California Fish and Game Commission

Marine Resources Committee

Meeting Binder

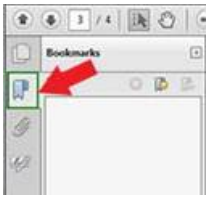
November 9, 2021

Webinar/Teleconference

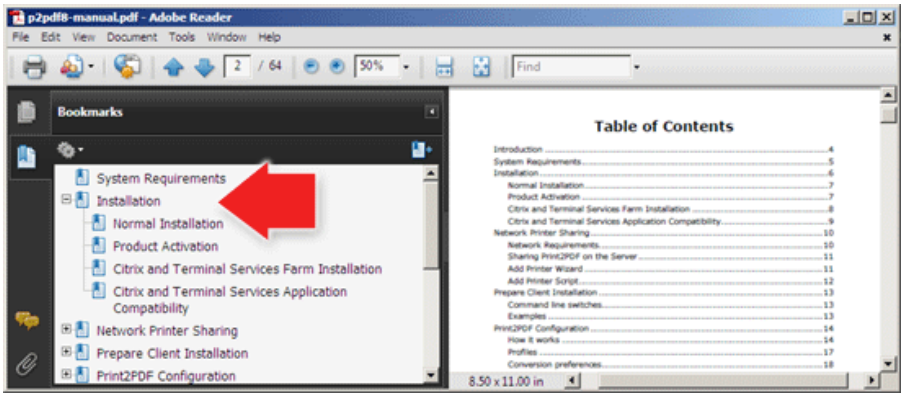
EASY GUIDE TO USING THE BINDER

1. Download and open the binder document using your Adobe Acrobat program/app.

2. If a bookmark panel does not automatically appear on either the top or left side of the screen, click/tap on the “bookmark symbol” located near the top left-hand corner.



3. To make adjustments to the view, use the Page Display option in the View tab. You should see something like:



4. We suggest leaving open the bookmark panel to help you move efficiently among the staff summaries and numerous supporting documents in the binder. It’s helpful to think of these bookmarks as a table of contents that allows you to go to specific points in the binder without having to scroll through hundreds of pages.

5. You can resize the two panels by placing your cursor in the dark, vertical line  located between the panels and using a long click /tap to move in either direction.

6. You may also adjust the sizing of the documents by adjusting the sizing preferences located on the Page Display icons found in the top toolbar or in the View tab.

7. Upon locating a staff summary for an agenda item, notice that you can obtain more information by clicking/tapping on any item underlined in blue.

8. Return to the staff summary by simply clicking/tapping on the item in the bookmark panel.

9. Do not hesitate to contact staff if you have any questions or would like assistance.

OVERVIEW OF FISH AND GAME COMMISSION COMMITTEE MEETING

- Welcome to this meeting of the Marine Resources Committee. The Committee is comprised of up to two Commissioners who co-chair each meeting; members are assigned by the Commission annually.

- Our goal today is informed discussion to guide future decision making, and, we need your cooperation to ensure a lively and comprehensive dialogue.

- We are operating under Bagley-Keene Open Meeting Act, but it is important to note that the Committee chairs cannot take action independent of the full Commission; instead, the chairs make recommendations to the full Commission at regularly scheduled meetings.

- These proceedings are being recorded for reference and archival purposes and are available upon request.

- Items may be heard in any order pursuant to the determination of the Committee Co-Chairs.

- As a general rule, requests for regulatory change need to be redirected to the full Commission and submitted on the required petition form, FGC 1, titled “Petition to the California Fish and Game Commission for Regulation Change” (Section 662, Title 14, CCR). However, at the Committee’s discretion, the Committee may request that staff follow up on items of potential interest to the Committee and possible recommendation to the Commission.

- Committee meetings operate informally and provide opportunity for everyone to provide comment on agenda items. If you wish to speak on an agenda item, please follow these guidelines:
    1. Raise your hand and wait to be recognized by the Committee.
    2. Provide your name, affiliation (if any), and the number of people you represent.
    3. Time is limited; please keep your comments precise to give others time to speak.
    4. If several speakers have the same concerns, please appoint a group spokesperson.
    5. If speaking during public comment, the subject matter you present should <u>not be related</u> to any item on the current agenda (public comment on agenda items will be taken at the time the Committee members discuss that item).

INTRODUCTIONS FOR FISH AND GAME COMMISSION MARINE RESOURCES COMMITTEE

FISH AND GAME COMMISSIONERS

Samantha Murray	MRC Chair (Del Mar)
Eric Sklar	MRC Chair (Saint Helena)

COMMISSION STAFF

Melissa Miller-Henson	Executive Director
Susan Ashcraft	Marine Advisor
Cynthia McKeith	Staff Services Analyst
David Haug	Regulatory Analyst
Corinna Hong	Sea Grant State Fellow

DEPARTMENT OF FISH AND WILDLIFE

Mike Stefanak	Assistant Chief, Law Enforcement Division
Randy Lovell	Statewide Aquaculture Coordinator
Craig Shuman	Regional Manager, Marine Region
Sonke Mastrup	Program Manager, Invertebrate Fisheries, Marine Region
Becky Ota	Program Manager, Marine Habitat Conservation, Marine Region
Kirsten Ramey	Program Manager, State Managed Finfish and Nearshore Ecosystem, Marine Region
Eric Kord	Captain, Marine Law Enforcement Division

INVITED SPEAKERS

I would also like to acknowledge special guests who are present:
(i.e., key DFW staff, elected officials, tribal chairpersons, other special guests)

STATE OF CALIFORNIA
Gavin Newsom, Governor

Fish and Game Commission

Wildlife Heritage and Conservation
Since 1870

Melissa Miller-Henson
Executive Director
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fgc@fgc.ca.gov

www.fgc.ca.gov

MARINE RESOURCES COMMITTEE

Committee co-chairs: Commissioner Sklar and Commissioner Murray

Meeting Agenda
November 9, 2021; 9:00 a.m.

Webinar and Teleconference

Pursuant to Executive Order N-08-21, the California Fish and Game Commission is conducting this committee meeting by webinar and teleconference. Commission members will participate remotely. The public may provide public comment during the public comment periods, and otherwise observe remotely consistent with the Bagley-Keene Open Meeting Act.

To participate in the meeting, please join via Zoom or by telephone.
Click here or go to https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195276&inline for instructions on how to join the meeting.

Note: See important meeting deadlines and procedures, including written public comment deadlines, starting on page 4. Unless otherwise indicated, the California Department of Fish and Wildlife is identified as Department. All agenda items are informational and/or discussion only. The Committee develops recommendations to the Commission but does not have authority to make policy or regulatory decisions on behalf of the Commission.

Call to order

1. Approve agenda and order of items

2. General public comment for items not on agenda
Receive public comment regarding topics that are not included on the agenda.
The Committee may not discuss or take action on any matter raised during this item, except to consider whether to recommend that the matter be added to the agenda of a future meeting [Sections 11125, 11125.7(a), Government Code].

3. Recreational take of clam and other invertebrates
Receive Department update on review of hydraulic pump gear ban adopted through emergency regulation and consider a potential committee recommendation for the regular rulemaking scheduled for December.

4. Marine protected area network

Receive Department update on planning for the first decadal management review of California's marine protected area network. Discuss and consider a committee recommendation on a process for Commission and public receipt and review of the Department's report.

5. California halibut fishery management review

Receive Department update review of California halibut fishery management. Consider potential committee recommendation on timing of review.

(A) Feedback received at stakeholder engagement webinars

(B) Department priorities for management attention

(C) Process for evaluating new and old California halibut trawl grounds as mandated in statute

6. California Coastal Fishing Communities Project

Receive Commission staff update on progress developing a potential policy—including feedback from regional stakeholder roundtables—and completing draft analyses of staff recommendations.

7. Staff and agency updates requested by the Committee

Receive written updates from staff and other agencies.

Note: To enhance meeting efficiency in the webinar/teleconference format, the Committee intends to receive updates primarily in writing. The public will be given an opportunity to provide comment, although the level of in-meeting discussion will be at the discretion of the Committee.

(A) California Ocean Protection Council

(B) Department

I. Law Enforcement Division

II. Marine Region

a. Kelp restoration and recovery efforts, including initial outcomes of urchin removal projects and status of sunflower star (*Pycnopodia*)
b. Red abalone fishery management plan development
c. Market squid management review
d. Aquaculture – Current and future lease planning

(C) Commission staff

8. Future agenda items

(A) Review work plan agenda topics, priorities, and timeline

(B) Potential new agenda topics for Commission consideration

Adjourn

California Fish and Game Commission
Meeting Schedule

Note: As meeting dates and locations can change, please visit www.fgc.ca.gov for the most current list of meeting dates and locations.

Meeting Date	Commission Meeting	Committee Meeting
December 14, 2021		**Tribal** Teleconference
December 15-16, 2021	Teleconference	
January 13, 2022		**Wildlife Resources** Sacramento
February 16-17, 2022	Sacramento	
March 24, 2022		**Marine Resources** Sacramento
April 19, 2022		**Tribal** Monterey/Santa Cruz area
April 20-21, 2022	Monterey/Santa Cruz area	
May 19, 2022	Teleconference	
May 19, 2022		**Wildlife Resources** Redding
June 15-16, 2022	Los Angeles/Orange County	
July 14, 2022		**Marine Resources** San Diego area
August 16, 2022		**Tribal** Fortuna
August 17-18, 2022	Fortuna	
September 15, 2022		**Wildlife Resources** Los Angeles/Inland Empire area
October 12-13, 2022	Truckee	
November 17, 2022		**Marine Resources** Monterey area
December 13, 2022		**Tribal** San Diego area
December 14-15, 2022	San Diego area	

Other Meetings of Interest

Association of Fish and Wildlife Agencies

- September 18-21, 2022, Fort Worth, TX

Pacific Fishery Management Council

- November 15-22, 2021, Costa Mesa, CA
- March 8-14, 2022, San Jose, CA
- April 6-13, 2022, San Jose, CA
- June 7-14, 2022, Vancouver, WA
- September 7-14, 2022, Boise, ID
- November 2-8, 2022, Orange County, CA

Pacific Flyway Council

- March 15, 2022, Spokane, WA
- August 2022 – Dates and location TBD

Western Association of Fish and Wildlife Agencies

- January 6-10, 2022, Tucson, AZ
- July 10-15, 2022, Oklahoma City, OK

Wildlife Conservation Board

- November 18, 2021, Webinar
- 2022 – Dates and locations TBD

IMPORTANT COMMITTEE MEETING PROCEDURES INFORMATION

Welcome to a meeting of the California Fish and Game Commission's Marine Resources Committee. The Committee is composed of and chaired by up to two Commissioners; these assignments are made by the Commission each year.

The goal of the Committee is to allow greater time to investigate issues before the Commission than would otherwise be possible. Committee meetings are less formal in nature and provide for additional access to the Commission. The Committee follows the noticing requirements of the Bagley-Keene Open Meeting Act. It is important to note that the Committee chairs cannot take action independent of the full Commission; instead, the chairs make recommendations to the full Commission at regularly scheduled meetings.

The Commission's goal is preserving our outdoor heritage and conserving our natural resources through informed decision-making; Committee meetings are vital in developing recommendations to help the Commission achieve that goal. In that spirit, we provide the following information to be as effective and efficient toward that end. Welcome, and please let us know if you have any questions.

PERSONS WITH DISABILITIES

Persons with disabilities needing reasonable accommodation to participate in public meetings or other Commission activities are invited to contact the Department's Equal Employment Opportunity (EEO) Office at (916) 653-9089 or EEO@wildlife.ca.gov. Accommodation requests for facility and/or meeting accessibility and requests for American Sign Language (ASL) Interpreters should be submitted at least two weeks prior to the event. Requests for Real-Time Captioners should be submitted at least four weeks prior to the event. These timeframes are to help ensure that the requested accommodation is met. If a request for an accommodation has been submitted but is no longer needed, please contact the EEO Office immediately.

SUBMITTING WRITTEN MATERIALS

The public is encouraged to attend Committee meetings and engage in the discussion about items on the agenda; the public is also welcome to comment on agenda items in writing. You may submit your written comments by one of the following methods (only one is necessary): **Email** to fgc@fgc.ca.gov**; mail** to California Fish and Game Commission, P.O. Box 944209, Sacramento, CA 94244-2090; or **deliver** to California Fish and Game Commission, 715 P Street, 16th Floor, Sacramento, CA 95814.

COMMENT DEADLINES

The **Written Comment Deadline** for this meeting is **5:00 p.m. on Wednesday, October 27, 2021**. Written comments received at the Commission office by this deadline will be made available to commissioners prior to the meeting.

The **Supplemental Comment Deadline** for this meeting is **noon on Thursday, November 4, 2021**. Comments received by this deadline will be made available to commissioners at the meeting.

*The Committee **will not** consider comments regarding proposed changes to regulations that have been noticed by the Commission. If you wish to provide comment on a noticed item,*

please provide your comments during Commission business meetings, via email, or deliver to the Commission office.

Note: Materials provided to the Committee may be made available to the general public.

REGULATION CHANGE PETITIONS

As a general rule, requests for regulatory change must be redirected to the full Commission and submitted on the required petition form, FGC 1, *Petition to the California Fish and Game Commission for Regulation Change* (Section 662, Title 14, California Code of Regulations). However, at the Committee's discretion, the Committee may request that staff follow up on items of potential interest to the Committee and possible recommendation to the Commission.

SPEAKING AT THE MEETING

Committee meetings operate informally and provide opportunity for everyone to comment on agenda items. If you wish to speak on an agenda item, please follow these guidelines:

1. You will be given instructions during the meeting for how to be recognized by the Committee co-chair(s) to speak.
2. Once recognized, please begin by giving your name and affiliation (if any) and the number of people you represent.
3. Time is limited; please keep your comments concise so that everyone has an opportunity to speak.
4. If there are several speakers with the same concerns, please try to appoint a spokesperson and avoid repetitive comments.
5. If speaking during public comment for items not on the agenda (Agenda Item 2), the subject matter you present should not be related to any item on the current agenda (public comment on agenda items will be taken at the time the Committee members discuss that item). As a general rule, public comment is an opportunity to bring matters to the attention of the Committee, but you may also do so via email or standard mail. At the discretion of the Committee, staff may be requested to follow up on the subject you raise.

VISUAL PRESENTATIONS/MATERIALS

All electronic presentations must be submitted by the **Supplemental Comment Deadline** and approved by the Commission executive director before the meeting.

1. Electronic presentations must be provided by email to fgc@fgc.ca.gov or delivered to the Commission on a USB flash drive by the deadline.
2. All electronic formats must be Windows PC compatible.

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

2. GENERAL PUBLIC COMMENT

Today's Item **Information ☒** **Action ☐**

Receive public comment for items not included on the agenda.

Summary of Previous/Future Actions (N/A)

Background

MRC receives two types of correspondence or comment under general public comment: requests for MRC to consider new topics and informational items. As a general rule, requests for regulatory change must be submitted to FGC on petition form FGC 1, *Petition to the California Fish and Game Commission for Regulation Change* (Section 662). However, MRC may, at its discretion, request that staff follow up on items of potential interest for possible recommendation to FGC.

Significant Public Comments (N/A)

Recommendation

Staff recommends any new agenda items—based on issues raised and within FGC's authority—be held for discussion under Agenda Item 8, Future Agenda Items.

Exhibits (N/A)

Committee Direction/Recommendation (N/A)

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

3. RECREATIONAL TAKE OF CLAM AND OTHER INVERTEBRATES

Today's Item **Information ☐** **Action ☒**

Receive DFW update on review of hydraulic pump gear ban adopted through emergency regulation and consider a potential committee recommendation for the regular rulemaking scheduled for Dec 2021.

Summary of Previous/Future Actions

• FGC adopted emergency regulations	Feb 10, 2021; Webinar/Teleconference
• FGC referred topic to MRC to consider options for longer-term regulations	Apr 14, 2021; Webinar/Teleconference
• DFW update on hydraulic pump gear ban	Jul 21, 2021; MRC, Webinar/Teleconference
• FGC re-adopted emergency regulations	Oct 14, 2021; Webinar/Teleconference
• **Today's update on hydraulic pump gear ban**	**Nov 9, 2021; MRC, Webinar/Teleconference**
• Notice hearing for regular rulemaking	Dec 15-16, 2021; Webinar/Teleconference
• Discussion hearing	Feb 16-17, 2022; Sacramento
• Adoption hearing	Apr 20-21, 2022; Monterey/Santa Cruz area

Background

In Feb 2021, FGC adopted an emergency rulemaking to prohibit the use of hydraulic pump gear for recreational take of clam and associated species (sand crab and shrimp), clarify permissible methods for the take of those species, and require each individual harvester to store their catch separately from others to support enforcement of individual bag and possession limits. The emergency action was taken in response to DFW observations and concerns that hydraulic hand pumps could facilitate overharvesting of clams, increase risk of illegal commercialization of gaper clam, and cause damage to the estuarine environment where recreational clamming occurs, particularly during a time of increased participation concurrent with the COVID-19 pandemic. The emergency regulations went into effect on Mar 8, 2021 and were readopted by FGC in Oct 2021.

At the emergency hearing, pump gear users requested FGC consider alternatives to a total ban on this equipment; FGC referred the topic to MRC in Apr 2021 to explore these requests while emergency regulations were in effect. A regular rulemaking (also called a certificate of compliance) to make the emergency regulations permanent was scheduled to begin in Dec 2021 to allow time for DFW to evaluate the gear and consider potential options for longer-term regulations.

In Jul 2021, MRC received an update from DFW regarding two months of field observations and creel, or angler, surveys conducted at clamming beds. Wildlife officers indicated that the

emergency regulations were effective at reducing the use of hydraulic pumps, and the requirement to store catch separately improved enforcement of bag limits and discouraged illegal commercialization.

For today's meeting, DFW provides a detailed summary of creel survey outcomes; in particular, surveyed clammers who provided an opinion supported prohibiting pumps by a nearly 3 to 1 margin (Exhibit 1). DFW acknowledges that the impacts of hydraulic pump gear compared to traditional take methods is uncertain; however, because the fishery has been conducted sustainably for decades using traditional methods, hydraulic pump gear has unknown impacts and facilitates illegal take, and fishery participants support the ban, DFW recommends continuing the current emergency regulations through a regular rulemaking.

Significant Public Comments (N/A)

Recommendation

FGC staff: Support continuing the emergency regulations through a regular rulemaking as recommended by DFW and scheduled to commence in Dec 2021, and encourage DFW to evaluate the gear and identify any reasonable conditions where authorizing its use may be justified.

***DFW staff*:** Continue the emergency regulations for harvest of clam, sand crabs, and shrimp through a regular rulemaking.

Exhibits

1. DFW update

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission: (1) Support continuing the emergency regulations for harvest of clams, sand crabs, and shrimp in the regular rulemaking scheduled to commence in December 2021, and (2) encourage the Department to evaluate the gear to identify any reasonable conditions where authorizing its use may be justified.

Department of Fish and Wildlife update: Certificate of Compliance Rulemaking Re: Recreational Clam, Sand Crab, and Shrimp Gear Specifications

Marine Resources Committee Meeting
California Fish and Game Commission

Summary of Proposed Rulemaking

This certificate of compliance rulemaking converts temporary emergency regulations affecting the recreational harvest of clams and other invertebrates to standard regulations. These regulations:

- Prohibit the use of hydraulic pump gear to harvest clams and other invertebrates and prohibit possession of hydraulic pump gear within 100 yards of any place marine invertebrates may be present.
- Prohibit the possession of hydraulic pump gear concurrently with any clam.
- Require each individual to keep the clams they harvested in a separate container from clams harvested by others.
- Clarify existing regulations that require clam species that have size limits to be immediately measured and reburied if undersized, and that clams shall be kept in a whole and measurable condition until being prepared for immediate consumption.

Background and Emergency Rulemaking

These regulations were developed to respond to concerns about the use of hydraulic pump gear in the recreational clam fishery, particularly when used to harvest gaper clams (*Tresus spp.*) and Washington clams (*Saxidomus spp.*) along the central and northern California coast.

With the tools typically used to harvest clams before the popularization of hydraulic pumps, clams were afforded substantial protection by tidal cycles, which was assumed by existing regulations. Hydraulic pumps allow faster, easier harvest of clams and allow clammers to access submerged beds. This increases the amount of time clams are vulnerable to harvest before and after a low tide, allows harvest on days when tidal levels would have previously prevented harvest, and allows clammers to access subtidal beds. Further, the widespread use of pumps (used by 85% of clammers contacted in a creel survey in 2018), compounded concerns that could impact resource sustainability. Specific concerns include:

- Increased illegal commercialization of gaper clams
- Increased over limits, and high grading

- Increased participation in the fishery after the 2018 closure of abalone concurrent with an overall increase in outdoor recreation during the COVID-19 pandemic.
- Increased impact to eelgrass beds, especially to subtidal beds.

After considering the above, the California Fish and Game Commission (Commission) voted to adopt the emergency regulations in February 2021, and they became effective March 8. The emergency regulations were readopted for 90 days in October 2021, and are slated for a second and final readoption in December 2021. This extends the rule to July 7, 2022, when it will expire if a certificate of compliance is not adopted by the Commission.

Efficacy of Emergency Rule and Public Response

Wildlife officers reported the emergency rule is effective at reducing the use of hydraulic pumps, and the requirement to keep individual bag limits separate has improved enforcement and discouraged illegal commercialization.

During creel surveys conducted by Department staff in June and July 2021, 121 groups representing approximately 825 fishery participants were surveyed for information about participation in the clam fishery and their opinion on the emergency regulation prohibiting hydraulic pumps. 45% of groups surveyed reported they went clamming for the first time in 2020 or 2021, or that they clammed on more days in 2020/21 than in previous years. 30% responded that they had previously fished for abalone, and 15% reported that they spend more days per year clamming because abalone is closed. The emergency regulation was supported by 55% of clammers surveyed, compared to 19% who supported allowing hydraulic pumps with the possibility of lower bag limits. The balance did not have an opinion on the issue. 75% of groups reported they were satisfied with current bag limits, with 7% each reporting the limits were too high or too low and 11% having no opinion.

The results of the survey support several of the assumptions made in the emergency rulemaking, particularly that there has been increased interest in the fishery since 2020, including many who have clammed for the first time. They also show that clammers support prohibiting pumps by a nearly 3:1 margin and that clammers are largely satisfied with current bag limits.

Impact on Habitat and Clam Stocks

The impact pumps may have on habitat compared to digging is unclear. Pumps may increase the frequency of disturbance and allow access to previously undisturbed subtidal beds. However, the act of harvesting with pumps may be less destructive because the clam is retrieved through liquified sediment and does not need to be completely dug out. Clams are more often harvested

whole, and impacts to juvenile clams and other benthic organisms may be lessened. The effect of pumps on the sustainability of clam stocks is also uncertain, due partially to the COVID-related limits on field work in 2020 and 2021. A better understanding of these impacts will require further study.

Discussion and Recommendation

With participants using gear other than hydraulic pumps, the fishery has been conducted sustainably for decades under the current management regime. The shift to hydraulic pumps represented a significant change in the nature of the fishery, and the effects of that change on the sustainability of the resource are uncertain. Because of that uncertainty, the use of hydraulic pumps to facilitate illegal take, and the support of fishery participants to prohibit the use of pumps, the California Department of Fish and Wildlife (Department) supports the proposed regulations.

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

4. MARINE PROTECTED AREA NETWORK

Today's Item **Information ☐** **Action ☒**

Receive DFW update on planning for the first decadal management review of California's marine protected area (MPA) network. Discuss and consider a committee recommendation on a process for FGC and public receipt and review of the DFW report.

Summary of Previous/Future Actions

• FGC adopted master plan for MPAs	Aug 24-25, 2016; Folsom
• MRC received first DFW update on plans for decadal management review	Mar 16, 2021; MRC, Webinar/Teleconference
• MRC update and discussion	Jul 21, 2021; MRC, Webinar/Teleconference
• **Today's update and discussion of process for decadal management review**	**Nov 9, 2021; MRC, Webinar/Teleconference**

Background

The first decadal management review of California's MPA network is scheduled to commence in 2022. Called for in the Marine Life Protection Act (MLPA) master plan for MPAs, the 10-year review will compare statewide monitoring results relative to regional baseline conditions, evaluate network efficacy, and determine whether changes in the management program are warranted to meet the goals of MLPA. Evaluations will consider progress toward meeting MLPA goals related to different focal areas of the MPA management program. FGC will receive DFW's decadal management review report at the end of 2022 or early 2023 and decide shortly after whether to direct DFW and its partners to pursue recommendations and identified next steps.

In Mar 2021, DFW provided MRC an update on planning efforts for the decadal management review. DFW highlighted the highly-coordinated preparation among program partners, including DFW, the California Ocean Protection Council, FGC staff, long-term monitoring project leads, and partners. DFW noted that two scientific working groups were formed to develop guidance on scientific evaluation and climate change considerations for the decadal review.

In Jul 2021, DFW presented MRC a general overview of the anticipated timing for several reports and products under development to support the decadal management review. DFW reported forming two steering committees to support targeted stakeholder outreach and tribal engagement (see Exhibit 1 for background).

DFW also presented potential options for FGC and public receipt and review of decadal management review materials, including options for a public symposium (see Exhibit 2 for additional background information). DFW requested MRC guidance on preferred approaches.

Following discussion, MRC expressed support for a full-day MPA symposium, regular updates, and incremental release of monitoring reports, other research, and evalutions leading up to the DFW report, rather than releasing all information at one time. MRC requested that DFW and FGC staff work together to develop options for process and timing for various steps of the review, and return to MRC at this meeting with potential options for incremental release of monitoring reports and evaluations, a public symposium, and process for MRC, FGC, and public review of DFW's decadal management review report and adaptive management recommendations.

Since the Jul 2021 MRC meeting, consistent with MRC direction, staff from DFW, FGC, and OPC have been working together to develop options for a review process and timeline that balances MRC's priorities, the timing for public release of each reporting piece, the needs of the state and constituencies, and opportunities for public review and vetting of the review report before FGC provides direction for any adaptation of the MPA management program. Staff believes that FGC's process will likely extend into early 2023 to allow DFW to integrate into its report the multiple scientific reports being prepared, and for public engagement following the release of DFW's report; suggested elements have included a public symposium, an opportunity for MRC and FGC public discussion of the review report, and FGC direction to DFW regarding adaptive management actions.

