

**California Fish and Game
Commission**

Marine Resources Committee

Meeting Binder



July 16, 2026

Teleconference

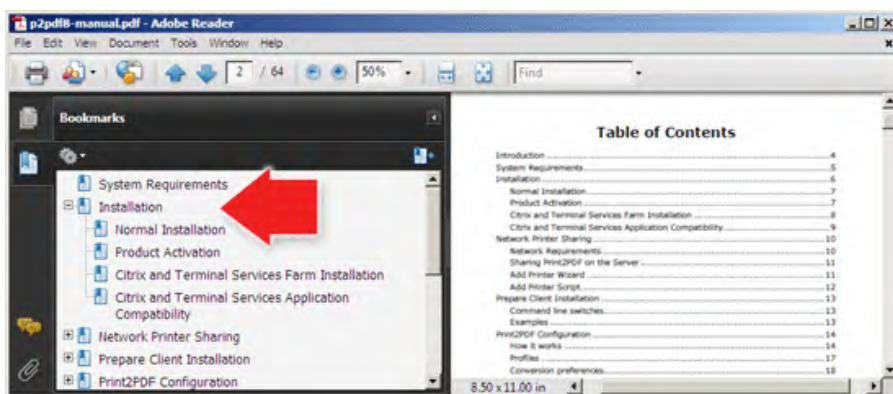
Co-Chairs in Sacramento and La Jolla

EASY GUIDE TO USING THE BINDER

1. Download and open the binder document using portable document reader (pdf) software like Adobe Acrobat/Reader.
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 California Fish and Game Commission Committee Meeting

- **Welcome.** Welcome to this meeting of the Marine Resources Committee. The committee is comprised of up to two commissioners who co-chair each meeting; and these members are assigned annually by the Commission.
- **Purpose.** Our goal today is to have informed discussion that will guide future decision-making. Your cooperation is essential to ensure a productive and comprehensive dialogue.
- **Authority.** We are operating under the Bagley-Keene Open Meeting Act. Please note that the committee cannot take action independent of the full Commission; instead, it makes recommendations to the full Commission at regularly scheduled meetings.
- **Recording.** This meeting is being recorded and will be posted on the Commission's website or YouTube channel for reference and archival purposes.
- **Agenda Order.** Items may be heard in any order at the discretion of the committee chair or co-chairs.
- **Regulation Change Requests.** Requests for regulatory must be submitted to the Commission using petition form **FGC 1**, titled "*Petition to the California Fish and Game Commission for Regulation Change*." However, at its discretion, the committee may ask staff to follow up on items of interest for possible recommendation to the Commission.
- **Participation Guidelines.** Committee meetings operate informally and provide an opportunity for everyone to contribute to the discussion. If you wish to speak on an agenda item:
 1. Raise your hand and wait to be recognized by the chair or co-chair. On Zoom, look for the "raise hand" feature, or by phone entering *9 will indicate that you want to speak.
 2. Wait to be called on by the chair or co-chair.
 3. State your name and affiliation (if any).
 4. Keep your comments brief so that others have time to speak.
 5. If multiple speakers share the same concern or idea, consider appointing a spokesperson. If you agree with a previous comment, simply state your agreement rather than repeating.
 6. In-person participants are generally called on first, followed by Zoom or phone participants.
 7. We encourage participants to continue contributing to the dialogue as the discussion evolves.
 8. For general public comment (non-agenda item), your remarks should not relate to current agenda topics. Public comment on agenda items will be taken when those items are discussed.
- **Housekeeping.** Please note the nearest emergency exit for use in case of an emergency.

Restrooms are located _____. Finally, please silence your mobile devices and computers.

Introductions for California Fish and Game Commission Marine Resources Committee Meeting

California Fish and Game Commissioners

Eric Sklar	MRC Co-chair (Saint Helena)
Samantha Murray	MRC Co-chair (La Jolla)

Commission Staff

Melissa Miller-Henson	Executive Director
Susan Ashcraft	Marine Advisor
Kelsey Leaird	Staff Services Analyst
Caroline Newell	Environmental Scientist
Amanda Specht	Sea Grant State Fellow
David Haug	Regulatory Analyst

California Department of Fish and Wildlife (CDFW)

Eric Kord	Assistant Chief, Marine Enforcement District, Law Enforcement Division (LED)
Craig Shuman	Regional Manager, Marine Region
Brent Chase	Captain, Marine Enforcement District, LED
John Ugoretz	Pelagic Fisheries and Ecosystem Program Manager, Marine Region

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

CDFW

Tom Mason	Senior Environmental Scientist Supervisor, Marine Region
Brian Demars-Owens	Senior Environmental Scientist Supervisor, Marine Region
Kristin Ellsmore	Senior Environmental Scientist, Specialist, Marine Region
Miranda Haggerty	Environmental Scientist, Marine Region

California Ocean Protection Council

Katie Cieri	Sustainable Fisheries and Aquaculture Program Manager
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Commissioners

Eric Sklar, President
Saint Helena

Darius W. Anderson, Vice President
Kenwood

Jacque Hostler-Carmesin, Member
McKinleyville

Samantha Murray, Member
La Jolla

Erika Zavaleta, Member
Santa Cruz

STATE OF CALIFORNIA
Gavin Newsom, Governor

Fish and Game Commission



*Wildlife Heritage and Conservation
Since 1870*

Melissa A. 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

Revised* Meeting Agenda — Teleconference July 16, 2026; 9:00 a.m.

* This agenda is revised to update the teleconference information and identify the name and location (room number) in La Jolla from which one committee co-chair will participate. Committee co-chairs will participate in Sacramento and La Jolla; staff will participate primarily in Sacramento.

The meeting will be live streamed for those who do not plan to make comments; visit www.fgc.ca.gov the day of the meeting to watch or listen. To provide public comment during the meeting, please join via Zoom, by telephone, or at an in-person location.

Participate via Teleconference

You may join the teleconference via Zoom directly at <https://wildlife-ca.gov.zoom.us/j/89836477592>. For complete instructions on how to join via Zoom or telephone, click [here](#) or visit the Commission meetings webpage at fgc.ca.gov/meetings/2026.

or

Participate in Person

Sacramento

California Natural Resources
Headquarters Building
715 P Street, 2nd Floor
Sacramento, CA 95814

La Jolla

Scripps Institution of Oceanography
Eckart Building, Room 137
8755 Biological Grade
La Jolla, CA 92037

- Notes:** (1) See *important meeting deadlines and procedures*, including written public comment deadlines, starting on page 6.
- (2) The California Department of Fish Wildlife is identified as Department.
- (3) 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

Discussion and Action Items

2. White Seabass Fishery Management Review

Receive and discuss Department options for interim changes to recreational white seabass fishing regulations within the broader management review, consider the timeline, and potentially develop a committee recommendation.

3. Recreational Gear Restrictions for White Shark

Review emergency regulations adopted in June 2026 to further protect white sharks during environmental conditions that increase nearshore aggregations and increase likelihood of human interaction with sharks while fishing, discuss rationale, and consider possible next steps, including potential readoption, notice of regulation change, and any modifications.

4. Commercial Spiny Lobster Fishery

Receive public input and hold an initial discussion regarding Petition 2026-02 related to allowing the processing of commercially caught spiny lobster into lobster tails for storage, transport, and sale in addition to selling lobster whole or live.

5. Commercial Coonstripe Shrimp Fishery Management

Receive and discuss a Department overview of a range of potential management measures, building on regulations adopted in 2025-2026, to further reduce whale entanglement risk in the coonstripe shrimp fishery.

6. Kelp Restoration and Management Plan (KRMP) Development

Receive and discuss Department update on KRMP development progress and timeline, including recent scientific advisory committee and community workgroup meetings and outcomes, and receive a report on the urchin culling project completed at Tanker Reef in Monterey.

Updates and Administrative Items

7. Staff and Agency Updates

This item provides updates from staff and other agencies, including progress on work plan topics as requested by the Commission. To promote meeting efficiency, some work plan topic updates will be in written format only. Public discussion may occur at the Committee's discretion if time allows.

(A) **California Ocean Protection Council**

(B) **Department**

I. *Law Enforcement Division*

II. *Marine Region*

(C) **Commission Staff**

8. Future Agenda Items

Review work plan agenda topics and timeline, and identify any potential new agenda topics for Commission consideration.

General Public Comment

9. General Public Comment for Items Not 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), California Government Code].

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. All Commission meetings will include a webinar/teleconference option for attendance and every effort will be made to ensure that committee meetings include the same.

Meeting Date	Commission Meeting	Committee Meeting
August 11, 2026		Tribal Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814
August 12-13, 2026	Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814	
September 10, 2026		Wildlife Resources Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814
October 13-16, 2026 *	Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814	
November 12, 2026		Marine Resources Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814
December 14, 2026		Tribal Natural Resources Headquarters Building 715 P Street, 2 nd Floor Sacramento, CA 95814
December 15-16, 2026	East End Complex Auditorium 1500 Capitol Avenue Sacramento, CA 95814	

* The October 2026 meeting has been extended for two additional days for discussion and potential action on MPA (marine protected area) petitions; exact dates TBD.

Other Meetings of Interest

Association of Fish and Wildlife Agencies

- September 13-16, 2026 – Lancaster, PA

Pacific Fishery Management Council

- September 17-23, 2026 – Vancouver, WA
- November 13-18, 2026 – Garden Grove, CA
- March 4-9, 2027 – Portland, OR
- April 7-12, 2027 – Sacramento, CA
- June 17-22, 2027 – Rohnert Park, CA

Western Association of Fish and Wildlife Agencies

- Mid-Winter 2027 – TBD
- Summer 2027 – TBD

Wildlife Conservation Board

- August 2026 – Sacramento, CA
- November 2026 – Sacramento, CA
- February 2027 – Sacramento, CA
- May 2027 – Sacramento, CA

Important Commission Meeting Procedures Information

About the Marine Resources Committee (MRC)

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 topics before the Commission than would otherwise be possible. Committee meetings are less formal in nature and provide additional access to commissioners. The Committee does not take action independent of the Commission; instead, the Committee makes recommendations to the full Commission at regularly scheduled Commission 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 as possible.

Public Participation: How to Attend and Engage

Committee meetings operate informally and provide opportunities for everyone to contribute. All meetings are open to the public and subject to the Bagley-Keene Open Meeting Act. You may participate in person, via Zoom webinar, or by phone. Meetings are also live streamed for listening or viewing only. Staff are available to help with logistical questions. Audio and video archives are posted to the Commission website after each meeting.

How to Provide Verbal Comment During the Meeting

You will receive instructions during the meeting on how to be recognized to speak on an agenda item. Begin your comments by stating your name, affiliation (if any), and the number of people you represent. Time is limited—please keep comments focused and concise. To avoid prolonging discussion, please do not repeat previous comments; you may designate a spokesperson or state your agreement with earlier remarks.

- **In Person:** Raise your hand to indicate your interest in speaking. Wait to be called and be prepared to approach the meeting table when your name is called.
- **Via Zoom or Phone:** "Raise" your hand using the Zoom function or press *9 once on your phone. Speakers will be identified by display name or by the last three digits of their phone number. Listen for your name or number to be called.
- **General Public Comment (Non-Agenda Items):** Comments during general public comment must be on matters **not** on the current agenda. This is an opportunity to bring new issues to the Committee's attention; concerns may also be submitted by email or mail. At the Committee's discretion, staff may be asked to follow up.

Written Public Comments and Submission Deadlines

The public is encouraged to submit written comments on any agenda item. Written comments may provide more detail than what time allows during verbal comment.

You may submit written comments by one of three methods: **Email** to fgc@fgc.ca.gov; **mail** to California Fish and Game Commission, P.O. Box 944209, Sacramento, CA 94244-2090; or **hand-deliver** to California Fish and Game Commission, 715 P Street, 16th floor, Sacramento, CA 95814.

Comment Deadlines

<i>Comment Deadline*</i>	<i>Supplemental Comment Deadline**</i>
July 2, 5:00 PM	July 10, 12:00 PM

- * Written comments received at the Commission office by the ***Comment Deadline*** will be made available to the Commissioners prior to the meeting, made available to the public, and may be posted online with meeting materials.
- ** Written comments received at the Commission office by the ***Supplemental Comment Deadline*** will be made available to Commissioners at the meeting, but not posted online.

After these deadlines, written comments may be delivered in person to the meeting. Please bring **six** (6) copies of written comments and hand them to the designated staff member just prior to speaking.

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

Visual Presentations: Slides, Videos, and Graphics

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

- Electronic presentations must be provided by email to fgc@fgc.ca.gov. If the file is too large to send via email, contact staff to identify an alternative method for submitting the file.
- All electronic formats must be Windows PC compatible.
- If participating in person, it is recommended that you bring a print copy of any electronic presentation in case of technical difficulties.
- Approval is at the discretion of the presiding co-chair and is not guaranteed.

Accessibility and Accommodation Needs

Individuals with disabilities and/or needing reasonable accommodation to participate in public meetings may contact the Department's Civil Rights Office (CRO) at (916) 653-9089 or civilrights@wildlife.ca.gov. Requests for facility or meeting accessibility and requests for American Sign Language 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 can be met. If an accommodation is no longer needed, please notify CRO immediately.

Individuals relying on an interpreter are entitled to at least twice the allotted speaking time pursuant to Government Code Section 11125.7(c), and are asked to provide at least 72 hours' notice. Additional time for other accommodation needs may be granted at the presiding commissioner's discretion to ensure equal opportunity to address the Commission.

Requests for Regulation Changes

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 regulation change, please provide your comments during Commission business meetings, via email, or by delivering to the Commission office.

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](#). 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 Staff Summary for July 16, 2026 MRC

2. White Seabass Fishery Management Review**Today's Item****Information** ☐**Action** ☒

Receive and discuss Department options for interim changes to recreational white seabass fishing regulations within the broader management review, consider the timeline, and potentially develop a committee recommendation.

Summary of Previous/Future Actions

- | | |
|--|---------------------------|
| • Commission adopted White Seabass Fishery Management Plan (White Seabass FMP) | 2002 |
| • Received annual review reports from the Department | 2003-2022 |
| • Received a Department overview of the White Seabass FMP and 2021-2022 annual review report | August 2023 |
| • Commission referred white seabass fishery management review to the Marine Resources Committee (MRC) | October 8-9, 2025 |
| • Received and discussed Department overview of plans and proposed process for reviewing management of the white seabass fishery | March 12, 2026; MRC |
| • Commission approved the MRC recommendation to request that the Department develop a proposed interim white seabass size limit for potential MRC recommendation in July | April 15-16, 2026 |
| • Today, consider interim changes to recreational white seabass size limit, consider timing, and develop an MRC recommendation | July 16, 2026; MRC |

Background

White seabass is managed under an FMP adopted by the Commission in 2002, with annual reviews conducted to identify any needed management or FMP changes, in accordance with Marine Life Management Act requirements. At the August 2023 Commission meeting, the Department presented the 2021-22 annual review report and recommended initiating a comprehensive white seabass fishery management review, consistent with established priorities.

As part of its review, the Department also identified a near-term management concern in the recreational fishery based on preliminary sampling data. The data indicated that female white seabass may mature at a larger size than previously understood, raising questions about whether the current recreational size limit adequately protects immature fish. The Commission supported initiating the management review.

The recreational white seabass fishery is open year-round with a daily bag limit of three fish, except that only one fish may be taken in waters south of Point Conception between March 15 and June 15, a period that overlaps with the species' spawning season in the region. The current minimum size limit is 28 inches total length, with a 20.5-inch alternate length as

Committee Staff Summary for July 16, 2026 MRC

specified in Section 28.35, Title 14, California Code of Regulations. The regulations were last amended over 40 years ago, in 1984.

In October 2025, the Commission formally referred the White Seabass FMP review to MRC to begin engaging with the Department and stakeholders, including addressing the maturity concern in the recreational fishery. Additional background on the white seabass fishery management review can be found in Exhibit 1.

March 2026 MRC Discussion

At the March 2026 MRC meeting — the first meeting to include the formal management review — the Department outlined its plan to review the 2002 White Seabass FMP and conduct a new stock assessment to replace the one now ten years old. The Department presented updated maturity data, summarized stakeholder outreach efforts, and recommended that the Commission support an interim regulatory action to increase the minimum size limit informed by the updated maturity data as a near-term measure, while a more comprehensive review is underway.

Meeting participants, and other stakeholders since then, raised a range of concerns about the potential impacts of a size limit increase — including effects on recreational charter boat operations, lack of larger fish available to shore-based anglers, and discard mortality — as well as interest in alternative bag limit structures, the need for updated scientific information, and questions about future stock assessment capacity. MRC developed a recommendation, approved by the Commission in April 2026, requesting the Department develop an interim size limit change for discussion and potential MRC recommendation at the July 2026 meeting.

Today's Meeting

Today's meeting focuses on the near-term management response needed to address new maturity-at-length information for white seabass — specifically, to consider an immediate size-limit increase or other interim regulatory measure(s) before the full white seabass fishery management review is completed. The Department's presentation (Exhibit 2) will provide additional details from the recent maturity assessment, trends in fish length observed in commercial and recreational landings, and the Department's rationale for proposing a specific minimum size limit change. The Department will also share perspectives from three public stakeholder meetings held in November 2025, March 2026, and May 2026.

In response to stakeholder concerns related to a size limit increase, the Department also evaluated other interim management options, including modifying the daily bag limit or a combined bag and size limit approach. The Department will describe how such options may address the maturity-at-size concerns for the fishery, limitations, and enforcement considerations for these options. The Department maintains that increasing the minimum size limit to 35 inches is the most effective and enforcement-friendly strategy to address concerns raised by the updated maturity data. The current 28-inch minimum size regulation was originally set to allow individual white seabass to spawn at least once before being taken by the fishery ([White Seabass FMP](#), Chapter 7.4.1); however, the FMP acknowledged that this standard was based on very limited maturity data.

Committee Staff Summary for July 16, 2026 MRC

A stated goal of the White Seabass FMP was to re-evaluate age and length at first maturity as new information became available, and to update the regulation if warranted. The recent maturity findings indicate that the minimum size limit should be adjusted to align with current understanding of the fishery and maintain the original intent of protecting spawning opportunities. Based on best available information, a minimum size of 35 inches would allow approximately 50 percent of white seabass to spawn at least once prior to harvest, helping to ensure that a sufficient portion of the population contributes to spawning stock biomass. The Department seeks an MRC recommendation to the Commission, including the timeline for a rulemaking.

Significant Public Comments (N/A)**Recommendation**

Commission staff: Receive public input and discuss the Department-proposed size limit and supporting rationale. Consider the potential effectiveness of alternative or complementary measures for protecting sexually immature female white seabass. Recommend that the Commission advance to rulemaking the Department's proposed increase in the recreational minimum size limit to 35 inches, or to advance other measures discussed today that would meet the objective of allowing more females to reach sexual maturity before they are subject to harvest.

Department: Increase the minimum size limit to 35 inches for the recreational white seabass fishery to protect sexually immature fish and support the spawning stock, and schedule a rulemaking to commence with notice in October, discussion in December, and adoption in February.

Exhibits

1. [Staff Summary for Agenda Item 4, March 12, 2026 MRC meeting](#) (*for background purposes only*)
2. [Department presentation](#)

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission advance to rulemaking the proposed increase in the recreational white seabass fishery minimum size limit to 35 inches, as recommended by the Department and discussed today, and schedule notice for October 2026.

OR

The Marine Resources Committee recommends that the Commission advance to rulemaking the following proposed changes to recreational white seabass fishing regulations:

Committee Staff Summary for July 16, 2026 MRC

3. Recreational Gear Restrictions for White Shark**Today's Item**Information ☐Action ☒

Review emergency regulations adopted in June 2026 to further protect white sharks during environmental conditions that increase nearshore aggregations and increase likelihood of human interaction with sharks while fishing, discuss rationale, and consider possible next steps, including potential readoption, notice of regulation change, and any modifications.

Summary of Previous/Future Actions

- | | |
|--|---------------------------|
| • Commission discussed and adopted emergency regulations | June 17-18, 2026 |
| • Today review emergency regulations and consider possible next steps | July 16, 2026; MRC |
| • Commission consider potential readoption of emergency regulations | October 13-16, 2026 |

Background

The Department is responsible for managing shark fishing under regulations adopted by the Commission, and tracks interactions with white shark as a federally and state-protected species. At its June 2026 meeting, the Commission adopted emergency recreational ocean fishing regulations in response to projected increases in juvenile white shark presence associated with warmer El Niño conditions.

Specifically, the action established temporary restrictions for fishing from shore or within 1,000 yards of shore from Pigeon Point (San Mateo County) southward to the U.S./Mexico border. The restrictions include; (1) no use of wire or other metallic lines or leaders, (2) no hooks larger than 1.5 inches, and (3) no removal of hooked white sharks from the water. Although these gear types are typically legal for targeting other shark species, they have been involved in recent incidents in which juvenile white sharks were hooked with heavy tackle, resulting in injuries to a swimmer and harm to the sharks, including several mortalities.

The concerns regarding white shark are heightened this year by forecasted warmer-water conditions that shift the preferred range for juvenile white shark northward from Mexico and lead them to stay in California nearshore areas later in the year. The emergency regulations aim to deter illegal targeting of white sharks where nearshore aggregations are known to occur, reduce the likelihood and severity of incidental hooking of white sharks, improve post-release survival by preventing white sharks from trailing heavy gear, and reduce risks to ocean users posed by hooked white sharks or attached wire leaders.

More detailed background is provided in the June 2026 Commission meeting staff summary (Exhibit 1); associated supporting documentation and emergency regulatory language is available online at [Staff Summary and Exhibits for Item 6, June 17-18, 2026 CFGC meeting](#).

Committee Staff Summary for July 16, 2026 MRC

Update

The temporary emergency regulations went into effect on July 3, 2026 and will continue for 180 days unless extended through subsequent Commission action. The emergency regulations prompted media attention and online postings from shore-based shark-fishing enthusiasts and a shark conservation group. Hundreds of comments (individual and form letters) from the angling community, shark conservationists, and the general public were submitted before, during and after the public comment period (see Significant Public Comments). In light of the volume of interest, concerns, and suggestions received, the Department requested that this topic be added to the MRC agenda — the only MRC meeting scheduled prior to the timing required for a potential readoption of the emergency regulations.

Today's meeting provides an opportunity to review and discuss the emergency action, the specific measures adopted in regulation, and considerations for future actions to extend and/or modify the regulations. The Department will present an overview of the implemented measures, the rationale behind them, and implications for recreational anglers targeting other legally harvested shark species (Exhibit 2).

Today's discussion is intended to support MRC consideration and input on next steps, including potential readoption of the emergency regulations and possible initiation of a regular rulemaking beyond the emergency period of approximately one year. To avoid the emergency regulations expiring, readoption would need to occur in October 2026. If MRC recommends, and the Commission approves, pursuing a regular rulemaking to maintain the current measures and/or explore adjustments, a public notice hearing for that action should be scheduled for December 2026 if any significant changes to the regulations are anticipated or February 2027 if there are limited changes; the latter would allow additional discussion at the November 2026 MRC meeting before a Commission decision is made on the contents of a regular rulemaking.

Significant Public Comments

No public comments were submitted specifically for this meeting. However, during the emergency rulemaking comment period — from the emergency adoption on June 17 through the comment period ending Jun 30 — the Commission received written comments supporting the action from just over 450 individuals (31 unique comments and 420 form emails), and opposing the emergency action from 89 individuals (including several “template” letters). Staff transmitted all unique comments to the Department and a set of example form letters and template emails; as a result, the numbers reported here differ from those in the Department presentation (Exhibit 2). A brief overview of the comments received is provided here.

Support: Individual commenters supporting the action, including white shark bite survivors, shark advocates, California residents, and the general public, highlight the need to reduce dangerous interactions between hooked sharks and swimmers, protect apex predators, and close loopholes in the pre-emergency regulations. Many also urged the Commission to consider further restrictions on the use of chum, live bait, mechanical gaffs from piers, and drones for bait deployment. The form letters, the result of an online campaign, continue to be received (over 800 as of July 9). Sample comments are provided in Exhibit 4.

Committee Staff Summary for July 16, 2026 MRC

Oppose: Commenters opposing the action, including shore-based shark anglers, express concern about impact on fishing for other shark species (notably from shore), potential harm of gear on sharks and the environment, and impacts to scientific research. Commenters suggested alternative measures, including increasing enforcement of current law and using education rather than broader restrictions. Others emphasized their right to fish and questioned the emergency justification. Sample comments are provided in Exhibit 5.

Responses: A summary of the comments by theme, and Department and staff responses to comments that were submitted to the Office of Administrative Law, is provided in Exhibit 3. The general responses in Exhibit 3 address all comments received by the Commission.

Recommendation

Commission staff: Recommend that the Commission continue gathering feedback on and results from the adopted regulations; and (1) schedule for October consideration of potentially readopting the emergency regulations, and consider whether to include a possible exception for smaller wire leaders if the regulation is readopted. (2) Delay any recommendation on initiating a regular rulemaking to allow time to learn from the feedback and outcomes of the emergency regulations, which may lead to identifying potential additional modifications, if any, that may be incorporated into a regular rulemaking. (3) Request that the Department provide an update at the November 2026 MRC meeting to inform a potential MRC recommendation regarding a regular rulemaking and the scheduling of public notice.

Department: Continue to gather feedback on and results from the adopted measures, and (1) schedule consideration of emergency readoption in October, and (2) consider scheduling a regular rulemaking notice for consideration in December. Consider a possible exception for smaller wire leaders and the need for modifications, if any, to be enforceable.

Exhibits

1. [Staff summary for Agenda Item 6, June 17-18, 2026 Commission meeting](#) (for background purposes only)
2. [Department presentation](#)
3. [Summary of comments and staff responses to comments](#) regarding the emergency regulations received during the comment period, June 17-30, 2026
4. [Sample comments supporting the emergency measures](#), received June 17-30, 2026
5. [Sample comments opposing the emergency measures](#), received June 17-30, 2026

Committee Direction/Recommendation

Motion 1, Emergency Readoption (October): The Marine Resources Committee recommends that the Commission consider readopting the emergency white shark gear restrictions at its October meeting, either:

- with the current emergency measures *as adopted*; or
- with the following *modification(s)*: _____.

AND [next page]

Committee Staff Summary for July 16, 2026 MRC

Motion 2, Regular Rulemaking (Future): The Marine Resources Committee recommends that the Commission either:

- ***not schedule*** a regular rulemaking at this time and return the topic to MRC for further discussion at the November 2026 MRC meeting; **or**
- ***schedule*** consideration of a regular rulemaking for the December Commission meeting, including the following potential modification(s) to the emergency measures: _____, and return the topic to MRC for further discussion at the November 2026 MRC meeting with an update and any recommended measures to incorporate into a regular rulemaking.

Committee Staff Summary for July 16, 2026 MRC

4. Commercial Spiny Lobster Fishery**Today's Item****Information** ☒**Action** ☐

Receive public input and hold an initial discussion regarding Petition 2026-02 related to allowing the processing of commercially caught spiny lobster into lobster tails for storage, transport, and sale in addition to selling lobster whole or live.

Summary of Previous/Future Actions

- | | |
|---|---------------------------|
| • Commission adopted California Spiny Lobster Fishery Management Plan (Spiny Lobster FMP) and implementing regulations | April and June 2016 |
| • Commission supported initiating a review of the Spiny Lobster FMP implementing regulations and referred the topjc to MRC | February 2019 |
| • MRC received and discussed Department overview of draft lobster regulation changes, including potentially allowing commercial lobster 'tailing' | July 2022; MRC |
| • Public receipt of regulation change petition #2026-02 | April 15-16, 2026 |
| • Referred regulation change petition #2026-02 to MRC and requested the Department review the petition and provide input to MRC | June 17-18, 2026 |
| • Today, receive input from the Department, including recent history of evaluating commercial lobster tailing; hear from the petitioner, fishery representatives and meeting participants; and consider next steps | July 16, 2026; MRC |

Background

Between 2019 and 2022, while undergoing a review and regulatory 'clean-up' of the regulations adopted in 2016 (effective in 2017) to implement the Spiny Lobster FMP, the Department explored — but ultimately did not pursue — adding an option for commercial lobster tailing. The tailing concept was originally raised by members of the commercial fleet in May 2020 as a strategy to diversify markets and support domestic sales, triggered particularly by pandemic-related disruptions to the international live market. The Department presented the concept at subsequent commercial fleet meetings, analyzed biological and enforcement considerations, and developed a set of conservative, minimum recommended conditions for a potential tailing option (Exhibit 1).

In February 2022, the Department issued a survey to all 215 commercial permit holders and buyers to assess fleet- and buyer-wide support for the proposed tailing option and a related post-season possession proposal. A majority of survey participants did not support the proposed tailing change: Out of 105 respondents, 53.3% (56) opposed tailing, 31.4% (33) supported it, and the remaining 15.4% (16) were uncertain or offered no position. Opposition was strongest in the southern portion of the fishery (near San Diego), where the smaller

Committee Staff Summary for July 16, 2026 MRC

average lobster size would constrain fishermen's ability to meet the Department's conservative proposed minimum tail-width requirement, limiting their eligibility to participate in any new tailing opportunity. Many respondents also expressed concerns about increased risk of illegal commercialization, potential market impacts on the live fishery, and unequal access and market opportunity across regions. (Exhibit 1)

At the July 2022 MRC meeting, the Department presented its findings from the survey and advised that a tailing option would require further vetting and development before being considered for potential rulemaking. Accordingly, the Department recommended not to include the tailing option in the "clean-up" rulemaking, which was intended to focus on needed amendments to the regulations implemented in 2017. MRC requested that the Department continue exploring a tailing option with industry outside the active rulemaking process, acknowledging both the interest in the concept and the complexities identified through outreach and analysis (Exhibit 2). In August 2022, the Commission approved the MRC recommendation to support continued Department engagement with industry on this topic.

In early 2025, representatives of the California Lobster and Trap Fishermen's Association (CLTFA) reengaged Department and Commission staff about a potential lobster tailing option, citing new tariffs affecting international markets, renewed interest in developing a domestic market alternative, and the prospect of adding lobster tail to a recently enacted law that allows Dungeness crab meat (without viscera) to be sold from domoic acid-affected areas. Based on staff input, CLTFA developed a new survey with Department input to gauge how industry perspectives may have shifted since 2022. The Department distributed the survey on CLTFA's behalf in late May 2025 to the roughly 160 permit holders (buyers were not included in the 2025 survey); responses were received from 35 (22%) permit holders (see significant public comments section).

In March 2026, CLTFA submitted regulation change petition #2026-02 to the Commission (Exhibit 3). The petition seeks to allow commercial lobster fishermen to tail their legally harvested lobster, in addition to the current ability to sell lobster whole or live. In June 2026, the Commission referred the petition to MRC for vetting and recommendation, and requested that the Department review and provide input to MRC.

Today, the Department will share a verbal overview of the history, outreach, analysis, and stakeholder feedback to date regarding commercial lobster tailing. The petitioner will be present to offer perspectives and answer questions. Today's discussion will inform next steps in evaluating the petition.

Significant Public Comments

In a comment received for the June 2026 Commission meeting, the petitioner provides the results of its 2025 lobster survey completed by 35 respondents, stating that consensus among members of the CLTFA board had subsequently been reached to support pursuing a tailing option as reflected in two unanimous board votes, indicating what potentially could be a shift in fleet support (Exhibit 4). As examples of survey results:

- When asked "If lobster tailing were allowed under current regulations, how interested would you be in participating", 74.2% (26) were very or somewhat interested, 23% (7)

Committee Staff Summary for July 16, 2026 MRC

were neutral or not interested, and 5.6% were concerned about implications (market, poaching).

- When asked “Do you support or oppose the option for a year-round global and domestic tail market”, 54.3% (19) supported, 20% (7) opposed, and 22.9% (8) were not sure, with 2.8% (1) unspecified.

Recommendation

Commission staff: After lobster fishery representatives and meeting participants share their perspectives, discuss potential next steps for considering Petition #2026-02.

Exhibits

1. [Staff summary and exhibits for Agenda Item 5, July 2022 MRC meeting](#), related to the Department’s evaluation of commercial lobster tailing (*for background purposes only*)
2. [Agenda Item 5 excerpt from the meeting summary, July 2022 MRC meeting](#), which details the outcomes of the meeting’s discussion regarding commercial lobster tailing (*for background purposes only*)
3. [Petition #2026-02](#), received March 12, 2026
4. [Email from Ava Schulenberg](#), Executive Director, CLTFA, received June 12, 2026

Committee Direction/Recommendation (N/A)

Committee Staff Summary for July 16, 2026 MRC

5. Commercial Coonstripe Shrimp Fishery Management**Today's Item****Information** ☒**Action** ☐

Receive and discuss a Department overview of a range of potential management measures, building on regulations adopted in 2025-2026, to further reduce whale entanglement risk in the coonstripe shrimp fishery.

Summary of Previous/Future Actions

- Department notified Marine Resources Committee (MRC) of coonstripe shrimp fishery concern November 6-7, 2024; MRC
- Commission approved emergency regulations to amend Section 180.15; referred topic to MRC February 12-13, 2025
- Department update and MRC discussion March 13, 2025; MRC
- MRC received Department-recommended regulation changes; MRC developed recommendation July 16-17, 2025; MRC
- Approved MRC recommendation for *regular rulemaking*; received update on development of rulemaking; held public notice hearing August 2025; October 2025; December 2025
- Commission approved regulations in *regular rulemaking* February 11-12, 2026
- **Today, receive and discuss a Department overview of a range of potential management measures, building on regulations adopted in 2025-2026, to further reduce whale entanglement risk** **July 16, 2026; MRC**
- Receive and discuss Department updates and recommended management measures, and potential MRC recommendation November 12, 2026; MRC

Background

The commercial fishery for coonstripe shrimp (*Pandalus danae*) is a small, open-access trap fishery operating under Commission regulations in Section 180.15. The fishery uses strings of traps connected to a groundline (also known as longline trap gear). In recent years, participation has increased, largely due to closures and limitations in other fisheries. This growth, particularly during peak whale migration, has increased marine mammal entanglement risk by adding more trap gear and vertical lines in the water.

In February 2025, following whale entanglements linked to the fishery, the Commission approved emergency regulations and referred the topic to MRC for further discussion. The emergency regulations were readopted twice, extending them for an additional 180 days (through April 3, 2026); no further extensions are possible under state law.

In March 2025, MRC heard input and discussed options for a regular rulemaking to ensure continuity of the emergency measures. At the July 2025 MRC meeting, the Department presented proposed coonstripe shrimp management measures for inclusion in a regular

Committee Staff Summary for July 16, 2026 MRC

rulemaking. The measures incorporated and refined the emergency regulations and added voluntary use of pop-up gear, developed with input from stakeholders and fishermen. A number of additional potential measures to further minimize entanglement risk were also suggested and discussed; however, given the time needed to sufficiently develop the measures and continue engagement with the fleet and stakeholders, the Department recommended a two-phased management response, with a near-term focus on maintaining emergency restrictions and authorizing pop-up gear.

MRC supported the near- and long-term strategy for the fishery as proposed by the Department. Accordingly, MRC recommended that the Commission initiate a regular rulemaking to incorporate the emergency regulations, Department-proposed updates and additional regulatory measures, and potential buoy size and trap-destruction device requirements. MRC also recommended that the Commission support the Department's plan to explore longer-term entanglement risk reduction measures (identified on the MRC work plan as phases 1 and 2). The Commission approved the two-phase approach at its August 2025 meeting.

The near-term "phase 1" regular rulemaking commenced at the December 2025 Commission meeting and was adopted in February 2026 (see exhibit 1 for background details). At the same meeting, the Commission supported launching the "phase 2" longer-term management review process, scheduled for July 2026 (today).

Today's Meeting

Today, the Department will present an overview of longer-term considerations and options to enhance management and further reduce marine life entanglement risk from the commercial coonstripe shrimp fishery (Exhibit 2). The range of potential management measures — such as gear modifications, reducing co-occurrence with whales, in-season response options, and entanglement identification tools — are being designed to build on the regulations adopted in 2025–2026 and further strengthen efforts to minimize entanglement risk in this evolving fishery. The Department will also outline planned next steps, including continued outreach, further discussion, and a request for a potential MRC recommendation in November 2026.

Significant Public Comments

1. Seven environmental non-governmental organizations urge MRC to recommend initiating a rulemaking to reduce whale entanglement risk in the commercial coonstripe fishery to adopt innovative fishing technologies. They recommend transitioning the southern fishery to pop-up (ropeless) gear over three years, authorizing the Department director, in consultation with Commission leadership, to temporarily close areas to vertical-line gear when warranted, and establishing limits on the number of vertical lines and buoyed endlines deployed. They also encourage strong and diverse stakeholder engagement and propose pathways to facilitate gear transition. The organizations emphasize that these actions would modernize the fishery while improving protection for marine wildlife. (Exhibit 3)

Recommendation (N/A)

Committee Staff Summary for July 16, 2026 MRC

Exhibits

1. [Staff summary for Agenda Item 19, December 10-11, 2025 Commission meeting](#) (*for background purposes only*)
2. [Department presentation](#)
3. [Co-signed letter from representatives of Oceana, Endangered Habitats League, Natural Resources Defense Council, Ocean Defenders Alliance, Center for Biological Diversity, Resource Renewal Institute, and the Animal Welfare Institute, received July 2, 2026](#)

Committee Direction/Recommendation (N/A)

Committee Staff Summary for July 16, 2026 MRC

6. Kelp Restoration and Management Plan (KRMP) Development**Today's Item****Information** ☒**Action** ☐

Receive and discuss Department update on KRMP development progress and timeline, including recent scientific advisory committee and community workgroup meetings and outcomes, and receive a report on the urchin culling project completed at Tanker Reef in Monterey.

Summary of Previous/Future Actions

- | | |
|--|--|
| • Commission referred KRMP development topic to Marine Resources Committee (MRC) | February 2022 |
| • MRC and Tribal Committee (TC) received Department overview of plans and process for KRMP development | March 2022; MRC and August 2022; TC |
| • MRC received Department update on KRMP development | March 2023; MRC |
| • MRC received a comprehensive kelp report prepared by Department and California Ocean Protection Council (OPC), and an update on KRMP development | November 2023; MRC |
| • MRC and TC received Department updates on kelp management and KRMP development | July 16-17, 2025; MRC and April 14, 2026; TC |
| • Written update on KRMP efforts and engagement | November 6, 2025 |
| • Today's update | July 16, 2026; MRC |

Background

Beginning in 2014, bull kelp populations in Mendocino and Sonoma counties dramatically declined to levels outside of the range of normal variability. The decline was caused by elevated sea surface temperature, poor nutrient availability, and drastic increases in purple sea urchin (*Strongylocentrotus purpuratus*) populations. The altered ecosystem conditions have persisted and, in some areas, worsened in subsequent years.

In October 2019, the Commission received a Department update confirming that dramatic bull kelp declines were persisting across the northern California coastline. Based on interest in tracking kelp conditions and kelp restoration strategies, the Commission referred the topic to MRC.

In February 2022, the Department, in partnership with OPC, initiated planning to develop a statewide, ecosystem-based, adaptive KRMP for giant kelp (*Macrocystis pyrifera*) and bull kelp (*Nereocystis luetkeana*). The Commission referred KRMP development to MRC to track the plan's progress. KRMP development began in earnest in October 2022, after funding was secured and a project management team was contracted.

KRMP development is being informed through tribal engagement and two formal groups: a community working group and a science advisory committee. The KRMP will serve as a cohesive kelp management strategy with three core components:

Committee Staff Summary for July 16, 2026 MRC

1. A harvest management framework and other fishery management plan elements required by the Marine Life Management Act (harvest management framework).
2. An innovative framework for ecosystem-based management of kelp forests (EBM framework).
3. A restoration toolkit.

The Department has provided five KRMP development updates to MRC since February 2022:

1. March 2022: Proposed a multi-pronged approach and process for developing the KRMP.
2. March 2023: Provided an overview of the three core components under preparation.
3. November 2023: Presented accelerated initiation of kelp research and restoration efforts, along with collaborative projects to explore tools like urchin suppression and kelp enhancement for the KRMP restoration toolkit; summarized tribal engagement and initial meetings with the community working group and science advisory committee; and shared the 2023 kelp report.
4. July 2025: Provided an estimated timeline for plan completion and implementation by 2027; an update on tribal engagement and meetings of the community working group and science advisory committee; and planned next steps for continued tribal, stakeholder, and community engagement.
5. November 2025: Shared a written update on tribal engagement efforts and updates on efforts within the community working group and scientific advisory committee.

Once adopted by the Commission, the KRMP will guide the management, protection, and restoration of California's kelp forests. For more information on KRMP development, including summaries of community working group and science advisory committee meetings, visit the Department's website at <https://wildlife.ca.gov/Conservation/Marine/Kelp/KRMP>.

Update

Today, the Department will present an update on recent progress on KRMP development, including guidance from the scientific advisory committee, recommendations from the community working group, and tribal engagement efforts, as well as an overview of the KRMP development timeline (Exhibit 1). The Department has also provided a written report summarizing the urchin culling project completed at Tanker Reef in Monterey (Exhibit 2).

Significant Public Comments

Keith Rootsart, Founder, Giant Kelp Restoration Project, expresses concerns with the "Tanker's Reef" report provided by the Department. He points to unanswered questions, the end of urchin culling access, and delays in project reporting as primary sources of frustration. He additionally provides draft monitoring recommendations for the Tanker Reef effort (Exhibit 3). In a separate comment, he transmits Monterey temperature and light monitoring data, which he interprets as indicating an increase in warm green water conditions and, therefore, a need for the KRMP to examine warm water, climate-acclimated kelp survival in the region (Exhibit 4).

Committee Staff Summary for July 16, 2026 MRC

Recommendation (N/A)

Exhibits

1. [Department presentation](#)
2. [Tanker Reef Project Report](#), dated June 2026
3. [Email from Keith Rootsart, Founder, G2KR](#), received July 1, 2026
4. [Email from Keith Rootsart, Founder, G2KR](#), received July 2, 2026

Committee Direction/Recommendation (N/A)

Committee Staff Summary for July 16, 2026 MRC

7. Staff and Agency Updates**Today's Item****Information** ☒**Action** ☐

Receive updates from staff and other agencies, including the California Ocean Protection Council and the Department.

Summary of Previous/Future Actions (N/A)**Background**

This is a standing agenda item for staff and agencies to provide an update on marine-related activities. Members of the public may have an opportunity to share thoughts and questions, although the level of in-meeting discussion will be at the discretion of MRC co-chairs and subject to time availability.

For today's meeting, there are no work plan topics scheduled for updates. Verbal updates, except where noted, on topics of interest to the committee are expected from OPC, the Department and staff.

(A) California Ocean Protection Council (OPC)**(B) Department****I. Law Enforcement Division (LED)**

LED is expected to share recent enforcement actions of interest.

II. Marine Region**(C) Commission Staff****Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits (N/A)****Motion (N/A)**

Committee Staff Summary for July 16, 2026 MRC

8. Future Agenda Items**Today's Item**Information ☐Action ☒

- (A) Review work plan agenda topics and timeline
- (B) Identify any potential new agenda topics for Commission consideration

Summary of Previous/Future Actions

- Commission approved Marine Resources Committee (MRC) agenda and work plan June 17-18, 2026
- **Today's review and discussion** **July 16, 2026; MRC**
- Next MRC meeting November 12, 2026; MRC

Background

MRC topics must be referred by the Commission, which schedules them as appropriate, with the schedule highlighted in the MRC work plan (Exhibit 1). MRC prioritizes issues of imminent regulatory or management importance; therefore, scheduling current topics and considering new ones require careful planning relative to existing workload and timing.

(A) *MRC Work Plan and Timeline*

The MRC work plan in Exhibit 1 has been updated to clarify one topic and to add one topic referred by the Commission in June. Draft topics anticipated for the November 2026 MRC meeting are marked in the November column of the work plan. Currently, six topics, including two that may result in a committee recommendation, are identified for discussion, and one topic is scheduled for an update. Staff may propose changes to the November agenda topics at the October 2026 Commission meeting, depending on topic readiness at that time. Staff welcomes guidance from MRC on scheduling specific topics identified in the work plan; no other changes or additions are currently proposed.

(B) *Discuss and Recommend New MRC Topics*

Today's meeting is an opportunity to identify any potential new agenda topics to recommend the Commission refer to MRC. Staff has not identified any new topics for potential referral at this time.

Significant Public Comments (N/A)**Recommendation**

Commission staff: Review the list of topics identified for the November 2026 MRC meeting, determine if topics or timing should be revised, or if any additional topics on the work plan should be scheduled for November 2026. Provide direction on any other additions or removals.

Exhibits

1. [MRC work plan](#), updated July 9, 2026

Committee Staff Summary for July 16, 2026 MRC

9. General Public Comment for Items Not on the Agenda**Today's Item****Information** ☒**Action** ☐

Receive public comment regarding topics that are not included on today's agenda.

Summary of Previous/Future Actions (N/A)**Background**

This item is to provide the public an opportunity to address the Marine Resources Committee (MRC) on topics not on the agenda. Staff may include written materials and comments received prior to the meeting as exhibits in the meeting binder (if received by the written comment deadline), or as supplemental comments at the meeting (if received by the supplemental comment deadline). However, under the Bagley-Keene Open Meeting Act, the MRC cannot discuss or take action on any matter not included on the agenda, other than to recommend that the Commission schedule issues raised by the public for consideration at future meetings.

General public comments are categorized into two types: (1) requests for MRC to consider new topics and (2) informational-only items. As a general rule, requests for a regulation change must be submitted to the Commission on petition form FGC 1, *Petition to the California Fish and Game Commission for Regulation Change*. However, MRC may, at its discretion, request that staff follow up on items of potential interest for possible recommendation to the Commission.

Significant Public Comments (N/A)**Recommendation (N/A)****Exhibits (N/A)****Committee Direction/Recommendation (N/A)**

Committee Staff Summary for March 12, 2026 MRC

For background purposes only

4. White Seabass Fishery Management Review

Today's Item

Information ☒

Action ☐

Receive and discuss Department overview of plans and proposed process for reviewing management of the white seabass fishery.

