: Consider climate change in human dimensions monitoring
- Rec 28: Integrate influencing factors into MPA performance evaluations

Long-Term (5- 10 years)

- Rec 5: Establish targets to meet MLPA goals
- Rec 19: Create MPA Enforcement Plan
- Rec 24: Better incorporate marine cultural heritage into MPA Network





Roadmap for Today's Discussion

- **Draft bins and justifications**
 - Move petitions?
 - Change criteria outcomes and justifications?
- **Evaluation process and timeline**
 - Phase 2: Individual actions
 - Policy guidance
 - Extent of evaluations and trade-offs
- **Next steps and MRC recommendations for August CFGC meeting**

Scan for draft
bins and
justifications



A. Van Diggelen



Draft Phase 1 Proposed Marine Protected Area Petition Bins

17 July 2024

Presented to:

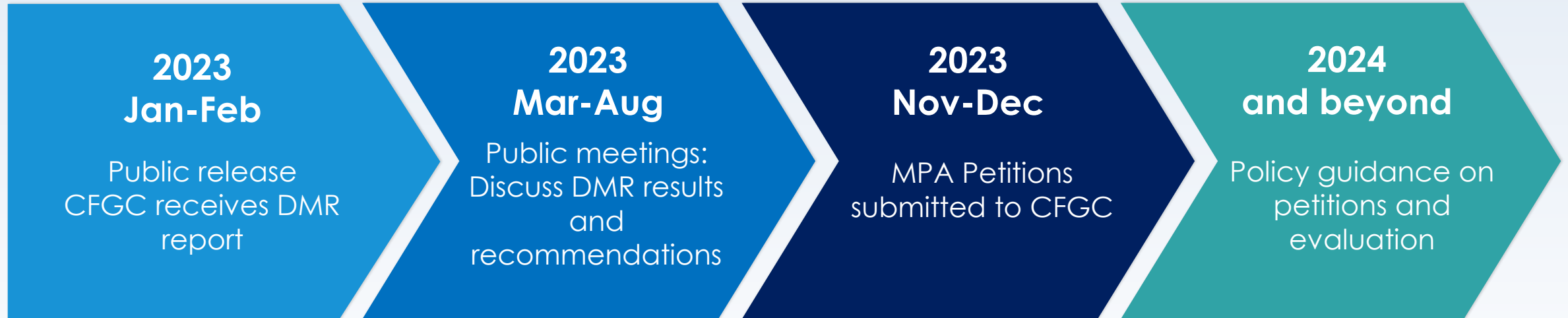
Marine Resources Committee
California Fish and Game Commission

Presented by:

Dr. Craig Shuman
Marine Regional Manager



How We Got Here: DMR Report and Petition Timeline



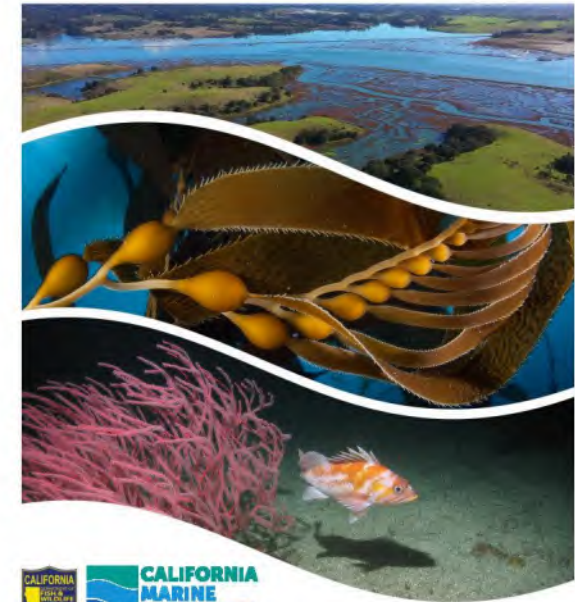
CFGF=California Fish and Game Commission
CDFW=California Department of Fish and Wildlife
DMR=Decadal Management Review



Petitions for Proposed MPA Network Changes

- CFGC received **20 petitions** to change MPAs at the December 2023 meeting
- **16 individual organizations** submitted petitions
- Petitions include **80+ proposed petition actions**
- **49+ MPAs and special closures affected** by proposals

California's Marine Protected Area Network **DECADAL MANAGEMENT REVIEW**



2022



Where We Are: MPA Petition Process 2024

**2024
and beyond**

Policy guidance on
petitions and
evaluation

- **February 2024** - CFGC referred all petitions to CDFW for evaluation
- **March 2024** – CDFW proposed 3-phased approach to petition evaluation process
- **April 2024** – CFGC accepted CDFW's approach
- **May 2024** – CDFW released a blog with the draft petition binning for public review
- **July 2024** - Marine Resources Committee discussion



Petition Evaluation Framework: 3-phase Approach

Phase 1: Bin whole petitions



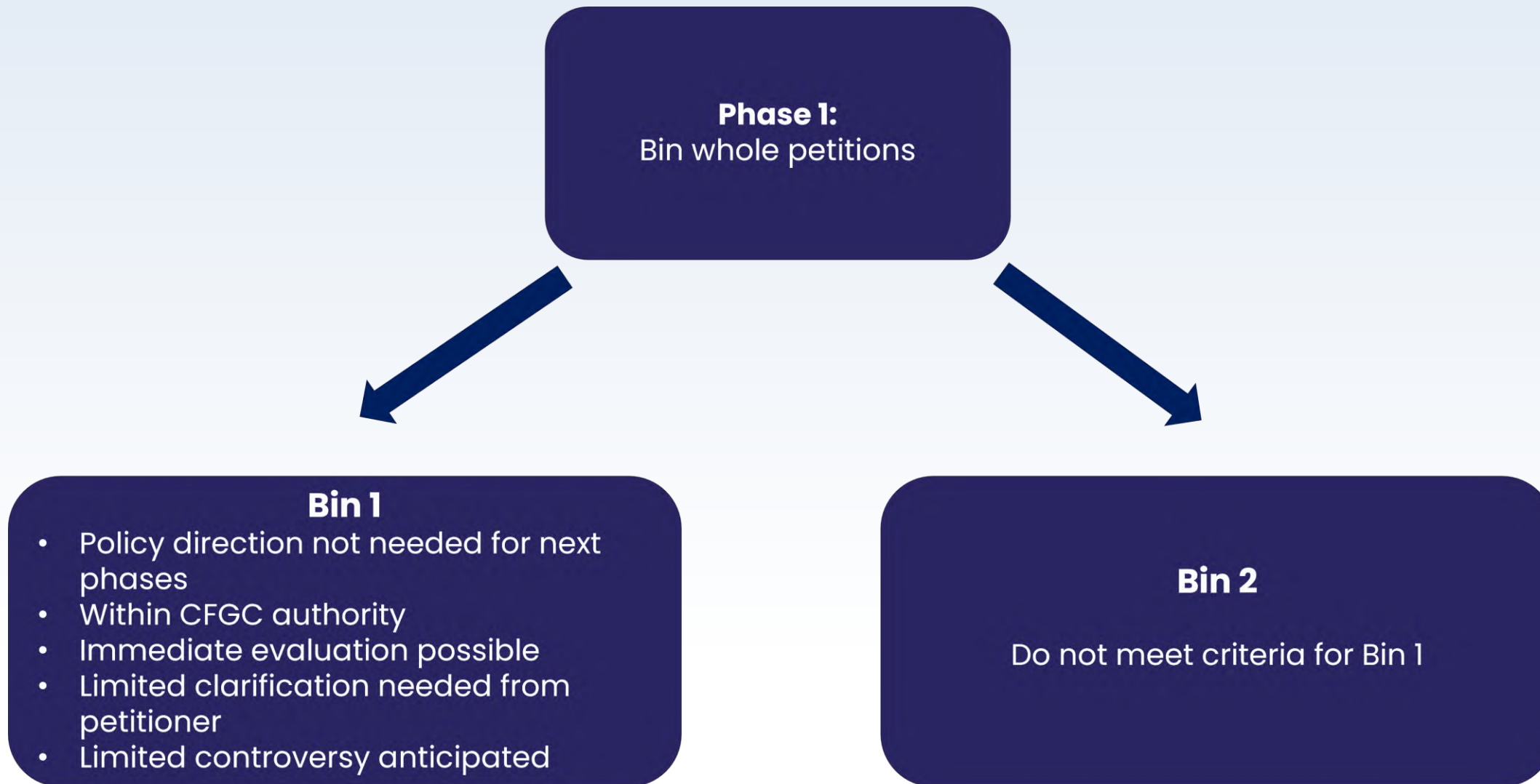
Phase 2: Separate petitions into individual actions to determine evaluation pathway



Phase 3: Adaptive management evaluation and recommendations



Phase 1: Bin Whole Petitions





Draft Proposed Bin 1 Petitions

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-22MPA	Orange County MPAs; change color coding on outreach maps, update regulatory language	N	Y/N	Y	N	Y
2023-25MPA	Catalina Island MPAs; change color coding on outreach maps, remove fish feeding; boundary update	N	Y/N	Y	N	Y
2023-26MPA	San Diego County MPAs; change color coding on outreach maps; Swami's SMCA boundary shift	N	Y/N	Y	N	Y
2023-30MPA_1	Big River SMCA; change Dungeness crab gear and take limits	N	Y	Y	N	Y
2023-31MPA_1	Drake's Estero SMCA; subsume into Estero de Limantour SMR	N	Y	Y	N	Y



Draft Proposed Bin 2 Petitions (1 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-14MPA	Allow commercial take of sea urchins in 9 SMCAs	Y	Y	N	N	N
2023-15MPA	Northern Channel Island MPAs; allow take of highly migratory species; pelagic finfish	Y	Y	N	N	N
2023-16MPA	Bodega Head and Stewarts Point SMRs; redesignate to SMCAs to allow commercial salmon trolling	Y	Y	N	N	N
2023-18MPA	Santa Barbara County MPAs; modify take allowances; modify special closures; create small SMCA within Vandenberg SMR	Y	Y/N	N	N	N
2023-19MPA	Designate new tribal SMCA with take exemption for the Santa Ynez Band of Chumash Mission Indians	Y	Y	N	Y	N



Draft Proposed Bin 2 Petitions (2 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-20MPA	Point Buchon MPAs; tribal take exemption for Santa Ynez Band of Chumash Mission Indians, boundary shift	Y	Y	N	Y	N
2023-21MPA	Pyramid Point SMCA; tribal take only for Tolowa Dee-ni' Nation, boundary adjustment	Y	Y	N	Y	N
2023-23MPA	Monterey County MPAs; designation changes, new permitting process, various other activities	Y	Y/N	N	Y	N
2023-24MPA	Laguna Beach no-take SMCA boundary shift	N	Y	N	N	N
2023-27MPA	Anacapa SMCA; redesignation to SMR, or partial redesignation	Y	Y	N	N	N



Draft Proposed Bin 2 Petitions (3 of 3)

CFGC Tracking No.	Brief description	Policy guidance needed?	Within CFGC authority?	Evaluate in the near-term?	Clarification needed from petitioner?	Limited controversy anticipated?
2023-28MPA	San Luis Obispo County; new MPA near Point Sal	Y	Y	N	N	N
2023-29MPA_1	Santa Barbara County; new tribal co-management MPA with Santa Ynez Band of Mission Indians	Y	Y	N	Y	N
2023-32MPA_1	Duxbury Reef SMCA; redesignate to SMR and expand boundaries	Y	Y	N	N	N
2023 33MPA_1	Expand boundaries of multiple SMCAs and SMRs; designate new MPA	Y	Y	N	N	N
2023-34MPA_1	Redesignate Point Buchon SMCA to SMR; modify take allowances in Farnsworth SMCAs	Y	Y	N	N	N



Next Steps: Implement DMR Recommendations

Near-Term (ongoing – 2 years)

- Rec 1: Improve state agencies tribal engagement
- Rec 4: Apply Review knowledge to Network/Management changes ★
- Rec 7: Expand outreach and education materials
- Rec 9: Continue OPC coordination
- Rec 10: Improve coordination across Management Program pillars
- Rec 11: Update Action Plan
- Rec 16: More targeted outreach to specific audiences
- Rec 17: Improve SCP process
- Rec 18: Use policy to review MPA restoration/mitigation efforts
- Rec 20: Increase enforcement capacity
- Rec 21: Enhance citation record keeping and management
- Rec 25: Implement MPA climate change research
- Rec 27: Improve understanding of MPA effects on fisheries

Mid-Term (2 – 5 years)

- Rec 2: Create pathway to tribal MPA management
- Rec 3: Build tribal capacity to participate in MPA management
- Rec 6: Include and fund more diverse researchers and stakeholders
- Rec 8: Evaluate MPA accessibility
- Rec 12: Improve understanding of human dimensions
- Rec 13: Explore innovative technologies
- Rec 14: Develop MPA community science strategy
- Rec 15: Evaluate Outreach needs and resource effectiveness
- Rec 22: Increase knowledge on MPA judicial outcomes
- Rec 23: Examine MPA Network design attribute more effectively
- Rec 26: Consider climate change in human dimensions monitoring
- Rec 28: Integrate influencing factors into MPA performance evaluations

Long-Term (5- 10 years)

- Rec 5: Establish targets to meet MLPA goals
- Rec 19: Create MPA Enforcement Plan
- Rec 24: Better incorporate marine cultural heritage into MPA Network





Roadmap for Today's Discussion

- **Draft bins and justifications**
 - Move petitions?
 - Change criteria outcomes and justifications?
- **Evaluation process and timeline**
 - Phase 2: Individual actions
 - Policy guidance
 - Extent of evaluations and trade-offs
- **Next steps and MRC recommendations for August CFGC meeting**

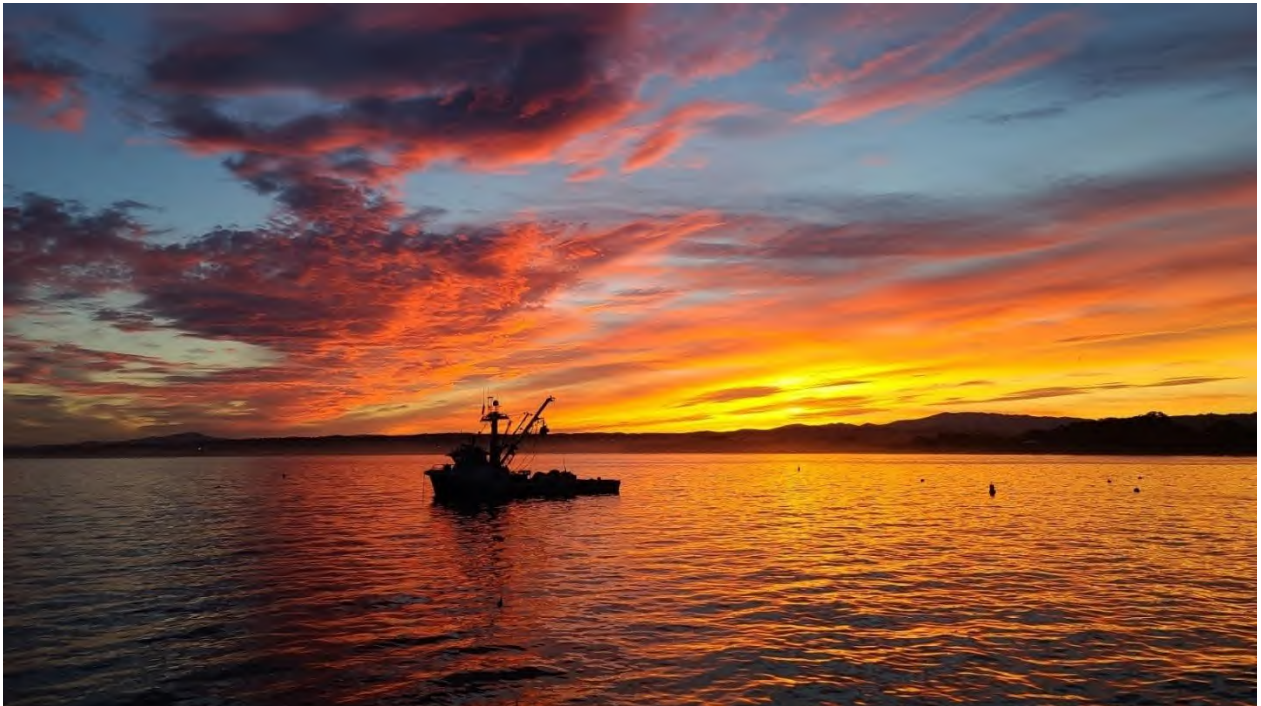
Scan for draft
bins and
justifications



A. Van Diggelen

Squid Fishery Advisory Committee Review of California Market Squid Fishery Management and Proposed Recommendations

California Department of Fish and Wildlife



**Marine Resources Committee Meeting
of the California Fish and Game Commission.
July 18, 2024**

EXECUTIVE SUMMARY	i
INTRODUCTION.....	1
MARKET SQUID FISHERY MANAGEMENT PLAN.....	1
ENHANCED STATUS REPORT	1
2023 MSFMP REVIEW – SQUID FISHERY ADVISORY COMMITTEE	2
MARKET SQUID fishery AND MANAGEMENT background.....	6
SFAC DISCUSSIONS AND DEPARTMENT RECOMMENDATIONS.....	10
MONITORING	10
EMPIRICAL DYNAMIC MODELLING	14
FISHING EFFORT AND TEMPORAL CLOSURES	17
SMALL-SCALE FISHERY ACCESS.....	21
NETS AND SQUID SPAWNING HABITAT	25
LIGHTING AND SEABIRD HABITAT	28
CLIMATE CONSIDERATIONS	31
Summary and Department Recommendations	33
Monitoring	33
Empirical dynamic modeling	33
Fishing effort and temporal closures	33
Small-scale fishery access	33
Nets and SQUID SPAWNING habitat	33
Lighting and SEABIRD habitat	34
Proposed FMP Amendment	35
Future Revisions.....	35
References	37
Appendix I	39
APPENDIX II	43

EXECUTIVE SUMMARY

BACKGROUND

In 2023, the California Department of Fish and Wildlife (Department) convened a Squid Fishery Advisory Committee (SFAC) charged with reviewing and advising the Department on potential changes to California market squid (*Doryteuthis opalescens*) fishery management. This document reviews the final recommendations developed in that process, including the background, rationale, and other options considered. Recommendations are included in each of the following categories:

MONITORING

The recommendation is to develop an electronic logbook (e-log) for the California market squid commercial fishery. Paper logs are cumbersome and real-time data collection is essential to modernize long-term monitoring efforts and build fishery climate resilience.

EMPIRICAL DYNAMIC MODELING

The Department will continue to develop forecasts with Empirical Dynamic Modeling (EDM; 2024 onward). EDM shows promise in (1) informing the development of an e-log, (2) forecasting for industry and management planning in response to climate change, and (3) exploring potential future management options.

FISHING EFFORT AND TEMPORAL CLOSURES

The recommendation is to extend the existing weekend closure (noon Friday to noon Sunday) to start at 7am Friday Statewide. An additional extension to end Sunday at midnight in the Monterey Bay Area (to be defined) is also recommended. These changes provide added conservation in squid fishery management and a buffer for climate change at little expense or potentially improvement to fishery yields and performance. The extensions provide for additional uninterrupted spawning, which should benefit squid reproduction and spawning success.

SMALL-SCALE FISHERY ACCESS

The recommendation is that individuals interested in pursuing small-scale opportunities should utilize the newly established experimental fishery permit (EFP) program. The Department will work with potential EFP applicants to develop EFPs that would allow for limited small-scale fishery opportunities outside the primary commercial fishing areas and not to compete with the existing limited entry program. This allows for testing for the viability and enforceability of small-scale commercial fishing outside the restricted access program.

NETS AND SQUID SPAWNING HABITAT

The recommendation is to establish regulations that require the use of a ribline and rope purse line for all squid round haul fishing vessels. This change mitigates potential impacts to sandy bottom habitat and enhances sustainability by protecting squid egg beds and other benthic species.

LIGHTING AND SEABIRD HABITAT

The Department, with support from the SFAC, has developed a draft Fishery “Best Practices” document that will be distributed to all commercial squid fishery participants. The Department will continue to collaborate with researchers to evaluate potential wildlife interactions (primarily nocturnal seabirds at the Channel Islands National Park) using squid fishery log data. The Best Practices document includes precautionary conservation measures that squid fishing vessels should implement near shorelines and in sensitive bird nesting regions. Evaluations of interactions will use long-term monitoring to inform potential wildlife interactions.

INTRODUCTION

MARKET SQUID FISHERY MANAGEMENT PLAN

The Market Squid Fishery Management Plan (MSFMP) was drafted over the course of five years between 1998 and 2003, with input from two advisory groups - the original Squid Fishery Advisory Committee and a Squid Research Scientific Committee - appointed by the California Department of Fish and Wildlife (Department). The MSFMP was reviewed through an extensive California Fish and Game Commission (Commission) process and adopted in December 2004, with the final version officially published in March 2005 (CDFW, 2005). The MSFMP was developed under the provisions set forth by California's Marine Life Management Act (MLMA), which established state policies, goals, and objectives to govern the conservation, sustainable use, and restoration of California's living marine resources, including the market squid resource.