At today's meeting, staff and DFW will bring a proposed approach for discussion and potential MRC recommendation.

Significant Public Comments (N/A)

Recommendation

Discuss the proposed MPA network decadal management review approach for an FGC and public review process, as presented today, and recommend to the Commission an approach that best matches and balances competing priorities for timeline, transparency, equitable access, and public vetting leading up to FGC direction about any adaptation of the MPA management program.

Exhibits

1. Background document: Staff summary for Jul 2021 MRC meeting, agenda item 4
2. DFW presentation provided at Jul 2021 MRC meeting

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission approve an updated Commission process and schedule to receive, discuss, and provide input on the marine protected area network decadal management review report, as follows:

_____.

COMMITTEE STAFF SUMMARY FOR JULY 21, 2021 MRC
Provided for background purposes only

4. MARINE PROTECTED AREA NETWORK

Today's Item **Information ☒** **Action ☐**

Receive and discuss DFW update on planning for the first decadal review of California's marine protected area (MPA) network in 2022.

Summary of Previous/Future Actions

- FGC adopted master plan for MPAs — Aug 24-25, 2016; Folsom
- MRC received first DFW update on plans for decadal management review — Mar 16, 2021; MRC, Webinar/Teleconference
- **Today's update and discussion** — **Jul 21, 2021; MRC, Webinar/Teleconference**

Background

The Marine Life Protection Act (MLPA) master plan for MPAs, adopted by FGC in 2016, provides a structure for monitoring and adaptively managing California's MPA network to meet the goals of the MLPA. The master plan established a formal 10-year review cycle to evaluate network efficacy and determine whether changes in management are warranted. The first such decadal management review of the statewide MPA network will occur in 2022. The review will cover four core areas - research and monitoring, enforcement and compliance, policy and permitting, and outreach and education - and provide adaptive management recommendations.

In Mar 2021, DFW provided MRC an update on preparation for the first decadal management review. DFW reported that preparation has involved substantial coordination among DFW, OPC, and FGC staff, MPA monitoring project leads, and partners. DFW also highlighted that two science advisory working groups, convened by DFW, OPC, and California Ocean Science Trust, were in the process of developing guidance on scientific evaluation for the decadal review. Substantial effort is needed to develop not only the approach to the first review, but also considerations for subsequent reviews.

Updates

Since Mar, the two science advisory working groups have concluded and released reports with recommendations to lend scientific support to the 2022 review. The "decadal working group" report focuses on approaches and priorities for evaluating MPA network performance, while the "climate resiliency working group" report provides guidance for integrating climate change with MPA science (see links listed as exhibits 3 and 4). Several active contracts are also proceeding; these aim to increase education and outreach surrounding MPAs or gain input from tribes, stakeholders, and partners over the next 12 to 16 months. There are also seven OPC-funded research projects underway, designed to synthesize long-term monitoring data associated with key habitats found in the MPA network (see Exhibit 1 for project descriptions and links).

Today, DFW will present an update on planning efforts for the 2022 MPA network decadal management review (Exhibit 2), and will highlight for MRC discussion potential options for how to incrementally release reporting and results to the MRC, FGC, and public.

COMMITTEE STAFF SUMMARY FOR JULY 21, 2021 MRC
Provided for background purposes only

Significant Public Comments (N/A)

Recommendation (N/A)

Exhibits

1. Long-term MPA monitoring project descriptions, received Jul 8, 2021
2. DFW presentation
3. Decadal working group report, available at https://www.opc.ca.gov/webmaster/_media_library/2021/06/Evaluating-Californias-Marine-Protected-Area-Network-2021.pdf?mc_cid=10b78d03c5&mc_eid=c1c16576a3
4. Climate resiliency working group report, available at https://www.opc.ca.gov/webmaster/_media_library/2021/06/Climate-Resilience-and-Californias-MPA-Network-2021_final.pdf?mc_cid=10b78d03c5&mc_eid=c1c16576a3

Committee Direction/Recommendation (N/A)

MPA Network – 2022 Decadal Review Update

21 July 2021

Presented to:

Marine Resources Committee

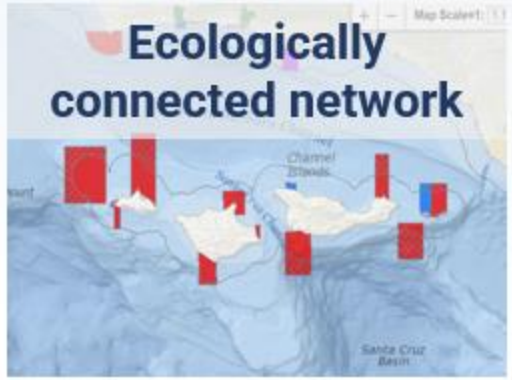
Virtual Webinar

Presented by:

Becky Ota

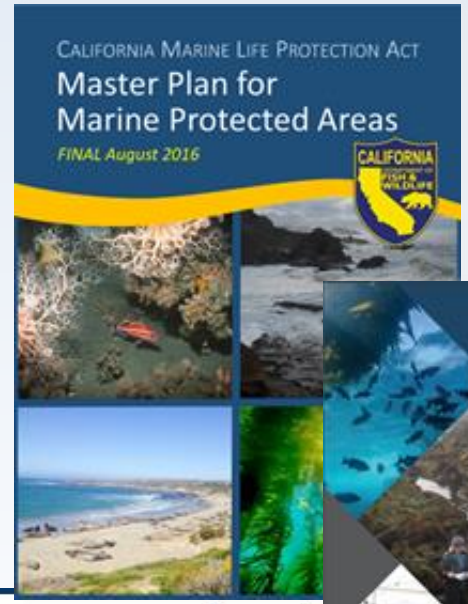
Program Manager
Marine Region

Marine Life Protection Act (MLPA) Goals



MPA Master Plan + Decadal Management Review

- MLPA Master Plan established:
  - MPA Management Program
  - 10-year management review cycle
  - Monitoring Program
    - Action Plan
      - Performance evaluation questions



MPA Statewide Leadership Team

MPA Management Program

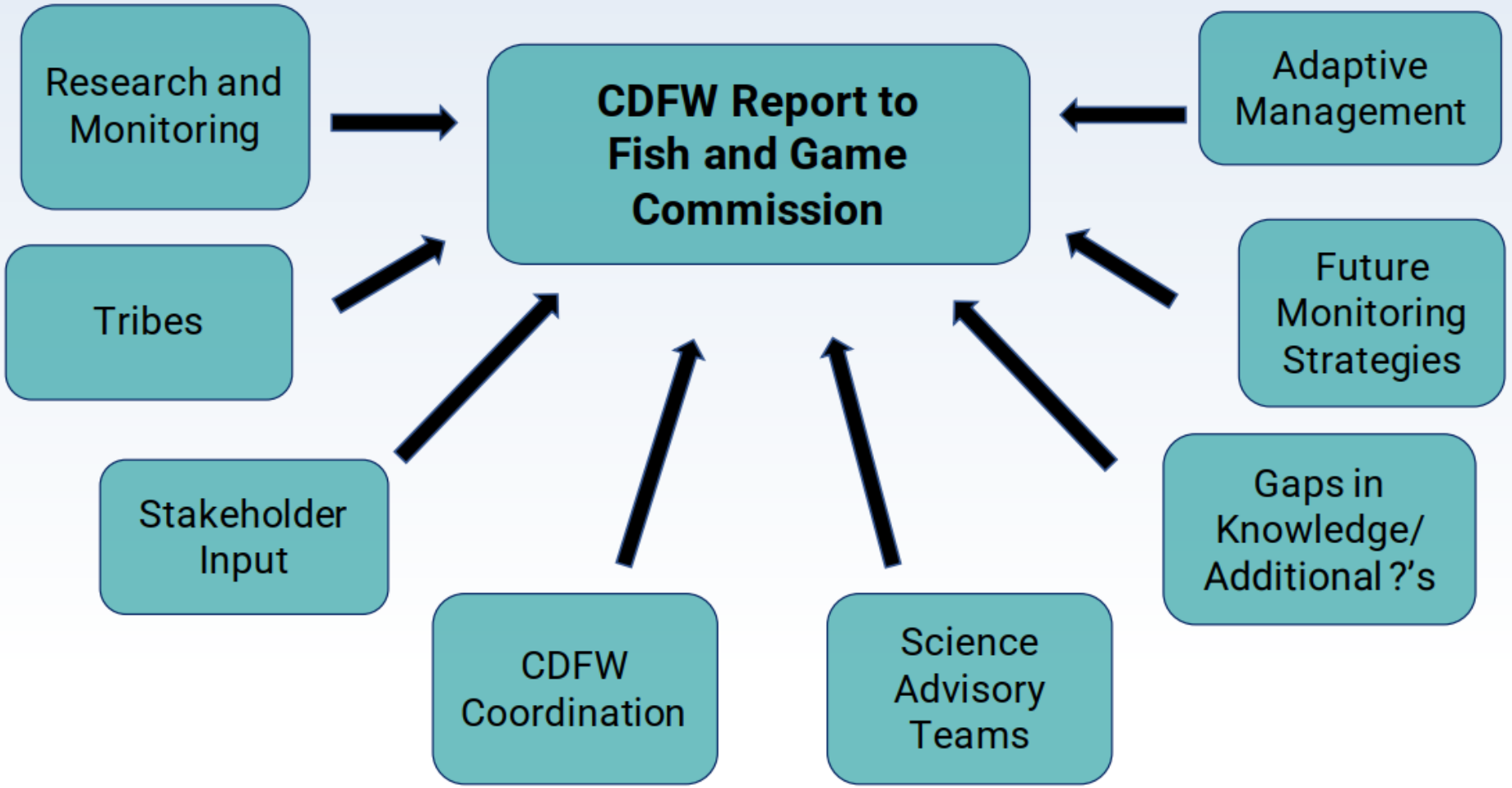
Outreach and Education

Research and Monitoring

Enforcement and Compliance

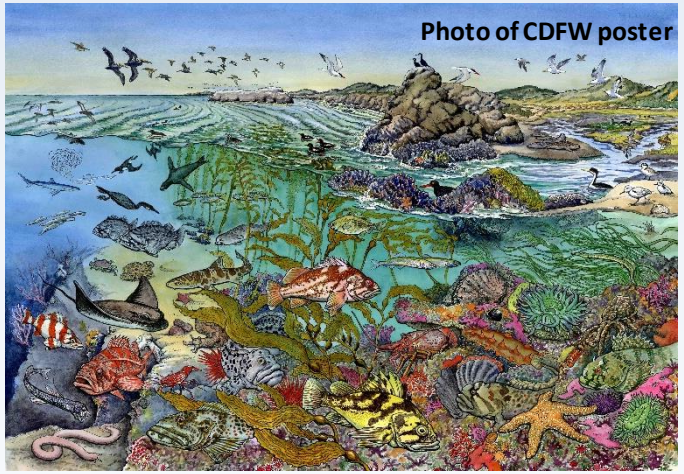
Policy and Permitting

Components of Decadal Management Review



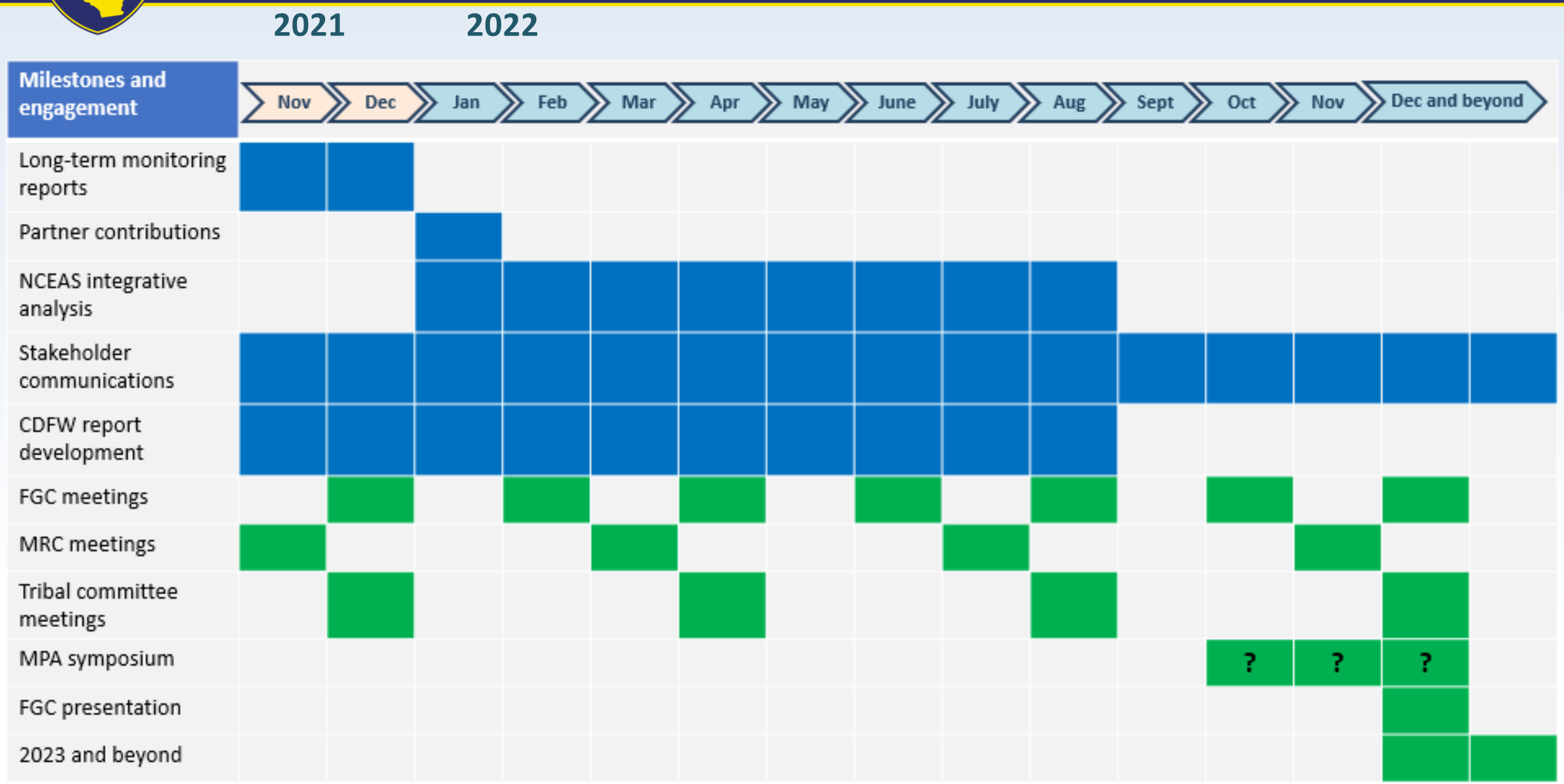
Outreach and Engagement Steering Committees

- Stakeholder (Key Communicators)
  - Identify
    - communications channels
    - strategies
    - target audiences
    - advise on the Outreach Workplan



- Tribal (a separate/parallel committee)
  - inform Tribal engagement
  - not a substitution for government to government consultation
  - similar roles

Decadal Management Report Timeline



Anticipated Outcomes from Decadal Review

- Progress towards meeting the MLPA goals
- Actions taken to engage Tribes and Ocean Community
- Summary of knowledge gaps
- Opportunities for next steps
- Recommendations on adaptive management

MPA Symposium

- Recognize partners
  - Options
    - Full Day Symposium
      - October 2022
      - November 2022
      - Day before the December Commission meeting
    - Half Day Symposium
      - Same months for full day
      - Half day prior to December Commission meeting
      - Half day on same day of December Commission meeting

December 2022 Commission Meeting

- How does the Commission want to receive the MPA Decadal Management Review Report at your December 2022 meeting?
- How much time do you want to set aside?
  - 1 hour
  - 2 hours
  - Half day
  - Full day

CALIFORNIA MARINE PROTECTED AREAS

Thank You

- **Becky Ota, Program Manager**

Becky.Ota@wildlife.ca.gov

wildlife.ca.gov/Conservation/Marine/MPA

MPAManagementReview@wildlife.ca.gov

Climate Resilience and California's Marine Protected Area Network

Science Guidance for Evaluating California's Marine Protected Area Network

www.oceansciencetrust.org/wp-content/uploads/2021/06/Foreword-MPA-reports-2021.pdf

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

5. CALIFORNIA HALIBUT FISHERY MANAGEMENT REVIEW

Today's Item **Information ☐** **Action ☒**

Receive DFW update on review of California halibut fishery management:

(A) Feedback from stakeholder engagement webinars

(B) DFW priorities for management attention

(C) Discuss potential process to evaluate California halibut trawl grounds

Summary of Previous/Future Actions

• FGC referred California halibut management review to MRC	Aug 19-20, 2020; Webinar/Teleconference
• DFW update on California halibut stock assessment and management review	Mar 16, 2021; MRC, Webinar/Teleconference
• FGC referred to MRC discussion of California halibut trawl grounds review	Aug 18, 2021; Webinar/Teleconference
• **Today's update and discussion of management review**	**Nov 9, 2021; MRC, Webinar/Teleconference**

Background

The California halibut fishery is a multi-sector commercial and recreational fishery managed by DFW under FGC authority. The fisheries prioritization process, undertaken by DFW in 2019 as part of implementing the master plan for fisheries pursuant to the Marine Life Management Act, identified California halibut as a priority for fisheries management review. FGC referred the topic to MRC in Aug 2020.

At MRC's Mar 2021 meeting, DFW provided an initial overview of its management review efforts. DFW reported outcomes from its recently-completed stock assessment and plans for the scoping phase of management review through early fall.

Update

For today's meeting, DFW will report on progress, management review priorities, and potential next steps (Exhibit 1):

(A) *Feedback from stakeholder engagement webinars*. DFW will share outcomes from stakeholder webinars, including two in Aug and Sep 2021, held as part of the scoping phase of the management review to assess fishermen's and other stakeholders' management priorities and concerns.

(B) *DFW priorities for management attention*. DFW will present its management review priorities, informed by the stakeholder feedback. Priorities include completing a halibut enhanced status report, evaluating management options, and continuing stakeholder engagement.

(C) *Discuss potential process to evaluate California halibut trawl grounds*. California Fish and Game Code Section 8495 designates specific areas of state marine waters as California halibut trawl grounds. The law requires that areas remain closed unless FGC determines that trawling in the areas is consistent with specified provisions, and requires FGC to conduct periodic reviews of available information against performance criteria. In 2018, California State Senate Bill 1309 established two additional California halibut trawl grounds areas, one in a formerly-trawled area of Monterey Bay and the other offshore of Port San Luis. In Jun 2021, industry representatives requested that FGC take action to open the new grounds to trawling (Exhibit 2). In Aug 2021, FGC referred the request to MRC for discussion in conjunction with the California halibut fishery management review, to consider timing and a potential pathway for considering implementation.

DFW has prepared a proposed assessment approach to support MRC discussion and potential recommendation today (Exhibit 3). DFW proposes to assess both existing and new (Monterey Bay and Port San Luis) areas of the California halibut trawl grounds using performance criteria in Fish and Game Code Section 8495(e) and guidance in the master plan for fisheries, including a bycatch assessment. DFW's proposal includes methods, evaluation of results, proposed roles for DFW and collaborative fishery participants, and considerations for such things as compensation for fishermen, vessel and fishermen selection, using experimental fishing permits for Monterey and Port San Luis trawl grounds for fishery participants who wish to sell their catch, and survey timing. Staff notes that the proposed assessment timing coincides with when the new experimental fishing permit program regulations, currently under FGC consideration, are anticipated go into effect. DFW has discussed the proposed approach with prospective fishery participants in the Monterey Bay area and plans to do the same with prospective participants in other trawl grounds areas.

Today, DFW will highlight evaluation criteria, cost considerations, and proposal elements, and seeks an MRC recommendation regarding next steps and pursuit of the proposed assessment of California halibut trawl grounds.

Significant Public Comments (N/A)

Recommendation

FGC staff: (C) Discuss DFW's proposed approach to evaluating California halibut trawl grounds. Consider whether to request that DFW solicit additional feedback from prospective fishery participants in the existing and potentially new trawl areas regarding DFW's proposed approach prior to MRC making a recommendation or to advance a recommendation to FGC to support advancing the proposed approach as recommended by DFW today.

***DFW*:** (C) Make a recommendation to FGC on assessing the existing and new California halibut trawl grounds as proposed today.

Exhibits

1. DFW presentation
2. Email from Mike McCorkle, received Jun 1, 2021
3. DFW proposal to assess California halibut trawl grounds, dated Oct 26, 2021

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission support a review of existing and new California halibut trawl grounds as required in statute using the performance criteria in Fish and Game Code Section 8495(e) and guidance in the master plan for fisheries, as recommended by the Department and discussed today, and request the Department to conduct additional outreach with the commercial halibut trawl fleet and stakeholders to provide transparency about the process.

OR

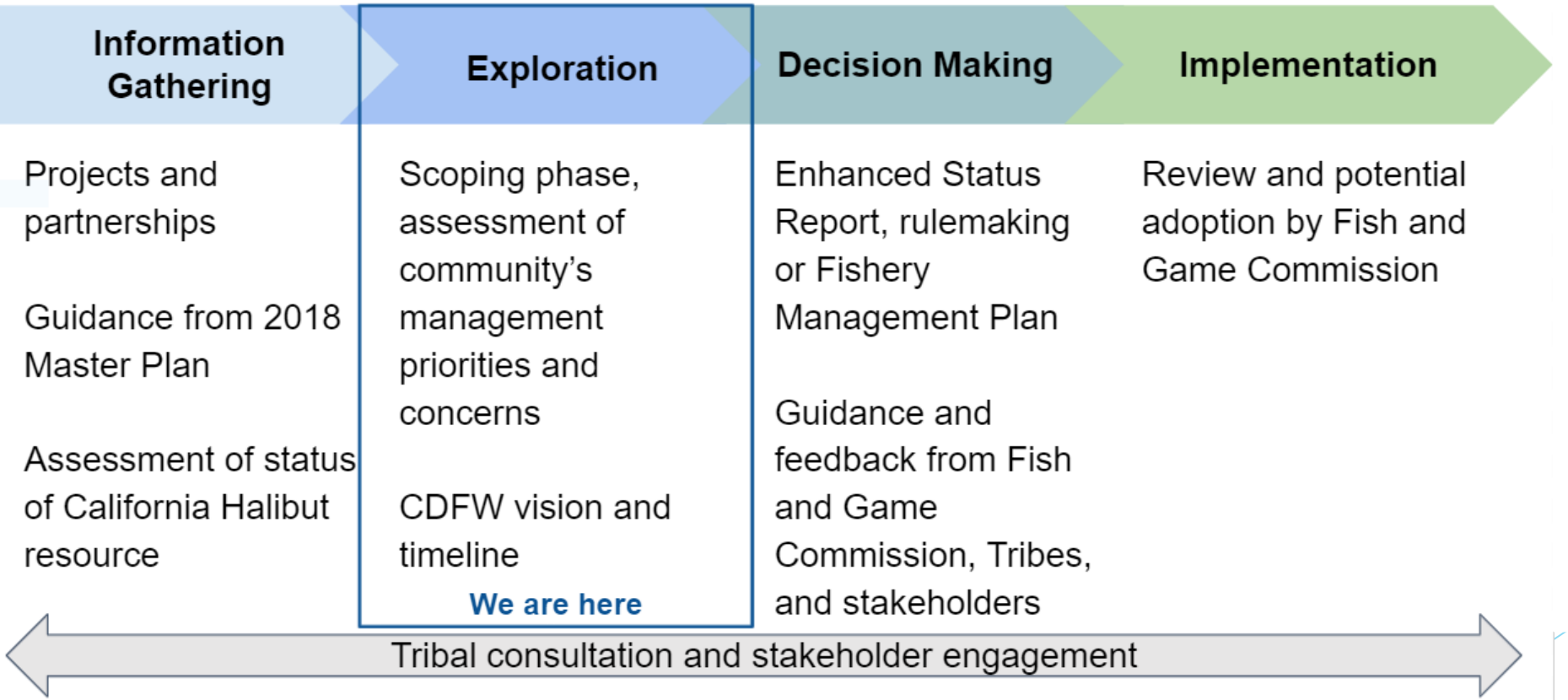
The Marine Resources Committee recommends that the Commission request the Department conduct additional outreach with the commercial halibut trawl fleet and stakeholders regarding the proposed approach for evaluating existing and new California halibut trawl grounds, for discussion and potential recommendation at the next Marine Resources Committee meeting in March 2022.

