4. California Halibut Fishery Management Review

Today's Item

Information 🛛

Action □

- (A) Receive Department updates on the status of management priorities, including completing a stock assessment for the southern California halibut stock and testing electronic monitoring/electronic reporting for set gill net fisheries, and discuss next steps.
- (B) Receive and discuss Department update on its evaluation of fisheries bycatch in the California halibut trawl fishery, including recent public engagement.

Summary of Previous/Future Actions

| • | Commission referred halibut management review to the Marine Resources Committee (MRC) | August 19-20, 2020 |
|---|---|------------------------------------|
| • | Commission referred bycatch evaluation to support halibut management review to MRC | December 15-16, 2021 |
| • | Received updates on bycatch evaluation for commercial halibut set gillnet and trawl fisheries | March 24 and July 14, 2022; MRC |
| • | Received and discussed Department bycatch analysis and report; MRC separated bycatch acceptability evaluations for halibut set gillnet and trawl fisheries, to start with set gillnet (approved by Commission in December 2022) | November 17, 2022; MRC |
| • | Set gillnet bycatch evaluation completed, leading to MRC recommendation and a 2024 Commission rulemaking | 2023, various; MRC |
| • | Received Department update; MRC recommendation to begin evaluating bycatch for halibut trawl fishery (approved by Commission in April 2024) | March 19, 2024; MRC |
| • | Today receive and discuss Department updates on its evaluation of fisheries bycatch in the California halibut trawl fishery | July 16-17, 2025; MRC |

Background

(A) Fishery Management Priorities and Actions

Management review of the California halibut fishery commenced in late 2020, consistent with the requirements of the Marine Life Management Act (MLMA) and using the framework outlined in the 2018 Master Plan for Fisheries, A Guide for Implementation of the Marine Life Management Act (master plan) for meeting those requirements.

Department management goals for the fishery have included reviewing the California halibut trawl grounds, strengthening data and stock assessments, and developing electronic monitoring and reporting, among other efforts. Today, the Department will provide updates on current management priorities, in addition to the bycatch evaluation, including an updated stock assessment for southern California halibut (last assessed in

2020) and testing electronic monitoring/electronic reporting for set gill net fisheries. The Department will also highlight next steps.

(B) Evaluation of Bycatch in the Trawl Fishery

A key requirement of fishery management reviews under the MLMA is to evaluate and address unacceptable bycatch, limiting it to acceptable types and amounts. Chapter 6 of the master plan outlines a four-step framework for bycatch evaluation: (1) collecting information on catch type and amount; (2) distinguishing target, incidental, and bycatch species; (3) determining "acceptable" types and amounts of bycatch; and (4) addressing unacceptable bycatch.

The California halibut fishery management review represents the first application of the master plan bycatch evaluation framework. In November 2022, the Department submitted a bycatch assessment report for both the commercial trawl and set gillnet California halibut fisheries, completing steps 1 and 2 of the framework (see Exhibit 1 for background on developing and completing the four steps).

In December 2022, the Commission approved an MRC recommendation to separate the bycatch evaluation of set gillnet gear from trawl gear for the two remaining California halibut bycatch evaluation steps. The Commission prioritized moving forward with steps 3 and 4 for the California halibut set gillnet fishery first, followed by the California halibut trawl fishery. The set gillnet fishery's bycatch evaluation was completed in 2023, with an MRC recommendation that the Commission approved in December 2023.

In March 2024, MRC recommended that the Department begin focusing its bycatch evaluation on the California halibut trawl fishery. Informed by a July 2024 MRC review of lessons learned from the set gillnet bycatch evaluation (see Exhibit 2 for more information), which considered potential application to the trawl review, the Department is now undertaking the trawl bycatch evaluation.

Today, the Committee will receive and discuss Department updates on its evaluation of bycatch in the California halibut trawl fishery, including recent public engagement workshops (Exhibit 3).