The MSFMP established a management program for California's market squid resource and procedures by which the State manages the market squid fishery. The goals of the MSFMP are to manage the market squid resource to ensure long term conservation and sustainability, reduce the potential for overfishing, and institute a framework for management that is responsive to environmental and socioeconomic changes. The tools implemented to accomplish the MSFMP goals were:

- Fishery control rules, including:
 - A seasonal catch limitation to prevent the fishery from over-expanding;
 - Weekend closures, which provide for periods of uninterrupted spawning;
 - Gear regulations regarding light shields and wattage used to attract squid and;
 - Monitoring programs designed to evaluate the impact of the fishery.
- A restricted access program, including provisions for initial entry into the fleet, types of permits, permit fees, and permit transferability that produced a moderately productive and specialized fleet.
- A seabird protection measure restricting the use of attracting lights for commercial purposes in any waters of the Greater Farallones National Marine Sanctuary.

ENHANCED STATUS REPORT

In 2020, the Department developed an Enhanced Status Report (ESR) for California's Market Squid Fishery in accordance with the MLMA's Master Plan. In general, ESRs systematically address objectives and requirements of the MLMA similar to but more succinctly than FMPs, and include topics such as landings,

fishing effort and location, and emerging needs. As an FMP was already in place for the Market Squid fishery, the ESR provided updated and more focused information pertaining to market squid life history information, the fishery, and management (CDFW, 2024). Additionally, the ESR included potential revisions to the FMP or management framework that have materialized since the 2005 implementation.

2023 MSFMP REVIEW – SQUID FISHERY ADVISORY COMMITTEE

Background

Between 2014 and 2017, fishing communities from northern California developed a petition that was submitted to the Commission for a community-based squid fishery with its own quota for the ports of Noyo, Eureka, and Crescent City. The inquiry for a community quota outside of the already established restricted access program led to consideration and discussion of potential squid fishery management changes. In August 2021, Monterey area fishermen submitted a petition seeking additional time restrictions for the fishery. In 2022, the State of Oregon also established commercial squid fishery management measures and regulations requiring the use of purse seine riblines, which provided additional basis for revisiting gear and potential habitat impacts in California. With increasing interest in evaluating existing management, new information identified in the ESR, and uncertainty involving climate change impacts on sustainable fisheries, the Department determined a need to revisit market squid regulations and initiated the process to form an advisory committee.

In 2023, the Department, with support from the California Ocean Protection Council and Resources Legacy Fund, initiated a review process for the market squid fishery and MSFMP. The Department convened a new Squid Fishery Advisory Committee (SFAC) charged with reviewing the fishery and advising the Department on potential changes to California market squid fishery management. The goals of the SFAC process were to:

- Review changes in fishery dynamics
- Respond to past stakeholder input and management change proposals
- Consider potential new management measures as guided by the MSFMP, Enhanced Status Report (ESR), and MLMA Master Plan
- Work with a postdoctoral scholar (post-doc) to forecast future landings and catch per unit effort (CPUE) and evaluate harvest control measures in the context of climate change using Empirical Dynamic Modelling (EDM)
- Explore opportunities for small-scale fisheries and the ability for coastal communities and local economies to adapt to climate change
- Modernize data collection and fishery monitoring efforts, including the use of electronic reporting

2022 SFAC Establishment

In spring of 2022, one-on-one interviews with interested stakeholders were conducted by the professional facilitation team, Concur Inc., to capture the broad range of perspectives on potential changes for squid fishery management and to test the willingness of interviewees to engage in an advisory deliberative process. In the fall of 2022, a call for nominations was released by the Department to squid fishery stakeholders and California Native American Tribes. SFAC members were selected in winter 2022 to participate as representatives for specific stakeholder groups, and an SFAC listserv was developed to keep the public and interested Tribes informed of the SFAC's progress. Concur assisted in developing a biography portfolio that included each of the SFAC members, meeting ground rules, and a committee charge to help the SFAC prepare for a series of meetings that would occur over the next 18 months. The SFAC consisted of a broad group of stakeholders, including representatives from the fishing industry, non-governmental organizations, government scientists, and the public.

Squid Fishery Advisory Committee Roster - 2023-2024

Name	Affiliation
Caitlin Allen Akselrud	Government Agency / Stock Assessment
Richie Ashley	Commercial/Recreational – Bait Fishery
Ryan Augello	Dealer/Processor
John Barry	Commercial Squid Fishing - Seine
Ken Bates*	Commercial Fishing – Small-Scale Access
Joe Cappuccio	Dealer/Processor
David Crabbe	Commercial Squid Fishing - Light/Brail
Mark Fina	Trade Association
Russel Galipeau	Non-Consumptive Users
Corbin Hanson	Commercial Squid Fishing - Seine
Greg Helms	Non-Governmental Organization
Porter McHenry	Commercial Squid Fishing - Seine
Tom Noto	Commercial Squid Fishing - Seine
Brian Susi-Blair	Commercial Squid Fishing - Light/Brail
Ken Towsley*	Dealer/Processor
Joe Villareal	Commercial Squid Fishing - Light/Brail
Anthony Vuoso	Dealer/Processor
Anna Weinstein*	Non-Governmental Organization
Dan Yoakum	Commercial Fishing - Access

* These members resigned from the SFAC prior to conclusion of the deliberative process and development of final recommendations

Meetings

The SFAC process included a series of in-person and remote meetings each discussing a specific set of topics for consideration. The meetings were designed to elicit detailed expressions of individual interests and commentary from members and directly respond to the SFAC goals. The SFAC process was supported by facilitation from Concur Inc. and subject matter experts with the Department, including insight from law enforcement. SFAC Members contributed a significant amount of their time to these meetings and their commitment to constructive engagement was invaluable. The meetings resulted in the set of recommendations found in this document. While not a consensus process, each recommendation had broad support from the majority of SFAC members. Summaries of each meeting's key outcomes are available on the Department's [squid fishery management web page](#).

- Meeting 1 – February 2023, Virtual – Introductions
- Meeting 2 – April 2023, Santa Cruz – Effort and EDM
- Meeting 3 – May 2023, Virtual – Effort and EDM
- Meeting 4 – July 2023, Virtual – Monitoring
- Meeting 5 – August 2023, Seal Beach – Monitoring
- Meeting 6 – October 2023, Virtual – Gear/ Habitat
- Meeting 7 – November 2023, Virtual – Gear/ Habitat and Access
- Meeting 8 – January 2024, Oakland – Access
- Meeting 9 – March 2024, Santa Barbara – Initial Proposals
- Meeting 10 – May 2024, Long Beach – Finalize Department Recommendations

SFAC Outcomes and Department Recommendations

For each meeting, the Department provided a presentation to frame a specific topic, presented interim data and results, and asked the SFAC for feedback based on the information provided. Members were able to hear differing perspectives of observed phenomena from other members. The dialogue provided SFAC members with an understanding of the fishery from different standpoints and engaged the committee in problem solving.

Recommendations were developed for the following topics: monitoring; empirical dynamic modeling; fishing effort and temporal closures; small-scale fishery access; nets and squid spawning habitat; and lighting and seabird habitat. At the final SFAC meeting, the Department reflected on SFAC discussions using MLMA guidance and provided a list of “narrowed options” which were selected based on the following criteria: specificity and clarity of the proposal, feasibility and enforceability, and presence of some demonstrated level of support. Using the criteria listed above, the Department provided a preferred option and the SFAC provided input and refinement to

work toward a more complete recommendation with as broad support as possible among SFAC members.

The SFACs' review of market squid fishery management was guided by the MLMA goals described in and key to the development of the MSFMP:

- 1) Ensure long-term resource conservation and sustainability.
- 2) Employ science-based decision-making.
- 3) Increase constituent involvement in management.
- 4) Balance and enhance socioeconomic benefits.
- 5) Identify implementation costs and sources of funding.

The five goals were referenced at the onset of each major topic reviewed by the SFAC and used to help guide meeting objectives. Throughout the SFAC process, committee members were asked to provide input on the following:

- Level of support for existing market squid fishery management (i.e., status quo).
- Potential and/or preferable modifications, if any.
- Confidence with whether the squid fishery management framework will keep the fishery sustainable in the face of climate change.

MARKET SQUID FISHERY AND MANAGEMENT BACKGROUND

Market squid (*Doryteuthis opalescens*) are short-lived (6 to 10 months) and die after spawning (Butler et al., 2001). Once sexually mature, market squid invest all metabolic energy into reproducing and die naturally within a few days to weeks. Market squid aggregate to lay eggs in the nearshore sandy bottom, which can happen throughout the year (Cheng et al., 2020). While spawning aggregations are found and fished primarily off central and southern California, market squid are found from Baja to Southeastern Alaska (Jereb and Roper, 2010). The population, which functions as cohorts of aggregations, is responsive to oceanographic changes resulting in large fluctuations in abundance and regional distribution (Suca et al., 2022; Van Noord and Dorval, 2017; Zeidberg et al., 2006).

Market squid landings in California are highly variable in time and space with a large market demand, primarily from international markets. The market squid commercial fishing industry is routinely the largest in California in volume (amount of fish landed) and value (ex-vessel revenue). The fishery has averaged approximately 70 thousand tons landed each calendar year since the MSFMP was implemented. The fishery is valued at an average of \$48 million in ex-vessel revenue each calendar year since 2005 (CDFW, 2024). In addition to commercial fishing, many recreational anglers use squid as dead or live bait to catch finfish species. (CDFW, 2023)

Implementation of the MSFMP followed an especially productive six-year period, followed by another productive period from 2010 to 2015 when the fishery approached or surpassed the 118,000-ton seasonal cap for five consecutive fishing seasons (Figure 1). The market squid fishing season runs from April 1 to March 31 of the following year. Since the implementation of the MSFMP, the Department observed the lowest statewide landings in 2019 at 13.6 thousand tons (Figure 1). Importantly, the relative value of market squid has increased substantially in recent decades. The ex-vessel value doubled from 2015 to 2023, increasing from an average of \$0.30 per pound to \$0.60 per pound (CDFW, 2023). In 2022, the value for time spent fishing market squid was noticeably larger than it was 10 years ago and is an important indicator for how fishery dynamics can change over time.

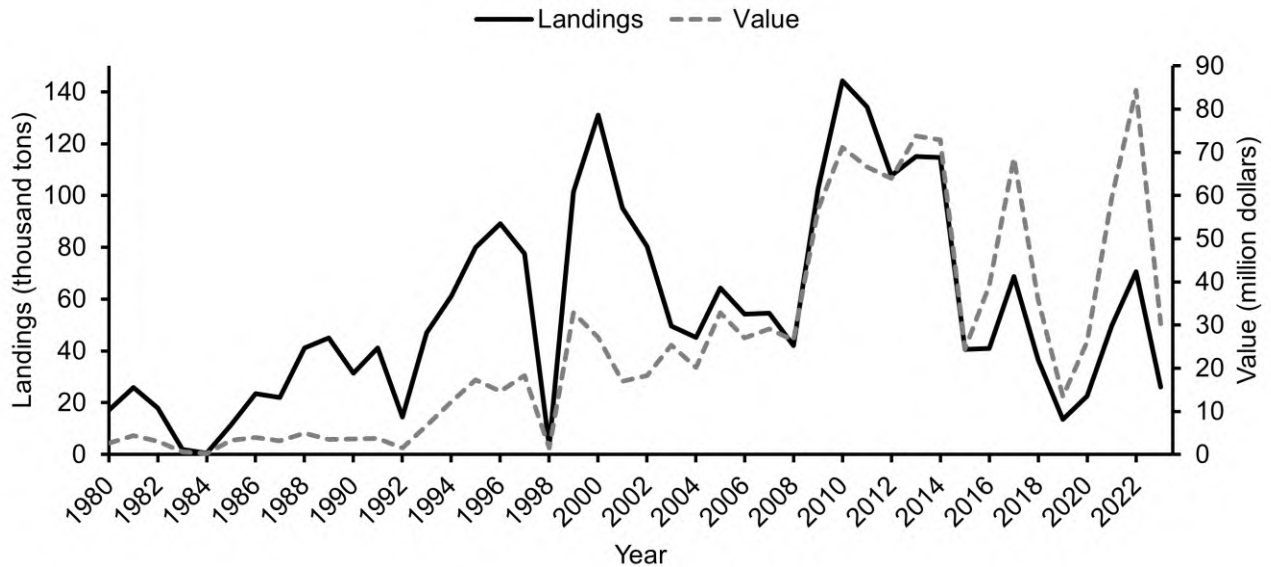


Figure 1. Market squid fishery landings (thousand tons) and value (million dollars) by calendar year from 1980 to 2022.

The major squid fishing areas are located on the central coast of California and the Southern California Bight with a hub of fish businesses in Monterey Bay, Ventura, and San Pedro. Notable fishing hotspots can be found off the Monterey Peninsula, the Northern Channel Islands, and Santa Catalina Island (Figure 2). Market squid spawning and fishing activity in California are typically considered asynchronous and seasonal, occurring between the area north of Point Conception (“northern region” or “north”) and the area south of Point Conception (“southern region” or “south”). In fall and winter, fishing takes place almost exclusively in the southern region while the northern region typically makes up more of the landings during the spring and summer.

The commercial fishery was historically concentrated in the southern part of California. However, landings and the number of vessels fishing have increased around the Monterey Bay region since the 2014-2016 El Niño and correspond with changing fishery dynamics and oceanographic warming events in the California Current Ecosystem (CCE; Chasco et al., 2022). While a large body of scientific literature that explores squid dynamics and biology in response to abiotic influences (i.e., temperature, dissolved oxygen, and upwelling) exists, little is known regarding predictive fisheries models that explore long-term market squid fishery-dependent information in relation to climate drivers (Suca et al., 2022; Munch et al., 2018; Navarro et al., 2018; Ralston et al., 2018).

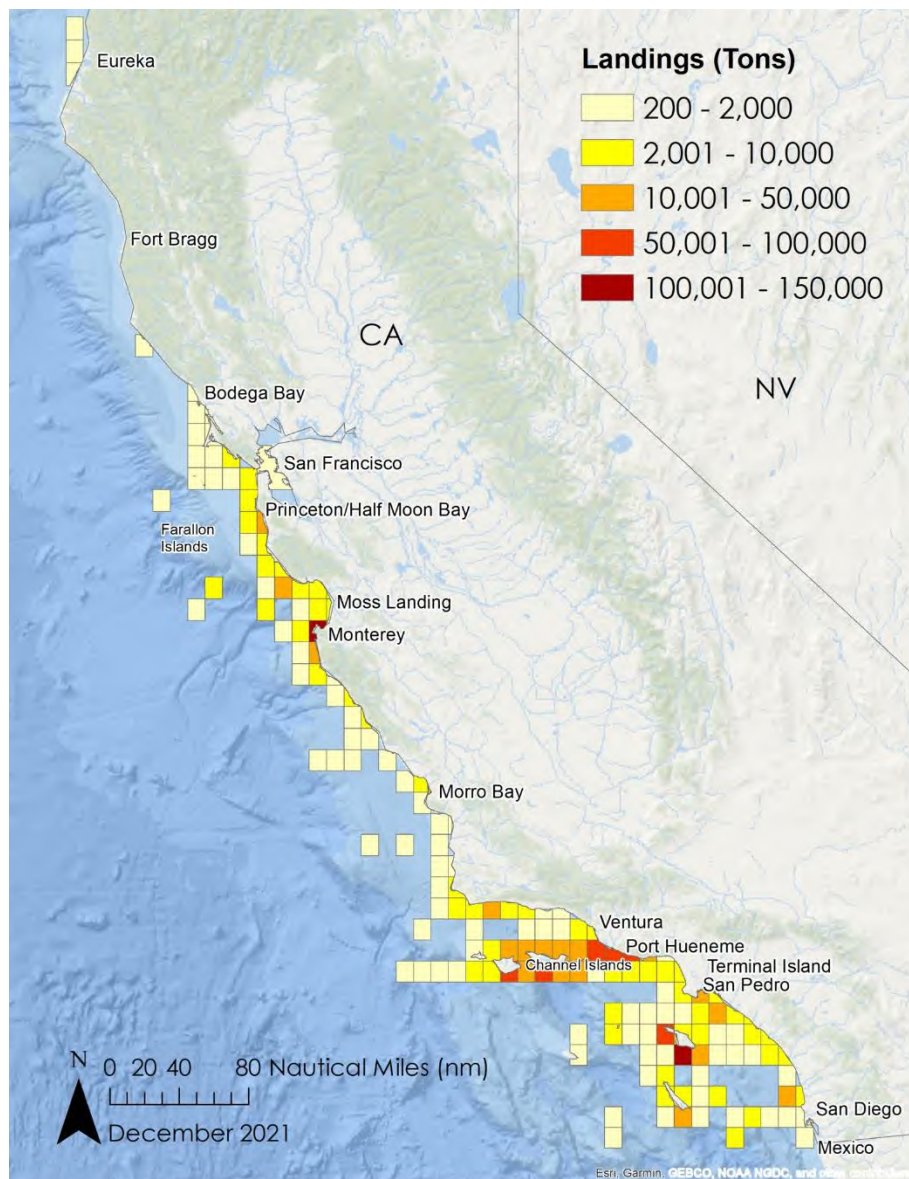


Figure 2. Market squid fishery landings (tons) summarized as a heat map by CDFW fishing block from 2005 to 2021.

Although market squid are included in the federal Coastal Pelagic Species (CPS) Fishery Management Plan (FMP), the California fishery is primarily managed at the State-level through the MSFMP. In addition to the MSFMP fishery control measures (see Fishery Management Plan), the CPS FMP and Magnuson-Stevens Act required that Maximum Sustainable Yield (MSY) be determined for all species in the federal plan. Without an accurate biomass estimate, determining MSY for market squid was problematic, hence the Pacific Fishery Management Council (PFMC) approved the use of egg escapement as a proxy for MSY for the market squid fishery. The estimates of egg escapement are evaluated in the context of a threshold (proxy set at 30%) that allows for

sustainable reproduction year after year (PFMC, 2024). With support from the National Oceanic and Atmospheric Administration (NOAA), the Department evaluates the 30% target escapement statewide by fishing season (CDFW, 2024). Additional conservation is provided by California's Marine Protected Area (MPA) network, which was designed with consideration for market squid spawning grounds and provides for additional escapement.

SFAC DISCUSSIONS AND DEPARTMENT RECOMMENDATIONS

MONITORING

Fishery monitoring efforts, from data collection to fisheries modelling, were a fundamental component during SFAC meetings and the market squid fishery management review. Long-term monitoring and time series data supported science-based discussions during the management review process. Three core market squid fishery monitoring tools and fishery dependent datasets managed by the Department were discussed:

- Landings – Marine Landings Data System
- Logbook – Marine Logs System
- Biological – Market squid fishery dockside sampling

Marine landings data, collected since 1969, are now submitted by fish dealers and businesses through electronic fish tickets (E-tix). The logbook program includes on-the-water effort and location information submitted on paper logs by vessel operators. The dockside sampling time series began in 1998.

Department staff monitor offloads at the docks and subsample squid for processing in a laboratory. Importantly, the dockside sampling program supports bycatch monitoring and provides inputs for the egg escapement modelling as a measure of relative spawning potential over time.

The market squid fishery logbook program began in 1999 shortly after the Legislature passed Senate Bill (SB) 364 (Sher), deeming it necessary to adopt and implement squid fishery management measures. The logbooks (Appendix I) are a requirement under Fish and Game Code (FGC) §8026, and California Code of Regulations (CCR) Title 14 §149. The logbook program enables the Department to monitor daily fishing activity, fishing trends, and provide more precise location and catch data than the landings dataset. Logbook data are useful in marine spatial planning, particularly during discussions of MPA locations and scoping for offshore wind and marine aquaculture (Morris Jr. et al., 2021). The logs were designed to learn about fishery and resource dynamics, and was originally intended to aid in the development of population models (CDFW, 2005).

While the Department's collection of marine landings data transitioned from paper receipts to electronic fish tickets in 2019, the market squid fishery logbook data are still collected through paper logbooks, post mail, and manual entry by Department staff (Appendix I). The objectives in working with the SFAC to review the market squid fishery logbook program were to:

- Better understand the current use of logbooks,

- Qualify and quantify the validity and accuracy of the information provided on paper logs,
- Evaluate the relative importance/usefulness of existing logbook data fields,
- Gauge interest in electronic logs, and
- Discuss areas for data collection improvement and/or techniques to collect data electronically.

The market squid fishery logbook data are currently used:

- To observe fishery dynamics over a finer spatial and temporal resolution,
- To explore novel population modelling techniques with EDM,
- In marine spatial planning such as fishery impact analyses during offshore wind and aquaculture scoping,
- For fishery business operations and record keeping, and
- For enforcement.

After reviewing current and potential future uses for market squid logbook data, the SFAC confirmed broad-based support to move away from paper logbooks and transition towards electronic data collection. Multiple vessel operators volunteered to participate in a pilot program, if available, to help the transition. Additional interest in logbook data improvements included capturing information about lightboats through E-fix. Currently, the only documentation lightboat operators have of their lighting activity is through paper logs, which can be cumbersome for operators, permit holders, and the Department to source as proof of fishing activity.

As part of SFAC meeting 4, Kate Wing, a contractor with the Department, shared a mock-up of a potential electronic log (e-log). The mock-up entailed an account set up form, a function to record the start and end of trips, buttons with GPS locations for different types of fishing events such as lighting, and other important details (Figure 3). In the effort of modernizing and advancing the market squid logbook, the Department, EDM team, and SFAC described and discussed specific examples of modifications to data fields and the information collected. Though not a comprehensive list, below are some examples and suggested modifications:

- Add fields for seine vessels to report time spent searching and lighting – Time spent searching and lighting should be reported by all vessels, not just lightboats, and are important metrics for calculating fishery CPUE.
- Add more detailed information about market orders and economic influences on effort or catch.