California Halibut Fishery Management Review

Kirsten Ramey
Marine Region, Environmental Program Manager

Marine Resources Committee Meeting
Tuesday, November 9, 2021

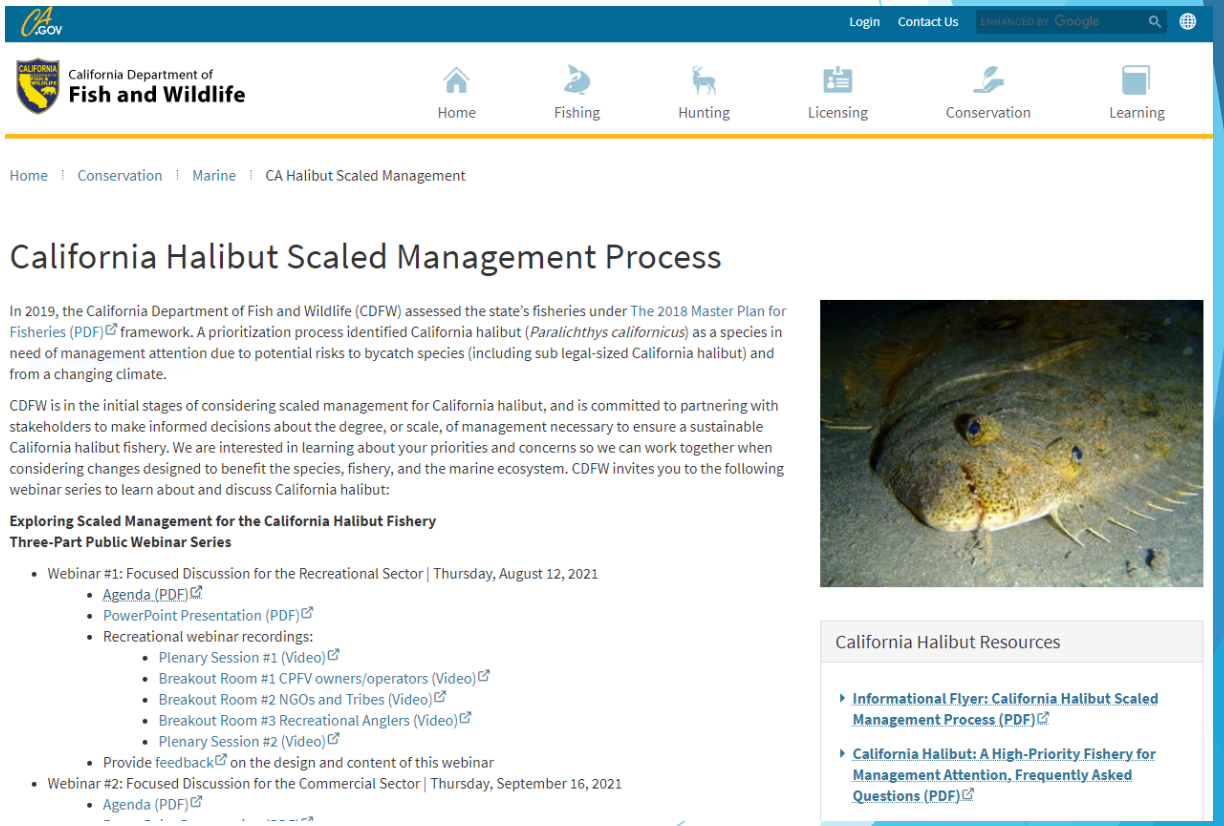
Scaled Management Development Process



Outreach with Stakeholder Community

- Webpage
- Subscribe to email listserv
- Informational materials
- Marine Management News
- Ongoing one-on-one communications

Visit our webpage
https://wildlife.ca.gov/Conservation/Marine/CA-Halibut-Scaled-Management



Key Messaging from CDFW to Stakeholder Community


Source: CDFW

- **Not** proposing a Fishery Management Plan for the California halibut fishery at this time
- **Not** suggesting new regulations at this time
- Looking to learn from the stakeholder community about priorities and concerns

Engagement with Stakeholder Community

- Three public webinars, Oct 2020 – Oct 2021
- Informational materials, including executive summary of 2020 stock assessment
- Focused discussions with commercial and recreational sectors and other stakeholders to explore priorities and concerns for the fishery
- *Postponement of final webinar to discuss next steps with the MRC*

Key Themes from Stakeholders

- “Sustainability” as having access to a consistent and viable fishery and feel that California halibut is sustainable
- MLMA definition of “bycatch” does not reflect the nuances of fishery
- Stakeholders had differing opinions on bycatch impacts
- Differing perspectives on affects of changing ocean conditions on fishery
- Interest in opening of Trawl Grounds

Next Steps

- CDFW internal visioning and strategic planning
- Stock assessment model improvements
- Complete Enhanced Status Report
- Complete bycatch evaluation
- Develop and submit trawl grounds evaluation proposal to MRC (*today)*

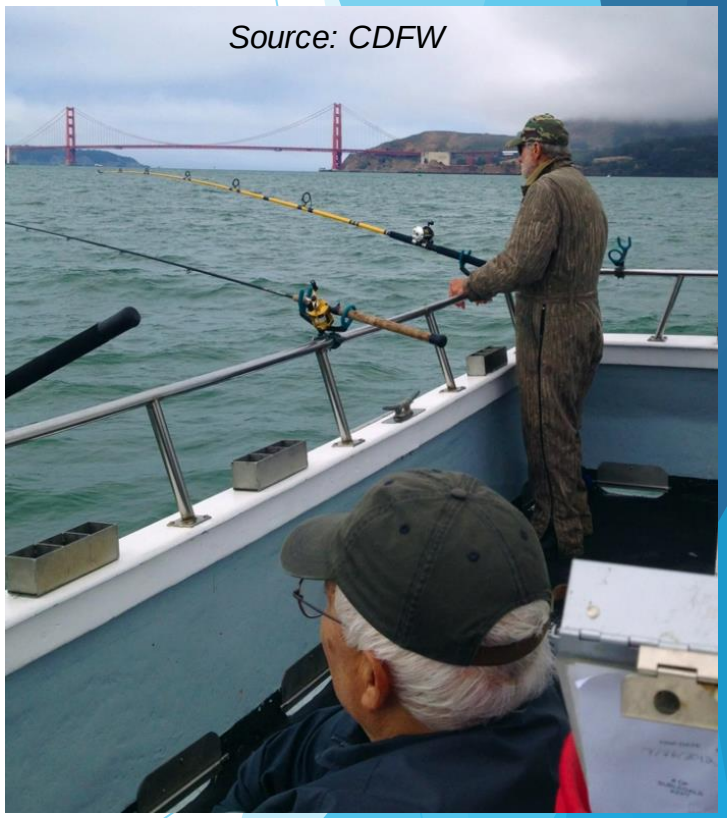
Source: www.romania2019.eu

California Halibut Trawl Grounds Proposal

- Senate Bill 1309 designated Monterey Bay and Port San Luis as part of the California Halibut Trawl Grounds (CHTG)
- Request from industry to open these new areas to trawling
- Fish and Game Code 8495(e) mandates an evaluation of the CHTG and identifies performance criteria
- Seeking Commission recommendation on conducting an assessment of the existing and new areas

Thank You

- Connect with Kirsten Ramey, CDFW Marine Region Environmental Program Manager: Kirsten.Ramey@wildlife.ca.gov
- Visit our webpage: https://wildlife.ca.gov/Conservation/Marine/CA-Halibut-Scaled-Management
- Subscribe to our email listserv or email: MLMAFisheriesMgmt@wildlife.ca.gov



Source: CDFW

FGC@FGC

From: McCorkle Fishing Enterprises <[redacted]>
Sent: Tuesday, June 1, 2021 10:26 AM
To: FGC
Cc: Keith; [redacted]
Subject: Request Halibut Trawl Bill to be Placed on Agenda for June 17, 2021 Meeting
Attachments: SCTA_2021_Agenda Request_FGCommission.docx

Dear Ms. Miller-Henson,

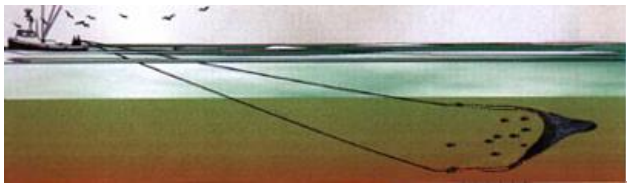
I would like to request that you forward the attached letter to the Commissioners and place this request on the July 17, 2021 agenda. I will be attending the meeting via Zoom. Please contact me by phone if you have questions about my request. [redacted]

Thank you,

Mike McCorkle

Southern California Trawlers Association

Santa Barbara, CA



Southern California Trawlers Association

May 30, 2021

Melissa Miller-Henson
Executive Director
California Fish & Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

Dear Ms. Miller-Henson

I would like to request time on the Commission's June 17, 2021 agenda to review progress on Sections 8495(a) and 8496(a) of the following bill SB 1309, which designated specific areas in Monterey Bay and offshore of Port San Luis as "designated halibut trawl grounds." This language was signed by the Governor and filed with the Secretary of State on September 30, 2018. So, the directive to designate these grounds for sustainable halibut trawl to provide fresh local halibut to coastal markets has been "on the books" for a few months short of three years.

Despite the fact that our Association has reached out to all the major ocean conservation groups and come to accord on this issue, I am here to report to the Commission that absolutely no progress has been made to designate these grounds by the Department of Fish and Wildlife. Each time I call the Department to discuss this, there is a different reason given for the lack of progress: "we don't have staff to do this," "we have to develop a halibut plan first," or some other excuse for delaying progress executing this legislative directive.

I respectfully request that the Commission direct the Department to "get off the dime" and execute this legislation by the end of 2021. Thank you for agendizing some time on the next Commission agenda to discuss this.

Sincerely,

Mike McCorkle, President
Southern California Trawlers Association
P.O. Box 713
Summerland, CA 93067

Senate Bill No. 1309
CHAPTER 985

An act to amend Sections 7863, 8183, 8494, 8495, 8496, 9002.5, and 9005 of, and to add and repeal Section 8276.1 of, the Fish and Game Code, relating to fishing.

[Approved by Governor September 30, 2018. Filed with Secretary of State September 30, 2018.

8495.

(a) The following areas are designated as the California halibut trawl grounds:

(1) The ocean waters lying between one and three nautical miles from the mainland shore lying south and east of a line running due west (270° true) from Point Arguello and north and west of a line running due south (180° true) from Point Mugu.

(2) The ocean waters of Monterey Bay delineated by straight lines connecting the following points in the following order and excluding federal waters as defined by the order entered by the United States Supreme Court in the case of United States of America v. State of California, 135 S.Ct. 563 (2014):

Latitude	Longitude
36° 54.146′ N	122° 4.244′ W
36° 52.910′ N	122° 4.225′ W

36° 52.024′ N	122° 2.117′ W
36° 51.680′ N	121° 59.321′ W
36° 52.230′ N	121° 57.810′ W
36° 48.974′ N	121° 52.474′ W
36° 49.835′ N	121° 51.840′ W
36° 54.250′ N	121° 54.883′ W
36° 54.287′ N	121° 58.062′ W
36° 53.956′ N	122° 2.117′ W

(3) The ocean waters offshore of Port San Luis lying between one and three nautical miles from the mainland shore, as described by an area circumscribed by a line connecting the following points in clockwise order, with the line connecting the last two points approximately parallel to the lines connecting the preceding points:

Latitude	Longitude
35° 08′ N	120° 46′ W
35° 08′ N	120° 40.1′ W
35° 06.6′ N	120° 39.2′ W
35° 02.2′ N	120° 39.3′ W
34° 57′ N	120° 40.7′ W
34° 57′ N	120° 43.5′ W
35° 06.4′ N	120° 46′ W

8496.

(a) Unless otherwise specified by the commission pursuant subdivision (b), within the California halibut trawl grounds the following requirements shall apply to the use of trawl nets:

(1) Open season and hours of operation shall be as follows:

(A) Open season shall be June 16 to March 14, inclusive.

(B) In the designated halibut trawl grounds within Monterey Bay and offshore of Port San Luis, trawl fishing gear may only be deployed to capture fish between sunrise and sunset.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Marine Region
20 Lower Ragsdale Drive, suite 100
Monterey, CA 93940
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Proposal to Assess the California Halibut Trawl Grounds

State Managed Finfish and Nearshore Ecosystem Program
California Department of Fish and Wildlife, Marine Region

October 26, 2021

1 Introduction

Trawling, an effective method for catching California halibut (halibut), is allowed only in Federal waters and designated trawl ground areas within State waters. Legislation (Fish and Game Code (FGC) Sections 8494 to 8497) created the original California Halibut Trawl Grounds (CHTG) (Fig 1) in 1971; they encompass a series of designated areas 1-3 nautical miles off the coast of Santa Barbara and Ventura Counties. FGC §8495(e)) requires the Fish and Game Commission (Commission), beginning January 1, 2008, to review every 3 years information from the federal groundfish observer program, monitoring information, and any other relevant research, and close any area within the CHTG where trawl gear: 1) does not minimize bycatch; 2) is likely damaging the seafloor; 3) is adversely affecting ecosystem health; or 4) impedes reasonable restoration of kelp, coral, or other biogenic habitats (hereafter referred to as performance criteria).

The last Department evaluation of the existing CHTG was completed in 2008 with a report submitted to the Commission that year. As a result of that analysis, the Commission decided to close one sub-area within the CHTG.

Figure 1. Existing California Halibut Trawl Grounds. Green area open to trawling June 16-March 14.

In 2018, legislation (FGC §8495 (a)(2) and (a)(3)) created two additional CHTG areas within State waters, one in the formerly trawled area of Monterey Bay and the other near Port San Luis (San Luis Obispo County) (Fig 2). Pursuant to FGC §8495(d), these areas shall remain closed to trawling until the Commission determines that trawling in those areas meets the performance criteria. The commercial trawling industry has formally requested the Commission take action to open these new areas to trawling.

The Department proposes to assess the existing and new areas of the CHTG, using the performance criteria in FGC §8495(e) and guidance in the 2018 Master Plan for Fisheries (Master Plan).

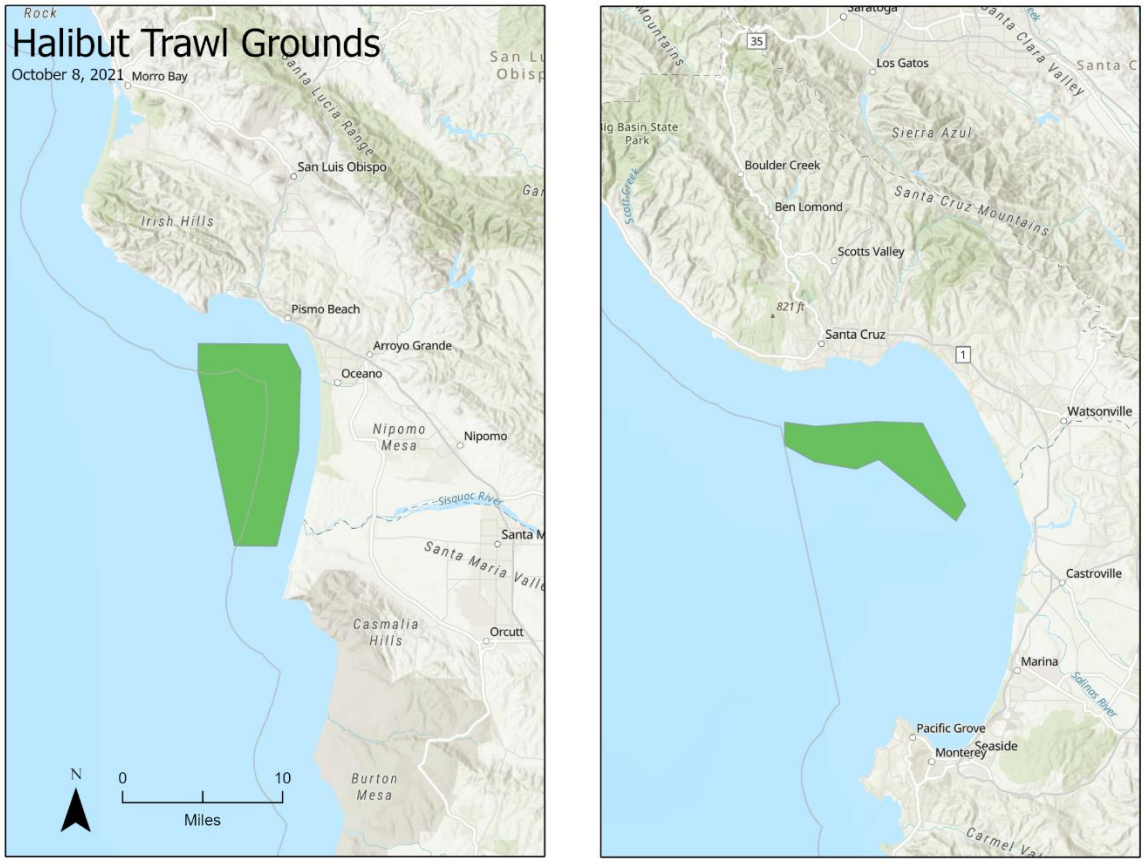


Figure 2. Port San Luis Trawl Grounds (left) and Monterey Trawl Grounds (right).

2 Methods

Enacted in 1999, the Marine Life Management Act (MLMA) is California's primary fisheries management law. The MLMA identifies sustainability as the primary objective and emphasizes the need for a comprehensive, ecosystem-based approach to managing the state's fisheries. The Master Plan (2018) guides the implementation of the MLMA and considers a new framework for applying fishery management tools.

The MLMA emphasizes the importance of conserving the health of marine ecosystems and the need to consider impacts to habitats and bycatch species. The Master Plan (2018) provides a step-wise approach to consider and address these potential impacts.

To determine if trawling in the existing CHTG is adversely harming ecosystem health, the Department will evaluate the effectiveness of current management measures. Specifically, the Department will evaluate trawl gear requirements, seasonal and spatial closures, logbooks, data from at-sea observers, and how these measures contribute to meeting the performance criteria.

2.1 Habitat Impacts, Kelp Restoration, Coral and Other Biogenic Habitat

2.1.1 Existing CHTG

The existing CHTG's primary habitat is soft bottom (sand/mud) with isolated areas of hard bottom habitat. There are three steps described in the Master Plan on how to assess and address habitat impacts:

1. Describe the habitat utilized by the target species at each life stage.
2. Describe the threats to the habitat utilized.
3. Minimize or mitigate adverse effects fishing activity may have on habitat

Department staff will use the most current scientific information available and GIS data to describe the CHTG's halibut habitat and potential impacts to that habitat. To determine whether the use of light-touch trawl gear will require any minimization or mitigation measures, the Department will review the results from a 2013 Monterey Bay light touch trawl study (Wick, et.al. 2014) and evaluate potential impacts of light touch trawl gear on soft bottom habitats in all trawl ground areas. No additional video surveys are planned for this evaluation update. However, to determine the extent that the trawl fishery encounters kelp or hard bottom habitat in the existing CHTG, we will review recent tow activity from logbooks and compare tow locations to current seafloor mapping data of these features.

2.1.2 New CHTG (Port San Luis and Monterey Bay)

For the new CHTG, staff will compare study tow locations to current GIS and bathymetric mapping data to determine rate of fishery encounters with kelp, coral, or other hard bottom habitat. Staff will address the three steps as described above from the Master Plan (2018) to assess and address impacts on the new CHTG.

2.2 Bycatch

During most fishing activity, fishing gear may catch other fish and invertebrate species in addition to the target species. One of the objectives of the MLMA is to limit bycatch to acceptable amounts and types. In 2015, the Commission convened a group of stakeholders to become the Bycatch Working Group. The recommendations from this group would help inform the Marine Resources Committee (MRC) and Commission in their review of bycatch management. The language in this review contributed to the bycatch section of the Master Plan (2018). This section provides guidance and a four-step process on what may constitute unacceptable bycatch and how this bycatch may be addressed. The four steps are:

1. Collection of information on the amount and type of catch
2. Distinguishing target, incidental, and bycatch species
3. Determining acceptable types and amounts of bycatch
4. Address unacceptable bycatch

To assess bycatch under step three, staff will address bycatch species using criteria as prescribed in the Master Plan (2018) and under the authority of FGC §7085:

1. Legality of the take of bycatch species
2. Degree of threat to the sustainability of the bycatch species
3. Impacts on fisheries that target the bycatch species
4. Ecosystem impacts.

As outline in the Master Plan (2018), each criteria have separate inquiries or questions to ask about the bycatch species and a series of recommendations.

2.2.1 Existing CHTG Bycatch Assessment

Department staff will replicate the 2007-08 review of the existing CHTG (CDFG 2008) and document potential impacts of trawling to bycatch species. Two Department Marine Region staff will make three observation trips each quarter onboard commercial halibut trawl vessels during the open season (June 16-March 14). By statute, all tows will occur during daylight hours and will use light touch trawl gear. Encountered species and disposition will be compared with the 2007 study results for changes in species composition.

Department staff will document tow information such as latitude/longitude of each tow start and stop, depth, vessel speed, and gear interactions with marine mammals or other fisheries. Tow length and direction, and specific areas fished, will be up to the discretion of the captain to represent normal fishing practices.

Department staff will identify all species caught during each tow. Staff will document the number, total weight, and disposition (live or dead) for each species caught and returned to the water, including sublegal-sized halibut. Staff will measure and weigh all legal-sized halibut. Subsequently, staff will calculate catch per hour for all bycatch

combined (including sublegal-sized halibut) and for legal-sized halibut and compare bycatch and legal-sized halibut weight per tow.

2.2.2 New CHTG Bycatch Assessment

Two Department staff will work with industry to conduct two trips each quarter during the current open season (June 16-March 14). These experiment or research tows will occur during daylight hours and will use light touch trawl gear. Encountered species and disposition will be compared with previous Department trawl study results for changes in species composition.

Department staff will replicate and document the same information as described above for the existing CHTG bycatch assessment.

3 Results and Discussion

Department staff will compile all data collected and assess as directed in the Master Plan to determine the effect of trawling in the CHTG relative to the performance criteria in FGC §8495(e). Staff will present the results to the Commission in a final report

This report will disclose potential impacts, if any, of trawling within the two new areas of the CHTG and provide a recommendation for the Commission's consideration.

4 Considerations

4.1 Compensation for Fishermen

Sea Grant and Southern California Trawlers Association funded the 2007 review of the existing CHTG. Currently, the Department has not identified any resources to support participation of Monterey or Port San Luis fishermen for their costs. Fishermen have volunteered to collaborate with the Department in the new Monterey and Port San Luis trawl areas; however, there is an expectation by those fishermen to sell all marketable fish caught under an experimental fishing permit as a means to cover their expenses.

Cooperating fishermen in the existing CHTG may sell any marketable fish harvested during this assessment; thus, will not receive additional compensation.

4.2 Vessel and Fishermen Selection

The Department is proposing a competitive process to select fishermen who will collaborate with staff for each of the CHTG areas. Fishermen that report their port of landing at or near each trawl area will receive notification that the Department is undertaking this evaluation effort and soliciting volunteers. Fishermen must have a valid California Halibut Trawl Vessel permit that has not been revoked and show a multi-year record of halibut catch with trawl gear. Prospective vessels must have legal light-touch gear and pass a U.S. Coast Guard safety inspection or inspection by staff to confirm sea worthiness.

4.3 Experimental Fishing Permits for Monterey and Port San Luis Trawl Grounds

Since the Commission has not authorized trawling in the new portions of the CHTG, participating fishermen in these areas will be required to obtain an Experimental Fishing Permit (EFP), which is authorized in FGC §1022 if they wish to sell their catch. Participating fishermen will be responsible for working with the Department to complete the permit application and pay all associated fees.

To assess the new Monterey Bay trawl area, the Department will apply for a Monterey Bay National Marine Sanctuary permit which authorizes prohibited or otherwise regulated activities to occur in the Sanctuary.

4.4 Survey Timing

The Department proposes to begin onboard observations in June 2022 and will complete field work in March 2023. Starting onboard observations in June 2022 will give Department staff sufficient time to identify fishermen volunteers, apply for any necessary permits, and to secure any required sampling equipment or funding resources.

In April and May 2023, staff will complete data analysis and draft a report to be delivered to the Commission in June 2023. As requested, the Department will provide updates to the Marine Resources Committee and the Commission on the progress of the evaluation and pending results.

5 Literature Cited

California Department of Fish and Wildlife. Master Plan for Fisheries, A Guide for Implementation of the Marine Life Management Act. 2018

California Department of Fish and Game. 2008. Review of California halibut trawl fishery in the California halibut trawl grounds. Report. 40p.

Wick, T.L., Tanaka, T.H., Pradhan, N.C., and L. Enriquez. 2014. An assessment of the use of light-touch California halibut trawl gear within historic Monterey Bay Trawl Grounds: seafloor Interactions, catch composition, and economic feasibility. NOAA Fisheries and California Department of Fish and Wildlife.

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

6. CALIFORNIA COASTAL FISHING COMMUNITIES PROJECT

Today's Item **Information ☐** **Action ☒**

Receive FGC staff update on progress developing a potential policy—including feedback from regional stakeholder roundtables—and completing draft analyses of staff recommendations.

Summary of Previous/Future Actions

- FGC referred topic to MRC — Feb 11, 2015; FGC, Sacramento
- MRC discussions — 2015-2020; Various
- MRC update and recommendation to begin policy development — Mar 16, 2021; MRC, Webinar/Teleconference
- FGC approved MRC recommendation — Apr 14, 2021; Webinar/Teleconference
- MRC update — Jul 21, 2021; MRC, Webinar/Teleconference
- **Today's update and discussion** — **Nov 9, 2021; MRC, Webinar/Teleconference**

Background

The MRC Coastal Fishing Communities Project was initiated in 2015, and included a series of eight coastal community meetings in 2016-2018. In Dec 2019, FGC adopted *a Staff Synthesis Report on California Coastal Fishing Communities Meetings, 2016-2018*. The report synthesized key themes from the community meetings and proposed ten staff recommendations as "initial concepts for potential development" by FGC (Exhibit 1). MRC directed staff to further develop the staff recommendations from the report through analyses to help evaluate and prioritize the recommendations upon which FGC may choose to act.

Staff Recommendation Analyses

Consistent with previous MRC direction, staff presented analyses for five of the ten recommendations in the staff synthesis report (recommendations 1, 3, 4, 5 and 8, available in the Mar 2021 MRC meeting binder; see Exhibit 2 for additional background). Staff has completed internal analyses for three of the remaining recommendations and is pursuing input from DFW and other partners on those before completing; analysis of the remaining two staff recommendations is underway. Following vetting with DFW and partners, staff will provide remaining draft analyses to MRC.

Implementation of Staff Recommendation 1 – Policy

Preliminary work toward staff recommendation 1 (*develop and adopt a policy and definition for coastal fishing communities*) was completed in 2019 based on MRC direction. MRC adopted a working definition for *coastal fishing communities* that was developed with stakeholders for purposes of this project. The working definition serves as a foundation for the second step in developing staff recommendation 1, which is to build a new FGC policy.

At MRC's Mar 2021 meeting, staff presented findings from initial conversations with fishing community leaders concerning a potential policy. Staff proposed that MRC support moving forward with policy development while additional analyses continued, and presented a draft

strategy and timeline for stakeholder engagement. Following discussion, MRC recommended FGC direct staff to engage stakeholders to initiate drafting a policy for coastal fishing communities, and FGC approved the recommendation in Apr 2021. Staff provided an update to MRC on roundtable planning in Jul 2021.

Update

Following the Jul 2021 meeting, staff convened six regional roundtable meetings between Aug and Sep with regional fishing community leaders and harbor representatives. The roundtables provided valuable input on potential policy goals and key elements for MRC and FGC consideration.

Today, staff will share outcomes from the regional roundtable meetings and present stakeholder-informed draft potential goals and key elements for consideration in an FGC policy on coastal fishing communities (Exhibit 3).

Significant Public Comments (N/A)

Recommendation

FGS Staff: Provide feedback and direction on draft goals and key elements for a potential coastal fishing communities policy. Approve draft goals for use as sideboards to shape the policy drafting process during two future workshops.