Summary of Previous/Future Actions

- | | |
|---|----------------------------|
| • Commission adopted White Seabass Fishery Management Plan (FMP) | 2002 |
| • Received annual review reports from the Department | 2003-2022 |
| • Received the Department overview of the White Seabass FMP and 2021-2022 annual review report | August 22-23, 2023 |
| • Commission referred white seabass fishery management review to the Marine Resources Committee (MRC) | October 8-9, 2025 |
| • Today, receive and discuss Department overview of plans and proposed process for reviewing management of the white seabass fishery | March 12, 2026; MRC |

Background

White seabass is managed under a fishery management plan (FMP), adopted by the Commission in 2002. The FMP requires annual monitoring and review of the commercial and recreational fisheries and fish stocks to prevent overfishing or other resource damage. The annual review includes fishery-dependent and fishery-independent data where available, documented changes within the social and economic structure of industries that utilize white seabass within California, information on the harvest of white seabass in Mexican waters, and other relevant data. The data are used to evaluate the status of white seabass relative to six "points of concern" criteria adopted by the Commission through the FMP, to help determine when management measures are needed to address resource conservation issues.

The White Seabass Scientific and Constituent Advisory Panel (WSSCAP) was established to assist the Department and Commission as needed by reviewing annual fishery assessments, management recommendations, and FMP amendments. Each year, WSSCAP meets to consider if current management measures provide adequate protection for white seabass. Annual reviews are conducted so that any changes in management, or to the White Seabass FMP, can be considered by the Commission in accordance with the requirements of the Marine Life Management Act (MLMA). WSSCAP meets with the Department each spring and the Department provides the Commission with updates in the annual review report.

At the August 2023 Commission meeting, the Department presented an overview of the white seabass fishery and the annual fishery review report (Exhibit 1). While the Department and WSSCAP concluded that the "points of concern" criteria were not met, the Department shared preliminary sampling data suggesting that white seabass may mature at a larger size than previously understood.

Committee Staff Summary for March 12, 2026 MRC*For background purposes only*

Beyond biological data, the Department addressed long-standing stakeholder concerns regarding bycatch in the fishery, acknowledging that the White Seabass FMP was adopted well before the 2018 Marine Life Management Act Master Plan for Fisheries (Master Plan), which established the current framework for evaluating bycatch acceptability. For these reasons, and in light of the fishery having been identified as a priority for review under the Master Plan implementation plan, the Department proposed to commence a formal, Department-led process that would include bycatch evaluations of the fishery to align with the Master Plan bycatch framework and address biological and management concerns.

In October 2025, the Commission referred the white seabass FMP review to MRC to begin engaging with the Department and stakeholders on the review and evaluative process.

Today's Meeting

The Department will provide an overview of plans and the proposed process for reviewing management of the white seabass fishery (Exhibit 2).

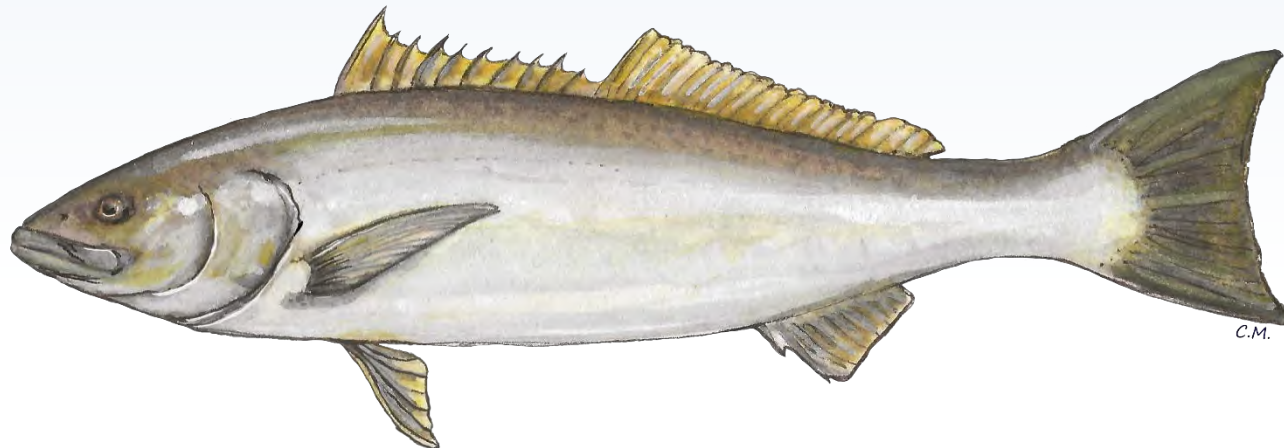
Significant Public Comments (N/A)**Recommendation (N/A)****Exhibits**

1. Staff summary and exhibits for Agenda Item 20 from the August 22-23, 2023 FGC meeting (*for background purposes only*), available online at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=214913&inline>
2. Department presentation

Committee Direction/Recommendation (N/A)



White Seabass Fishery Management



July 16, 2026

Presented to:

Marine Resources Committee

CA Fish and Game Commission

Presented by:

Miranda Haggerty

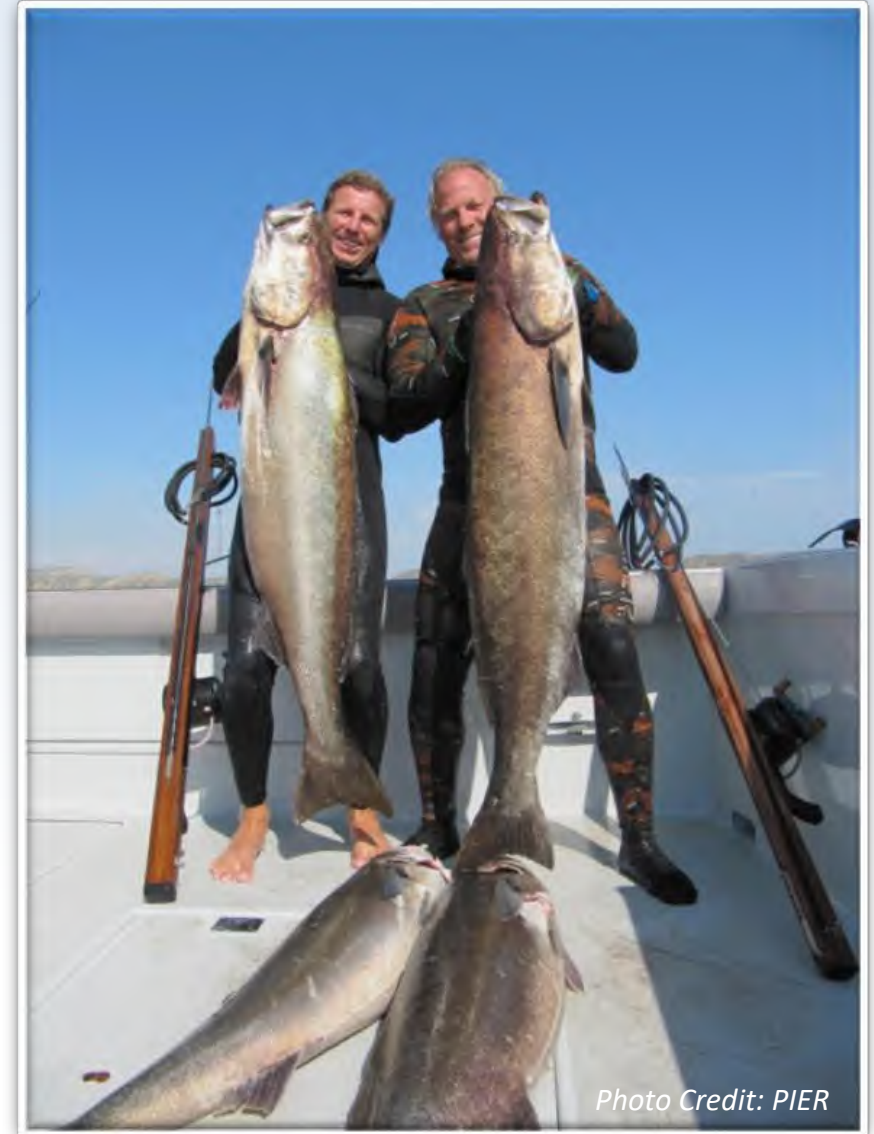
Environmental Scientist

Marine Region



Outline

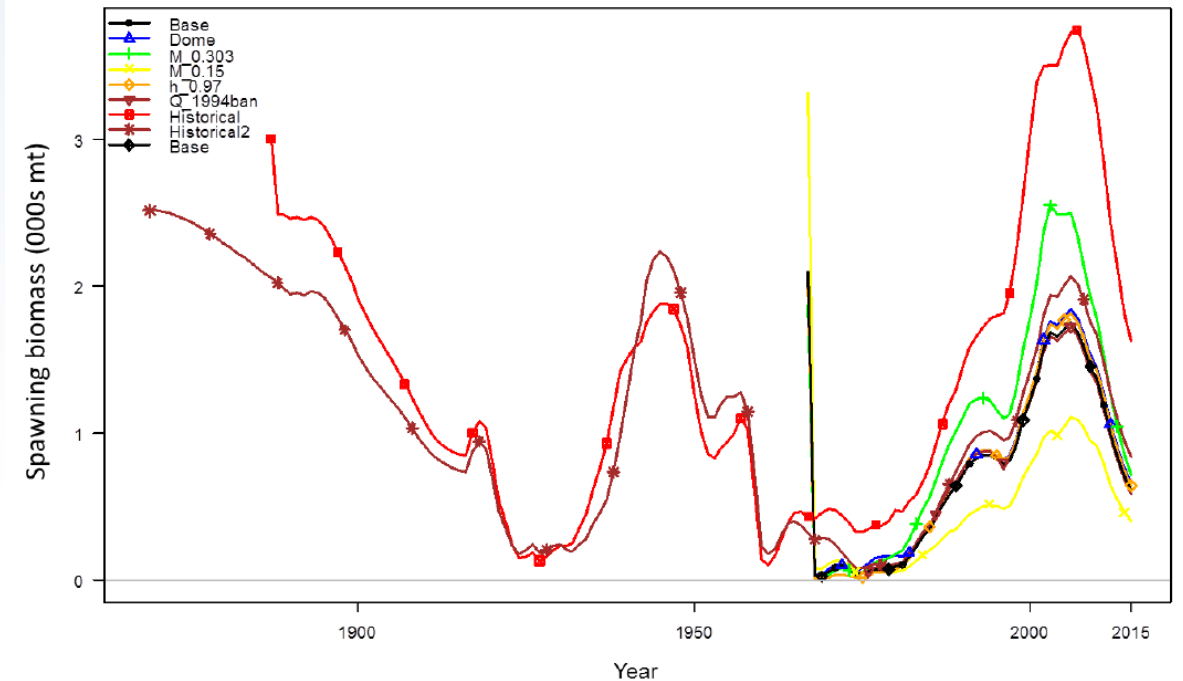
- Updated maturity assessment results
- Stakeholder Engagement
- Landings and Length Composition
- Potential Regulation Change Options
- Timeline/Next Steps





Stock Assessment

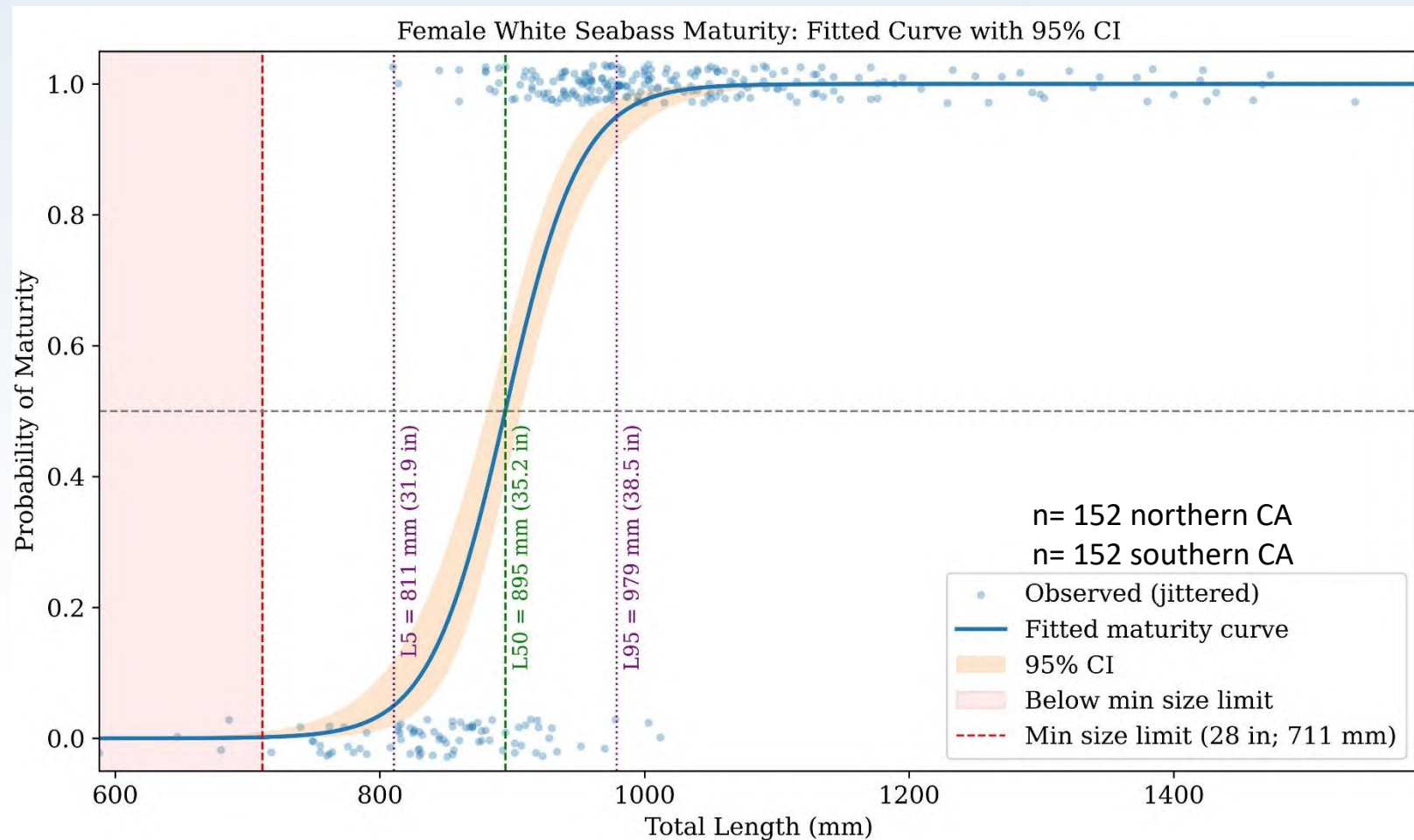
- Stock Assessment last conducted in 2016 (Valero and Waterhouse 2016)
 - Estimated stock at ~27% unfished biomass
 - Spawning stock biomass declining between 2006-2015
 - Importance of updating size at maturity estimates





Updated Size at Maturity Results

- Accepted for publication in CDFW Journal
- WSFMP Point of Concern
 - New biological information is discovered
 - Capturing immature females





Size at Maturity and Fishery Regulations

- Standard practice – consistent, scientifically-founded management



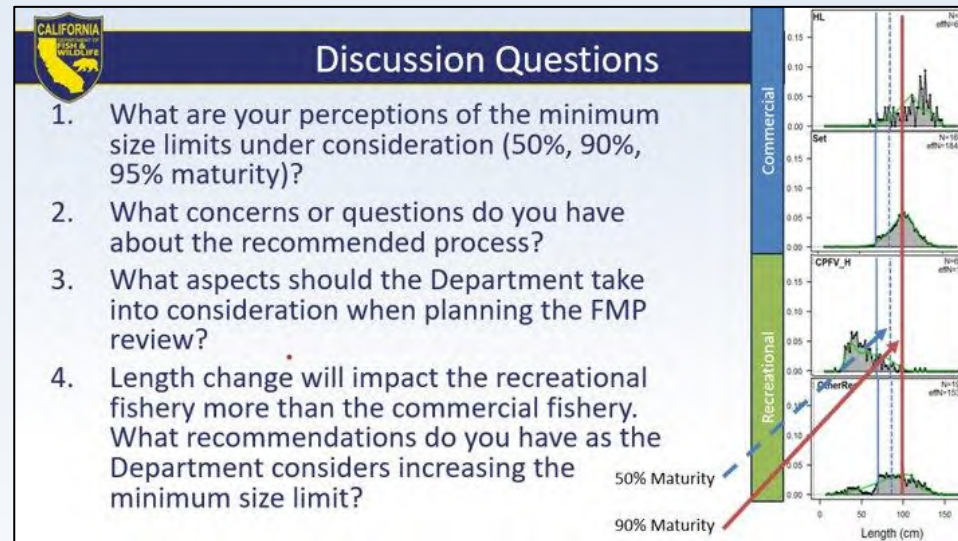
Photo Credit: iNaturalist

- Allows females to reproduce at least once before harvest
- State, federal, and intergovernmental bodies regularly use 50% as a minimum benchmark
- Basis in the Marine Life Management Act



Stakeholder Engagement

- Maturity results presentations
 - FGC -December 2025
 - MRC- March 2026
- Stakeholder Engagement Meetings/Webinars
 - November 18, 2025
 - March 4, 2026
 - May 12, 2026





Yield Optimization – Spawning Potential Ratio

Yield optimization – WSB is likely being fished at rates that exceed maximum yield

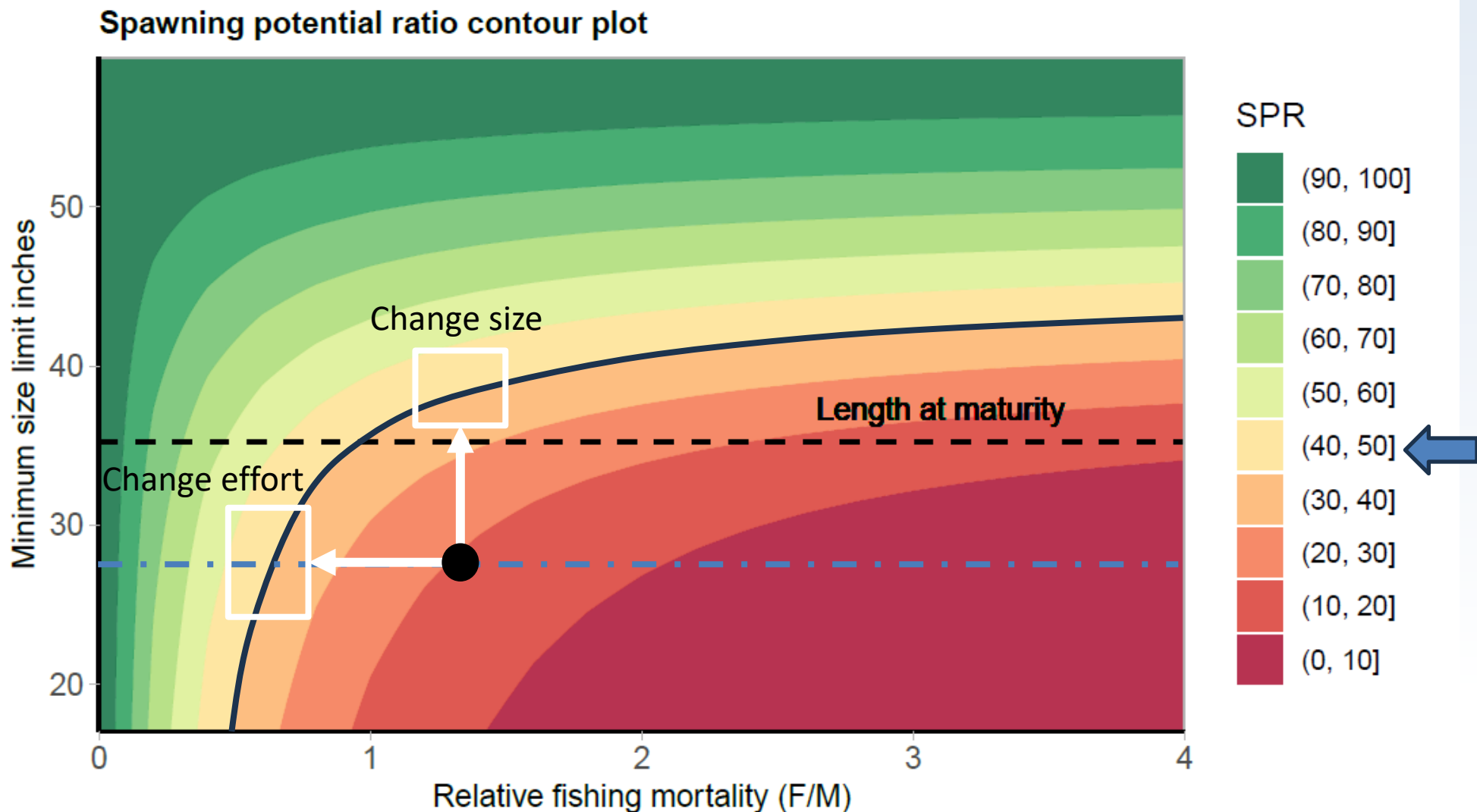
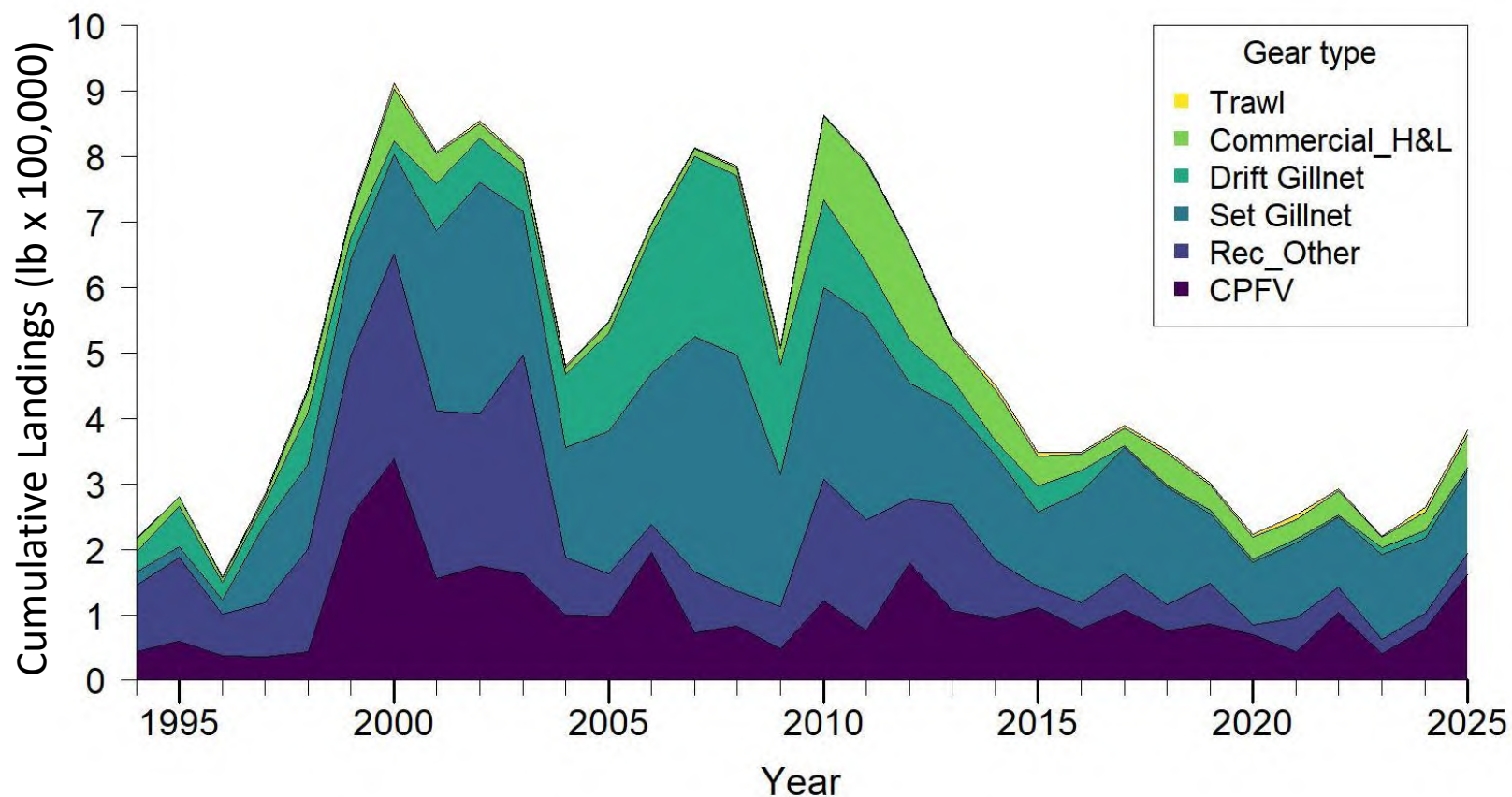


Figure from The Nature Conservancy's FishKit tool



White Seabass Landings

- WSB Landings 1994-2025
 - Optimum Yield – 1.2 million pounds





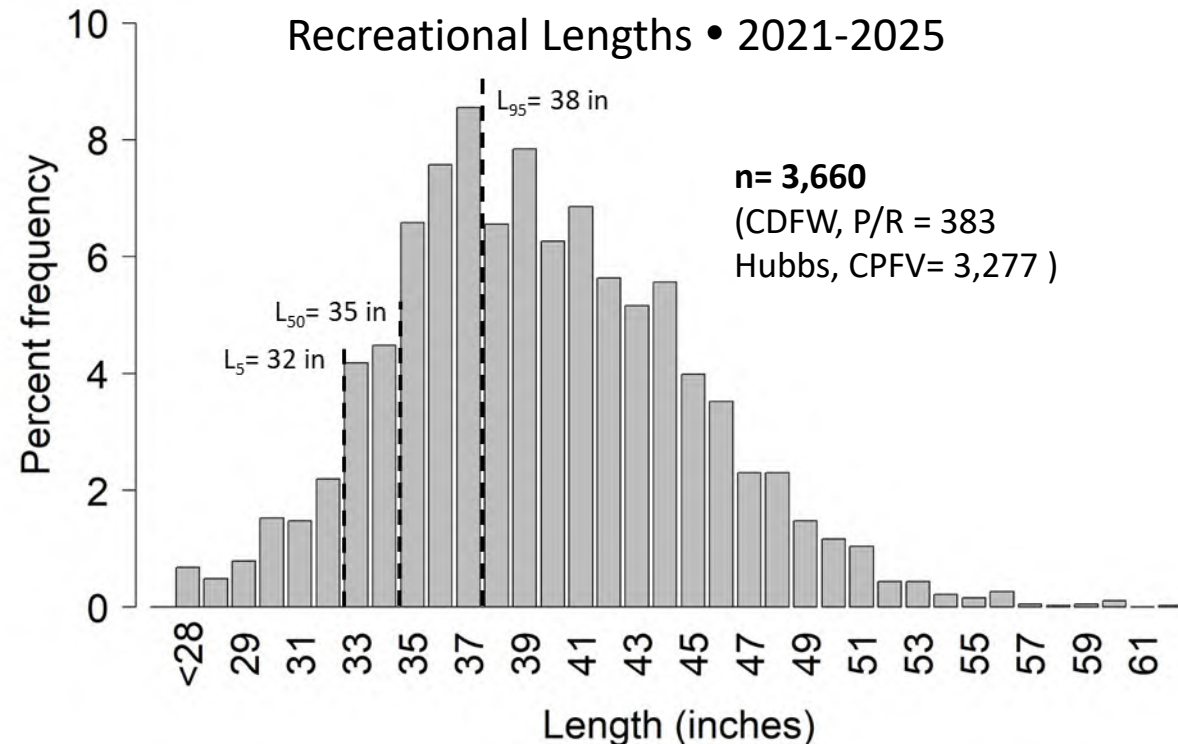
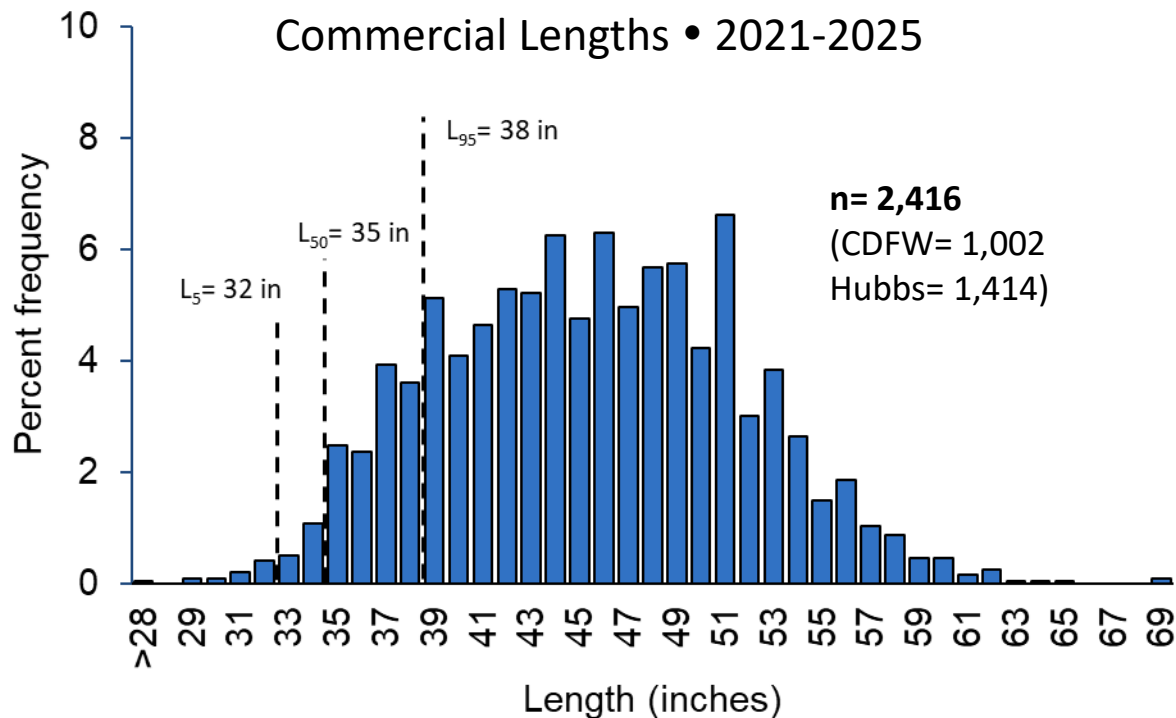
White Seabass Landings Length Composition

Commercial catch • 2021-2025

- 11% of current catch <38 in TL
- 2.5% of current catch <35 in TL
- 0.5% of current catch <32 in TL

Recreational catch • 2021-2025

- 37% of current catch <38 in TL
- 16% of current catch <35 in TL
- 5% of current catch <32 in TL





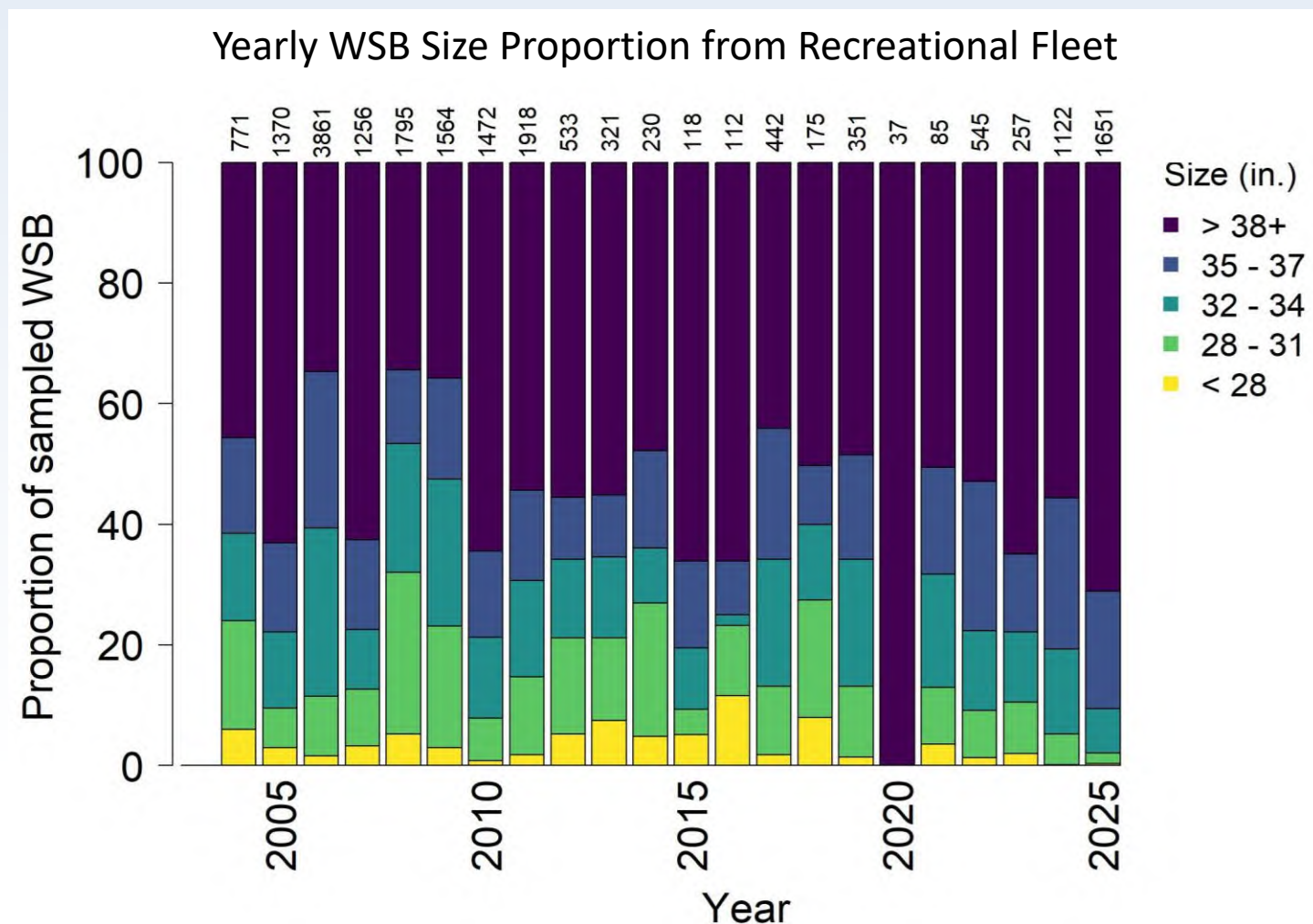
Minimum Size Limit Impacts - Recreational

Private Boats (2021 – 2025)

- 39% for <38 in TL (Range 27 – 70%)
- 27% for <35 in TL (Range 14 – 54%)
- 15% for <32 in TL (Range 8 – 28%)

CPFVs (2021 – 2025)

- 37% for <38 in TL (Range 27 – 52%)
- 15% for <35 in TL (Range 9 – 29%)
- 4% for <32 in TL (Range 1 – 10%)





Catch and Release Mortality

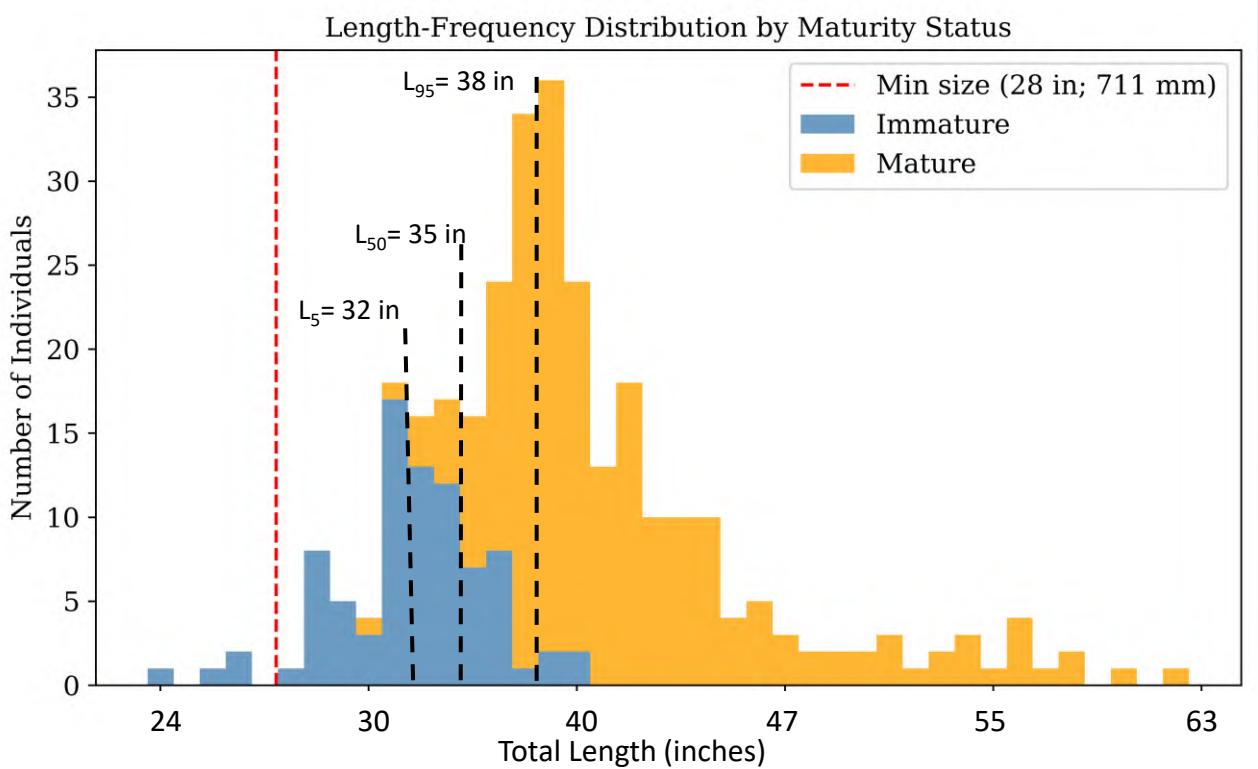
- Post release mortality assessments (MacNamara et al. 2025, Aalbers et al. 2004) suggest WSB are unlikely to experience discard mortality changes with increased size limit
 - Not realistic CPFV conditions
 - Post release predation
- Potential collaborations to re-assess discard mortality onboard CPFVs?





Regulation Proposal Options

1. Minimum Size Limit: 32-38 inches



2. Bag Limit

- 1 or 2 fish annually

	Percent Savings (28 in.)	
Year	Bag Limit- 1	Bag Limit - 2
2021	33%	14%
2022	31%	11%
2023	26%	11%
2024	28%	10%
2025	28%	10%

OR 3. Combined Minimum Size/Bag Limit



Regulation Proposal Options – Fillet Length

Minimum Size Limit: 32-38 inches

Total Length (inches)	Fillet Length Conversion (inches)
28	19
32	21.5
35	23.5
38	25.5



Photo credit: Channel Islands Sportfishing



Photo credit: iNaturalist



Photo credit: Surf Fishing In So Cal

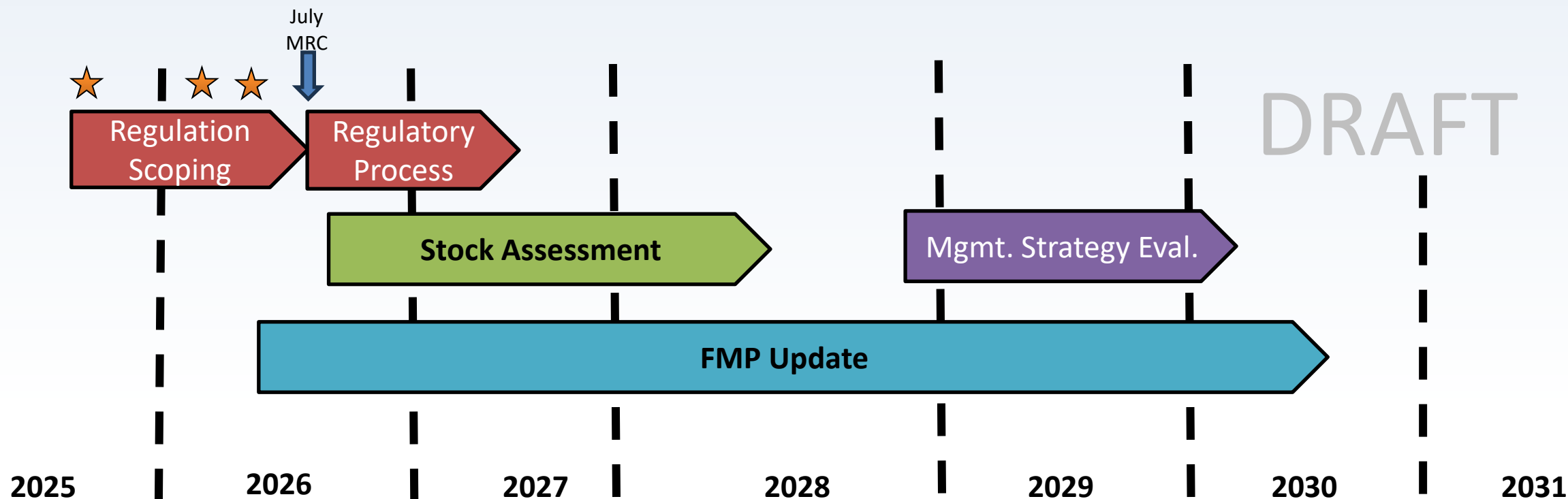


Photo Credit: Seafood Sherpa



Recommendation and Next Steps

- Increase the minimum size limit to 35 inches for the recreational fishery to protect sexually immature fish



Stars indicate stakeholder engagement meetings related to regulation change process.



Proposed Rulemaking Timeline

- Ongoing stakeholder and tribal engagement
- Notice Hearing: October 14, 2026
- Discussion Hearing: December 15, 2026
- Adoption Hearing: February 11, 2027
- Effective Date: by June 15, 2027



Thank You

mlmafisheriesmgmt@wildlife.ca.gov

[https://marinespecies.wildlife.ca.gov/
white-seabasstrue/](https://marinespecies.wildlife.ca.gov/white-seabasstrue/)

Staff Summary for June 17-18, 2026
For Background Purposes Only

6. Recreational Gear Restrictions for White Shark (Emergency)

Today's Item

Information ☐

Action ☒

Consider adopting emergency regulations to further protect white sharks during environmental conditions that increase nearshore aggregations of white sharks and increase the likelihood of humans interacting with sharks while fishing, by prohibiting specific gear types when recreational fishing from shore or within 1,000 yards of shore.

Summary of Previous/Future Actions

- **Today discuss and consider adopting emergency regulations** **June 17-18, 2026**

Background

White sharks (*Carcharodon carcharias*) are an important apex predator in the marine ecosystem and are protected from take under state and federal fishing regulations. Juvenile white sharks commonly aggregate in nearshore waters of southern California and have not been documented north of Santa Cruz.

Recently, several incidents have occurred in which juvenile white sharks were hooked by pier and shore anglers using heavy fishing gear, such as wire leaders and large hooks; this gear is commonly used to legally target other shark species but can also be used to illegally target white sharks. These fishing interactions can injure sharks and have resulted in the death of at least three white sharks in 2026. A previous incident in 2014 also involved a swimmer being bitten by a white shark that had been hooked by an angler on a pier.

This year, a strong El Niño event is expected to warm coastal water and increase the presence of juvenile white sharks in California coastal waters, making the sharks more susceptible to being hooked and significantly heightening the potential for human-shark interactions involving hooked sharks. Given these conditions, there is an immediate need to deter illegal targeting of white shark, improve survival of incidentally hooked white sharks, and reduce risk of incidents in which hooked sharks may pose a hazard to ocean users.

Based on the recent events and the anticipated increase caused by the upcoming El Niño event, the Department is requesting the Commission amend recreational ocean fishing regulations through the emergency rulemaking process to further protect white sharks from illegal take and incidental harm and to help prevent incidents between ocean users and hooked sharks (see Exhibit 1 for additional details).

The draft emergency amendments would require that any white sharks caught be released immediately and prohibit removing hooked white sharks from the water. The amendments would also prohibit the use of wire or other metallic lines or leaders and hooks larger than one and one-half inches in maximum inside measurement when fishing in ocean waters south of Pigeon Point (San Mateo County, 37° 11' N. lat.), the area where juvenile white shark aggregations are documented to occur and are expected to increase. For additional background, supporting information, and proposed regulatory text, see exhibits 2 and 3.

Staff Summary for June 17-18, 2026***For Background Purposes Only*****Significant Public Comments (N/A)****Recommendation**

Commission staff: Adopt the proposed emergency regulation for recreational gear restrictions for white sharks as recommended by the Department.

Department: Adopt the emergency regulation described in exhibits 2 and 3.

Exhibits

1. [Department memo, received June 2, 2026](#)
2. [Draft emergency statement and informative digest, dated May 13, 2026](#)
3. [Draft proposed regulatory language](#)
4. [Draft economic and fiscal impact statement \(STD 399\)](#)
5. [Department presentation](#)

Motion

Moved by _____ and seconded by _____ that the Commission finds, pursuant to Section 399 of the California Fish and Game Code, that adopting the proposed emergency regulation is necessary for the immediate conservation, preservation, or protection of birds, mammals, fish, amphibians, or reptiles, including, but not limited to, their nests or eggs and is necessary for the immediate preservation of the public peace, health and safety, or general welfare.

The Commission further determines, pursuant to Section 11346.1 of the Government Code, that an emergency situation exists and finds the proposed regulation is necessary to address the emergency.

Therefore, the Commission adopts the emergency regulation to amend sections 28.06 and 28.65, as discussed today.