- Add more detailed monitoring of marine mammal interactions during fishing activity.
- Monitor the use of marine mammal deterrents.
- Improve reporting on vessel and net specifications.
- Make it easy for the permit holder and vessel operator (if different) to access vessel or trip reporting.
- Minimize the amount of time that operators need to interact with reporting forms while actively fishing (i.e., consider Bluetooth sensors on hydraulics).

SEARCHING	Start	Stop
LIGHTING	Start	Stop
BRAILING	Start	Stop
SEINING	Start	Stop
Additional event questions ...		

The START and STOP buttons would automatically generate timestamps and record GPS locations

Figure 3. Example of a potential electronic log form with start and stop buttons for various fishing events. Mock-up designed by Kate Wing.

Electronic data collection in the form of an e-log could generate more timely and reliable information as well as reduce time and effort for vessel operators and Department staff. By minimizing manual entry and written records of detailed information such as GPS coordinates, the validity and accuracy of data collected can improve. An e-log also enables more real-time monitoring, better quality assurance and quality control, and improved compliance.

Additional topics discussed that were deemed outside the scope of the Department's active monitoring programs included interest in utilizing observers on vessels, primarily to document wildlife interactions and bycatch during fishing and lighting. Vessel operators and crew explained that seining operations are not conducive to and can be unsafe for on-board observers. Due to the existing investment in dockside observations of bycatch and the logistical constraints of getting observers on vessels, equivalent observations could be made from a nearby Department vessel. Continued outreach with the fleet and upfront

investment in well-planned monitoring tools could provide more detailed documentation of fishery interactions with other wildlife.

Narrowed Options:

- Develop an e-log for the California market squid commercial fishery

Department Recommendation:

- Develop an e-log for the California market squid commercial fishery

EMPIRICAL DYNAMIC MODELLING

While market squid is currently considered a sustainable fishery, a need exists to modernize management and planning in the context of climate change. In the primary fishing grounds, located in the southern region of California, market squid landings, larval abundance, and size at maturity declined during major El Niño events. As noted above, cumulative landings have increased in central and northern California since the 2014-2016 El Niño. Climate drivers can alter the seasonal and spatial cycles in spawning activity, which in turn can impact fishing behavior, fleet dynamics, and socioeconomics of fishing communities (CDFW, 2024; Chasco et al., 2022). Given that El Niño Southern Oscillation (ENSO) variability is likely to increase in the future, a better understanding of how market squid respond to environmental forces is needed as conditions shift (Ohman et al., 2020). Sea surface temperature (SST) is one of the primary sources of information on ENSO patterns.

Empirical dynamic models (EDMs) capture nonlinear dynamics and system drivers that haven't been measured by including lags (i.e. previous measurements of the same data stream at different time steps). EDMs can be used to make predictions based on patterns in long-term data such as environmental drivers and are unbiased by predetermined model equations. EDMs can work particularly well for short-lived species (Giron Nava et al., 2017; Munch et al., 2018). California market squid fishery data and data sets include landings and logbook data on vessel-specific effort and dockside sampling, larval abundance surveys conducted by both California Cooperative Oceanic Fisheries Investigations and industry researchers with the California Wetfish Producers Association (CWPA), and juvenile abundance information resulting from NOAA surveys of juvenile rockfish. Preliminary work conducted by Dr. Stephan Munch and Bethany Johnson using EDM indicated excellent capability to forecast market squid landings, tease out complex spatial and temporal dynamics, and highlight survey information of greatest value.

2022-2024 EDM Post-Doc Objectives:

- Forecast future squid landings and CPUE (i.e., proxy for market squid abundance) over relevant temporal and regional geographic scales.
- Incorporate environmental drivers (i.e., SST) into EDM.
- Seek stakeholder input on calculating CPUE, management options, and desired fishery performance metrics.
- Set up a harvest control analysis to evaluate CPUE under different fishing effort and climate scenarios (See Fishing Effort and Temporal Closures).

The EDM post-doc investigator, Dr. Lucas Medeiros, was onboarded in July 2022 to tackle the objectives listed above. Initial SFAC meetings focused on introducing EDM and the various sources of time series data from 2000 to 2023. Early data exploration at quarterly resolution indicated apparent differences between SST and fishery dynamics in the regions of California north and south of Point Conception. Given the differences, the modelling team constructed separate models of the northern and southern regions of the fishery, delineated at Point Conception, with quarterly forecasts.

Both quarterly time series exhibited seasonality in SST with more variability in SST in the South than in the North. Landings and logbook catch were highly correlated, and initial comparisons of catch and effort were tightly coupled and not independent (i.e., landings/catch scaled with time spent fishing). Once the modelling team incorporated search time into the effort metric, landings became more decoupled from effort, which is necessary to effectively use CPUE as a proxy for abundance. Hindcasts were performed to predict CPUE as an estimate of squid abundance based on lags in CPUE, effort (i.e., hours fishing and searching), and SST. The northern model more accurately predicted past CPUE than the southern model, while both were far more accurate in their predictions than an average seasonal trend. Additionally, positive correlations were found between estimates of fishery CPUE and paralarval CPUE informed by CWSA surveys, particularly at biologically relevant lags. Positive correlations at biologically relevant lags help to validate the use of CPUE as an abundance indicator and provides support for the continued monitoring of paralarvae.

The SFAC was well-positioned to build on collaborative data gathering and accountability. Modelling efforts were informed by commercial squid vessel operator experience and knowledge, particularly when attempting to accurately calculate effort. Importantly, EDM work helped to prioritize the types and frequency of data collected in a transition to electronic, real-time monitoring.

The harvest control analysis was constructed by imposing varying degrees of fishing effort and forecasting landings and CPUE under three different SST scenarios. While SST states had only modest impacts on forecasts, larger impacts were observed when changes in fishing effort were imposed in the northern and southern regions. The results supported discussions about fishing pressure and time spent fishing (see Fishing Effort and Temporal Closures). EDM struggled to capture extreme highs and lows of landings and SST in either region. EDM is an area for further exploration given that expansions, shifts, or dramatic changes in

market squid landings or proxies for abundance at various life stages are most likely to occur under environmental extremes.

Narrowed Options:

- Continue forecasts with EDM (2024 onward)

Department Recommendation:

- Continue forecasts with EDM (2024 onward)
 - Test forecasting for industry and management planning.
 - After testing period and the development of real-time monitoring for fishing effort (e-log), explore the potential use of EDM to help inform harvest control rules as management procedures.

FISHING EFFORT AND TEMPORAL CLOSURES

At the onset of the SFAC meetings, stakeholders were interested in pursuing additional temporal and spatial closures in the Monterey Bay Area, as well as exploring lighting dynamics (See Lighting and Seabirds, below). Data summaries were initially reviewed to aid discussions about fishery dynamics and potential changes since the development of the MSFMP.

An iterative approach was used between the modelling team and the SFAC to quantify fishing effort in EDM, resulting in significant discussion about some of the drivers that impact fishing effort. Economic and market factors discussed include trade wars, processing capacity, freight costs, availability of cold storage, and market demand. Overall reliance on squid fishing has increased with fishery closures such as Pacific sardine (*Sardinops sagax*), incidental catch restraints, or limited markets in other fisheries such as northern anchovy (*Engraulis mordax*). Fishing also becomes more competitive, particularly when concentrated in easily accessible fishing locations such as Monterey Bay.

SFAC members confirmed that in their experience, effort and dynamics are distinct between the north and south regions, and the regions should be discussed and modeled separately. While the Department manages the fishery statewide by fishing season (April 1 to March 31), the SFAC determined a need to consider the biogeographic and fishery differences between the two regions. The southern region made up the bulk of the landings historically, but in 2014 the northern region exceeded the south for the first time since the MSFMP (Figure 4). In 2020, the Department documented more squid seiners offloading in the Monterey port area than any season prior.

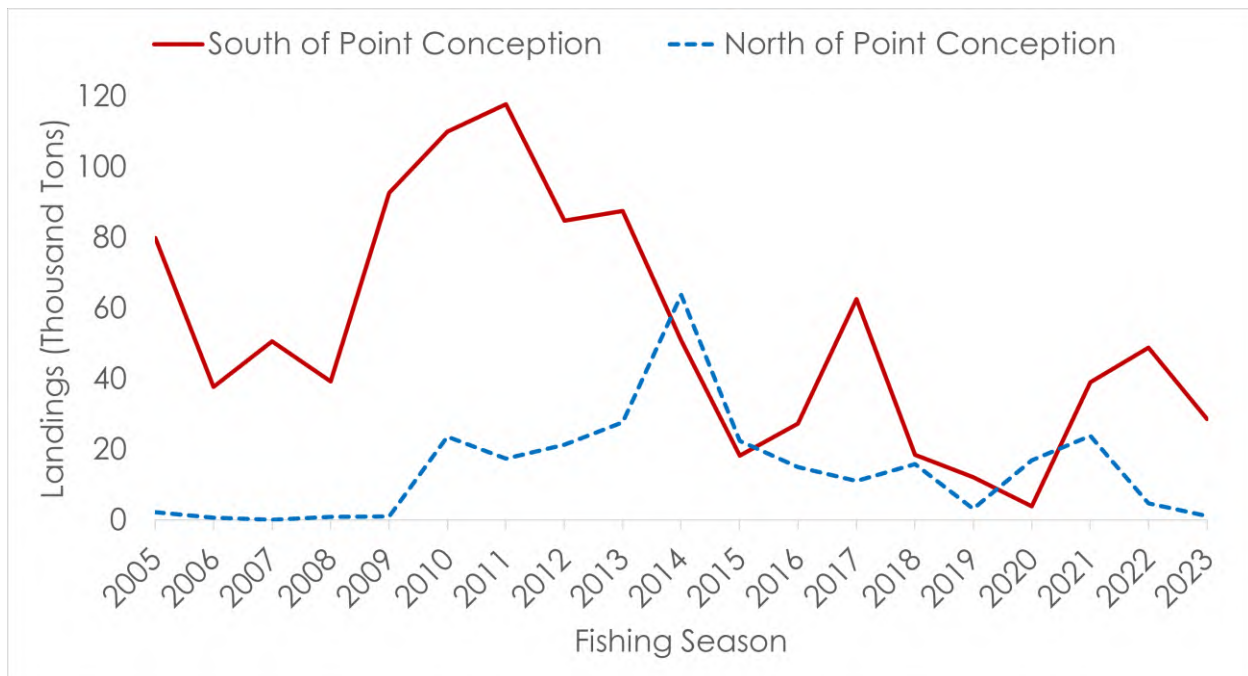


Figure 4. Market squid fishery landings (thousand tons) by regions south and north of Point Conception and fishing season (April 1 to March 31 of the following year).

In 2021, a petition was submitted to the Commission requesting a weekend closure extension and incorporation of half-day closures on weekdays in the Monterey Bay Area. The original request was to extend the weekend closure by 12 hours from noon Friday to midnight on Sunday, and to close commercial market squid fishing from noon to midnight Monday through Thursday. The rationale for the proposed change was the concern that increased fishing pressure in the Monterey Bay Area was not allowing enough time for squid to spawn. The petition was not considered at the Commission and was referred to the SFAC process.

While the weekend closure was the primary topic discussed under fishing effort, additional feedback included interest in re-visiting the seasonal catch limit of 118,000 tons, exploring a daily catch limit on the number of sets or trips to slow down the rate of fishing, and a seasonal closure that varies by region to allow squid “scouts” more time to build spawning aggregations. The underlying goals behind these interests were to boost localized spawning potential, provide for long-term sustainability and added conservation, and improve fishery yields.

SFAC members voiced strong support to keep a seasonal catch limit (SCL) in place, particularly to provide market stability. The SCL was historically only utilized during prolific periods of squid abundance (i.e., 2010 to 2014). Some

SFAC members were interested in exploring alternative, forecast-driven, or in-season ways to manage catch. Though EDM forecasting of CPUE could be an avenue to estimate future abundance, managing catch has more uncertainty and less assurance compared to managing effort or focusing on proportional egg escapement (PFMC, 2024). The challenges of managing catch or quotas in a changing climate stem from rapid squid population turnover (on average 6 months) and responsiveness to environment, and high natural mortality (CDFW, 2024). Daily catch or trip limits are also difficult to enforce.

Without the ability to establish a biomass estimate for squid and the fact that landings scale with effort (see Empirical Dynamic Modelling), temporal closures that allow uninterrupted spawning (i.e., the weekend closure) as opposed to catch controls (i.e., SCL or daily catch limits) are considered more effective when squid abundance is low. Based on dockside sampling data, squid landed immediately following the weekend closure have spawned more than squid landed later in the week (Leos, 1998). The increase in spawned squid early in the week provides evidence for the value of the weekend closure to facilitate uninterrupted squid spawning and greater proportional egg escapement. While a longer-term closure may allow squid aggregations to build at popular fishing sites, concern and uncertainty exists about the timing of such a closure given that the early part of the spawning window can vary seasonally and regionally.

The EDM harvest control analysis was used in an attempt to help understand how changes in fishing effort might impact fishery yields. Results from this analysis suggest that a reduction in fishing effort in the northern region of the fishery could provide improved yields and fishing efficiency. In the southern region, yields increased with increasing fishing effort and declined with a reduction in time spent fishing, though the greatest yields occurred earlier in the fishing week. Egg escapement monitoring shows a similar result. On quarterly and regional scales, relative escapement is lower and therefore relative fishing pressure is higher in the northern-most region on the central coast around the Monterey Bay area (Dorval et al., 2013).

Given the EDM results, monitoring findings, and feedback from the SFAC, an extension to the front end of the weekend closure Statewide provides an added buffer for sustainability, is unlikely to negatively impact overall yields, and is enforceable. In addition to a statewide extension, key differences between the northern and southern regions of the fishery drove the Department's recommendation to extend the closure longer at the back end for the Monterey Bay Area (using a reference line of latitude to be defined). Differences between the regions that guided the Department's rationale

include transit distance to spawning grounds, business operations, lighting dynamics, biogeography, relative egg escapement estimates, and forecasted landings and CPUE from the EDM harvest control analysis.

Current Regulation:

Statewide weekend closure from noon on Friday to noon on Sunday

Narrowed Options:

- Start time of weekend closure: Begin closure earlier on Friday at 7am
- End time of weekend closure: Extend closure to Sunday sunset or 7pm or Monday 12am or 7am
- Location of weekend closure:
 - Statewide
 - North of Point Conception (northern region)
 - District 16 and/or District 17
 - Monterey Bay Area – (using reference line of latitude)

Department Recommendation:

- Extend the weekend closure
 - Statewide – start time of weekend closure will begin 7am Friday
 - Monterey Bay Area (to be defined) – end time of weekend closure extended to Sunday at midnight

SMALL-SCALE FISHERY ACCESS

Since 1990, most commercial squid landings were made by seine vessels with upwards of 4,000 unique landings per year (CDFW, 2023). With support from a tender, seine vessels use purse or drum seine, also known as round-haul gear to encircle squid. Brail vessels use mechanical or handheld scooping, which leads to a smaller-scale operation. On average, very few landings are from brail-permitted vessels, though brail landings spiked in the 2010-2011 and 2011-2012 fishing seasons due to an unintentional 2-ton allowance loophole that allowed commercial brail operations to keep fishing after the seasonal catch limit was reached and the fishery was closed. The desire to land more squid using brail led to a two-fold increase in the number of brail permits through upgrades from lightboat permits (Figure 5). Inversely, lightboat permits have declined by half. Seine permits have steadily declined from 92 permits in 2005 to 69 permits in 2023, likely due to attrition, two-for-one permit transfers to increase overall tonnage on the vessel, latent permits, and lack of fishing opportunities.

While the MSFMP lays out capacity goals for the market squid commercial restricted access fleet (Figure 5), the goals are operational in nature. Results from the EDM harvest control analysis suggest that historical levels of fishing effort statewide, which scales with number of vessels, have not exceeded sustainable harvests. It is unlikely that exceeding the capacity goals, especially brailing activity, will negatively impact sustainability. Of the 69 vessel permits issued, only 59 reported squid landings, and of the 47 brail permits issued, only 10 reported commercial landings sold as dead squid in 2023.

SFAC members asked that the market squid fishery restricted access permit ownership and transfer process be more transparent. The Department generated summaries of permit transfers and use over time, which can be incorporated into the ESR for more routine updates (Figure 5). For confidentiality reasons, permit information must be summarized and the Department cannot provide specifics on individual permit ownership or use.

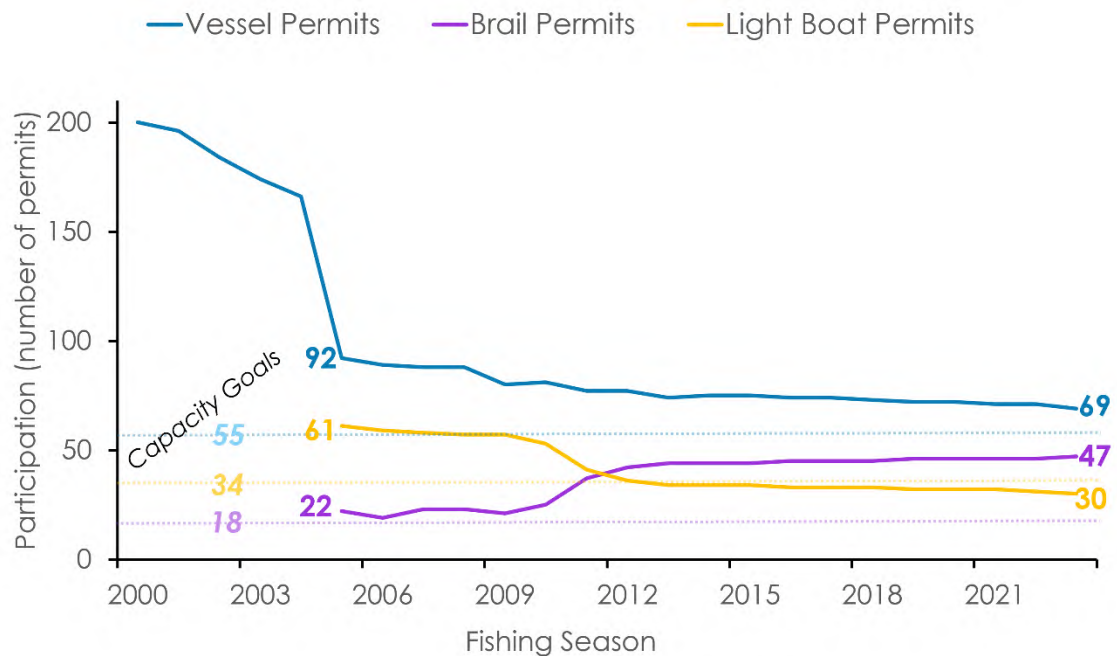


Figure 5. Participation (number of permits) in the commercial market squid restricted access fishery from 2000 to 2023. Capacity goals described in the MSFMP are delineated as dotted lines.

Discussion continued around underutilization of the brail permits, and an effort to understand and define the term “small-scale” for the California market squid fishery, which included reference to the Commission’s recently developed Coastal Communities Policy.

Small-scale access was also a topic identified early in the SFAC process with a request to initiate discussions around fishery access sooner than the final topic meeting. Small-scale access was therefore incorporated as a topic over the course of multiple meetings through the SFAC process.

In terms of interest in improved small-scale access, various proposals were discussed:

- Experimental fishing permits (EFPs),
- Small-scale/low volume fishing,
- Developing local markets in smaller ports,
- Providing dead bait for other commercial fisheries,
- Selling local catch at farmers’ markets or local restaurants,
- Use of low volume gear (i.e., hand jig and hand brail),

- Special allocations of up to 10 tons per day and 10,000 tons per season for specific port areas, and
- Establishing an open access small-scale allowance.

A primary concern raised was that if market squid aggregate near more remote fishing harbors (i.e., Fort Bragg), the fishable biomass is inaccessible to commercial boats in those harbors under the current restricted access policy. The market squid fishery is focused on a high-volume export market and the restricted access fleet has shown a propensity to develop infrastructure in response to squid presence. There is uncertainty in whether a different, economically viable, and small-scale avenue exists in regions where squid aggregate and are less accessible to the active fleet.

As an alternative to acquire a more expensive seine permit, multiple SFAC members pointed to the potential to purchase a brail permit as an existing opportunity to gain access to the commercial market squid fishery. Existing permit holders noted that the restricted access permit program was enacted to create a moderately productive and specialized fleet. Allowing others to create an open access portion of the fishery, particularly at high volume, is seen as unfair to those who have made substantial investments to follow the regulatory framework put in place by the MSFMP. Such a change would also call the entire Commission limited access policy into question and could have broad implications in other limited access fisheries.

The SFAC also discussed the possibility of commercial vessel operators interested in fishing squid using existing permits – purse seine or brail. There are ways to allow another captain to fish an existing limited entry permit, as the operator and the permit holder/vessel owner do not need to be the same individual or entity. Exploratory jigging and modifying regulations to allow for intermittent jigging was also discussed. Additionally, a suggestion to explore a fishery “pop-up” on the more isolated northern coast of California was mentioned.

Many of the proposed quota allocations and harbor-based options would be difficult to manage, challenging to enforce, and could create conflicts with existing commercial operations. The SFAC discussed that options for improved small-scale access should be explored as a new sector that is unique or outside of the business operations built under the restricted access program. The EFP would allow the Department a testing and evaluation period to determine feasibility, enforceability, and unforeseen negative impacts of a truly unique small-scale sector prior to moving forward with a new policy. The Commission

recently approved a new EFP process in which participants can apply for opportunities to fish.