Exhibits

1. Coastal fishing communities project staff recommendations, excerpted from the 2019 staff synthesis report
2. Background document: Staff summary for March 2021 MRC meeting, agenda item 5
3. Draft potential policy goals and key elements, dated Nov 3, 2021

Committee Direction/Recommendation

Direct staff to use draft goals as discussed today to shape the process for developing a potential coastal fishing communities policy during future policy drafting workshops.

California Fish and Game Commission Marine Resources Committee
California Coastal Fishing Communities Project Staff Recommendations

The ten recommendations in this document are excerpted from *Staff Synthesis Report on California Coastal Fishing Communities Meetings, 2016 – 2018*, pages 10-12, as prepared by California Fish and Game Commission staff in 2019. This document is intended only as a quick-reference guide for public discussions about the recommendations under consideration by the Commission's Marine Resources Committee.

1. Develop and adopt a policy and definition for coastal fishing communities.

Consider developing a new policy related to coastal fishing communities for Commission adoption. A policy could help clarify how the Commission wishes to consider coastal fishing community needs in decision-making, and the information necessary to help support those decisions. Given that the term "fishing community" is not defined in the California Fish and Game Code, a definition could be developed for inclusion in the policy. Multiple stakeholders representing fishing groups have requested and provided written recommendations for this definition. Developing a draft definition and policy may be best accomplished in collaboration with stakeholders.

2. Review the Commission's policy on restricted access commercial fisheries.

Restricted access programs and the Commission's policy were cited by many community members as contributing barriers to entry and adapting fishing strategies and targets as local changes arise, including those associated with climate dynamics. Other community members defended current restricted access programs as effective management that has improved the resource, the economic viability of fishing, or both. The Commission could conduct a review of how the policy has been applied since it was adopted in 1999, to examine where it was or wasn't applied to specific fisheries, how the policy performed at meeting the fishery objectives, identifying any unintended consequences for fishing communities, and whether any objectives have changed that warrant possible adjustments to the policy. This complex policy includes 21 individual sub-policies across 9 unique topic areas.

3. Approve specific, small-scale projects to test and evaluate proposed new approaches.

Stakeholders have requested that the Commission allow for stakeholders and partners to develop small-scale projects to test new approaches, including departures from the restricted access policy and current permit structures, acknowledging that permit holders are key stakeholders in helping to create, design and define these projects, in consultation with the Department. The new *experimental fisheries permit* program, authorized through legislation as of January 1, 2019, provides a possible pathway to testing pilot projects once regulations implementing the program are adopted by the Commission. Consider projects supporting opportunities for small-scale fishing that can be designed to help to fill information gaps consistent with guidance from the MLMA master plan for fisheries.

4. Engage legislative staff to pursue adjustments to laws as ideas are refined, if warranted to support fishing community adaptability.

Recognizing that some possible actions may be outside of Commission authority to accomplish, direct staff to seek to partner with stakeholders, the Department, and non-governmental organizations to find appropriate issues and means of engaging with legislative staff.

5. Direct staff to increase engagement and coordination with sister agencies, when feasible, on management decisions affecting California coastal communities.

Commission-related actions in isolation cannot meet all needs of coastal fishing communities, and

decisions made by different coastal management authorities can have a combined influence on the health of a coastal community. Community members have requested deeper Commission engagement with coastal management agencies to urge them to consider potential impacts to California's coastal fishing communities from their decision-making. Sister agencies that fishing community members emphasized include the Pacific Fishery Management Council (PFMC) related to west coast federal fisheries management decisions, and the California Coastal Commission, related to coastal development permit approvals to facilitate awareness and coordination on relevant topics and/or projects.

6. Explore pathways for authorizing community-based adaptable fishery structures (e.g., community permit banks or risk pools).

Explore options for community-organized structures that provide for adaptable responses within the community and could include co-management responsibilities. Consult with partner organizations and possibly convene an experts' workshop. This recommendation may require legislative or regulatory frameworks to accommodate such avenues. An example of such a structure that could be used as a model is the Monterey Fisheries Trust.

7. Explore filling data needs through collaborative research and data collection.

Coastal fishing community members have raised a concern that adaptive responses and new management strategies have not been pursued due to lack of data. Many fishermen have offered to support of collaborative data gathering. The Commission could work with the Department on identifying data gaps and possible scientific information that could be gathered through collaborative research or experimental fishing between partner entities and fishermen. Such efforts might be coordinated through creating an app or a website. However, great care must be taken to create citizen science data collecting systems that provide credible data. The Commission would have to rely on partners for labor costs.

8. Survey communities, commercial and recreational fishers, and processors about their priorities for Commission focus.

This strategy could help refine understanding about the issues facing coastal fishing communities and their priorities. Some stakeholders have criticized this idea as being too similar to this coastal fishing communities project.

9. Explore a model of "fishing community sustainability plans" (CSPs) and possible development of a state fisheries-based module to add to existing CSPs.

CSPs are cited in the Magnuson-Stevens Act as a potential method to avoid negative impacts in small fishing communities from the catch share program; they enable communities to plan strategically and to be more proactive in developing fishing community resilience for a sustainable future. Staff envisions that incorporating a state fisheries module could potentially be part of a future where ports are empowered to define how to support their own fishing community resilience and structure fisheries access according to their unique needs.

10. Continue to develop an understanding of climate change impacts on fisheries and fishing communities.

Science is still evolving regarding how fish populations and fisheries are affected by and respond to changing climate dynamics, including short-term, extreme ocean events. Developing successful fisheries management response strategies that meet both biological and socioeconomic/community needs is still nascent. Increased understanding of what is often referred to as "climate-responsive fisheries management" or adaptable management structures).

COMMITTEE STAFF SUMMARY FOR MARCH 16, 2021 MRC
For Background Purposes Only

5. COASTAL FISHING COMMUNITIES PROJECT

Today's Item **Information ☐** **Action ☒**

Receive an update on staff analyses and discuss a potential committee recommendation for next steps in exploring options to support California's coastal fishing communities.

Summary of Previous/Future Actions

- FGC referred topic to MRC — Feb 11, 2015; FGC, Sacramento
- MRC discussions — 2015-2020; Various
- Most recent MRC update — Nov 10, 2020; Webinar/Teleconference
- **Today's update and direction** — **Mar 16, 2021; Webinar/Teleconference**

Background

The MRC Coastal Fishing Communities Project has been underway since 2015, and included a series of eight coastal community meetings in 2016-2018. In 2019, FGC adopted a *Staff Synthesis Report on California Coastal Fishing Communities Meetings, 2016-2018* (https://fgc.ca.gov/Committees/Marine/Coastal-Fishing-Communities-Project). The report synthesized key themes from the community meetings and proposed ten staff recommendations (SRs) as "initial concepts for potential development" by FGC (Exhibit 1). MRC directed staff to further develop the SRs to help evaluate and prioritize the recommendations upon which FGC may choose to act.

At the Jul 2020 MRC meeting, staff proposed a draft analytical approach for a more in-depth analysis of each SR (Exhibit 2; for background purposes), and MRC directed staff to move forward with analyses using the draft approach presented.

In Nov 2020, staff presented MRC with a draft analysis of the first SR (*develop and adopt a policy and definition for coastal fishing communities*) (Exhibit 3), prepared based on the analytical framework. Staff has since used the analytical framework to develop four additional analyses for this meeting:

- SR3 - *Approve specific, small-scale projects to test and evaluate proposed new approaches* (Exhibit 4);
- SR4 - *Engage legislative staff to pursue adjustments to laws as ideas are refined, if warranted to support fishing community adaptability* (Exhibit 5);
- SR5 - *Direct staff to increase engagement and coordination with sister agencies, when feasible, on management decisions affecting California coastal communities* (Exhibit 6); and
- SR8 - *Survey communities, commercial and recreational fishers, and processors about their priorities for FGC focus* (Exhibit 7).

Analysis of the remaining five SRs is underway.

The SR 1 analysis suggests pursuing an FGC policy and definition for coastal fishing communities on its own merit; the policy has the potential to guide development of the other

SRs. While reviewing analysis of all SRs together to could help MRC evaluate the relative priority of different actions, completing the remaining analyses could occur concurrently with additional work on a draft policy.

Preliminary work toward SR 1 was completed in 2019 based on MRC direction; staff worked with stakeholders to draft a proposed definition for *coastal fishing communities,* and MRC adopted the definition for purposes of the project. The second step in developing SR 1 is to build a policy and, in Nov 2020, staff recommeded reengaging stakeholders to further evaluate and explore the potential for developing a coastal fishing communities policy while the other SRs were further analyzed. Since Nov, staff has held individual conversations with several fishing community leaders who previously contributed to policy considerations by commenting on the 2019 draft staff synthesis report and participating in drafting the working definition of coastal fishing communities.

At this meeting, staff will present findings from initial conversations with stakeholders concerning a policy, as well as a draft proposed strategy and timeline for stakeholder engagement for MRC consideration.

Significant Public Comments (N/A)

Recommendation

FGC staff: Direct staff to continue developing analyses for the remaining SRs (2, 6, 7, 9 and 10), and to begin outreach to stakeholders to inform development of a draft policy on coastal fishing communities.

Exhibits

1. Coastal fishing communities project staff recommendations, excerpted from the 2019 staff synthesis report
2. FGC staff-proposed analytical approach presented to MRC in Jul 2020
3. Revised draft analysis of staff recommendation 1, dated Mar 10, 2021
4. Draft analysis of staff recommendation 3, dated Mar 10, 2021
5. Draft analysis of staff recommendation 4, dated Mar 5, 2021
6. Draft analysis of staff recommendation 5, dated Mar 8, 2021
7. Draft analysis of staff recommendation 8, dated Mar 8, 2021

Committee Direction/Recommendation

Direct staff to begin working with stakeholders to inform development of a policy on coastal fishing communities.

California Fish and Game Commission
Coastal Fishing Communities Project
Potential Overarching Goals and Specific Elements for a Policy for Marine Resources Committee Review

November 3, 2021

In 2018, California Fish and Game Commission staff solicited public feedback on a draft report titled *Staff Synthesis Report on California Coastal Fishing Communities Meetings, 2016-2018*. Public comments received on the draft staff report were integrated into the final 2019 report, and comments were summarized in Appendix D of the report. Many of the public comments pertained to staff recommendations made in the report. The first of the ten recommendations (referred to as "Staff Recommendation 1"), is for the Commission to "develop and adopt a policy and definition for coastal fishing communities." That recommendation is the focus of this document.

Existing state and federal policies consider actions for a fishery from the standpoint of fished stock status, the ecosystem, and the social and economic impacts to fishery participants. Fisheries management and/or regulation options are evaluated for: (1) meeting sustainability goals for the fish stock (fishery); (2) impacts to the target species' ecosystem, including bycatch and habitat impacts; and (3) intra- and inter-sector social and economic considerations. This approach, however, fails to consider community-scale implications of a fishery management decision.

Recognizing the potential value of, and community support for, integrating consideration of community-scale impacts into its fishery management decisions, in April 2021 the Commission adopted a Marine Resources Committee recommendation (MRC) to direct staff to pursue development of a new policy through a stakeholder engagement process.

A new Commission policy on coastal fishing communities could serve to shift policy direction to consider fishing community-level implications in fishery management options. It would formalize the Commission's commitment to look at the compendium of factors that can shape a fisheries management decision. In addition to considering the sustainability of a fishery stock and natural ecosystem upon which it depends, or the direct participants in that fishery (sector or sectors), a policy could help shape how the Commission considers the potential impact of management options on the individual fishing community and collective fishing communities in a region.

Defining specific goals is necessary to initiate and support this policy shift. This document provides an overview of stakeholder engagement to date, and draft goals, sample objectives, and specific key concepts for potential inclusion in a coastal fishing communities policy informed by stakeholder input.

Overview of Stakeholder Engagement Process

In January 2021, staff conducted a handful of one-on-one industry calls to recap previous comments and key areas of concern, clarify if any new areas of concern had developed in the intervening time (e.g., learned through the global pandemic), and gain a sense of the potential value and appetite for developing a policy at this time. After receiving confirmation through these calls that interest in the Commission developing a policy still existed, staff developed a proposed process to receive stakeholder policy input through regional roundtables followed by

public workshops. MRC endorsed this approach in March 2021, and in April 2021 FGC directed staff to commence policy development through stakeholder engagement.

In August and September 2021, staff conducted a series of regional roundtable meetings with select coastal fishing community members from each of five regions: north coast, north-central coast and San Francisco Bay Area, central coast, south-central coast, and south coast. A sixth roundtable was held for interested members unable to attend the roundtable scheduled for their respective regions.

Based on regional roundtable input, staff has developed draft goals for discussion with MRC and subsequent discussion through public workshops. This document outlines draft overarching goals and associated themes to consider addressing through a policy, as well as specific key concepts related to each goal, derived from public comments on the staff report, one-on-one phone calls, and the regional roundtable meetings.

These draft goals for a potential coastal fishing communities policy showcase a desire to create a new lens through which to consider Committee recommendations and Commission decisions on topics related to coastal fishing communities. The draft goals for the policy suggest an expanded scope in which to examine trade-offs, where community-level issues are considered rather than the narrower fishery-level scope. Ideally, a coastal fishing communities policy will provide a lens that reaches beyond a single fishery and encourage thinking about future coastal fishing community goals, weaving them into current management decisions.

Potential Goals and Objectives

The goals and objectives described herein are what stakeholders have indicated they would like the policy to accomplish.

Goal A: *Integrate consideration of potential coastal fishing community-scale impacts into Commission fisheries management decisions*

Objectives

- Consider what ripple effects might occur through each fishing community where that fishery occurs, including:
  - How regional fisheries management proposals align with individual port conditions;
  - the interplay of a fishery's changes with other fisheries within a community's core fisheries; and
  - shoreside implications of how changes could impact infrastructure, processors and employees, or loss of markets.

Goal B*: Ensure the sustainability of coastal fishing communities through community empowerment that is inclusive and reflective of community diversity*

Objectives

- Take a stance where the Commission defends and acts as a champion for coastal fishing communities

- Consider impacts of external development efforts that compete with commercial and recreational fishing for space in the ocean landscape (e.g., offshore wind and offshore aquaculture, and California's initiative to conserve 30% of coastal waters by 2030)
- Push back on advocacy for the Commission to curtail a commercial and/or recreational fishery based on claims of unsustainability when data indicates otherwise
- Promote California fisheries and their legacy
- Increase community empowerment
  - Co-manage and collaboratively research with fishermen/fishing communities
  - Support community-led efforts and leadership
  - Create community ownership opportunities (e.g., with permitting give communities more influence over how their "backyard" is being managed)
  - Increase community autonomy (e.g., ability to define when and where to fish to avoid issues such as entanglement)
- Bring more individuals from within the fishing community into the state decision-making process
  - Create opportunities/embedded process for direct dialogue between the Commission/Department and fishermen/user community/permit holders with simple, clear and consistent communication
  - Include local communities in fisheries management plan process
    - Leverage the expertise of fishermen by enabling them to collect data while fishing and fill data gaps
    - Include fishermen's unique perspectives and valuable insights as people who are on the water all the time
    - Improve outreach to different sectors of the fishing industry (e.g., Vietnamese and Cambodian fishermen and urchin collectors) and let them know they have a voice, even if that voice does not prevail

***Goal C**: Support economic growth of the fishing industry*

Objectives

- Address loss of infrastructure
  - Take actions to restore, encourage, and facilitate harbor space use and development to better support fishing activities
  - Maintain and improve upon existing infrastructure
- Increase access to pelagic species:
  - Consider modifying fishing restrictions in marine protected areas (MPAs) for species that migrate through, and do not benefit from, specific geographic closures
  - Support lifting federal groundfish conservation area closures to allow access to pelagic species that will not impact bottom species those areas are designed to protect
- Preserve fishing here in California for generations to come
  - Provide low-cost opportunities for entry level positions
  - Provide opportunities for small-boat access

- Allow for a diversity of ways for fishermen to earn more money from fishing
  - Alternative products such as supplements, fish oil, etc.
- Marry biological sustainability with economic sustainability in decision-making

***Goal D**: Build pathways for innovation and adaptation*

Objectives

- Address loss of access to fishing grounds/regional access issues
  - Consider where adjustments to state fishery closures can be made to mitigate access loss when additional spatial closures to fishing are enacted (aka from other industries on the water)
  - Recognize the changing dynamics of how fish are being consumed and marketed in California (i.e., loss of global distribution and increase in direct-to-consumer distribution during COVID-19 pandemic)
  - Establish a quicker process for decision-making/pivoting for the Commission/Department to act quickly to respond to emerging needs and creative adaptation ideas from fishermen
    - Enables sport and commercial fisheries to quickly adapt to changes
  - Prioritize working collaboratively through regulatory or enforcement barriers

Specific Concepts and Key Elements to Include in a Policy

The specific concepts and key elements that stakeholders would like a coastal fishing communities policy to say to achieve their desired goal(s).

Key Elements for Goal A

- Identify metrics to evaluate potential impacts of changes to a fishery's management at the fishing community scale, including local fishing customs and port conditions (including vessel size, number of vessels, individual or community fishing portfolios), fishing- and ocean-dependent shoreside industries such as infrastructure, receivers, processors, and employees, etc.
- Process for checking in with all sectors of a coastal fishing community during decision-making
  - Input on how XYZ will affect processors, bait shops, ice, etc.

Key Elements for Goal B

- Emphasize the importance of domestic fisheries and fishermen and what they do for the community and the role they play in domestic food security
- Express support for wild capture, domestic fisheries
- Reaffirm priority of sport fishing and commercial fishing (from California Coastal Act) and advocate for their prioritization in coastal development decisions
- Highlight that sportfishing and outdoor recreation is very important to Californians
  - Commercial passenger fishing vessels (CPFVs) are frequent entry point and first exposure to fishing for many

- Enumerate to the public that California fisheries are sustainably managed, and that fishermen and resource managers are always working toward sustainability
- Commission supports fishing industry's goal to provide fresh and local seafood for Californians

Key Elements for Goal C

- Facilitate opportunities to access underutilized species and depth limits (e.g., chili pepper rockfish)
- Allow for resource pooling to reduce individual costs for things such as infrastructure
- Undertake a review of the restricted access policy and timeframe for recurring reviews and updates to the restricted access policy to match current needs

Key Elements for Goal D

- Work with other agencies (state and federal) to make sure coastal community access to fisheries is maintained, falling in line with protecting ocean resources (shoreside and beyond)
  - "…to ensure that actions of one agency does not overrule the other and the public is left with limited or no access to an area"
- Commission will give input to the Pacific Fisheries Management Council on behalf of California fishermen
  - "We need to do XYZ to create something more stable for our fishermen"
- Commission will use science-based decision-making in fisheries management
  - Reaching maximum sustainable yield (MSY) for fisheries
  - Reliance on scientific sustainability standards not subjective values
- Enable and champion approval of experimental fishing permits (EFPs) through the EFP program to test new approaches, strategies, and community structures (or maybe 'make EFPs accessible to test new ideas')
- Employ tools to increase in-season adaptability
  - e.g., using e-ticket data to monitor fishing/fishery and then give fishermen the ability to adjust marketing and production side of things

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

7. STAFF AND AGENCY UPDATES

Today's Item **Information ☒** **Action ☐**

Receive written updates from staff and other agencies.

(A) California Ocean Protection Council (OPC)

(B) DFW

I. Law Enforcement Division (LED)

II. Marine Region

a. Kelp restoration and recovery efforts, including initial outcomes of urchin removal projects and status of sunflower star (*Pycnopodia*)
b. Red abalone fishery management plan (FMP) development
c. Market squid management review
d. Aquaculture lease planning

(C) FGC staff

Summary of Previous/Future Actions (N/A)

Background

This is a standing item for staff and agencies to provide an update on marine-related activities of interest.

(A) ***OPC***

OPC staff has provided an update on topics of interest to the committee in Exhibit 1.

(B) ***DFW***

I. *LED*

An update on marine enforcement items of interest is provided as Exhibit 2.

II. *Marine Region*

Marine Region has provided updates on three topics in the MRC work plan.

- *Kelp restoration and recovery efforts:* DFW's update includes a report of initial outcomes of urchin removal projects and status of sunflower star (*Pycnopodia)*. See Exhibit 3.
- *Red abalone FMP development:* DFW provides an outline of its progress and anticipated timing for steps leading to completion of a draft FMP (Exhibit 4). DFW would like to present management options for MRC feedback at the Mar 2022 meeting.
- *Market squid management review*: DFW has received funding to support Phase 1 of a two-phase squid fishery advisory committee process. Phase 1 will entail interviews to inform establishment of the advisory committee and a process roadmap. DFW also has secured funding to support a post-doctoral

researcher to synthesize long-term monitoring data at applicable temporal and regional geographic scales, which will complement the projected year-long Phase 2 portion. While DFW still seeks full funding for Phase 2, it expects to begin Phase 2 in summer 2022, with commencement of advisory committee meetings.

III. *Aquaculture Lease Planning*

DFW's State Aquaculture Coordinator has highlighted progress in advancing pending aquaculture lease requests with Marine Region and FGC staff (Exhibit 5).

(C) ***FGC staff***

FGC has been matched with its 2022 Sea Grant Fellow. Kimberly Rogers recently received her master's degree from Scripps Institution of Oceanography at the University of California, San Diego, and will start her tenure with FGC in early 2022. Corinna Hong will remain in her fellowship position through Feb 2022.

Significant Public Comments

Kelp restoration and recovery efforts – sea urchin removals:

- A project lead and a volunteer/organizer with the Giant Giant Kelp Restoration Project each sent presentations summarizing volunteer diver efforts and initial measured project outcomes at the Tanker Reef project site in Monterey, California since efforts began in Apr 2021 (exhibits 6 and 7).

  The project team believes that the project has met the two "criteria for success" specified by DFW, OPC, and Monterey Bay National Marine Sanctuary staff. The project team proposes to expand efforts into marine protected areas and is informally requesting a rulemaking change to sanction restoration inside of marine protected areas (Exhibit 7).

Red abalone FMP development:

- A recreational abalone diver and member of the previous FMP Administrative Team is concerned that the FMP has not been completed despite a long process undertaken by stakeholders, FGC, and DFW to replace the existing Abalone Recovery and Management Plan sections governing the recreational fishery. FMP completion could allow the fishery to reopen before the end of the current closure in 2026 if DFW integrates the de-minimis or biological fishery option recommended in 2020 by the Administrative Team. The commenter asks FGC and DFW to commit to a firm timing for FMP completion, and requests that the DFW Director's Red Abalone Advisory Committee (RAAC) resume holding regular public meetings, publish meeting notes, and have RAAC officers selected from appointed members only (Exhibit 8).
- The Nature Conservancy (TNC) restates its commitment to science-based, collaborative solutions as demonstrated through its leadership role in the red abalone FMP management strategy integration process and Administrative Team facilitation (Exhibit 9). The process served as a new model for public-private partnerships to leverage additional funding and capacity to advance state fisheries management objectives.

  TNC has continued to invest in this effort: (1) TNC funded Reef Check to conduct a study to assess the feasibility of gathering abalone length data in Humboldt and Del Norte

counties to manage the fishery in these counties as proposed in the FMP integrated harvest control rule. TNC reports on results and prospects for generating the data required for the harvest control rule. (2) TNC has completed and transmits a report titled *Lessons Learned from a Unique Fisheries Management Planning Process* (Exhibit 10). Developed through interviews with participants in the integration process, the report offers findings and recommendations for improvement should the state consider a similar stakeholder-led model in the future.

Recommendation (N/A)

Exhibits

1. OPC update, received Nov 2, 2021
2. DFW LED update (will be provided in supplemental meeting materials)
3. DFW update on kelp restoration and recovery efforts, received Oct 26, 2021
4. DFW update on red abalone FMP development, received Oct 26, 2021
5. DFW update on current and future aquaculture lease planning, received Oct 29, 2021
6. Email and presentation from Marc Shargel, received Oct 27, 2021
7. Email and presentation from Keith Rootsaert, received Oct 27, 2021
8. Email from Jack Likins, received Oct 22, 2021
9. Email from Alexis Jackson, TNC, received Oct 27, 2021
10. TNC lessons learned report, received Oct 27, 2021

Committee Direction/Recommendation (N/A)

Marine Resources Committee meeting – Ocean Protection Council update
November 9, 2021

30x30

- OPC leadership and staff continue to work closely with Dr. Jennifer Norris, CNRA's Deputy Secretary for Biodiversity and Habitat, on the coastal and ocean components of California's 30x30 initiative.
- Recommendations from the Conservation of Coastal Waters Advisory panel report have been integrated into a draft "Pathways to 30x30" document, which will detail opportunities and strategies to achieve 30x30 in California.
- The pathway to conserving 30% of California's coastal waters will include the state waters currently protected within marine protected areas (MPAs) and a prioritized focus on working with federal resource managers to strengthen biodiversity conservation measures in California's National Marine Sanctuaries.
    - Examples of such measures could include mandatory vessel speed reductions, phasing out the use of particularly harmful fishing gear or making existing gear restrictions permanent, strengthening water quality protections, restoring degraded habitats, and banning single-use plastics within Sanctuary watersheds.
- Additionally, restoring and revitalizing Tribal stewardship is a critical step toward conserving coastal and ocean biodiversity and achieving the 30x30 target.
- Finally, the pathway will also include an evaluation of other strategies with potential for increasing biodiversity benefits, including Areas of Special Biological Significance, National Estuarine Research Reserves, and fisheries management measures.
- A draft of the Pathways document will be released in December 2021, with the final released in 2022.

Offshore Wind

- The Bureau of Ocean and Energy Management released two announcements for a Morro Bay Call for Information and Nominations and Humboldt Wind Energy Area Environmental Assessment.
- Public comments for these two announcements will inform the process and evaluation of offshore wind (OSW) development moving forward.
- The California Coastal Commission (CCC) held an informational hearing on offshore wind and the federal consistency determination (CD) process at their Thursday, September 9 meeting. CCC is preparing for potential CD hearings for the North Coast in April 2022 and the Central Coast in June 2022.
- OPC is supporting the CD process through funding a series of projects that have been identified as key environmental and cultural information gaps. Recently funded and planned projects include: support for spatial environmental and ocean use mapping and

modeling projects; synthesis of existing data; and an inventory of Tribal cultural resources.

- California State Lands Commission also released its draft Preliminary Environmental Assessment for Vandenberg Offshore Wind Energy projects located in state waters.