Recreational Gear Restrictions for White Shark

July 16, 2026

Presented to:

Marine Resources Committee
CA Fish and Game Commission

Presented by:

John Ugoretz
Pelagic Fisheries Program Manager
Marine Region



Emergency Regulations

- Prohibit removing hooked white sharks from water and requiring immediate release
- South of Pigeon Point (San Mateo County):
 - **Prohibit** the use of **wire lines and leaders** or **hooks > 1.5” in maximum inside measurement** when:
 - **Angling from shore** (including beaches, banks, piers, jetties, breakwaters, docks, and other man-made structures connected to the shore)
 - **Angling within 1,000 yards of mean high tide line**



Photo: Dr. Chris Lowe



Comments in Favor

- 5 Commenters at the emergency adoption hearing
 - Multiple recreational fishing representatives
- 67 Written comments after emergency adoption
 - Supported protection of white sharks
 - Recommended other restrictions
 - Prohibiting chum and live bait
 - Further limit hook size
 - Prohibiting Kevlar leaders and limit total line test
 - Prohibit the use of gaffs on piers
 - Prohibit the use of drones to place bait offshore



Comments in Opposition

- 61 written comments received after emergency adoption
 - White sharks already protected
 - Impacts to fishing for legal species:
 - mako, blue, thresher, soupfin, sevengill, sixgill, smoothhound, prickly, and leopard sharks as well as bat rays
 - Forced use of smaller hooks may cause gut hooking
 - Fish will break off and trail monofilament
 - No input from anglers



Mako and Blue Sharks

- Extremely rare to be taken from piers or beaches
- Unlikely to be taken within 1,000 yards of shore
- Not significantly impacted by the emergency regulation



Photo: CDFW



Thresher Sharks

- Taken from piers and beaches, though majority taken offshore
- Niche fishery, relatively few participants statewide
- Can be taken with monofilament, though larger individuals may break off
- Large hooks unnecessary



Photo: CDFW



Smoothhound Sharks

- Smaller sharks (largest 4-5')
- Readily landed without wire leader and with small hooks



Photo: J. Seiler, CDFW



Sevengill, Sixgill, and Prickly Sharks

- Occasionally taken from piers and beaches
- Niche fishery, relatively few participants statewide
- Smaller sharks can be taken without wire leader
- Larger sharks more likely to be lost



Photo: A. Mutti CDFW



Soupfin and Leopard Sharks

- Taken primarily from beaches and jetties, in particular within bays
- Can be taken with monofilament, though larger individuals may break off
- Large hooks unnecessary



Photo: A. Mutti CDFW



Bat Rays

- These species are sometimes taken off piers and beaches
- Wire leader not needed to land
- Large hooks not needed to catch



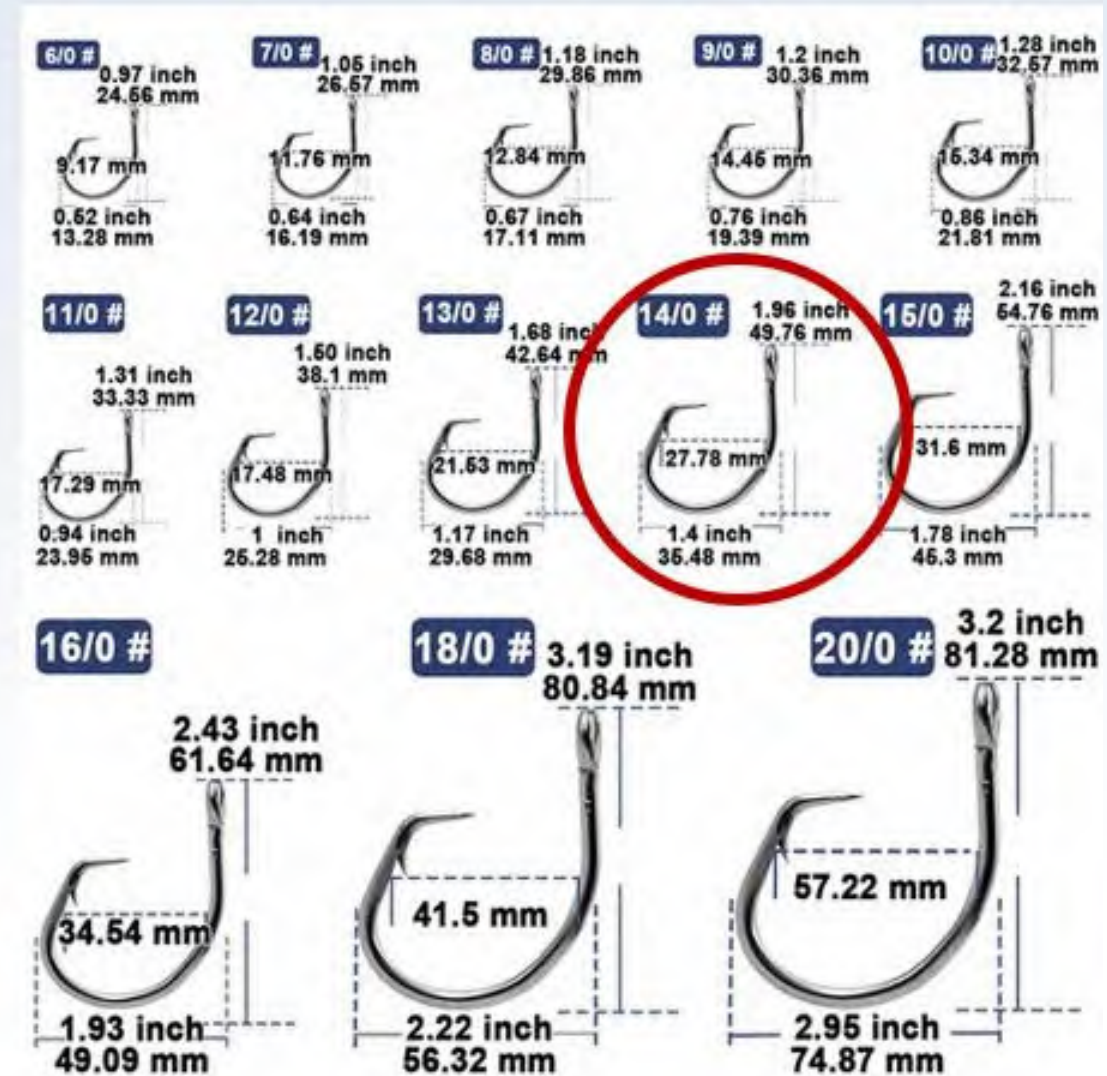
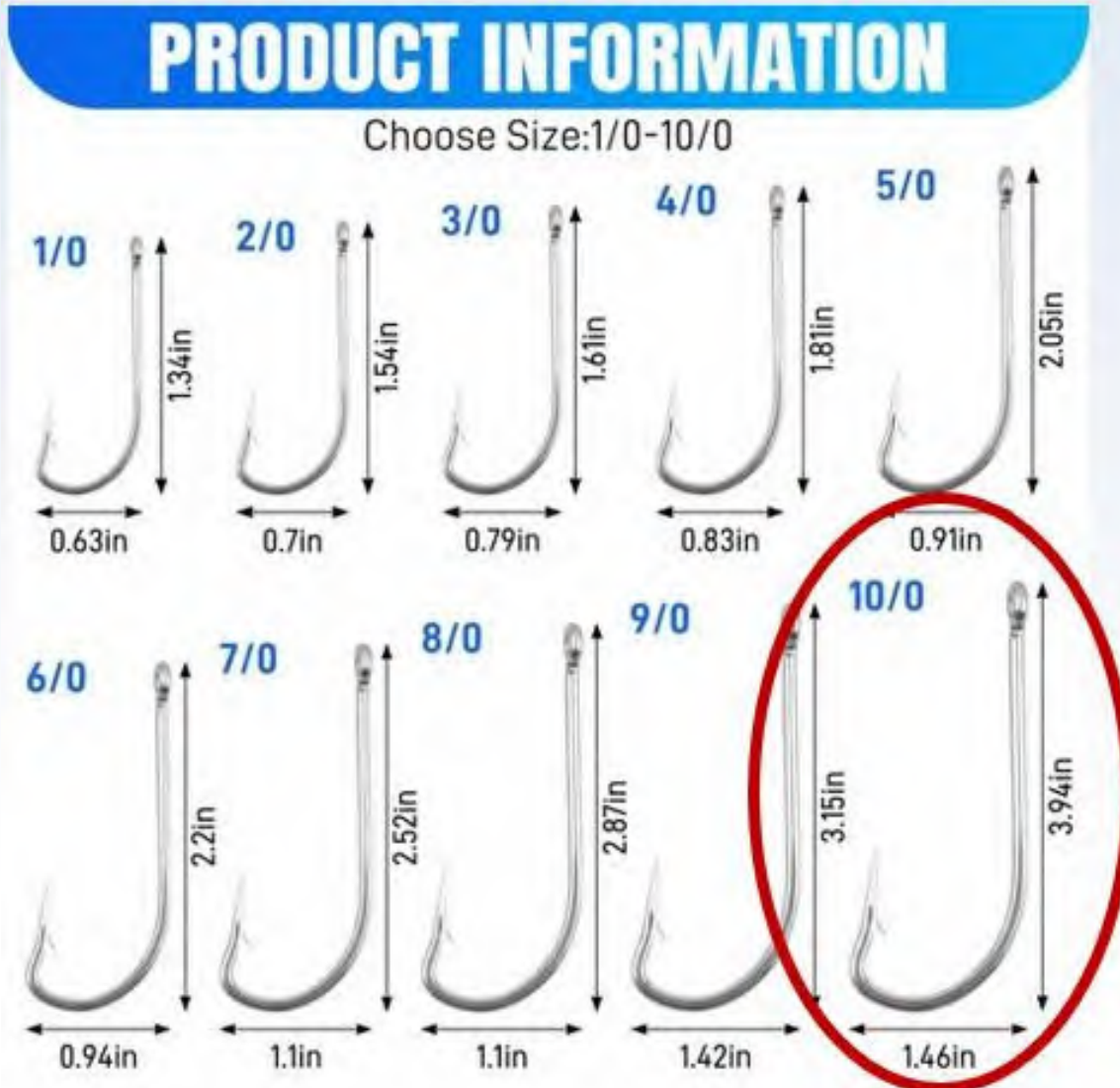
Successful Shark Angling



Video Credit: @REMYLEWIS17
<https://www.instagram.com/reel/DaAxOhHB4Al/>



Hook Size



Images from Amazon.com



Hook Examples



CDFW Photo



CDFW Photo

10/0 J-Hook and 14/0 Circle Hook ~ 1 ¼" Inside Diameters



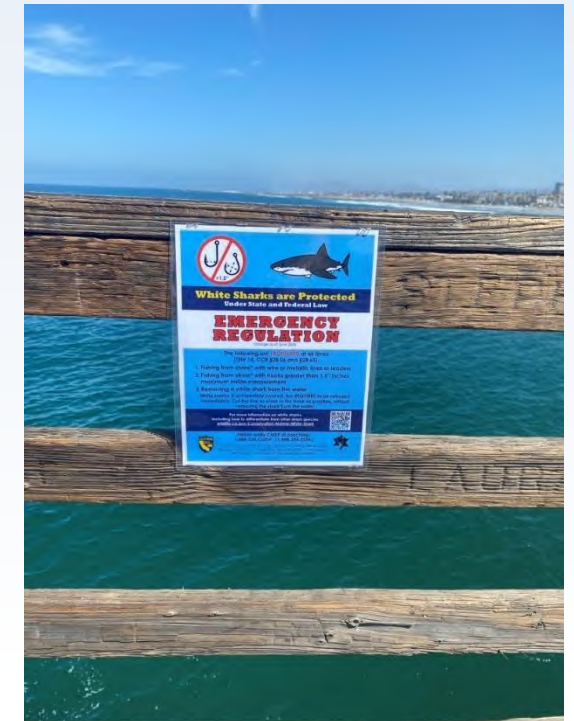
Harm to the Environment

- Small hooks lead to gut-hooking
 - Previous slides demonstrate these are not small hooks
 - More damage from hooks attached to wire that doesn't break
- Long trailing monofilament
 - More likely to break between hook and edge of mouth
 - Trailing wire will not break if entangled



Next Steps

- Emergency regulations were just implemented
- Continue to gather feedback and results
- Consider emergency readoption in October
- Potential rulemaking notice in December
 - Consider possible exception for smaller wire leaders
 - Need to define
 - Needs to be enforceable



CDFW Photo

Thank You

The logo of the California Department of Fish & Wildlife is a shield-shaped emblem. It features a light blue background with a darker blue outline. Inside the shield, the word "CALIFORNIA" is written in large, bold, white capital letters at the top. Below it, the words "DEPARTMENT OF FISH & WILDLIFE" are written in smaller, bold, white capital letters. In the center of the shield is a white silhouette of the state of California.

AskMarine@Wildlife.ca.gov

California Fish and Game Commission Emergency Regulations for Title 14, Section 28.06, Shore Fishing Gear Restrictions and White Shark Take 2026

General Responses to Comments Received During the Public Comment Period

Comments received during the public notice period for the Shore Fishing Gear Restrictions and White Shark Take Emergency action were grouped based on similarity in topic or concern. At the June 17, 2026 Fish and Game Commission (Commission) meeting, 5 oral comments were received in support of the proposed regulation change.

Between June 17 and the end of the comment period on June 30, 2026, the Commission received 451 comments in support of the emergency regulation (including 31 unique comments and 420 form letters), and received 89 comments opposing the action (including several template letters).

Additional comments were received outside the time period allowed by Government Code section 11349.6 (including nearly 800 form letters in support and 4 individual comments opposed). The Commission is providing general responses to all received comments below.

General Responses to the public comments on the proposed regulations were focused on the following topics:

Support for Regulation Change

Numerous commenters expressed support for the proposed regulations and encouraged the Commission to take further actions to protect other shark species. These commenters highlighted the potential for dangerous interactions between hooked sharks and swimmers, the need to protect apex predators, and the loopholes provided by the current regulations. They requested additional restrictions, including prohibiting the use of all chum and live bait in the water, further limiting hook size, prohibiting the use of Kevlar leaders and limiting total line test, prohibiting the use of mechanical gaffs on piers, and prohibiting the use of drones to place bait offshore.

Response: The Commission thanks the commenters for their support. Recommendations to further restrict fishing for other species of shark and additional measures to restrict shark fishing gear, chumming, and other activities are outside the scope of the emergency. The emergency regulation is intended not only to help prevent the take of white shark during a period when a larger number of white sharks are expected to be present, but also to help reduce the potential for interactions with swimmers and hooked sharks near beaches and piers. The Commission feels the emergency regulations will adequately meet the need, and that the additional recommendations could be considered in future rulemakings if needed.

Enforcing Current Regulations

Commenters noted that white shark take is already prohibited, and that if Department of Fish and Wildlife enforcement staff enforced the current law, the emergency regulation would not be necessary. They also state that the emergency regulations will not address the current problem due to the lack of enforcement.

Response:

The Commission acknowledges that existing regulations prohibit the recreational take of white shark (Title 14, California Code of Regulations, Section 28.06) and California law prohibits placing any shark bait, shark lure, or shark chum into the water within one nautical mile of any shoreline, pier, or jetty when a white shark is either visible or known to be present (California Fish and Game Code Section 5517). These restrictions, however, require substantiating evidence that an individual was intentionally seeking to take a white shark, or had knowledge that a white shark was known to be present. Given that several other shark and ray species may be taken using the same fishing gear, it is very difficult to successfully enforce these restrictions, as evidenced by multiple highly publicized events on both social media and news media platforms this year. Additionally, the intent of the emergency regulations is not only to help protect white sharks, but to help prevent interactions between any species of hooked sharks, whether intentional or accidental, that are connected with metal lines to a rod on the shoreline or a pier with nearby swimmers and other ocean users. Eliminating the use of wire leaders and lines and limiting the size of hooks used will substantially decrease the potential for a large shark to remain on the line and harm an ocean user, while being fought by an angler, or for a swimmer to become entangled in or harmed by the wire.

Impact on Fishing for Other Shark Species

Commenters expressed concerns that prohibiting the use of wire/metallic leaders would unnecessarily impact legal fishing for a variety of other shark species, including mako, blue, thresher, soupfin, sevengill, sixgill, smoothhound, prickly, and leopard sharks as well as bat rays. Many commenters indicated a concern that this amendment is a coastwide gear ban on all species of shark.

Response:

The Commission recognizes that prohibiting the use of wire and metallic lines and leaders may make it more difficult to successfully land other large shark species taken from the shore or within 1,000 yards of shore. Mako and blue sharks are very rarely taken from the shoreline or piers, and the impact of the emergency regulations on fishing for these species would be extremely low. While catches of these species from piers is known to occur, Department sampling in the California Recreational Fishery Survey has not documented a single occurrence of either species in the last 20 years. Smoothhound sharks, both brown and gray, have a maximum length of between 4 and

5 feet and are much smaller on average. These species can be readily landed without the use of wire leaders. Thresher sharks are taken from piers in Southern California. While these sharks can be larger, their mouths and teeth are much smaller than similarly sized species, and they have been known to be taken without wire leaders. Sevengill, sixgill, and prickly sharks are far less common and only taken by a very small number of anglers fishing from beaches and piers. While larger individuals would be unlikely to be successfully landed without wire leaders, the overall impact of eliminating this take would not significantly change the total statewide take. The majority of sevengill shark recreational fishing effort occurs in San Francisco Bay, which is not part of this emergency rulemaking. Prickly sharks are associated with colder, deeper water, and the geographic locations in which a shore-based angler is likely to encounter one are extremely limited. Additionally, there is no active fishery for this species, and catches are extremely rare. Smaller leopard and soupfin sharks can be taken using monofilament leader and are regularly landed successfully without the use of wire or metallic leaders. Larger individuals will likely break a monofilament leader and may not be successfully landed. While this may reduce the total take of these species, the ability to catch them will not be eliminated. Bat rays do not have sharp teeth like the shark species and can be readily landed with monofilament leaders even at very large sizes.

The Commission notes that the regulation is limited to the shoreline (including piers, jetties, and other manmade structures attached to the shoreline) and out to 1,000 yards from the mean high tide. Additionally, the regulation is not statewide and extends only from Pigeon Point (San Mateo County) to the U.S. / Mexico international border.

Potential Harm of Gear on Sharks and the Environment

Commenters claimed that if wire or metallic leaders are not allowed, fish with sharp teeth will break off and be left with trailing monofilament that could become entangled and cause the fish to suffer and die. Some commenters also expressed concern for increased amounts of monofilament remaining in the ocean creating entanglement hazards for marine mammals, sea turtles, seabirds, and fish. Other commenters stated that the hook size limit would lead to smaller hooks being swallowed by fish (gut hooking) causing them further harm after breaking off.

Response:

The Commission notes that allowing larger shark species to quickly break off is the intent of the regulation. In the case of lighter test line, where fish with sharp teeth would easily sever the line, it will not leave long trailing monofilament but rather a very short piece only the length between the hook in the fish's mouth to their teeth. Heavier test line would break in the same manner when catching larger sharks, with the sharp teeth breaking the line near the hook in the shark's mouth. This is not anticipated to lead to long trailing monofilament that would either become entangled or later become an

entanglement risk to other species. Scientific literature supports leaving hooked sharks in the water and cutting the line to limit fight time and avoid additional injuries and indicates that even gut-hooked fish survive better when the line is cut (Fobert, et al., 2009, Horton, et al. 2023, Gallagher, et al. 2017).

Conversely, wire or metallic leaders and line are unlikely to be broken by even larger sharks' teeth. In this case, it is more likely that the attached monofilament line would break either due to the shark's weight or through abrasion against the shark's skin, leaving the wire leader and a portion of monofilament line attached to the shark to potentially become entangled.

The regulation limits hook size to less than 1.5" maximum inside measurement. At this size, all but the very largest species would not be likely to swallow the hook. In the case of larger species, such as a very large leopard shark or a large thresher shark, if the shark breaks off the line the hook would eventually break down or be expelled and, because it would not be larger than 1.5", would be unlikely to cause significant harm and are expected to be shed within 1 year (Bègue, et al., 2020). Hooks larger than 1.5" would be more likely to cause significant internal damage, especially if connected to a wire leader that does not break in the case of a shark swallowing a hook and allows the angler to continue fighting the shark with the hook embedded in the shark's gut.

Impact to Scientific Research

One commenter stated that the regulation would eliminate research catch, which requires steel leaders to conduct.

Response: White shark take for scientific research is allowed under the authority of a Scientific Collecting Permit pursuant to Section 1002, California Fish and Game Code, and as referenced in Title 14, California Code of Regulations, Section 28.06. Scientific Collecting Permits specify the gears allowed and can include the use of wire or metallic lines and leaders. This type of activity, as well as scientific research for other species, is not considered recreational fishing and is not constrained by the emergency regulation.

Constitutional Right to Fish

Two commenters indicated that the emergency regulation was unconstitutional and that anglers had the right to use any gear necessary to take legal species.

Response: The California Constitution does not provide an absolute right to fish. Article 1, Section 25, of the California Constitution states "The people shall have the right to fish upon and from the public lands of the State and in the waters thereof...provided, that the legislature may by statute, provide for the season when and the conditions under which the different species of fish may be taken." In 1918, the California Supreme Court considered whether a law providing for the licensing of fishermen was unconstitutional because it violated Article 1, Section 25. The court rejected the

argument, finding that the provision authorizing the Legislature to fix the seasons and conditions under which fish are taken was intended to leave the matter in under the Legislature's discretion [Paladini v. Superior Court (1918) 178 Cal. 369]. As recently as 1995, a court reaffirmed the qualified, not fundamental, right to fish and that the language of the State Constitution was not intended to curtail the ability of the Legislature (or the Fish and Game Commission through legislated authority) to regulate fishing [California Gillnetters Association v. Department of Fish and Game (1995) 39 Cal.App.4th 1145]. Section 25 must be read in connection with article 4, section 20 (formerly section 25½), which states that the Legislature may enact appropriate laws for protection of fish and game, and may delegate to the Fish and Game Commission such powers relating to protection and propagation of fish and game [Ex parte Parra (1914) 24 Cal. App. 339, 340]. In that respect, the California Supreme Court found it "most apparent" that the purpose of (now) article 4, section 20 "was to clothe the Legislature with ample power to adequately protect the fish and game of the state." Further, the California Supreme Court has long declared that the power to regulate fishing has always existed as an aspect of the inherent power of the Legislature to regulate the terms under which a public resource may be taken by private citizens [In re Phoedovius (1918) 177 Cal. 238, 245-246; People v. Monterey Fish Products Company (1925) 195 Cal. 548, 563]. This regulatory power clearly includes the regulation of the tackle used to catch fish as found throughout Commission regulations.

Use Education Rather than Regulations

Several commenters recommended that California implement mandatory education programs for shark anglers, similar to those found in some east coast states, rather than implementing new gear restrictions.

Response: While educational programs could increase angler awareness of existing regulations and help ensure that accidentally hooked white sharks are successfully released, they would not achieve the primary purposes of the emergency regulation. Importantly, people who are intentionally targeting white sharks and illegally taking them would not be expected to change this behavior with educational programs. Also, an important component of the need for these regulations is to help reduce the potential for a large, hooked shark attached to a wire or metallic line to bite a person in the water, as occurred in 2014, or for a swimmer to become entangled in the line and injured by it. Educational programs would not reduce this potential, without also removing the ability to use wire or metallic lines or leaders.

Emergency Justification

Several commenters stated that the emergency finding relies heavily on a limited number of incidents. Some incidents are several years old and do not warrant an emergency regulatory change. Commenters also state that the projected climate

changes are not confirmatory and do not justify emergency regulations and projections regarding future conditions.

Response: The Commission's determination that an emergency regulation is warranted is supported by current environmental and biological conditions that present an immediate threat to public safety. There is evidence of a significant rise in shark activity in southern California waters this year. This pattern aligns with the established scientific understanding that juvenile white sharks migrate into Southern California during the summer months seeking warmer waters. Warm-water events historically intensify their presence and shift their range northward. Additionally, the 20 juvenile white sharks caught in a single day off the Hermosa Beach pier demonstrate an unusual and concentrated increase of sharks into highly populated recreational and fishing zones. Finally, NOAA has declared that El Niño conditions exist at this time and the forecasted warm-water conditions for the remainder of the year support the expectation that shark presence will continue to rise. Delaying action until a standard rulemaking is completed would leave the public exposed to documented and escalating risk.

Literature Cited

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<https://doi.org/10.1016/j.fishres.2023.106760>

California Fish and Game Commission
Sample Comments Supporting White Shark Emergency Regulations

June 2026

1. [Email from David McGuire, Director, Shark Stewards](#), received June 16, 2026
2. [Email from Maria Korcsmarcos](#), received June 22, 2026
3. [Email from Kinga Phillips, journalist, Executive Producer and Host of Shark Week](#), received June 23, 2026
4. [Letter from nine researchers from University of San Diego School of Law, University of Miami, City University of New York, New York University, and Indiana University Indianapolis](#), received June 23, 2026
5. [Email from Grace Van de Pas](#), received June 23, 2026
6. [Letter from Maria Brown, Board Vice President, Greater Farallones Association](#), received June 24, 2026
7. [Email from Sofya Sadiq](#), received June 24, 2026
8. [Email from Jennifer Conley](#), received June 30, 2026
9. [Email from Dominique Cano-Stocco](#), received June 30, 2026
10. [Email from Christopher Jones](#), received June 30, 2026
11. [Email from Nick DeNezzo, Marine Conservation Artist, Nicholas DeNezzo Fine Art](#), received June 30, 2026

From: David McGuire
Sent: Tuesday, June 16, 2026 8:42 PM
To: FGC
Subject: Approve: Recreational Gear Restrictions for White Shark (Emergency) Item 6 June 17, 2026
Categories: Exhibit

Dear President Sklar and California Fish and Game Commissioners,

This letter is to urge your support of the proposed Finding of Emergency and Statement of Proposed Emergency Regulatory Action Emergency Action to Amend Sections 28.06 and 28.65 Title 14, California Code of Regulations Re: Recreational Gear Restrictions for White Shark

With the imminent El Niño in 2026, a shift in range of white shark demography associated with warming waters and the public safety risk posed by anglers targeting sharks using gear that is harmful to protected white sharks, habituates sharks near public beaches and piers, we urge you to approve of the proposed emergency regulation by the California Department of Fish and Wildlife with additional restrictions involving mechanical gaffs, drine baiting and use of attractants for sharks by recreational fishing.

Shark Stewards has been tracking shark catch in Southern California in social media and documented that fishermen are targeting white sharks under the guise of fishing for other sharks, despite its illegality under California law AB 2109. Under [California Code of Regulations \(Title 14, § 28.06\)](#) and Fish and Game Code Section 5517, white sharks may not be taken or possessed at any time, except with a special scientific or educational purposes.

However, a loophole in the law only makes it illegal to fish for sharks only “when white sharks are near.” This loophole gives fishermen targeting white sharks an out, while also allowing fishermen to harm a protected species with impunity. Social media rewards this illegal behavior. Since AB 2109 came into law we have documented more than thirty instances of fishermen catching white sharks on social media. Dead white sharks have washed up on beaches with evidence of fishing gear and damage at [Torrey Pines](#), [Carlsbad](#) and [Santa Cruz](#). The shark in the instagram post below by Terrafirmtackle was caught twice and shows clear signs of gill damage.

It is strictly **illegal to intentionally fish for, catch, or possess white sharks** in California waters. Governed by the California Department of Fish and Wildlife (CDFW), these protections require anglers to immediately release any white shark that is accidentally hooked, without removing it from the water

The news story of the young man widely celebrated on the news and social channels for releasing a white shark on April 10 at the Hermosa Pier, followed by a [targeted team effort Saturday](#) is a glaring example of this loophole. The excuse that they thought they were catching Mako sharks is absurd. We request an investigation into this incident and citations issued to the perpetrators. A witness La Playita restaurant owner Harold Cohen observed five sharks being caught. With over 20 sharks reported caught it is likely that one shark was caught and released more than once. Fighting a shark and bringing it to the pier level to cut the line exhausts the animal and threatens its survival. These sharks are gaffed to raise them and cut the line, injuring sensitive gills or rostrum. Leaving hooks and lines in the jaw impair their feeding and risks infection.

Attracting and catching large sharks nearshore also puts the public safety at risk. On the morning of Saturday July 5, 2014, distance swimmer Steven Robles was bitten by a 7-to-10-foot juvenile white shark while swimming off the Manhattan Beach Pier in California. The shark, which had been hooked by a fisherman for 40 minutes before the line was cut. The agitated shark bit Robles in the torso and hand before releasing him, causing extreme injury. Other near misses have been documented with sharks passing close beneath surfers at public beaches where fishing is occurring.

SHARK STEWARDS IS PETITIONING THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE AND THE FISH AND GAME COMMISSION TO INCREASE REGULATION FOR THE PUBLIC SAFETY AND PROTECT THREATENED SPECIES.

We support a regulation for all public piers and beaches in California that will:

prohibit chum and live bait in the water;

limiting hook size to no greater than 1/0;

prohibit heavy wire or kevlar leaders;

prohibiting line strength greater than 60 test;

prohibit mechanical gaffs on piers;

prohibit the use of drones to place bait offshore;

Banning nearshore shark attractants (not just for white sharks), drone fishing and banning shark fishing entirely has been applied in towns in Florida and South Carolina to protect the public safety. As a leader in shark and marine conservation, California can demonstrate sound policy that allows recreational and subsistence fishermen to fish safely and responsibly.

Linked here is a [petition](#) link with public support for this emergency regulation.

Thank you for your comments and consideration.

David McGuire, MEH

Director, Shark Stewards

m:415 350-3790 | e:sharkfilms@gmail.com | w:www.sharkstewards.org

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Shark Stewards is a non-profit project of the Earth Island Institute

From: maria korcsmaros [REDACTED]
Sent: Monday, June 22, 2026 6:38 PM
To: FGC
Subject: Fishing regulations for sharks

Categories: Exhibit

Hello,

I am a shark survivor, my incident was in Corona Del Mar state beach on May 29th, 2016. Another friend of mine , shark survivor, Steven Robles was bitten in July 4th in 2014 after a pier fisherman hooked a great white and it broke the line.

We would like to thank you for your emergency regulations just passed last week and encourage you to continue protecting the general public by enforcing this as strictly as you can.

Also looking into chumming near shore to attract fish but in all likely attracts sea lions and hence bigger predators like sharks.

My contact information below:



Maria Korcsmaros

Race Director:

<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.run4sharks.org%2F&data=05%7C02%7Cfgc%40fgc.ca.gov%7Ccccb75a490a54baa125e08ded0c805f3%7C4b633c25efbf40069f1507442ba7aa0b%7C0%7C0%7C639177754703425321%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIlwLjAuMDAwMCIslIAiOiJXaW4zMilslkFOljoitWFBpClslldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=prh%2Blqx2dTmUsUVQcfPONM7vTx%2BEjd3R89Md55Po9xs%3D&reserved=0>

SoCal Chair Shark Stewards:

<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.sharkstewards.org%2F&data=05%7C02%7Cfgc%40fgc.ca.gov%7Ccccb75a490a54baa125e08ded0c805f3%7C4b633c25efbf40069f1507442ba7aa0b%7C0%7C0%7C639177754703455693%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIlwLjAuMDAwMCIslIAiOiJXaW4zMilslkFOljoitWFBpClslldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=n9smFNTEL%2BqSbTrGwouzywiaBd2p%2BhU92rSZ0%2FABL1s%3D&reserved=0>

Owner: Kissed By a Shark Wellness

<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.kissedbyasharkwellness.com%2F&data=05%7C02%7Cfgc%40fgc.ca.gov%7Ccccb75a490a54baa125e08ded0c805f3%7C4b633c25efbf40069f1507442ba7aa0b%7C0%7C0%7C639177754703455693%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIlwLjAuMDAwMCIslIAiOiJXaW4zMilslkFOljoitWFBpClslldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=n9smFNTEL%2BqSbTrGwouzywiaBd2p%2BhU92rSZ0%2FABL1s%3D&reserved=0>

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ZHMWQoxo9DI%3D&reserved=0



From: Kinga Philipps
Sent: Tuesday, June 23, 2026 7:01 PM
To: FGC
Subject: Public Comment IN SUPPORT of Emergency Regulations: White Sharks

Categories: Exhibit

To the Commissioners and Department Staff,

I am writing as a California resident, diver, spear fisher and ocean/shark conservationist to express my full and unreserved support for the emergency regulations passed unanimously on June 17, 2026, which ban wire leaders and restrict hook sizes to a maximum of 1.5 inches inside measurement from Pigeon Point south.

While certain recreational angling groups have publicly criticized these restrictions under the guise of "animal welfare" and "constitutional rights," their arguments fundamentally misrepresent the reality of land-based shark fishing, modern tackle engineering, and the original intent of California's legal framework. I urge the Commission to uphold these protective measures permanently and to address critical omissions regarding modern technology.

I would like to submit the following points and scientific evidence for the official record:

1. Large Hooks and Wire Leaders Are Solely Necessary for Prohibited Apex Predators:

Opponents argue that restricting hook size to 1.5 inches and banning wire leaders will cause incidental harm to smaller, legally targeted species like leopard sharks (*Triakis semifasciata*). This argument is technologically and biologically incorrect.

Leopard sharks average 4 to 5 feet in length, possess small mouths, and feed primarily on benthic invertebrates (crabs, clams) and small fish. They do not possess the broad, bone-hinged jaw structures or razor-sharp, serrated teeth that require heavy wire leaders or hooks exceeding 1.5 inches. Anglers sustainably targeting legitimate shore species can, and routinely do, safely catch them using smaller circle hooks (such as sizes 1/0 to 5/0) and heavy monofilament or fluorocarbon leaders.

I am well-versed in this fishing technology as we utilize a variety of hooks and gear in our research work.

The only functional reason a shore-based angler utilizes an industrial wire leader and a massive hook exceeding 1.5 inches is to handle the immense weight, shearing power, and abrasive skin of massive apex predators, most notably juvenile and adult White Sharks (*Carcharodon carcharias*), which are fully protected under California law (AB 2109). The restriction does not punish everyday surf fishers; it deliberately removes the specialized toolkit required to pull apex predators into the surf line.

Mako sharks are apex, open-ocean predators that do not inhabit shallow beach surf zones; they are targeted almost exclusively from offshore vessels, which are unaffected by this shore-based regulation. Thresher sharks, whose populations are only recently recovering after decades of devastating historical pressure from commercial drift gillnets, are open-water schooling fish feeders. They are not a resident shoreline species. Invoking these species to defend land-based, heavy-tackle shark fishing is a logical fallacy designed to obscure the fact that the only large sharks consistently accessible from the sand are protected juvenile White Sharks and vulnerable nearshore Sevengills.

2. The Physiological and Lethal Toll of Land-Based "Catch and Release."

Opponents frame catch-and-release fishing as a harmless, conservation-neutral hobby. Peer-reviewed marine science proves otherwise. Landing a heavy shark from the shore is vastly more detrimental to the animal than boat-based angling due to unique physiological stressors:

Severe Metabolic Acidosis: Sharks are obligate ram ventilators or rely heavily on constant movement to flush water through their gills. The prolonged, exhaustive struggle against heavy drag from the shoreline causes a rapid, catastrophic accumulation of blood lactate and a sharp drop in blood pH. A landmark study on shore-based shark fishing stress (Binstock et al., 2023) documented post-release mortality (PRM) rates as high as 45% to 50% for sensitive species due to metabolic failure and irreversible muscle damage (rhabdomyolysis) occurring hours after the shark is released.

Internal Organ Crushing (Gravity Damage): Unlike bony fish, sharks have a cartilaginous skeleton and lack a rigid rib cage. Their internal organs are supported entirely by the natural buoyancy of deep water. When a large shark is dragged onto the hard sand or rocks of a beach, its immense body weight collapses inward, crushing its liver, heart, and internal vasculature. This causes severe internal hemorrhaging that is completely invisible to the angler taking a photograph, but lethal to the shark post-release.

I am VERY well versed in how taxing such fishing methodology is on shark species, as we often utilize boat fishing practices for the purpose of scientific tagging. When spear tagging is not an option, we land sharks from boats to install satellite and acoustic transmitters. It's a very meticulous process that requires extensive care to ensure the sharks do not suffer post-release mortality. While some species and individuals are more resilient, others are not. It is my job to be in the water when sharks are landed, and I often have to swim the sharks off by pushing them by the tail to revive them, or they could potentially sink to the bottom and die. I find that I have to intervene in at least 30-40 percent of situations, on average. These are the risks and precautions we take for the highly beneficial purpose of gathering scientific data to study and protect shark species. Subjecting these animals to this kind of physiological trauma purely for an Instagram photo or personal entertainment is an unjustifiable ecological risk and arguably a moral conflict.

3. Public Safety, Attraction, and the Coexistence Boundary:

A primary driver of land-based shark fishing is social media validation, where anglers capture "trophy" photos with distressed animals on the sand before releasing them. To achieve this, anglers frequently deploy heavy chum lines and large baits directly from public beaches, piers, and jetties.

Chumming and baiting near shore actively draw large, predatory sharks into shallow water zones heavily used by swimmers, surfers, and wading families. This creates an artificial overlap between apex predators and human recreation, severely compromising public safety and risking negative human-shark interactions that ultimately result in public backlash against shark conservation. Managing the

"coexistence boundary" requires keeping heavy attractants and heavy shark-fighting gear away from public recreation beaches.

4. Historical Context: The 1910 Constitutional Amendment Was for Sustenance, Not Trophy Hunting:

Opponents frequently cite Article I, Section 25 of the California Constitution, claiming it protects their absolute "right to fish" from public lands. This argument ignores the historical context and legal intent of the 1910 amendment.

Voters passed Section 25 in the early 20th century as a direct reaction to wealthy private developers monopolizing coastlines and cutting off public water access. The amendment was written to guarantee subsistence fishing rights, ensuring that working-class citizens, immigrants, and their families had uninterrupted access to public waters to harvest sustainable marine protein for survival.

It was never intended to provide constitutional protection for an industrialized recreational sport, nor did it envision wrestling protected apex predators onto the sand for pure entertainment or digital media exposure. Furthermore, Section 25 explicitly includes the caveat that the Legislature may provide the "conditions under which the different species of fish may be taken." Restricting destructive gear types falls entirely within this constitutional authority.

5. Suggestion for Future Consideration for Restricting Use of Bait-Dropping Drones:

The emergency regulation initially considered restrictions on drone-assisted baiting, which were unfortunately removed. This omission undermines the efficacy of the gear restriction.

Recreational fishers do not utilize high-powered, GPS-guided drones to drop small baits into the surf zone for 15-pound leopard sharks. Drones are deployed explicitly to carry massive, bloody baits (such as whole rays or fish heads) hundreds of yards past the breaker line into the migratory corridors of large pelagic sharks and protected White Sharks. Allowing drone-assisted baiting to continue facilitates the intentional targeting of apex predators from public beaches. I strongly urge the Department to reinstate the ban on drone baiting in the permanent rulemaking phase.

In conclusion, the emergency regulations enacted by the Commission are common-sense, scientifically backed measures that close dangerous regulatory loopholes. Forcing an end to the use of heavy wire leaders and oversized hooks from the shoreline protects vulnerable, ecologically vital apex predators from lethal capture stress, aligns with the true historical intent of California's fishing laws, and protects public safety on our shared beaches.

I strongly support these emergency restrictions and urge the Department to make them permanent, while also reconsidering a future full ban on chumming and drone-assisted baiting from public shorelines.

Thank you sincerely for your dedication to protecting California's marine ecosystems. If I can be of any future assistance in any way, please do not hesitate to reach out.

Cheers,

--

Kinga Philipps | Executive Producer and Host of Shark Week
Emmy & Telly Winning Journalist | Producer | Writer

Travel & Conservation News Correspondent
National Geographic, Travel Channel, History Channel, Discovery, BBC
[The Explorers Club FN'18](#) | www.sharkallies.com
www.kingaphilipps.com

June 23, 2026

Dear California Fish & Game Commission and Office of Administrative Law,

As researchers of wildlife crime and shark conservation policy, we fully support and commend the Commission's proposal to amend § 28.06 and § 28.65 to prohibit removal of white sharks from the water, and to prohibit wire leader and hooks exceeding 1.5" internal gap south of Pigeon Point. We would also like to offer suggestions to close loopholes based on our observations studying shark fishing policy across U.S. states.

We represent a research collaboration of coders, criminologists, conservation biologists and legal scholars conducting the largest study of land-based shark fishing to date. Our opinions are our own and do not represent the opinions of our associated institutions. Our preliminary social media analysis indicates that California is an outlier in rates of full removal of sharks from the water, at 90.7%. Contributing factors include the concentration of shark fishing activity on piers and the state's fishing regulations.

In Florida, where removal of prohibited shark species is illegal, rates of full removal of these species in social media posts is significantly lower (49.8%). However, we caution the Commission that these regulations must be explicit and without loopholes to be effective.

We recommend California extend the proposed handling regulations to explicitly prohibit:

- delay of release for any reason, including photographs, as in New York and Florida ([NYCRR 6 § 40.6](#), [FAC § 68B 44.004\(3\)\(d\)](#))
- use of treble or gaff hooks on prohibited species
- augmented casting by unmanned aerial systems (drones) – a violation of [Title 50 CFR § 19.11\(b\)\(2\)](#), according to the [USFWS Office of Law Enforcement](#).

We recommend these prohibitions throughout the whole state coastline, as well as urge the Commission to expand prohibited species to include the endangered mako shark (*Isurus oxyrinchus*), to eliminate plausible deniability and potential confusion between the similar species. In Florida, FWC prohibits take of six shark species in state waters that are permitted by NOAA in federal waters. These state water protections have minimal spatial overlap with fishing vessels and are critical to conserving coastal nurseries of these species. California prohibits only one shark species: the white (*Carcharodon carcharias*).

Relatedly, we recommend prohibition of take for the critically endangered tope shark (*Galeorhinus galeus*) in state waters, at least in the vicinity of known breeding aggregation sites. While the tope was not granted ESA-listing status in the most recent NOAA Assessment, global abundance trends show declines of [88% in three generations](#) and the Northeast Pacific population is data-deficient.

As you may be aware, in April, sensationalized media coverage of a "[white shark rescue](#)" at Hermosa Beach in LA County, which was in reality shark fishing, spread rapidly online. In subsequent days, fishermen flocked to the Hermosa Pier, reportedly hooking [over 20 white sharks in a day](#). This incident strongly indicates illegal pursuit of white sharks, endangering swimmers and likely [killing several sharks](#). We strongly encourage the Commission to implement the proposed regulations and consider adding the previously mentioned prohibitions to deter illegal shark fishing.

Thank you for your dedication to California wildlife,

Spencer Roberts
PhD Candidate
Abess Center for Ecosystem Science & Policy
Rosenstiel School of Marine, Atmospheric, & Earth Sciences
University of Miami

Jennifer Jacquet
Professor
Abess Center for Ecosystem Science & Policy
Rosenstiel School of Marine, Atmospheric, & Earth Sciences
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Gohar A. Petrossian
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Executive Officer of the Doctoral Program in Criminal Justice, The Graduate Center
City University of New York

Juliana Freire, ACM Fellow, AAAS Fellow
Institute Professor, Tandon School of Engineering
Professor, Computer Science and Data Science
Director, Visualization, Imaging and Data Analysis (VIDA) Center
New York University

Natalie Jacewicz
Assistant Professor
University of San Diego School of Law

Sunandan Chakraborty
Associate Professor
Luddy School of Informatics, Computing, and Engineering
Indiana University Indianapolis

Kinshuk Sharma
PhD Candidate
Luddy School of Informatics, Computing, and Engineering
Indiana University Indianapolis

Candace Drabeck
Marine Conservation Master's Student
Rosenstiel School of Marine, Atmospheric, & Earth Sciences
University of Miami

Ulhas Gondhali
PhD student
John Jay College of Criminal justice,
City University of New York

From: Grace Van de Pas
Sent: Tuesday, June 23, 2026 1:04 PM
To: FGC; OAL Reference Attorney@OAL
Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

Categories: Exhibit

Dear California Fish and Game Commision,

I am reaching out in support of new measures to ban the use of shark fishing equipment south of Pigeon Point to better protect great white sharks. Due to increased targeting of the species, this measure would close long-standing loopholes and have a significant impact on their protection.

I imagine you have received many opposing comments from fishermen, and to give context, many will be based where I live, in Florida. The culture of Land Based Shark Fishing (LBSF) within our state has rapidly grown out of control with poor enforcement of regulations from our state wildlife agency. Opposition to the well-justified regulations proposed by the Commission is not based in the interest of conservation, or even favored by most recreational anglers. Metal leaders and massive circle hooks are used to exploit loopholes that have allowed for the poaching of species California protects, loopholes we would aim to close for any other vulnerable species. Do not let this poaching culture fester in California as it has in Florida, as it is difficult to close the gates on illegal and cruel mishandling of sharks once they have been opened.

Comments opposing the Commission's proposed regulations are being driven by an individual, previously in California and now in Florida, who has participated in the [poaching of a white shark](#) on video. Spencer Wonder, representing the corporations Terra Firma Tackle and Land-Based Angling Alliance, was investigated for criminal mishandling, including gaffing a young female white shark, causing torn gills. While the District Attorney did not bring charges, there is ample evidence this man knowingly participated in this crime. While other fishermen involved claimed they misidentified the shark as a mako, this individual stated that he knew it was a white and "was totally against gaffing it", yet [did not intervene to stop the gaffing](#) or report the crime in progress to CDFW law enforcement.

We also urge the commission to consider the most common excuse given for the mishandling and poaching of white sharks: the misidentification of white sharks as makos. Unless the mako shark is protected, white shark poaching will continue to have a bulletproof excuse. Whether fishermen are using this excuse conveniently or genuinely do not know what species they are catching, the justification for protecting the mako is equally strong. The state of California has the ability to protect more species than are protected in federal waters. Many coastal states have also enacted protections for other species, and California can and should put further restrictions on the fishing and killing of the many IUCN Redlisted species that inhabit and migrate through its waters.

I commend the commission for the steps it is taking to protect this beautiful and threatened species, it is encouraging seeing positive changes being made in favor of the sharks we share our seas with.

Thank you,
Grace Van de Pas



GREATER FARALLONES ASSOCIATION

June 24, 2026

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

Sent via email to fgc@fgc.ca.gov

RE: Support for Amendments to Title 14 CCR Sections 28.06 and 28.65 Regarding Recreational Gear Restrictions for White Shark (SCH No. 2026060900)

Dear Commissioners:

On behalf of the Greater Farallones Association, I am writing in strong support of the California Fish and Game Commission's amendments to Title 14, California Code of Regulations, Sections 28.06 and 28.65 regarding recreational gear restrictions and handling requirements for white sharks.

Greater Farallones Association works to conserve the wildlife and habitats of California's nationally significant Greater Farallones (GFNMS), Cordell Bank, and Monterey Bay (from Marin to Santa Cruz County) national marine sanctuaries through science, education, and restoration. We recognize that effective ocean stewardship requires adaptive management informed by emerging conditions and conservation needs. GFA supports the GFNMS-managed [White Shark Stewardship Program](#), and the CDFW proposed action is consistent with this program and the sanctuary regulations related to attracting and approaching white sharks.

White sharks play a critical role as apex predators in California's marine ecosystems. Their presence helps maintain ecological balance and supports the health and resilience of coastal food webs. As protected species, white sharks warrant careful stewardship and management measures that minimize avoidable mortality and disturbance.