Narrowed Options:

- Experimental Fishing Permit (EFP) –
 - Small-scale/low volume
 - Develop local markets
 - Dead bait, farmer markets, local restaurants
 - Low volume gear (i.e., hand jig and hand brail)
 - Outside current major fishing areas
- Open-Access Small-Scale – This would bypass the EFP described above and go straight into a policy for an open-access sector

Department Recommendation:

- Experimental Fishing Permit (EFP)

NETS AND SQUID SPAWNING HABITAT

In the California market squid fishery, bycatch is minimal and marine mammal interactions that lead to mortality or serious injury are rare (Marine Mammal Protection Act Category III). The low bycatch, in large part, is because seiners are specifically targeting squid aggregations and the action of pursing a seine net allows for mammals or large predators to jump in and out of nets or for the active release of an animal by dipping the side of the net as it gets closer to the vessel. Most of the bycatch observed are other incidentally caught CPS such as Pacific sardine, Pacific mackerel (*Scomber japonicus*), and northern anchovy because CPS will occasionally school with market squid.

Benthic species are, however, observed in small amounts during dockside sampling and fishery offloads, which indicate that nets contact spawning habitat (i.e., nearshore sandy bottom). Squid eggs are also present in offloads about 30% of the time though eggs can be laid in the net during transit or come from the egg bed. Squid eggs serve no benefit to the fishery and the presence of squid eggs can be cumbersome to processing.

The Department has heard interest expressed from various stakeholders and SFAC members to consider net restrictions as a method to mitigate impacts to spawning habitat and egg beds. No requirements or specifications currently exist for seine net use while fishing market squid in California. The market squid logbooks were designed to gather information about fishing gear including nets. However, the Department does not have a strong understanding of net metrics and changes over time due to extremely low compliance rates for vessel profile page submittals (only four seiners reported this information in 2022). The data collected from interviews with vessel operators during the Department's dockside sampling are more robust and provide a more accurate understanding of net specifications and changes over time. Since 2019, net depth is, on average, longer in the northern region of the fishery compared to the southern region. Conversely, the average fishing depth is routinely deeper in the south and shallower in the north. As a result, fishing grounds are shallower, but nets are deeper in the northern region.

While not common, Department data show nets are interacting with bottom habitats, egg beds, benthic species, and prohibited species. As a result, the Department determined it prudent to consider additional measures to minimize adverse effects on habitat caused by fishing as guided by the MLMA. Some ideas proposed included prohibiting the use of chains or heavy cable lines, requiring the use of a ribline to modify how the seine purses, prohibiting submerged lights, and establishing a maximum net depth or minimum fishing

depth. Some members of the seine fleet voiced a strong reluctance to pursue net depth or fishing depth restrictions given logistical and financial constraints.

As an alternative measure, many vessel operators have employed the use of a ribline, which creates a “ribbing” or additional webbing between the lead line and the purse line. SFAC members and members of the public explained that this causes the net to flutter or bounce when it does contact the bottom as opposed to dragging. The ribline is intended to reduce the likelihood of pursuing benthic bycatch, including squid eggs, and to reduce the impact on the sandy bottom habitat, while simultaneously strengthening the integrity of and preventing damages to the net. The Department conducted a survey in 2020 and discovered that roughly 40% of the 56 vessel operators interviewed had switched to a ribline, which was up from an estimated 15% in 2016 (Figure 6). Since the 2020 interviews, more operators/owners have switched to a ribline including members of the SFAC. The Department estimates that more than 50% of the fleet is now using a ribline.

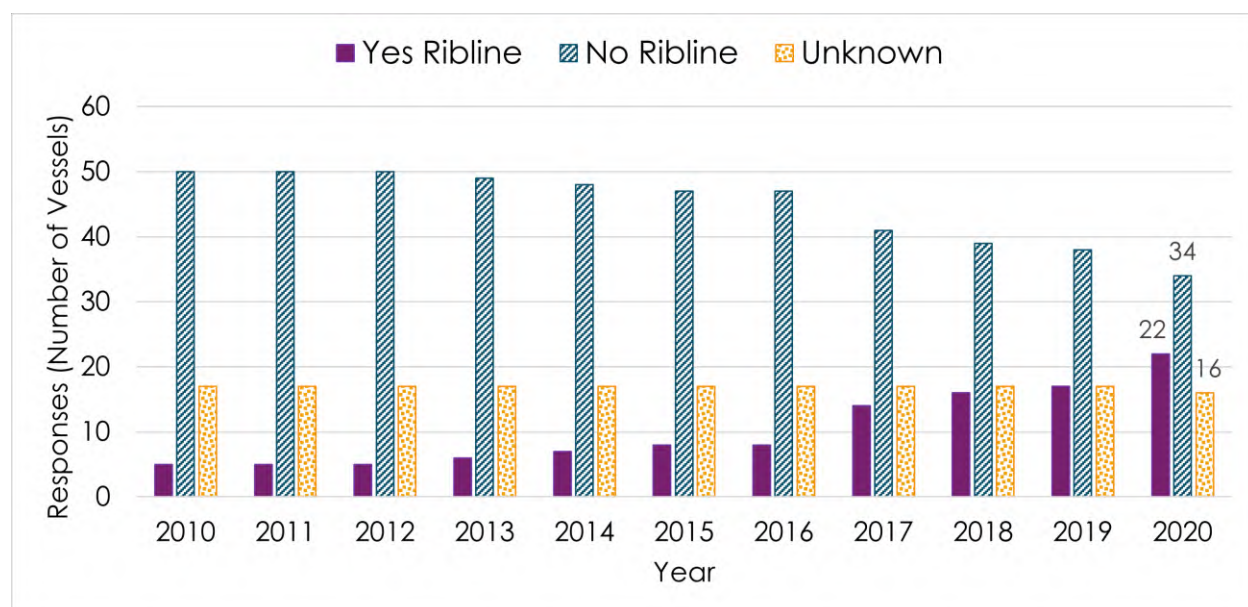


Figure 6. The results of a survey conducted by the Department in 2020. Responses from vessel operators, described by year as yes to using a ribline, no ribline, or unknown if the operator could not be reached.

Dockside sampling data were used to evaluate the extent that nets disturb egg beds in relation to proposed net modifications. Observations of squid eggs in the offloads were roughly half as likely when vessels had a ribline. The Department used the following two conditions as indicators of seine nets touching the bottom: (1) the presence of eggs aged past 24 hours and (2) the presence of benthic bycatch. In the northern region, a 10% decrease in benthic habitat

interactions was observed when the vessel had a ribline. While a positive impact with riblines was not detected in the southern region during this timeframe, discerning these effects was difficult as dockside sampling efforts were minimal at southern region ports due to challenges posed by the COVID-19 pandemic, staffing shortages, and a lack of fishing activity. Statewide, the likelihood of observing a specific benthic species declined when a ribline was employed for almost all documented benthic species.

As guided by the MLMA, mitigating habitat impacts and minimizing bycatch remains a high priority for the Department. In addition to pursuing gear modifications, improved data quality and monitoring through the use of e-logs should clarify the interactions between net depth, fishing depth, bycatch, and habitat. A better understanding of these interactions could inform future management actions and additional regulatory changes, if needed.

Narrowed Options:

- Require a ribline.
- Require a ribline when fishing shallower than a specified depth boundary.
- Require rope purse lines, no cable or chains (i.e., no metal lines).

Department recommendation:

- Require a ribline and rope purse line.

LIGHTING AND SEABIRD HABITAT

In addition to evaluating direct potential impacts to spawning habitat, discussions occurred around the use of lights over time and the potential impacts to land-based wildlife and the public. Current lighting regulations include:

- Permit required to light for squid for the purpose of commercial take
- Logbook required
- No more than 30,000 watts of lights to attract squid per vessel
- Entire filament of each light shielded
- Lower edges of shields parallel to the deck of the vessel

The SFAC was interested in improving our understanding of the dynamics between daytime and nighttime fishing and looking at the use of lights and lightboats over time. Stakeholder interest in spatial closures was primarily focused on restricting lighting activity around nocturnal seabirds during particularly sensitive life stages and to improve visitor experience at the Channel Islands National Park (Park), with an initial suggestion to close the Park to all squid lighting year-round. Some SFAC members also expressed interest in additional lighting restrictions, specifically that the light bulb (not only the filament) be shielded. Using logbook data, the Department provided various maps and summaries to give context to historical fishing and lighting activity, as well as MPA development over time and space.

According to set times reported on fishing logs, the proportion of fishing sets made at night is greater in the southern region (75%) relative to the northern region (59%). Furthermore, smaller sets are more common in the daytime in the North. SFAC members expressed that they are more likely to encounter squid during the day in the North and suggested that this is due to differences in spawning behavior between the regions. The seiners are more reliant on nighttime fishing and lightboats in the South.

The MPAs on the northern Channel Islands were implemented in 2003 and considered seabird activity as well as market squid spawning during the designation process. The SFAC discussed relative fishing activity in the northern Channel Islands MPA areas leading up to the development of the MSFMP. From 1999 to early 2003, approximately 25% of overall squid catch for this region came from fishing sets made in areas that subsequently were closed to commercial market squid fishing and lighting. Members of the fishing fleet referenced the closure of the north side of Anacapa Island as a substantial loss of fishing grounds at the time. The current lighting regulations were also

implemented, in large part, using results from lighting research on impacts to nocturnal seabirds conducted during the 1999 to 2005 timeframe (CDFW, 2005).

Most vessels and lightboats continue to use metal halide as the predominant attracting light type, which is listed on approximately 75% of logbook profile pages since 2005. In order of most prevalent to least, the other attracting light types used include high pressure sodium, incandescent, and halogen. To support SFAC discussions around lighting, Department staff took photos of light configurations and summarized compliance in the three major port areas (Monterey, Ventura, and San Pedro) in 2023. Almost all vessels in Monterey and San Pedro had 95% to 100% of their bulbs fully shielded, while shielding compliance was more ambiguous for a subset of Ventura-based vessels. Some vessels also had unshielded forward-facing lights, which are illegal to use during squid fishing because they can attract and aggregate squid. The SFAC and members of the public explained that current shielding requirements are set up to provide some light spread on the water to improve the capacity to aggregate squid. SFAC members also mentioned that forward-facing lights are useful for safety and navigation.

Because the historical research that went into the existing lighting regulations is still relevant today and most commercial squid fishing lights are compliant with those regulations, the SFAC suggested that a “Best Practices” for the fishery could be a useful management tool and more appropriate than a regulation change. A Best Practices could inform the fleet of how to employ precautionary conservation measures near shorelines and be used to mitigate less desirable or unenforceable lighting behaviors. Using scientific literature provided by SFAC members and mitigation strategies summarized by Dr. Travis Longcore out of the University of California, Los Angeles, the Department expanded on the body of research used to develop the MSFMP, and with advice from the SFAC, drafted a Best Practices throughout the course of the SFAC meetings (Appendix II).

At the final SFAC meeting, a proposal was made to close Anacapa, San Miguel, and Santa Barbara Islands to night-time squid fishing from February to October, which is considered a key nesting and breeding period for the California listed (Threatened) Scripp's murrelet (*Synthliboramphus scrippsi*). Most of the commercial squid fishing and lighting activity takes place in the fall and winter at these islands and does not overlap with known nesting and breeding seasons, though there are occasionally landings from February to October that add considerable ex-vessel value to the fishery. A strong opposition was voiced from many SFAC members, who explained that lighting in the areas of concern has already been reduced over the last 25 years, and that the status of the Scripp's

murrelet has improved, which is largely attributed to the eradication of land-based predators on the Channel Islands. SFAC members that opposed the proposal stated a lack of evidence for lighting impacts. Given the considerations, the SFAC voiced broad-based support for research to improve the understanding of potential interactions between lighting operations and nocturnal seabird activity at the Park.

Narrowed Options:

- Develop a Best Practices for the commercial squid fishery
- Close Anacapa, San Miguel, and Santa Barbara Islands to squid fishing from February to October (key nesting and breeding period for the Scripp's Murrelet)
- Evaluate potential wildlife interactions (primarily nocturnal seabirds at the Park) using squid fishery log data

Department Recommendation:

- Develop a Best Practices for the commercial squid fishery – draft included (Appendix II)
- Evaluate potential wildlife interactions (primarily nocturnal seabirds at the Park) using squid fishery log data

CLIMATE CONSIDERATIONS

The California market squid fishery still faces many unknowns. Continued research into climate drivers using long-term monitoring in conjunction with physiological studies is fundamental to improving our understanding of how market squid will continue to respond to environmental change. Squids and other cephalopods have high adaptive capacity and the propensity to modify their own physiology through protein-altering ribonucleic acid editing, which could help with acclimating to variable ocean conditions and temperature changes (Voss and Rosenthal, 2023). These physiological advantages paired with a changing ocean environment may result in shifts in suitable habitats for market squid, including an expansion or shift of fishable biomass to more northern latitudes north of Point Conception (Suca et al., 2022).

A few questions arise if the market squid population is expected to acclimate and adapt to climate changes that impact the CCE. How will the fishing industry and coastal communities adapt along with the market squid resource? How can fisheries managers effectively plan, prepare, and sustainably manage the market squid resource with such a high level of climate uncertainty?

The SFAC explored some of the above questions in the context of the MSFMP and the prevailing topics described in this report. Representatives of the fishing industry expressed a common understanding that market squid landings have always fluctuated, but also that more opportunities existed in the past to redirect fishing effort to other species, such as Pacific sardine, when squid abundance was low. Now, with a greater reliance on and higher value for squid, fishing can be more concentrated, and operators are investing more effort into finding squid when squid is available. It also seems that while the various sectors within the commercial squid fleet are facing different challenges, vessel operators and commercial businesses agree that having flexibility in fishing operations such as easily switching targets is of the utmost importance.

Given the questions around small-scale access, a need exists to understand how local economies may respond to shifts in timing, location, and frequency of squid aggregations under climate change. An EFP could provide valuable insight as to the viability of commercial squid fishing outside the restricted access policy (i.e., low volume or local markets) in the future.

The Department sought support from the EDM team to better understand how climate drivers might directly impact fishery and management performance. EDM efforts were informed by the market squid fishery logbook data and insight from members of the commercial fleet as an iterative process. The long-term goal for continuing work with EDM is to advance climate resiliency for the fishery as forecasting may provide an avenue to buffer uncertainty for fishing

operations and management. The SFAC and the modelling team agreed that forecasting by quarter with max of one year is appropriate, and any forecasts beyond that timeframe are less reliable and not as useful. Real-time monitoring through electronic logs will be essential to forecast at biologically relevant scales and to assess management strategies in the future.

SUMMARY AND DEPARTMENT RECOMMENDATIONS

During the final meeting, the Department presented draft recommendations to the SFAC and adjusted the recommendations to reflect discussion points and expression of support from members. Given the broad topics the SFAC covered and the various potential regulatory changes, the Department is also proposing that an amendment to the FMP be initiated, which would allow for incorporation of new information regarding climate change, revisions to pertinent chapters of Section 1, and removal of regulatory text in Section 2 that is redundant with the California Code of Regulations Title 14. Proposed Department recommendations are listed below with the necessity for associated rulemakings noted:

MONITORING

Department Recommendation: Develop an electronic logbook (e-log) for the California market squid commercial fishery.

Far-term Rulemaking: This would eventually lead to a regulatory change to section 149(e) to revise text pertinent to logbook requirements.

EMPIRICAL DYNAMIC MODELING

Department Recommendation: Continue forecasts with EDM (2024 onward):

- Test forecasting for industry and management planning
- After testing period and development of electronic log, explore the potential use of EDM for management procedures and further evaluation under climate change

FISHING EFFORT AND TEMPORAL CLOSURES

Department Recommendation: Extend the weekend closure

- Statewide – start time of weekend closure will begin 7am Friday
- Monterey Bay Area – end time of weekend closure extended to Sunday midnight

Near-term Rulemaking: Revise hours in 149(c)(1); add times for specific locations.

SMALL-SCALE FISHERY ACCESS

Department Recommendation: Those interested in pursuing small-scale opportunities should utilize the newly established EFP program.

NETS AND SQUID SPAWNING HABITAT

Department Recommendation: Require commercial purse seiners to use ribline and rope purse line.

Near-term Rulemaking: Add a regulatory paragraph to section 149 specific to nets.

LIGHTING AND SEABIRD HABITAT

Department Recommendation:

- Provide a fishery “Best Practices” in 2024
- Evaluate potential wildlife interactions (primarily nocturnal seabirds at the Channel Islands National Park) with squid fishery log data

PROPOSED FMP AMENDMENT

The 2005 MSFMP contains four sections, which are listed below. Preliminary Department proposed revisions for an amendment are noted for each section:

- **Section 1** presents background on the California market squid fishery. It also provides a range of alternatives for management of California's market squid fishery and the Department's Proposed Project.

Proposed revision:

Chapter 1 – minimal changes, Department can revise as needed

Chapters 2 and 4 – could point to ESR

Chapter 3 – Pertinent sections would be revised

Chapter 5 – Update costs

- **Section 2** includes the environmental analysis (see California Code of Regulations Title 14 15250-15253), including a review of alternatives and options, some of which were recommended by constituents in the review of the preliminary draft MSFMP.

Proposed revision: Analysis pertinent to weekend closures and gear (nets) would be revised/ incorporated, and logbook text would refer to modernization.

- **Section 3** includes regulations that would implement the MSFMP Project's management strategy.

Proposed revision: Do not include this section in the amendment as the text is redundant with regulatory text that should only appear in the California Code of Regulations.

- **Section 4** includes public comments and Department responses to both the Preliminary Draft Market Squid Fishery Management Plan (released May 2002) and the Draft Market Squid Fishery Management Plan (released July 2003).

Proposed revision: Replace with new public comment on amendment.

FUTURE REVISIONS

Five years after an amendment is complete and subsequent rulemakings have been approved, a future review is recommended. The review would serve as a check-in with stakeholders and include an evaluation of monitoring data, any new changes to the fishery, and any emerging issues either specific to climate change or other unforeseen variables. The ESR is the primary document to find

up-to-date information on California market squid fishery and fishery management.

REFERENCES

- Butler, J., J. Wagner, and A. Henry. 2001. Age and growth of *Loligo opalescens*. Pacific Fishery Management Council Stock Assessment Review. 14 p.
- California Department of Fish and (Game) Wildlife (CDFW). March 25, 2005. Final Market Squid Fishery Management Plan. 566 p.
- California Department of Fish and Wildlife (CDFW). 2024. Market Squid, *Doryteuthis (Loligo) opalescens*, Enhanced Status Report (ESR).
- California Department of Fish and Wildlife (CDFW) Marine Fisheries Data Explorer (MFDE). 2023. <https://wildlife.ca.gov/Conservation/Marine/Data-Management-Research/MFDE/Commercial-Landings>. Accessed on August 9th, 2023.
- Chasco, B. E., M. E. Hunsicker, K. C. Jacobson, O. T. Welch, C. A. Morgan, B. A. Muhling, and J. A. Harding. 2022. Evidence of temperature-driven shifts in market squid *Doryteuthis opalescens* densities and distribution in the California Current Ecosystem. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 14:e10190.
- Cheng, S., M. Gold, N. Rodriguez, and P. Barber. 2020. Genome-wide SNPs reveal complex fine-scale population structure in the California market squid fishery (*Doryteuthis opalescens*). *Conservation Genetics* 21: 6.
- Dorval, E., P. R. Crone, and J. D. McDaniel. 2013. Variability of egg escapement, fishing mortality and spawning population in the market squid fishery in the California Current Ecosystem. *Marine and Freshwater Research* 64(1): 80 – 90 .
- Giron-Nava, A., C. C. James, A. F. Johnson, D. Dannecker, B. Kolody, A. Lee, M. Nagarkar, G. M. Pao, H. Ye, D. G. Johns, and G. Sugihara. 2017. Quantitative argument for long-term ecological monitoring. *Marine Ecology Progress Series* 572: 269 – 274.
- Jereb, P., and C. F. E. Roper. 2010. Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date. Volume 2. Myopsid and Oegopsid Squids. FAO Species Catalogue for Fishery Purposes. No. 4, Vol. 2. Rome, FAO. 605p. 10 colour plates.
- Leos, R. R. 1998. The biological characteristics of the Monterey Bay squid catch and the effect of a two-day-per-week fishing closure. *CalCOFI Report.*, Volume 39: 204 – 211.
- Morris Jr., J. A., J. K. MacKay, J. A. Jossart, L. C. Wickliffe, A. L. Randall, G. E. Bath, M. B. Balling, B. M. Jensen, and K. L. Riley. November 2021. An aquaculture

opportunity area atlas for the Southern California Bight. NOAA Technical Memorandum NOA NCCOS 298.

Munch, S. B., A. Giron-Nava, and G. Sugihara. 2018. Nonlinear dynamics and noise in fisheries recruitment: A global meta-analysis. *Fish and Fisheries* 2018; 00:1 – 10.

Navarro, M. O., P. E. Parnell, and L. A. Levin. 2018. Essential market squid (*Doryteuthis opalescens*) embryo habitat: a baseline for anticipated ocean climate change. *Journal of Shellfish Research* 37(3): 601 – 14.

Ohman, M. D., N. Mantua, J. Keister, M. Garcia-Reyes, and S. McClatchie. 2022. ENSO impacts on ecosystem indicators in the California Current System. UC San Diego. CLIVAR & OCB Newsletter, 15(1).

Pacific Fisheries Management Council (PFMC). April 2024. Coastal Pelagic Species Fishery Management Plan. As amended through Amendment 21.

Ralston, S., E. Dorval, L. Ryley, K. M. Sakuma, and J. C. Field. 2018. Predicting market squid (*Doryteuthis opalescens*) landings from pre-recruit abundance. *Fisheries Research* 199: 12-18.