Tribal Engagement Strategy and Listening Sessions

- OPC is seeking to consult and collaborate with California Native American Tribes on the development of a Tribal Engagement Strategy, which will provide a framework for enhanced partnership between OPC and Tribes on ocean and coastal matters.
- OPC will be holding listening sessions this month to hear and discuss Tribes' perspectives on two key issues:
    - Best practices for conducting outreach and engaging with Tribes in a respectful and effective manner (Tuesday November 9)
    - Tribes' priorities for coastal and ocean conservation and management (Tuesday November 16)
- Outcomes of these listening sessions will inform the development of a draft Tribal Engagement Strategy. There will be additional opportunities for consultation once the draft strategy is developed.

Kelp Research and Restoration

- OPC and CDFW continue to support pilot research and restoration projects aimed at understanding the drivers of recent kelp declines in California and exploring potential restoration approaches (please refer to CDFW's written update for a more detailed summary of these projects, including results of urchin removal efforts).
- In the coming months, OPC will be working to develop its Interim Kelp Action Plan into a final Kelp Action Plan with priorities for collaborative, partnership-based action based on results of pilot projects as well as scientific, Tribal, and public input.

Aquaculture Principles and Action Plan

- The development of the statewide Aquaculture Action Plan is underway and proceeding on schedule with planned completion by 2023.
    - The National Center for Ecological Analysis and Synthesis (NCEAS) and California Sea Grant, in close partnership with OPC staff, finalized membership of both the community and scientific listening groups as well as held initial meetings of both (on 7/19 and 8/23 respectively). This was a major milestone in the process to develop a working draft of the Action Plan, with completion of the full draft expected by December 2021.
- In addition to moving forward on the Aquaculture Action Plan, OPC publicly released the Guiding Principles for Sustainable Marine Aquaculture in CA at the June OPC meeting.
    - The Guiding Principles were cooperatively developed by the Aquaculture Leadership Team (led by Secretary Crowfoot and composed of programmatic

staff of all state agencies involved in the regulation, permitting and development of aquaculture in California (the California Department of Fish and Wildlife, California Fish and Game Commission, California Coastal Commission, State Lands Commission, OPC, California Department of Food and Agriculture, California Department of Public Health and the State Water Resources Control Board)).

- Most recently, the Aquaculture Leadership Team met on September 29 to continue to coordinate a cohesive strategy for implementation of the Guiding Principles across all member agencies.

<u>Upcoming Council meeting</u>

- The next OPC meeting will be held on December 7, 2021, from 11:00am-3:00pm. The meeting will be held remotely by teleconference.
- Agenda will be posted on OPC's website in the coming days. Meeting materials will be posted ten days prior to the meeting.

Department of Fish and Wildlife update on kelp restoration and recovery efforts, including initial outcomes of urchin removal projects and status of sunflower star (*Pycnopodia helianthoides*)

Marine Resources Committee Meeting
California Fish and Game Commission
November 9, 2021

North Coast Urchin Control: removal by commercial urchin divers.

In 2020, the Ocean Protection Council (OPC), California Department of Fish and Wildlife (CDFW), and Reef Check California (RCCA) initiated a partnership with north coast commercial sea urchin divers to evaluate the feasibility and efficacy of removing urchins at key locations as a kelp restoration tool. Restoration and control sites (~10 acres ea.) have been established at Noyo Bay and Albion Cove in Mendocino County and changes in ecological metrics, including urchin density, kelp density/canopy area, and community composition are being monitored. Removed urchins are donated for use as a soil amendment in compost. This project will help inform the development of restoration best practices and the potential development of a broader restoration strategy.

Table 1: Summary of commercial diver urchin removal effort by site as of September 24, 2021.

Site	Start Date	Diver Days	Urchins Removed (lbs)
Noyo Bay	August 2020	121	31,192
Albion Cove	July 2021	62	9,931

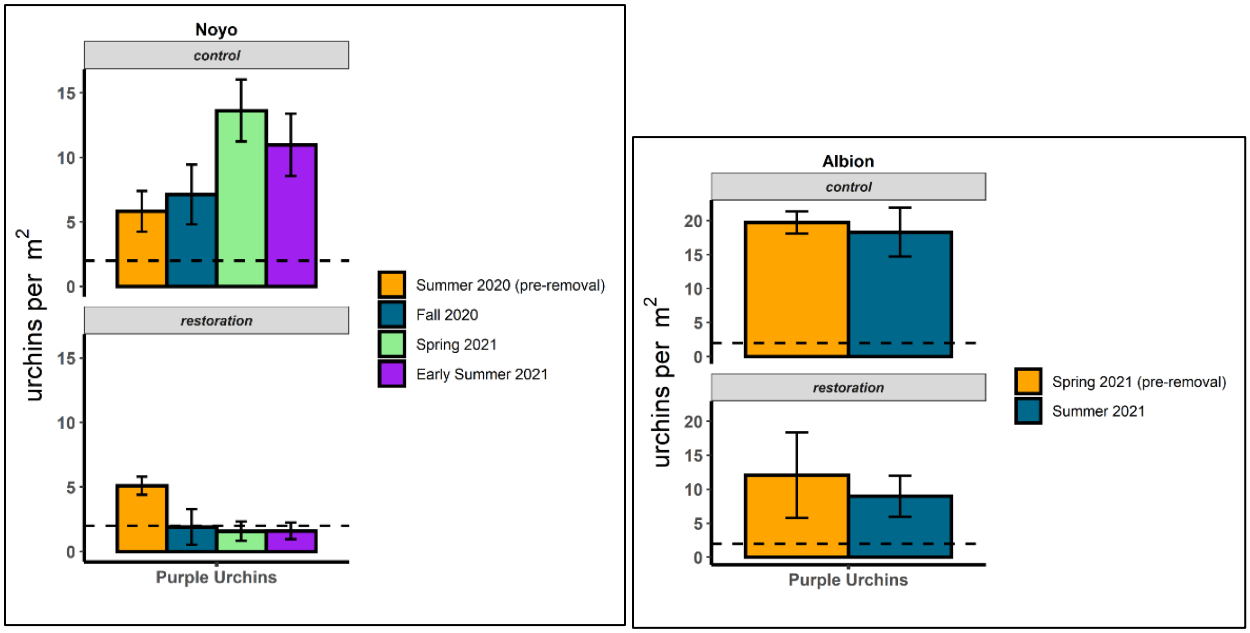


Figure 1: Purple urchin density over time at Noyo Bay (left) and Albion Cove (right) showing urchin control (no removals) and restoration (commercial removal) sites (bars indicate mean density +/- standard error; dotted line - target threshold density of 2 purple urchins per m^2. Data source: Reef Check California).

Dive operations on the north coast are seasonally restricted because of poor winter conditions. At Noyo Bay, commercial divers worked on the restoration site from August until November in 2020, during which time they completed the initial clearance of the site to the target threshold density of ≤ 2 purple urchins per m^2 (Figure 1 – Noyo). Work resumed in March 2021 and the purple urchin target density has been maintained through the early-Summer 2021 sampling period. Fall 2021 surveys are currently being conducted so results are not yet available; however, anecdotally purple urchin density appears to be below the target density and kelp regrowth has been observed in the restoration site. In comparison, urchin density in the control site was observed to be variable, but consistently higher than the threshold density of 2 urchin per m^2 from Summer 2020 through the early-Summer 2021 sampling period. As noted above, Fall 2021 surveys are not yet available; however anecdotally, purple urchin density in the control site appears to be above the threshold density, and while some kelp has also regrown, it appears to be less than in the restoration site. This will be confirmed when the survey results are available and analyzed.

At Albion Cove, commercial divers began working on the restoration site in July 2021. As such, results from the Summer 2021 sampling period were not expected to show a significant reduction in urchin density from the Spring 2021 sampling period (Figure 1 – Albion). This reef is more complex with higher abundance of smaller urchins making clearing more difficult than at Noyo Bay; however, Fall 2021 sampling results are expected to reflect the removal efforts.

North Coast and Central Coast Urchin Control: in-water culling by recreational divers.

The recreational diver community is highly engaged with the issue of kelp loss and have spearheaded several grass roots efforts to promote localized kelp recovery by controlling urchin density. In 2020, the Fish and Game Commission approved an amendment to the recreational urchin harvest regulations allowing unlimited take of purple and red urchins at Tanker Reef (Monterey County) and the unlimited take of purple urchins at Caspar Cove (Mendocino County) including via in-water culling. The purpose of the regulatory amendment is to evaluate: 1) the efficacy of this approach at reducing and maintaining urchin densities at or below the threshold level that may support kelp regrowth; and 2) environmental impacts, including potential negative impacts to other organisms or damage to underlying reef structure.

<u>Tanker Reef – Monterey County</u>

This is a recreational diver community effort, led by Mr. Keith Rootsaert of the Giant-Giant Kelp Restoration Project. Divers have established a training program to facilitate responsible participation and diver effort is self-reported via a standardized mobile app datasheet. Project monitoring by a partnership of CDFW, Monterey Bay National Marine Sanctuary (MBNMS), and Reef Check California occurs at 2.5 acre restoration and control sites, although urchin culling also occurs outside of these monitored areas within the broader Tanker Reef regulatory boundary.

Self-reported diver effort:

Culling efforts were initiated in April 2021 with 365 dives (277 diver hours) logged and a self-estimated 229,312 urchins culled (for context, approximately 700,000 purple urchins have been estimated removed at Noyo Bay by commercial divers as of 09.24.21).

Monitoring effort:

Urchin density on the 2.5 acre restoration site at Tanker Reef was reduced below the target threshold of ≤ 2 urchins per m^2 between the Spring and Fall 2021 sampling events by volunteers (Figure 2). In comparison, urchin density at the control site was observed to remain higher than the threshold density of 2 urchin per m^2, with little change between the Spring and Fall sampling periods. Continuing monitoring will track the level of maintenance required to sustain target urchin densities over time, if kelp and other algal species colonize the site in the spring, and the effectiveness of expanding the project to other areas on Tanker Reef.

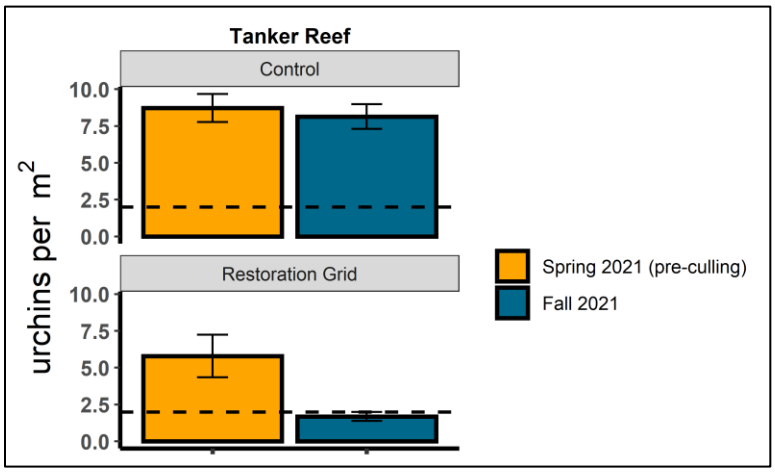


Figure 2: Purple and red urchin density pre- and post-culling at the Tanker Reef control and restoration sites (bars indicate mean density +/- standard error; dotted line - target threshold density of 2 purple urchins per m^2. Data source: CDFW/MBNMS).

Experiments by CDFW and MBNMS divers demonstrated that the mudstone substrate at Tanker Reef is friable, and errant strikes can directly damage the soft substrate. However, training on responsible culling practices being implemented by the dive community may mitigate these impacts in the field. Similar impacts are not anticipated on granite reefs, although analysis is ongoing. In addition, analyses are in progress to assess vulnerability and damage to non-target organisms.

<u>Caspar Cove – Mendocino County</u>

This is a recreational diver community effort. Diver effort is self-reported via a standardized mobile app datasheet. Project monitoring occurs via a partnership of RCCA and CDFW staff.

Self-reported diver effort:

Culling efforts by the public were initiated in July 2020 with 77 dives logged for a self-estimated 57,225 purple urchins culled.

Monitoring effort:

Due to the COVID -19 pandemic, recreational effort was lower at this site than anticipated, and monitoring efforts were disrupted. Figure 3 shows purple urchin density at the north and south sides of Caspar Cove in the Summer of 2020, when culling efforts were initiated, and in the Summer of 2021. Most culling has occurred on the south side of the cove but has

been highly patchy both spatially and temporally. Monitoring has not detected a measurable difference in urchin density between the sampling periods. However, the current monitoring strategy is being adapted to be better aligned with effort at this site.

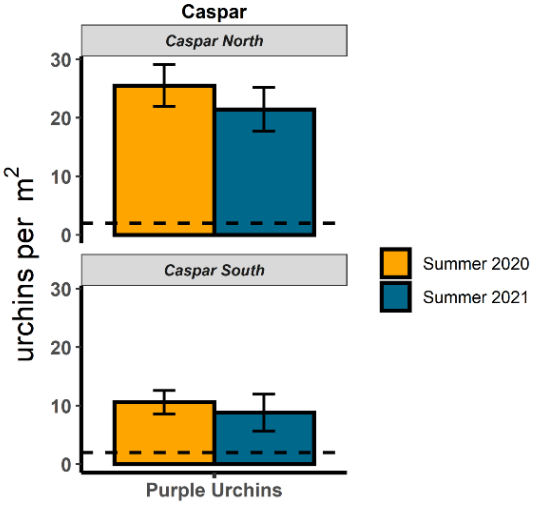


Figure 3: Purple and red urchin density pre- and post-culling at the Caspar Cove control and restoration sites (bars indicate mean density +/- standard error; dotted line - target threshold density of 2 purple urchins per m^2. Data source: Reef Check California).

Pycnopodia helianthoides –status update

Beginning in 2013, Sunflower sea star (*Pycnopodia helianthoides*) populations along the West Coast were decimated by Sea Star Wasting Disease (SSWD) resulting in the functional extinction of this species throughout California. A petition for U.S. Endangered Species Act listing was filed on August 18, 2021. Numerous entities are working on various aspects of the ecology and potential recovery of this species. The Nature Conservancy (TNC) is funding and coordinating many efforts. The following list represents the main bodies of work TNC is sponsoring:

- Development of peer-reviewed journal article (including CDFW staff): Hamilton SL et al. 2021 Disease-driven mass mortality event leads to widespread extirpation and variable recovery potential of a marine predator across the eastern Pacific. Proc. R. Soc. B 288:20211195.
- Working with Dr. Jason Hodin at the University of Washington (UW) exploring laboratory culturing and early life history stage biology of *Pycnopodia* to maintain broodstock and support recovery efforts.
- Working with Dr. Drew Harvell at UW to determine the causative agent of SSWD.
- Working with Dr. Aaron Galloway at Oregon State University evaluating *Pycnopodia* food preferences and feeding rates on purple sea urchins.
- Convening and coordinating a working group of West Coast experts and managers (including CDFW staff) to develop a Road Map to Recovery for *Pycnopodia* - identifying key steps necessary for recovery, fostering partnerships, catalyzing action, and securing funding.

Department of Fish and Wildlife update on Red Abalone FMP

Marine Resources Committee Meeting
of the California Fish and Game Commission
November 9, 2021

- Work has been completed on a draft Management chapter that contains six elements listed below:

    1. Management Framework

    2. Environmental Conditions Supporting Abalone

    3. Abalone Productivity Indicators

    4. Uniform Fishing Regulations

    5. Egg Production Indicator and Reference Points

    6. Adaptive Management and Total Allowable Catch

- The Department request a comprehensive discussion at an upcoming MRC meeting to inform the final development of the management chapter. The Department would then host a meeting of the Recreational Abalone Advisory Committee (RAAC) (likely spring 2022) to discuss the draft Management chapter for additional input.

- After the RAAC meeting the Department will complete drafting and submit the draft FMP to the MRC/FGC (anticipated summer 2022) for input before submitting the document for peer review. Once the peer review has been completed and incorporated into the FMP, the Department will submit the final draft FMP to the FGC to start the formal approval process.

California Department of Fish and Wildlife
Update on Aquaculture – Current and Future Lease Planning

Marine Resources Committee Meeting
California Fish and Game Commission
November 9, 2021

- Department and Commission staff continue to address lease amendment requests, coordinating priorities and progress on a bi-weekly basis.
- Staff is working through backlog of requests, including:
    1. Confirmed authorization in lease terms regarding work platform with letter to Coastal Commission (M-614-01 p1).
    2. Confirmed authorization in lease terms regarding culture method with letter to leaseholder (M-430-04)
    3. Executed lease amendment reconciling lease boundary descriptions and authorized species (M-430-05).
- Additional lease boundary reconciliations ahead, relying on survey work and coordination among leaseholders.
- Providing CEQA support to three current leaseholders where applicable for change requests, in addition to same for two new lease applicants.
- Lease site inspection conducted this month concerning lease transfer request, to inform Department recommendations to Commission.
- Department and Commission staff have participated in joint calls with select lease holders with pending requests or applicants for new leases, which has improved shared understanding and creative problem-solving. Department and Commission staff plan to initiate calls with lease holders/applicants when future requests are received to clarify where needed and to coordinate moving the requests forward for review without administrative delay.
- Staff capacity is a significant constraint to effective aquaculture management.

FGC@FGC

From: Marc Shargel <[redacted]>
Sent: Wednesday, October 27, 2021 4:43 PM
To: FGC
Cc: Ashcraft, Susan@FGC
Subject: Visual material (written comments) for MRC meeting of Nov 9, 2021, Agenda Item 7
Attachments: G2KR MRC Meeting 21_11_09 Shargel.pdf

Dear Commissioners and Staff,

As a volunteer and organizer for the Giant Giant Kelp Restoration Project (G2KR) in Monterey, I would like to make some comments to Agenda item #7 at the MRC meeting on November 9. To be completely specific, that's Item 7 B II a. I'll be able to communicate more clearly if I can present some visuals at the same time. I've prepared a PowerPoint stack for that purpose. Attached to this email is a PDF version of that PowerPoint.

Please let me know how we can arrange the mechanics of showing these visuals in the meeting. For example, do I send the PowerPoint to an address at FGC, so one of the staff can show it? Can you enable me to share my screen with the meeting? If you need me to send the PowerPoint to you, when do you need it?

Thanks for allowing me to participate!

Marc Shargel

Sea Life Photographer, Author, Speaker and
Volunteer organizer for the

Giant Giant Kelp
Restoration Project

Giant Giant Kelp
Restoration Project

Registered Volunteers:	**356**
Trained Divers:	**55**
Divers Reporting Data:	**67**
Dives Logged:	**407**
Injuries & Mishaps:	**0**

Results

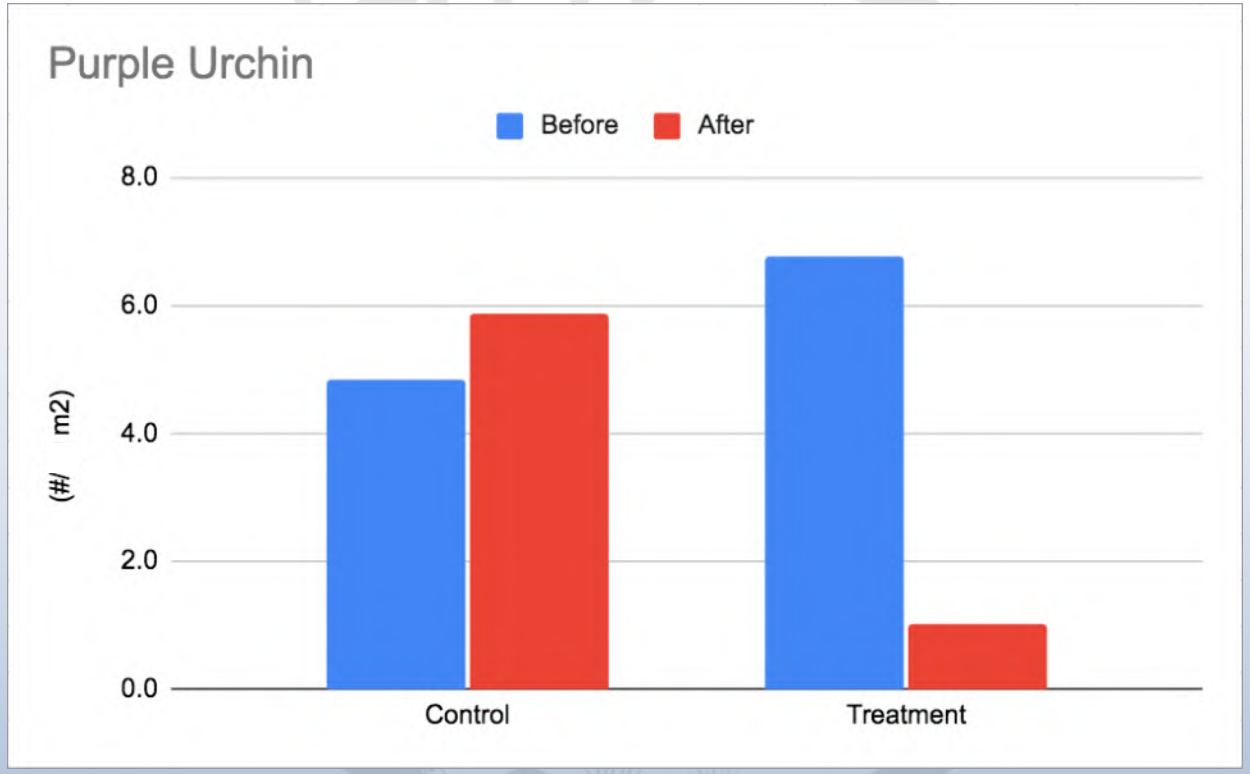
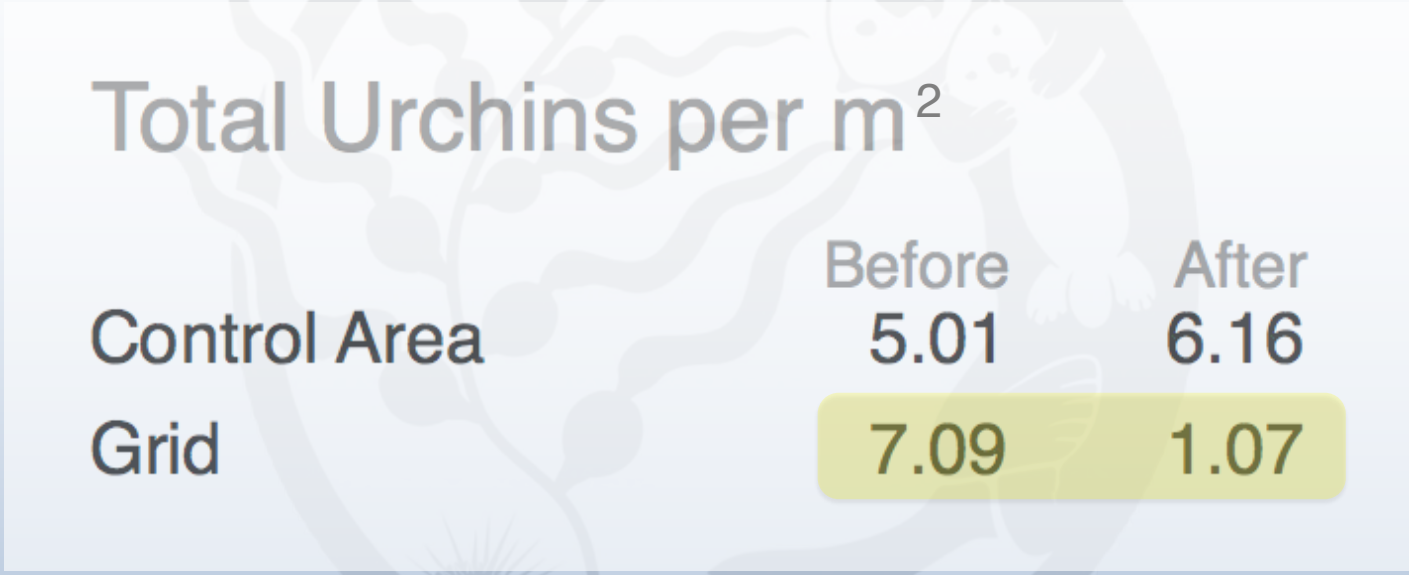


Chart and data directly from Reef Check California. “Before” = March 26, “After” = October 9.