The need for these protections is particularly important given reports of recent white shark deaths associated with recreational fishing activities and increasing observations of juvenile white sharks along California's coast. As ocean conditions continue to shift and white shark distribution changes, proactive management measures are necessary to reduce harmful interactions between people and wildlife and to ensure that protected species remain protected in practice as well as in regulation.

The proposed amendments also provide important public safety benefits. By discouraging the use of gear commonly associated with targeting large sharks in heavily used coastal recreation areas, the regulations help reduce the risk of dangerous interactions involving hooked sharks, anglers, swimmers, surfers, and other ocean users.

Therefore we support the Commission's proposed requirements to immediately release hooked white sharks, prohibit removing white sharks from the water, and restrict the use of fishing gear that can facilitate the intentional targeting of white sharks from shore-based locations. These measures

represent a practical, science-based approach to reducing shark mortality while promoting responsible recreational fishing practices. The Commission's proposed amendments demonstrate a commitment to protecting both marine ecosystems and the public.

Thank you for your leadership in advancing these important protections for California's marine wildlife. We respectfully urge the Commission to adopt and implement these amendments.

Sincerely,

Maria Brown

Maria Brown
Board Vice President
Greater Farallones Association

From: Sofya Sadiq [REDACTED]
Sent: Wednesday, June 24, 2026 1:16 PM
To: FGC
Subject: Protect White Sharks

Categories: Exhibit

To whom it may concern,

I am a local citizen and wish to express my support of the emergency regulation to protect great white sharks and large sharks from beach fishing.

I have seen a man on the beach fishing great white sharks. He lied and told lifeguards it was not a great white shark, but a Mako. The lifeguards were afraid of him and let it go. In fact, it was a great white shark and I took pictures.

Great white sharks are a cornerstone species of our local ocean ecosystem. They need to be protected, which I believe is what the law intended. Please do whatever you can to protect great white sharks in our SoCal oceans.

Thanks very much for your time!

Sofya Sadiq

“Treat people as if they were what they ought to be, & you help them become what they are capable of being.”

--Johann Wolfgang von Goethe

From: Jen Conley [REDACTED]
Sent: Tuesday, June 30, 2026 8:08 PM
To: FGC; OAL Reference Attorney@OAL
Subject: ATTENTION: Emergency Regulations: Recreational Gear Restrictions for White Shark

Categories: Exhibit

To the California Fish & Game Commission,

I strongly support the proposed regulations to prohibit wire leaders and large hooks used to target white sharks, as well as requiring this species to be kept fully submerged if incidentally caught. For too long, our beloved great whites have been illegally targeted using this gear, under the auspices of targeting other species.

To ensure these regulations are truly effective, I urge the Commission to include the following critical protections:

Protect Mako Sharks: Standardize these gear restrictions to include mako sharks as well, effectively eliminating the common excuse of "mistaken species" by fishermen.

Prohibit Drone Fishing: Ban the use of drones for shark fishing to align state regulations with federal law.

Ban White Shark Photoshoots: Explicitly prohibit prolonged photoshoots with captured white sharks, which unnecessarily delays their release and decreases their survival rate.

Mandate Gill Submergence: Strictly require that the shark's gills remain completely submerged at all times during an incidental capture to ensure proper respiration.

As warm El Niño waters stir, bringing more sharks to California shores, these regulations are more than warranted to protect California swimmers, surfers, and sharks alike.

Thank you for your time and dedication to protecting our marine ecosystems.

Kindly,

Jennifer Conley

From: Dominique Cano-Stocco
Sent: Tuesday, June 30, 2026 8:49 AM
To: FGC
Subject: Rec. Fishing Gear - White Sharks

Categories: Exhibit

I applaud the commission for taking necessary action to protect the public and marine animals, specifically Great White Sharks, from harmful and reckless fishing practices and gear. And, I urge the commission to make the emergency declaration permanent, with additional & rational bans on the use of chum in any form of delivery (off a pier, via drone, etc)

The science is clear on this matter, while rampant misinformation on social media is not.

The harm to marine life goes beyond just Great White Sharks. Specifically, dumping chum anywhere, to attract predators leads to unnecessarily competitive behaviors, and increases the likelihood of localized, harmful algae blooms.

Restricting the use of chum is not a new concept in need of study or further review. It's based on science and documented experiments. Importantly, it does not harm the rights of any individual to "go fishing."

Critically, targeting Great White Sharks is illegal, period. Allowing any loopholes in gear, location or attractants (chum) just undermines California's well-thought-out laws.

Finally, **the public deserves the right to enjoy the ocean, including piers, without an increased risk of fear or injury due to the reckless, inconsiderate and dangerous behaviors of bad actors who are rarely held accountable for their actions.** For example, by attracting sharks, these fishermen are endangering the lives of people in the water near the pier and for miles around. If someone is harmed, the individual(s) responsible are rarely identified, prosecuted or held financially responsible for their actions. It's the businesses impacted by closed beaches who pay. And, it's the people harmed who pay the medical bills, live with the trauma, or who lose their lives.

It's abundantly clear that the commission's decision to protect people & sharks was the right decision, and in fact, the commission should go further, by banning the practice of "chumming", anywhere.

Thank you.

Dominique Cano-Stocco
Resident of Encinitas, CA

From: Christopher Jones
Sent: Tuesday, June 30, 2026 8:12 PM
To: FGC; OAL Reference Attorney@OAL
Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

Categories: Exhibit

California Fish & Game Commission,

Studies have consistently proven that white sharks do not prefer, nor will consume humans. Those saying these things are not researched on this topic. YouTube has tens of thousands that believe myths.

Great white sharks have almost no interest in eating humans, a recent study confirms. Great white sharks are near to people in Southern California nearly every day but rarely bite them. A study published in the journal PLOS ONE illustrates this. June 2023.

Most shark-biting incidents involve a single bite – which rarely prove fatal – rather than a sustained attack. Only 14% of all shark bites are fatal. You are 3,820 times more likely to drown than die from a shark bite. The chances of drowning are 1 in 1,134 compared to the 1 in 4,332,817 odds of being bitten by a shark, much less killed.

Sharks pay the heavier price. The Journal of Marine Policy states that humans kill an estimated 100 million sharks every year. That's an average of almost 274,000 sharks every day, over 11,000 sharks every hour. More than one third of shark species are currently threatened with extinction. Populations of sharks in the open ocean have declined by 71% over the past 50 years. Yet, fewer than 10 people worldwide are killed each year by shark attacks. For context, every year approximately 24 people die after being hit by flying champagne corks; toasters kill an estimated 700 people, and lightning strikes and kills around 2,000 people. People have the risk factors totally in reverse.

I strongly support the proposed regulations to prohibit wire leaders and large hooks used to target white sharks, as well as requiring this species to be kept fully submerged if incidentally caught.

For too long, our beloved great whites have been illegally targeted using this gear, caught and dragged from the ocean for photoshoots, under the auspices of targeting other species.

As warm El Niño waters stir, bringing more sharks to California shores, these regulations are more than warranted to protect California swimmers, surfers, and sharks alike.

Thank you

From: Nick DeNezzo [REDACTED]
Sent: Tuesday, June 30, 2026 8:51 PM
To: FGC; OAL Reference Attorney@OAL
Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

Categories: Exhibit

California Fish & Game Commission,

I am a lifelong California resident and ocean user—as a swimmer, surfer, diver, and spearfisher. And as a former Scripps Institution of Oceanography graduate student, my capstone research focused on human-shark interactions, particularly with regard to great white sharks here along the California coast.

I strongly support the proposed regulations to prohibit wire leaders and large hooks used to target white sharks, as well as requiring this species to be kept fully submerged if incidentally caught.

I have seen far too many instances, both in person and posted online, in which fisherman have skirted the legal loopholes to illegally target great whites. There are numerous examples throughout social media showing white sharks hauled from the water to pose for photos, all while claiming the catch was accidental. And even worse, there are fishing companies deriving profit specifically from these illegal catches, using the photos in their promotional material and teaching others how to manipulate the same loopholes in the system.

Those who intentionally target these sharks put both the wildlife and beachgoers at higher risk. Post-release mortality rates increase due to factors like longer fight time or time spent out of the water—factors that are prevalent when these sharks are specifically targeted and brought to shore. The presence of bait and chum also risks bringing hungry sharks closer to shore, potentially increasing contact with unaware beachgoers.

As we face a future that's likely to bring warmer waters—and more sharks—to the California coast, these regulations are essential to protecting both beach users and white sharks.

Thank you,

Nicholas DeNezzo, M.A.S. | Marine Conservation Artist
Nicholas DeNezzo Fine Art

www.nicholasdenezzo.com

California Fish and Game Commission
Sample Comments Opposing White Shark Emergency Regulations

June 2026

1. [Emails from Nick Heid, Surf Fishing in So Cal](#), received June 19 and 20, 2026
2. [Email from Jeremy Rodda](#), received June 19, 2026
3. [Email from Maxx Martinez, Captain](#), received June 19, 2026
4. [Email Beau Johnson](#), received June 21, 2026
5. [Email from Ryan Lee, Laboratory Analyst, Onterris, and Research, Department of Biological Sciences, CSU Fullerton](#), received June 21, 2026
6. [Letter from Luke Totah](#), received June 22, 2026
7. [Email from Philip Wright](#), received June 22, 2026
8. [Email from Thomas Campion](#), received June 21, 2026
9. [Email from Cameron Cochran](#), received June 19, 2026
10. [Email from Felix Miller](#), received June 30, 2026
11. [Email from Being Kyant](#), received June 30, 2026

From: Nick Heid

Sent: Friday, June 19, 2026 01:52 PM

To: OAL Reference Attorney@OAL <OALReferenceAttorney@oal.ca.gov>; FGC <FGC@fgc.ca.gov>

Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

To the Office of Administrative Law and the California Fish and Game Commission,

Re: Emergency Regulations: Recreational Gear Restrictions for White Shark

I am writing as a California resident and frequent surf angler to formally oppose this emergency regulation and request that it be blocked before taking effect.

I fish the Southern California surf several times per week, primarily targeting leopard sharks and soupfin sharks. In a typical year I land between 25 and 100 leopard sharks in the 5-foot range, along with a number of 6-foot soupfin sharks. I have never landed a white shark. The one time I hooked one by accident, the fish went airborne and broke off within 15 seconds because my gear was not built to handle a fish of that size or strength. It is simply not the gear anglers use when targeting white sharks.

My hooks are 7/0 to 9/0 circle hooks, well under the 1.5-inch maximum inside measurement this regulation restricts. This is gear scaled for leopard and soupfin sharks, not white sharks, and it illustrates a broader point. Anglers fishing for smaller coastal shark species are not the source of the white shark interactions this regulation is meant to address.

Wire leader is not optional equipment for this fishery. Leopard sharks and soupfin sharks have abrasive skin and a fighting style that shreds monofilament or fluorocarbon leader on a regular basis. Without wire, a meaningful share of fights against these species end in a break-off rather than a landed fish. **The practical result of banning wire leader is not fewer sharks hooked. It is far more sharks swimming away with a hook and a long trailing length of monofilament still attached. That outcome is worse for the animals, not better.** It is also a source of marine debris that does not exist when a fish is landed, unhooked, and released with wire leader.

I recognize the Commission's stated concern is public safety and reducing white shark interactions during a season of elevated white shark presence in Southern California waters. I share that concern and support efforts that are actually targeted at the gear and practices associated with intentionally or incidentally hooking white sharks specifically, such as heavier leader than 150LB, larger hooks than 3-4", chum, and bait presentations scaled for large sharks. But a blanket wire leader ban that applies

coastwide, to every angler targeting every species of shark and not just white sharks, sweeps in a long established, sustainable, catch and release coastal shark fishery that has no meaningful overlap with the white shark issue this regulation is trying to solve.

I fish for these animals because I love them and because they're central to my business in content creation and guiding. Leopard sharks in particular are one of the more remarkable things people can experience firsthand on a California beach, and getting to see one up close, healthy, and released safely is something I do not take lightly. A regulation that results in more shark injuries and mortality, not fewer, while doing little to address actual white shark interactions, does not serve the conservation goals the Commission is trying to achieve.

I respectfully request that this emergency regulation be blocked, or at minimum narrowed so that wire leader restrictions apply only when using a massive hook, and in the specific circumstances actually associated with white shark interactions, rather than coastwide across all recreational shark fishing.

Thank you for your consideration.

--

Nick Heid

Surf Fishing In So Cal

surffishingsocalsd.com

-----Original Message-----

From: Nicholas Heid

Sent: Saturday, June 20, 2026 10:09 AM

To: FGC <FGC@fgc.ca.gov>; OAL Reference Attorney@OAL
<OALReferenceAttorney@oal.ca.gov>

Subject: Emergency Regulations — Recreational Gear Restrictions for White Shark

To the Office of Administrative Law and the California Fish and Game Commission

Re: Emergency Regulations: Recreational Gear Restrictions for White Shark

I submitted a comment on this regulation earlier this week explaining my own fishing practices and why wire leader is essential equipment for the leopard shark and soupfin shark fishery I participate in regularly. I am writing again because the more I have sat with this regulation, the more convinced I am that the cost benefit analysis behind it does not hold up, and I want to lay that out plainly.

The stated basis for this emergency action is that Shark Stewards documented more than 30 instances of anglers illegally targeting white sharks in Southern California. I do not dispute that number, and I do not defend anyone illegally targeting a protected species. But I want the Commission to actually weigh that number against what this regulation will cost on the other side of the ledger, because I do not believe that weighing has happened.

I am one angler. In a typical year I hook somewhere between 50 and 100 leopard sharks from the surf, none of them white sharks, all of them legally targeted with appropriately sized circle hooks and wire leader. I am not unusual. I am one of many thousands of anglers fishing this coast for leopard sharks, soupfin sharks, sevengills, threshers, and makos every season. Take away wire leader, and a meaningful share of those fish are no longer landed cleanly and released. They are lost mid fight, swimming away with a hook and a length of monofilament still attached. That is a worse outcome for the animal, not a better one, and it is happening at a scale that dwarfs the 30 incidents this regulation is meant to address.

The hook size restriction compounds this. Anglers targeting sevengill, thresher, and mako sharks rely on larger circle hooks sized appropriately for those species, gear that is specifically designed to hook in the corner of the mouth rather than be swallowed. Forcing smaller hooks than what is appropriate increases the likelihood of deep hooking and gut hooking, the exact outcome circle hooks are used to prevent. A rule framed as protecting sharks is, in this specific provision, making injury more likely for the sharks anglers are legally targeting and even the anglers themselves.

I recognize the Commission is acting out of genuine concern for public safety and for white sharks specifically, and I do not question that the underlying concern is real. But a coastwide gear ban that sweeps in every species of shark and every angler targeting them, in order to address a problem caused by a small number of people acting illegally, is not a proportionate

response. It trades a documented, limited harm for a much larger, undocumented one, and asks an entire sustainable fishery to absorb the cost of a problem it did not create.

I would ask the Commission to look closely at that trade before this becomes permanent, and to consider whether a narrower rule, one that targets the gear and practices actually associated with white shark targeting specifically, rather than every species of shark coastwide, would achieve the same public safety goal without the unintended harm this version creates.

Thank you for your time and consideration.

From: Jeremy Rodda

Sent: Friday, June 19, 2026 10:04 PM

To: FGC <FGC@fgc.ca.gov>; OAL Reference Attorney@OAL <OALReferenceAttorney@oal.ca.gov>

Subject: Recreational Gear Restriction for White Sharks

To the Fish and Game Commission,

I have read through the emergency proposal for protecting nearshore white sharks this year.

As one of the more progressive nearshore shark fishermen in the state, I understand the concern. There are too many shore fishermen using oversized gear and getting away with targeting white sharks under false or improbable pretenses. This has been an ongoing issue for at least the last ten years, and we have Mark Zuckerberg among several others to thank for the rise in popularity of covertly fishing for white sharks nearshore.

The fine line I wish to be drawn in this situation is for legitimate law abiding nearshore shark fishermen targeting sevengills and soupfin. These are, in some areas, much more common than white sharks, and legal to take/target. I have spent several years targeting these species and there is a small but passionate and responsible community of anglers who appreciate these fisheries.

Tackle-wise, these are successfully targeted with the use of 3' 135lb 7 strand wire leaders and 10/0 octopus circle hooks. Thresher shark fishing also sometimes benefits from 135lb 7 strand wire.

If a compromise for the current emergency proposal could be made, I would request that instead of banning all wire leaders, there could be a wire leader length limit and possible diameter limit, set at 3' length and .8mm diameter (135lb 7 strand is .69mm diameter). The inner hook diameter limit is reasonable for the purposes of the sevengill, soupfin, and thresher fisheries.

On a similar note, regulation enforcement would go a long way toward curbing incidents. While I am not a regular at piers, I have been checked twice for my fishing license in the last 6 years (at least 250 trips from shore and boat). It would be ideal if wardens checked piers **daily**. I live in Orange County, so from my vantage point I consider it reasonable for one team to visit the piers of Balboa, Newport, Huntington, Seal Beach, and Belmont, twice daily, starting from one of the far ends and making a loop. Clearly posted regulations with redundant signage (in English, Spanish, Vietnamese, and Mandarin) along with regular enforcement would likely go a long way in helping both education and enforcement.

I am sure you will hear other impassioned insights on this matter. As someone who cares deeply about both conservation and the continued access to California fisheries, It would be of great relief to not lose reasonable access to the sevengill and soupfin fisheries. I respect your intent to manage this predicament, and I hope you take my specific requests into consideration.

If for any reason you would like to contact me, I am deeply interested in this conversation and have no problem making more time for it. You can reply to this email or reach me during business hours at the number below.

Sincerely,

Jeremy Rodda,

From: Maxx Martinez

Sent: Friday, June 19, 2026 01:56 PM

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

Subject: Emergency action

To whom it may concern, Regarding "Emergency action to amend Sections 28.06 and 28.65 Title 14, California Code of regulations for White shark."

I'm Captain Max Martinez avid fisherman and conservationist.

Working on the sea for 11 months of the year. 10 of those months I sample and collect data for The Sportfishing Association of California (SAC) also for the National Oceanic and Atmospheric Administration (NOAA). The ban on metallic leaders and hooks size is preposterous. That needs to be re-thought and re-write. The ban would endanger and hinder nearly all sharks not just the white sharks. There are 10+ other species of shark that are legal to fish for that you wouldn't be able to effectively or safely fish for. Working with us in maybe minimizing metallic leaders to 1.4mm -1.2mm would be a lot more efficient. We have several strict laws already in play to protect white sharks. If we enforce those those better there would be no problem. If we could make a program with an endorsement on the license if you want to participate in land base shark fishing. With this emergency action you will get us allow fishermen to leave hook unwillingly in fished mouths due to bite offs which will endanger more life's. The emergency action among us will simply fail the sharks have been here they will still find the baits like they have been made to do. They aren't leaving anytime soon and neither are we; it's time we work together.

Best regards,

Captain Max Martinez

Phone #:

From: Beau Johnson

Sent: Sunday, June 21, 2026 4:37 PM

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

Subject: PUBLIC COMMENT: Emergency Regulatory Action - Recreational Gear Restrictions for White Shark (Title 14, CCR, Sec 28.06 & 28.65).

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Hello,

Please see the attached public complaint document regarding the recent proposed regulations regarding shark fishing in Southern California. These regulations affect much more than just Great White sharks.

I support White shark protections, however, prohibiting the use of cable along the coast destroys the entire shark fishery on our coast.

Thank you for your attention to this matter.

Subject: Opposition to Proposed Emergency Restrictions on Shore-Based Shark Fishing

PUBLIC COMMENT: Emergency Regulatory Action - Recreational Gear Restrictions for White Shark (Title 14, CCR, Sec 28.06 & 28.65).

Dear Members of the California Fish and Game Commission,

My name is Beau Johnson and I am a recreational shark fisherman here in Southern California. Shark fishing has become my favorite hobby within the last seven years due to many different reasons involving friends, family, life, and personal enjoyment. It has exposed me to many people and taught me many different things about people, sharks, and other animals.

I was deeply disturbed when I read the *Emergency Action to Amend Sections 28.06 and 28.65 Title 14, California Code of Regulations Re: Recreational Gear Restrictions for White Shark* document. The new proposed emergency regulations do not solve the “issue” at hand. They effectively kill off the sport for any other shark species we can catch from shore. Not to mention they will put other shark species (such as the Thresher shark) at risk. The emergency document also contains information that is misleading.

I. Protected Species and Crime

The Great White Shark (*Carcharodon carcharias*) was protected in the State of California back in 1994 because of a severe population decline. Since that time, their numbers have increased substantially, **as proven by the very existence of this emergency statement**. This should point out that the current regulations we do have on these animals is certainly enough for

the population to continue rebounding from. Especially when the current prohibitions we have actually begin being enforced.

II. El Nino

El Nino is part of what makes the Southern California fishing world renowned. An influx of pelagic fishes swim up from waters often warmer than ours because of a breakdown in trade winds that weakens coastal upwelling and drives warm equatorial currents northward. The emergency statement reads:

“This year, a forecasted strong El Niño oceanic event is anticipated to increase the presence of white sharks in California coastal waters, which will increase their availability to anglers and the potential for human interactions with hooked sharks. Young white sharks are already being observed in significantly higher numbers in southern California” (para. 2).

If the Commission proceeds through emergency rulemaking, it should clearly explain why the legal standard for emergency action is satisfied, including why ordinary rulemaking would be inadequate and why less restrictive alternatives would not sufficiently address the identified concerns.

This is the type of situation where transparency must be prioritized. I believe the issue that is trying to be addressed is one where Fish and Game Conservation (FGC) is trying to mitigate the interaction of Great White Sharks with fisherman and swimmers. While I commend you for this, it is not a realistic expectation given the ecosystem they are in. We are talking about a wild animal habitat where people frequently travel thousands of miles to enter.

III. Proposed Restrictions for 2026

The list of proposed restrictions for 2026 within the emergency statement includes horrendously overbearing regulations on anglers that would do nothing for the issues trying to be solved.

Section 28.06

- Any white Sharks caught are to be released immediately
- Prohibit removing White Sharks from the water

Section 28.65

- Prohibit the use of wire or metallic lines or leaders
 - Prohibit the use of hooks greater than 1 ½ inches (inside measurement), when fishing south of Pigeon Point (San Mateo County, 37° 11' N. lat.)
 - This restriction would apply to anglers fishing from the shoreline (including beaches, banks, piers, jetties, breakwaters, docks, and other man-made structures connected to the shore) or within 1,000 yards of the mean high tide line.
-

As far as section **28.06** goes, I don't see there being any major changes to what has already been passed. However, section **28.65** introduces numerous new regulations that do nothing for the protection of these fish, and only punish land based anglers.

Southern California's inshore waters are home to many different species of sharks. Our waters create a unique ecosystem for pelagic fish to come close to shore, which allows for unique and exhilarating opportunities that aren't available in most parts of the world.

Many of the more common local sharks people **can** catch from land include: Swell Sharks, Leopard Sharks, Soupfin (Tope) Sharks, Six Gill Sharks, Seven Gill Sharks, Prickly Sharks, Thresher Sharks, Blue Sharks, Mako Sharks, and Great White Sharks. Each one of these represents their own unique challenges for catching and landing. Of the ten sharks listed, there are two that can be reliably caught without cable. The Leopard Shark and the Thresher Shark. Of the eight that are remaining, we are not allowed to pursue or target Great White Sharks, meaning the left over majority are only reliably caught on wire or metallic lines and leaders.

By prohibiting the use of wire or metallic lines and leaders for the recreational activity or fishing for sharks, two major problems arise. First, you are essentially **removing an entire fishery** from one of the few places in the world that hold the opportunities our niche part of the coast offers. The second— and perhaps most important— factor **highlights the major target you place onto an already pressured fish; the Thresher Shark.** These fish have been labeled **"vulnerable" and are on IUCNs "Red List of Threatened Species."** They are one of the most sought after sharks available to the coastal angler of the ten sharks listed due to their insane speed and frequent acrobatics. They are truly a legendary fish for the coastal angler to catch. By removing cable from the tackle boxes of shark fishermen along the coast, you essentially limit them to only fishing for Leopard Sharks and Thresher Sharks. Since Leopard Sharks are not comparable to what any of the other ten sharks can do when hooked, the Thresher Shark would be left to support the Land Based Shark Fishing (LBSF) community on its own. To add, Thresher Sharks are generally a more fragile fish and tend to have higher mortality rates compared to their counterparts when caught.

IV. Loose Tackle in Free Swimming Fish

The emergency statement fails to mitigate the very problems it presents. The document states:

“These changes are necessary to better protect white sharks from illegal targeting, allow incidentally hooked white sharks to more easily break free from the line, and prevent sharks from being released with trailing wires that can entangle the shark after release. The restrictions will also help protect swimmers, surfers, and other ocean users from potential harm caused by a hooked shark or attached wire leader.”

Prohibiting cable and forcing fishermen to use monofilament or fluorocarbon does not solve the issue of fish swimming around with tackle stuck in their face. It only increases the amount of fish affected if we aren’t given the opportunity to remove the hooks from the animal.

This emergency statement was summed up by stating it protects swimmers, surfers, and other ocean users from harm caused by hooked sharks or wire leaders. I cannot emphasize this enough... There has only been **one** case in **all of history** where a White shark bit a swimmer while attached to a fishing line. The foundation for these proposed regulations is centered around a singular, outlier event. Punishing a group of recreational fishermen that have done nothing to endanger the community is pure government overreach. Additionally, the one instance in which this event happened **only applies to a miniscule percentage of the population** (distance swimmers) that **willingly participate** in swimming hundreds of yards from the sand.

V. Why These Regulations Won’t Fix Anything

There is no denying the influx of Great White sharks along the coast of Southern California. There are a substantial amount of these fish swimming around, which we **should be thrilled about**. These animals were initially protected due to a severe decline in their population over thirty years ago, and are now showing significant signs of a population rebound.

With that said, this emergency statement claims, “In early April 2026, 20 juvenile white sharks were caught in a single day from the Hermosa Beach Pier” (para. 7). I will be the first to admit, this is an alarming amount of protected sharks being caught from a singular pier. That is not something we should allow to happen. However, this problem **does not** highlight a lack of regulations, **nor** does it show that fishermen target these animals. **What it does blatantly demonstrate is Fish and Wildlife Conservation’s extreme lack of enforcement in regards to the rules and regulations that have already passed.**

There are already mandates in place that are supposed to prevent things like this from happening. Perhaps the most important of those being that **fishermen are not allowed to fish for sharks if there’s been a sighting of a Great White shark**. Per the Department of Fish and Wildlife (DFW) website:

“If the angler can see a white shark, or if someone (for example a public safety official, officer, or credible witness) informs the angler that a white shark was recently spotted or is present in the area then the angler would reasonably be expected to know it is present. Our wildlife officers would be required to determine whether someone had recently observed or has knowledge of a white shark present in the area to take enforcement action”

(<https://wildlife.ca.gov/Conservation/Marine/White-Shark#643032838-is-it-legal-to-attract-white-sharks-with-bait-or-decoys>).

Following this definition, it is further stated that:

“There is no specific ‘closure’ – If an angler knows a white shark is present and they are within 1 mile of the shore, pier, or jetty, then they cannot place shark lures, shark bait or shark chum in the water.”

The “Hermosa Beach Pier Incident” that had 20 Great White Sharks caught in a single day demonstrates **an extreme lack of enforcement and engagement on Fish and Wildlife’s end**. They already have parameters for this type of thing that are simply not being enforced. **Not enforcing the laws already in place does not justify further regulation.** More restrictions will not fix the issue, nor will they be acceptable.

The moment that one Great White was caught off that pier, all shark fishing should have been halted, per the **current** rules and regulations. **Start enforcing the law on those actually endangering the public, not the people enjoying their weekends.**

VI. Circle Hook Regulations

The proposed regulations on circle hooks do not make any sense either. Circle hooks have been proven to avoid gut-hooking sharks and fish substantially, sometimes **improving overall mortality rates by around 50%** when compared to a traditional J-hook. Why?

The rounded design of a circle hook is such that it forces the hook to slide out of the throat and catch cleanly in the jaw hinge of the fish or shark when used correctly. To enable the hook to maintain its intended benefit, the distance between the hook point and the shank (hook gap) must be **wider than the thickness of the animal's jaw** tissue.

Taking what we now know about circle hooks, we must acknowledge that **a Great White Shark has an incredibly thick jaw** that is covered in dense muscle. By prohibiting the use of hooks with a gap larger than 1.5 inches, you are not allowing circle hooks the physical clearance they need to roll around the thick jaw bone of a large shark effectively. Instead of rolling into the corner of the mouth, a small hook is far more likely to slide out entirely, or worse, foul-hook elsewhere or slide down into narrower throat tissue and catch internally.

With this information in mind, requiring smaller hooks for shark fishing off the Southern California Coast **does not make sense**. It is actually **more threatening** to these large Great White Sharks than if Fish & Game Conservation (FGC) was to **promote something like requiring circle hooks when targeting sharks from land, or requiring circle hooks when targeting sharks with cable from land**. All of this information was retrieved from a case study conducted by S.J. Cooke and C.D. Suski in 2004 (<https://www3.carleton.ca/fecpl/pdfs/Circle%20Hook%20Review.pdf>).

VII. Assumptive Legislature

The emergency statement also attempts to frame the *projected* increase in Great White Sharks as a threat to the public. It states:

“Given the number of white sharks taken in recent months, the confirmed deaths of at least three white sharks, and the known potential for a hooked shark to bite a human in the water, the magnitude of documented and potential harm is great” (para. 8).

It is unjust to severely cripple a fishery because of the “potential harm” it might have on a population, when the **specific harm (swimmers being bit my hooked sharks) being mentioned has only happened one time. Ever**.

A more realistic course of action in regards to the safety of the public within the water would be regulating the distance at which someone can swim past the breaking waves without a dive/swim flag. This lowers the percentage of people within range of most shark lines from piers, as well as increases the safety of those who do swim out that far in regards to boats that operate close to the beach.

Thank you for your attention to this matter.

- Beau Johnson

Resources:

Cooke, S. J., & Suski, C. D. (2004). *Are circle hooks an effective tool for conserving marine and ... Are circle hooks an effective tool for conserving marine and freshwater recreational catch-and-release fisheries?*

<https://www3.carleton.ca/fecpl/pdfs/Circle%20Hook%20Review.pdf>

New California law increases White Shark Protection. (n.d.).

<https://sharkstewards.org/new-california-white-shark-protection/>

The IUCN red list of threatened species. IUCN Redlist. (n.d.).

<https://iucnredlist.org/search?amp=&query=thresher+shark&searchType=species>

From: Ryan Le

Sent: Sunday, June 21, 2026 5:52 PM

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

Subject: Recreational Gear Restrictions for White shark

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Attached file regarding emergency action.

Best,

Ryan Le

California Fish and Game Commission

P.O. Box 944209, Sacramento, CA 94244-2090

fgc@fgc.ca.gov

June 18, 2026

RE: OPPOSITION TO PROPOSED EMERGENCY AMENDMENTS TO SECTIONS 28.06 AND 28.65, TITLE 14, CCR — RECREATIONAL GEAR RESTRICTIONS FOR WHITE SHARK (Item No. 6, June 17–18, 2026 FGC Meeting)

Dear Commissioners and Executive Director Miller-Henson,

I am writing in strong opposition to the proposed emergency amendments to Sections 28.06 and 28.65 of Title 14 of the California Code of Regulations, which would prohibit the use of wire or metallic lines and leaders, and restrict hooks to a maximum inside measurement of one and one-half inches, for all shore-based angling south of Pigeon Point (San Mateo County). While I share the Commission's concern for the welfare of juvenile white sharks and public safety, this emergency regulation is a blunt, overbroad instrument that will cause substantial, disproportionate harm to a wide range of entirely lawful and ecologically responsible fisheries — while offering only speculative protection to the species it purports to safeguard.

I. THE REGULATION IS OVERBROAD AND WILL DEVASTATE LAWFUL TARGET FISHERIES

The proposed restriction does not narrowly target illegal white shark fishing. It categorically eliminates **standard, legal tackle configurations** that have been the backbone of responsible shore-based and pier-based shark angling in Southern California for generations including for several species whose size, dentition, or fight characteristics make wire leader and large-gap hooks a practical necessity rather than a convenience. The following legal, non-prohibited species are directly harmed by this regulation:

- Leopard shark (*Triakis semifasciata*) — One of the most popular catch-and-release shore species in Southern California and the Bay Area. Wire leaders of 80–200 lb coated cable are the established standard for leopard shark fishing, necessary to prevent bite-offs from the species' abrasive, cartilaginous jaw

structure and dermal denticles. Hook sizes 8/0–12/0 are routinely employed for large adult females and fall far outside the proposed 1.5-inch inside-gap limit.

- Soupfin shark (*Galeorhinus galeus*) — A slow-reproducing, near-threatened species. Anglers targeting this species from shore use the same wire rigs. A Soupfin large enough to reproduce will bite through any monofilament leader, making wire leader non-negotiable for ethical catch-and-release.
- Broadnose sevengill shark (*Notorynchus cepedianus*) — A resident apex predator found in bays, harbors, and nearshore environments throughout Southern California. Shore and pier anglers targeting sevengills for catch-and-release employ large-gap circle hooks and wire leaders. This species is a subject of active population genetics research and is ecologically invaluable as an inshore apex predator.
- Bluntnose sixgill shark (*Hexanchus griseus*) — A deepwater species occasionally accessible from shore with deep-water reach. Sixgills are large, powerful sharks that require heavy wire leader and large circle hooks (10/0 and above) for safe, ethical catch-and-release. The species' size and dentition make monofilament leaders functionally useless for this fishery.
- Shortfin mako shark (*Isurus oxyrinchus*) — While makos are rarely encountered by surf casters, they are occasionally taken by pier anglers and niche land based anglers fishing deeper water accessible from extended pier structures, using 6/0–10/0 hooks and wire leader as standard tackle. The Pacific shortfin mako stock is federally assessed and managed under the Shark Conservation Act; California recreational landings are incidental and already constrained by federal retention rules. This regulation would not improve federal stock management, but would eliminate the small legal pier fishery for the species.

The regulation makes no attempt to distinguish between gear presented as *targeted white shark tackle* and gear that happens to share dimensional characteristics. This is regulatory overreach. It is the equivalent of banning all firearms over a certain caliber to prevent one type of illegal poaching.

II. THE CENTRAL INCIDENT DRIVING THIS PROPOSAL WAS ALREADY ILLEGAL — AND SHOULD BE ENFORCED, NOT USED TO JUSTIFY RESTRICTING LAWFUL ANGLERS

The event most heavily relied upon to justify this emergency rulemaking — the April 2026 Hermosa Beach Pier incident in which more than 20 juvenile white sharks were hooked in a single day — was not a case of lawful anglers incidentally encountering a protected species. By the Department's own account, this involved sustained, repeated targeting of white sharks, a species that has been fully protected from recreational take since 1994 under Section 28.06. Sharks were hooked and, in at least three documented

cases, died after being released with wire leaders and large hooks trailing from their bodies.

This was not a gray area. Intentionally fishing for white sharks is **already illegal** under existing Section 28.06. Continuing to fish for and hook more than 20 individuals of a fully protected species in a single day at a single, well-known location is not a gear problem, it is a **law enforcement and compliance failure**. No new prohibition on wire leaders or hook size changes the fact that targeting white sharks was, and remains, against the law before and after this rulemaking. The appropriate response to anglers knowingly and repeatedly violating an existing take prohibition is citation, confiscation of gear, and license suspension under the Department's existing enforcement authority, not a sweeping new gear restriction imposed on the thousands of anglers who were not engaged in this conduct.

Critically, the emergency findings do not establish that increased enforcement, citations, or warden presence at Hermosa Beach Pier was attempted and failed before this regulation was proposed. If illegal targeting of white sharks was occurring openly enough for the Department to document more than 20 specimens hooked in a single day, that is a textbook case for immediate, visible enforcement action at that specific location — not a basis for amending statewide gear regulations covering hundreds of miles of coastline and species that have nothing to do with the violation.

Restricting gear for the entire population of shore, and pier-based anglers because a known group of individuals broke an existing law, at a specific known location, is the regulatory equivalent of closing a road to all drivers because a few were caught speeding at one intersection, when ticketing the speeders was always an available and more direct remedy. The Commission should direct the Department to report on what enforcement actions, if any, were taken at Hermosa Beach Pier in response to the documented April 2026 incident before adopting any new restriction on lawful gear.

III. THE "EMERGENCY" JUSTIFICATION DOES NOT WITHSTAND SCRUTINY

The Commission's emergency finding rests on three premises: (1) at least three white shark deaths in 2026 attributable to hook-and-line gear, (2) a forecasted El Niño event expected to increase juvenile white shark presence, and (3) a 2014 incident in which a shark bit a swimmer after being hooked. Each of these deserves critical examination.

A. Three documented deaths are not a population-level emergency. California's white shark population, while not subject to commercial take, is slow-growing, late-

maturing, and long-lived, yet three incidental deaths, while regrettable, do not constitute the kind of acute, species-threatening emergency that warrants bypass of normal rulemaking procedures under Fish and Game Code Section 399. The Commission must ask: would the normal 45-day public comment process have materially reduced that number? Almost certainly not, as these deaths occurred in April 2026 — well before any regulation could have been implemented even under emergency authority.

B. NOAA's El Niño forecast is predictive, not confirmatory. The emergency findings acknowledge that the anticipated increase in white shark aggregations is based on a forecast, not observed conditions. Regulations founded on forecast modeling, rather than on documented, imminent, and irreversible harm, do not satisfy the standard for emergency rulemaking. The harm anticipated is speculative and seasonal. A properly noticed rulemaking with expedited comment could have achieved the same ends without cutting off public participation.

C. The 2014 Manhattan Beach incident is a 12-year-old data point. Citing a single incident from 2014 as evidence of a present-day emergency weakens rather than strengthens the Department's case. If that incident were truly dispositive, the Department had over a decade to pursue a properly noticed rulemaking. Its failure to do so undermines the credibility of the emergency designation.

IV. THE 1,000-YARD OFFSHORE BOUNDARY IS SCIENTIFICALLY UNWARRANTED

The proposed regulation extends gear restrictions to any angler fishing within 1,000 yards of the mean high tide line — including from vessels such as kayaks, personal watercraft, and small boats. This exceeds the reach of any realistic shore-cast. A typical pier or surf angler casts 50 to 150 yards. Even drone-deployed baits rarely exceed 400–500 yards. The 1,000-yard boundary serves no demonstrable conservation purpose but dramatically expands the regulation's intrusion into small-vessel recreational fishing in nearshore waters, a class of anglers who were not identified as causing any of the documented incidents.

The scientific basis for the Pigeon Point boundary (37° 11' N. lat.) is acknowledged in the staff summary as historical, juvenile white sharks have "not previously been observed" north of Santa Cruz. As ocean temperatures shift under climate change and El Niño events, this geographic logic becomes increasingly tenuous as a permanent regulatory line. The Commission should be cautious about encoding a static geographic restriction based on historical range data during a period of documented range expansion.

V. LESS RESTRICTIVE, TARGETED ALTERNATIVES EXIST AND WERE NOT ADEQUATELY CONSIDERED

The Commission has multiple, better-tailored tools available that would protect juvenile white sharks without broadly eliminating lawful fisheries:

- Mandatory use of non-offset, non-stainless BARBLESS steel circle hooks when targeting elasmobranchs from shore; already standard in other states and consistent with existing federal shark tournament regulations ;promotes release survival without requiring elimination of wire leaders.
- Targeted enforcement at known hotspots, including Hermosa Beach Pier, where the documented illegal targeting actually occurred; citations, gear confiscation, and license suspension under existing Section 28.06 authority directly address the conduct described in the Department's own findings, rather than restricting gear for anglers who were not involved.
- Species-targeted bait restrictions in documented white shark aggregation areas (e.g., prohibiting whole fish baits over a certain size near documented nursery zones during peak aggregation months of May through October) would directly reduce incidental white shark hookings without affecting leopard shark, sevengill, tope, or mako anglers.
- Geographic spot closures limited to the locations where incidents actually occurred, rather than a blanket restriction on all shore-based angling across the entire Southern California coastline.
- A requirement to immediately cut the line without removing the shark from water upon incidental white shark hookup, combined with clear enforcement protocols and increased warden presence at high-aggregation piers, would address the documented mortality mechanism directly.

The Department's own finding acknowledges that the gear restriction is designed to make it *easier for white sharks to break free from the line* after being hooked. This concedes that the primary intervention point is post-hookup, not pre-hookup — a goal that is better achieved through immediate-release mandates and tackle-design requirements than through a categorical gear ban that imposes sweeping burdens on unrelated fisheries. The limitation of wire and hook size does NOT prevent anglers from targeting white sharks with monofilament and smaller hooks.

VI. IF ADOPTED, THE REGULATION SHOULD BE LIMITED TO PIERS, NOT ALL SHORE-BASED ANGLING

Should the Commission determine that some form of emergency gear restriction is warranted, it should be confined to **man-made pier structures only**, rather than the full

sweep of beaches, banks, jetties, breakwaters, and 1,000 yards of nearshore water currently proposed. There is a strong, defensible rationale for this narrower scope:

- Every documented incident cited in the Department's own findings — the April 2026 Hermosa Beach Pier event and the 2014 Manhattan Beach Pier swimmer-bite incident — occurred at a pier. No incident cited in the staff summary or emergency findings occurred from a beach, jetty, or open surf-casting position.
- Piers provide unique access to deeper water and structure that concentrates juvenile white shark aggregations within easy casting range of stationary, heavy-tackle anglers. Surf and jetty anglers casting from the beach do not have comparable access to the deep-water aggregation zones where these incidents occur.
- Piers are fixed public structures with defined boundaries, making a gear restriction straightforward to post, communicate, and enforce — unlike a 1,000-yard nearshore zone spanning hundreds of miles of variable, unmarked coastline.
- Public safety risk from a hooked shark or trailing wire leader is meaningfully higher on piers, where swimmers, waders, and other beachgoers are concentrated directly beneath and adjacent to elevated anglers fighting large fish — the exact mechanism of harm in the 2014 incident. This risk is structurally different from, and greater than, the risk posed by a surf angler whose hooked fish remains in open water away from concentrated foot and swim traffic.
- Limiting the restriction to piers would preserve the surf- and bank-based leopard shark, sevengill, and soupfin fisheries described in Section I almost entirely intact, since the large majority of that angling occurs from open beach and bank positions, not pier structures. In addition, anglers fishing from shore (non-pier) are able to dehook and release their catches with proper protocol to ensure the vitality of the animal.

A pier-only restriction would directly target the locations where the Department's own cited evidence shows the problem is actually occurring, while leaving the broader surf, bank fishery, and the conservation-minded anglers who sustain it, undisturbed. This is precisely the kind of narrowly tailored alternative that emergency rulemaking is supposed to favor over a blanket, coastline-wide prohibition.

VII. PROCEDURAL CONCERNS: EMERGENCY RULEMAKING BYPASSES REQUIRED PUBLIC PARTICIPATION

California Government Code Section 11346.1 requires a finding that a regulation is "necessary for the immediate preservation of the public peace, health and safety, or general welfare" to justify bypass of standard rulemaking notice requirements. The recreational fishing community — the primary stakeholder class affected by this regulation — has been given no meaningful opportunity to participate in its

development, challenge its scientific premises, or propose alternatives. This is precisely the population whose behavior the regulation targets, and precisely the community that has the most relevant practical and ecological knowledge of the relevant fisheries.

The Commission should decline to adopt this regulation as an emergency measure and instead direct the Department to pursue an expedited but properly noticed rulemaking with a focused public comment period, stakeholder workshops with the elasmobranch angling community, and a full Economic Impact Assessment consistent with the California Administrative Procedure Act.

CONCLUSION

The proposed emergency amendment to Sections 28.06 and 28.65 reflects a legitimate conservation impulse, but it is executed through an instrument that is far too broad, bypasses required public process, and will eliminate lawful, ecologically conscious fisheries that are not responsible for the documented harm. Three white shark deaths as regrettable as they are ; do not constitute an emergency requiring the wholesale elimination of wire leader and large-hook angling from more than 400 miles of Southern California coastline.

I respectfully urge the Commission to reject this emergency rulemaking in its current coastline-wide form. If the Commission determines that some emergency action is warranted, it should, at minimum, narrow the restriction to pier structures only, where the documented incidents actually occurred, rather than imposing a blanket prohibition across all shore-based fishing ,surf, bank, and jetty alike ; over more than 400 miles of coastline. I further urge the Department to pursue a properly noticed, stakeholder-informed rulemaking process for any longer-term regulation, one that protects juvenile white sharks without eliminating lawful, ecologically conscious shark and ray angling in California.

Respectfully submitted,

Ryan Le

Laboratory Analyst — Wet Chemistry | Onterris

Researcher — FABB Lab, Department of Biological Sciences, CSU Fullerton

(Sevengill shark & Sixgill population genetics, Southern California Bight — CA DFW Scientific Collection Permit)

Garden Grove, California

-----Original Message-----

From: Luke Totah

Sent: Monday, June 22, 2026 7:47 PM

To: OAL Reference Attorney@OAL <OALReferenceAttorney@oal.ca.gov>; FGC <FGC@fgc.ca.gov>

Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

WARNING: This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

Hi,

My name is Luke Totah and I live in San Diego. My favorite fishing here in San Diego is surf fishing. I have a daughter who will be 2 years old soon and a son on the way this November. One of my favorite things to look forward to as my kids grow is fishing with them. The one thing that does bring me the most joy in life is when I go shark fishing here in San Diego. I think they are just beautiful creatures which is why I love catching them. I also always catch and release. So I am writing to you because I truly don't understand why removing wire leaders is going to solve regulations on white sharks. Here are some of my questions/ statements I have...

1. Most of the time I only catch leopard sharks and I've never even seen a white shark in the first place - so what data is being used to make this decision?
2. I surf fish often and other than the few friends I do fish with, I hardly ever see any other shark fishermen. I also go to multiple beaches throughout the year so I don't have a "secret spot". And with the FEW people I do see who shark fish, I have yet to find someone who doesn't practice catch and release. So what data do you have the shark population in general needs these regulations?
3. After copious amounts of research I have done I have seen no data proving these regulations need to be in place. With that said, these regulations seem unjust! It makes me feel like the people who are creating these regulations truly haven't done any research themselves. I frequently snorkel around La Jolla cove to watch the leopard sharks to admire these creatures. Let me tell you, sharks are flourishing all up this coast. So, wouldn't you agree this regulation is unjust?
4. I truly feel like these regulations will cause more harm for sharks than help them. It is a huge passion of mine and I can't wait to show my kids these incredible creatures. So, if this regulation gets passed, I would happily get a strong mono line to continue this passion. Unfortunately this would mean more hooks will get bitten off and more sharks left around the sea with hooks in their mouths causing further damage. How will multiple white sharks with hooks in them help them?