Suca, J. J., J. A. Santora, J. C. Field, K. A. Curtis, B. A. Muhling, M. A. Cimino, E. L. Hazen, and S. J. Bograd. 2022. Temperature and upwelling dynamics drive market squid (*Doryteuthis opalescens*) distribution and abundance in the California Current. *ICES Journal of Marine Science*, 79: 2489 – 2509.

Van Noord, J. E., and E. Dorval. 2017. Oceanographic influences on the distribution and relative abundance of market squid paralarvae (*Doryteuthis opalescens*) off the Southern and Central California coast. *Marine Ecology*, 38: e12433.

Voss, G., and J. J. C. Rosenthal. 2023. High-level RNA editing diversifies the coleoid cephalopod brain proteome. *Briefings in Functional Genomics* 22: 525 – 532.

Zeidberg, L. D., W. M. Hamner, N. P. Nezlin, and A. Henry. 2006. The fishery for California (*Loligo opalescens*) (Cephalopoda: Myopsida), from 1981 through 2003. *Fish Bulletin* 104(1): 46 – 59.

APPENDIX I



State of California - Department of Fish and Wildlife
MARKET SQUID VESSEL LOGBOOK
 DFW 149a (Rev. 05/01/15) Previously DFG 149a

LOG # _____

Market Squid Vessel Profile

Vessel Name _____

Attracting Lights Used:

Vessel ID Number _____

Type: _____ Light Generated: _____ Number: _____

Vessel Characteristics:

Vessel Permit Number _____

_____ W L (circle one) _____

Boat Length (ft) _____

Captain's Name _____

_____ W L (circle one) _____

Hold Capacity (st) _____

Captain's ID Number _____

_____ W L (circle one) _____

Gross Tonnage _____

Purse Seine / Drum Seine / Lampara / Brail Net (circle one)

Electronics Used:

Horsepower:

Net Depth (fm) _____

Side-scan Sonar: Yes No (circle one)

Main Engine _____

Net Length (fm) _____

Fathometer: Yes No (circle one)

Generator _____

Mesh Size (in) _____

Other: _____

If Brail, scoop capacity (ft): Circumference _____ Depth _____ Average lbs per scoop _____

Fish Hold's Water System (circle one): Brine RSW Dry CSW (live) Other (please specify) _____

Crew members:

Name	ID Number	Name	ID Number

Captain's Signature _____ Date _____

Certified under penalty of perjury as true and correct



Market Squid Light/Braile Boat Profile

Vessel Name: _____

Vessel ID Number: _____

Light or Braile Boat Permit Number: _____

Captain's Name: _____

Captain's ID Number: _____

Electronics:

Side-scan Sonar: Yes No (circle one)

Fathometer: Yes No (circle one)

Other: _____

Attracting Lights Used:

Type:	Light Generated:	Number:
_____	_____ W L (circle one)	_____
_____	_____ W L (circle one)	_____
_____	_____ W L (circle one)	_____

Vessel Characteristics:

Boat Length (ft): _____

Gross Tonnage: _____

Hold capacity (st): _____

Horsepower:

Main Engine _____

Generator _____

Scoop capacity: Circumference (ft) _____ Depth (ft) _____ Average lbs per scoop _____

Fish Hold's Water System (circle one): **Brine** **RSW** **Dry** **CSW (live)** **Other** (please specify) _____

Crew Members:

Name	ID Number

Captain's Signature: _____ Date _____

Certified under penalty of perjury as true and correct



State of California - Department of Fish and Wildlife
MARKET SQUID VESSEL LOGBOOK
DFW 149a (Rev. 05/01/15) Previously DFG 149a

LOG #

Vessel Name: _____

Vessel Permit Number: _____

Captain's Name: _____

Vessel ID Number: _____

Captain's ID Number: _____

Alpha Code	Date	Set Number (or B T using trail beer)	Set Time: hr:min AM or PM (circle one)		Set Position: decimal minutes to hundredths place				SST (°F)	Bottom Depth (fm)	Name of light boat set upon	Catch Estimate (Short Tons)	Was catch limited by market order? Y/N	Bycatch:		Landing Receipt(s)	
			Start	End	Latitude		Longitude							Species	Amount (lbs)		
					Degree Ex. 34°	Minutes Ex. 05.15'	Degree Ex. 120°	Minutes Ex. 04.85'									
A			AM / PM	AM / PM													
B			AM / PM	AM / PM													
C			AM / PM	AM / PM													
D			AM / PM	AM / PM													
E			AM / PM	AM / PM													
F			AM / PM	AM / PM													
G			AM / PM	AM / PM													
H			AM / PM	AM / PM													

Comments: List by date any anecdotal information such as additional bycatch information, equipment problems, interference from other boats, weather-related problems, day set activity, etc.

Captain's Signature _____ Date _____
Certified under penalty of perjury as true and correct



Vessel Name: _____

Light or Brail Boat Permit Number: _____

Captain's Name: _____

Vessel ID Number: _____

Captain's ID Number: _____

Date	Location: <small>For brail activity enter latitude and longitude using decimal minutes to hundredths place. Ex. 34° 05.15', 120° 04.85'</small> <small>For light boat activity enter block code or lat/long if block code unknown.</small>	Hours spent:		Name of Seiner that set squid	Total tons (st) of squid caught by seiner	Estimated tonnage (st) remaining after fishing is completed	Were birds present? Y/N	Were mammals present? Y/N	Your vessel's estimated BRILL catch <small>Leave blank if you are a light boat permittee or a brail boat permittee operating solely as a light boat</small>									
		Searching <small>(includes day sets)</small>	Lighting						Time of trawling: hr:min AM or PM <small>(circle one)</small>	Bottom depth (fm)	Amount sold to Market <small>(short tons)</small>	Landing receipt #	Amount for Live Bait (lbs)	Brill Bycatch:				
														Species	Amount (lbs)			
																Start	End	
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								
									AMPM	AMPM								

Comments: List by date any anecdotal information such as additional bycatch information, equipment problems, interference from other boats, weather-related problems, day set activity, etc.

Captain's Signature: _____
Certified under penalty of perjury as true and correct

Date: _____

APPENDIX II

Best Practices for Market Squid Fishing

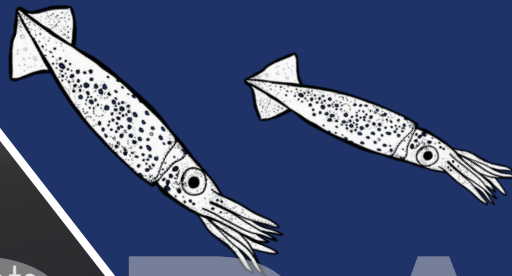


ILLUMINATE only downward facing lights

INSPECT lights and shields for compliance annually

MINIMIZE deck lights when at anchor or close inshore overnight

CONFIRM that squid lights illuminate downward and do not illuminate the shoreline



TURN OFF unnecessary lights

TURN OFF squid lights when fishing not permitted

DO NOT illuminate shoreline

DO NOT use forward facing lights (ie. crab lights) when lighting for squid

MINIMIZE the amount of weight used to sink nets and don't add additional weight in shallow water



Sea Bird Avoidance Tips

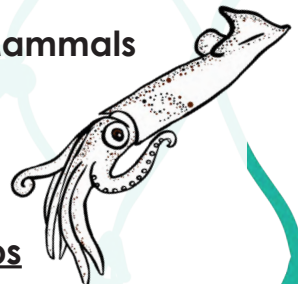
<https://www.fisheries.noaa.gov/national/resources-fishing/seabird-protection-and-avoidance-tips>



Proposed guidelines for safely deterring marine mammals : <https://www.regulations.gov/document/NOAA-NMFS-2020-0109-0001>

Additional Information

- CCR T14 § 149 (h) Light Shields - Each vessel fishing for squid or lighting for squid will reduce the light scatter of its fishing operations by shielding the entire filament of each light used to attract squid and orienting the illumination directly downward, or providing for the illumination to be completely below the surface of the water. The lower edges of the shields shall be parallel to the deck of the vessel.
- Reducing lights when not in use will help limit wildlife interactions at night.
- Vessels using any light (Ex. squid lights, deck lights, or forward facing crab lights) that may attract/aggregate market squid while fishing is not permitted are in violation of FGC § 86 and CCR T14 §149.
- Keeping lights at a minimum when near the shoreline will reduce impacts to wildlife especially seabirds which can be negatively impacted by artificial lights.
- If near the shoreline, make sure that all extraneous lights are reduced so that seabirds and other wildlife are not affected.
- It is ILLEGAL to use forward facing lights (ie. crab lights) when attracting squid because squid lights MUST have entire filament shielded and the squid light must be illuminating directly downward. CCR T14 § 149 (h).
- Using additional weights in shallow water may increase the interactions of the net and seafloor.
- CCR T14 § 149 (j) - Citations for violations of this Section [CCR T14 § 149] may be issued to the vessel operator, crewmembers, and/or the holder of a market squid permit issued pursuant to Section 149.1 of these regulations
- National Marine Fisheries Service has a proposed rule on Guidelines for Safely Deterring Marine Mammals and has specific guidance on proper use of Seal Bombs. More information can be found here:
<https://www.regulations.gov/document/NOAA-NMFS-2020-0109-0001>
- If sea birds need to be released please visit this site for more information on proper release:
<https://www.fisheries.noaa.gov/national/resources-fishing/seabird-protection-and-avoidance-tips>
- For more information on the market squid fishery, please visit
<https://marinespecies.wildlife.ca.gov/market-squid/>



Squid Fishery Best Practices References

Marangoni, L. F. B., Davies, T., Smyth, T., Rodríguez, A., Hamann, M., Duarte, C., Pendoley, K., Berge, J., Maggi, E., & Levy, O. (2022). Impacts of artificial light at night in marine ecosystems-A review. *Global change biology*, 28(18), 5346–5367. <https://doi.org/10.1111/gcb.16264>

Montevecchi, W. A. (2006). Influences of Artificial Light on Marine Birds. T. Longcore & C. Rich (Eds.), *Ecological Consequences of Artificial Night Lighting* (pp. 94–113). Chapter 5, Island Press.

Rodríguez, A., Holmes, N.D., Ryan, P.G., Wilson, K.-J., Faulquier, L., Murillo, Y., Raine, A.F., Penniman, J.F., Neves, V., Rodríguez, B., Negro, J.J., Chiaradia, A., Dann, P., Anderson, T., Metzger, B., Shirai, M., Deppe, L., Wheeler, J., Hodum, P., Gouveia, C., Carmo, V., Carreira, G.P., Delgado-Alburquerque, L., Guerra-Correa, C., Couzi, F.-X., Travers, M. and Corre, M.L. (2017), Seabird mortality induced by land-based artificial lights. *Conservation Biology*, 31: 986-1001. <https://doi.org/10.1111/cobi.12900>

Reed, J.R., Sincock, J.L., Hailman, J.P. (1985), Light Attraction in Endangered Procellariiform Birds: Reduction by Shielding Upward Radiation, *The Auk*, Volume 102, Issue 2, Pages 377–383, <https://doi.org/10.2307/4086782>

From: Michael Quill <[REDACTED]>
Sent: Monday, July 15, 2024 11:06 AM
To: FGC <FGC@fgc.ca.gov>
Cc: Michael Quill <[REDACTED]>
Subject: LA Waterkeeper - Comment Letter- for MRC 7.17.24

Hello – Find attached LA Waterkeeper’s comment letter for the July 17-18, 2024 MRC meeting.

Let me know if there are any questions.

Best regards,
Michael

MICHAEL QUILL, PhD
Marine Programs Director
360 E 2nd Street, Suite 250
Los Angeles, CA 90012
@LAWaterkeeper



July 15, 2024

California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

Submitted electronically via fgc@fgc.ca.gov

Submitting Comments on Fish and Game Commission July 17-18, 2024
Marine Resources Committee Agenda Item 2 - MPA Petition Review Process

Dear President Murray and Honorable Commissioners:

As announced at recent California Department of Fish and Game Commission (CDFGC) meetings, lack of funding available to cover this extensive process is only one complication the CDFGC and California Department of Fish and Wildlife (CDFW) staff support are facing in tackling this ongoing process of reviewing the first petitions submitted. With that in mind, Los Angeles Waterkeeper (LAW) is grateful for the time and effort CDFGC has dedicated to and is being called upon to address the petition process and further follow ups to the Decadal Management Review (DMR).

LAW agrees with the petition binning process that has been laid out by the CDFGC. While unclear as to the next steps, we found what could be interpreted as a ranking of the first and second binning of petitions submitted to be aligned with what we understood the binning process to address. The petitions included in the first bin reflect petitions that met what we have thought the CDFGC guided petitions to address, the second bin fall into those that do not. More importantly, the lack of consideration of the social impact some second binned proposals campaigning for additional closures will have on our diverse community seem to be bypassed in some instances. We hope those petitions will be dismissed. Petitions that thicken walls dividing our community along cultural and tribal lines encourage more of the habituated false beliefs in separation and submarine efforts to bring our diverse community members together in support of the Marine Life Protection Act (MLPA) and the health of our ocean and our Marine Protected Areas (MPAs).

In agreeing with the current binnings, we also urge swift dismissal of some of the petitions that do not meet the binning criteria and encourage the CDFGC to explore the lack of funding to support a long-drawn-out process and keep in mind future budgets hopefully dedicated to supporting CDFW Law Enforcement Division (LED) support and LED community engagement and CDFW MPA outreach. The long lamented and often referenced shortage of enforcement officers in the field needs fiscal attention and supported direction. Further in-depth reviews of petitions not meeting the criteria set forth by CDFGC seems to logically lead to delays and the postponement of next steps and pushing this review process closer to a 20-year MPA management plan review than the DMR of 2022.


LAW marine staff has dedicated time and effort to explore changes encouraged by some of our colleagues including NGOs who participate in the NGO MPA Coalition and those who do not. We also include open discussions with fishers and have tapped CDFW colleagues for

information in forming our opinions. In supporting the binning protocol outlined for this ranking of petitions, we are encouraged that the binning reflects LAW's perspective in supporting no changes to our mainland Los Angeles County MPAs and LAW continues to support no changes to regulations or additional MPA coverages in Los Angeles County.

Of concern here is the growing divisional talk and ongoing and seemingly rising undercurrent of "us versus them" talk and even combative battle line talk we continue to witness during discussions around this petition process. Some petitions reveal a lack inclusion or consideration of all members of our diverse consumptive and non-consumptive community members. We find contrary statements including broadening access to our coastal waters to our systemically bypassed communities on one hand while closing off more areas off to all fishing whether recreational or commercial fishing to be alarming.

The ongoing divisional trends that our community habitually gravitates to has, in my opinion, created another strong undercurrent of mistrust and a conspiratorial mindset we encountered and had hoped had faded over the years since the extremely divisional MLPA process prior to 2012 and some years after. The divisional and at times physical confrontations had, in my experience, thankfully faded a bit over the first ten years of the implementation of our newest MPA's, but deep and often angered cultural and ethnical divisions are once again percolating below the surface talk of bringing our communities together and to share an ocean experience.

Sincerely,

Michael Quill, PhD
Marine Programs Director
Los Angeles Waterkeeper
360 E. 2nd Street – Suite 250
Los Angeles, CA 90012


From: Nur Arafah Dalmau <[REDACTED]>

Sent: Monday, June 17, 2024 09:19 PM

To: [REDACTED] <[REDACTED]>;
[REDACTED] <[REDACTED]>; [REDACTED]
<[REDACTED]>; [REDACTED] <[REDACTED]>;
[REDACTED] <[REDACTED]>; FGC
<[REDACTED]>

Cc: Octavio Aburto <[REDACTED]>; Kyle Cavanaugh <[REDACTED]>;
[REDACTED] <[REDACTED]>; Ben Halpern <[REDACTED]>; Fiorenza Micheli
<[REDACTED]>; Stephen Palumbi <[REDACTED]>; Pauly, Daniel
<[REDACTED]>; Enric Sala <[REDACTED]>

Subject: Science_Letter_Support_California_MPAs

Dear President Murray and Members of the California Fish and Game Commission,

We are pleased to share a letter expressing support for maintaining and strengthening protections for California's marine protected areas (MPAs) network and ensuring the state's MPAs are effectively managed and enforced. This joint letter has been written and signed by leading scientists with decades of experience in MPA science in California and globally.

We would appreciate it if you could distribute this letter to the Commission.

Best regards,

Dr. Nur Arafah Dalmau
Postdoc at Hopkins Marine Station, Stanford University

[REDACTED] | [REDACTED]

Delivered by electronic mail to: fgc@fgc.ca.gov

June 17, 2024

California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244

Dear President Murray and Members of the California Fish and Game Commission,

We are writing to express strong support for maintaining and strengthening protections for California's network of marine protected areas (MPAs) and ensuring the state's MPAs are effectively managed and enforced. As marine scientists, we have collectively conducted decades of research in California's coastal waters and global ecosystems. Based on that experience we write to affirm that MPAs, particularly fully protected no-take MPAs, are a foremost tool to protect our ocean - and the communities it sustains - in the face of growing ocean threats.

California's MPA network is globally recognized as an example of science-based, stakeholder-informed marine management. Ten years after the network was fully designated, initial research results are demonstrating a range of positive response: spillover of fish and lobster, increased species diversity in rocky intertidal habitats, increased resilience to climate impacts in Southern California; and rebounds in fished species populations. In some cases, MPA effects are already demonstrably stronger for no-take MPAs than for MPAs allowing some fishing. Furthermore, many scientific questions cannot be fully answered after only 10-15 years, demonstrating the importance of permanent MPAs as sentinel sites for ongoing ocean research and for informing climate adaptation measures.

In addition to the growing body of California-based MPA research, global analysis consistently underscores that fully protected MPAs have the largest positive impacts. A recent [2024 paper by Gill et al.](#) examined 216 MPAs around the world and found that no-take marine reserves demonstrated four times the increase in fish biomass produced by partial-take MPAs as compared to counterfactual sites without protections. In addition, another [2024 paper by Benedetti-Cecchi et al.](#) examined 357 MPAs globally and found that fish communities are more stable to marine heatwaves inside well-managed, no-take MPAs compared to non-protected areas.

California is now facing a timely opportunity to improve its existing network of MPAs. The current MPA network covers only sixteen percent of state waters - with only nine percent in no-take marine reserves - leaving more than ninety percent of state waters open to fishing. Under the 30x30 global and national commitment, expanded protection remains an urgent goal. Moreover, when the impacts of the recent extreme heat wave and associated kelp loss are considered, the extent of persistent kelp forests protected is even further away from science-based targets.

As California's ocean faces a growing suite of threats from climate change and other human uses, we urge your Commission to use its authority to strengthen its MPA network to ensure adequate representation of all key habitats in no-take MPAs and to promote effective enforcement of MPAs so that California's MPA network remains an effective ecosystem-based approach for resilience into the future.

Signed,

Dr. Octavio Aburto-Oropeza, Professor, Scripps Institution of Oceanography, University of California, San Diego

Dr. Nur Arafteh-Dalmau, Postdoctoral Scholar, Hopkins Marine Station, Stanford University

Dr. Kyle Cavanaugh, Professor, Department of Geography, University of California, Los Angeles

Dr. Steve Gaines, Professor and Dean of Bren School for Environmental Science & Management, University of California Santa Barbara

Dr. Ben Halpern, Professor and NCEAS director, University of California, Santa Barbara

Dr. Fiorenza Micheli, Professor and Chair of Oceans Department, Stanford University

Dr. Steve Palumbi, Professor, Hopkins Marine Station, Stanford University

Dr. Daniel Pauly, Principal Investigator, Sea Around Us, and Professor, University of British Columbia.

Dr. Enric Sala, Explorer in Residence, National Geographic Society

From: Chris Killen <[REDACTED]>
Sent: Monday, July 22, 2024 10:11 PM
To: FGC <FGC@fgc.ca.gov>
Subject: MPA Petition Process Concerns

Dear Executive Director Miller-Henson

My name is Chris Killen and I am the CEO of Allwaters Protection and Access Coaliton. Allwaters exists to advocate for the protection of our precious marine resources as well as to defend fishing access for all Californians, particularly for future generations and those who don't have a voice in our conservation and marine fisheries management decisions but will be deeply impacted by the paths we choose.

We are writing to express serious concerns with the process proposed by The Department and adopted by The Commission to evaluate the 20 or more Marine Life Protection Act (MLPA) related petitions, and the over 80 individual actions they contain presently before The Commission.

The MLPA, and the 2008 and 2016 Master Plans for Marine Protected Areas (MPM) lay out clear processes and public expectations for how decisions regarding the siting of new MPAs and major modifications of existing MPAs will be handled, with particular focus on the areas of stakeholder and tribal input, independent scientific and economic impact review, and the necessity of securing sufficient funding in MLPA related MPA creation and expansion. We feel many key tenets of these Commission adopted documents are being ignored.

There are numerous sections of directives contained in MLPA, and the 2008 and 2016 MPMs which are not being followed because of what we are being told are budgetary/resource shortfalls. Instead of the robust, inclusive, objective, process promised in the MLPA, followed in the 2008 MPM, and delineated in the 2016 MPM, The Department and Commission have decided on a process which relies on only The Department's and their own subject matter expertise, admittedly has no dedicated funding source for both the mandated analysis, creation, implementation, management, outreach, education, monitoring, and enforcement of any new or expanded MPAs which may result, and only allows for public input leading up to or during Commission meetings.