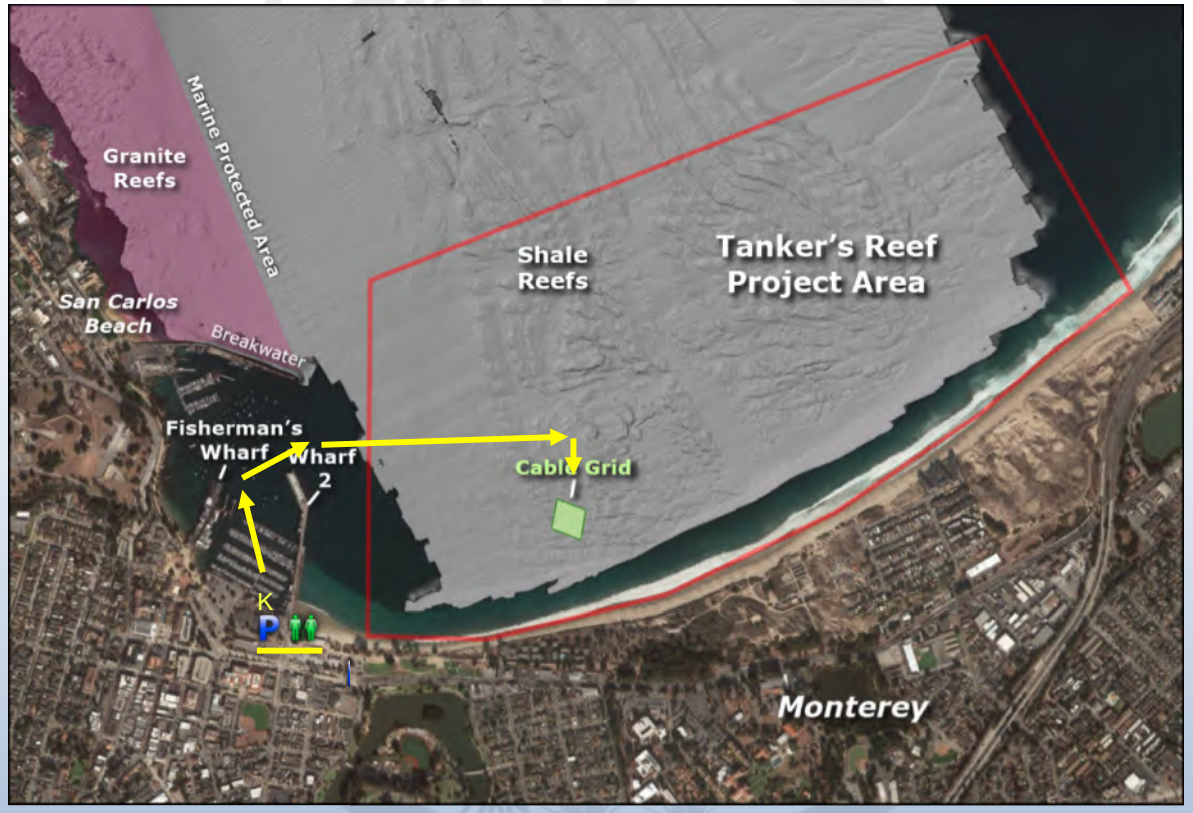
Results

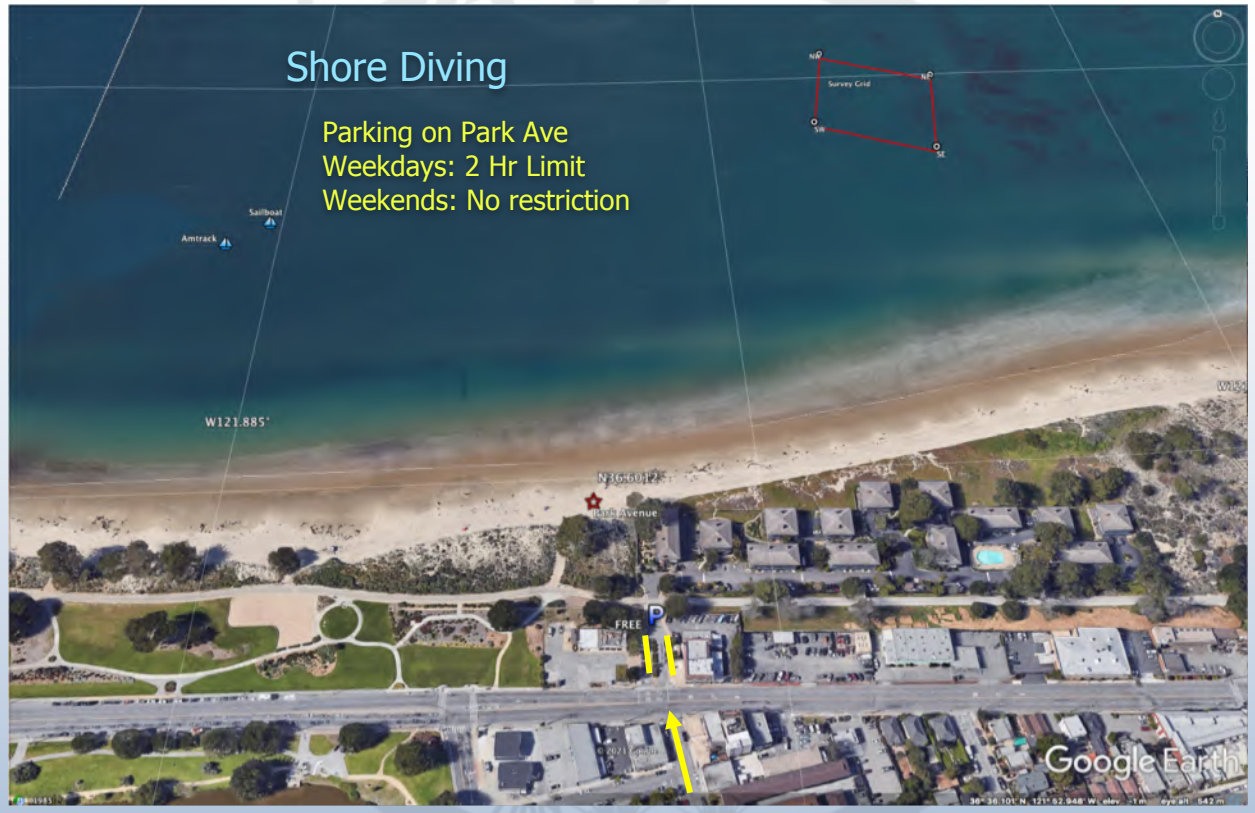


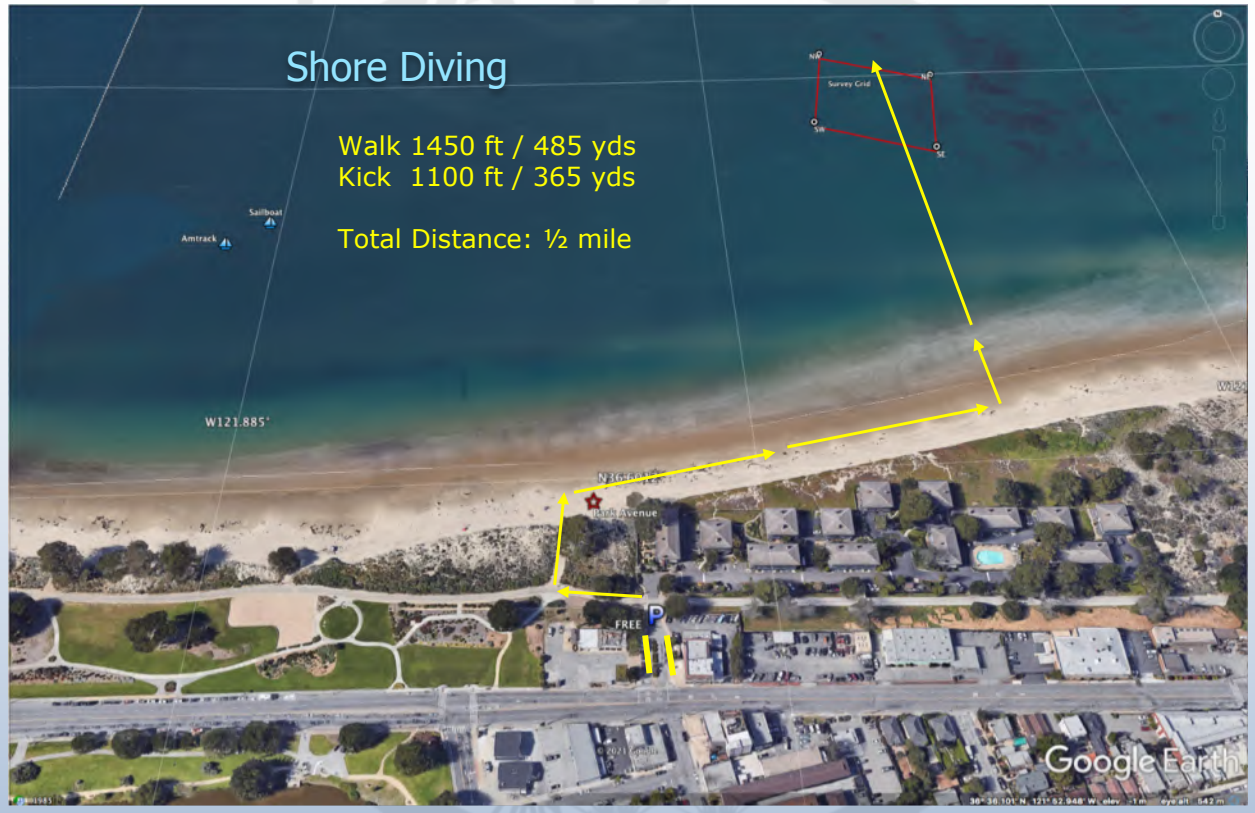
Data directly from Reef Check California. “Before” = April 19, “After” = October 9

Registered Volunteers:	**356**
Trained Divers:	**55**
Divers Reporting Data:	**67**
Dives Logged:	**407**
Injuries & Mishaps:	**0**


BEACH
HOPPER II


Granite Reefs
Marine Protected Area
Shale Reefs
Tanker's Reef Project Area
San Carlos Beach
Breakwater
Fisherman's Wharf
Wharf 2
Cable Grid
K
Monterey


Shore Diving
Parking on Park Ave
Weekdays: 2 Hr Limit
Weekends: No restriction
Survey Grid
NW
NE
SW
SE
Sailboat
Amtrack
W121.885°
Park Avenue
FREE
P
Google Earth


Shore Diving
Walk 1450 ft / 485 yds
Kick 1100 ft / 365 yds
Total Distance: ½ mile
Sailboat
Amtrack
W121.885°
Survey Grid
FREE
Google Earth

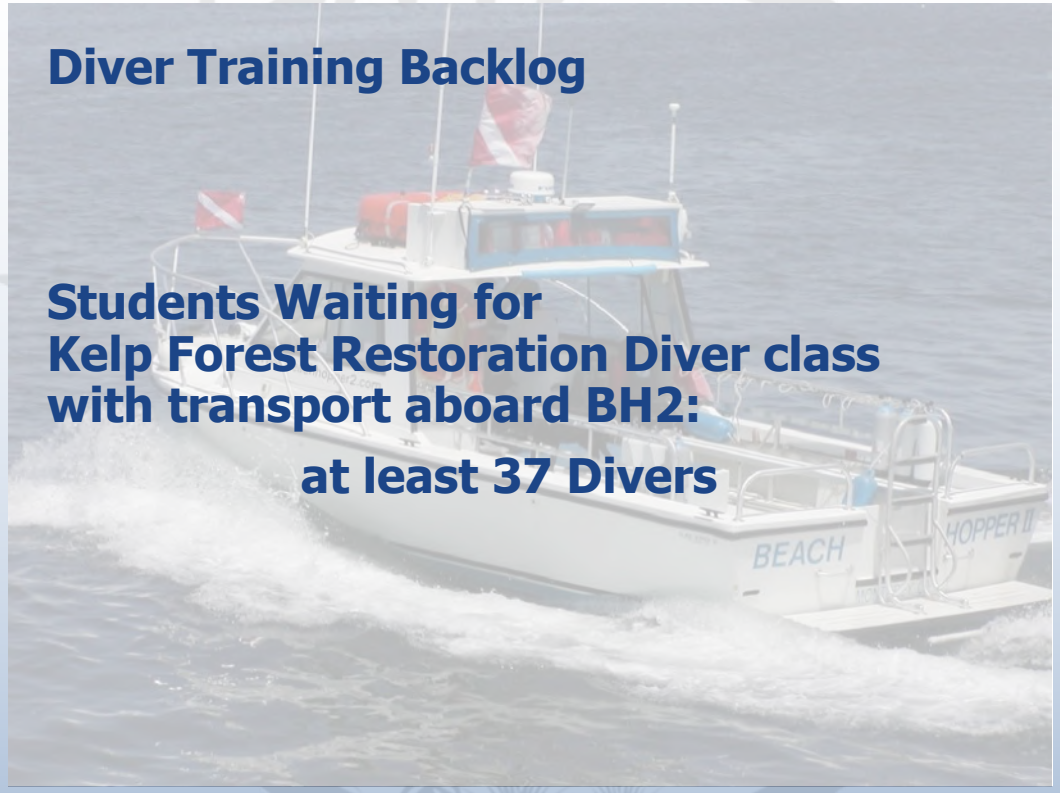

BEACH
HOPPER II

Beach Hopper II Dive Boat

Capacity:	**11 Divers**
Cost:	**All expenses except fuel and crew donated**
CPFV License:	**$790**
Application Made:	**June 5**
License Issued:	**Oct 23**

License numbers being applied to hull now, first trip to Tankers' Reef early November

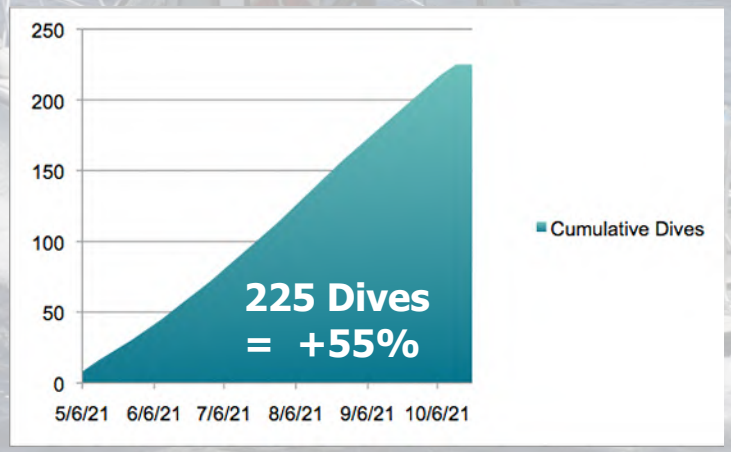
Diver Training Backlog



Students Waiting for
Kelp Forest Restoration Diver class
with transport aboard BH2:

at least 37 Divers

Estimated Dives That Didn't Happen



State of California Revenue Windfall

Sport Fishing Licenses for 67 to 356 divers	$3423 to $18,747
CPFV License for BH2	$790
Total	$4213 to $19,537
Compare to G2KR Budget to Date	$10,116

FGC@FGC

From: Keith Rootsaert <keith@g2kr.com>
Sent: Wednesday, October 27, 2021 9:12 AM
To: FGC
Cc: Ashcraft, Susan@FGC; Ray, James@Wildlife
Subject: G2KR - MRC Meeting Nov. 9, 2021
Attachments: G2KR MRC Meeting 21.1109 Agenda Item 7 B II. a.pdf

Dear FGC,

Attached are my written comments referencing Agenda Item 7 (B) II. a. - Kelp restoration and recovery efforts, including initial outcomes of urchin removal projects and status of sunflower star (Pycnopodia)

I ask to speak before the commission for 3 minutes so that I may present an abridged version of the attached document which I will submit before the Supplemental Comment Deadline of noon on Thursday, November 4, 2021.

Thank you,

Keith Rootsaert
G2KR.com

Giant Giant Kelp
Restoration Project

Good morning, my name is Keith Rootsaert and I'm with the Giant Giant Kelp Restoration Project in Monterey, California.

Tanker's Reef Project

This is the first year of the Tanker's Reef Kelp Restoration Project. The red line shows the perimeter of the project boundary and the grid where certified Kelp Restoration Divers have been working.
The mustard color shows where kelp forests have grown in the past, before urchin barrens began to take over.
The star is the easiest shore access point for the grid.

Tanker's Reef Project

When we began in April, there was very little kelp on the site - indicated by the little green patches.

Criteria for Success

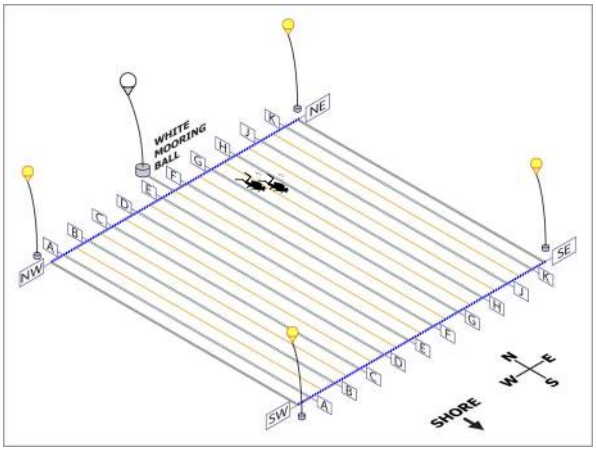
1. **Recreational divers are able to clear 1-2 acres of reef at the treatment site (i.e. reduce urchin densities to <2 total urchins/m^2 along fixed transects within the first year of the amendment, and keep that area cleared for the duration of the amendment, with no significant bycatch, damage to reef structure, or disturbance to marine mammals).**

2. **Recreational divers are able to self-organize, develop and implement biological monitoring protocols, and adequately collect and report biological data to state and federal agencies to assess effectiveness of their efforts.**

CDFW, OPC and Monterey Bay National Marine Sanctuary staff defined the objectives of the project and determined the specific Criteria for Success. They determined the project would be a success if: Recreational divers are able to clear 1-2 acres of reef at the treatment site. For example, reduce urchin densities to <2 total urchins per square meter along fixed transects within the first year of the amendment, and keep that area cleared for the duration of the amendment, with no significant bycatch, damage to reef structure, or disturbance to marine mammals.

Tanker's Reef Project Key Accomplishments: Criterion #1

1. **Reduced urchin densities on a 2.5 acre cable grid below 2/m^2 to 1.07/m^2.**
2. **Required density achieved in 5 months.**
3. **Divers trained to avoid and report accidental bycatch and damage to reef.**
4. **Divers trained to avoid disturbing marine mammals.**
5. **In addition to requirements, divers were trained to be safe, pick up trash, report invasive species, report damaged equipment, and document changes.**



To achieve these objectives we reduced urchin densities on a 2.5 acre cable grid below 2 per square meter from 7/m2 to 1.07/m2. We achieved this density in only 5 months. Divers were trained to avoid and report accidental bycatch and damage to the reef. They were also trained to avoid disturbing marine mammals. In addition to requirements, divers were trained to be safe, pick up trash, report invasive species, report damaged equipment, and document changes.

Criteria for Success

1. Recreational divers are able to clear 1-2 acres of reef at the treatment site (i.e. reduce urchin densities to <2 total urchins/m^2 along fixed transects within the first year of the amendment, and keep that area cleared for the duration of the amendment, with no significant bycatch, damage to reef structure, or disturbance to marine mammals).

2. **Recreational divers are able to self-organize, develop and implement biological monitoring protocols, and adequately collect and report biological data to state and federal agencies to assess effectiveness of their efforts.**

The second criteria is focused on recreational divers ability to self-organize, develop and implement biological monitoring protocols, and adequately collect and report biological data to state and federal agencies to assess effectiveness of their efforts.

Tanker's Reef Project Key Accomplishments: Criterion #2

1. **Established the Giant Giant Kelp Restoration Project; 356 registered divers, 65 Certified Kelp Restoration Divers.**

2. **Self-organized, 2 international dive certifications, local dive shops, instructors, students, dive clubs, fundraising, 6 Dive Meetups, webinars and newsletter to inform volunteers about project updates.**

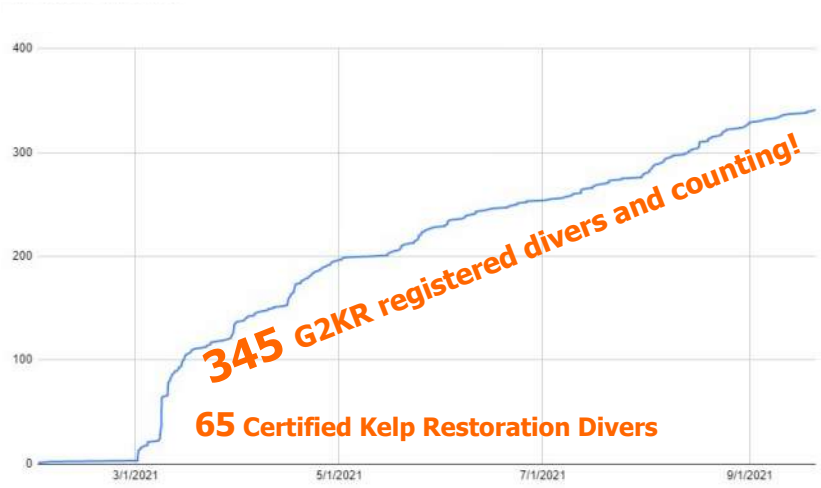
3. **Biological Monitoring Protocols coordinated with Reef Check, CDFW, and MBNMS, our joint agency partners.**

4. **Divers reported data for 406 dives in detailed online dive logs to inform marine resource managers.**

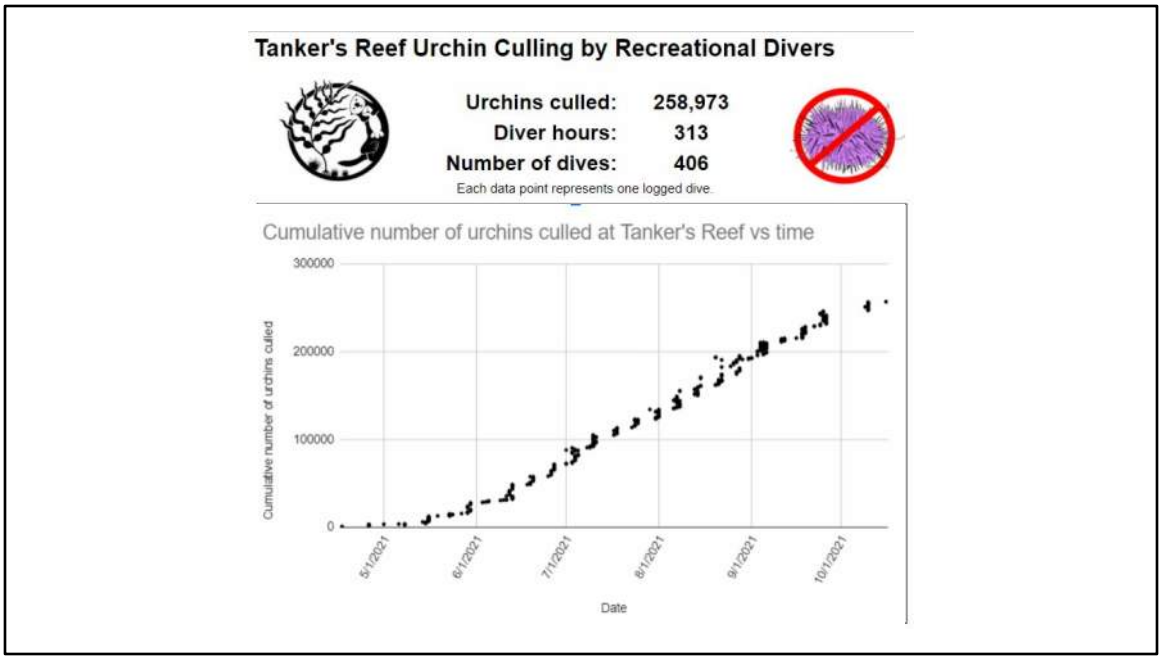
To achieve these objectives we established the Giant Giant Kelp Restoration Project, which has 345 registered divers and 65 Certified Kelp Restoration Divers. We organized and developed two internationally-recognized scuba certifications which are now being taught by trained dive instructors through local dive shops. We engaged dive clubs, conducted grassroots fundraising, held 6 Dive Meetups, hosted webinars and sent out newsletters to inform volunteers about project updates.

Biological Monitoring Protocols were coordinated with Reef Check, CDFW, and MBNMS, our joint agency partners.

Divers reported data for 387 dives in detailed online dive logs which informs marine resource managers about urchin culling workrates and efficiency.

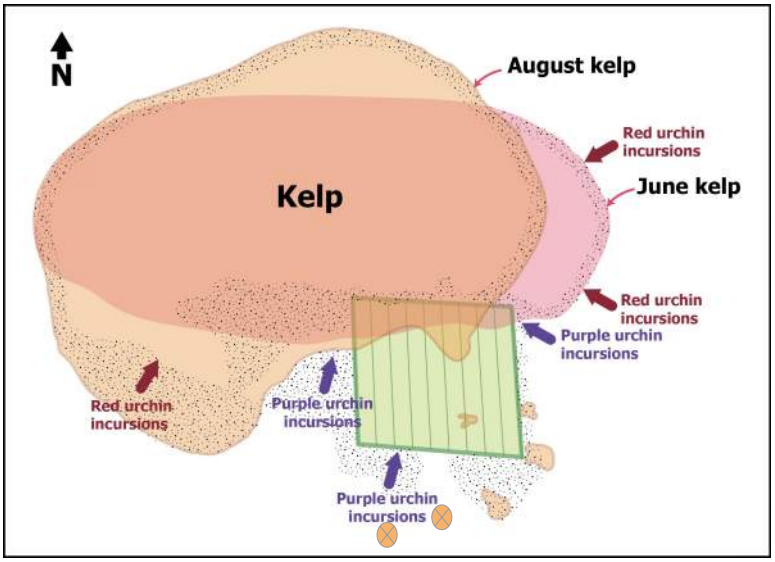


This success was possible because of the work of 65 Certified Kelp Restoration Divers.
81% of registered divers are waiting to be trained, many of whom were waiting for the Beachhopper II dive boat to receive the required license from CDFW.



This graph shows the project progress so far.
The Fish and Game Commission allowed work to begin on April 1, 2021. Reef Check surveys estimated there were 84,000 urchins on the grid. As of September 6, we have culled over 127,000 urchins on the grid. Additional urchins were culled outside of the grid and in kelp forest areas.

6 acre kelp forest



By June, a sparse 6-acre kelp forest had grown northwest of the survey grid. The stipple pattern is where we culled urchins outside of the grid in order to defend the newly established kelp. We lost some kelp to urchin predation on the east side of the kelp forest while we worked on the grid but we were able to increase the kelp to the north and the south. We protected kelp south of the grid by targeted culling. We are hoping that the low urchin density on the grid will allow kelp to infill between the new kelp beds.

Otters return to Tanker's Reef! Photo by Dan Schwartz

With the return of some areas of healthy kelp, southern sea otters, a threatened species, have been able to return to Tanker's Reef to forage and rest.

Obstacles

Commercial fishing license approval from CDFW took 4 months, restricting commercial dive charters to the site.

April 28th State Parks issued a cease and desist order and required concessionaires permit for divers to cross the beach.

Commercial fisherman harvested traps on the grid, cutting kelp.

Recreational fishing increased significantly.

Monterey Fire Department sped through the site, endangering divers.

Naval Postgraduate School sped through the site and installed yellow buoys just like ours.

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We encountered many obstacles in doing the project. Captain Mary Jo Nelson donated her time and the use of her dive boat, but we waited four months for approval of the CDFW commercial fishing license required. Since the dive boat is putting recreational divers in the water who cull urchins, this is considered as a fishing activity. Right at the beginning of the season, State Parks issued a cease and desist order and required a concessionaires permit for divers to cross the beach! We had commercial fishermen dropping traps on the grid to catch snails that the otters are eating. By culling so many urchins we attracted fish which attracted recreational fishermen. The Monterey Fire Department drove through our site, spraying their water cannon up in the air. Just to add to the confusion, the Naval Postgraduate School installed yellow buoys on the site just like ours.