5. White sharks are already protected in California. So what makes you think removing wire leaders will protect them further?

6. Leopard sharks and Soupfin sharks are legal species we can target here in San Diego. So this regulation negatively impacts legal and lawful fishing which is unjust!

7. Since there are such a small amount of shark fishermen I know up the coast, you're wildly punishing all those responsible fishermen who know how to safely fish, practice catch and release, and continue to protect these amazing creatures.

8. As I mentioned before, there is a huge lack of evidence for why these regulation needs to be in place. What I have read was how in the past decades the white shark population actually is being seen more often than ever! So if that is the case, why are these regulations being enforced?

At the end of the day I feel like this will cause more harm to the beautiful shark population. I highly ask you to rule against these regulations as it can cause more harm and is unjust!

Thank you from a fellow fishermen,

Luke

Sent from my iPhone

From: Philip Wright

Sent: Monday, June 22, 2026 07:50 PM

To: OAL Reference Attorney@OAL <OALReferenceAttorney@oal.ca.gov>; FGC <FGC@fgc.ca.gov>

Subject: Please Revise the ban on hook diameter and wire leader

I am writing as a regular recreational angler who fishes inside Morro Bay, California. I strongly oppose the emergency gear restrictions capping hooks at a maximum 1.5-inch inside diameter and banning wire leaders. While the stated goal is to protect white sharks, this blanket rule will cause severe, unintended harm to legal, sustainable shark fisheries like soupfin and sevengill sharks. Forcing land-based and nearshore anglers to use tiny hooks under 1.5 inches does not stop large sharks from biting; it simply ensures that when they do bite, they will completely swallow the small hook. This results in severe gut-hooking, internal bleeding because of people switching to J hooks,—the exact opposite of ethical catch-and-release conservation. Furthermore, combining a mandatory small hook with the required heavy 200 lb fluorocarbon leader needed to withstand shark teeth creates a mechanical impossibility. The thick diameter and crimps of 300 lb line entirely choke out the gap of a small hook, preventing clean corner-of-the-mouth jaw sets and leading to torn fish jaws or lost gear left in the water. A traditional 8/0- 10/0 inline circle hook is a proven conservation tool that inherently prevents gut-hooking and can atleast allow fishing for seven gills and soupfins. Maybe also reducing the strength of wire leaders to maximum 210lbs. And also forbidding the use of certain baits. I urge the Commission to reject this blanket gear ban and try a different way.

Sincerely, Philip Atascadero CA

From: Thomas Campion [REDACTED]

Sent: Sunday, June 21, 2026 4:38 PM

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

Subject: Emergency Regulations: Recreational Gear Restrictions for White Shark

California Fish and Game Commission

Attn: Jenn Bacon

I just learned of the potential new emergency regulations, banning wire leader and hooks over 1.5 inches used in shark fishing.

While the stated intent (to protect white sharks) is noble, the result of this ban will be catastrophic.

I have shark fished, and like most experienced anglers, I've practiced catch and release.

Proper gear with appropriate wire leader and sized hooks leads to limited harm (if any at all) to the catch before and during hook removal

and release.

Current hooks are usually embedded in the side or front mouth area. This enables the easy removal of the hook from the catch.

If the emergency regulations take effect, fishing will continue, but a large percentage of the sharks caught will have swallowed the smaller

hooks more deeply into their anatomy. Perhaps even into the stomach. Removal of such hooks is dangerous for the angler and

potentially very harmful to the catch, if it can be done at all. Likewise, the different leader will result in scratches and abrasions on the fish.

This new regulation designed to prevent harm to one species caused by a few fishermen, will result in untold harm as an unintended side effect

to many other species. Please reconsider this regulation and devise one that deals directly with the problem at hand without creating new ones.

I respect many of the governmental regulations to protect state fisheries, but in my opinion this one is misguided and counterproductive.

Thank you for addressing this.

Sincerely,

T. Campion

San Diego County, Ca.

-----Original Message-----

From: Cameran Cochran

Sent: Friday, June 19, 2026 11:14 AM

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

Subject: Subject: Opposition to Proposed Emergency Regulations – Sections 28.06 & 28.65 – Recreational Gear Restrictions for White Shark

Dear California Fish and Game Commission,

My name is Cameran and I'm a recreational angler based in San Diego County. I fish the Oceanside Pier regularly and spend a lot of my time land based shark fishing up and down the San Diego coastline. I'm writing because I have serious concerns about the proposed emergency regulations under Sections 28.06 and 28.65.

I want to be clear — I have no interest in targeting white sharks. Nobody I fish with does either. When I'm out on the pier or fishing the beach, I'm targeting leopard sharks, sevengills, smoothhounds, and other legal species that California waters are full of. That's what the vast majority of shore anglers down here are doing. To paint us all with the same brush as the few bad actors who are intentionally going after white sharks is frustrating and honestly pretty unfair.

Banning wire leaders and restricting hook sizes south of Pigeon Point doesn't just inconvenience us it makes it nearly impossible to fish for the species we're legally allowed to target. Wire leaders aren't some secret weapon for catching white sharks. They're a basic, responsible piece of tackle that any shark angler uses to get a clean catch and release without damaging the fish or the gear. Taking that away doesn't protect white sharks, it just punishes people like me who are already following the rules.

If the Commission wants to address the problem of people illegally targeting white sharks, I'd ask that you focus on enforcing the laws that already exist, increase education at popular fishing spots, and work with the fishing community directly before rolling out a blanket ban that affects everyone. Limiting any restrictions to specific areas and times where juvenile white shark aggregations are actually being documented would make a lot more sense than shutting down an entire region for all shark anglers.

I care about the ocean and I want white sharks protected just as much as anyone. But these regulations go too far and they're going to hurt a community of responsible anglers who have nothing to do with the problem you're trying to solve.

Please reconsider this emergency action and give the fishing community a seat at the table before moving forward.

Thank you,

Cameran

San Diego County

-----Original Message-----

From: Felix Miller [REDACTED]

Sent: Sunday, June 21, 2026 1:09 PM

To: OAL Reference Attorney@OAL <OALReferenceAttorney@oal.ca.gov>; FGC <FGC@fgc.ca.gov>

Subject: White shark emergency regs

Dear commission,

I believe that passing the proposed regulations of banning cable leaders and hooks bigger than 1.5" would be a terrible mistake. While I understand the intention is to protect white sharks, these regulations would have much wider effects. There are numerous other legal shark species that are extremely difficult to successfully catch with cable leader and big hooks, such as mako sharks, prickly sharks, sixgill sharks, sevengill sharks, blue sharks and even large thresher sharks and soupfin sharks. There are already existing regulations in place to protect white sharks such as prohibiting intentionally targeting white sharks and no shark fishing within 1 mile of any known white shark presence. These regulations would severely compromise anglers' ability to target any of the large shark species I listed. Some people depend on these species for food to feed themselves and/or their families. Others such as myself just like to fish for them recreationally and should have every right to do so. Some of the examples that were cited were also very troubling to me.

To start with, the example of the swimmer being bitten by a hooked white shark at Manhattan Beach was an egregious and one off scenario. In order to have been hooked off the pier, the shark had to have already been near the shore to begin with, as are thousands of other white sharks along the California coast. The angler can not possibly be considered at fault for this event.

In the other case of the 20 white sharks being caught off the Hermosa Beach Pier, all that shows to me is an egregious failure to enforce existing laws. Every single person on that pier that landed a white shark with the exception of the first one was breaking an already existing law of not shark fishing in the known presence of white sharks, but as far as I know, no disciplinary action was handed down for this event, and it was instead used as an example to pass new laws that would not have resulted in a better outcome.

And the last and most egregious case was last winter when anglers gaffed and killed a white shark at the seal beach pier. An individual employed by the Department of Fish and Wildlife was called to the scene, only to misidentify the shark as a mako and impose no disciplinary action on the individuals who committed this serious offense. Anglers should not be punished for the Department's failure to enforce existing laws, and as for the anglers mentioned and others that commit similar offenses, they are not in any way representative of shark anglers in California and are instead a few outlying individuals.

The vast majority of shark anglers follow existing laws, whether they are enforced or not, and they should not be punished for the mistakes of a few uneducated individuals. And as for the actual gear restriction, only allowing monofilament lines and small hooks is not going to stop any white sharks from being hooked. What it will do, is cause much more of them to break off and be left with hooks in their mouths, and the few that are reeled in will be subjected to a much longer fight due to the lighter tackle used, which will lower their chances of survival upon release.

What I propose should be done instead is placing a ban on any stainless steel hooks, which take much longer to rust out in a sharks mouth, as well as encouraging any angler that incidentally bycatches a white shark to remove the hook whenever possible instead of cutting the line, which will be better for the sharks.

I also believe that existing regulations need to be better enforced, which will prevent incidents such as the Hermosa Beach Pier incident and the Seal Beach Pier incident from happening again. I believe the proposed regulations will have devastating effects on anglers and actually on white sharks as well, and I urge you to reconsider them for the sake of all.

From: beingkyant@gmail.com [REDACTED]
Sent: Friday, June 19, 2026 9:25 AM
To: FGC <FGC@fgc.ca.gov>
Subject: Potential regulatory changes (steel leader ban)

Hello,

I have been keeping up to date with the recent regulations and potential changes coming to CA fishing and I must say as a commercial and sport fisherman I'm very disappointed in the problem solving at hand. I read an over all ban to metallic leaders as a whole? This seems very very counterproductive to me as this takes away a MASSIVE fishery especially for those fishing off the piers in California. I assume this is to prevent the targeting of great whites?

I find this to be incredibly ironic though seeing as Fish and Game approved the harvest of a great white shark off of Seal Beach pier less than a year ago. To me that is a much larger problem than using steel leader as a whole. I truly believe that if officers are more informed as to the way people target great whites and even what they look like that would solve the problem much more effectively than banning an entire way of fishing to essentially the whole state. This prevents targeting very much legal species to harvest such as 7 gill, soupfin, leopard shark, and some people even use steel leader for thresher.

I am in full agreement that targeting whites in California is definitely a problem and one that needs to be addressed but this is truly in no way shape or form the way to handle it. I'm additionally included a picture of the event I'm speaking of on Seal Beach, which was honestly a VERY disappointing thing to hear of seeing as that is an absurd level of ignorance at hand from someone who holds so much jurisdiction over our waters. If you need more photos of the event I have many, including multiple with officers and a video of one saying that it was in fact a mako.

5:11

5G 64



Mako 😂

Send message...



COMMITTEE STAFF SUMMARY FOR JULY 14, 2022 MRC

For background purposes only

5. CALIFORNIA SPINY LOBSTER FISHERY REGULATIONS

Today's Item	Information ☒	Action ☐
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Receive DFW overview of potential adjustments to regulations implemented in 2017 for the California spiny lobster (lobster) fishery and develop a potential committee recommendation.

Summary of Previous/Future Actions

- | | |
|---|--------------------------------------|
| • FGC adopted lobster fishery management plan (FMP) | Apr 13-14, 2016; Santa Rosa |
| • FGC adopted regulations implementing lobster FMP | Jun 22, 2016; Bakersfield |
| • FGC referred review of lobster FMP implementing regulations to MRC | Feb 6, 2019; Sacramento |
| • Today receive and discuss DFW overview of draft lobster regulation changes, and potential recommendation | Jul 14, 2022; MRC, Santa Rosa |

Background

The California Spiny Lobster FMP was adopted by FGC in Apr 2016. FGC adopted regulations with measures implementing the FMP at the Jun 2016 meeting, which went into effect in 2017. In light of the breadth of fishery changes adopted, DFW committed to track implementation effectiveness and identify any provisions that might need to be adjusted through what is commonly referred to as regulatory “clean-up.”

In late 2018, a stakeholder requested that FGC refer to MRC a discussion about the new lobster trap retrieval regulations and other regulations established to implement the Lobster FMP. FGC granted that request at its Feb 2019 meeting, and referred the work plan topic “California Spiny Lobster Fishery Management Plan implementing regulations review” to MRC. The topic was held for a future meeting date to be determined, pending completion of DFW investigation into specific concerns related to the abandoned trap retrieval provision and other FMP-implementing regulations that might warrant regulatory clean-up.

In Jun 2022, following consultation with fishery participants between 2020 and 2022, DFW notified FGC that it completed its review of potential adjustments to the regulations. FGC approved scheduling this topic for today's MRC meeting for vetting and potential committee recommendation.

For today's meeting, DFW has prepared a detailed overview of potential regulatory adjustments (Exhibit 1), a summary of outreach meetings, and DFW recommendations. DFW is proposing four recreational fishery adjustments and three commercial fishery adjustments.

COMMITTEE STAFF SUMMARY FOR JULY 14, 2022 MRC

For background purposes only

The majority of potential changes would constitute “clean-up” of regulations implemented in 2017. However, DFW also evaluated two new commercial regulation options—allowing commercial lobster “tailing” and after-season possession of live lobster—proposed by individual fishery participants. In Feb 2022, DFW distributed a survey to commercial permittees and buyers to gauge the level of fleet-wide and buyer-wide support for the two requested changes under minimum recommended conditions developed by DFW. DFW analyzed results, synthesized the findings, and makes recommendations within a report provided as Exhibit 2. Based on survey results, DFW does not recommend including a regulatory change for either proposed allowance at this time.

In late Jun 2022, DFW distributed the survey results report to commercial lobster permittees and buyers. DFW highlighted its conclusions and rationale for not recommending either option at this time, adding that an option for tailing would require additional time for scoping and discussion. DFW also summarized the three previously-discussed commercial regulatory “clean-up” adjustments that DFW does support and will be presenting for discussion today.

DFW proposes the rulemaking commence with notice in Dec 2022 to ensure changes go into effect by the Oct 2023 lobster season. Additional discussions are ongoing between DFW and proponents of the commercial changes scoped through the survey.

Significant Public Comments (N/A)

Recommendation

FGC staff: Support DFW recommendation to schedule a rulemaking to consider recreational and commercial lobster fishing regulations as proposed by DFW, and tentatively schedule an update for the Nov 2022 MRC meeting.

DFW: Schedule a rulemaking to consider recreational and commercial lobster fishing regulations on a timeline commencing with notice in Dec 2022, as reflected in Exhibit 1.

Exhibits

1. DFW presentation
2. CDFW *Commercial Lobster Tailing and Post-Season Possession Survey Results*, dated Jun 22, 2022

Committee Direction/Recommendation

Advance a rulemaking to consider potential adjustments to California spiny lobster fishery regulations implemented in 2017 as recommended by the Department, schedule for notice in December 2022, and request the Department to provide an update at the November 2022 Marine Resources Committee meeting.



Adjustments to Spiny Lobster Regulations Implemented in 2017

July 14, 2022

Presented to:

Marine Resources Committee

Presented by:

Jenny Hofmeister, PhD

**Environmental Scientist
Marine Region**



Outline

- History and Context
- Proposed Recreational Regulatory Adjustments
- Proposed Commercial Regulatory Adjustments
- Commercial Regulatory Changes Scoped but Not Recommended At This Time
- Proposed Timeline
- Summary



Commercial Regulatory Changes Scoped but Not Recommended



Lobster Tailing: Background

- **May 2020:** Contacted by member of commercial lobster fleet requesting a change to allow the sale of lobster tails
 - Put pause on rulemaking package
 - Immediate concern for COVID impacts on live market
- **July 2020:** Commercial fleet meeting
 - Presented tailing request and gauged initial interest
- **Oct 2020:** Season start, price per pound hit record high in Dec
 - Urgency was lessened, but staff continued analysis and information gathering

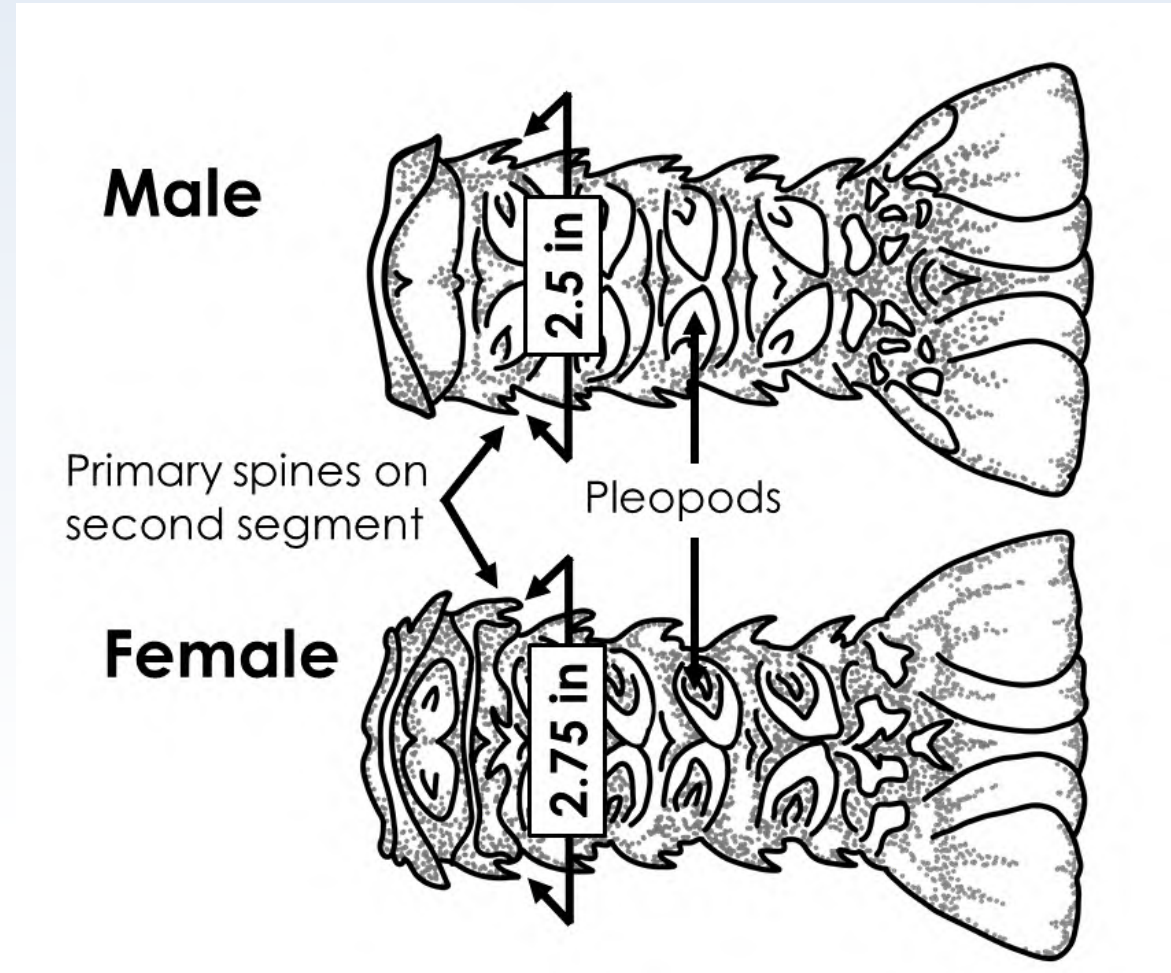


Lobster Tailing: Background (Cont.)

- **Aug 2021:** Commercial fleet meeting
 - Reassessed tailing interest, determined a survey should be issued
- **Feb 2022:** Commercial regulation survey sent
 - Sent to permit holders and buyers
 - Also included a question about interest in possession of lobsters after the season closure
- **June 2022:** Results shared with the fleet

Lobster Tailing: Survey

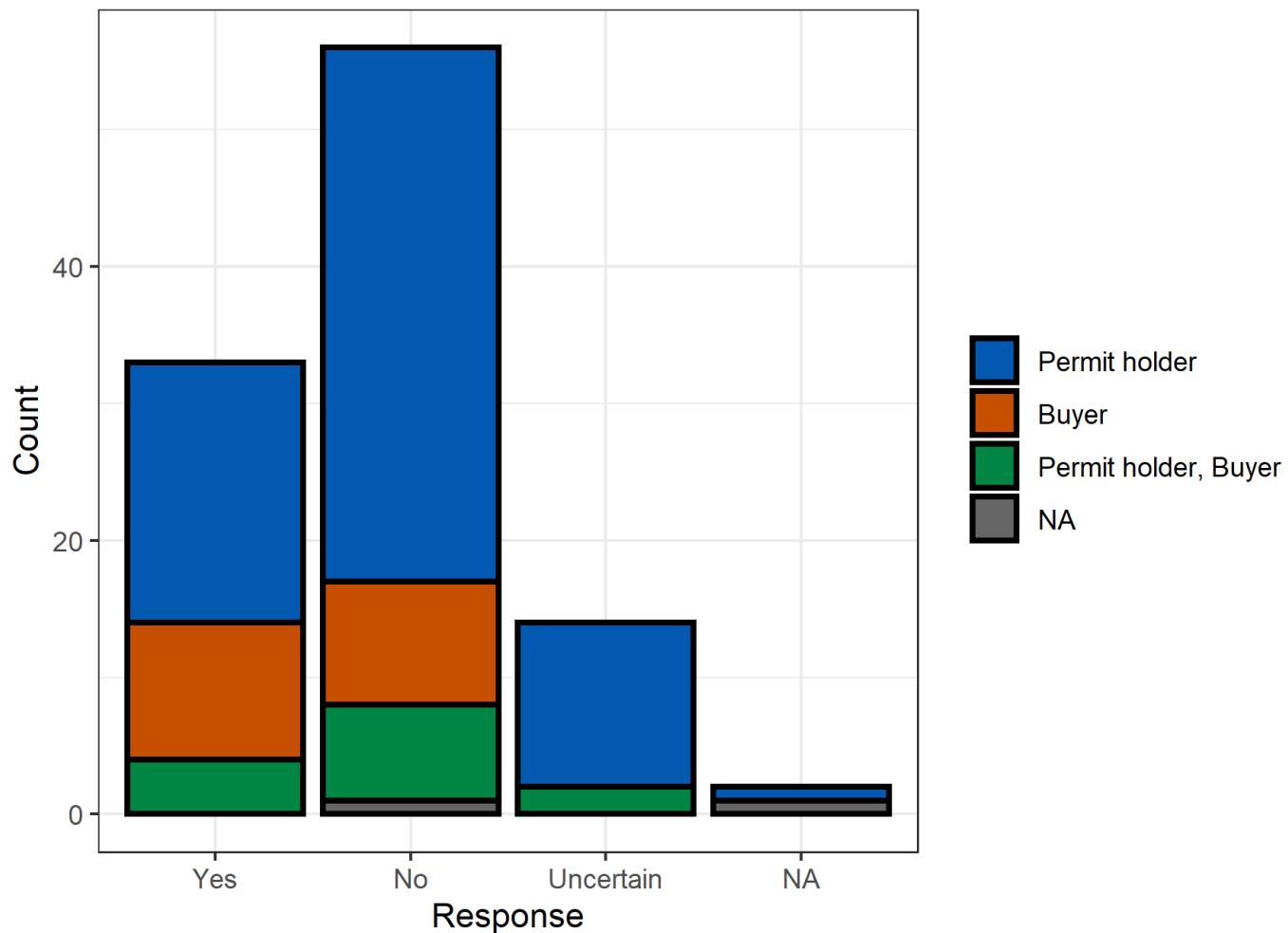
- Analyzed existing data to determine conservative tail width limits
- Outlined a draft regulatory structure
- Detailed report of survey results in MRC binder





Lobster Tailing: Responses

Do you support a change allowing lobsters to be tailed, given that setting conservative legal tail widths would mean not all catch could be tailed?

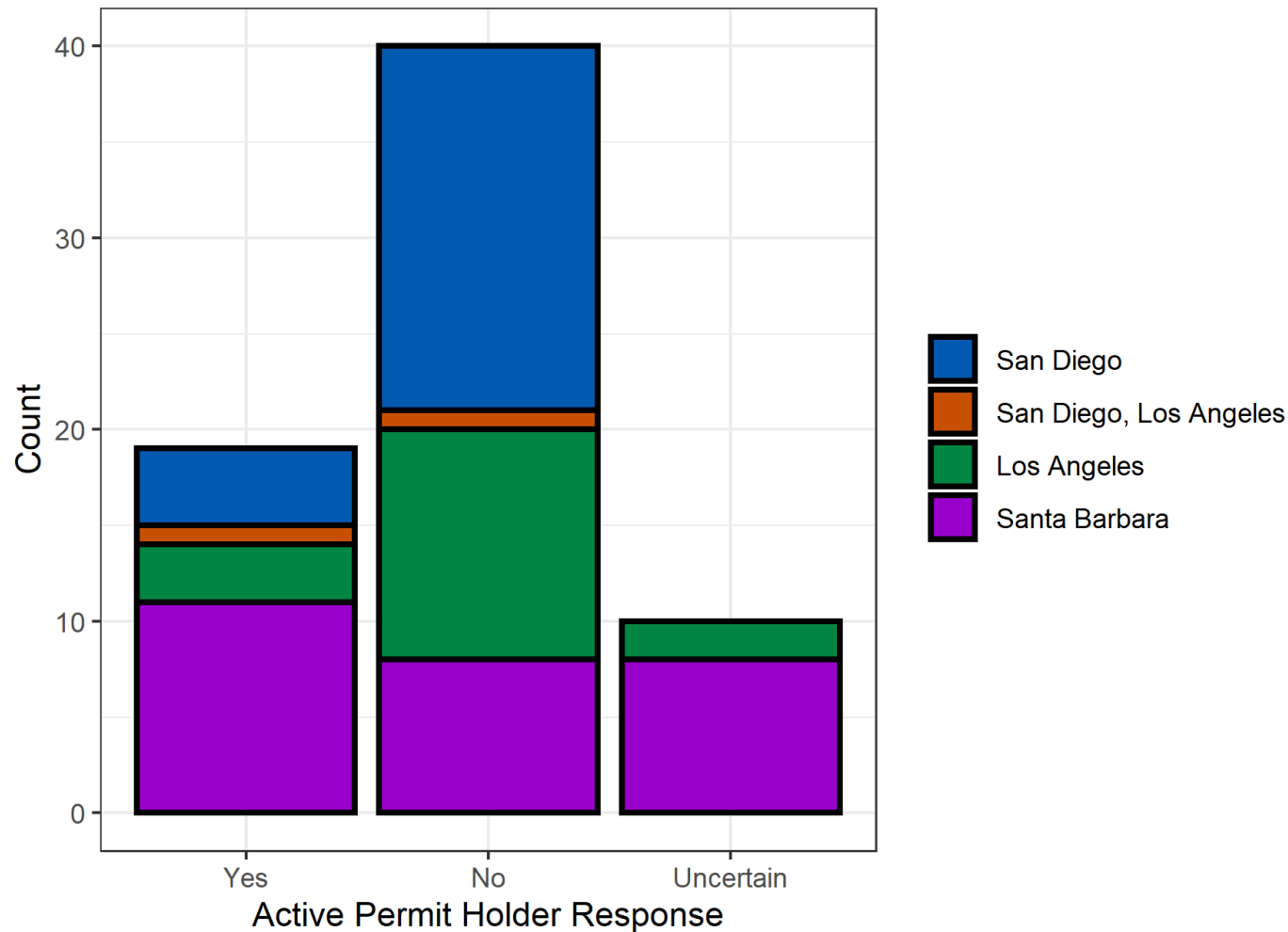


- 215 contacted, 105 responded
- Yes = 33, No = 56, Uncertain = 14, Did Not Answer = 2



Lobster Tailing: Geographic Support

Do you support a change allowing lobsters to be tailed, given that setting conservative legal tail widths would mean not all catch could be tailed?

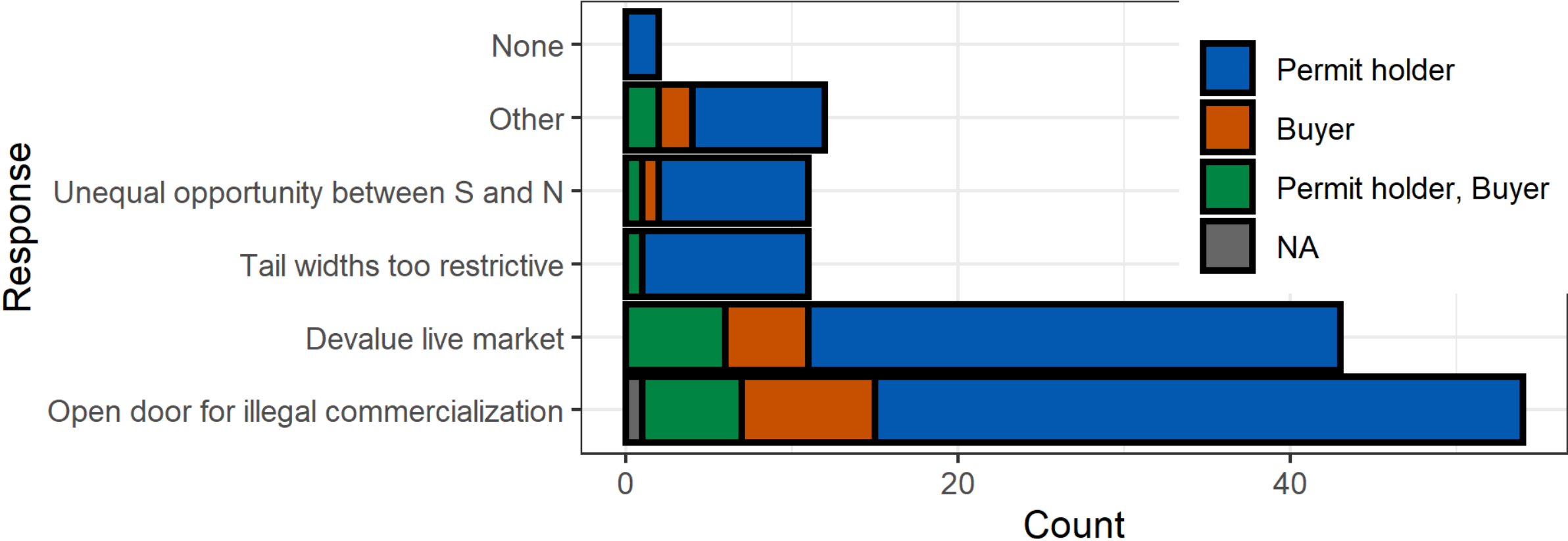


- 71 respondents made landings during the 2021-22 season
- Less support in the south than in the north



Lobster Tailing: Reasons Against

If you DO NOT support a tailing option, please select your reasons for why you do not want lobster tailing to be implemented.





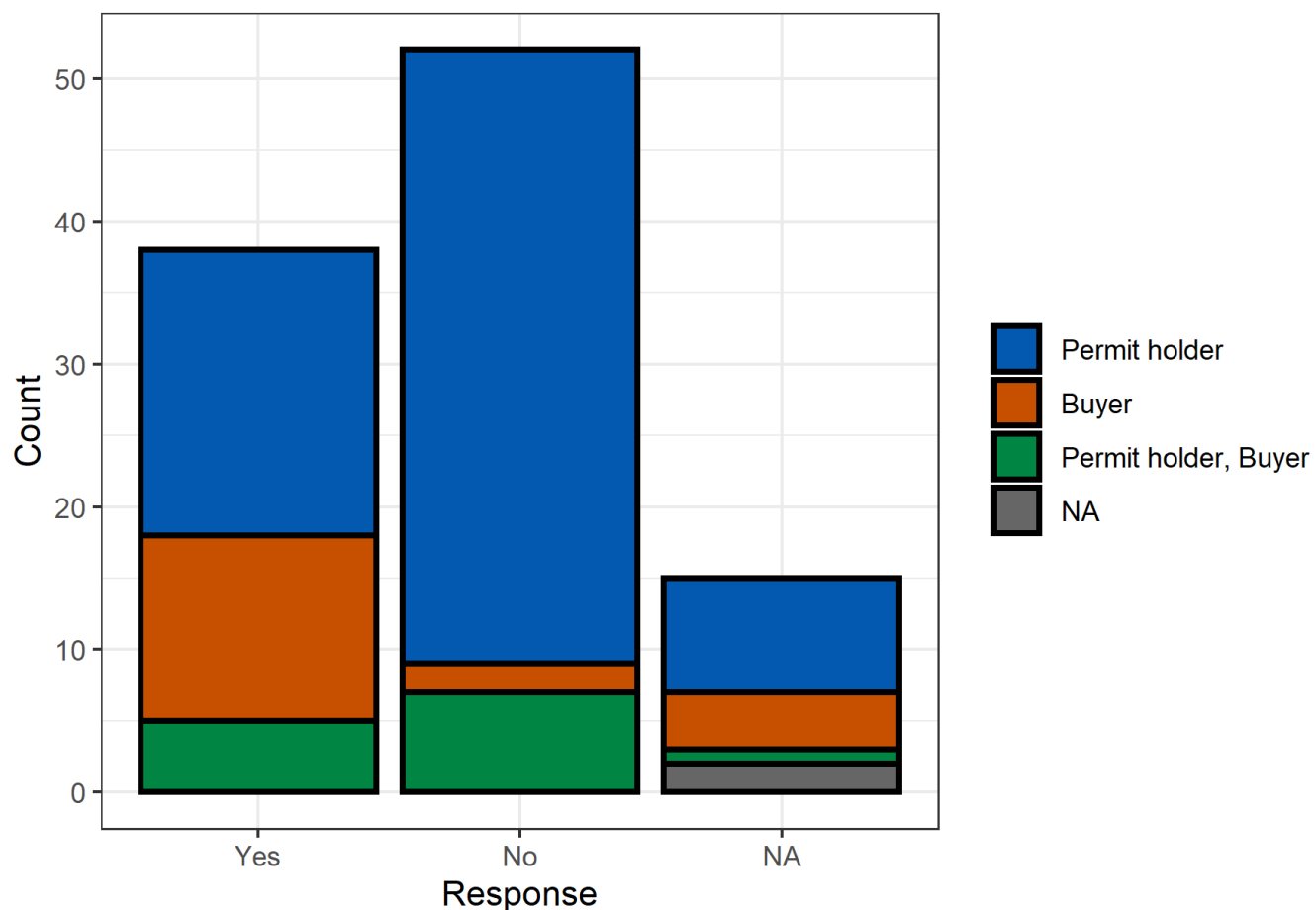
Post-Season Possession

- Current rule prohibits possession of lobsters after the season
- Post-season possession of live lobsters would give markets more time to sell lobsters that were landed on the last day of the season
- For enforcement purposes, it was recommended this change be accompanied by a requirement that all traps be out of the water by season's end



Post-Season Possession: Responses

Would you be in favor of allowing post-landing possession of live lobsters up to 7 days after the season closes, given the LED requirement that all traps be out of the water on the last day of the season?



- Yes = 38, No = 52, Did Not Answer = 15



Tailing and Post-Season Possession: Recommendations

- Tailing
 - Not recommended to include in current proposed regulatory package, doing so would significantly delay timeline
 - More discussion and scoping needed
- Post-Season Possession
 - Not recommended to pursue at this time

Thank You



Jenny Hofmeister, PhD.
Environmental Scientist, CDFW
lobster@wildlife.ca.gov

Commercial Spiny Lobster Tailing and Post-Season Possession Survey Results

California Department of Fish and Wildlife (06/23/2022)

Marine Resources Committee Meeting of the California Fish and Game Commission July 14, 2022

Background Information

Some members of the commercial lobster fleet contacted California Department of Fish and Wildlife (Department) staff in May 2020 to propose a change in the regulations to allow lobster to be tailed at some point after being landed. Currently, lobster cannot be tailed until prepared for immediate consumption or sold to the ultimate consumer (CCR Title 14 § 121.5(c)). The intention of this requested change, as it was communicated to the Department, is to diversify the lobster market as well as improve and expand domestic sales by allowing lobster to be tailed and packaged for sale. In addition, some in the commercial fishery have asked about a change to allow buyers and markets to possess live lobsters up to 7 days after the season closes. This would allow fishing to occur up to and including the last day of the season, since buyers would not need to sell live catch before the season closes. Currently, the possession or sale of lobster is prohibited after the season.

On February 9, 2022, Department staff mailed and emailed a lobster tailing and post-season possession survey to 215 commercial lobster fishers and buyers, which included all valid commercial lobster permit holders and buyers who purchased lobster in the last three seasons. This survey was designed to assess the fleet-wide and buyer-wide level of support of the two requested changes. As of June 7, 2022, the Department received 105 responses (48.8% response rate).

In the survey, the following minimum recommended rules were presented as conditions if the Department were to pursue lobster tailing:

- Existing carapace size limit applies to all lobsters prior to landing, and to all lobster kept whole after being landed.
- Only commercial processors would be allowed to tail lobsters at a land-based address after landing. Tailing would not be allowed on a boat, in a vehicle, at the dock, or any place other than the land-based address.
- Tailed lobsters could not be possessed on a commercial vessel regardless of if they were landed or not.

- A minimum tail width would be established to ensure that a given tail came from a legal (3.25-inch carapace length) lobster.
- Tail widths would be sex-specific and conservative to minimize the chance that lobsters less than 3.25 in carapace length would enter the tail market.
 - 2.5 inches for males and 2.75 inches for females, measured in a straight line between the tip of the spines on the second abdominal segment just above the first pair of pleopods.
- A marking system (e.g., tail clip or tagging program) may be needed to identify sport-caught lobster from commercially caught lobster to minimize black market lobster tails.

Not every legal-size lobster would qualify for the tail market. From existing data, female lobsters with a carapace length of 3.25-3.75 inches have a tail width range of 2.0 to 3.0 inches with 64% having a tail width of 2.75 inches or greater making them available for a tail market. Male lobsters with a carapace length of 3.25-3.75 inches have a tail width range of 1.3 to 3.1 inches with 57% having a tail width of 2.5 inches or greater. However, these tail widths would result in a less than 0.5% chance that lobsters with a legal tail width came from a sublegal carapace length.

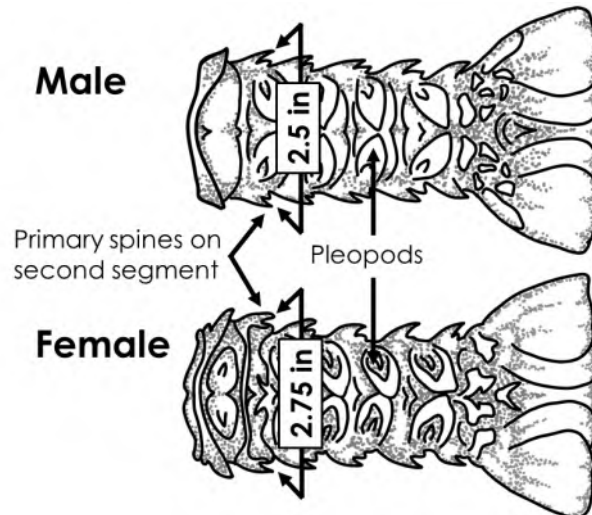


Figure 1. Proposed legal lobster tail widths and method of measuring for male and female lobsters. Tail width would be measured at the widest point on the second segment of the tail.

For post-season possession of live lobster, the following recommended restrictions were included:

- No lobsters would be allowed on commercial fishing vessels after the season.

- For enforcement purposes, an additional change would be recommended to require all lobster traps be removed by the last day of the season instead of the current allowance for unbaited and open traps to remain in the water for 9 days after the season closes.

Key Takeaways from Survey Results

- About half of respondents (n = 56) do not support a change allowing lobsters to be tailed, about 1/3 of respondents support a change, and the rest were uncertain or did not answer. Responses were as follows: Yes = 33; No = 56; Uncertain = 14; Did Not Answer = 2.
- Of the 105 respondents, 71 hold permits and made landings during the 2021-22 commercial lobster season (active permit holder). Of those 71, 19 (27%) support lobster tailing, 40 (56%) do not support lobster tailing, and 10 (14%) are uncertain. Two active permit holders (3%) did not answer the question.
- Active permit holder support for tailing varied regionally with 19% of southern-based fishers (San Diego, Orange, and Los Angeles counties; n = 42) in support, while 41% of northern-based fishers (Ventura and Santa Barbara counties; n = 27) support tailing. Two active permit holders did not answer the question.
- Based on responses to multiple questions, fishery participants are primarily interested in utilizing a tail market as a back-up plan and would not participate in a tail market when the live market is performing well.
- Buyers have a bigger interest in a tail market than permit holders do; 44% of respondents who are buyers in some capacity support lobster tailing, while 27% of those who only hold lobster permits support lobster tailing.
- Of those opposed to tailing, opening the door for illegal commercialization is the most common reason for the opposition.
- Most respondents to the question regarding allowance for possession of live lobsters after the season closure (n = 52) do not support such a change, given the recommended conditions. Responses were as follows: Yes = 38; No = 52; Did Not Answer = 15.

Recommendations

Based on these survey results, Department staff does not recommend including a regulatory change that would allow for lobster tailing at this time. Doing so would significantly delay the current proposed regulatory changes and expand the scope of the proposed rulemaking beyond its original intention. The scope of the proposed regulatory package is focused on needed adjustments to

regulations implemented in 2017. If this change is to be pursued, the support, need, and consequences of lobster tailing need to be further vetted and explored.

Additionally, Department staff does not recommend including a regulatory change that would allow for the possession of live lobster after the season closure conditional on all lobster traps being out of the water by the last day of the season. Fleet support, specifically permit holder support, was not high enough to warrant pursuing such a change.

Survey Question Responses

QUESTION 1. Do you support a change allowing lobsters to be tailed, given that setting conservative legal tail widths would mean not all catch could be tailed?

Question 1 was intended to assess overall support of a change allowing lobsters to be tailed, given the recommended restrictions set forth in the survey background information. In response to Question 1, 56 respondents replied “No”, 33 replied “Yes”, 14 were “uncertain”, and 2 did not answer the question (Figure 2). The respondents who replied yes accounted for 17.9% of lobster landings by weight for the 2021-22 commercial season. The respondents who replied no accounted for 30.2% of lobster landings by weight and the respondents who were uncertain accounted for 8.2% of lobster landings by weight (Figure 3).

- Of the 105 respondents, 71 hold permits and made landings during the 2021-22 commercial lobster season (Figure 4). Of those 71, 19 (27%) support lobster tailing, 40 (56%) do not support lobster tailing, and 10 (14%) are uncertain. Two active permit holders (3%) did not answer the question. Of the active permit holders who replied “Yes” to Question 1, 8 fished in the southern region of the fishery (San Diego, Orange, and Los Angeles counties) and 11 fished in the northern region of the fishery (Ventura and Santa Barbara counties). Of the active permit holders who replied “No” to Question 1, 32 fished in the southern region and 8 fished in the northern region. Two southern permit holders and 8 northern permit holders replied “Uncertain”.

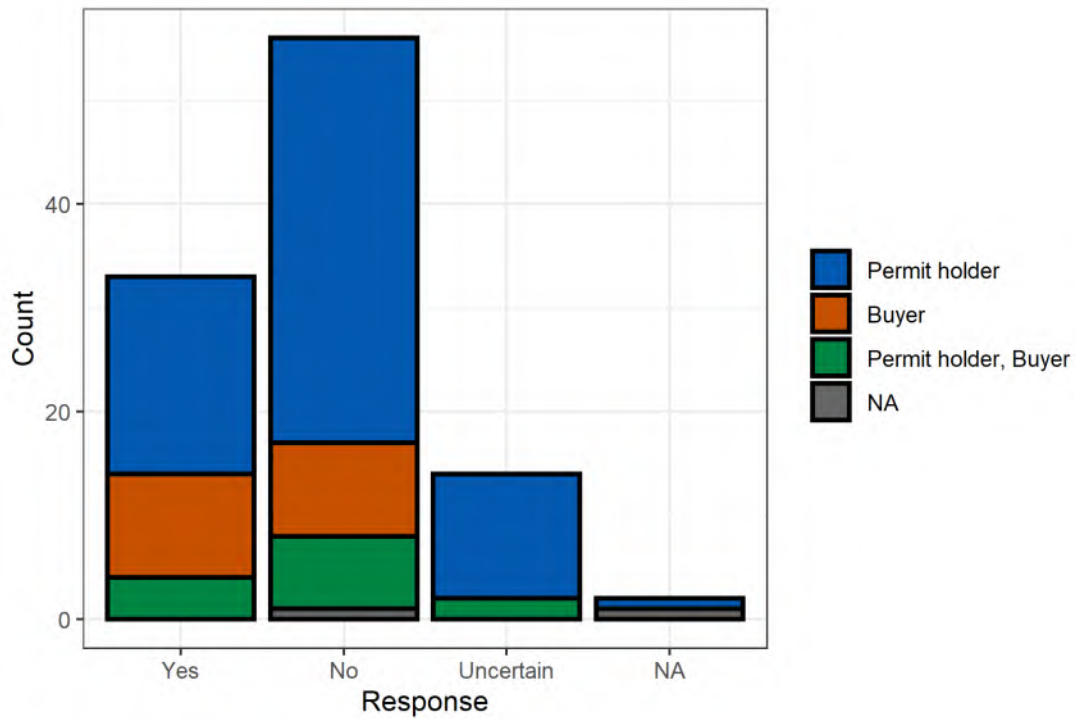


Figure 2. Number of respondents (n = 105), color coded by fishery participant type, who do or do not support a change allowing lobsters to be tailed. An NA participant type is a respondent who did not indicate if they were a permit holder and/or buyer, and an NA response is a respondent who left that question blank.