We feel this approach to public comment and stakeholder engagement is particularly harmful. It only allows for a very select class to be able to participate. The vast majority of Californians have no idea this process is taking place. Of those who do, the chosen plan allows for input from only those privileged few who work for an entity with interest in the outcome of this process, or from those individuals whose economic or life circumstance allows them the luxury of time to either follow remotely and write public comment, or show up to a live meeting during the work week. At live meetings, comment is almost always limited to 90 seconds; not nearly enough time to express detailed and nuanced opinions and concerns. Those vulnerable individuals and communities, who rely most on the health of our ocean and their local access to catch fish in order to feed their families, are mostly excluded by the current process. The only language being spoken at the commission meetings is English and we know of no outreach or education in an effort to include the voices in this already live process of communities that do not call English their native tongue.

The Commission and Department have publicly recognized shortcomings with the lack of inclusion of the Tribal Community and traditional knowledge in the first phase of the MLPA process. A lot of great work has been done by those agencies to avoid future harm to that very important and historically mistreated group in our marine ecosystems and fisheries management decisions. The addition of a new tribal liaison to The Commission team is a wonderful example of this commitment to justice and inclusion. But we fear the approach The Commission and Department are now taking toward stakeholder input has the potential to create the circumstance for other marginalized and unrecognized communities and people to be excluded from, and hurt by, the ultimate decisions around these petitions.

The adherence to the prescribed process The MLPA included for stakeholder participation, science and economic advisory panels, secured funding sources, and interagency cooperation, and their execution in the carrying out of the 2008 MPM established for the public at minimum a strong expectation, and likely an actual precedent, that a mostly identical process would be followed going forward, should new MPAs or major modifications to existing MPAs be considered.

A second but related concern is that there is an arbitrary haste in this petition review process which is absolutely counter to the importance of the task. It is dangerous to ignore the fine detail the drafters of the MLPA and MPMs very purposefully gave us in how to design, implement, and adaptively manage the most successful MPA network in existence. In fact, the stakes are even higher now in our management of our marine environments as compared to when the MLPA was written and our network implemented. In light of what we now know about the potential ravages of climate change, marine heat waves, and a myriad of other potential harm causing stressors to our marine ecosystem, we need to act with extreme care and be incredibly methodical in analyzing every aspect of management decisions. This critical work cannot be done properly without a sufficient budget and without as much time as it takes to do it right.

Department staff and Commission members both have repeated the sentence “we can’t (or don’t want to) do a “MLPA 2.0”” in public meetings. We again are told that this is because of lack of resources. It is very clear in the examples the two failed attempts to initiate the original MLPA provide us that proper funding is critical to the ultimate success of MPA projects. The MOU between our state and Resource Legacy Fund, which was the differentiator between the two failures and our current success, was so pivotal in its enablement of our network that the need to secure similar, sufficient, funding for new MPAs or expansions of existing MPAs has been enshrined as one of the core tenants of the 2016 MPM. This begs the question, if there isn’t now enough money or time to do this as prescribed in the MLPA and MPM, why aren’t these petitions tabled until proper resources can be allocated?

It is easily argued that California’s ocean and marine resources are both one of its most valuable attributes as well as one of its most complex and fragile. More than 20 years ago concerns of severe degradation and future risks facing these resources, voiced by leading environmental groups, scientists, members of the fishing community, and many other diverse stakeholder groups, the state legislature passed the MLPA and The Department, Commission and other state and private organizations dutifully and successfully implemented one of the most extensive marine conservation projects ever undertaken. The MLPA serves as a global model of exceptional marine conservation.

We now find ourselves with a warming climate and many unknowns with regard to the future

health of our marine ecosystems. What the MLPA and MPM provide us in these challenging circumstances are proven methodologies to follow in the consideration of the use of MPAs as part of an overall ecosystem level protection strategy. To deviate from this guidance now, particularly in light of the aforementioned increased risk factors and because of budgetary shortfalls, is not only shortsighted, but could result in tremendous wasted resources, loss of public support, and actual harm to our ocean and our state's population who depend on it for their health, recreation, nutrition, and income.

Because of these concerns and the provided rationale, we ask that you dismantle the current process you have adopted and replace it with the one prescribed in the MLPA, which resulted in the 2008 and 2016 MPMs and which was followed to create and manage the amazing network of MPAs now off our coast. And further, if lack of dedicated funding and resources, as demanded in the 2016 MPM, are not allowing The Department and Commission to carry out the robust, objective, and inclusive review process of these petitions, we expect you to wait until the promised and proven process can be successfully carried out.

Respectfully,

Chris Killen
CEO
Allwaters PAC

From: Emily Parker <eparker@healthebay.org>

Sent: Thursday, August 1, 2024 04:59 PM

To: FGC <FGC@fgc.ca.gov>

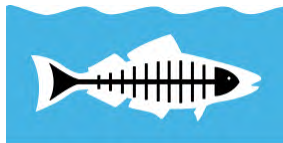
Subject: Public Comment - August FGC Meeting

Good Afternoon,

Please accept the attached document as public comment from 10 NGOs on the Fish and Game Commission August 14-15 Meeting Agenda Item 7B: Marine Resources Committee - MPA Petition Binning Outcomes. Please do not hesitate to contact me with any questions or for additional information.

Best,

Emily



Heal the Bay

EMILY PARKER | COASTAL AND MARINE SCIENTIST

She/Her/Hers ([What does this mean?](#))

Heal the Bay

1444 9th Street

Santa Monica, CA 90401

T: 310.451.1500 x 156





August 1, 2024

California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

Submitted electronically via fgc@fgc.ca.gov

**RE: Comments on Fish and Game Commission August 14-15 Meeting Agenda Item 7B:
Marine Resources Committee - MPA Petition Binning Outcomes**

Dear President Murray and Honorable Commissioners:

The undersigned organizations are dedicated to ocean protection in California and have decades of combined experience in marine protected area (MPA) management, research, compliance, education, and outreach. We applaud the Fish and Game Commission's (FGC) commitment to meeting the goals of the Marine Life Protection Act (MLPA) through support of the Marine Protected Area (MPA) Network, including adaptive management as part of the decadal management review.

As the FGC and California Department of Fish and Wildlife (CDFW) begin evaluating petitions to modify California's MPA Network, our organizations would like to reiterate our comments from the recent July Marine Resources Committee (MRC) meeting and offer our **support for outcome of the MPA petition binning process and the MRC recommendation to approve the outcomes and recommend moving forward with petition evaluation expeditiously.**

We would also like to take this opportunity to offer additional comments and recommendations on the petition evaluation process. These comments are as follows and are further outlined in the subsequent sections:

1. Petition Evaluation Must be Rooted in Science
2. The Network Must Not be Weakened
3. Petition Evaluation Must be Prompt and Consider Numerous Threats
4. Recommendations for Priority Research Questions During Petition Evaluation

Petition Evaluation Must be Rooted in Science

We firmly believe the scientific merit of a petition should be the primary factor in its evaluation. As both CDFW and FGC have previously emphasized, modifications to the network should be scientifically driven. We are wary of using controversy as a key metric for evaluating petitions and urge that the weight of this particular criterion be reconsidered and that the focus of petition evaluation be concentrated on the goals of the Marine Life Protection Act, scientific rigor and broad community engagement. It is essential that modifications to the MPA Network are grounded in robust scientific evaluation and driven by data that reflect the current and anticipated future conditions of our oceans. This will require consideration of both local and regionally relevant data and forecasts. Equally important is the incorporation of community input, as local stakeholders offer invaluable perspectives and knowledge that can enhance the effectiveness and acceptance of management decisions.

The Network Must Not be Weakened

As we have stated in prior communication, **our organizations strongly oppose proposals that would weaken the MPA Network** including: 1) Petition 2023-14 MPA by David Goldberg of the California Sea Urchin Commission to allow to allow commercial take of sea urchins in 9 SMCAs, 2) Petition 2023-15 MPA by Blake Hermann to 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, and 3) Petition 2023-16MPA by Richard Ogg to reclassify Stewarts Point and Bodega Head SMRs and SMCAs to allow commercial take of salmon by trolling.

Petitions that would result in a net loss of protection should not be considered, as they contradict the foundational principles of the MLPA and the growing body of international science demonstrating the need for additional ocean protection. Given the accelerating challenges facing ocean health, as well as the livelihoods, cultural practices and many recreational activities of Californians that depend upon a healthy ocean, it is essential to prioritize petitions that strengthen or maintain the MPA network rather than those that would undermine it. We would like to affirm statements made by President Murray and Commissioner Sklar during previous FGC MRC regarding no net weakening of the MPA Network as a result of this petition process.

Petition Evaluation Must be Prompt and Consider Numerous Threats

The adaptive management process must consider historical, scientific, and future contexts. While historical context is important, it is critical to acknowledge 1) our oceans are undergoing significant changes and 2) the communities that were absent from the initial implementation of the MLPA. Adapting to these changes and including diverse voices is critical and consistent with the goals of the MLPA. From a scientific perspective, petition evaluation must account for numerous threats to ocean health, particularly the climate crisis. Rising ocean temperatures, acidification, and other climate-related threats are putting unprecedented pressure on our marine ecosystems. Due to these pressing stressors, we need to examine the current network with respect to its resilience to climate change and ensure that changes to its design help to enhance both climate and ecological resilience. It would also be prudent to move forward with necessary adaptive management changes on a reasonable time frame. **We urge CDFW to complete the review of Bin 1 petitions promptly and proceed to evaluating Bin 2 petitions without delay.**

Recommendations for Priority Research Questions During Petition Evaluation

We would like to thank CDFW staff for providing an initial overview at the July MRC meeting of the tools that will be used for petition evaluation. These tools, including the StoryMap that will be used to house all petition information, the updated SeaSketch modeling tool that will be used for spatial planning and mapping, and the updated network connectivity model, will be critical in evaluating the 20 petitions and the requested changes to the network. We are very supportive of the development and use of these tools in the petition evaluation and encourage the FGC and CDFW staff to share these tools widely upon their completion.

As discussed at the July MRC meeting, the development of these tools, particularly the updated SeaSketch mapping tool, will be very useful as CDFW evaluates each petition and determines what petitions to approve. The MRC discussion spurred a conversation around these priority research questions and, as such, we would like to respectfully offer the following **recommended priority research questions**:

1. Where are the gaps in the minimal and preferred size and spacing SAT guidelines and how do the MPA petitions fill those gaps?
2. How much of each key marine habitat is protected in the network overall, by region, and by county? How would the petitions impact that habitat protection?
3. What is the representation (areal extent) of kelp forest habitat in highly or fully protected areas by county and region? Compare coverage of persistent kelp versus historic?
4. How much of each habitat type is in the different levels of protection? Is there any data to evaluate whether these protections are protecting key habitats?
5. What types of enforcement violations occur most within protected key habitats?
6. How many replicates exist for the key marine habitats across large environmental and geographic gradients or bioregions?

Furthermore, ocean conditions have changed dramatically since over the past 20 years. Scientific experts predict that climate change will have major impacts on marine ecosystems. Scientific research from other MPA Networks is revealing how MPAs are likely to experience increased climate stress and uncertainty, lower climate stability, contraction of habitats and shifts in species distribution and movement patterns. California has an opportunity to consider how these impacts will affect its ocean ecosystems and adapt the network as climate impacts increase.

Closing

In conclusion, we once again stress the urgency of completing the Bin 1 petition review and moving forward to the Bin 2 petition evaluation. The health of our marine environments cannot afford delays. We sincerely thank the FGC and CDFW for their continued dedication to the protection and management of California's MPA Network. The adaptive management of our MPAs is more critical than ever, especially in the face of the escalating climate crisis. Adaptive management allows us to respond to these changes in real-time, ensuring that our MPAs can continue to provide vital ecological, economic, and social benefits. We again thank you for this opportunity to comment and look forward to the next phase of the MPA petition process.

Sincerely,

Emily Parker
Coastal and Marine Scientist
Heal the Bay

Rikki Eriksen, PhD
Marine Spatial Ecologist
California Marine Sanctuary Foundation

Ashley Eagle-Gibbs, Esq.
Executive Director
Environmental Action Committee of West
Marin

Azsha Hudson
Marine Conservation Analyst & Program
Manager
Environmental Defense Center

Tomas Valadez
CA Policy Associate
Azul

Laura Deehan
State Director
Environment California Research and Policy
Center

Angela Kemsley
Director of Conservation Impact
WILDCOAST

Ray Hiemstra
Associate Director
Orange County Coastkeeper

Sandy Aylesworth
Director, Pacific Initiative, Oceans Division
Natural Resources Defense Council

Michael Quill, PhD
Marine Programs Director
Los Angeles Waterkeeper

From: Aylesworth, Sandy <[REDACTED]>

Sent: Thursday, August 1, 2024 04:58 PM

To: FGC <FGC@fgc.ca.gov>

Subject: August 14 FGC meeting - Comment letter submission agenda item 7B

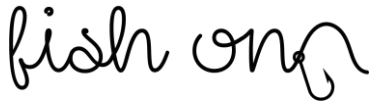
Greetings,

Please find attached NRDC, Azul, Environment California, and FishOn's comment letter on agenda item 7B for the August 14th FGC meeting.

Thank you for including and considering these comments.

Best,

Sandy



August 1, 2024

Samantha Murray, President
California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

Submitted electronically via fgc@fgc.ca.gov

RE: Comments on Fish and Game Commission August 14, 2024 Meeting Agenda Item 7B Marine Resources Committee

Dear President Murray and Honorable Commissioners:

The Natural Resources Defense Council, FishOn, Azul, and Environmental California respectfully offer the following comments on agenda item 7B. We hope these comments are useful in informing the August 2024 California Fish and Game Commission (FGC) meeting.

1. MPA petition decision-making process can be transparent and inclusive while advancing expeditiously.

We appreciate the California Department of Fish and Wildlife's (CDFW) efforts to release the proposed petition binning and associated justifications six weeks ahead of the July 2024 Marine Resources Committee (MRC) meeting, and the May 2024 Marine Management News blog, which provided an overview of the MPA petition evaluation process and officially amplified the need for public input.

Continuing to release this type of information through official CDFW and FGC channels with ample time for the public to review materials ahead of MRC discussions and FGC decision-making moments is critical. Advance notice enables the public to understand, participate in, and provide substantive written and verbal comments throughout the MPA petition evaluation process. We hope these efforts from CDFW and FGC throughout the adaptive management process will continue.

We recognize CDFW and FGC's limitations on capacity for outreach around the adaptive management process. The best way to ensure thorough and substantive public participation is to make it clear when decisions will be made, what those decisions will be, and what feedback they are seeking from the public. This would allow members of the public to adequately prepare for decision-making moments and amplify information with interested parties. We recommend that CDFW and FGC focus on clarifying the process moving forward and releasing information early, often, and through official communication channels that can be easily amplified with communities up and down the coast.

As petitioners, we will continue to support CDFW and FGC with outreach efforts to ensure that decision-making is accessible and welcoming to community members who wish to engage. Our organizations will continue to amplify MPA petition process and timeline updates, CDFW recommendations, opportunities for public participation around decision-making moments, and other relevant CDFW and FGC information with our networks.

In addition to providing advance notice, we request that FGC provide specific guidance outlining what feedback you are seeking in the public comments for specific agenda items. This guidance should specify the exact questions that Commissioners would like petitioners to answer and be enforced equitably throughout each meeting. The adaptive management process is clearly a subject of great public interest and concern. To allow for robust participation in that process, we recommend that both MRC and full commission meetings provide a discrete time for general public comment in advance of specific feedback items outside of the “comments for items not on the agenda” portion of the meeting. For example, offering the option to make a short group presentation, offering general public comment for a specified period of time at the beginning of a meeting, or having an item for “general feedback germane to the adaptive management process” would be a way to hear relevant feedback from MPA stakeholders while allowing time to address specific questions.

Finally, we agree with and support the Marine Resources Committee’s recommendation to approve CDFW’s proposed binning and move forward with the next phases of the evaluation process expeditiously. Ahead of the February 2024 FGC meeting, CDFW staff divided the MPA petitions into discrete 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. Given that most of Phase 2 of the Proposed MPA Petition Evaluation Framework is complete, we urge the Commission to direct CDFW to finalize Phase 3 for Bin 1 petitions ahead of the November 2024 MRC meeting. We urge CDFW to bring recommendations based on the evaluation for MRC discussion and for the full Commission to vote on Bin 1 decisions at the December 2024 FGC meeting. We support the MRC’s view that Bin 2 petitions must advance as Bin 1 evaluations are occurring. Following the August 2024 FGC meeting, CDFW should begin efforts to gather the additional policy guidance, information, and resources needed to begin the Bin 2 evaluations.

2. The MPA petition process should strengthen the MPA network. FGC should therefore deny petitions that would weaken the network.

The MLPA clearly states that the purpose of an MPA is to protect marine biodiversity, “MPAs are primarily intended to protect or conserve marine life and habitat.”¹ The MLPA also notes the special importance of no-take Marine Life Reserves in conserving ecosystem health and declares that no-take MPAs “shall be maintained to the extent practicable in an undisturbed and unpolluted state.”^{2,3} The MLPA states that adaptive management “means a management policy that seeks to *improve* [emphasis added] management of biological resources, particularly in areas of scientific uncertainty, by viewing

¹ Marine Life Protection Act, California Fish and Game Code § 2582 (c)

² FGC § 2581(f) Marine life reserves are an essential element of an MPA system because they protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries.

(g) Despite the demonstrated value of marine life reserves, only 14 of the 220,000 square miles of combined state and federal ocean water off California, or six-thousandths of 1 percent, are set aside as genuine no take areas.

(h) For all of the above reasons, it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves.

³ FGC § 2582 (d)

program actions as tools for learning.”⁴ Given the foundational goal of an MPA is to conserve biodiversity, the MLPA’s affirmation of the value of no-take Marine Life Reserves, and the guidance that adaptive management is to result in improved resource management, petitions that fail to enhance biodiversity conservation are inconsistent with the statute.

Petitions 2023-15MPA, 2023-16MPA, and 2023-18MPA seek to allow commercial or recreational take within State Marine Reserves (SMRs), where it is currently prohibited. Approval of these petitions would constitute a weakening of the network. Petitions promoting commercial and/or recreational fishing in SMRs weaken the network, in part, by inviting significant enforcement challenges. MPA enforcement is inherently challenging, and this is compounded by limited state resources for these activities. The conversion of five SMRs to State Marine Conservation Areas (SMCAs), as proposed by petitions 2023-15MPA and 2023-16MPA, would compromise a significant portion of the MLPA network. While more limited in scope, petition 2023-18MPA proposes to allow shore-based fishing in the largest SMR — the only SMR that met the Science Advisory Committee’s original size guidelines. This will undercut its important role in the MLPA network. No-take reserves provide unique benefits like helping to restore the size and age distributions of harvested fish populations. Therefore, our organizations support the denial of petitions 2023-15MPA, 2023-16MPA, and 2023-18MPA before the Department begins Phase III of the MPA Petition Evaluation Framework.

3. Strengthening and expanding the MPA network is consistent with OPC, FGC, and CDFW MPA policy.

The Proposed MPA Petition Evaluation Framework notes that policy direction for certain Bin 2 petitions is needed.⁵ The FGC, Ocean Protection Council (OPC), and CDFW have all indicated that changes to the MPA network that strengthen or enhance it are acceptable outcomes of the adaptive management process, thereby providing policy direction for petitions seeking to re-designate SMCAs to SMRs, expand existing MPAs, and create new SMRs or highly protected SMCAs.

As the policy lead for California’s MPA network, OPC specified that the adaptive management of the MPA network is one of the state’s four key strategies to achieve 30x30 in coastal waters—a Newsom Administration priority that was recently codified into state law. Since the state requires additional conservation actions to meet the 30x30 goal, decisions to strengthen or expand the MPA network are consistent with OPC policy. Further, in its discussion of MPAs, the 30x30 Draft Decision-Making Framework for Coastal Waters states, “Fully or highly protected areas have the greatest potential to protect biodiversity, confer resilience, and benefit species and ecosystems.”⁶ It is, therefore, wholly consistent with OPC policy for the Department to evaluate and approve petitions that would re-designate SMCAs to SMRs, expand existing MPAs, and create new SMRs or highly protected SMCAs.

Overwhelming public input for DMR Recommendation 4, which states “Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and management program,” resulted in CDFW and FGC embarking on the current adaptive management process.⁷ Part (b) of Recommendation 4 calls on decision-makers to “Identify and utilize best science-based approaches to

⁴ FGC § 2852 (a)

⁵ California Department of Fish and Wildlife. (2024). [Proposed MPA Petition Evaluation Framework](#)

⁶ California Ocean Protection Council. (2024). [30x30 Draft Decision-Making Framework for Coastal Waters](#).

⁷ California Department of Fish and Wildlife. (2022). [California’s Marine Protected Area Network Decadal Management Review](#).

inform potential changes to the MPA network in order to enhance Network performance.”⁸ Based on the policy guidance within the DMR, it is clear that the adaptive management process should result in changes to the network that enhance its performance.

As CDFW Director Bonham has publicly affirmed since the DMR was completed, the MPA network is working. California's Natural Resources Secretary Crowfoot and Deputy Secretary for Oceans and Coastal Policy for Natural Resources Eckerle agree that the MPA network should not be weakened through the adaptive management process. Secretary Crowfoot rightfully noted at the 30x30 Senate Natural Resources and Water Informational Hearing in March 2024 that we need more conserved areas to meet our biodiversity goals. Our organizations also appreciate Commissioner Sklar’s confirmation at the February 2024 FGC meeting that, “one of the Commission’s goals is to in no way weaken the network... including specific MPAs.” Our organizations agree with these comments from our state leaders and urge the Department and FGC to ensure the adaptive management process results in strengthening and expanding the MPA network to meet the goals of the Marine Life Protection Act and the state’s overall biodiversity protection and conservation goals.