Natural challenges: Unreliable kelp forest. Sand littoral plain. Large storms. Marine Heat (hobo data)

Opportunities

- Commercial divers
- Urchin ranching
- Urchin accumulator and trapping
- Sunflower Star reintroduction
- Desmarestia (acid weed)
- Scalable diver effort
- Science
- Education
- HR 4458 funding through NOAA
- Grants
- Carbon Credits

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We also found many opportunities: Commercial divers should be allowed to size select large urchins and deliver them for local urchin ranching. We are developing additional tools like an urchin accumulator and urchin trapping. We are supporting startup efforts to reintroduce Sunflower Stars as urchin predators. We are considering Desmarestia harvesting for suppressing urchins. This is a scalable diver effort that encompasses science, education and climate change mitigation, all while being inclusive in the diving community and fostering ocean stewardship. We are not waiting on state funding, we will do this through private donations and HR 4458 funding through NOAA, grants and international carbon credits.

Natural Benefits: Kelp forest spore bank. Coastal armoring/prevention of beach erosion. Biodiversity.

Next Steps

Proposed kelp restoration sites

Ed Ricketts SMCA

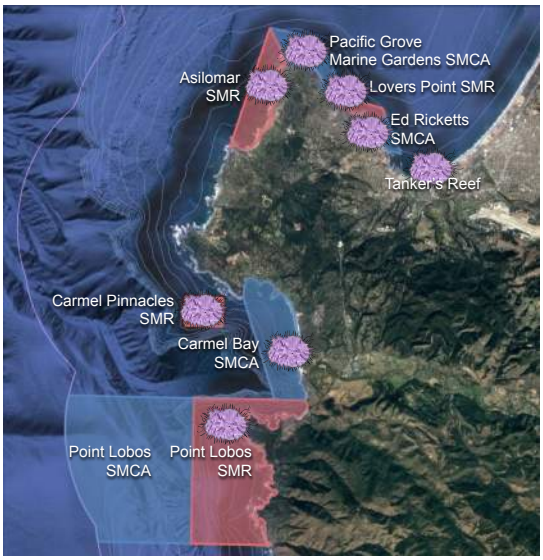
Pacific Grove Marine Gardens SMCA

Carmel Bay SMCA

Proposed control sites

Lovers Point SMR

Point Lobos SMR



Our team is ready for expansion into persistent urchin barrens in Marine Protected Areas in the spring of 2022. We propose to scale kelp restoration into three Monterey State Marine Conservation Areas. The State Marine Reserves have long term data sets and can be controls for monitoring purposes. We are requesting rulemaking changes to sanction our community effort.

Here are our collaborators and allies that we present at all of our presentations and we consider the Fish and Game Commission one of our partners in this venture. We need the commission's continued support for our mission to be successful and restore kelp on the Central Coast.

Thank you. I'm happy to answer any questions.

From: Jack Likins <[redacted]>
Sent: Friday, October 22, 2021 1:56 PM
To: Shuman, Craig@Wildlife <Craig.Shuman@wildlife.ca.gov>
Cc: FGC <FGC@fgc.ca.gov>; Wildlife DIRECTOR <DIRECTOR@wildlife.ca.gov>; Mastrup, Sonke@Wildlife <Sonke.Mastrup@wildlife.ca.gov>; Weseloh, Tom <tom.weseloh@sen.ca.gov>; Alexis Jackson <alexis.jackson@tnc.org>; dennis <dennis@20fathoms.com>; wmfbernard1 <[redacted]>; [redacted]; jdbeallo <[redacted]>; Riske, Steve@Wildlife <Steve.Riske@wildlife.ca.gov>; Kashiwada, Jerry@Wildlife <Jerry.Kashiwada@wildlife.ca.gov>; [redacted]; [redacted]; Taniguchi, Ian@Wildlife <Ian.Taniguchi@wildlife.ca.gov>; phaaker <[redacted]>; BenabvidesSteve <[redacted]>; DanielsRocky <[redacted]>; Rogers-Bennett, Laura@Wildlife <Laura.Rogers-Bennett@wildlife.ca.gov>; Catton, Cynthia@Wildlife <Cynthia.Catton@wildlife.ca.gov>; Mastrup, Sonke@Wildlife <Sonke.Mastrup@wildlife.ca.gov>; kelplady <[redacted]>; Hendricks, Joel@Wildlife <Joel.Hendricks@wildlife.ca.gov>; douglaughlin3 <[redacted]>; edwardschulze <[redacted]>; urquhartk <[redacted]>; Puccinelli, Robert@Wildlife <Robert.Puccinelli@wildlife.ca.gov>; TheGWTC@yahoo.com; Brooke Halsey <brooke@brookehalseylaw.com>
Subject: Abalone Management - Oct. 16, 2021 F&GC Meeting

Hi Craig,
As you well know, your department has been working on a revised recreational abalone fishery management plan to replace the outdated Abalone Recovery and Management Plan (ARMP) for over 7 years. I was a member of the 2019 Administrative Team which was directed by the Commission to integrate the two proposed North Coast recreational abalone management plans: one proposed by your Department of Fish and Wildlife (CDFW), and the other by The Nature Conservancy (TNC). In addition to representatives from the CDFW and TNC, other members of the Admin Team included representatives from the Ocean Protection Council (OPC), the Ocean Science Trust (OST) and the Tribes. The Admin Team worked diligently to integrate the two proposed plans and to make them adaptive to newer science, new data and the current rapidly changing environmental conditions. As you also know, a Scientific Peer Review funded by the OPC recommended integration of the two plans and the Commission directed it to be done. In addition, the Commission directed that the integrated plan include a de-minimis fishery (a fishery that could be implemented on a limited basis before what was deemed "full recovery"). Furthermore, the Admin Team recommended the integrated plan consider a biological fishery which was to be used during closure *"…as a means of allowing for near-term recreational harvest opportunities, that also helps support the state's data collection needs* ". My recollection is that Sonke, your Invertebrate Manager, was the member of the Admin Team who first proposed the idea of a biological fishery. He was also instrumental in developing a "strawman proposal" for how the biological fishery would work. For your edification, both of these pre-full-recovery fisheries were included in the integrated plan and recommended by the Admin Team.

As you know, the Department spent 5 years (beginning in 2014) working on a revised FMP to replace the outdated ARMP. In 2019, the Admin Team took one year to complete the integrated recommendation, which was presented to the Commission in early 2020. Because of chronic delays by the Department to complete the revised FMP, to this day the outdated ARMP continues to be used to manage the abalone fishery state-wide. Under the ARMP the Commission had little choice and closed the North Coast recreational abalone fishery in 2018.

In my limited 2 minutes at the last Commission meeting (Oct 16, 2021), I tried to explain that there is a path forward for a limited abalone fishery, if only the Department would complete its responsibility and turn the recommended integrated plan into a formal FMP. You countered my comments, calling them "untrue" and that there was no path forward. With all due respect, your statement is correct only if your department does not fulfill its responsibility to draft an integrated FMP and continues to rely on the outdated ARMP.

When the Commission (on recommendation of the Department) changed the sunset date for the expiration of the current emergency closure from 2021 to 2026, it seems the department dropped the ball drafting the integrated FMP. The extension of the sunset date was not meant to be an excuse to delay work on the FMP. It was to allow more time for the environment to improve and to collect more data so that the Commission could make a more informed decision about re-opening of the fishery.

The Commission can reopen the fishery before 2026, if environmental conditions improve and/or your Department allows for a de-minimis or biological fishery in the integrated FMP as recommended by the Admin Team. Even though the environment seems to be improving over the last couple of years, we are almost 7 years into a revised abalone FMP with little or no published progress since the presentation of the integrated plan by the Admin Team. According to the current CDFW website (Red Abalone Fishery Management Plan (ca.gov), a final draft of the abalone management plan and CEQD was to be presented to the Commission in the fall of 2020 with adoption by the Commission in 2021. Obviously, these dates have been missed, again.

It's been 27 frustrating years since the southern fishery was closed, 16 years since the adoption of the ARMP, 7 years since beginning a revised FMP, 4 years since the closure of the northern fishery and 2 years since the integration recommendation was presented to the Department and the Commission.

By this letter I ask both you and the Commission to please make a firm commitment to the public as to when you will complete and implement the revised abalone FMP.

What's even more frustrating is that fishermen have lost their main communication channel with the Department. With the closure of the abalone fishery south of San Francisco in 1997, SB463, among other things, created the Recreational Abalone Advisory Committee (RAAC), which by law is supposed to hold public meetings at least once per year. Historically, the RAAC

has met more often when there were matters of importance to fishermen and the public. There is nothing more important to abalone fishermen than their fishery. In 2017, at the height of the fishery's environmental problems, Sonke appointed himself chairman of the RAAC, even though he is not a member of the Committee. Before Sonke's chairmanship, meetings had been well-attended and gave fishermen a good channel of communication directly with the scientists and decision-makers in the Department. For those on the distribution of this letter who may not be familiar with the RAAC, members are nominated by areas within the State and appointed by the Director of the Department of Fish and Wildlife (Chuck Bonham). Since Sonke appointed himself chairman, the group has met only 3 times. There were no meetings in 2019 or 2021, and one sparsely attended webinar in 2020, with no record of discussions held or attendees. This lapse of responsibility has effectively eliminated one of fishermen's and the public's main channels of communication with the Department.

Also, by this letter, I request that the RAAC resume holding regular public meetings, publish notes from their meetings and that the officers of the Committee be selected from the appointed members. Not holding meetings is a failure of responsibility by the Chairman, and moreover seems to be a violation of the law.

Sincerely,

Jack Likins
Abalone Fisherman, Administrative Team Member – Abalone Integration Project.

CC (by email):
Chuck Bonham, Director, CDFW
Sonke Mastrup, Invertebrate Manager, CDFW
Alexis Jackson, Chairwoman, Abalone Integration Admin Team (TNC).
Tom Weseloh, Chief Consultant for the Joint Committee on Fisheries and Aquaculture, Senator McGuire's Office.
F&G Commissioners: President Silva, Vice President Murray, Members: Sklar, Hostler-Carmesin, and Zavaleta.
RAAC members: Ian Taniguchi (CDFW), Peter Haaker (ex-CDFW), Joel Hendricks (warden), Josh Russo (northern area), Brooke Halsey (northern area), Doug Laughlin (central area), Dennis Haussler (central area) Nancy Caruso (southern area), Chris Voss (southern area)

The Nature Conservancy
Protecting nature. Preserving life.™

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October 27, 2021

Peter Silva, President
Samantha Murray, Vice President
California Fish and Game Commission
715 P Street, 16th Floor
Sacramento, CA 95814

RE: Agenda Item 7(B)(b) – Red abalone fishery management plan development

Dear President Silva and Vice President Murray,

Across the state, The Nature Conservancy (TNC) is exploring science-based, collaborative solutions to promote healthy ocean ecosystems and thriving marine fisheries. This is even more critical under changing ocean conditions. The North Coast recreational red abalone fishery is one of many fisheries vulnerable to climate change that requires more effective and immediate management action.

Since the California Department of Fish and Wildlife (CDFW) initiated the development of a fishery management plan (FMP) for the recreational red abalone fishery in late 2014, TNC has been a highly engaged stakeholder. We have worked closely with recreational divers, world-class fishery scientists, and state fishery managers and policy makers to explore more cost-effective, data driven management solutions that balance the needs of the state, harvesters, conservation interests, and Tribes and Tribal communities. This was most recently demonstrated as TNC took on a leadership role in the management strategy integration process from January 2019 through March 2020. This process piloted a new model for public-private partnership to leverage additional funding and capacity to advance state fisheries management objectives. At the conclusion of the process in March 2020, the Administrative Team delivered an extensive final report[1] that included a set of management recommendations to inform the development of the red abalone FMP by CDFW. In addition to encouraging the adoption of one of the management strategies evaluated, some recommendations of note were related to streamlining data collection efforts, exploration of a citizen science driven data collection program for Humboldt and Del Norte Counties, instituting a biological fishery as a means of allowing near-term harvest opportunities and supporting data collection, as well as a creating a tribal allocation for subsistence fishing.

Since the final Administrative Team report and recommendations were submitted in March 2020, TNC has advanced two efforts that will help to inform the development of the red abalone FMP. As such, we would like to share the following two updates with the Marine Resources Committee:

[1] Jackson, A., Berube, P., Taniguchi, I., Likins, J., Silva, J., Pope, E., and S. Mastrup. 2020. *Summary of the Management Strategy Integration Process for the North Coast Recreational Red Abalone Fishery*. Administrative Team Report to the California Fish and Game Commission. 115 pp.

(1) Lessons Learned from the Management Strategy Integration Process

TNC collaborated with members of the Administrative Team to document lessons learned from the multi-year management strategy integration process (*see attached*). TNC conducted interviews with participants in the integration process to gather insights from their experiences as managers, scientists, policymakers, stakeholders, and members of Tribes and Tribal communities. The attached document highlights key enabling conditions and actions that supported an effective and productive process. Recommendations were also included to improve the process if and when the state considers another stakeholder-led model.

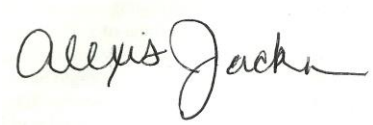
(2) Feasibility Study for Data Collection in Humboldt and Del Norte Counties

To address Recommendation #2 from the Administrative Team final report, TNC funded Reef Check to conduct a study in Humboldt and Del Norte Counties (identified as Zone 3 during the integration process). The study was aimed at assessing the feasibility to gather abalone length data that could inform use of the spawning potential ratio (SPR) indicator to manage a fishery in Zone 3. Over the course of the two-year study, Reef Check conducted size frequency surveys across nine sites near Pyramid Point, Crescent City, Trinidad, and Shelter Cove. A total of 900 abalone were measured. While abalone were notably absent in many of the more popular dive sites, they were found in high abundances in a few survey sites.

Findings from the Reef Check surveys suggest it is possible to generate the data required to inform an SPR-based harvest control rule (HCR). During the integration process, an analysis was conducted to examine whether limited collection of length frequency data could theoretically support an SPR-based HCR in Zone 3. Simulation results suggested that an HCR could be designed relying upon 60 to 300 observations every three years. From these initial surveys, Shelter Cove and Trinidad Bay seem most promising as potential index sites. Reef Check has presented findings from this study and shared raw data with CDFW to guide FMP development.

In closing, TNC continues to encourage and support the transition to more climate-ready fisheries management in California. Completion of the red abalone FMP is an important step towards demonstrating these principles and delivering more transparent, science-based, and responsive decision-making in this fishery. Thank you for the opportunity to provide public comment.

Sincerely,



Alexis M. Jackson, PhD
Associate Director – Ocean Policy and Plastics Lead
California Oceans Program
The Nature Conservancy

Lessons Learned from a Unique Fisheries Management Planning Process

DEVELOPING AN FMP FOR THE NORTH COAST RECREATIONAL RED ABALONE FISHERY

Fishery management plans (FMPs) as outlined in the Marine Life Management Act (MLMA) are intended to conserve the health and diversity of marine ecosystems and resources while allowing for sustainable harvest opportunities. MLMA guidelines require collaboration and the best available science when developing FMPs, and also create room for stakeholders to put forth proposals. These guidelines are general to allow the state more flexibility based on each fishery's needs, but they do not provide specific guidance for stakeholder-led processes.

FMP development is a complex, time-intensive process. While every FMP process is unique to the species and the participants involved, development of an FMP for the recreational red abalone (*Haliotis rufescens*) fishery on the North Coast faced two special circumstances:

1. **It was the first-ever FMP process where the CA Fish and Game Commission (the Commission) mandated integration of a management strategy proposal from a non-state entity (i.e., a stakeholder-led proposal) with that of the CA Department of Fish and Wildlife (CDFW).**
2. **At the time of FMP development, the red abalone fishery was in the midst of an unprecedented environmental crisis.**

BRIEF HISTORY

Until recently, red abalone supported a $40 million recreational fishery on California's North Coast between San Francisco and the Oregon border. It was the only remaining abalone fishery open in California, and important to the heritage of local communities and Tribes—for generations, people had harvested abalone for food and for their iridescent, mother-of-pearl shells. But data about the health of red abalone populations were limited, and recent changing ocean conditions posed a threat to the species' future.

In 2014, CDFW—with support of the Commission—began engaging with stakeholders on the creation of an FMP for the recreational red abalone fishery. As one of those stakeholders, The Nature Conservancy (TNC) was interested in supporting the development of a more inclusive and transparent management process that would utilize current science and technology for data-limited fisheries, ultimately resulting in a cost-effective, adaptive management strategy.

In 2017, the onset of dramatic, climate-induced change in the kelp forest ecosystem and abalone population health led the Commission to temporarily close the recreational red abalone fishery to all harvest. This closure has since been extended at least through 2026, with the ability to re-evaluate upon completion of the FMP.

In 2018, CDFW and a stakeholder-led group organized by TNC each submitted management strategies for potential inclusion in the FMP. The Commission supported having both management strategies go through scientific review. Following the review, both the peer review team and the Commission recommended the two strategies be integrated, to inform the final FMP.

In 2019, the process of integrating these two management strategies began. This unique effort brought together a diverse group of stakeholders seeking to fill data gaps in the fishery and collaboratively develop a management strategy that would protect the ecological, economic and cultural values of the red abalone fishery.

The integration process was completed in April 2020 with the submission of a report guiding development of the final FMP. The integrated FMP was scheduled to be adopted in the spring of 2021, although that timeline has since changed.

About This Report

Following completion of the management strategy integration process, TNC conducted interviews with participants to gather insights and lessons learned. A total of eight interviewees shared their feedback in hour-long phone calls. From these interviews, a picture emerged of the successes and areas for improvement of this integration process, as well as recommendations to consider for future processes.

This report summarizes these findings and is organized into the following sections:

The findings shared in this document represent meaningful insights and observations from a unique FMP development process. This document is intended to guide similar stakeholder-led FMP processes in the future and potentially inform revisions to the Fish and Game Code to clarify key aspects of such stakeholder-initiated management processes. Also available is a shorter version of this report that highlights the recommendations for future processes—see "Insights on Developing a Stakeholder-Led Fisheries Management Plan (FMP)." Together, these documents can serve as complements to the July 2020 Kearns & West report developed for CDFW to assess lessons learned across all California FMP processes.

PARTICIPANTS

Representatives from the following groups participated in the integration process:

- **CA Department of Fish and Wildlife (CDFW)** [Administrative Team, Modeling Team, Project Team]
- **CA Fish and Game Commission (Commission)** [Administrative Team, Project Team]
- **CA Ocean Protection Council (OPC)** [Administrative Team, Project Team]
- **Tribes and Tribal communities** [Administrative Team, Project Team]
- **The Nature Conservancy (TNC)** [Administrative Team (Chair), Modeling Team, Project Team]
- **Recreational fishing and diving community** [Administrative Team, Project Team]
- **Other local, state and federal government representatives and a diverse group of academic, industry and nonprofit stakeholders** [Project Team]

I. Framework For Success

As stated in the introduction, MLMA guidelines for state-led FMP development efforts are general, allowing for flexibility according to fishery needs, but do not provide specific procedures for a stakeholder-led process. Because the red abalone FMP integration process was a unique effort that involved stakeholder leadership and integration of two management strategies, interviews with participants focused largely on gathering lessons learned about the administrative structures and procedures that served as the framework for this process.

Teams. Participation was structured across three distinct teams—the Administrative Team, Project Team and the Modeling Team (see Table 1). The roles and responsibilities of each were outlined in charters and can be explored further in Section II of the Administrative Team Final Report (see Appendix). As one interviewee said, the team structure was "an important part that we got right." Having the Modeling Team operate separately from the other teams was helpful for the science to be conducted away from administrative details and public influence. Many interviewees called out the effective project management and leadership skills of the Administrative Team chair as integral to the success of the process.

Table 1: Teams for integration process

	Administrative Team	Project Team	Modeling Team
Team Role	This core team oversaw the process and made consensus-based decisions to ensure the process proceeded in a collaborative, efficient and timely manner.	An advisory group for user groups, stakeholders and the general public to engage with the process, provide input and stay informed on all aspects, from scientific recommendations to policy procedures.	This core team, with input from the Administrative Team and Project Team, led all data integration and scientific modeling associated with the management strategy evaluation.
Team Composition	Team members included one representative each from CDFW, OPC, the Commission, TNC (chair person), the recreational red abalone fishing community, a Tribal representative. This team included a designated alternate for each group.	This team was open to all members of the public, including members of the fishing community, Tribes and Tribal communities, NGOs, scientists, resource managers, the Recreational Abalone Advisory Committee, as well as staff of state agencies (i.e., CDFW, OPC, the Commission). Members of the Administrative Team and Modeling were also present	This team consisted of staff scientists from TNC and CDFW, as well as a quantitative fisheries modeler (under contract).

Charters. At the outset of the process, the Administrative Team established charters (see Appendix) to outline team goals and guidelines for participant engagement. This process served to set expectations around objectives and behavior, ensuring that everyone was on the same page. Interviewees considered the charters "essential tools" that helped "in laying out roles and responsibilities for the group," but also noted that fulfilling and enforcing the charters was sometimes a challenge (see Areas for Improvement).

Timeline. The integration process took approximately 18 months from January 2019-April 2020, based on a timeline set by the Administrative Team. The Administrative and Modeling Teams were engaged for the duration of this time period, while the Project Team was engaged over a period of six months (May-December 2019). Project Team meetings involved members of the Administrative Team, plus voluntary participation of members of the general public, through six meetings that were held both in-person and remotely.

Facilitation. Given the diversity of state agency staff and stakeholders involved, an external facilitation group (Strategic Earth Consulting) was brought in to ensure neutrality and support a more productive and collaborative integration process. Some interviewees observed that facilitation can be tricky to get right, noting past FMP processes in which external facilitation had not worked well due to a mix of unclear expectations or personality conflicts. One interviewee commented on the potential for "mistrust of an independent group coming in without any history or credibility." While external facilitation does not always guarantee effectiveness, the majority of feedback from interviewees in this process was positive. Said one interviewee, "The way they [the facilitators] ran the meetings really produced results and got the most bang for the buck."

Communication And Documentation. Information—such as meeting summaries, upcoming agendas, presentations, reports and other relevant documents—was made available to stakeholders via timely updates to the website. To keep decision-makers informed, presentations and opportunities for discussion were integrated into existing policy processes, including at meetings of the Commission's Marine Resource Committee (MRC). The Administrative Team made use of existing mechanisms (such as regularly scheduled meetings) to provide high-level updates on the status of the integration process. One interviewee noted that having "regular updates back to the MRC helped keep the Commission engaged and kept this on their radar." The Contracted Fisheries Modeler Communicated Scientific Findings To The Project Team.

Funding And Staff Capacity. Partners contributed project management capacity, funding, stakeholder engagement support, and policy and scientific expertise. Costs associated with this process were shared among the partner organizations and included facilitation, scientific modeling and staff time to attend all meetings—OPC funded the external facilitators and TNC funded the fisheries modeler, in addition to state agencies and TNC contributing staff time to the process. Recreational fishermen and Tribal representatives generously volunteered their time to participate in the process, with some stipend funding available to cover travel expenses to meetings.

"This process provided a collaborative structure that formalized accountability and created shared expectations and responsiveness, which were all necessary compared to where we had been a year before. It was a very creative strategy for moving the process forward."

— SUSAN ASHCRAFT,
MARINE ADVISOR,
CA FISH AND GAME COMMISSION

"The final report and executive summary resulting from the integration process were incredibly comprehensive. Documenting the process and being able to share synthesized, inclusive perspectives from the integration process with the Fish and Game Commission to inform their decision-making was invaluable."

— PAIGE BERUBE,
FORMER PROGRAM MANAGER AT CA OCEAN PROTECTION COUNCIL (CURRENTLY OCEAN PROGRAMS ASSOCIATE, THE NATURE CONSERVANCY)

II. Areas For Improvement

While interviewees overwhelmingly agreed that the integration process was effective and an improvement over other FMP processes, some key areas of growth were identified:

Better Clarity On Staff Time And Commitment Up Front. A few participants noted that having an explicit understanding of staff capacity (in number of hours per week) up front would have been helpful to ensure that project planning and project timelines accounted for staff time constraints and established realistic expectations.

Road Map Of Expected Outputs. Spending time early in the process to develop an outline of the expected products the team was working toward would have helped provide clarity and direction, especially in a new process such as this one. The outline shouldn't be so specific as to constrain the creative process, but simply serve as a road map when the process inevitably gets murky.

Reconsider Alternates. Having designated alternates for each team member is intended to provide flexibility and ensure representation when a team member can't attend a scheduled meeting or event. However, in practice the use of alternates did not always work and sometimes created confusion and difficulty. Interviewees recommended that the alternate system either be dropped—one option is to instead have two primary representatives, rather than one primary and one alternate—or improved through better understanding and guidance of the role and expectations of an alternate.

Charter Enforcement. Charters need to be realistic and enforceable, particularly when it comes to the rules of engagement for participants. Interviewees noted, for instance, that while the charters did establish roles for primary and alternate team members, those roles were challenging to enforce. In addition, ground rules are helpful for situations when conflicts or tensions arise. One suggestion was to make sure the facilitators—as neutral parties—are empowered to enforce the charters, and all participants should be encouraged to hold other members accountable to the codes of conduct.

Team Nomenclature And Relationships. While everyone agreed the structure of having three teams—Administrative, Project and Modeling—was useful, some interviewees noted there was confusion about the distinct roles of each team and how they related to one another. It was suggested that better names for each team might have helped, as well as better guidance around the function of each team and their relationships to one another, particularly for participants new to the process or who wore multiple hats as members of more than one team.

More Streamlined Final Product. Some interviewees found the final product to be overwhelming and would have preferred a more streamlined document with fewer layers of recommendations. At the same time, interviewees commented that the final product was very comprehensive and an accurate reflection of the unique process of integrating two plans during a situation of environmental crisis. Many interviewees noted that the Executive Summary was a valuable component of the final product. The nature of the final report may be a function of lack of clarity as to the level of decision-making power the Administrative Team possessed.

Science Process. This management strategy integration process required a unique level of data collection and integration, producing more robust science (see Positive Outcomes). Establishing methods for data sharing (i.e., tools such as shared folders, guidelines for data formatting) and clear expectations around what data would be shared at the beginning could have made this process more smooth and less time-consuming.