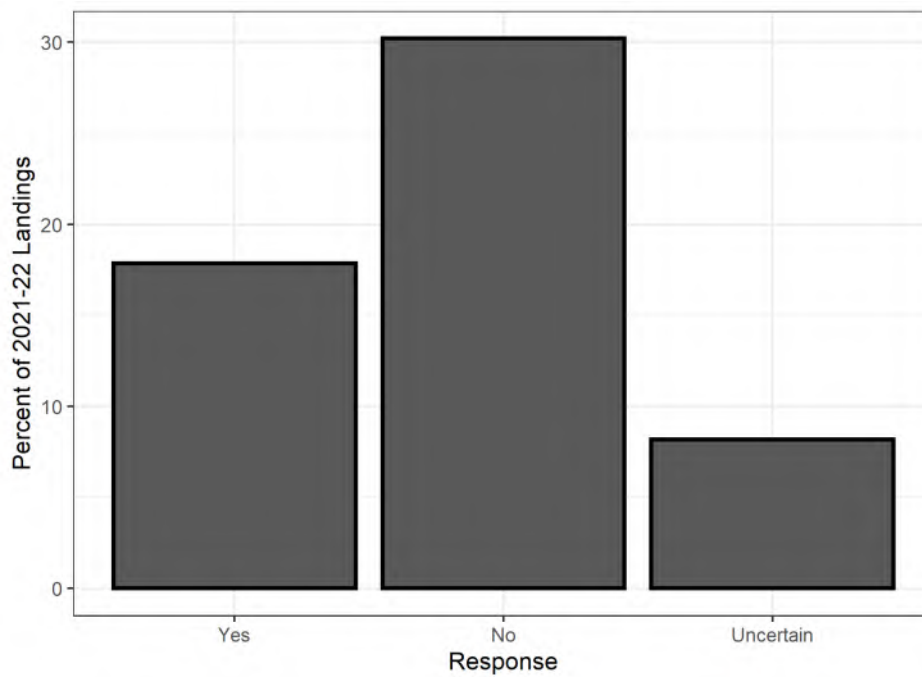


Figure 3. Percentage of 2021-22 landings reported by respondents, based on E-Tix data accessed on April 15, 2022.

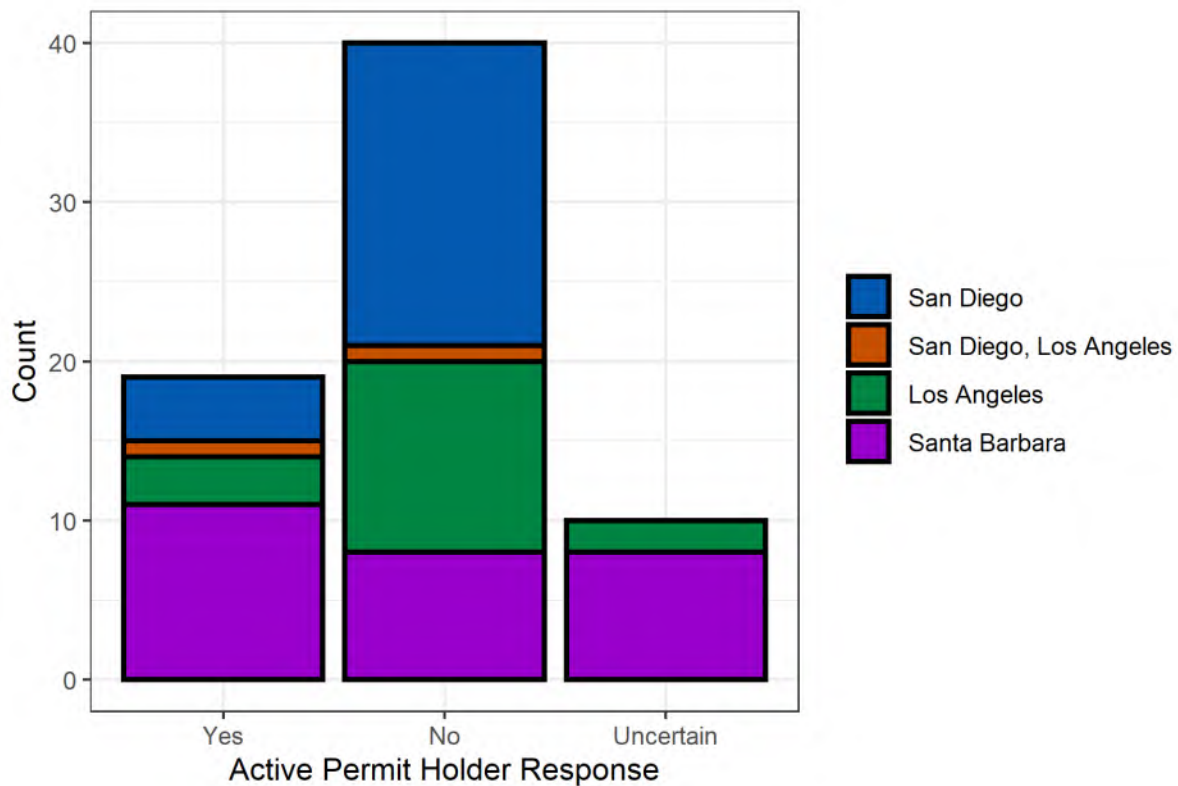


Figure 4. Number of respondents who made landings during the 2021-22 season, color coded by county, who do or do not support a change allowing lobsters to be tailed (n = 71). "Los Angeles" includes Orange and Los Angeles counties. "Santa Barbara" includes Ventura and Santa Barbara counties. Some respondents landed lobsters in San Diego, Orange, and Los Angeles counties (indicated in orange).

QUESTION 2. On a scale of 1-5, with 1 meaning “Never” and 5 meaning “All the Time,” if lobster tails were allowed in markets, how often would you use this option?

Question 2 was intended to assess how often fishery participants would use a lobster tailing option. The answer to this question, in combination with questions 3 and 4, were designed to distinguish between participants who would use a lobster tail market as a regular component of their marketing approach, or ones who intend to use it only as a back-up option when the live market is not a financially or logistically viable option. Most respondents who answered “Yes” or “Uncertain” to Question 1 selected a value of “3” for this question, which was labeled as “Depends” in the survey (n = 27; Figure 5).

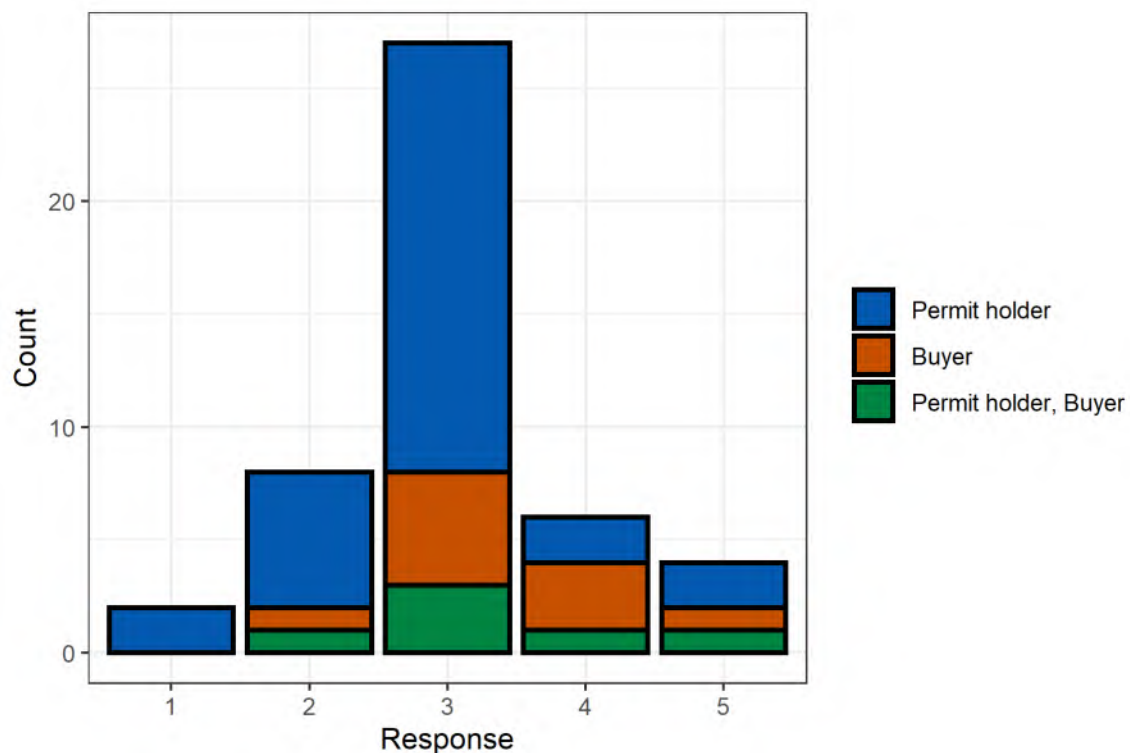


Figure 5. Responses to Question 2 assessing the frequency of use of a lobster tail market option. These results are only from respondents who answered “Yes” or “Uncertain” to Question 1 (n = 47).

QUESTION 3. Are you interested in participating in a tail market only as a back-up plan when live or whole lobsters cannot be sold?

The majority of respondents who answered “Yes” or “Uncertain” to Question 1 selected “Yes” to Question 3 (n = 36; Figure 6), indicating most who are interested in lobster tailing are interested in it as secondary option when the live market is not performing well. Only results from respondents who answered “Yes” or “Uncertain” to Question 1 are presented.

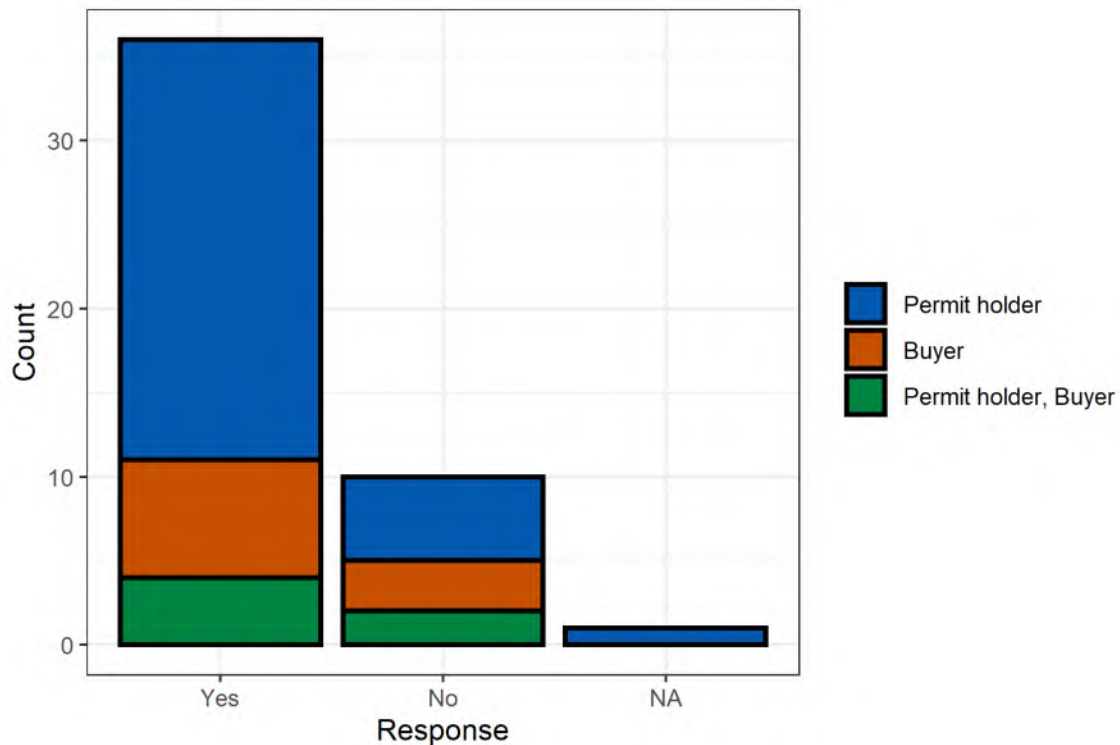


Figure 6. Responses to Question 3 assessing interest in lobster tailing as a back-up plan to the live market. A response of NA indicates the question was not answered. These results are only from respondents who answered “Yes” or “Uncertain” to Question 1 (n = 47).

QUESTION 4. Would you utilize a tail market if the live market is doing well?

The majority of respondents who answered “Yes” or “Uncertain” to Question 1 replied “Yes” to Question 4 ($n = 23$; Figure 7). This is in seeming contrast to the answers to Question 3. Permit holders made up a much larger proportion of “No” answers to this question than buyers. An additional 2 respondents indicated they were uncertain if they would use a tail market if the live market were doing well, which was not an official option presented in the survey.

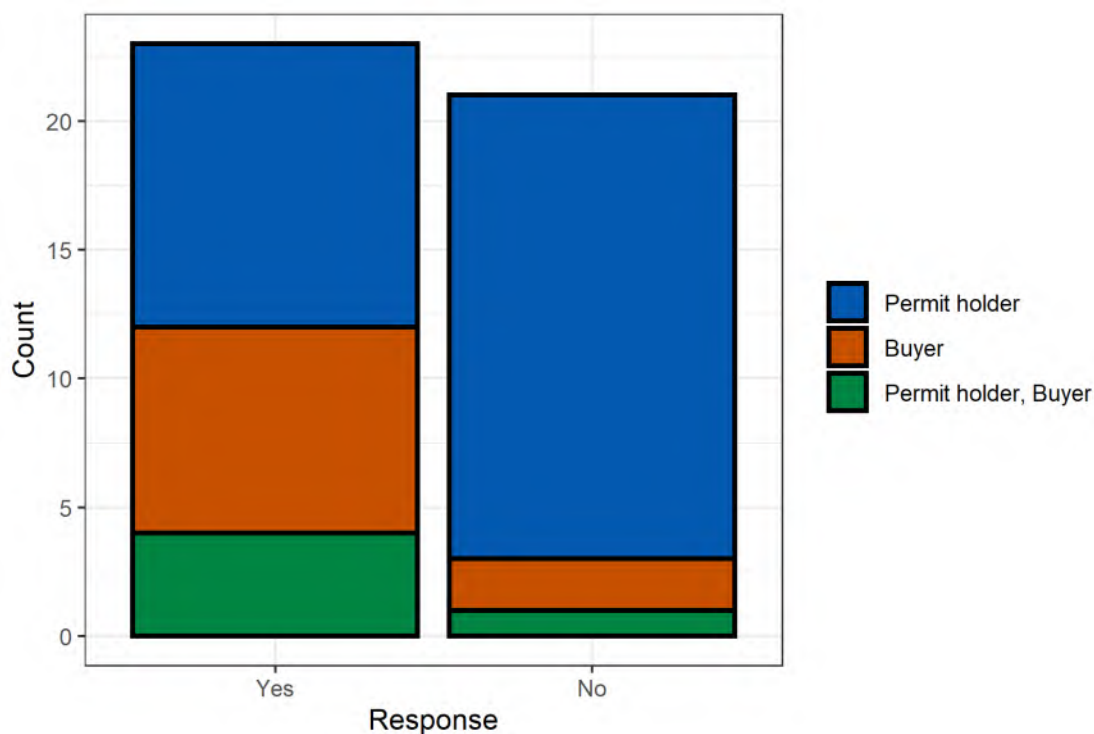


Figure 7. Responses to Question 4 assessing if fishery participants would utilize lobster tailing if the live market was doing well. These results are only from respondents who answered “Yes” or “Uncertain” to Question 1 ($n = 47$).

QUESTION 5. On a scale of 1-5, with 1 meaning “Not important at all” and 5 meaning “Extremely important,” how important is it to you that lobster tailing becomes a consistent market option available throughout every season?

This question was intended to determine if support for tailing is driven by intended use (as asked in Questions 2, 3, and 4), or by importance of tailing as an option within the fishery. Only results from respondents who answered “Yes” or “Uncertain” to Question 1 are presented (Figure 8).

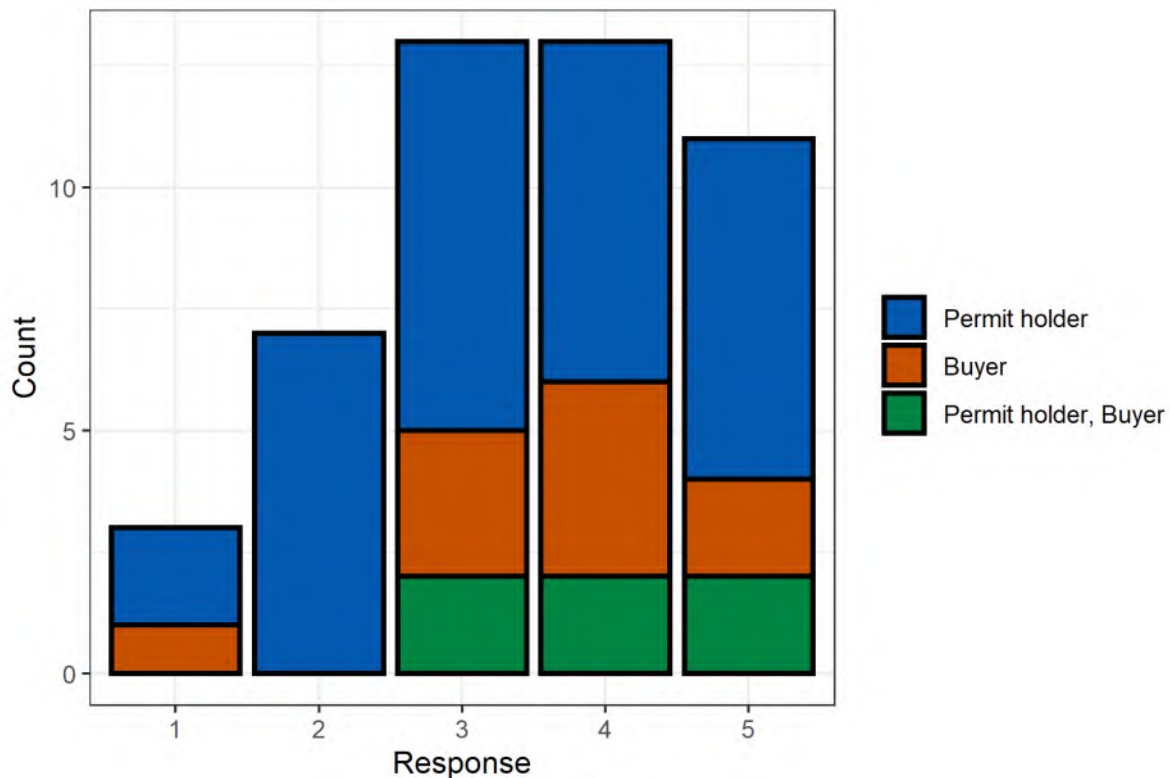


Figure 8. Responses to Question 5 assessing how important respondents feel a lobster tailing option is. These results are only from respondents who answered “Yes” or “Uncertain” to Question 1 (n = 47).

QUESTION 6. If you DO NOT support a tailing option, please select your reasons for why you do not want lobster tailing to be implemented.

This question was asked to determine the primary reasons a fishery participant does not support lobster tailing. Only results from respondents who answered “No” or “Uncertain” to Question 1 are presented (n = 70; Figure 9). The most chosen reason against lobster tailing was “Open door for illegal commercialization” (n = 54), followed by “Devalue live market” (n = 43). Respondents could choose more than one reason.

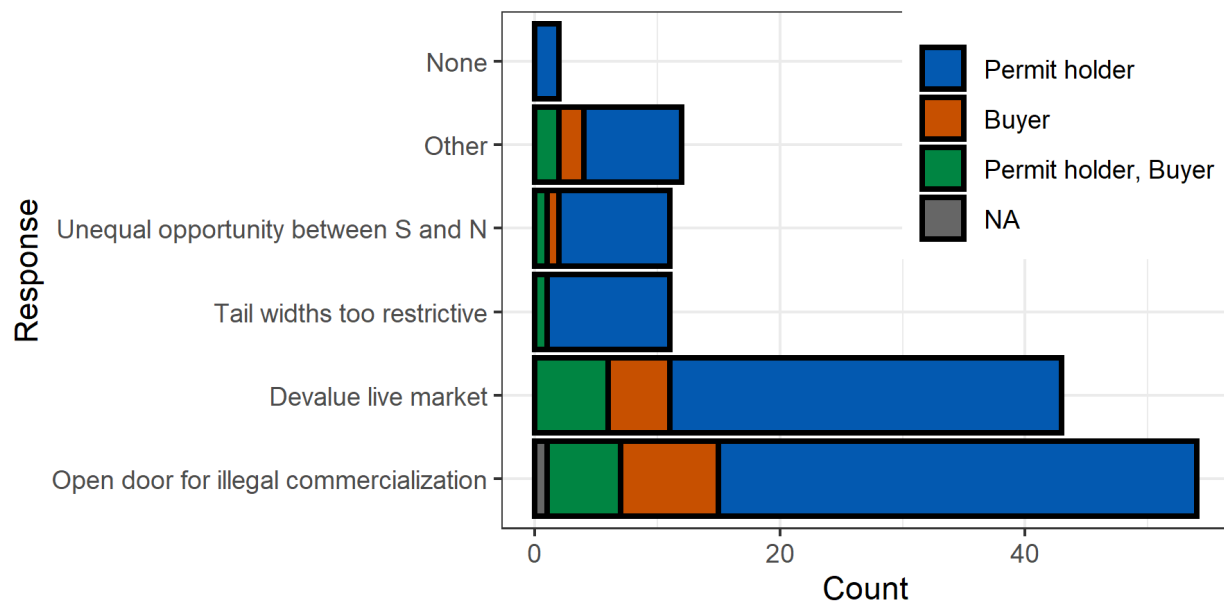


Figure 9. Responses to Question 6 assessing the reasons why fishery participants do not support lobster tailing. Only responses from participants who answered “No” or “Uncertain” to Question 1 are presented (n = 70). An NA participant type is a respondent who did not indicate if they were a permit holder and/or buyer.

QUESTION 7. Would you be in favor of allowing post-landing possession of live lobsters up to 7 days after the season closes, given the LED requirement that all traps be out of the water on the last day of the season?

The majority of respondents answered “No” to Question 7 (n = 52; Figure 10). Buyers most often answered “Yes” while the permit holders most often answered “No”.

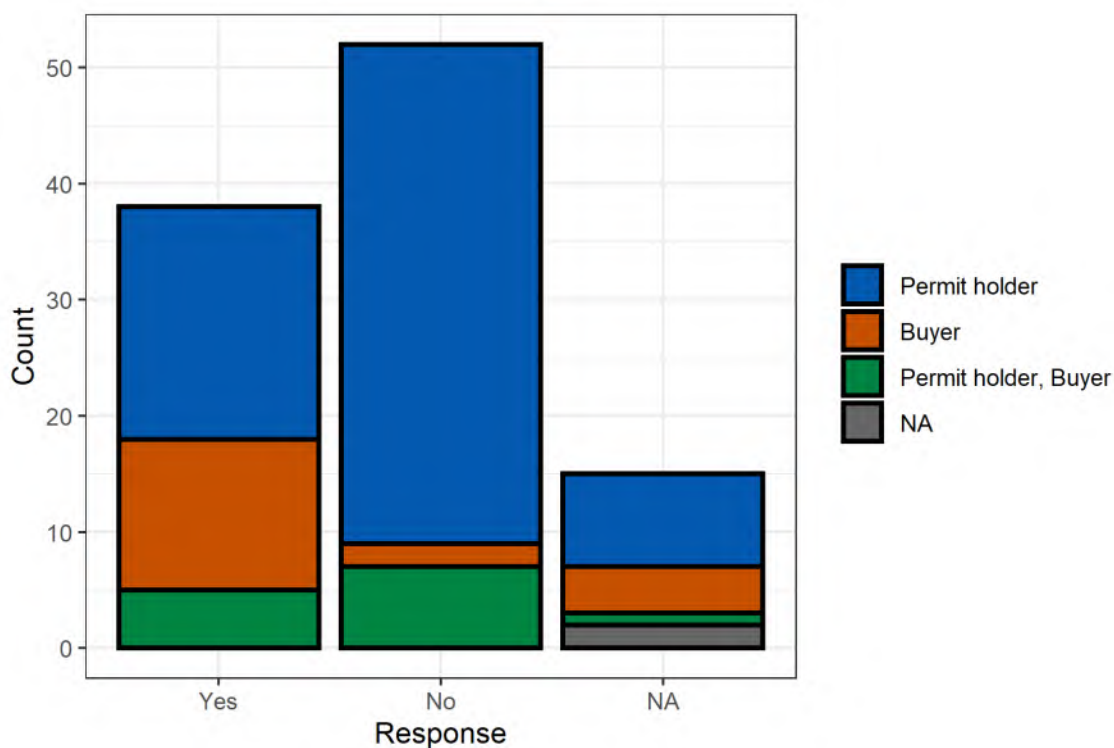


Figure 10. Responses to Question 7 assessing if fishery participants would want an allowance for live lobsters to be possessed after the season closure given the recommended conditions. An NA participant type is a respondent who did not indicate if they were a permit holder and/or buyer, and an NA response is a respondent who left that question blank.

Synthesis and Conclusions: Tailing

The overall responses to this survey indicate that the majority of the commercial lobster fishery participants either do not support or are uncertain about regulation changes allowing for the tailing of lobsters post-landing. In addition, the majority of supporters are based in the northern range of the fishery (Ventura and Santa Barbara counties) while the majority of opponents are from the southern range of the fishery (San Diego, Orange, and Los Angeles counties). It should be noted that to be confident that a tail came from a legal-sized lobster (based on carapace length), a conservative (relatively wide) tail width limit would be recommended. Lobsters caught in the south are smaller on average

than lobsters caught in the north, and therefore less of the legal-size lobsters caught in the south would qualify to be tailed. Question 6, attempted to assess the prevalence of this concern which asked why fishery participants do not support a tailing option. "Unequal opportunity between southern and northern fleet" was selected 11 times as a reason against lobster tailing (Question 6).

Of the respondents who are supporters or uncertain of allowing tailing, there were mixed responses to questions assessing the source and level of importance and need for lobster tailing. While most respondents in this category indicated they would only be interested in a tailing option as a back-up plan (Question 3), roughly the same number of respondents indicated they would (n = 23) use a tail market when the live market is doing well as those who indicated they would not (n = 21) (Question 4). In addition, the majority of respondents in this category stated their frequency of use of lobster tailing would depend on the situation (Question 2), but when ranking the importance of this change there was a skew towards the "Important" and "Very Important" responses (Question 5). Taken together, these responses suggest fishery participants who support tailing view it as an important addition to their marketing options but is not something they plan to utilize on a regular basis.

The most common reasons for not supporting a lobster tailing option were "Open door for illegal commercialization" and "Devalue the live market". The former is a concern tied to resource protection and enforceability of regulations, while the latter is primarily a market concern.

Synthesis and Conclusions: Possession after season closure

The majority of respondents do not support a regulatory change that would allow the possession of live lobsters after the season, given the condition that all traps be out of the water by the last day of the season. There was a clear difference between permit holder and buyer preference. The regulatory change was supported by a larger number of buyers, and not supported by a larger number of permit holders.

Commissioners
Samantha Murray, President
La Jolla
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Santa Cruz
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Eric Sklar, Member
Saint Helena
Vacant, Member

STATE OF CALIFORNIA
Gavin Newsom, Governor

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Executive Director
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Fish and Game Commission



*Wildlife Heritage and Conservation
Since 1870*

MARINE RESOURCES COMMITTEE

Committee co-chairs: Commissioner Sklar and Commissioner Murray

Excerpt of Agenda Item 5 from

July 14, 2022 Meeting Summary

Following is an excerpt from a summary of the California Fish and Game Commission (Commission) Marine Resources Committee (MRC) meeting as prepared by staff. A video and audio recording of the meeting are available at: [Marine Resources Committee - July 14, 2022 - Santa Rosa / Webinar/Teleconference - YouTube](#).

5. California spiny lobster fishery regulations

Jenny Hofmeister presented an overview of Department-proposed adjustments to recreational and commercial spiny lobster regulations implemented in 2017, summarized outreach to lobster fishery participants, and provided a proposed regulatory timeline. The Department evaluated two potential changes proposed by commercial fishery participants, one to authorize lobster tailing and one to allow end-of-season live possession at commercial fish processing facilities. The Department developed conditions that would address enforcement feasibility and conducted a survey of commercial lobster fishermen and buyers to gauge support for the options under Department-defined measures. The lobster tailing option as proposed was not supported by a majority of survey respondents; this option would require more vetting and development, thus the Department does not recommend including them in the proposed rulemaking. The end-of-season live possession option as proposed was not supported by a majority of respondents; therefore, the Department recommends not pursuing this option further.

Public Comment

Two commercial lobster fishery representatives shared that lobster tailing is an important management tool to be available in response to domoic acid closures and think this idea should still be considered.

Discussion

Assistant Chief Kord stated that the DFW-recommended changes are important to move forward for the Law Enforcement Division (LED) in regard to staffing and safety concerns, and to close regulatory loopholes that could be exploited as an excuse for illegal fishing.

Co-chair Sklar expressed support for the proposed timeline and suggested that this topic does not need to be discussed at the November MRC. However, he encouraged the Department, Law Enforcement Division, Commission staff, and stakeholders to continue to explore options for end-of-season live possession that may address enforcement concerns in a manner palatable to fishermen. He also suggested the conversation on a tailing option be continued separately.

Melissa Miller-Henson asked Jenny Hofmeister about how the proposed change would impact the ability of fishermen to retrieve gear if the gear is lost or abandoned, or if the permittee is incapacitated and cannot provide written approval. Jenny explained that provisions allow people to retrieve another's gear when something catastrophic happens to the permittee, or to recover up to six lost or derelict traps, and that those provisions are not proposed to change.

Following discussion, MRC developed a recommendation for Commission consideration.

MRC Recommendation

MRC recommends that the Commission: (1) Schedule a rulemaking to consider revisions to recreational and commercial spiny lobster fishing regulations as proposed by the Department; (2) request that the Department continue to work with industry on options to allow end-of-season live possession at commercial fish processing facilities, and present at the notice hearing for potential addition to the rulemaking if an approach amenable to both enforcement and the industry is developed; and (3) request that the Department continue to explore a tailing option with industry separately from this rulemaking.



Tracking Number: (2026-02)

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

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

SECTION I: Required Information.

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

1. Person or organization requesting the change (Required)

Name of primary contact person: Ava Schulenberg, California Lobster & Trap Fishermen's Association (CLTFA)

Address: 315 Meigs Rd., STE A279, Santa Barbara, CA, 93109

Telephone number: [REDACTED]

Email address: cltfa2023@gmail.com

2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: The Commission's authority to adopt the proposed regulation derives from the California Fish and Game Code, including but not limited to Sections 200, 205, and 219, which authorize the Commission to regulate the take, possession, and management of fishery resources, including California spiny lobster.

3. Overview (Required) - Summarize the proposed changes to regulations: We propose allowing the option for permitted commercial California spiny lobster fishermen to tail their legally harvested lobster in addition to the current ability to sell lobster whole or live.

4. Rationale (Required) - Describe the problem and the reason for the proposed change: Current regulations require that California spiny lobster be landed and sold whole, which limits the ability of commercial fishermen and seafood businesses to adapt to changing market conditions. Allowing the option to tail lobster would provide additional flexibility for fishermen, processors, and distributors while maintaining existing conservation measures and harvest limits.

The proposed change would not alter season dates, size limits, trap limits, or overall harvest levels. Instead, it would simply allow legally harvested lobster to be processed into tails for storage, transport, and sale. This option could improve product handling and reduce spoilage or waste, particularly when live markets are limited or disrupted. Allowing lobster tailing would



also expand access to domestic markets that prefer frozen lobster tails rather than live product, providing additional economic stability for California fishermen and seafood businesses. Increased market flexibility could help the fishery better withstand fluctuations in export demand, transportation challenges, or other market disruptions.

The proposed regulation would maintain current fishery management and conservation objectives while providing practical operational benefits to participants in the fishery. Similar processing practices are common in other lobster fisheries and have not been shown to increase fishing pressure when existing harvest regulations remain in place.

Recent consensus among members of CLTFA indicates that the option to tail lobster should be available to all permit holders. Following meetings with the California Department of Fish and Wildlife, a statewide survey was conducted in May–June 2025 to further evaluate support and concerns regarding the proposal, including input from both members and non-members. Responses were received from 35 commercial lobster fishermen representing multiple ports across California, ranging from newer participants in the fishery to fishermen with more than 40 years of experience. The results showed significant interest in allowing lobster tailing among active fishermen, while also identifying concerns related to enforcement, logistics, and potential market impacts.

The proposed change would support the long-term economic viability of the California spiny lobster fishery while maintaining responsible management of the resource. Any implementation of lobster tailing would include appropriate handling, landing, and/or reporting requirements to ensure that enforcement officers can continue to verify compliance with minimum size regulations. Further discussion and potential pilot testing could help refine a program that addresses these concerns while protecting resource sustainability and expanding economic opportunities within the fishery.

Proposed Regulatory Language: Proposed amendment to Title 14, California Code of Regulations, Section 122 – Spiny Lobster

§122. Spiny Lobster

(x) Tailing of Lobster.

Commercial fishermen holding a valid California spiny lobster permit may remove the tail from legally harvested lobster. All lobster must be in compliance with the minimum size limit at the time of harvest.

Lobster tails may be possessed, transported, processed, and sold provided that all applicable landing, reporting, and permit requirements established by the California Department of Fish and Wildlife are followed.

The removal of lobster tails shall not be used to circumvent minimum size limits, possession limits, or other fishery management regulations.



SECTION II: Optional Information

5. **Date of Petition:** March 11th 2026
6. **Category of Proposed Change**
☐ Sport Fishing
☒ Commercial Fishing
☐ Hunting
☐ Other, please specify: [Click here to enter text.](#)
7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*
☒ Amend Title 14 Section(s): 122 – Spiny Lobster
☐ Add New Title 14 Section(s): [Click here to enter text.](#)
☐ Repeal Title 14 Section(s): [Click here to enter text.](#)
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)
Or ☒ Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.
If the proposed change requires immediate implementation, explain the nature of the emergency: First Wednesday of October 2026
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: [Click here to enter text.](#)
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: The proposed regulation allowing the option to tail California spiny lobster is not expected to result in significant negative economic impacts to the California Department of Fish and Wildlife, individuals, businesses, jobs, or other state or local agencies. The proposal does not alter harvest limits, season dates, or permit structures, and therefore is not expected to affect licensing revenue, landing taxes, or other revenues collected by the state. Providing the option to tail lobster may create economic benefits for commercial fishermen, processors, wholesalers, and restaurants by improving storage efficiency, reducing shipping constraints, and allowing access to additional markets that prefer frozen lobster tails rather than live product. These efficiencies could help reduce waste and mitigate economic volatility associated with market disruptions or export limitations. Overall, the proposed change is expected to have neutral to positive economic effects while maintaining current fishery management objectives.
12. **Forms:** If applicable, list any forms to be created, amended or repealed:
[Click here to enter text.](#)



SECTION 3: FGC Staff Only

Date received: 03/12/2026

FGC staff action:

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

Tracking Number

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

Meeting date for FGC consideration: _____

FGC action:

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

Tracking Number

From: CLTFA Friday, June 12, 2026 11:58 AM
Sent: FGC
To:
Cc: CLTFA Lobster Tailing Petition Additional Materials
Subject: CA Spiny Lobster Tailing Survey 2025 Results (CLTFA).pdf
Attachments:

Hello Fish and Game Commission,

We hope you are doing well!

We look forward to discussing our tailing petition with you in Sacramento next week. For some context, we know this isn't the first time a tailing petition has been put forth for the CA spiny lobster fishery, but in light of recent market fluctuations (largely due to tariffs), the topic resurfaced and CLTFA has spent a substantial amount of time discussing it at board meetings over the past couple years that have led us to have two separate unanimous board votes asking the Association to move forward with pursuing this option. I've attached our original [survey](#) results that helped drive forward the decision as well. This survey was sent through CDFW last year to *all* permit holders as we wanted to make sure non-members' voices were heard (CLTFA has 62 members which is more than half of the active permit holders in the state).

Please don't hesitate to reach out if you have any questions that you'd like to discuss ahead of time, otherwise we'll see you on Wednesday!

Thanks and have a wonderful weekend!

--

Kind Regards,
Ava Schulenberg
Executive Director | [CA Lobster & Trap Fishermen's Association](#)
Assistant Director | [Commercial Fishermen of Santa Barbara \(CFSB\)](#)
Deckhand

California Spiny Lobster Tailing Survey (CLTFA)

35 responses

[Publish analytics](#)



What is your name/vessel? (Optional)

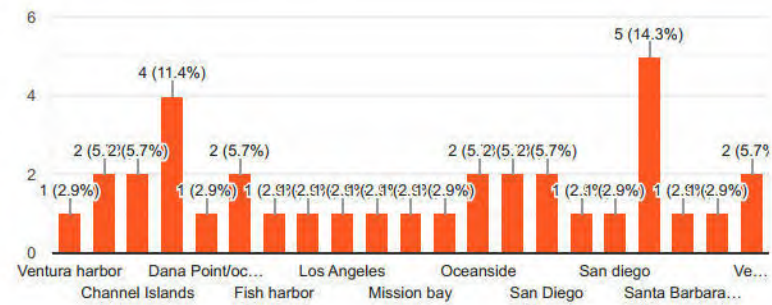
25 responses



What is/are your primary port(s)?

[Copy chart](#)

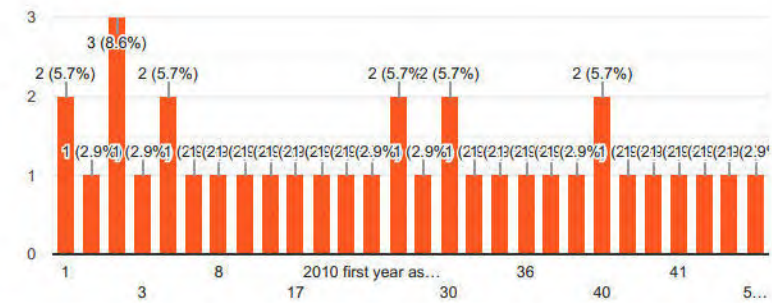
35 responses



How many years have you fished lobster (including any time spent as a deckhand)?

[Copy chart](#)

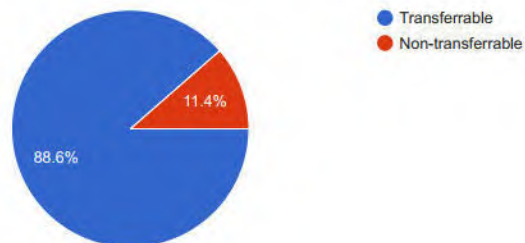
35 responses



What type of lobster permit do you have?

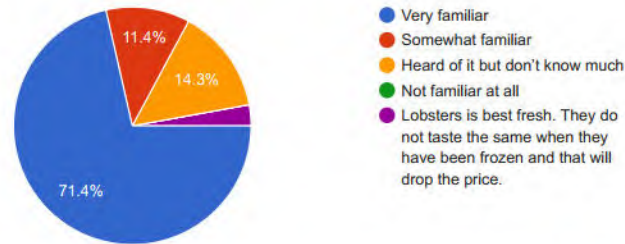
[Copy chart](#)

35 responses



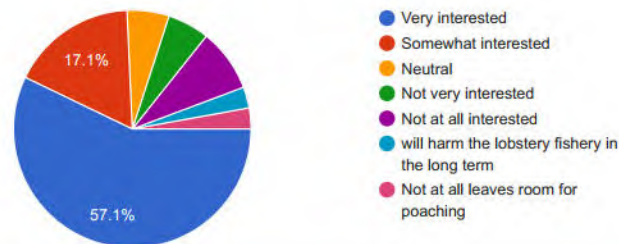
How familiar are you with the concept of lobster tailing (removing the tail and potentially freezing it for sale)?

35 responses



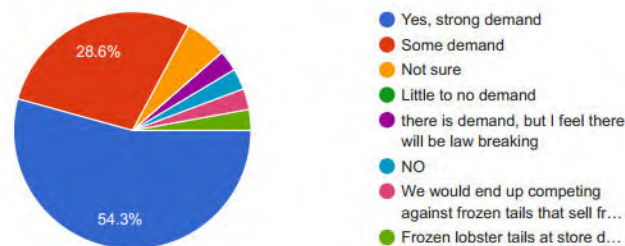
If lobster tailing were allowed under current regulations, how interested would you be in participating?

35 responses



Do you believe there is a sufficient market for frozen lobster tails?

35 responses



 Copy chart

A pie chart showing the distribution of responses for the statement 'The company has a good reputation'. The chart is divided into five segments: a large blue segment (45.7%), an orange segment (22.9%), a green segment (11.4%), a purple segment (8.6%), and a small cyan segment (8.6%).

Response	Percentage
Strongly agree	45.7%
Agree	22.9%
Disagree	11.4%
Strongly disagree	8.6%
Don't know	8.6%

-
- Copy chart

 Copy chart

Frequency	Percentage
Very often	40%
Often	28.6%
Sometimes	17.1%
Rarely	8.6%
Never	4.6%

-
- Copy chart

 Copy chart

Statement	Number of Responses	Percentage
Additional time to complete the project	1	4%
Biggest queue at the port	1	4%
Fishermen's boats not allowed to fish	1	4%
Inefficient routing of the boats	1	4%
Must be done in a different way	1	4%
None at this time	2	8%
One concern about the project	1	4%
Sport fishermen not allowed to fish	1	4%
The trial period is too long	1	4%
Transport to the port is too long	1	4%
This shouldn't be done	1	4%
none	1	4%



What are your thoughts on exploring different gauge sizes or regulations for male and female lobsters as part of a tailing program?

29 responses

Establish a minimum width of tail to ensure all tails came from legal size lobsters

Horrible idea

don't allow it

Sounds like a good plan.

Keep it the way it is currently

I'm down for that but concerned it will take many years for the law to be passed.
And it will be a confusing mess at the start.

thats the only hard part ! If there is a guage change for males we need to be part of the decision !!

Not a problem. To be expected if one chooses to participate in the tailing of lobsters for sale.

If the carapace is still connected to the tail we could circumvent any new legislation

I think one measurement would make everything a lot easier.

The size of a tail gage would have to be different for males and females obviously. Another thought is it would have to be a pretty big tail to be obviously legal, as far as the carapace goes. So I think that would be difficult to navigate.

Only tail very large lobsters. Sell questionable to market whole.

I think it's a good idea

Already done

None leave it alone
The regulations we have already worked

Sounds logical

It should be assumed there legal size. Enforcement's opportunity to measure has passed.
Same way a 10 oz halibut fillet can no longer be measured to verify the fish was of legal size.

I'm OK with exploring them, just not moving forward without discussion.

N/a

Ridiculous option to go into the frozen market and degrade the premium product we currently provide.

Very interested



I'm open to it

Not particularly excited.

Not interested

I think it would be a good idea to have a two gauge system - evens out the playing field for areas that catch more male lobster with smaller tail and provides the ability to sell more tails for a frozen market

Keep the same

Not sure

Leave it alone

I am not interested in gauging lobsters any other way. The way we do it allows you to gauge the Lobster then let it go without harming it fast and easy.



In your opinion, what are the **main benefits** of offering lobster tailing as an option?

35 responses

Being able to compete in global markets to get a higher price

Direct marketing

more money, but it will harm the lobster industry in the long run

More options and opportunity to sell and store lobsters

Being able to sell to US, restaurants, grocery stores and direct to consumer. Also will help stabilize market pricing with consistent product available for market.

For certain people that sell small amounts it helps but not all

Freezing and selling as a package in markets and grocery stores worldwide. It expands our market in a huge way.

it would give a whole new market for all of us . especially in Japan ! we lost that market because they didnt want to deal with live product. Japan brings in frozen tails from all over the world now ! most likely China will not be an option !!

- 1) liberation from the current power of the live export market players.
- 2) allows California lobsters to stay local and compete fairly in the market place
- 3) would let a fisherman avoid peaks and valleys of marketing booms and gluts. Meaning for an example if price is low on the opener because of a large harvest by the fleet, a fisherman could tail and freeze his catch until the market price increases later in the season for holidays or decreased of lobsters in the market place.
- 4) flexibility to expand demand to local consumers (restaurants, parties, direct to market farmers markets, there is no end since a tailed lobster is less perishable and easier to be stored in bulk than live ones.
- 5) a huge one is the possibility to avoid fishery closures due to Domoic acid toxicity. Since tailing is avoiding the viscera it would be difficult to have a complete shut down of a region by DFW if they test hot.
- 5) tailing would allow an individual to market his own catch (or if a successful marketer other lobster fisherman too) . This enables the fisherman to negotiate his price which they can't legitimately do now. I would envision tailing would increase the price received per lobster over current export "set" prices.

Opening new markets

Having options is the main benefit

Help with the domestic market and not having to depend on our live market overseas.

another way of marketing

To make more money from your un-shippable lobsters/ make money in summer

Sell catch year round

Help a domestic market



Year round market

None

It could possibly open up new markets that are unable to deal with live product. This MAY allow buyers to purchase more lobster to service these alternative markets.

Makes a perishable product less perishable. Product could be held in the case of a glut in the market. Also retail shops could hold product until needed.

It opens up new markets and offers alternatives to the Chinese market.

Expanding markets

Another option for sales

There are none!

None

off season market

More options markets etc

It opens lots of potential new markets. Direct to consumer, restaurants, and wholesalers that don't have live tanks or the desire to handle live product.

To create a stronger market.

Another out let

We will not be dependent on the Asian market to sustain our business. More local and sustainably caught seafood that stays in our backyard.. provides for our own local economy rather than China or wherever else they get shipped over seas. Also, the ability to provide lobster all year around instead of just the season will encourage more restaurants to buy them because they won't have to deal with a live product that could possibly die or spoil before someone buys it for dinner.

So people don't have to deal with the whole lobster

Good question

Eliminating only "live" market

For me, there isn't much.



What are your **biggest concerns** about implementing lobster tailing?

35 responses

Poaching

No comment

Devaluing the fishery and creation of for government regulations to a then devalued fishery

some fishermen will tail the short lobster population

Buyers hosing fishermen on price

Short lobsters from bad actors or scab operators/traceability

Shorts being sold and not as fresh as live lobster

Losing the quality of fresh catch.

the fish & wild lifes overreach !!!

1)Complicating the physical aspect of tailing with a third party And red tape BS with DFW ,health, or other governmental types.

2) this needs to be a California commercial concept not a sport or imported lobster shared deal.

3) some realistic allowance for tailed lobsters after the season closes with out complicating or changing the current season closing days and subsequent trap removal.

No concern

Fish and game will take too long to consider doing it and I ll have to do another questionnaire

The length of time the department takes to make tailing legal.

sizing

Making less demand for them during lobster season/ people tailing and freezing them all summer during the off season.

Regulations.

Law breakers

Might be good for the wholesalers & processors, but will it really benefit the fisherman? If the buyers / processors are able to buy more lobster, will that effect the price in a negative way? Will that put more pressure on the species?