4. “Controversy” should not be a factor in the evaluation process for Bin 2 petitions.

Controversy was a main factor in the binning phase of the MPA Petition Evaluation Framework. While there has been no indication that controversy will factor into Phases II and III, our organizations would like to emphasize that controversy should not be an evaluation metric or influence decision-making. As discussed at the July 17, 2024 MRC meeting, all petitions have some level of controversy—not just those in Bin 2— and it is unlikely that a full consensus will be reached for all petitions. Rather than denying petitions because of a lack of consensus, we agree with and support FGC and CDFW’s statements thus far that modifications to the network will be scientifically driven, will enhance MPA management, and must align with the goals of the MLPA.

5. Adaptive management should consider the broader threats facing our ocean.

As our organization has previously stated, the adaptive management process is occurring in the context of unprecedented changes to California’s ocean. We very much agree with Secretary Crowfoot’s opening in the DMR,

As we embark into the next decade of MPA Management, we must steady ourselves for the challenges ahead. While we see evidence of MPA protections benefiting key species and habitats, we must continue to invest in long-term monitoring to further understand how MPAs are meeting the goals of the MLPA and what additional steps may be necessary to further strengthen the Network. We need to consider climate change impacts and ensure that California’s MPAs promote ecosystem resilience and support sustainable fisheries outside their boundaries.⁹

California’s ocean and coastal areas are experiencing significant environmental stressors from climate change. Ocean waters are rising, becoming warmer, more acidic, lower in oxygen, and prone to extreme

⁸ Decadal Management Review.

⁹ California Department of Fish and Wildlife. (2023). [Marine Protected Area Decadal Management Review Report: Prioritized Recommendations](#)

events.¹⁰ Combined with the impacts of existing local stressors (e.g., fishing, pollution), climate change poses a significant threat to California's ocean biodiversity and coastal economy.

Furthermore, as heavily impacted as the California seascape is now, the human pressures to use the ocean more intensively are only rising.¹¹ California is investing heavily in offshore wind energy production as a key component of its clean energy transition.¹² Demand for the expansion of aquaculture is also rising.¹³ As the severity of the freshwater crisis in California intensifies, there will be sustained pressure to develop desalination plants along the coast. Efforts to develop ocean-based carbon dioxide removal (CDR) strategies are intensifying. Because of these trends, scientists warn that we are embarking on an era of large-scale habitat modification in the sea.

MPAs can guard marine ecosystems from ocean crowding and help them face unprecedented changes in ocean conditions in numerous ways: by reducing cumulative impacts from local stressors; by helping to protect species, genetic, and phenotypic diversity; by creating refuges in areas that are climatically stable through time; and by creating functional networks to help maintain migration and dispersal corridors.^{14,15} These impacts make California's MPAs an important tool to invest in the future health of our coastal ecosystems and offer direct benefits to communities, including enhanced recreation and the potential for improved subsistence-level fishing outside of MPA boundaries.

The adaptive management process is an opportunity for California to examine the current MLPA network in this broader context. We urge the FGC to take stock of current and future threats to our coastal ecosystems as they make decisions about the petitions. Twenty years ago, California exhibited leadership in establishing a network of ecologically connected highly and fully protected MPAs. It is time for the state to recommit to the goal of a healthy and resilient ocean and take additional and significant action to protect biodiversity and help ensure resilient systems now, while we can.

Thank you for considering these comments and your dedication to protecting California's coast.

Sincerely,

Sandy Aylesworth
Director, Pacific Initiative
Natural Resources Defense Council

Tomas Valadez
CA Policy Associate

¹⁰ H.-O. Pörtner et al., "IPCC Special Report on the Ocean and Cryosphere in a Changing Climate," Intergovernmental Panel on Climate Change, 2019, https://www.ipcc.ch/site/assets/uploads/sites/3/2019/12/SROCC_FullReport_FINAL.pdf.

¹¹ Benjamin Halpern, et al., "Spatial and temporal changes in cumulative human impacts on the world's ocean." *Nature communications* 6, no. 1 (2015): 1-7 6. 7615. 10.1038/ncomms8615.

¹² California Energy Commission. (2022). [Offshore Wind Energy Development off the California Coast](#)

¹³ Rosamond Naylor et al., "A 20-year retrospective review of global aquaculture." *Nature* 591, no. 7851 (2021): 551-563. <https://www.nature.com/articles/s41586-021-03308-6>.

¹⁴ Marissa L. Baskett and Lewis A. K. Barnett. "The ecological and evolutionary consequences of marine reserves," *Annual Review of Ecology, Evolution, and Systematics* 6 (2015): 49-73, <https://doi.org/10.1146/annurev-ecolsys-112414-054424>.

¹⁵ Callum M. Roberts et al., "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change," *PNAS* 114, no. 24 (2017): 6167-75, <https://doi.org/10.1073/pnas.1701262114>.

Azul

Anupa Asokan
Founder and Director
Fish On

Laura Deehan
State Director
Environment California

From: Keith Rootsart <[REDACTED]>

Sent: Friday, July 19, 2024 12:58 PM

To: FGC <FGC@fgc.ca.gov>; Ashcraft, Susan@FGC <[REDACTED]>

Cc: Dave Rudie <[REDACTED]>; [REDACTED] <[REDACTED]>;

David Goldenberg <[REDACTED]>; [REDACTED]

<[REDACTED]>; [REDACTED] <[REDACTED]>; Michael

Nelson <[REDACTED]>

Subject: MRC comments on Commercial Urchin closure

Dear FGC,

Below are my written comments provided in shortened form as testimony at the July 18, 2024 MRC meeting, Agenda Item #6.

1. Creation of New Daily Sea Urchin Permit

1. Slide #12 is too confusing to comment on and the explanation didn't make sense to me.
2. The Department should wave all fees and restrictions for commercial urchin fishing at this point.
3. Why does the State need to profit from conservation efforts?

2. Remove Friday as Prohibited Day in North

1. Inclusion of Fridays for commercial fishing is great, but why not Saturdays and Sundays too?
2. Fishing, especially on the north coast is very dependent on weather.
3. If the reasoning is that allowing Fridays is safer, than Saturday and Sundays would be even more safer.

3. Remove Commercial Prohibition at South Caspar Point

1. Removing urchins outside of Rec culling area may reduce migration of urchins into the culling area.
2. The Caspar Cove site is a continuous rocky reef without sand barriers to migration of urchins.
3. At Tanker's Reef, CDFW proposed an option #2 to push our culling area 100 meters away to avoid the influence of urchin migration. At Tanker's Reef there are sand barriers that limit urchin migration.
4. This commercial boundary is adjacent to the rec urchin boundary. Like Dave Rudie said, Block A is 350 meters away from the boundary.
5. Removing large highly mobile urchins may improve the kelp response to urchin culling, but kelp restoration is not the goal, only an experiment to see if divers can do the work of culling in the north. At the end of 5 years, like at Tanker's Reef, the culling must stop and the kelp consumed by grazers.
6. I think it's a great idea to stop the urchin migration but Brian Owens, CDFW, might disagree.

7. I agree with Commissioner Murray that this effect needs to be accounted for/documented in the study.

We Support Option #3

4. CDFW Proposed Changes

Size limit regulation is unclear, need to standardize method of measurement

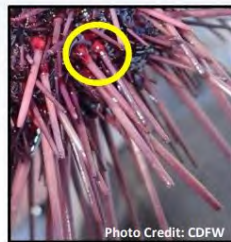
Note: Slide #23 was out of order in the presentation and not shown at the meeting.



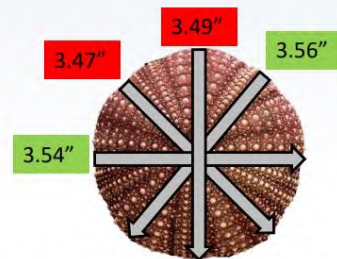
4) CDFW Proposed Changes (Cont.)

Additional changes needed for clarity

- Size limit regulations unclear
- Need to standardize method for measurement



Ball-and-Socket Attachment



Non-uniform Shell (Test) Diameter

1. Measuring tolerance could be plus/minus a quarter inch (0.25") due to spines, irregular shape, and urchins degrowing in size. The graphic on the slide shows a tolerance of +/- .03"
2. This is an intellectual exercise and is not practical on the water.
3. Moreover: **There should not be any size limits!**
4. The goal should not be to maintain a sustainable red urchin fishery! That was a rule for the previous ocean. We need to change our mindset from the status quo and adapt to the new ocean condition of an overabundance of urchins and try to add to the problem by allowing smaller urchins to mature, become reproductive, and make even more urchins, compounding the problem.
5. We are developing a **Regenerative purple urchin fishery** with urchin ranching in coordination with kelp restoration. The commercial urchin fishery could be a valuable asset with slight modification to methods and gear.

More

We should allow urchin removal in the adjacent Point Cabrillo SMR. We should not desire to maintain moonscapes in our best places. This is an argument for another time.

Thank you,

Keith Rootsaert
Giant Giant Kelp Restoration



Giant Giant Kelp
Restoration Project

Committee Staff Summary for July 17-18, 2024 MRC

6. Commercial Sea Urchin Fishing**Today's Item****Information** ☐**Action** ☒

Receive and discuss Department findings and recommendations for proposed changes to commercial urchin regulations, and potential committee recommendation.

Summary of Previous/Future Actions

- Petition 2023-04 submitted by California Sea Urchin Commission (CSUC) June 14-15, 2023
- Commission referred petition to Marine Resources Committee (MRC) and Department for review August 22-23, 2023
- Received and discussed Department recommendations for changes to commercial urchin fishing regulations March 19, 2024; MRC
- **Today receive and discuss Department recommendations and potential MRC recommendation** **July 17-18, 2024; MRC**

Background

Since the 1970s, sea urchins (primarily red) have been commercially harvested throughout California for “uni,” a delicacy prepared from urchin gonads. Section 9054 of the California Fish and Game Code authorizes the Commission to set the conditions for issuing commercial sea urchin diving permits to prevent overutilization of sea urchin and “...to ensure efficient and economic operation of the fishery...” on both a statewide basis and in specific geographic areas.

Current regulations for commercial sea urchin harvest are regionally-based, with differing regulations in northern and southern California (divided by the Monterey/San Luis Obispo county management line). In addition, management recommendations are periodically provided by CSUC, a statutory body established within the California Food and Agricultural Code in 2002 to “...ensure a reliable, sustainable supply of sea urchin products to consumers and to enhance California’s sea urchin industry performance through research funding, supporting industry standards and marketing, and promoting responsible fishery management recommendations.”

In June 2023, CSUC submitted a regulation change petition (2023-04) to propose changes to the fishery in northern California. Specifically, the petition requests to: (1) Remove Friday as a prohibited commercial urchin fishing day between June 1 and October 1 in northern California; and, (2) remove the commercial urchin fishing prohibition at South Caspar Point, Mendocino County, which was closed in 1989 to allow for sea urchin refuge and research endeavors (see Exhibit 1 for petition and CSUC rationale). In August 2023, the Commission referred the petition to MRC for discussion, supported by Department evaluation and input.

At the March 2024 MRC meeting, the Department presented an overview of the petitioned changes to commercial sea urchin regulations, the Department’s review of the proposed changes, and potential next steps. The Department also introduced potential additional changes related to creating a new daily sea urchin permit — as requested by urchin divers — and

Committee Staff Summary for July 17-18, 2024 MRC

changes needed to enhance clarity, such as size limit measuring methods. MRC expressed support for further development of the full scope of proposed regulatory options as proposed in Petition 2023-04 and by the Department, and to return to today's meeting for a final recommendation.

Update

Since March, the Department has continued collaborating with CSUC to develop proposed options. Consistent with MRC direction, today the Department will present proposed regulation changes in four categories:

1. Develop a new daily sea urchin crew permit.
2. Remove Friday as a prohibited day in northern California (from petition).
3. Remove the commercial closure at South Caspar Point (from petition; see below for three options).
4. Make other changes for clarity.

For the commercial sea urchin fishing closure at South Caspar Point, the Department has identified three options for discussion:

- *Option 1:* Maintain the closure until the sunset date of April 1, 2029 as specified in regulation (*status quo*).
- *Option 2:* Remove the closure and open the area to commercial sea urchin fishing immediately
- *Option 3:* Reduce the closure area to only include the northeast bay until April 1, 2029 (*Department-preferred*)

Option 3 is preferred by the Department because it restores commercial sea urchin fishing in most of the previous closure area but maintains the closure in those areas of the cove with active kelp restoration projects that are anticipated to continue until April 1, 2029.

The Department supports scheduling a rulemaking and, if MRC concurs, seeks MRC guidance on the options for the South Caspar Point closure area. MRC could recommend a single one of the three options to advance in a future rulemaking, or could recommend the Commission schedule notice with more than one option. Today is an opportunity to clarify and discuss the options and consider an MRC recommendation for the Department's proposed regulation changes (proposed for notice in December 2024).

If MRC recommends scheduling a rulemaking, the Department will continue working with CSUC to refine the daily sea urchin crew permit concepts to build into proposed regulations.

Significant Public Comments (N/A)

Recommendation

Commission staff: After discussing Department options and trade-offs, recommend the Commission support granting petition 2023-04 with either full or partial lifting of South Caspar

Committee Staff Summary for July 17-18, 2024 MRC

Point closure area. Develop a recommendation to schedule a rulemaking to consider proposed changes to commercial urchin regulations as recommended by the Department, specifying the option(s) to include for the South Caspar Point closure area.

Department: Provide feedback on Department options to address the commercial sea urchin fishing closure at South Caspar Point (Option 3 preferred), and support scheduling a rulemaking to consider proposed changes to commercial urchin fishing regulations on a timeline commencing with notice in December 2024, as reflected in Exhibit 2.

Exhibits

1. [Petition 2023-04](#)
2. [Department presentation](#)

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission grant Petition 2023-04 *in concept* for consideration in a rulemaking, using [option 1, 2 or 3 OR options 2 and 3] as proposed by the Department for lifting the commercial urchin closure at South Caspar Point, Mendocino; and schedule a rulemaking to consider potential changes to commercial sea urchin regulations, as recommended by the Department, to commence with notice in December 2024.



Tracking Number: (2023-04)

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:

Telephone number:

Email address:

2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Authority Fish and Game Code 713, 1050, 9054, 9055. References: Fish and Game Code 713, 1050, 7850, 7852, 7852.2, 7857, 9054, 9055

3. Overview (Required) - Summarize the proposed changes to regulations: Two changes are being requested: 1) Remove Friday as a prohibited commercial urchin fishing day north of the San Luis Obispo/Monterey county line between June 1 and October 31. 2) Remove the commercial urchin fishing prohibition in the area identified as South Caspar Point.

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

Request 1:

Friday was one of the closure days originally established to reduce fishing pressure in the northern area; however, the Friday closure is no longer necessary to limit take due to the small number of fishermen in the northern zone. For instance, in 2022 there were 16 divers with landings in Northern California, compared with 49 in 2014 before the El Nino and Warm Water events of 2014 and 2015 when the number of active divers began to decline. During this same period harvest poundage decline from 3.7 million pounds to 284,000 pounds within the same time period. The area is not overharvested as there are abundant urchins in the North. The issue is the lack of kelp canopy which reduces the ability to find harvestable urchins. Thus, it requires more dive time to find quality urchins. Additional dive time is dangerous to divers as they must spend more time during the day under water and deeper depths, thus potentially subjecting themselves



to decompression sickness or the “bends”. Several divers experienced bends in recent years and two died. Providing an additional day could avoid the need to search in deep water for longer periods of time versus using the additional day to explore a wider diving area. Lack of urchins is not beneficial to the industry due to the need to better service seafood markets. Consumers are seeking out more opportunity to purchase urchins. In response, there are more direct sales dockside than ever before in the North. The most convenient day for dockside sales occurs on weekends. Having Fridays to fish allows for fresher product for weekend sales. For the same reasons, the Fish and Game Commission has reduced closed days in the southern fishery area in the last decade. In addition, the Fish and Game Commission recently implemented a new regulatory framework to achieve a capacity goal of 150 permits, which was identified in the current Enhanced Status Report (ESR) as a key tool to manage effort in this fishery. Although the ESR identifies increasing the number of closure days as a possible way to limit effort, there is no evidence that it has been or will be effective. The industry feels the capacity goal of 150 will be effective at limiting effort and servicing the markets so critical to this fishery.

Present Regulations.

Current regulations in subsection (n 1) allow sea urchins to be harvested seven days a week from November through May and Monday through Thursday from June through October.

Proposed Regulation

The proposed amendment would allow the harvest of sea urchin on any weekday (Monday-Friday) from June-October in both northern and southern California south of the Monterey-San Luis Obispo county line. This will add 21 additional days of fishing during the summer season.

The CSUC has discussed this proposal at every board of directors meeting and at local northern California port meetings. In addition, The CSUC conducted industry surveys. The divers and processors in northern industry are in favor of adding Fridays back to their season.

Rationale

The current closures for the sea urchin fishery were instituted in 1993 to curb resource depletion and did not account for evolving market dynamics. Long-term market trend of sea urchin roe has since evolved from large-scale international exports to one encompassing significant domestic consumption. A reliable supply of a quality product at a fair price is now essential to maintaining and expanding the market share of California's urchin gonads. The current June-October harvest schedule of Monday through Thursday is resulting in delayed market replenishment at the beginning of each week. Sea urchins held over for shipments from the previous Thursday also lose some of their freshness and thus quality. Friday deliveries will allow for fresher product for weekend consumption at sushi restaurants.

In addition, an increasing number of fishermen are selling sea urchins directly to the end users at local ports. These markets tend to be open during weekends, and are more amenable to products obtained the day before as opposed to ones that have sat in storage for over a day.

The extended weeks are not expected to increase fishing pressure on the red sea urchin resource in total. Most urchin divers do not currently dive for more than 75 percent of his/her available dive days during the restricted season. Making Fridays available to commercial divers would allow them to further exploit the high-end niche market catered to specific restaurants and end consumers. Divers are expected to divert more time and effort into marketing their catch,



preserving the products, and interacting with end users. The extended fishing week is also expected to benefit fishermen by giving them more flexibility in selecting dive days with safer water conditions.

The changes in the market require a smaller but steadier supply of urchin roe. The value of the domestic market for California red sea urchin has grown dramatically during the last decade and is continuing to expand, helping to offset the economic damage the fishery suffered with the loss of a substantial portion of its sales to the Japanese market and imports from Mexico. The U.S. market experiences its highest product demand during the summer months into early fall. By adding one day a week to the current harvesting schedule (June through October), the fishery will be on a more equal footing with the rest of the world. The additional day would also bring an added benefit of giving divers more flexibility to manage their dive schedules.

Request 2:

Open the Caspar Point area to urchin harvesting provided the industry does not harvest in areas where ongoing research is taking place. The South Caspar Point commercial urchin closure was originally created in the early 1990s to study management effectiveness during the “gold rush” period of the developing urchin fishery. Those studies were completed decades ago and the study area no longer serves any purpose. Additionally, with the implementation of the MLPA, a much more effective network of study areas was created that could be used as reference sites to study commercial urchin fishing impacts and potential management measures, if necessary. Allowing commercial urchin fishing within that area may also support the kelp recovery efforts recently approved by the Fish and Game Commission, which increased the recreational take of purple urchins in that area in an effort to restore kelp forests.

Present Regulations.

Current regulations restrict harvesting in the South Caspar Point off Mendocino's coast. Once considered a reserve to prevent overfishing, the use of the area diminished with the advent of MPAs in 2012. The geographical boundaries of the South Caspar Point are not well defined and vague. In the regulations they are defined under Title 14, Section 120.7 (O) Closed Areas “The South Caspar Point area in Mendocino County is closed to all commercial fishing for sea urchins. This area is bounded on the north by a line extending 90° magnetic from sea to the mouth of Caspar Creek (north bank) in Caspar Cove, on the south by the northern boundary of the Point Cabrillo State Marine Conservation Area and its westward extension to the 120-foot depth contour, on the west by 120-foot depth contour line connecting the north and south boundary lines, and on the East by the mainland shore. The Point Cabrillo State Marine Conservation Area remains closed to the take of all forms of marine life except as permitted in subsection 632(b).”

Rationale

There are currently 20 MPAs and 7 special closure areas in northern California. These MPAs represent 137 square miles or 13% of state waters. There are adequate reserve areas to protect resources and ocean management. The South Caspar Point has ongoing research activities that will remain in force should the area become opened by the Fish & Game Commission. The industry will collaborate with the Department to maintain safe distances from ongoing projects so they will not disturb monitored areas.

In 2010 a Maximum Sustainable Yield (MSY) study was conducted by the Department when 3.3 million pounds was considered to be the MSY for Northern California and there were 250 active



divers in the California at the time. During this same time period the CSUC was co-funding a larval settlement project with the University of California Santa Barbara, and continues to do so to present day. The larval distribution is shown to be impacted more by temperature fluctuations in the ocean than any other influence. What the study has shown is that harvest of legal sized red or purple urchins does not impact larval settlement. Therefore, opening the Caspar Point area will not result in further loss of future harvestable urchins.

Observation by local divers indicate there is kelp growth on the Southside of Caspar Bay and has the potential for additional regrowth as the reef consists of a hard substrate and stretches towards the middle of the bay on the inside of the cove. This area has maintained persistent kelp throughout the downturn period.

The CSUC has discussed this proposal at every board of directors meeting and at local northern California port meetings. In addition, The CSUC conducted industry surveys. The divers and processors in northern industry are in favor of opening the Caspar Point closed area.