Significant Public Comments (N/A)

Recommendation (N/A)

Exhibits

- 1. <u>Staff summary for Agenda Item 5, November 2022 MRC meeting (for background purposes only)</u>
- 2. <u>Staff summary for Agenda Item 4, July 2024 MRC meeting (for background purposes only)</u>
- 3. Department presentation

Committee Direction/Recommendation (N/A)

COMMITTEE STAFF SUMMARY FOR NOVEMBER 17, 2022 MRC For background purposes only

5. ASSESSING AND ADDRESSING BYCATCH IN CALIFORNIA FISHERIES

Today's Item

Information

Action 🛛

- (A) Overview of process for evaluating and addressing fishery bycatch Review the four-step process for limiting bycatch to acceptable types and amounts as outlined in the 2018 Marine Life Management Act (MLMA) master plan for fisheries.
- (B) Evaluating bycatch in the California halibut fishery Receive Department update on analysis of bycatch data for the California halibut fishery to support fishery management review.
- (C) Determining acceptable bycatch types and amounts Discuss potential approaches to completing inquiries for determining what bycatch is "acceptable" within a specific fishery and develop potential committee recommendation.

Summary of Previous/Future Actions

| • | FGC referred California halibut management review to MRC | Aug 19-20, 2020; Webinar/Teleconference |
|---|---|---|
| • | DFW update on California halibut stock assessment and management review | Mar 16, 2021; MRC, Webinar/Teleconference |
| • | DFW update; MRC recommendation to schedule bycatch review discussion | Nov 9, 2021; MRC, Webinar/Teleconference |
| • | FGC referred bycatch review to MRC | Dec 15-16, 2021; Webinar/Teleconference |
| • | FGC received update on bycatch evaluation for California halibut management review | Mar 24, 2022; MRC, Webinar/Teleconference |
| • | DFW written update on bycatch evaluation for California halibut | Jul 14, 2022; MRC, Santa Rosa |
| • | Today's update and discussion on bycatch evaluation for halibut; potential MRC recommendation | Nov 17, 2022; MRC, San Diego |

Background

The California halibut fishery is a multi-sector commercial and recreational fishery managed under FGC authority. In 2019, as part of the fisheries prioritization process required by the Marine Life Management Act (MLMA) and outlined in *2018 Master Plan for Fisheries, A Guide for Implementation of the Marine Life Management Act*, California halibut was prioritized for management review. In Aug 2020, DFW recommended that it initiate the management review process for California halibut; FGC concurred and referred the topic to MRC.

One key driver in halibut's high priority ranking included potential risks to bycatch species (including sub-legal-sized halibut) in commercial trawl and set gillnet fisheries. Bycatch, as defined by MLMA for state-managed fisheries, means "...*fish or other marine life that are taken in a fishery but are not the target of the fishery. Bycatch includes discards*" (California Fish and Game Code Section 90.5). MLMA requires that DFW manage every sport and commercial

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marine fishery in a way that *limits bycatch to acceptable types and amounts* (Fish and Game Code Section 7056(d)), and specifies information, analysis, and management measures required to accomplish this for each fishery (Fish and Game Code Section 7058).

The master plan established a bycatch evaluation framework in Chapter 6 ("Ecosystem-based objectives") as guidance for achieving the requirements of Section 7058. The framework is detailed in a section titled "Limiting bycatch to acceptable types and amounts" (Exhibit 1). The section draws largely from the work of a group of diverse stakeholders, called the Bycatch Working Group, convened by FGC in 2015 to help inform review of bycatch management. The framework in the master plan is, in part, designed to help determine what constitutes "acceptable types and amounts" of bycatch for each fishery evaluated.

The California halibut fishery management review presents the first opportunity to utilize the master plan's bycatch evaluation framework. In Dec 2021, FGC requested that MRC pursue the halibut bycatch evaluation as a separate work plan topic from the related fishery management review that the bycatch evaluation will inform, to ensure robust public engagement through this first evaluation process. In Mar 2022, DFW presented MRC with its approach to evaluating halibut fishery bycatch and, in Jul 2022, DFW provided a written update about its continued efforts and hurdles it is facing in analyzing halibut bycatch from the available data.

Today's meeting is an opportunity to focus on the master plan guidance and discuss options for how to complete the steps in the process.

(A) **Overview of process for evaluating and addressing fishery bycatch**

FGC staff will recap the four-step process laid out in the master plan framework to identify bycatch and consider its impacts (Exhibit 1):

- Step 1 Collect information on the amount and type of catch
- Step 2 Distinguish target, incidental, and bycatch species
- Step 3 Determine "acceptable" types and amounts of bycatch

Step 4 – Address unacceptable bycatch

Note that today's meeting is focused on steps 1-3.