Complicated legal requirements that could result in legal liability. Regulation tends to be worded in ambiguous language and could result in citations and fines depending on the discretion of officers.

None, at this point.



Enforcement

I don't have any at this time

See statement above

I think it will make it easier sell under size lobsters.

may drop price

Don't have any

Decrease in market value of product

That the fisherman doesn't receive benefits.

People running shorts

Keeping recreational catch out of the market

Legal size

Crooked fisherman

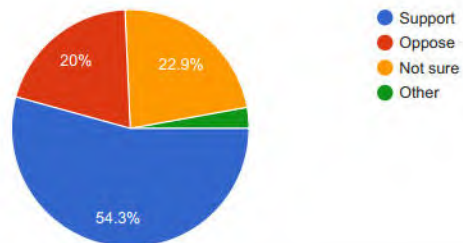
Shorts, crooked processors

Poachers selling frozen lobster tails .the price dropping even lower than it is now. Any additional cost to me will be harmful and unnecessary.

 [Copy chart](#)

Do you support or oppose the **option** of tailing lobsters for the year-round global and domestic tail market?

35 responses



Do you have any additional comments or suggestions regarding the possibility of a tailing option?

23 responses

No

Let's make it happen

Show the tailing reason and concept and expense from the dept before discussing further.

leave as is, it works well and is profitable

It benefits few fishermen in the fleet not the fleet as a whole

I think we need to figure out a way to freeze them whole as well as tailing.
A lot of people are very attracted to the whole lobster on a plate.

We have a multifunction fish business license and would like to be able to tail lobster for our customers !!!!

I think it's an added benefit for our fishery. I also think we should be able to sell frozen lobster year round

I don't think having frozen tails year round would be beneficial I think we should just follow our normal season maybe just a month after the season.

I think it has to be really thought out and not rushed because it's opening a lot of doors for big buyers to control the price and market for the fisherman.

Only tail size that leaves no question

Don't do it

There are still to many unanswered questions about the tailing process for me to give a definitive answer.

- 1 - Would it only be able to be done by "certified facilities" with a special license?
- 2 - Will the fishermen need to do the "gauging and sorting" of the lobsters that would be tailed, and will they need to take these lobsters to the "certified facility".
- 3 - Is it really going to increase the viability of the Spiny Lobster market, and if so, will that result in increased profitability for the fisherman?

I realize that the China market is unpredictable at the moment, but let me finish with a couple of questions.

In the past, have you ever NOT been able to sell you lobster catch?
And, yes the price has and does fluctuate, but will this change that?

Nope

Open option for all permittees

I am a fisherman not a frozen market executive. We should not degrade our product to that level!



I would think there is probably a market for tails and this proposal will make it easier for low life fishermen to sell their black market catch. I also think that it will hurt the fishery because you have fishermen selling undersized tails therefore reducing the number of spawning lobsters and next year's catch. I understand the plan is to have certified tailing facilities, but you are going to have individuals who will work around the system. It's a bad idea.

None

Leave things alone

Stop pushing your agenda. We already voted on this and did not want it. selling live lobsters is where it's at fresh not frozen. Frozen lobster do not taste the same. It changes the texture and the price will drop due to the fact that they don't taste good. Throwing the head away is not OK with me. There's a lot of food left in it and I know a lot of people that enjoy it. This is just some other thing that is going to cost me more money and make it less profitably. Leave the regulations the way they are. If you wanna do something that makes sense change the regulations on sport fishing hoop netting no more pyramid hoop nets. Go back to the original collapsible with a larger opening on the top, it took some skill to be able to catch lobsters with those. pyramid hoops are like a trap .one net per person.

Anyways,

I am very against selling frozen lobsters .

I am very against changing the way we gauge the Lobster

Terry Boyd

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Staff Summary for December 10-11, 2025*For background purposes only***19. Commercial Coonstripe Shrimp Fishery Regular Rulemaking****Today's Item**Information ☐Action ☒

Consider authorizing publication of notice of intent to amend regulations regarding the commercial coonstripe shrimp fishery.

Summary of Previous/Future Actions

- | | |
|---|-----------------------------|
| • Adoption hearing for <i>emergency regulations</i> | February 12-13, 2025 |
| • Department presented the Marine Resources Committee (MRC) with proposed measures for a regular rulemaking; MRC recommendation | July 16-17, 2025; MRC |
| • Approved MRC recommendation for <i>regular rulemaking</i> | August 13-14, 2025 |
| • First readoption of <i>emergency regulations</i> | August 13-14, 2025 |
| • Update on development of and timeline for <i>regular rulemaking</i> | October 8-9, 2025 |
| • Second readoption of <i>emergency regulations</i> | December 10-11, 2025 |
| • Today's notice hearing for <i>regular rulemaking</i> | December 10-11, 2025 |
| • Discussion and adoption hearing for <i>regular rulemaking</i> | February 11-12, 2026 |

Background

The California commercial coonstripe shrimp trap fishery has experienced increased participation in recent years, largely due to closures and limitations in other fisheries. The increase in fishing activity, particularly during peak whale migration, has elevated the risk of marine animal entanglement by increasing the amount of trap gear and vertical lines in the water. Three recent humpback whale entanglements have been linked to this fishery, in direct conflict with California's goal of zero entanglement mortality.

In response to whale entanglements attributed to the commercial coonstripe shrimp trap fishery, the Commission approved emergency regulations in February 2025. The emergency regulations, aimed at reducing marine life entanglement risk, took effect on April 7, 2025. At its August 2025 meeting, the Commission approved a 90-day extension of the emergency regulations, which are set to expire in January 2026. A second, and final, 90-day extension is scheduled for consideration at today's meeting (Agenda Item 14).

To ensure continuity after the emergency regulations expire, Department and Commission staff developed draft documents for a regular rulemaking based on an MRC recommendation that the Commission approved in August. Department staff provided an update on this effort at the October 2025 Commission meeting, including an overview of additional proposed amendments (see background in Exhibit 1).

For today's meeting, the Department transmitted draft proposed amendments to regulations governing the commercial coonstripe shrimp trap fishery (exhibits 2 through 4).

Staff Summary for December 10-11, 2025*For background purposes only****Draft Proposed Regulations******Section 180.15 (emergency provisions carried into regular rulemaking)***

- Establishes a management boundary at the Sonoma/Mendocino counties line and management areas northward to the California/Oregon border, and southward to the United States/Mexico border.
- Defines "ground line" and imposes a limit on the number of traps per ground line: 15 in the northern fishery and 40 in the southern fishery.
- Defines "vertical line" and imposes a limit on the number of vertical lines per vessel: 180 in the northern fishery and 60 in the southern fishery.
- Sets a 30-fathom depth limit in the northern fishery only.
- Replaces the 2001 control date with a new date of February 13, 2025.
- Updates procedures for weather and hardship exemptions.

Additional Section 180.15 Amendments (new)

- Authorizes the voluntary use of pop-up fishing gear — in lieu of vertical lines attached to a surface buoy — and establishes conditions for its use.
- Redefines the fishing season based on the two new management areas and sets start dates and times corresponding to each area.
- Establishes minimum trap construction requirements for single- and multi-chamber traps, and buoy marking requirements.
- Prohibits take of non-coonstripe species and restricts possession of coonstripe shrimp during closed seasons.

Section 180.2 (new)

- Exempts coonstripe shrimp traps from destruct device requirements.

Section 180.5 (new)

- Replaces the requirement to mark buoys with the operator's commercial fishing license identification number with a new requirement to mark buoys with the vessel's commercial boat registration number.

Benefits of Regulatory Amendments

The newly-established limit on vertical lines per vessel (180 in the north and 60 in the south) provides an upper limit where none currently exists. While this cap may, in theory, authorize an increase for some operators, the fleet has historically operated within a range (70 to 180 in the north and 8 to 60 in the south). The combination of the longstanding variability, the newly-established upper limit, and the anticipated voluntary conversion to pop-up gear, is expected to result in a net reduction in vertical lines deployed over time. Each conversion of a traditional vertical line to pop-up gear directly reduces the number of persistent vertical lines in the water column.

Staff Summary for December 10-11, 2025
For background purposes only

Significant Public Comments

An environmental, non-governmental organization generally supports the proposed regulations, particularly the voluntary use of pop-up fishing gear. However, it expresses concern that current measures may not sufficiently reduce the level of entanglement risk, citing three entanglements from July 2024 through May 2025. The organization recommends three key amendments: (1) Prohibit use of floating (positively buoyant) ground lines, to further reduce entanglement risk; (2) adopt stronger protections in biologically important areas for federally-protected species (i.e., prohibit vertical lines); and (3) establish a concrete timeline for transitioning to mandatory pop-up gear. (Exhibit 7)

Recommendation

Commission staff: Authorize publication of a notice of intent to amend sections 180.15, 180.2 and 180.5, as recommended by the Department.

Department: Authorize publication of a notice of proposed regulations regarding the commercial coonstripe shrimp trap fishery.

Exhibits

1. [Staff summary for Agenda Item 24, October 8-9, 2025 Commission meeting](#) (for background purposes only)
2. [Department memo](#), received November 24, 2025
3. [Draft initial statement of reasons and informative digest](#)
4. [Draft proposed regulatory language](#)
5. [Draft economic and fiscal impact statement](#) (STD 399)
6. [Department presentation](#)
7. [Letter from Francine Kershaw, Senior Scientist, Natural Resources Defense Council](#), received October 3, 2025

Motion

Moved by _____ and seconded by _____ that the Commission authorizes publication of a notice of its intent to amend sections 180.15, 180.2 and 180.5, related to the commercial coonstripe shrimp fishery, as discussed today.



Commercial Coonstripe Shrimp Fishery Management

July 16, 2026

Presented to:

Marine Resources Committee
CA Fish and Game Commission

Presented by:

Brian Demars-Owens
Northern Invertebrate Project Supervisor
Marine Region



Fishery Background

- Open access longline trap fishery
- Open season May to October
- History of recent whale entanglements
- Emergency regulations enacted in 2025
- Certificate of Compliance in 2026





Key Regulations Implemented - May 2026*

Topic	Current Regulations (May 2026)
Control Date	Feb 13, 2025
Fishery Participation	Unrestricted
Vertical Line Limit	North: 180 South: 60
Traps/String Limit	North: 15 South: 40
Pop-Up Gear	Voluntary with requirements
Surface Gear	Prohibit surface line
Buoy Size Restriction	4" diameter and 18" length

*Not a complete list of the recent changes.



Fishery Update

2025 Landings	2026 Landings to Date*
12 Vessels	8 Vessels
240,121 lbs	59,199 lbs
\$2,109,923 EVV	\$474,093 EVV

*data accessed June 17, 2026



Previously Discussed Items

- Sinking groundlines
- “Hot spots”
- Transition to mandatory pop-up
- Surface gear modifications





Future Management Options



Management Measures

- Entanglement Risk
 - Gear modifications
 - Reductions in co-occurrence
- Inseason Response
- Entanglement Identification Tools



Photo: CDFW



Entanglement Risk - Gear Considerations

Management Option	Outcome
Pop-up buoys	Reduce entanglements in vertical lines
Sinking groundline	Reduce entanglements in groundline



Entanglement Risk - Reduction in Co-Occurrence

Management Option	Outcome
Limited Entry	Cap number of fishery participants.
Gear Endorsement	Limit the number of vessels permitted to use vertical lines.



Entanglement Risk - Reduction in Co-Occurrence

Management Option	Outcome
Restrict use of traditional gear to historical fishing areas	Prevent expansion of vertical lines in areas not previously fished
“Hot Spot” closures	Reduce co-occurrence of whales and gear in an area
Further vertical line reductions	Reduce number of vertical lines and co-occurrence risk
Reduced fishing season	Reduce number of days of co-occurrence



Inseason Response

Grant Director of CDFW authority to implement limited measures in response to an entanglement.

Measures could include:

- Vertical line reductions
- Mandatory use of pop-up fishing gear
- Fishery closure



Entanglement Identification Tools

Management Option	Outcome
Buoy Registration	Vessels register buoy colors and markings, helps to identify gear involved in entanglements
Line Marking	Fishery specific line color, helps to identify gear involved in entanglements



Next Steps

- Identify measures for further discussion and exploration
 - Gear endorsement
 - Transition to pop-up fishing gear
 - Director authority for inseason action
- Conduct outreach (summer/fall)
- Discussion and potential MRC recommendation (Nov)

Thank You



Photo: WDFW

coonstripeshrimp@wildlife.ca.gov



July 2, 2026

Samantha Murray, Co-Chair
Eric Sklar, Co-Chair
Marine Resources Committee
California Fish and Game Commission
Sacramento, California

RE: Phase 2 Rulemaking for the California Coonstripe Shrimp Fishery

Dear Chair and Members of the Marine Resources Committee:

On behalf of the undersigned conservation and marine wildlife organizations, we respectfully request that the Marine Resources Committee recommend that the California Fish and Game Commission initiate a rulemaking package for the California coonstripe shrimp fishery to reduce the risk of whale entanglements and modernize fishery operations through the adoption of innovative fishing technologies.

Specifically, we request the Commission take prompt action to reduce whale entanglements by initiating a rulemaking process to:

1. Transition the Southern coonstripe shrimp fishing zone from conventional vertical-line trap gear to pop-up (ropeless) gear over a three-year implementation period;
2. Authorize the Director of the California Department of Fish and Wildlife, in consultation with the Executive Director of the Fish and Game Commission, to temporarily close coonstripe shrimp fishing zones to the use of vertical-line gear when whale entanglement risk warrants management action; and
3. Establish measures to limit and reduce the total number of vertical lines deployed in the coonstripe shrimp fishery, including through a cap on the number of buoyed endlines associated with trap strings.

California has established itself as a national leader in addressing the risk that fixed-gear fisheries pose to whales and other protected marine species. As populations of humpback whales, blue whales, other large whales, and leatherback sea turtles increasingly overlap with commercial fishing activity along the California coast, the state has adopted precautionary measures in several fisheries - including the coonstripe shrimp fishery - to reduce entanglement risk. The next phase of rulemaking for the coonstripe shrimp fishery presents an opportunity to build on this progress.

The use of conventional buoyed trap gear requires persistent vertical lines in the water column and on the surface, which are the primary mechanism by which large whales and other wildlife become entangled. Advances in pop-up gear technology, resulting from Commission-supported Experimental Fishing Permits, now provide a viable pathway to substantially reduce this risk by eliminating persistent vertical lines except during gear retrieval.

The Southern fishing zone (all California waters south of Point Arena) is a high entanglement risk area for whales and sea turtles during the full duration of the coonstripe shrimp fishing season (May-October), as demonstrated by recent entanglements. Although immediate measures are needed to prevent entanglements, a structured three-year transition period to pop-up gear would provide fishermen, regulators, law enforcement, and technology providers sufficient time to adapt operations, address implementation challenges, and ensure a successful deployment of this proven whale-safe technology.

In addition, California's experience managing whale entanglement risk has demonstrated the importance of having responsive management tools that can be implemented quickly when conditions change. Whale distribution and aggregation patterns vary annually and seasonally, and entanglement events can occur unexpectedly. Granting the Director authority, in consultation with the Commission's Executive Director, to temporarily close specific fishing zones to vertical-line gear would provide a targeted and efficient mechanism for reducing risk when circumstances warrant immediate action. Such authority would allow management actions to be tailored to specific areas and time periods while minimizing unnecessary disruption to fishing operations elsewhere.

We further recommend that the Commission establish measures to prevent increases in the coonstripe shrimp fishery's number of vertical lines in the water column. While the transition to pop-up gear in the Southern fishing zone would substantially reduce this risk over time, immediate reductions can also be achieved by limiting the total number of buoyed endlines deployed by the fishery. The Commission should discourage increases in vertical-line fishing effort and support other gear configurations that reduce the number of buoyed lines per trap. The Commission should reduce the total number of vertical lines present in fishing areas while maintaining fishing opportunity and operational flexibility. During Marine Resources Committee discussions on the

Phase 1 rulemaking process, the Commission expressed interest in pursuing gear endorsement conditions or establishing a limited entry permit as a tool to control vertical line effort increases in this fishery. We ask that the Commission and Department implement these participation control tools as a means of minimizing entanglement risk as part of the upcoming rulemaking package.

We also share the concerns raised by a fisher during previous regulatory discussions about risk of entanglements in the groundline connecting traps on the seafloor. We ask that the Department and Commission establish conditions on groundline that minimize the risk of groundline entanglements.

We recognize that any transition to new fishing methods can benefit from informed stakeholder engagement, fishery-dependent information, and practical implementation considerations. Accordingly, we encourage the Commission and Department to work closely with fishermen, conservation organizations, tribal representatives, gear manufacturers, and scientists throughout the rulemaking process. We also encourage the state to expand opportunities for pilot programs, financial assistance, and technical support that can facilitate adoption of pop-up gear technologies. Specifically, a buoy registration database would help the Department better understand and track entanglements that occur in coonstripe shrimp fishing gear but are sighted in locations outside of the designated California fishing zones.

California has long demonstrated that sustainable fisheries management and marine wildlife conservation can be advanced together. Initiating this rulemaking process would represent a thoughtful and proactive step toward reducing whale entanglement risk while supporting the long-term viability of the coonstripe shrimp fishery.

We respectfully request that the Marine Resources Committee recommend that the Commission direct staff, in coordination with the Department, begin developing a rulemaking package incorporating the measures described above.

Thank you for your consideration. We look forward to working with the Marine Resources Committee, Commission, and Department on these important issues.

Sincerely,

Geoff Shester, PhD
Director of Fisheries Innovation
Oceana

Dan Silver
Executive Director
Endangered Habitats League

Francine Kershaw, PhD
Senior Scientist
Natural Resources Defense Council

Kurt Lieber
President
Ocean Defenders Alliance

Miyoko Sakashita
Oceans Program Director
Center for Biological Diversity

Scott Webb
Director of Advocacy and Engagement
Resource Renewal Institute

Georgia Hancock
Director and Senior Attorney, Marine Wildlife Program
Animal Welfare Institute



Kelp Restoration and Management Plan Development

July 16, 2026

Presented to:

Marine Resources Committee
CA Fish and Game Commission

Presented by:

Dr. Kristen Elsmore
Sr. Environmental Scientist Specialist
CDFW Marine Region



Overview

- Development of the Kelp Restoration and Management Plan (KRMP)
 - Development Process
 - Timeline
 - Progress to Date
 - Looking Ahead



PC: S. Kawana



PC: A. Dias



PC: K. Elsmore



Kelp Restoration and Management Plan (KRMP)



- **Overarching Goal:** *To develop a robust, adaptive, climate-ready approach to managing, protecting, and restoring giant and bull kelp forest ecosystems statewide for consideration and adoption by the Fish and Game Commission*
- **Core Components:**
 - Overarching ecosystem-based management framework
 - Adaptive kelp harvest framework
 - Restoration toolkit



PC: Kristen Elsmore, CDFW

- **Tribal Engagement**
- Solicitation, establishment, and convening of **Community Working Group (CWG)**
- Establishment and convening of **Science Advisory Committee (SAC)**



With Support from:





KRMP Development Timeline



Science Advisory
Committee

Tribal
Engagement and
Consultation

Community Working
Group



2023-2026

Recommendations informing the KRMP



On the Ground
Research

2025 - 2026

KRMP Drafting, CEQA,
and Finalization

2027 - 2028

Peer Review,
Regulatory Process, and
Implementation





KRMP Tribal Engagement



- Tribal Notification Letters
 - May 2023; April 2026
- Listening Sessions and Forums
 - June 2023; July 2024; June 2026
- CFGC Tribal Committee
 - August 2022; April 2023; August 2024; April 2026
- Representatives from several California Native American tribes on the CWG and SAC



Exploration of co-management pathways and consultation is ongoing



KRMP Community Working Group (CWG)



- Role and Composition:
 - Formed in 2023
 - 23 Members
 - Representing regional community sectors
 - Tasked with informing KRMP development, including gathering and sharing information with their communities
- Progress to Date:
 - 6 full CWG meetings; 8 subcommittee meetings
 - Developed and voted on recommendations to inform the KRMP





KRMP Science Advisory Committee (SAC)



- Role and Composition:
 - Formed in 2023
 - 12 Members
 - Representing broad scope of disciplines and geographic areas
 - To provide scientific expertise on all aspects of the KRMP
- Progress to Date:
 - 12 full SAC meetings and additional topic-specific subgroup meetings
 - Refined characterization of “Kelp States”
 - Developing indicators and thresholds for management strategies
 - Developing the Kelp Restoration Toolkit

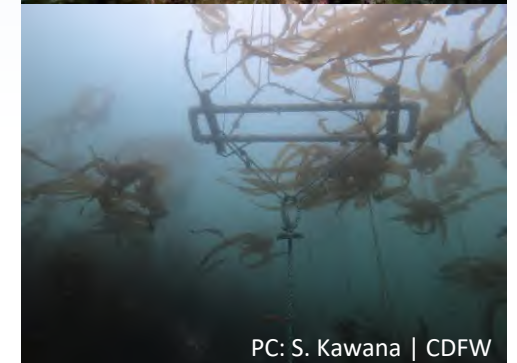
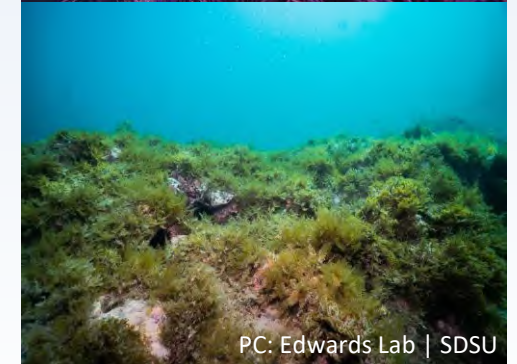




KRMP Restoration Toolkit Assessment



- Tools being assessed:
 - Managing grazing pressure
 - Remove or reduce grazers from the system
 - Move or relocate grazers from the system
 - Modify grazer behavior via dietary supplementation, grazer predator protection or enhancement
 - Managing competitive pressure
 - Remove or reduce competitive invasive species
 - Move or relocate competitive invasive species
 - Managing kelp spore supply/availability
 - Move or relocate kelp source material from the system
 - Supplement kelp source material into the system
 - Building physiological or genetic resilience of kelp





Kelp Biomass and Harvest Assessment



- Assessment of kelp biomass, production, and harvest
 - Project Lead: Woods Hole Oceanographic Institution
- Progress to Date:
 - Partnership with commercial harvesters in Northern, Central and Southern California
 - Drone surveys paired with commercial kelp harvest activities
 - Bull kelp biomass conversion factor development:
 - In situ biomass turnover sampling
 - Finer-scale remote-sensing techniques to detect bull kelp
 - Biomass model development





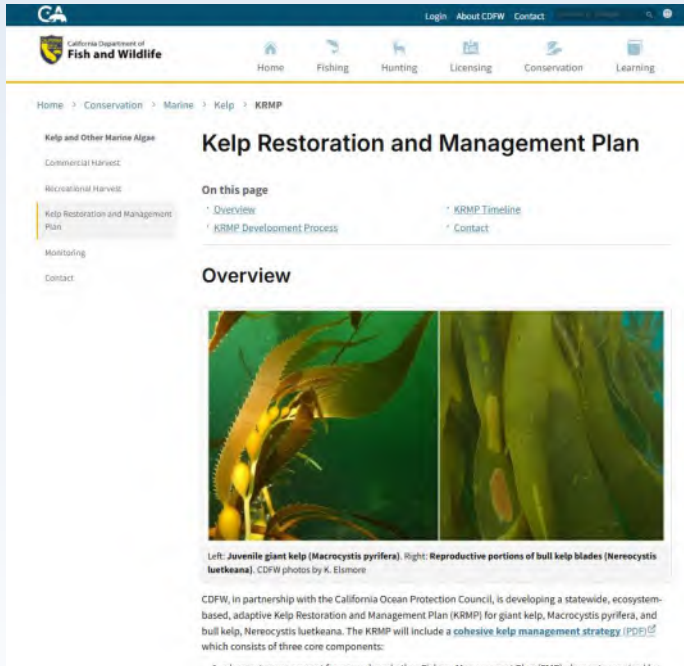
KRMP: Next Steps 2026



- Tribal Engagement:
 - Additional opportunities for Tribal input and engagement
- Community Working Group:
 - Community input and priorities on KRMP components
- Science Advisory Committee:
 - Evaluation of potential restoration tools and approaches, harvest frameworks, other considerations
 - Decision tree for overarching management framework



KRMP Progress To Date



Scroll down to
learn more about
the process to date



- **Follow along on the KRMP Website – meeting summaries in the timeline**
- **Reach out to kelp@wildlife.ca.gov with any questions**

Thank You

Dr. Kristen Elsmore

Senior Environmental Scientist Specialist

State Managed Finfish and Nearshore Ecosystems Program

Department of Fish and Wildlife

Marine Region

Email: kelp@Wildlife.ca.gov

Tanker Reef Project Report



Giant Kelp, *Macrocystis pyrifera* (Photo Credit: CDFW)

**California Department of Fish and Wildlife
Marine Region**

June 2026



Citation: ¹Elsmore, K., ¹S. Kawana, ²S. Lonhart, ³A. Bauer-Civiello, ⁴K. Rootsaert. 2026. Tanker Reef Project Report.

Affiliations: ¹California Department of Fish and Wildlife; ²Monterey Bay National Marine Sanctuary; ³Reef Check; ⁴Giant Kelp Restoration Project.

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- Figure 1 Map of Tanker Reef in Monterey County, regulatory boundary and study sites. (Chad King, MBNMS)
- Figure 2 Landsat-derived *Macrocystis pyrifera* kelp canopy cover from 1984 to 2025 within the regulatory boundary of Tanker Reef (Bell et al. 2026).
- Figure 3 Surface and bottom daily mean temperatures in degrees Celsius (CDIP and Reef Check)
- Figure 4 Tanker Reef “grid” site set up and navigation schematic (G2KR)
- Figure 5 Tanker Reef monitoring map of 18 transect survey locations within the grid (RCCA)
- Figure 6 Regulatory and Agency and RCCA subtidal monitoring timeline
- Figure 7 Uniform Point Contact of benthic percent cover by site
- Figure 8 Recreational effort and urchin culling data
- Figure 9 Targeted species monitoring density data

LIST OF ACRONYMS

CCR	California Code of Regulation
CDIP	Coastal Data Information Program
G2KR	Giant Giant Kelp Restoration
KFM	Kelp Forest Ecosystem Monitoring
MBNMS	Monterey Bay National Marine Sanctuary
NAUI	National Association of Underwater Instructors
PADI	Professional Association of Diving Instructors
QAQC	Quality Assurance and Quality Control
RCCA	Reef Check California
RM	Restoration Monitoring
SBLTER	Santa Barbara Coastal Long Term Ecological Research
UPC	Uniform Point Contact

EXECUTIVE SUMMARY

The California Fish and Game Commission adopted a temporary amendment to existing regulations in Section 29.06, Title 14, California Code of Regulations to remove the daily recreational bag limit for the take of sea urchins at Tanker Reef in Monterey County for a three-year period (April 1, 2021-2024). In conjunction with the proposed regulations, the California Department of Fish and Wildlife worked closely with community partners and other agency partners to establish specific performance criteria to evaluate the efficacy of the proposed activity at Tanker Reef. This included targeted and ecological subtidal monitoring designed to assess whether recreational divers can lower sea urchin densities enough to support kelp recovery and if these efforts lead to natural kelp regrowth.

In just over a two-year period, recreational divers conducted over 1,529 dives and culled an estimated 749,320 sea urchins within the Tanker Reef regulatory boundary, concentrating efforts to protect and maintain a 100 meter (m)² “grid” focal area. Subtidal monitoring indicated that within five months of organized culling effort, urchin densities in the grid were reduced to the targeted 2 urchins m⁻² density. Divers maintained targeted urchin densities, through repeated passes at the grid (8.7 total) and defending the surrounding area. Within the grid, increases in giant kelp individual density were observed in spring of 2022 and reached a maximum (0.3 m⁻² ±0.9 Standard Error (SE)) in summer of 2022. Maximum stipe density reached 2.4 m⁻² (±0.5 SE) in the summer of 2023, where individual and stipe density in the control remained near-zero. After urchin culling ceased in July 2023, urchin densities at the grid increased to similar levels as the control. Kelp densities, both of individuals and of stipes, remained persistent throughout the duration of the evaluation period.

These data show that within the documented timeframe, organized recreational culling can rapidly reduce urchin densities in a 100 m² focal area to target thresholds and increase kelp individual and stipe densities reflective of new and emergent forested areas. Assessment of potential impacts associated with in-water urchin culling were assessed in a separate, [unpublished study](#); however, preliminary results document measurable damage that can occur to both organisms and the substrate. The underlying reef geomorphology and benthic community structure are important considerations for the application of in-water culling as a future tool.

BACKGROUND

In response to severe broadscale decline of kelp forests along California's north coast, in December 2020, the California Fish and Game Commission (Commission) temporarily [amended](#) Section 29.06 of the Sport Fishing Regulations (Title 14, California Code of Regulations) for sea urchins at Caspar Cove in Mendocino County and Tanker Reef in Monterey County (CDFW 2020; CDFW 2023). The temporary provisions were intended to support data collection to inform the state's response to the loss of kelp forests within state waters (CDFW 2020; CDFW 2023). From here on, this report will focus on activities associated with Tanker Reef in Monterey. The temporary regulatory amendment allowed divers with valid California sport fishing licenses unlimited take via in-water culling of purple urchins (*Strongylocentrotus purpuratus*) and red urchins (*Mesocentrotus franciscanus*) at the 685-acre site for a three-year period (April 1, 2021 through April 1, 2024). Tanker Reef (Figure 1) historically supported giant kelp (*Macrocystis pyrifera*), although kelp canopy cover has been variable since 1984 (Figure 2; Bell et al. 2026; see also [Kelpwatch.org](#)), documenting canopy cover up to just over six acres at its maximum historical extent in 1986.

The regulatory action at Tanker Reef was intended to evaluate the feasibility and effectiveness of kelp restoration efforts driven by recreational diver participation, as well as any potential environmental impacts associated with the large-scale sea urchin removal. As outlined in [Joint Memorandum](#) on Petition 2020-001, submitted to the Commission in August 2020, the California Department of Fish and Wildlife (CDFW), California Ocean Protection Council (OPC), and Monterey Bay National Marine Sanctuary (MBNMS) expected that the temporary sportfishing regulations at Tanker Reef would provide an improved understanding of the following key management questions related to kelp ecosystem recovery in central California:

1. Can recreational divers reduce sea urchin densities to levels expected to facilitate kelp regrowth (<2 urchins m^{-2}) via in-water urchin culling?
2. Does the reduction of sea urchin grazing pressure via in-water urchin culling by recreational divers facilitate natural kelp regrowth?
3. Are there negative impacts associated with in-water sea urchin culling by recreational divers (e.g. bycatch, damage to underlying reef structure, disturbance to marine mammal populations)?
4. Can recreational divers collect, analyze, and communicate data/results in a way that is both scientifically sound and informative to resource managers?

This report aims to address the first two of the four questions posed within the Joint Memorandum, and briefly addresses the latter two questions.

The Giant Kelp Restoration (G2KR) project, a community-led entity, was established and took on the responsibility for coordinating sport fishers, overseeing urchin-culling efforts, and addressing the questions outlined above, posed within the

Joint Memo from OPC, CDFW, and MBNMS, in association with the rulemaking process. Agency scientific divers from CDFW and MBNMS collaborated with Reef Check California (RCCA) to conduct two independent but coordinated sets of subtidal surveys to assess changes associated with culling. The monitoring surveys by agency and RCCA citizen-science divers were designed to specifically address questions 1 and 2 above, and this report is focused on those results, though questions 3 and 4 are also addressed.

METHODS

Study Area

Tanker Reef is a shallow (8 - 20 m depth), low-relief, rocky reef located off Del Monte Beach in Monterey, California (Figure 1), within Monterey Bay National Marine Sanctuary, a federal marine protected area. As part of the Monterey Formation (Eittreim et al. 2002), Tanker Reef, also known as the “Shale Beds” or “Tanker’s Reef” by local divers, consists of horizontal slabs of friable mudstone interspersed with angled ledges up to 1 m high and areas covered by fine sand (Figure 1). The temporary regulatory amendment encompassed an area of 685 acres, which was originally selected based on the following criteria 1) the area was outside any state-designated marine protected area, 2) it was accessible from both shore and vessel, 3) giant kelp had historically occurred in the area, and 4) high densities of exposed sea urchins were observed in the area in 2020.

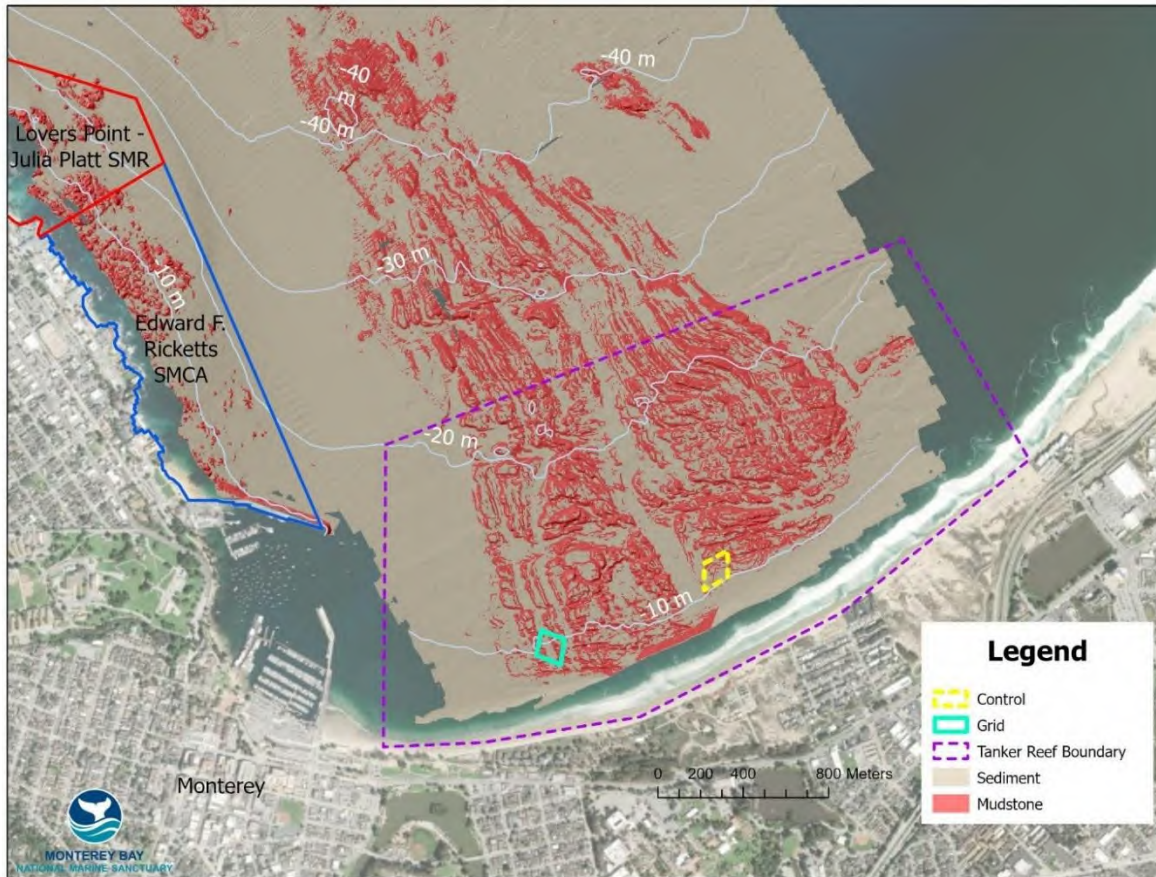


Figure 1. Tanker Reef and the 685-acre regulatory boundary (purple dashed line) in Monterey, California. The 2.5-acre treatment area (aka the grid; green polygon) and the control (dashed yellow polygon) are displayed. The underlying geology of the area, composed primarily of mudstone, is shown in red. Courtesy of Chad King, MBNMS.

A broad look at kelp canopy cover within the broader regulatory boundary was acquired using Landsat imagery packaged by the Santa Barbara Coastal Long-term Ecological Research network (SBCLTER; Bell et al. 2026). Landsat is a remote sensing satellite imagery tool that provides kelp canopy data at 30 m resolution, dating back to 1984. While other canopy mapping techniques, such as PlanetScope imagery and drones, can produce data at finer-scale resolution, Landsat serves as a useful tool to evaluate kelp canopy dynamics on broader spatial and temporal scales. Historically, the 685-acre Tanker Reef regulatory boundary supported up to around six acres of kelp canopy cover at its maximum extent in 1986 (SBCLTER, Figure 2). Canopy cover across the reef was dynamic and experienced extended periods of time with low and near-zero coverage. With the exception of a slight uptick in 2016 (~0.5 acres), canopy cover remained very low (< 0.001 acres) across the broader regulatory boundary area since 2005.

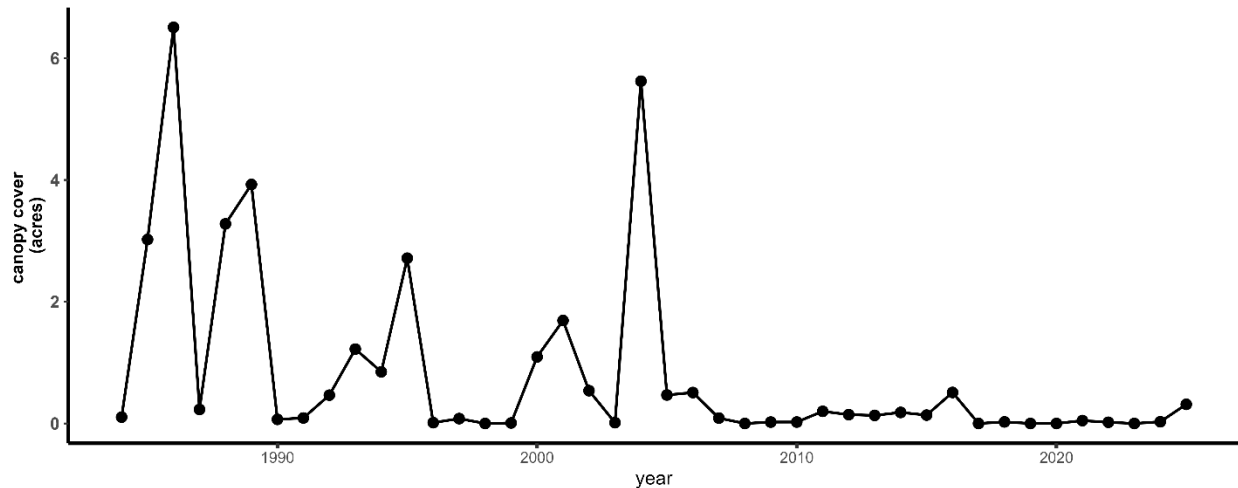


Figure 2. Changes in the annual maximum of Landsat-derived *Macrocyctis pyrifera* kelp canopy cover from 1984 to 2025 within the regulatory boundary of Tanker Reef, as indicated in Figure 1 (Bell et al. 2026).

Sea surface and bottom temperatures were measured throughout the duration of the regulatory timeframe and evaluation period (Figure 3). Sea surface temperatures for the area were sourced from a nearby Datawell Waverider MkIII surface buoy, positioned at Cabrillo Point (36.6263°N, -121.9071°W) in Pacific Grove, CA, and maintained by the Scripps Institution of Oceanography Coastal Data Information Program (CDIP, <https://cdip.ucsd.edu/>). Bottom temperatures were sourced from two HOBO® temperature loggers deployed at depth (10 m and 12 m) by RCCA at the grid. Mean daily surface and bottom temperatures generally tracked one another, with surface temperatures generally remaining above those of bottom temperatures, with convergence of surface and bottom temperatures coinciding with winter and early spring months. Such patterns are consistent with intra-annual patterns of thermal stratification, mixing, and seasonal upwelling in the region.

In general, surface temperatures observed within the evaluation time period (Figure 3) remained within the normal range for the central coast region, with mean monthly temperatures typically spanning 11°C to 17°C (Scheil and Foster 2015). Temperatures exceeding 17°C occurred across a total of 28 days within the four-year time period between April 2021 and April 2025, with six days in 2021, four days in 2022, and 18 days in 2023, and a maximum observed surface temperature reaching just above 18°C in August of 2023 (Figure 3). Temperatures above 21°C, which have been documented to negatively impact frond elongation and overall growth of giant kelp (Schiel and Foster 2015), were not observed.

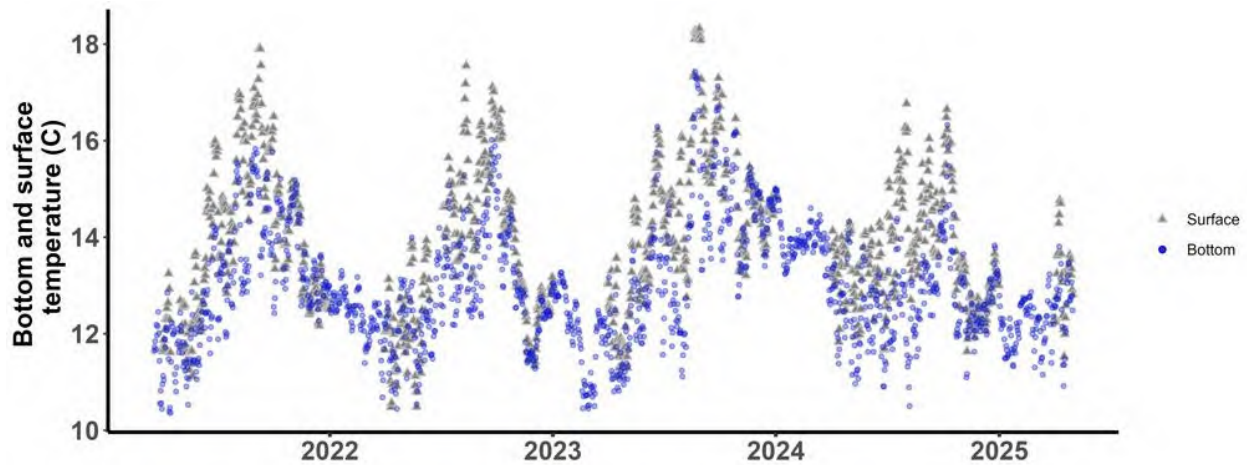


Figure 3. Surface and bottom daily mean temperatures in degrees Celsius. Surface temperature, shown in blue circles, was derived from the CDIP Cabrillo Point surface Waverider buoy 158. Bottom temperature, shown in gray triangles, was derived from HOBO temperature loggers deployed by Reef Check California at depth on the grid.

Study Sites

A 100 m by 100 m square area (hereafter, the grid) was designated as the primary section of Tanker Reef where sport divers would initially focus sea urchin culling efforts. Prior to the onset of sea urchin culling activities, divers from RCCA and G2KR, operating under a permit issued by MBNMS, installed stainless steel eye-bolts along the grid perimeter in 10 m intervals along the north and south borders and in 25 m intervals along the east and west borders. A lead-line was then attached to the bolts, delineating the grid boundary.

The grid was subdivided using cave lines into ten 10 m by 100 m “lanes” running approximately north to south, each marked at both ends with a lettered sign (A - K, excluding J), and were bolted down every 25 m. In 2021, a 100 m measuring tape was placed along the center of each lane to guide diver navigation (Figure 4). A total of 18 non-overlapping transects were established within the 10 grid lanes, each 30 m long and 2 m wide, covering nearly 11% of the grid’s total area (Figure 5). All transects were placed ≥ 5 m inside the grid perimeter lead-line, which created a buffer zone along the entire border of the grid intended to reduce confounding edge effects.

The control site (Figure 1), where no urchin culling occurred, was established 500 m east of the grid and remained within the Tanker Reef regulatory boundary. Depth, substrate composition, and sea urchin density in the control were similar to those in the grid (Figure 7). The control was surveyed by sampling six lanes, each 100 m in length, running north to south, with fixed GPS coordinates at the northern end of each lane. Within each of the six lanes, three 30 m by 2 m transects spaced 5 m apart (0-30 m, 35-65 m, and 70-100 m) were sampled, totaling 18 transects.

In addition to the grid and control, which were monitored and surveyed by agency divers and RCCA divers, sea urchin culling activities occurred in roughly 25 acres surrounding the grid; however, these additional areas were not surveyed by agency or RCCA divers.

Tanker's Reef cable grid and buoys

August 18, 2021



Giant Giant Kelp
Restoration Project

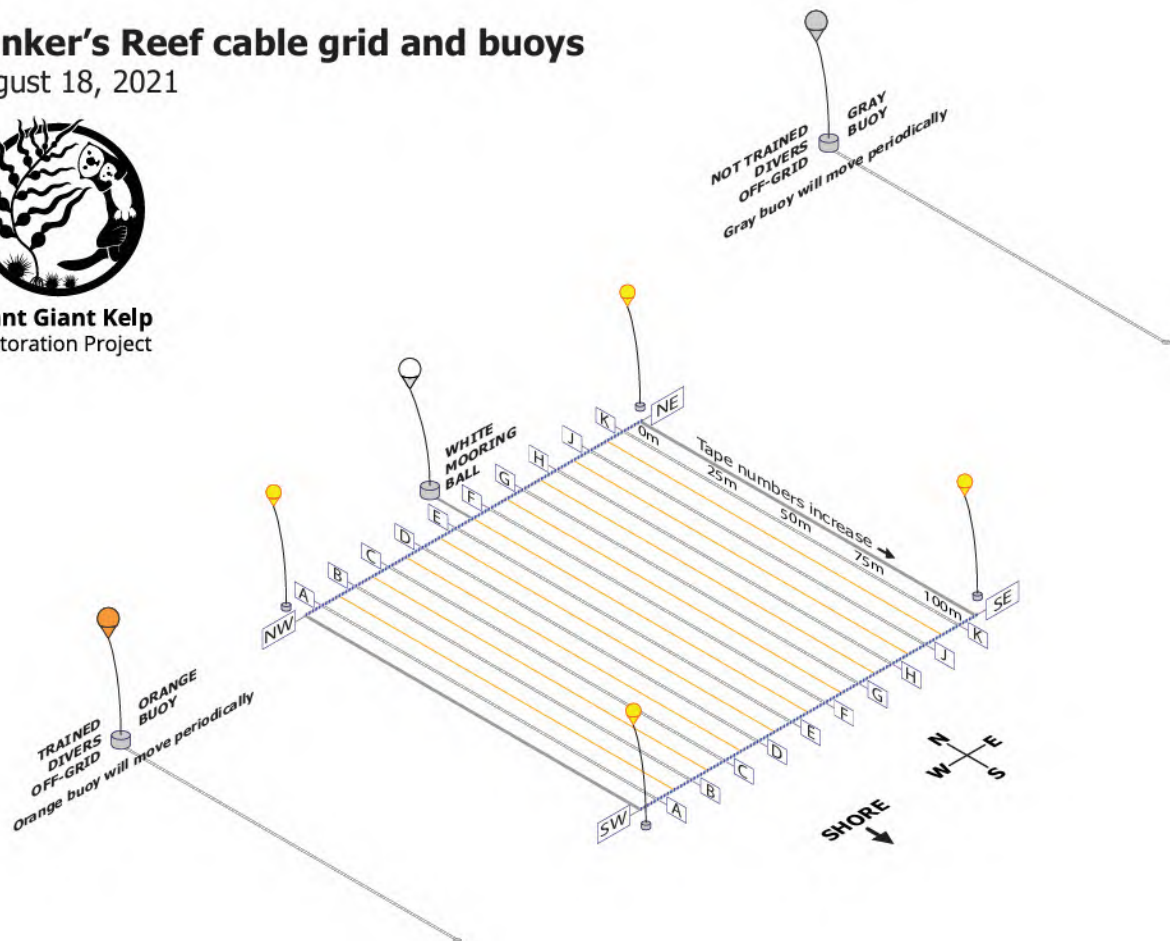


Figure 4. The “grid” area and 10 m by 100 m “lanes.” Courtesy of G2KR.