SECTION II: Optional Information

5. **Date of Petition:** May 25, 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): Request 1) Amend Section 120.7(n)(1) ...~~Friday,~~ ...
 - ☐ Add New Title 14 Section(s): [Click here to enter text.](#)
 - ☒ Repeal Title 14 Section(s): Request 2) Strike Section 120.7(o)(2)
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: 2024
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). Status of the Fisheries Report 2003 (See California Department of Fish and Game website).
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 a formally closed area to fishing and increasing fishing opportunities by allowing fishing on Fridays.

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

N/A

SECTION 3: FGC Staff Only

Date received: 05/25/2023

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: Aug 22-23, 2023

FGC action:

☐ Denied by FGC

☐ Denied - same as petition _____

Tracking Number

☐ Granted for consideration of regulation change



Proposed Changes to Commercial Sea Urchin Regulations

18 July 2024

Presented to:

Marine Resources Committee
CA Fish and Game Commission

Presented by:

Joanna Grebel
Invertebrate Program Manager
Marine Region



Proposed Changes (Title 14, CCR § 120.7)

1. Develop new sea urchin permit
2. Remove Friday as a prohibited day north of San Luis Obispo/Monterey county line
3. Address commercial urchin fishing prohibition at South Caspar Point, Mendocino County
4. Other changes for clarity





1) Creation of New Daily Sea Urchin Permit

Background

- New permit authority (FGC 9054.5)
- Daily permit with less burdensome requirements or time delays





1) Creation of New Daily Sea Urchin Permit

	<u>DIVING</u>	<u>CREWMEMBER</u>	<u>DAILY (New)</u>
Permit Access	Limited Entry	Open Access	Open Access
Take and Sell Sea Urchin	✓	✗	✗
Assist Fishing Operations	NA	✓	✓
Commercial Fishing License	✓	✓	✓ ✗
Permit Fees	✓	✓	✓*
Lottery Preference Points	NA	✓	✗

* Fee paid by sea urchin diver



2) Remove Friday as Prohibited Day in North

Current Regulation: Red sea urchin shall not be taken for commercial purposes on Friday, Saturday, and Sunday north of the Monterey-San Luis Obispo county line from June 1 through October 31.

Petitioner Rationale and **CDFW response (bold)**:

- Effort reduction no longer necessary (**agree**)
- Expands direct sales to consumers (**agree**)
- Increased safety for divers (**agree**)

CDFW: Consistent season statewide – more practical for Law Enforcement Division





2) Remove Friday Southern Statistics

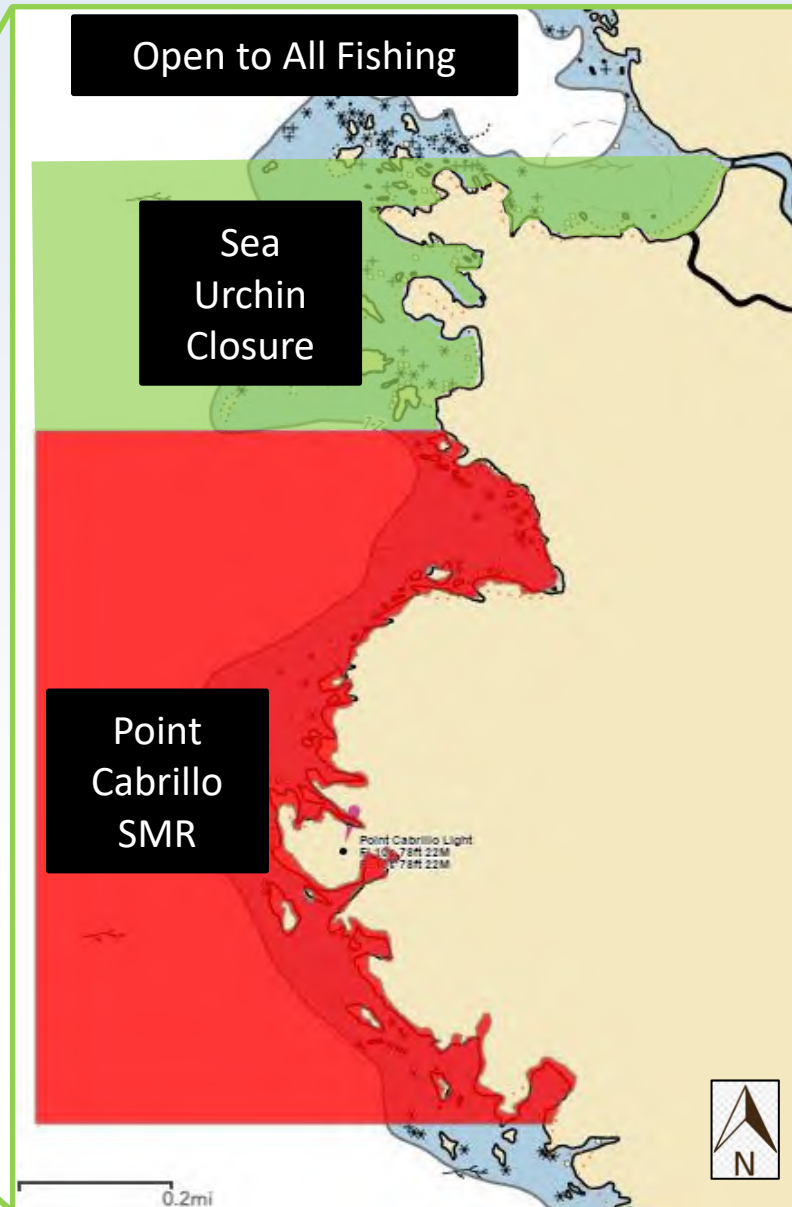
Effects of Friday Opening in the South (June-October)

	Mon	Tues	Wed	Thurs	Fri
Pre-Rule Change (2011-2017)	16%	30%	24%	30%	Closed
Post-Rule Change (2018-2023)	9%	24%	26%	20%	22%
Percent Change	-7%	-6%	+2%	-10%	+22%

- Effort shifted from Monday, Tuesday, and Thursday to mostly Friday
- Divers benefiting from direct market sales, weekend markets, and another weather option



3) Remove Commercial Prohibition at South Caspar Point

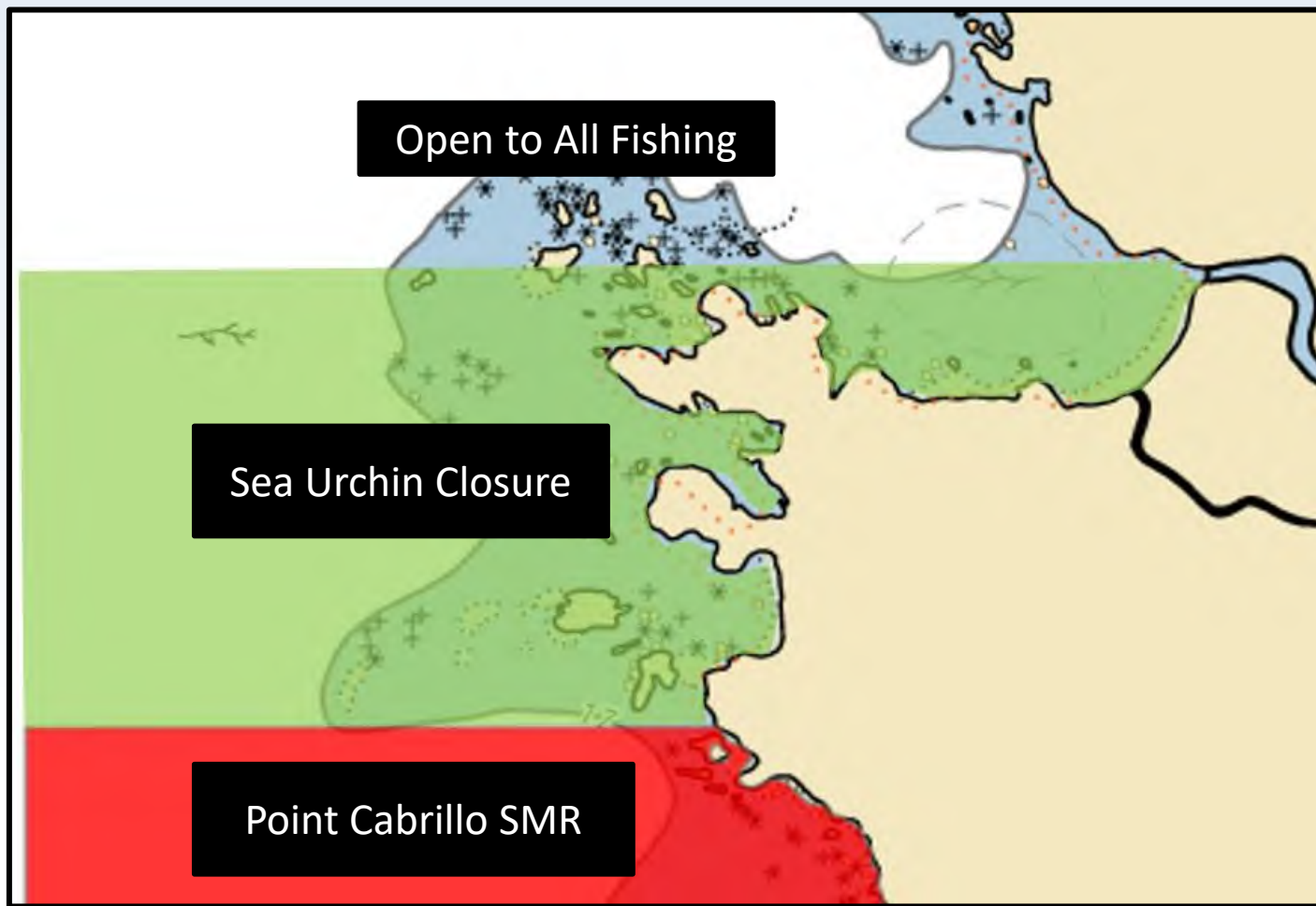


Current Closure

- Established in 1989
- Prohibits only sea urchin harvest
- Encompasses 0.19 square miles out to 120-foot contour line
- Created as sea urchin refuge
- Borders the Point Cabrillo SMR



3) Remove Commercial Prohibition at South Caspar Point (Option 1)



OPTION #1

Maintain sea urchin closure until 29.06 sunset date of April 1, 2029.

Pros: minimal regulation change which only adds a sunset date. Allows help restoration studies to continue without commercial sea urchin fishing.

Cons: loss of fishing opportunities for commercial industry for 5 years



3) Remove Commercial Prohibition at South Caspar Point (Option 2)

OPTION #2

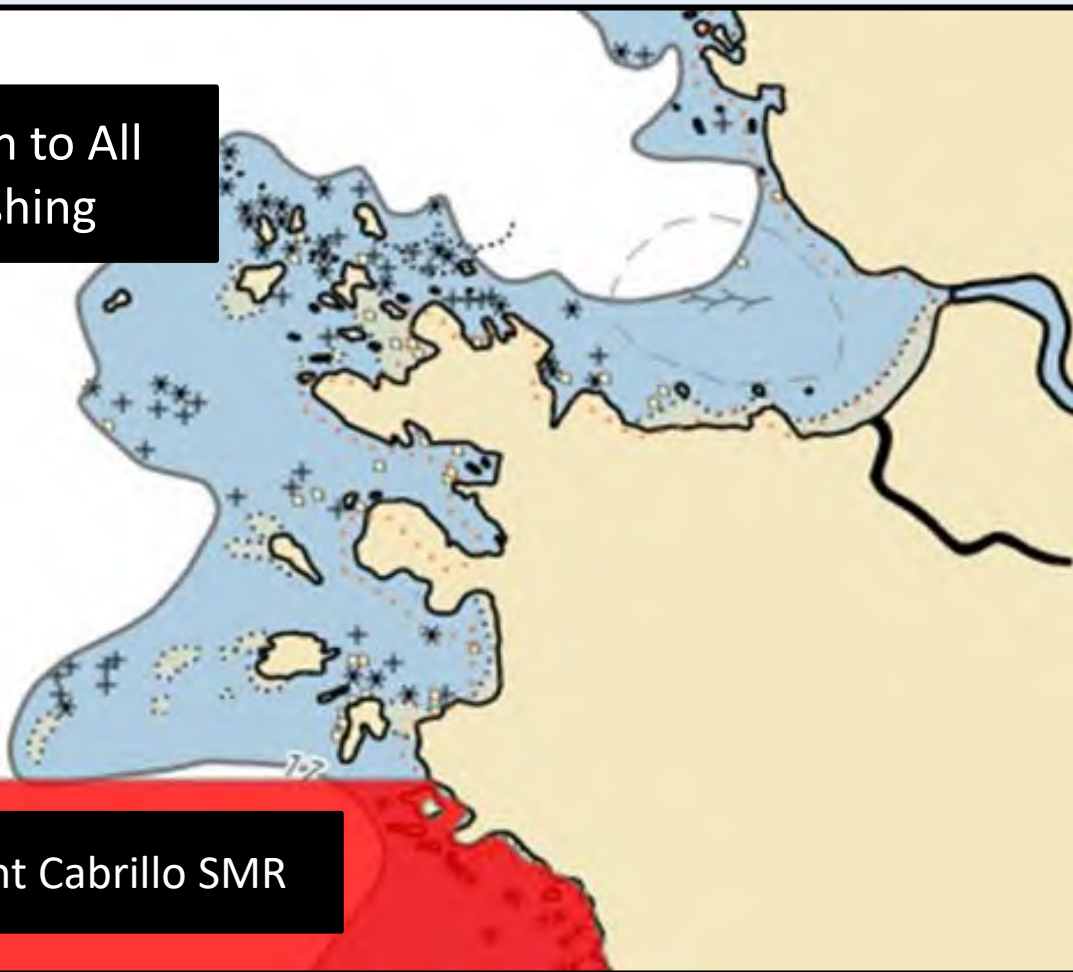
Remove sea urchin closure and open to all fishing immediately

Pros: opens sea urchin fishing opportunities to all previous closed areas

Cons: commercial harvesting may alter results of ongoing recreational kelp restoration projects through April 1, 2029 (sunset date of 29.06 Caspar Cove).

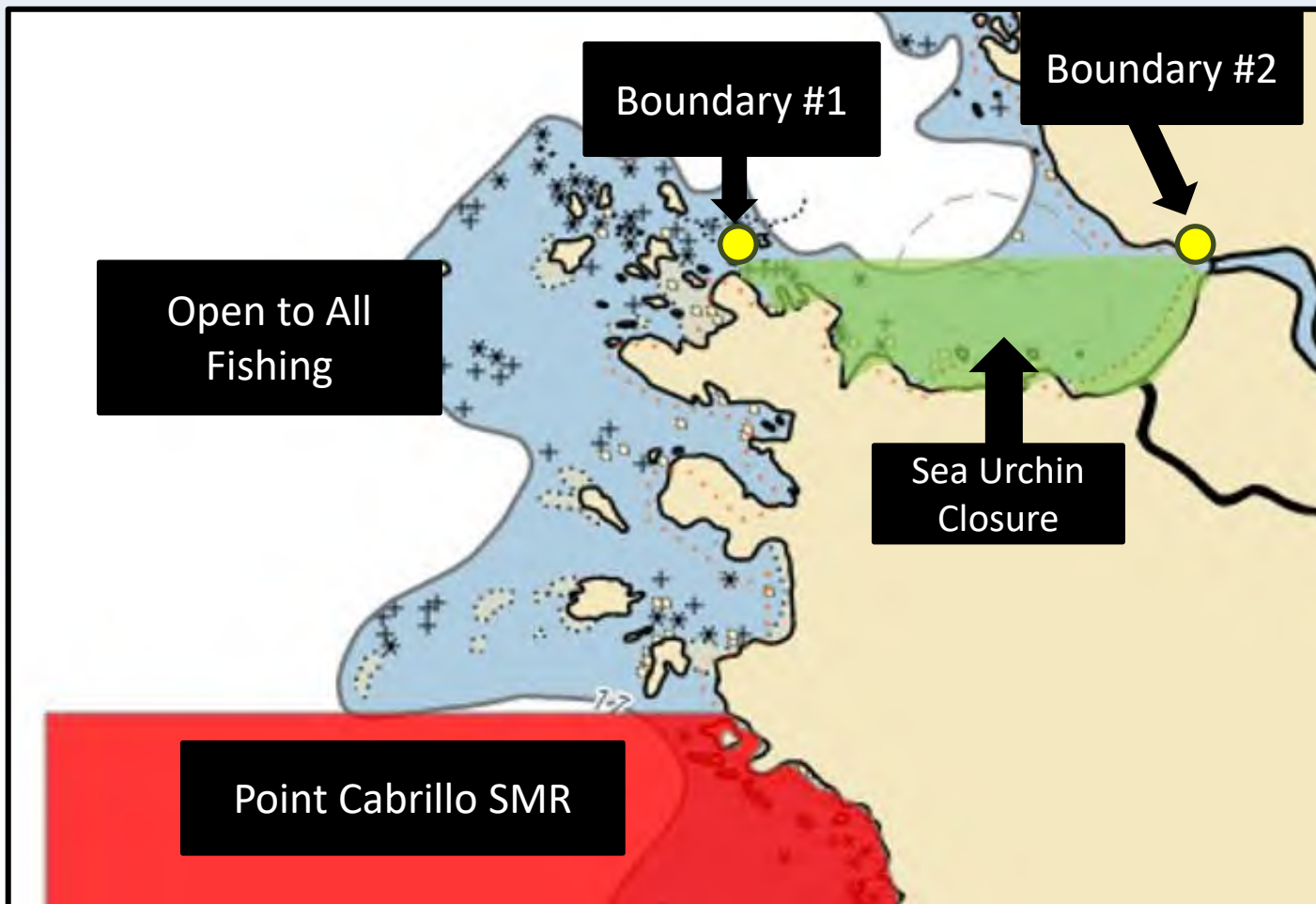
Open to All
Fishing

Point Cabrillo SMR





3) Remove Commercial Prohibition at South Caspar Point (Option 3)



OPTION #3 (Preferred)

Reduce closure area to only include Northeast bay until April 1, 2029

Pros: allows sea urchin fishing in most of the previous closure area. Maintains closure in area where kelp restoration projects are ongoing until April 1, 2029.

Cons: loss of small area of fishing opportunities for commercial industry



4) CDFW Proposed Changes

Current 120.7 Regulation	Proposed Change
(a)(1) Descriptions of allowed activities for sea urchin diving permit	Permit description clean up
(b)(1)-(b)(2) Description of Sea Urchin Diving and Crew Member Permit	Add language clarifying permitted activities for this permit
(p) Size Limit	Rewrite section for clarity on minimum size, slot limit, and method of measuring.



Timeline

Milestone	Date
MRC Final Recommendation	July 18, 2024
Proposed Rulemaking Timeline	
FGC Notice Meeting	December 2024
FGC Discussion/Adoption Meeting	February 2025



Summary & Next Steps

- Feedback on the proposed regulation changes
- Continue working with CSUC to further develop new Daily Sea Urchin Permit concepts



Thank You



Questions:

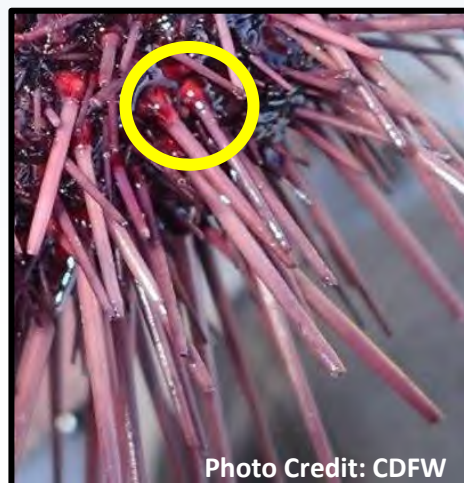
AskMarine@wildlife.ca.gov



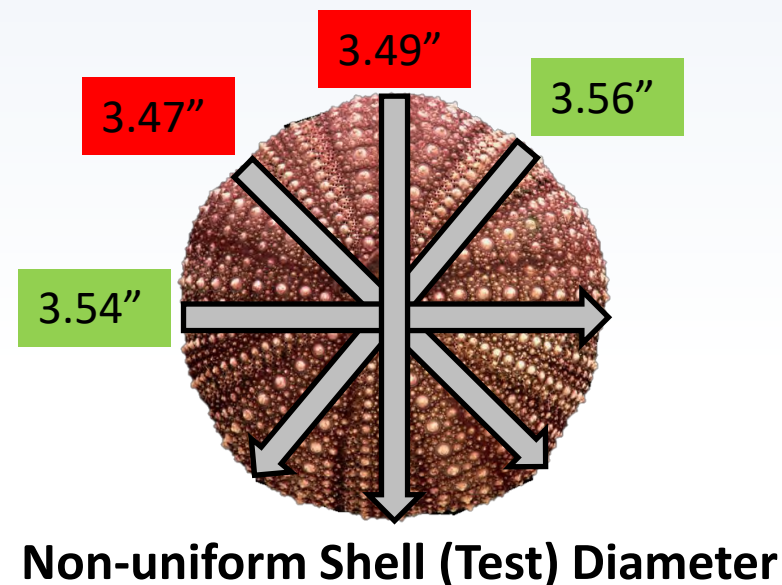
4) CDFW Proposed Changes (Cont.)

Additional changes needed for clarity

- Size limit regulations unclear
- Need to standardize method for measurement



Ball-and-Socket Attachment



Non-uniform Shell (Test) Diameter