Public Engagement. Numerous interviewees noted that public input and support of FMPs is critical, but also challenging to fulfill adequately considering the limitations of time, budget and staff resources. Participants from user groups noted they would have preferred more insight into scientific discussions of the modeling team, and suggested that meetings could be recorded or that high-level notes could be shared. In addition, despite the more collaborative nature of this process, some interviewees expressed concern that the state would not be accountable to the recommended timeline and goals set forth by the integration process. There is an inherent tension around public engagement that requires ongoing consideration.

Tribal Relations. All participants noted that Tribal relations were improved from this collaborative process over previous FMPs, but there is still much work to be done. Some specific suggestions are listed here, but each of these would benefit from deeper reflection:

- Better outreach and follow-up on those outreach efforts to help ensure broader Tribal participation;
- Recognition of Tribal participants as representatives of sovereign nations rather than as members of the general public;
- Opportunities for and recognition of how Tribal knowledge can inform and be integrated into the science process;
- Better understanding of the landscape of Tribal capacity, such as which Tribes and Tribal communities may have environmental scientists and which may not have the capacity to attend meetings but would like to receive report-outs or summary information; and
- Better ways to engage Tribal communities through the Commission's Tribal Advisory Committee, which currently has limited representation.

> *"There were growing pains and bumps along the way, opportunities to improve for future projects. But it was a great pilot project and the experience was positive."*
>
> **— ELIZABETH POPE,** FORMER ACTING MARINE ADVISOR, CA FISH AND GAME COMMISSION (CURRENTLY ENVIRONMENTAL SCIENTIST)

III. Positive Outcomes From This Unique Process

Past FMP processes have been almost entirely coordinated and facilitated by CDFW. The process discussed in this report represents a new consensus-based approach for partnership between resource managers, scientists, members of the fishing community, Tribes and NGOs to develop an adaptive management strategy for the recreational red abalone fishery.

This process was unique because it involved the integration of two proposed management strategies, rather than the development of one from scratch. It also combined public and private resources to leverage existing funds and staff capacity.

There were many positive outcomes of this unique approach, beyond the expected delivery of management measures for an FMP, that have the potential to benefit other collaborative efforts, now and into the future.

Increased Trust From Stakeholders. Government-led management processes are often plagued by mistrust—resource users are wary of the motivations of state agencies and can be fearful of additional regulatory oversight. In this integrated process, interviewees reported that having NGO leadership helped "overcome a long relationship of mistrust" between the state and non-state entities, as well as bring more scientific credibility to the management strategy of the FMP process.

Many of the administrative structures and procedures outlined in Section I contributed to building trust. For example, interviewees called out the value of communication tools, such as the website, to keep stakeholders informed and to document the process. "Having the website was helpful," said one interviewee, and another noted that, "all the documentation was online, what was discussed at meetings." Consistent communication and availability of documentation made the process more transparent, promoting greater trust from stakeholder groups.

Effective communication about the science is also important for building trust and support among stakeholders. While science education has often been "an uphill battle" in past FMP processes, interviewees of the red abalone integration processes agreed that the contracted fisheries modeler was very effective at gaining the trust of user groups and translating the scientific findings to the wider, non-science group.

Finally, striking the right balance for a timeline is important—too long of a process and there is risk of losing participants' interest and faith in the process, but too short and there isn't enough time to achieve the engagement and review necessary for a solid outcome. Interviewees felt the 18-month timeline of this process was "fair and reasonable" to meet the goals of the project. Staying accountable to the timeline and goals also contributed to increased trust in the process.

Improved Cost-sharing And Capacity. The public-private partnership of this process was touted as "hugely helpful" and a "value-add" for leveraging resources and staff capacity. Staff from CDFW and the Commission both indicated that this partnership allowed everyone "to accomplish a high level of work that wouldn't have been attainable" otherwise.

One interviewee noted that the structure of distinct teams "allowed us to divide and conquer so we could meet deadlines and maximize everyone's different areas of expertise." Having external facilitation helped free up the Administrative Team to be more engaged in the process and removed that burden from staff capacity.

One area of potential concern going into the process was how to integrate different organizational procedures without making additional work for people. However, interviewees noted that the process "dovetailed nicely" with existing state management procedures. Said one interviewee, the public-private partnership was "definitely positive in terms of leveraging resources" and helped the process to "get where it needed to go in the time we had."

"The length of the process was a good amount of time—it gave everyone a chance to participate and created something that's not finished but a very solid place to start. I think what happened was really great. We had the right people, the right groups involved. Overall it was an improvement on past practices."

— JOSH RUSSO,
RECREATIONAL DIVER

"This was a unique situation—we went in expecting to draft a management plan and instead found a collapsed fishery in need of recovery. This was hard for all of us, but especially for the user groups. Having a transparent, collaborative process [led by a third party] was integral in getting everyone on the same page in terms of understanding the situation and building trust to move forward."

— SONKE MASTRUP,
INVERTEBRATE PROGRAM MANAGER, CA DEPT. OF FISH AND WILDLIFE

"Overall the process was very good, very productive. In comparison to prior processes I've had experience with, not only abalone but other fisheries, this particular process was an improvement over past processes. I think this process could probably transfer to other similar projects, depending on what constituencies are involved and their relationships."

— IAN TANIGUCHI,
SENIOR ENVIRONMENTAL SCIENTIST, CA DEPT. OF FISH AND WILDLIFE

Progress On Tribal Relations. While there is still much work to be done to foster better collaboration with Tribal communities, there were many bright spots in this process. In particular, having a Tribal representative sit on the Administrative Team—the first time this was done in an FMP process—was a success, with many participants noting that the process was made better because of Tribal engagement. In addition, the final Administrative Team report includes a recommendation specifically related to subsistence fishing for Tribal communities. Together these steps helped improve Tribal relations and sparked more conversation among state and NGO partners about how to continue developing these relationships (see Areas for Improvement and Recommendations for the Future). Many participants expressed hope that this progress would set a precedent for future Tribal engagement.

More Robust Science. The integrated process produced solid, sound science—interviewees were pleased with the level of modeling and data integration that took place. As was frequently noted, there can always be more science, more data analysis and more modeling, but these are necessarily limited by time and budget.

A unique aspect of this process was the integration of state and non-state data sets for use in the integrated management strategy, and compiling an extensive list of a variety of state, academic and NGO data streams. This led to a better understanding of the red abalone resource as well as the entire ecosystem, and can help to reduce future data collection and monitoring costs to the state. While some recommendations were identified to improve the science/data process—such as engagement of an independent panel of scientists—the science process as a whole was viewed as very successful. One scientist noted that the dire environmental conditions of the fishery "might not have come to light without the extensive data and science involved in this process."

IV. Recommendations For The Future

Stakeholders have a long history with red abalone, and their deep connections to and passion for the resource were clear throughout the integration process. In addition, the environmental crisis presented a curveball for all involved—participants went in expecting to establish sustainable harvest guidelines and instead discovered the fishery was "in dire straits," as one interviewee said. All of this resulted in a process that, at times, was tense and charged.

However, as revealed in the interviews, this stakeholder-led process succeeded at bringing greater trust, representation and cooperation to a difficult situation. While each fishery is unique, the recommendations below could help inform future efforts to develop integrated FMP processes.

Emphasize Communication And Reporting Out. Many participants commented on the value of the communication tools used to document and report on the process, highlighting specifically the website where current information and resources were regularly made available. For stakeholders who represent broad groups—such as fishermen—having the ability to point their constituents to a website to find meeting notes, agendas, presentations, reports and more is extremely useful. In addition, reporting out to various levels of stakeholders was crucial, such as through emails and sharing of information at meetings of internal stakeholder groups. Identify early the tools or mechanisms through which each group or agency can best communicate to leadership and other stakeholders, as well as a timeline for those communications.

"Abalone is a very sensitive and important topic among Tribal people. This plan established a specific recommendation for Tribal subsistence fishing and that was a step in the right direction. Hopefully, this will be a model for the future, or at least open the door for more discussion about Tribal engagement in other areas. We need to continue the conversation. It was great to be part of this and I look forward to continuing and being part of whatever comes next."

— JAVIER SILVA,
TRIBAL REPRESENTATIVE
FROM THE SHERWOOD VALLEY
BAND OF POMO INDIANS

"Without a doubt the science was improved by this process. I think each of our respective groups was set in our ways to some extent, and being pushed to acknowledge alternative interpretations of the value of particular data sets was helpful in developing a more robust strategy."

— JONO WILSON,
LEAD FISHERIES SCIENTIST,
THE NATURE CONSERVANCY

Develop Policy And Scientific Education Resources For Stakeholders New To Management Processes. Multiple interviewees noted that for participants unfamiliar with the state FMP process, or regulatory proceedings in general, there was confusion and difficulty in navigating the process. This can slow progress down as well as introduce mistrust or disinterest in the process. Briefing documents or webinars that outline and explain the process, including timelines and resources, could help participants feel informed and more confident in engaging effectively in any management process. One interviewee proposed an amendment to the MLMA that would provide public stakeholders with an assigned state representative or clerk who could regularly answer questions as needed, similar to a helpline.

In addition, science education should be recognized as a crucial component for success and planned for at the outset of the process. In this case, having an independent contractor translate and communicate science findings was useful, but in other processes there could be different tools or methods.

Build In Adaptability. As climate impacts continue, there is an increased risk of dramatic environmental events causing rapid declines in or unexpected impacts to fishery resources. Considering these changing environmental conditions, it is necessary to have multiple sources of information available, as well as to build in flexibility to decision-making and adaptive precautionary measures as part of a climate-ready management strategy. This process highlighted the value of leveraging resources—through public-private partnerships, stakeholder engagement and citizen science opportunities—to increase adaptability in the face of climate crises.

Engage An Independent Panel Of Scientists. Although the recommendations put forth in the integrated management strategy are based on a rigorous scientific process undertaken by staff scientists (from TNC, CDFW and one contracted quantitative fisheries modeler), there is still potential for the scientists to not be viewed as neutral or impartial. Having a panel of independent scientists—either contractors or a formalized committee of non-government academics—available throughout the FMP development process could reduce any perception of institutional bias and increase validation of the science behind the FMP. Such a panel could also contribute more diverse perspectives and ensure integrity of the final products.

Consider Establishing A Team Of Tribal Representatives. While having a Tribal member sit on the Administrative Team was highlighted as an improvement over past processes, creating a Tribal team, and establishing their clear charge, would acknowledge the unique role of Tribal entities and provide an opportunity for Tribal representatives to engage in a safe space to discuss different perspectives and needs, including how to contribute Indigenous knowledge to the science process. Such a team would provide high-level recommendations that the Administrative Team could incorporate into the process and decision-making.

Invest In Citizen Science. An emerging strategy for streamlining data collection is the use of tools and technologies that allow fishermen and other public user groups to collect and log data while they are out on the water. This can help save time and money in the quest to better understand rapidly changing ocean conditions and their impacts on resources. It can also help build relationships with fishing communities, fostering trust and support of management strategies.

But adoption of citizen science approaches takes planning and preparation. As one interviewee noted, citizen science efforts have a “huge value-add, but it takes work” to cultivate relationships, train citizen scientists and manage the data collection process. State and federal agencies should consider what types of expertise and tools to prioritize so non-state entities can invest or align existing programs to ensure successful citizen science approaches in the future. One interviewee noted that the use of citizen science-based technology in the red abalone FMP process might help pave the way for more ready incorporation in future processes.

V. Appendix

Interviewees

Susan Ashcraft	Marine Advisor, CA Fish and Game Commission
Paige Berube	Former Program Manager at CA Ocean Protection Council (currently Ocean Programs Associate, The Nature Conservancy)
Sonke Mastrup	Invertebrate Program Manager, CA Department of Fish and Wildlife
Elizabeth Pope	Former Acting Marine Advisor, CA Fish and Game Commission (currently Environmental Scientist, CA Department of Fish and Wildlife)
Josh Russo	Recreational diver
Javier Silva	Tribal representative from the Sherwood Valley Band of Pomo Indians
Ian Taniguchi	Senior Environmental Scientist, CA Department of Fish and Wildlife
Jono Wilson	Lead Fisheries Scientist, The Nature Conservancy

Interview Questions

Interviews took place over phone or video calls and lasted approximately one hour. Interviews were conducted by Alexis Jackson, Administrative Team Chair and Fisheries Project Director at The Nature Conservancy, and a strategic communications contractor. A list of general questions was asked of all participants, and then more specialized questions were asked depending on each individual's role in the process.

General Questions:

- What made this process unique? What challenges had to be overcome?
- Was the overall experience for you a positive one? What could be improved next time?
- Did the process feel clear and transparent? What components helped to achieve this?
- Was the length of the process too long, too short, or just right?
- Did the core structure of the process, facilitation, and working groups (i.e. Admin Team, Project Team, modeler) meet your individual or organizational needs?
- Did the process deliver the management products you expected and/or needed?
- Has this process led to any unexpected outcomes, either positive or negative?
- What advice or guidance would you offer to other groups embarking on a similar process?
- Do you feel you had adequate time to synthesize or reflect on lessons learned from the process?
- Is there anything we haven't asked about that stands out as transformative or critical to the success of the process?

RESOURCES

Project Team Charter:

https://opc.ca.gov/webmaster/_media_library/2019/05/Red-Abalone_-FINAL-Draft-Project-Team-Charter-Updated-June-2019.pdf

Administrative Team Charter:

https://opc.ca.gov/webmaster/_media_library/2019/05/FINAL-Admin-Team-Charter-2.pdf

OPC Website:

https://www.opc.ca.gov/2019/05/red-abalone-management-strategies-integration/

CDFW Website:

https://wildlife.ca.gov/Conservation/Marine/Red-Abalone-FMP

Report: "Summary of the Management Strategy Integration Process for the North Coast Recreational Red Abalone Fishery Management Plan" (April 17, 2020) prepared by the Administrative Team.

Report: "Assessment Summary Report: Lessons Learned from Past Fishery Management Plans in California" Prepared by Kearns & West (July 2020) for the California Department of Fish & Wildlife

Interview Questions (Continued)

For Scientists:

- How was collaboration within the modeling group? What could be improved or codified in the scientific aspects of the process?
- Was there sufficient time between public meetings (i.e. project team meetings) to update data and advance modeling work?
- Did any aspects of data review, data integration, or modeling reveal anything that you would want to highlight for a future stakeholder process?
- Did you feel you had enough or too much public input to deliver adequate modeling results?
- TNC only: Did the final outcome provide an opportunity to use Poseidon or other technology tools to improve the data collection process?
- Was there sufficient time and access to information to complete the necessary modeling work?

For Policymakers & State Managers:

- Was the process effective at leveraging private and/or public resources for management?
- Did this process yield any management solutions that could save money or time? Which aspects?
- Did the process integrate well with your organization's typical management process and/or approach? If not, what changes could be made to do so?
- Is this process something that can be replicated in other fisheries? Which core components would you keep?

For Divers/Fishermen:

- Why did you get involved in this process? Have you been involved in other similar efforts before?
- Was outreach effective at reaching the recreational and/or commercial community? If not, how could it be improved?
- What was the general reaction to the process?
- What would you say is the unique contribution that divers/ fishermen brought to this process?
- What was the reaction to an NGO helping to lead the management process?
- Did you feel divers had enough time or understanding of the MSE to digest the results?
- Did you feel you had enough opportunity for input on the science and management options?

For Tribal Representatives:

- What is your connection with the red abalone fishery?
- Did the process incorporate enough flexibility to meet the needs of Tribes and Tribal communities?
- Was the process respectful and sensitive to Tribes' unique relationship to the resource?
- Was there enough outreach, or the right types of outreach, to reach enough voices?
- Do you feel that the process provided an opportunity for the interests of Tribes and Tribal communities to be engaged and heard? Do you feel that Tribes and Tribal communities had agency in the process?
- Was this process different than past ones you've been involved in? How so? Better/worse?

COMMITTEE STAFF SUMMARY FOR NOVEMBER 9, 2021 MRC

8. FUTURE AGENDA ITEMS

Today's Item **Information ☐** **Action ☒**

Review work plan topics, priorities, and timeline, and discuss potential new agenda topics for FGC consideration.

Summary of Previous/Future Actions

- FGC approved MRC agenda and work plan — Oct 14, 2021; Webinar/Teleconference
- **Today's discussion** — Nov 9, 2021; MRC, Webinar/Teleconference
- Next MRC Meeting — Mar 24, 2022; MRC, Sacramento

Background

Committee topics are referred by FGC and scheduled as appropriate. FGC-referred topics and their schedule are shown in the MRC work plan (Exhibit 1); currently several complex and time-intensive topics are under development. MRC has placed emphasis on issues of imminent regulatory or management importance; thus, scheduling current topics and considering new topics for MRC review requires planning relative to existing workload and timing considerations.

At the Oct 2021 FGC meeting, staff presented a committee workload prioritization tool for FGC discussion and feedback. Following discussion, FGC directed staff to update the prioritization framework and apply the tool to future MRC projects. Staff expect to begin using the committee workload prioritization tool in 2022, which may result in changes to the proposed Mar 2022 agenda topics. Staff will bring an update and recommendation for Mar 2022 agenda topics to the Feb 2022 FGC meeting.

MRC Work Plan and Timeline

At this time, five discussion topics and three updates are anticipated to be proposed for the Mar 2022 meeting. Topics are grouped by the type of anticipated action to help inform workload and prioritization, if needed.

Discussion and Potential Recommendations

1. Red abalone fishery management plan development
2. Kelp and algae commercial harvest regulations
    a. Edible algae (seaweed)
    b. *Postelsia* (sea palm)
3. Aquaculture program planning (state aquaculture action plan)
4. Coastal Fishing Communities Project

Updates from Staff and Other Agencies

1. California halibut fishery management review

2. Market squid fishery management review
3. Aquaculture public interest determination criteria for new lease applications

Note that readiness considerations may lead to changes in proposed timing and type of anticipated action for FGC consideration in Feb 2022. Staff welcomes guidance from MRC regarding scheduling any specific topics identified in the work plan.

Discuss and Recommend New MRC Topics

Today is an opportunity to identify any potential new agenda topics to recommend to FGC for referral to MRC. No new topics have been identified for potential referral to MRC at this time.

Significant Public Comments (N/A)

Recommendation

Discuss priorities, review list of topics to clarify those to schedule as updates versus discussion or recommendation items, and determine if any additional topics on the work plan should be scheduled or revised for the Mar 2022 MRC meeting.

Exhibits

1. MRC work plan, updated Oct 29, 2021
2. FGC perpetual timetable for regulatory actions, dated Oct 28, 2021

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Committee work plan be updated with the following changes: _____.

California Fish and Game Commission
Marine Resources Committee (MRC) Work Plan
Scheduled Topics and Timeline for Items Referred to MRC
October 29, 2021

TOPIC	CATEGORY	JUL 2021	NOV 2021	MAR 2022
Planning Documents & Fishery Management Plans (FMPs)				
MLMA Master Plan (MP) for Fisheries – Implementation Updates	MP Implementation			
Red Abalone FMP / ARMP Update	FMP	X	X	X/R
California Halibut Fishery Management Review	FMP		X	X
California Pink Shrimp FMP	FMP	X/R		
Market Squid Fishery Management Review	Management Review	X	X	X
Marine Protected Area Network – 2022 Decadal Management Review	Management Review	X	X	
Regulations				
Kelp and Algae Commercial Harvest – Bull Kelp	Commercial Kelp	X/R		
Kelp and Algae Commercial Harvest – Edible Algae (Seaweed)	Commercial Kelp			X
Kelp and Algae Commercial Harvest – *Postelsia* (sea palm)	Commercial Kelp			X/R
Use of Hydraulic Pump Gear to Take Clam: Review of Emergency Prohibition and Future Rulemaking	Recreational Take	X	X/R	
California Spiny Lobster FMP Implementing Regulations Review (a*dded Feb 2019; timing TBD*)	FMP Implementing Regulations			
Marine Aquaculture				
Aquaculture Program Planning (State Aquaculture Action Plan)	Planning Document			X
Aquaculture State Water Bottom Leases: Existing & Future Lease Considerations	Current Leases / Planning	X	X	
Public Interest Determination Criteria for New Aquaculture Lease Applications	New Leases	X		X
Aquaculture Lease Best Management Practices (BMP) Plans (On hold, TBD)	Regulations			
Emerging Management Issues				
Kelp Restoration and Recovery Tracking	Kelp	X	X	
Invasive Non-native Kelp and Algae Species	Kelp / Invasive Species			
Special Projects				
California's Coastal Fishing Communities	MRC Special Project	X	X	X

Key: **X** = Discussion scheduled **X/R** = Recommendation may be developed and moved to FGC

California Fish and Game Commission: Perpetual Timetable for Anticipated Regulatory Actions

Updated October 28, 2021

Regulatory Change Category	Title 14 Section(s)	MRC Webinar/Teleconference Nov 9, 2021	TC Webinar/Teleconference Dec 14, 2021	FGC Webinar/Teleconference Dec 15, 2021	FGC Webinar/Teleconference Dec 16, 2021	WRC Sacramento Jan 13, 2022	FGC Sacramento February 16, 2022	FGC Sacramento February 17, 2022	MRC Sacramento Mar 24, 2022	TC Monterey / Santa Cruz Area Apr 19, 2022	FGC Monterey / Santa Cruz Area Apr 20, 2022	FGC Monterey / Santa Cruz Area Apr 21, 2022	FGC Teleconference May 19, 2022	WRC Redding May 19, 2022	FGC Los Angeles / Orange County June 15, 2022	FGC Los Angeles / Orange County June 16, 2022	MRC San Diego Area July 14, 2022	TC Fortuna August 16, 2022	FGC Fortuna August 17, 2022	FGC Fortuna August 18, 2022	WRC Los Angeles / Inland Empire Area September 15, 2022	FGC Truckee October 12, 2022	FGC Truckee October 13, 2022
Recreational Clam, Sand Crab, and Shrimp Gear Emergency [6]	29.20, 29.80					EE 1/8																	
Recreational Clam, San Crab, and Shrimp Gear Emergency (First 90-day Extension) [6]	29.20, 29.80					E1/8				EE 4/8													
Recreational Clam, Sand Crab, and Shrimp Gear Emergency (Second 90-day Extension) [6]	29.20, 29.80							A		E 4/8							EE 7/7						
Recreational Clam, Sand Crab, and Shrimp Gear (Implementing Certificate of Compliance) [6]	29.20, 29.80				N		D				A						E 7/1						
Central Valley Sport Fishing (Annual)	7.40(b)(4), (43), (66), (80)							N				D	A					E 7/16					
Klamath River Basin Sport Fishing (Annual)	7.40(b)(50)							N				D	A					E 8/15					
Waterfowl (Annual)	502			N				D				A					E 7/1						
CA Grunion Limit and Season Changes (FGC Petition #2019-014)	27.60(b), 28.00				D		A								E 6/1								
Pink Shrimp Fishery Management Plan Implementing Regulations	120.1, 120.2						N								D/A							E 10/1	
Big Game Preference Point Reinstatement and Tag Refunds	708.14			D				A		E 4/1													
Harvesting of Kelp and Other Aquatic Plants, Commercial Marine Algae Management Policies	165, 165.5, 705.1				N		D/A										E 7/1						
Emergency Low Flow Restrictions Due to Drought Conditions	7.40(b)(40)(A)1., 8.00(a), 8.00(b)			N/A			E 1/30											EE 7/30					
Game Fish Contests	230							N				D	A				E 7/1						
Western Joshua Tree Dead Hazard Trees 2084 Emergency	749.11	EE 11/9																					
Western Joshua Tree Dead Hazard Trees 2084 Emergency (90-day Extension)	749.11	E 11/9				EE 2/7																	
Western Joshua Tree Local Government 2084 Emergency	749.12	EE 11/9																					
Western Joshua Tree Local Government 2084 Emergency (90-day Extension)	749.12	E 11/9				EE 2/7																	
Recreational Crab Marine Life Protection Measures	29.80, 29.85, 701	E 11/1																					
Experimental Fishing Permit (EFP) Program Phase II	90, 91, 120.1, 149, 149.3, 180, 704				A					E 4/1													

Rulemaking Schedule to be Determined	Title 14 Section(s)	MRC Webinar/Teleconference Nov 9, 2021	TC Webinar/Teleconference Dec 14, 2021	FGC Webinar/Teleconference Dec 15, 2021	FGC Webinar/Teleconference Dec 16, 2021	WRC Sacramento Jan 13, 2022	FGC Sacramento February 16, 2022	FGC Sacramento February 17, 2022	MRC Sacramento Mar 24, 2022	TC Monterey / Santa Cruz Area Apr 19, 2022	FGC Monterey / Santa Cruz Area Apr 20, 2022	FGC Monterey / Santa Cruz Area Apr 21, 2022	FGC Teleconference May 19, 2022	WRC Redding May 19, 2022	FGC Los Angeles / Orange County June 15, 2022	FGC Los Angeles / Orange County June 16, 2022	MRC San Diego Area July 14, 2022	TC Fortuna August 16, 2022	FGC Fortuna August 17, 2022	FGC Fortuna August 18, 2022	WRC Los Angeles / Inland Empire Area September 15, 2022	FGC Truckee October 12, 2022	FGC Truckee October 13, 2022
Pre-Existing Structures in Marine Protected Areas (MPAs), Marine Managed Areas (MMAs), and Special Closures	632																						
Santa Cruz Harbor Salmon Fishing (FGC Petition #2016-018)	TBD																						
European Green Crab (FGC Petition #2017-006)	TBD																						
Wildlife Areas/Public Lands [4]	TBD																						
Possess Game / Process Into Food	TBD																						
American Zoological Association / Zoo and Aquarium Association	671.1																						
Night Hunting in Gray Wolf Range (FGC Petition #2015-010)	474																						
Shellfish Aquaculture Best Management Practices	TBD																						
Ban of Neonicotinoid Pesticides on Department Lands (FGC Petition #2017-008)	TBD																						
Ridgeback Prawn Incidental Take Allowance	120(e)																						

KEY

FGC = California Fish and Game Commission MRC = FGC Marine Resources Committee WRC = FGC Wildlife Resources Committee TC = FGC Tribal Committee

EM = Emergency **EE = Emergency Expires** E = Anticipated Effective Date (**RED "X" = expedited OAL review**)

N = Notice Hearing D = Discussion Hearing A = Adoption Hearing V = Vetting R = Committee Recommendation

4 = Includes FGC Petition #2018-003 6 = Includes FGC Petition #2019-012