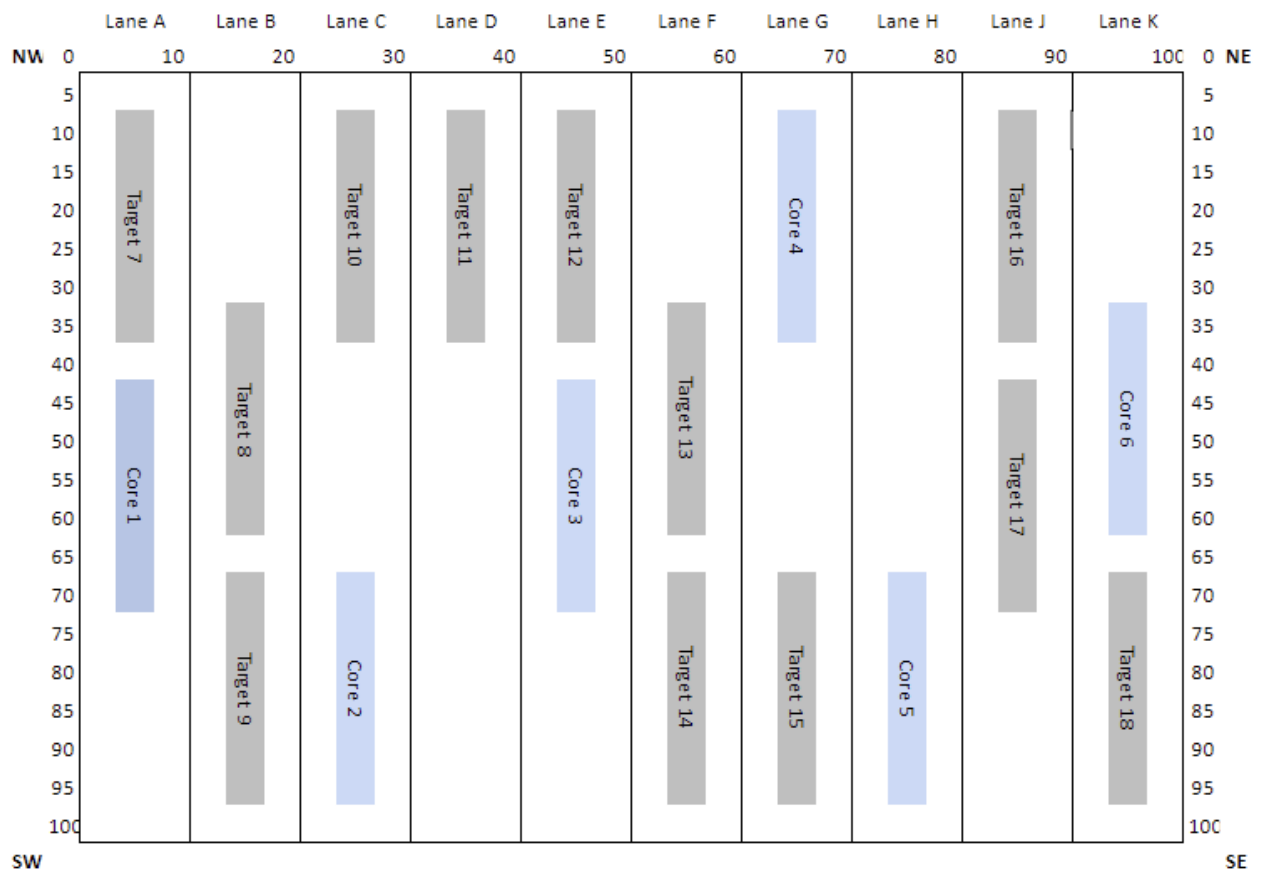


Figure 5. Spatial distribution of 18 30 m by 2 m transects within the grid, where volunteer divers culled sea urchins at the direction of G2KR. Agency divers collected only targeted monitoring data at all 18 transects. RCCA divers collected restoration monitoring data at the 12 “target” transects and kelp forest monitoring data at 6 “core” transects. Courtesy of RCCA.

Study Participants

When the amended temporary sport fishing regulation took effect on April 1, 2021, anyone with a valid fishing license could legally harvest or cull sea urchins at Tanker Reef. Concerns for diver safety and a desire to manage volunteer divers led to two recreational diving certification agencies (the Professional Association of Diving Instructors (PADI) and the National Association of Underwater Instructors (NAUI)) developing a course curriculum to certify kelp restoration divers. G2KR trained local dive shop instructors and created instructional slides for students to use as part of the course. G2KR provided additional class materials free to the instructors and included safety protocols and methods to collect data. An emphasis was placed on minimizing errant strikes with hand-held hammers, thereby reducing strikes to non-urchins and the reef itself in an effort to reduce collateral damage.

Certified divers were managed by G2KR via internet assignments, organized meetups, and boat charters. Starting in the spring and summer of 2021, divers with a valid sport

fishing license and a kelp restoration certification were directed by G2KR to the grid and specific lanes and, in some cases, specific areas within a lane. Divers culled all visible and accessible red and purple sea urchins using hand-held hammers. The goal was to reduce urchin density within the grid to <2 urchins m^{-2} , which was expected to facilitate kelp regrowth.

Culling efforts led by divers were broken down into two general categories: counting and non-counting. Counting divers would track the number of sea urchins culled and the time spent culling during each dive; these data were used to calculate a culling rate (urchins culled per minute). These individual rates for the last 30 days were then averaged among all counting divers to generate an average culling rate. In contrast, non-counting divers only recorded the time spent culling, and an estimate of the number of sea urchins culled was calculated by multiplying time spent culling by the average culling rate.

Data management by G2KR was facilitated by a Salesforce™ web-based portal, which allowed divers to record additional information, such as: date and location of the dive, dive buddy, time spent culling, area covered while on the grid, marine mammal disturbances, benthic disturbance and bycatch, location of invasive species, trash collected, other marine life comments and observations, and damage to the grid infrastructure. Data underwent weekly QAQC, and Tableau™ [data visualization tools](#) on the website displayed project progress and the status of individual effort.

Monitoring Efforts

One monitoring group (hereafter, RCCA divers) consisted of citizen-science divers using standard kelp forest ecosystem monitoring methods. These volunteer scientific divers were trained by RCCA, a community-based science organization, to identify and count a list of fishes, invertebrates, and algae. Data were collected along 30 m by 2 m transects as either density data via counts of individuals or percent cover via the uniform point contact survey method. RCCA divers used a combination of two survey protocols: 1) Kelp Forest Ecosystem Monitoring (KFM; [RCCA standardized survey protocol](#); Bauer-Civiello et al. 2026), which included surveys of fishes, invertebrates, and algae, and 2) Restoration Monitoring (RM; Freiwald et al. 2021), which focused on urchins and kelp only. Survey frequency (using both KFM and RM protocols) occurred twice per year (approximately May and September; Figure 6). Surveys were typically completed within 1-2 days at the grid and within 1-2 days at the control area, usually completing both sites in the same week.

Of the total 18 transects established on the grid, six were surveyed using the KFM protocol (labeled as “Core” in Figure 5), which include Uniform Point Contacts (UPC) to estimate percent cover of substrate, relief, and cover (Figure 7); swath counts of 13 algae taxa; swath counts of 35 invertebrate taxa; swath counts of 35 fish taxa; and all occurring along the same 30 by 2 m transect. The remaining 12 transects were surveyed with RM protocols (labeled as “Targeted” in Figure 5), which targeted purple and red urchin, kelp (same as KFM), and fishes (same as KFM).

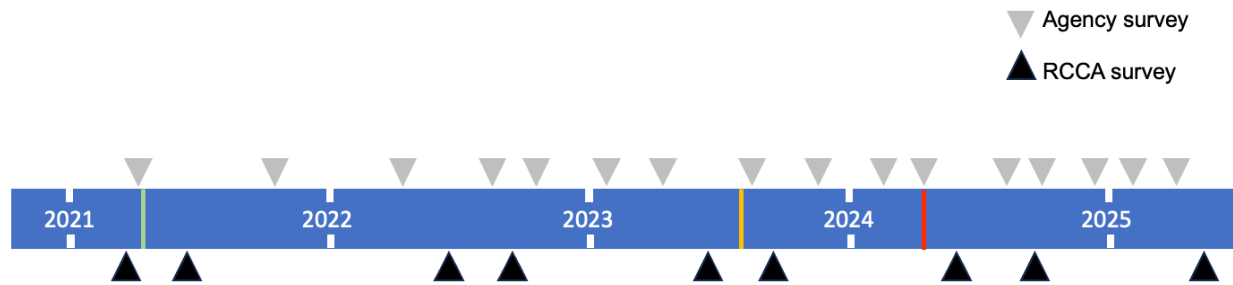


Figure 6. Frequency and timing of surveys at Tanker Reef, both in the "grid" where sea urchin culling occurred from April 2021 until July 2023, and at the control site, where no culling occurred. Gray triangles indicate when agency scientists completed "targeted" surveys of sea urchins and kelp, and black triangles indicate when RCCA divers collected "ecosystem" survey data, which includes algae (including kelp), invertebrates (including sea urchins), and fishes. The three vertical lines indicate: April 1, 2021, when culling was allowed (green line); July 2023, when culling stopped in the grid (orange line); and April 1, 2024, when the regulatory modification at Tanker Reef sunsetted, reverting back to the prior sportfishing regulation for sea urchins (red line).

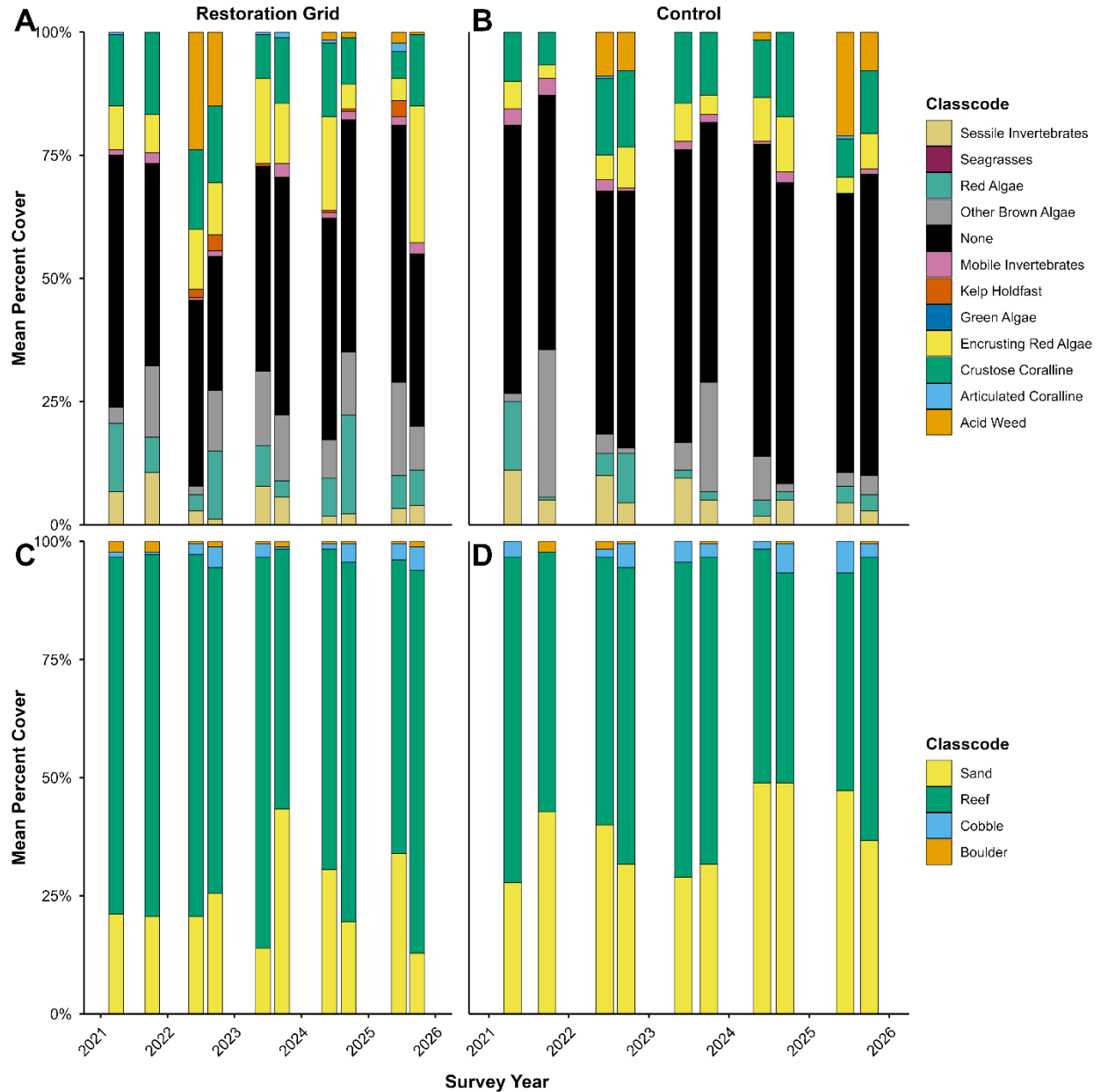


Figure 7. Uniform Point Contact (UPC) data collected by RCCA divers, comparing the mean percent cover of invertebrates and algae attached to the benthos at the A) restoration grid and B) control sites, and the mean percent cover of substrate type at the C) restoration grid and D) control sites by survey year.

The second monitoring group (hereafter, agency divers) consisted of scientific divers from CDFW and MBNMS. Agency divers collected data on three taxa: purple urchin, red urchin, and kelp (Order Laminariales), which was almost exclusively giant kelp (*Macrocystis pyrifera*). Survey frequency varied from 2-5 surveys per year (Figure 6). Surveys at both the grid and the control were typically conducted within a week and took from 2-5 days to complete.

Along the 30 m by 2 m transect, each agency diver of the buddy pair surveyed a single side of the transect tape, covering 30 m². Agency divers used flashlights to thoroughly look for all sea urchins and kelp on the transect, peering under ledges, and moving aside understory and turf algal species for an unobstructed view of the substrate. For each species of sea urchin, the first ≥50 individuals encountered by each diver were measured to the nearest centimeter (test diameter), and the distance along the transect was recorded. Any additional sea urchins encountered were not measured but were counted along the entire length of the transect. All giant kelp encountered were recorded: adults (>1 m stipe length) were recorded by the number of stipes occurring 1 m above the holdfast; juveniles (<1 m stipe length) were counted as individual thalli, regardless of stipe number. Beginning in November 2023, giant kelp recruits (i.e., a positive giant kelp identification but no bifurcation in the initial blade) were also recorded separately as counts. Giant kelp showing the first bifurcation of the blade were considered juveniles and counted as such. Additional transect-level information recorded included depth, ambient bottom temperature, location of extensive patches of sand covering the reef, and sporadic events (e.g., seasonally dense cover of acid weed *Desmarestia* spp.).

To standardize sea urchin and kelp data with agency diver surveys, starting in June 2022, RCCA divers modified the RM and KFM survey protocol to include giant kelp recruits (giant kelp <1 m in size), bull kelp recruits (bull kelp <30 cm in size), unidentified kelp recruits, 'no blade' kelp, and counting sea urchins <2.5 cm in diameter. In addition, the UPC survey was modified to include the invasive bryozoan *Watersipora* spp. and *Desmarestia* spp. due to initial observations and surges in understory coverage, respectively. Only sea urchins >2.5 cm were recorded in 2021 by RCCA divers. Direct comparison of RCCA and agency urchin density data highlighted the importance of enumerating urchins <2.5 cm. For example, up to 46% of urchins encountered on the site were <2.5 cm and not captured in the data using RCCA's standard KFM protocols. As such, RCCA protocols were adjusted to include the full size range within their RM protocols 2022 onward.

RCCA also collected sea urchin size-frequency data (test diameter to the nearest cm, by species) in March and October of 2021, where up to 50 urchins per 30 m by 2 m transect were sized to the nearest cm (test diameter). Starting in 2022, only agency divers collected sea urchin size-frequency data.

A total of 25 subtidal survey timepoints were conducted by agency (n=16) and RCCA (n=9) monitoring groups (Figure 6) throughout the Tanker Reef project timeframe (March 2021 to June 2025). Agency and RCCA divers each conducted one pre-culling targeted and ecological monitoring survey at both the grid and control sites in spring 2021 before organized urchin culling occurred following the regulatory amendment, which went into effect on April 1, 2021. Agency and RCCA divers conducted surveys through April 2025, one year after the regulatory amendment sunset on April 1, 2024.

RESULTS

Sea Urchin Culling

Recreational divers self-reported sea urchin culling efforts at the grid from April 17, 2021, until July 30, 2023, when culling ceased in the grid and was focused elsewhere on Tanker Reef. Divers self-reported over 700,000 sea urchins culled within the broader Tanker Reef regulatory boundary (purple dashed line in Figure 1), although the majority (66%) of the urchin removal efforts in this timeframe were outside of the grid as part of a strategy to reduce the number of sea urchins migrating into the grid between targeted culling efforts. Culling by divers within the grid was stepwise and incremental, completing an initial pass through the entire grid prior to revisiting culled areas, as reflected in pulses of time spent culling, relative to the self-reported urchins culled (Figure 8). In just over two years, divers conducted removal efforts over the entire grid 8.7 times. By April 2024, there were 18 instructors and 252 divers who performed 1,529 dives, culled an estimated 749,320 sea urchins (228,861 urchins within the grid; 520,459 urchins outside of the grid), and had no reported diving safety incidents.

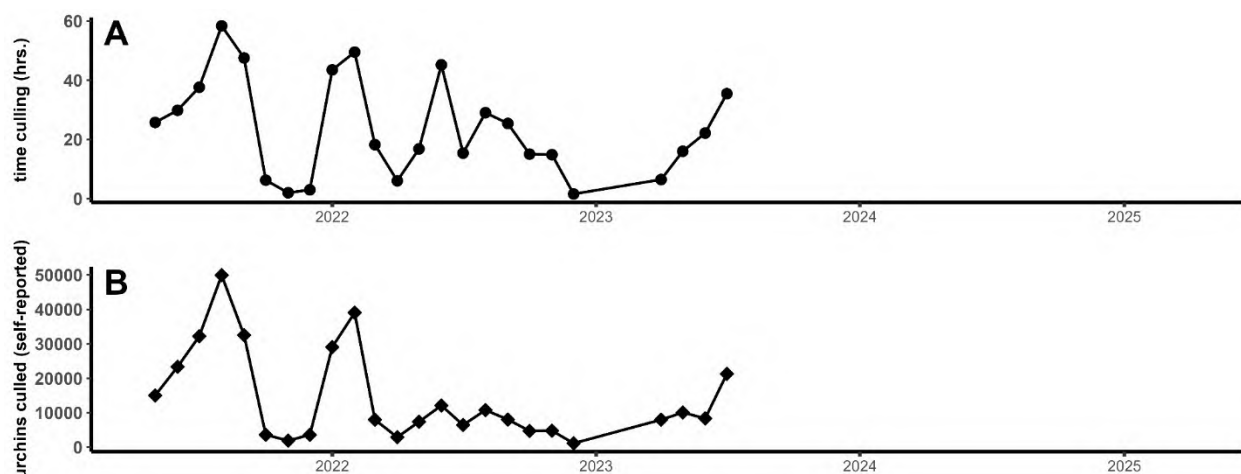


Figure 8. Time series of urchin culling effort data collected at the grid by G2KR throughout the duration of the regulatory amendment. Metrics are summed by month. A) self-reported time spent culling (in hours), B) self-reported estimates of urchins culled.

Subtidal Surveys

Across four years of monitoring, following initiation of organized urchin culling in April 2021, purple urchin densities generally remained higher at the control site than at the grid (Figure 9; Panel A). During the pre-culling survey in spring 2021, mean purple urchin density was similar, but slightly higher at the control compared to the grid ($8.5 \text{ m}^{-2} \pm 0.9 \text{ SE}$ and $6.8 \text{ m}^{-2} \pm 1.3 \text{ SE}$, respectively). By Fall 2021, five months after organized culling efforts were underway (Figure 9; Panel A), purple urchin density at the grid was 1.6 m^{-2} ($\pm 0.3 \text{ SE}$), below the 2 m^{-2} threshold, and relatively unchanged at the control. Purple urchin densities were as low as 0.7 m^{-2} ($\pm 0.2 \text{ SE}$) at the grid in summer 2022. Purple urchin densities remained at or below the 2 m^{-2} threshold through early 2023, after which densities hovered just above the threshold until early 2024. Purple urchin

densities at the control varied through this timeframe but remained well above densities within the grid. In the time period between 2024 and 2025, purple urchin densities at the grid remained above the threshold, and while they were still lower than densities observed at the control, the pattern of variability through time generally tracked that observed at the control (Figure 9; Panel A). Excluding the pre-culling timepoint, purple urchin density at the grid reached its highest ($6.4 \text{ m}^{-2} \pm 1.4 \text{ SE}$) in early 2025, which was just below the pre-culling density of 6.8 m^{-2} observed in spring of 2021. The control site, including pre-culling timepoint, also reached its highest purple urchin density ($11.3 \text{ m}^{-2} \pm 1.6 \text{ SE}$) in early 2025.

Red urchin densities at both the control and grid were considerably lower than purple urchin densities throughout the survey time period. At the control, mean red urchin densities ranged from 0.08 m^{-2} ($\pm 0.02 \text{ SE}$) up to 0.53 m^{-2} ($\pm 0.07 \text{ SE}$). At the grid, mean red urchin densities ranged from 0.04 m^{-2} ($\pm 0.01 \text{ SE}$) up to 0.65 m^{-2} ($\pm 0.67 \text{ SE}$). In general, the red urchin densities at the grid remained lower than those of the control site, including the pre-culling survey timepoint (Figure 9; Panel B).

Adult giant kelp individuals were rare at both the grid and the control in 2021, reaching a max individual density of 0.002 m^{-2} ($\pm 0.001 \text{ SE}$) and 0.04 m^{-2} ($\pm 0.02 \text{ SE}$), respectively. At the grid, giant kelp individual mean density started to increase in the spring of 2022, with a sharp jump up to $0.3 \text{ individuals m}^{-2}$ ($\pm 0.9 \text{ SE}$) in the summer of 2022, and hovered around this density into early 2023 (Figure 9; Panel C). Starting in spring 2023 and continuing through spring 2025, mean densities of giant kelp individuals remained stable, around $0.15 \text{ individuals m}^{-2}$. Giant kelp individual densities at the control site remained near-zero for this entire time period. Bull kelp individuals were only observed in 2022, with one and twenty-two individuals observed at the control and grid, respectively, in June 2022, and five individuals observed at the grid in September 2022.

Giant kelp stipe densities at the grid were low in 2021 and showed a slight increase during the summer and fall of 2022 at the grid, reaching a maximum in the summer of 2023 (2.4 m^{-2} ($\pm 0.5 \text{ SE}$)), and a lower but stable plateau around $0.7 \text{ stipes m}^{-2}$ for 2024 and 2025 (Figure 9; Panel D). Giant kelp stipe densities at the control site remained near-zero for this entire time period.

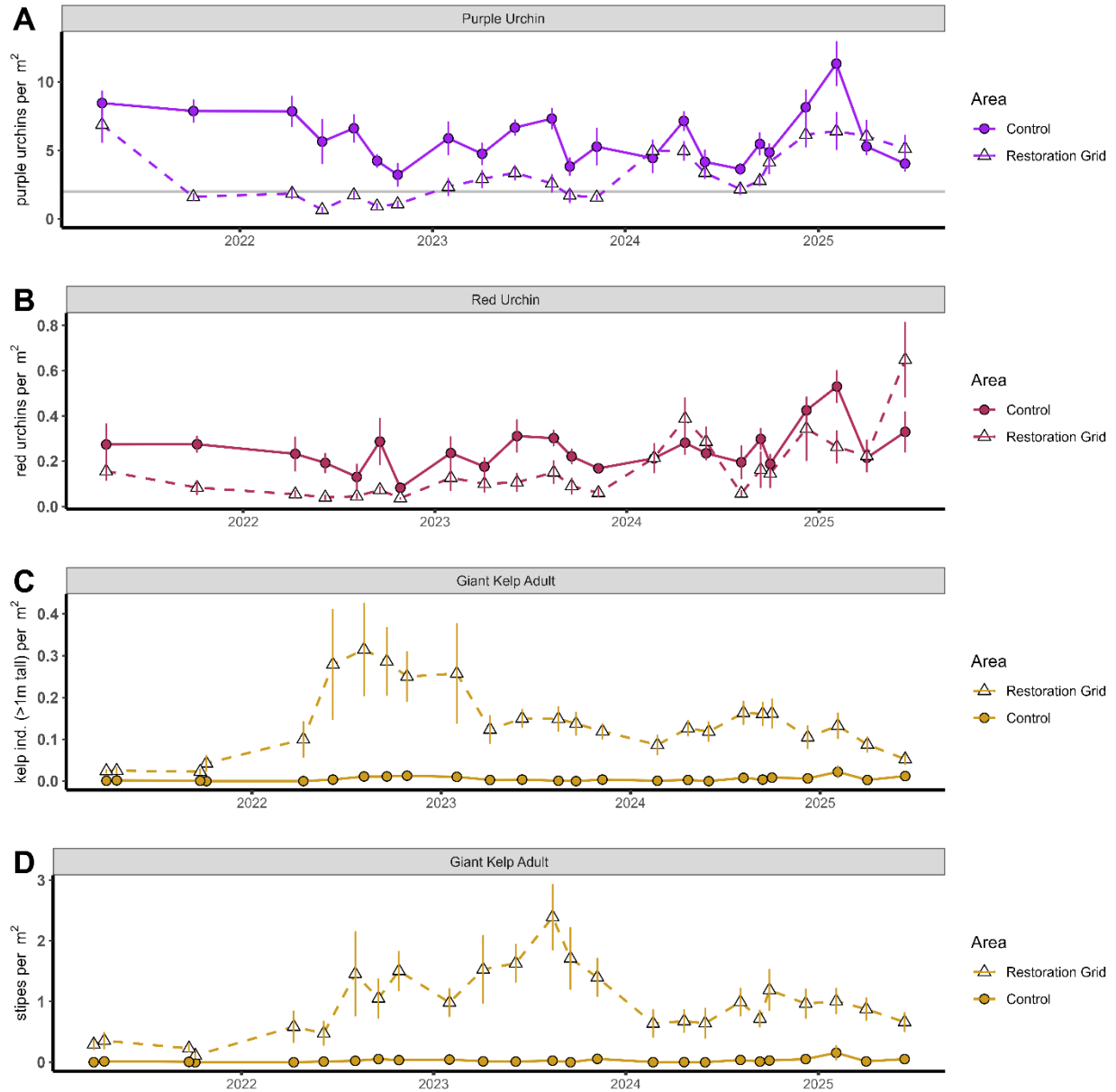


Figure 9. Combined survey data from both agency and RCCA monitoring groups for the grid (triangle; culling present) and control (filled circle; culling absent) at Tanker Reef, CA, USA. Panel A) purple urchin densities m^{-2} and the target density of $2 m^{-2}$ (gray line), Panel B) red urchin densities m^{-2} , Panel C) adult giant kelp densities m^{-2} , and Panel D) giant kelp stipe densities m^{-2} .

CONCLUSION

Throughout the duration of the regulatory amendment allowing urchin culling *in situ* at Tanker Reef, which went into effect April 1, 2021, and sunset April 1, 2024, recreational divers with valid sport fishing licenses conducted organized culling, and citizen-science and agency divers conducted independent monitoring to collectively advance

understanding of the efficacy of *in situ* culling in the central coast region. This report focuses on addressing the first two of the four questions posed within the Joint Memorandum from OPC, CDFW, and MBNMS, in association with the Commission rulemaking process, with the latter two questions briefly addressed.

Subtidal surveys combined with self-reported urchin culling data were used to assess Question 1: Can recreational divers reduce sea urchin densities to levels expected to facilitate kelp regrowth (<2 urchins m^{-2}) via in-water urchin culling? Results shown in Figures 8 and 9 (Panels A and B) collectively suggest that urchin densities can be reduced and maintained by recreational divers to levels at or below 2 urchins m^{-2} . Importantly, initial density reductions were observed in a relatively short period of time (e.g., months); however, recreational divers continued to revisit the site to re-cull areas in order to maintain relatively low urchin densities (Figure 8). During the three-year regulatory amendment, at the scale of a 2.5-acre grid, efforts from over 250 trained recreational divers showed that coordinated removal efforts were both feasible and effective. Unlike other locations within the state where coordinated urchin removals have occurred and necessitated little-to-no urchin removal maintenance (i.e., along the Palos Verdes Peninsula; Johnson et al. 2024), the grid, and Tanker Reef more broadly, has limited natural physical barriers to urchin intrusion. Despite a persistent sand channel on the north side of the grid, dynamic sand movement and sedimentation patterns, as well as a continuous low-lying reef, presented challenges to managing urchin densities and evaluating the effort (Figure 7; Panels C and D).

Subtidal surveys combined with the initiation and cessation time of urchin culling efforts were used to assess Question 2: Does the reduction of sea urchin grazing pressure via in-water urchin culling by recreational divers facilitate natural kelp regrowth? Results shown in Panels C and D of Figure 9 show giant kelp individual and stipe density increased at the grid within a year of culling effort initiation. This, in contrast to a near-zero presence of kelp at the control site, suggests kelp regrowth occurred following culling efforts. Kelp densities, both of individuals and of stipes, remained persistent throughout the duration of the evaluation period. This pattern highlights that kelp remained on the site for over a year after the organized urchin culling efforts ceased. The temporal shifts observed in the peaks of stipes m^{-2} and of individuals m^{-2} (Figure 9; Panels C and D) are consistent with observed patterns of emergent kelp forests, likely driven by natural succession processes such as self-thinning (Dayton et al. 1984; Elsmore et al. 2022). Early observations showed many kelp individuals consisted of one to a few stipes, which shifted over time to become fewer but larger individuals consisting of many stipes. This is reflective of kelp dynamics observed in new and emergent forested areas (Dayton et al. 1984; Elsmore et al. 2022).

Kelp forests along California's coast typically support individual densities ranging from $0.5 m^{-2}$ to $3 m^{-2}$ and stipe densities ranging from $1.9 m^{-2}$ to $15 m^{-2}$ (North 1971). Peak individual kelp densities observed ($0.3 m^{-2}$) at the Tanker Reef grid were below that of typical forests within the state, while peak stipe densities observed ($2.4 m^{-2}$) were within the range of typical California kelp forests, albeit on the lower end. The maximum giant kelp stipe densities were observed in summer of 2023, which coincided with the cessation of organized urchin culling in late July 2023. The temporary regulations

remained in place for an additional 8 months, during which organized culling did not occur, and it is unknown how continued efforts would have influenced observed kelp and urchin dynamics at the site.

While this study did not directly assess Question 3, whether there were negative impacts associated with in-water urchin culling (e.g., bycatch, damage to underlying reef structure, disturbance to marine mammal populations), that question was addressed in a separate, unpublished study ([Lonhart and Osorio, unpublished](#)). Preliminary results document measurable collateral damage that can occur to both organisms and the substrate, though the magnitude and extent of damage due to culling by divers at scale remain an open question. Importantly, the underlying reef geomorphology and benthic community structure are important considerations for the application of this as a future tool.

Limited capacity for this study prevented us from evaluating Question 4, however, participating divers and G2KR collected and analyzed many additional types of datasets and presented their findings on the G2KR [website](#); however, for this study, we did not assess whether those data products were scientifically sound and/or informative to resource managers. Future collaborative efforts should consider utilizing established sportfishing reporting platforms for recording recreational diver participation. Having divers submit data through CDFW-established reporting systems would have provided streamlined information gathering, accessibility, and reduced workload and capacity demands associated with independent evaluations.

ACKNOWLEDGEMENTS

We would like to thank the suite of project participants and contributors for their specific contributions to the contents of this report. The survey design was developed by Steve Lonhart (MBNMS), Dan Abbott (RC), Jan Freiwald (RC), Keith Rootsart (G2KR), Mike Esgro (OPC), and James Ray (CDFW). The infrastructure and equipment (e.g., buoys, lines, hammers) that divers used at Tanker Reef were paid for by private donations and by SeaTrees. We would like to thank the >250 volunteer divers that contributed to the urchin removal efforts and 18 instructors that helped train participating divers. Additionally, we would like to thank the >40 trained citizen-science RCCA volunteers who contributed time to support the subtidal monitoring and HOBO temperature sensor deployments. SeaTrees also supported costs of RCCA surveys. We would also like to thank CDFW and MBNMS staff who provided dive and vessel support to conduct the monitoring surveys, including Dave Osorio and Chad King.

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From: Keith Rootsart [REDACTED]
Sent: Wednesday, July 1, 2026 10:44 AM
To: FGC <FGC@fgc.ca.gov>
Subject: G2KR Written Comments

Dear FGC Staff,

Attached are our written comments for the July 16, 2026 MRC meeting.

These are submitted prior to the Written Comment deadline of July 2 at 5:00 PM.

Thank you,

Keith Rootsart

Giant Giant Kelp Restoration



Giant Giant Kelp
Restoration Project

Tanker's Reef Monitoring Recommendations, design, and reporting

CDFW, MBNMS, and OPC wrote a memorandum on August 5, 2020 outlining their expectations for the Tanker's Reef Project. This memo was discussed in several Teams meetings and resulted in a Draft Monitoring Recommendations document on November 23, 2020 that confirms four scientific questions and how the project should attempt to answer them. For the July 2026 MRC meeting the Tanker Reef Project Report addresses only two of the four scientific questions.

The third question *"Are there negative impacts associated with in-water urchin culling?"* was very important to MBNMS. A study was conducted by MBNMS/CDFW to determine if damage to structure and animals was possible using tools that we do not use. Our divers were trained not to damage the reef or cause bycatch, but our training, tools, and in-water efforts were not evaluated. The unsatisfying conclusion is that there is a non-zero chance of damage.

The fourth question *"Can recreational divers collect, analyze, and communicate data/results in a way that is both scientifically sound and informative to resource managers?"* was very important to G2KR and we invested considerable time and effort to develop curriculum, analyze, and submit our [observations bi-weekly](#) to the joint agencies. Although there are several discrepancies, The Tanker Reef Project Report unfortunately does not consider whether our data collection and analysis was heard or helpful.

When kelp actually grew, the joint agencies insisted on adding a new fifth question *"What happens when the culling stops?"* that effectively ended the effort. This was a horrible question to ask when the community of 252 trained divers were asking FGC to continue kelp restoration efforts. This new fifth question was not addressed in the report.

In the Draft Monitoring Recommendations there is no mention or intent to end urchin culling. Our culled area was 10x the size of the treatment area and our intent was to continue culling urchins in the 685 acres area. However, MBNMS addressed the MRC in the third season and insisted the culling must stop everywhere for the sake of their research, so FGC voted to sunset the amendment.

Our success at restoring an 11-acre kelp forest created a target for urchins. If we stopped before the forest became self-sustaining, we would be feeding urchins kelp, making them more reproductive. When we first heard the joint agencies' intent, we abandoned culling urchins in the treatment area on July 30, 2023, 8 months early. For the last three years we sadly documented the demise of the kelp we restored.

We succeeded at culling urchins and restoring kelp, but instead of reporting every year on the project results to FGC to petition to advance our efforts to better granitic substrate (abandoning their research project), only a much-delayed partial Tanker Reef Project Report is provided at the MRC meeting, 5 years after the project start.

The following are the Draft Monitoring Recommendations, 11-23-20 (not cited in the Tanker Reef Project Report):

Project design, monitoring, and reporting recommendations for urchin culling at Tanker Reef

Background

There is considerable scientific evidence that the reduction of sea urchin grazing pressure can facilitate kelp regrowth in urchin-dominated habitats. In-water urchin culling (i.e. smashing or crushing sea urchins *in situ*) has the potential to be an effective method of kelp restoration, if sufficient focused effort can be sustained and ocean conditions are favorable for kelp regrowth. This concept has strong support within the California recreational dive community. However, significant uncertainties about in-water urchin culling by recreational divers must be addressed, including 1) the efficacy of such efforts at reducing urchin densities to the level required for kelp regrowth and 2) ecological effects, including potential unintended negative impacts, such as bycatch or damage to underlying reef structure.

In June 2020, the California Fish and Game Commission (FGC) received Petition 2020-001, which proposes to amend the sport harvest regulations for sea urchin. Specifically, the petition proposes to allow recreational divers with valid California sport fishing licenses to take unlimited purple and red sea urchin via in-water culling at Tanker Reef in Monterey County, a system historically dominated by giant kelp (*Macrocystis pyrifera*). This amendment would complement a similar effort currently under way at Caspar Cove in Mendocino County, a system historically dominated by bull kelp (*Nereocystis luetkeana*). As outlined in [joint comments](#) on Petition 2020-001, submitted to the California Fish and Game Commission in August 2020, the California Department of Fish and Wildlife (CDFW), California Ocean Protection Council (OPC), and Monterey Bay National Marine Sanctuary (MBNMS) expect that regulatory amendments approved at Tanker Reef will provide an improved understanding of the following key management questions:

- Can recreational divers operating under the proposed sea urchin sport harvest regulations reduce sea urchin densities to levels expected to facilitate kelp regrowth (<2 urchins/m²) via in-water urchin culling?
- Does reduction of sea urchin grazing pressure via in-water urchin culling facilitate natural kelp regrowth?
- Are there negative impacts associated with in-water urchin culling (e.g. bycatch, damage to underlying reef structure, disturbance to marine mammal populations)?
- Can recreational divers collect, analyze, and communicate data/results in a way that is both scientifically sound and informative to resource managers?

Following on from the joint agency comments referenced above, this document is intended to provide specific recommendations on design, monitoring, and reporting for the Tanker Reef effort, to ensure that management questions are addressed in a scientifically robust manner.

Goals

Based on the management questions posed above, participants should aim to accomplish the following:

- Reduce purple and red sea urchin densities to threshold levels expected to facilitate kelp regrowth (<2 total urchins/m² along fixed transects within a designated treatment site) via in-water urchin culling and maintain those densities while the amendment is in place.
- Conduct robust monitoring to evaluate the ecological effects of in-water urchin culling, with a focus on purple and red sea urchin and kelp density in treatment sites compared to control sites.
- Document any observations of direct or indirect impacts of in-water urchin culling on non-target organisms (e.g., bycatch, damage to underlying reef structure, disturbance of marine mammal populations).
- Collect, analyze, and communicate data/results in a way that is both scientifically sound and informative to resource managers.

Survey design, monitoring, and reporting recommendations

CDFW, OPC, and MBNMS are providing the following specific recommendations to participants. These recommendations will increase the likelihood that information collected at Tanker Reef will meet the goals identified above.

- A ~1-2 acre treatment site and a ~1-2 acre reference site should be established at Tanker Reef.
 - The treatment site should also be located near existing kelp, to maximize spore settlement potential; should be adjacent to sand, to provide some protection from urchin incursion; and should be characterized by urchin densities that are representative of barrens in the broader Monterey region.
 - The reference site should meet these same criteria but should be located on the east side of Tanker Reef to reduce the potential for undirected urchin culling to occur in this area.
 - Existing seafloor mapping data, along with diver observations of kelp and urchins, should inform selection of both the treatment and reference sites.
- In-water urchin culling efforts should be conducted along fixed transects at the treatment site, with the goal of reducing purple and red sea urchin densities to <2 total urchins/m² along those transects within 1 year of the amendment. These densities should be maintained through organized culling efforts while the amendment is in place.
- A monitoring protocol shall be used with sufficient statistical power to detect changes in the following key ecological metrics over time: density of purple sea urchins, density of red sea urchins, and density of giant kelp.
 - Before and after culling efforts, divers should survey fixed transects, collecting data on purple sea urchin density, red sea urchin density, and giant kelp density using kelp forest monitoring protocols (e.g., PISCO or RCCA) used for marine protected area monitoring statewide. Transects should also be surveyed at regular intervals while the amendment is in place.
 - CDFW, OPC, and MBNMS staff will advise participants in determining the appropriate number of transects, location of transects, length and width of transects, and survey frequency once the treatment and reference sites have been established.

- Any observations of direct or indirect impacts of in-water urchin culling on non-target organisms should be documented. For example, divers could conduct video surveys before and after organized culling efforts.
- Sea otter observations should be conducted by a land-based observer before and during culling efforts to avoid disturbance. [Disturbance](#) is defined as divers approaching within 50 feet of a sea otter or inducing a change in sea otter behavior.
- A self-reporting system must be established through which divers can report data on their efforts, including the following:
 - Date of dive
 - Dive time
 - Approximate location of dive within treatment area
 - Number of urchins culled
 - Noteworthy observations
 - The self-reporting system should be modeled after the self-reporting form for Caspar Cove: www.tinyurl.com/CasparCoveDiveLog
- Some attempt should be made to quantify undirected urchin culling, for example via cameras or land-based observers.
- To the extent practicable, agency divers will verify data collected by participants, and may establish complementary studies, such as a centimeter-scale assessment of the impacts of urchin culling on hard substrate and broad biodiversity surveys.
- Leaders managing participants should meet regularly with CDFW, OPC, and MBNMS staff to ensure efforts are addressing the goals listed above.

Criteria for success

This amendment will be considered a success if:

- Recreational divers are able to clear 1-2 acres of reef at the treatment site (i.e. reduce urchin densities to <2 total urchins/m² 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).
- 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.

From: Keith Rootsart [REDACTED]
Sent: Thursday, July 2, 2026 02:34 PM
To: FGC <FGC@fgc.ca.gov>
Subject: MRC Agenda Item 6

Dear FGC Staff,

Attached is our Monterey Temperature and Light update that repeats previously provided information and is updated through June 26, 2026.

Warm green water conditions are increasing. Kelp prefers cold nutrient rich water to grow with plenty of sunlight. We are anticipating even warmer conditions later this summer. Summer cold water upwelling helps kelp grow, but the resulting algae bloom limits sunlight at depth that kelp craves.

Out-planting kelp is proposed in our petition 2023-23MPA. The KRMP should explore now if warm water climate-acclimated kelp can survive in this region with warmer and warming conditions.

Thanks,

Keith Rootsart
Giant Giant Kelp Restoration
[REDACTED]



Giant Giant Kelp
Restoration Project

Monterey Dive Sites 10/24/25 to 6/26/26

Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light		Light	
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Notes:
Giant kelp thermal limit is 58-59 degrees F
Normal Monterey diving temperature range is 50-55 degrees F
The Marine Heat Wave began September 15, 2026
Item in red is an error when the sensor detached and dropped to the bottom

Committee Staff Summary for July 16, 2026 MRC

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission approve the following changes to the Committee work plan: _____.

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

Updated July 9, 2026

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

Topics	Category	Mar 2026	Jul 2026	Nov 2026
Planning Documents, Fishery Management Plans (FMP)				
MLMA Master Plan for Fisheries – Implementation Updates	Plan Implementation			
Red Abalone Restoration Plan (statewide) Development	Restoration Plan			
CA Halibut Review – Bycatch Evaluation for Trawl Gear	Management Review	X		X
Kelp Restoration and Management Plan (KRMP) Development	Restoration/ Management Plan		X	
White Seabass Fishery Management Review	Management Review	X	X/R	
Regulations				
Commercial Coonstripe Shrimp Fishery Management, Phase 2	Commercial Take		X	X/R
Recreational Use of Hand-Held Harpoons and Flying Gaffs to Assist Anglers with Landing Tuna	Recreational Take	X/R		
Method of Determining Recreational Legal Size	Recreational Take	*		
Recreational Take of Pismo Clam (Petition 2025-14; granted for further consideration)	Recreational Take			X
Tidal Invertebrates Regulations	Recreational Take			*
Commercial Lobster Tailing (Petition 2026-02; referred to MRC)	Commercial Take		X	
Marine Aquaculture and State Water Bottom Leases				
Statewide Aquaculture Action Plan	Planning Document	X		
Status of Existing Leases and Leaseholder Requests	Current Leases	X		
Applications for New Leases - San Andreas Shellfish Company (Tomaes Bay)	Lease Applications			
Lease Best Management Practices Plans (Hold, TBD)	Leases – Regulatory	X/R		
Special Projects, Informational Topics, and Emerging Management Issues				
Coastal Fishing Communities Project	MRC Project			X/R
Kelp Restoration and Recovery Tracking	Kelp			
Barred Sand Bass Working Group	Informal Advisory Body			
Nearshore Groundfish Management Process	State/Federal Fisheries			X
Experimental Fishing Permit (EFP) Program				
Box Crab Exploratory Fishing EFP – Project Outcomes	EFP			X
Pop-Up Gear in State-Managed Fisheries EFP	EFP			

Key: X = Discussion X/R = Recommendation and may move to Commission * = Written or oral agency update