(B) Evaluating bycatch in the California halibut fishery (steps 1 and 2)

Consistent with MRC discussion in Jul 2022, DFW has provided the recently-completed bycatch assessment report for the trawl and set gillnet California halibut fisheries that DFW developed in collaboration with an academic partner, which authored the final report (Exhibit 2). DFW believes that the report accomplishes the goals of steps 1 and 2 and is adequate to support the Step 3 analysis. DFW will present an overview of the complex assessment, methods and results—to help build a common understanding of the foundational data that can support the Step 3 evaluation of bycatch acceptability—and potential next steps for MRC consideration (Exhibit 3).

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(C) Determining acceptable bycatch types and amounts (Step 3)

The master plan specifies that DFW will determine if the amount and type of bycatch is unacceptable for a particular fishery using four criteria mandated in MLMA (Fish and Game Code Section 7058):

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

The master plan bycatch evaluation framework (Exhibit 1) lays out a detailed series of inquiries and recommended actions for each criterion under Step 3 that would be applied to each species of bycatch. The inquiries provide a structural basis for managers to consistently assess each criterion to determine what is "acceptable" bycatch in the fishery and to articulate the findings. However, given the number of bycatch species and the detailed inquiries that would need to be applied to each, it is necessary to prioritize which species to include in the Step 3 assessment. It is possible that selecting a handful of representative species for the assessment would be sufficient, as the benefit of proposed management actions will likely have benefits across multiple species.

Today's meeting provides an opportunity to explore how DFW might accomplish the bycatch inquiries for California halibut in a manner that is transparent, inclusive and timely. This discussion will inform MRC's direction or potential recommendation regarding an approach.

Significant Public Comments

A joint comment from two environmental non-governmental organizations emphasizes the importance of FGC's commitment to minimize fishery bycatch, with an initial focus on California halibut trawl and gill net gears, consistent with DFW's ecological risk assessment and prioritization. The organizations have conducted their own bycatch assessments of trawl and set gillnet gear in California using federal observer data and request a collaborative approach to implementing the bycatch inquiry. They also request that MRC provide direction on what additional analyses are needed and to outline the public process and timeline MRC will follow to make a recommendation to FGC (Exhibit 4).

Recommendation

FGC staff: (1) Recommend FGC support DFW moving forward with Step 3 of the bycatch evaluation to determine bycatch acceptability, using the bycatch analysis report DFW provided today (Exhibit 2) and a DFW-led workgroup of key communicators representing various interests to provide a forum for discussing responses to the Step 3 inquiries prior to bringing recommendations to MRC. (2) Recommend using MRC as a forum for broader discussion and, ultimately, MRC recommendation to FGC on DFW's findings. (3) Provide guidance on selection of bycatch species to begin Step 3.

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DFW: Move forward with Step 3 of the framework in the master plan analysis based on the information contained in the steps 1 and 2 bycatch analysis report (Exhibit 2), and provide guidance on options for public engagement in determining bycatch acceptability.

Exhibits

- 1. Chapter 6 "Ecosystem-based objectives: Limiting bycatch to acceptable types and amounts", extracted from 2018 Master Plan for Fisheries, A Guide to Implementation of the Marine Life Management Act, dated June 2018
- 2. Report by Christopher M. Frees, DFW contractor: Assessment of associated landed species and bycatch discards in the California halibut gill net and trawl fisheries, received Nov 4, 2022
- 3. DFW presentation
- 4. Letter from Geoff Shester, Oceana, and Scott Webb, Turtle Island Restoration Network, received Nov 3, 2022

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission (1) support the Department moving forward with evaluation of bycatch acceptability based on the analysis report submitted by the Department at the committee's November 2022 meeting; and (2) request that the Department pursue the following approach for completing the inquiries within the Step 3 evaluation framework and engaging stakeholders in the process:

Action □

Information 🛛

4. Commercial California Halibut Fishery Bycatch Evaluation for Fisheries Management Review

| (A) | Discuss lessons learned from the set gill net evaluation, a trawl fishery bycatch evaluation | nd potential application to the |
|------------|---|--|
| (B) | Receive update on California halibut (halibut) trawl ground time | ds assessment regarding tow |
| Sun (A) | nmary of Previous/Future Actions | |
| . , | Commission referred halibut management review to the Marine Resources Committee (MRC) | August 19-20, 2020 |
| • | Commission referred to MRC bycatch evaluation to support halibut management review | December 15-16, 2021 |
| ٠ | Received updates on bycatch evaluation for commercial halibut set gillnet and trawl fisheries | March 24 and July 14, 2022; MRC |
| • | Received and discussed Department bycatch analysis and report; MRC recommendation to conduct first bycatch acceptability evaluation for halibut <i>set gillnet</i> <i>fishery</i> (approved by Commission in December 2022) | November 17, 2022; MRC |
| • | Received and discussed Department updates and evaluation of bycatch acceptability for halibut <i>set gillnet</i> <i>fishery;</i> MRC recommendation to develop management options to address bycatch concerns (approved by Commission in August 2023) | March 14, 16 and July 20, 2023; MRC |
| • | Received and discussed potential management measures to address set gillnet bycatch; MRC recommendation for near- and long-term regulatory approach for specified measures (approved by Commission in December 2023; scheduled near-term rulemaking for April 2024 notice) | November 16, 2023; MRC |
| • | Received Department update; MRC recommendation to begin evaluating bycatch for halibut <i>trawl fishery</i> and schedule MRC discussion on lessons learned from set gill net bycatch evaluation to apply to trawl (Commission approved MRC recommendation in April 2024) | March 19, 2024; MRC |
| • | Today discuss lessons learned from set gill net bycatch evaluation; consider applying to the <i>trawl fishery</i> bycatch evaluation | July 17-18, 2024; MRC |

Today's Item

(B)

| • | Today receive Department update on CHTG assessment related to tow time | July 17-18, 2024 |
|---|--|------------------------------------|
| • | Department presented evaluation of southern CHTG review | March 19, 2024; MRC |
| • | Received and discussed Department updates on CHTG review | March 24 and July 14, 2022; MRC |
| • | Commission approved MRC recommendation to initiate review of current and new California halibut trawl grounds (CHTG) | December 15-16, 2021 |

Background

This agenda item builds on efforts undertaken by the Department over the past several years to review management within the California halibut fishery, which was prioritized for review according to the Marine Life Management Act and master plan for fisheries.

(A) Lessons Learned from Set Gill Net Evaluation – Potential Application to Next Fishery Bycatch Evaluation

After over two years focused on evaluating bycatch in the halibut set gill net fishery, the Department is in early stages of the next phase of bycatch evaluation undertaken as part of the California halibut fishery management review. Consistent with previous Commission direction, the next evaluation focuses on halibut trawl gear, following guidance in the master plan for fisheries. The effort also follows completion of the Department's evaluation of bycatch in the halibut set gill net fishery and advancing a near-term rulemaking to address bycatch concerns and information gaps (regulation changes are scheduled for adoption in August 2024).

In March 2024, the Department presented an update on managing set gill net fisheries, and recommended beginning the evaluation of bycatch for the halibut fishery using trawl gear in both federal and state waters (see Exhibit 1 for additional background). Recognizing that halibut set gill net marked the first application of the four-step bycatch evaluation framework outlined in the fisheries master plan, MRC acknowledged the potential for valuable lessons learned from the initial process.

In April 2024, the Commission approved MRC's recommendation to proceed with the halibut trawl evaluation. Additionally, the Commission supported scheduling an MRC discussion on potential lessons learned from the halibut set gill net bycatch evaluation that could be applied to the upcoming trawl evaluation.

Update

Following the set gill net evaluation, Commission and Department staffs have actively reflected on the process, focusing on identifying aspects that worked well, areas for improvement and clarity, and transferable knowledge that can be applied to the upcoming trawl fishery evaluation. Staff envisions this collaborative effort, coupled with

perspectives shared by stakeholders and meeting participants, will support a more efficient and effective trawl evaluation, building upon the experience gained from the set gill net process.

At this meeting, the Department will present a verbal summary of the key takeaways identified through the reflection process with Commission staff. Takeaways, as well as reflections from meeting participants, are encouraged to address topics such as:

- Strengths of the initial set gill net evaluation process to carry forward;
- challenges encountered and potential improvements related to data confidentiality and data limitations;
- ambiguity and interpretation issues with terminology (e.g., "bycatch" or "unacceptable bycatch") and within the evaluation framework;
- the importance of stakeholder engagement, relationship-building, and effective communication throughout the process; and
- the value of open discussions with stakeholders regarding data collection improvements, and participation in brainstorming solutions to minimize bycatch and improve management.

At today's meeting, an open discussion of reflections on the set gill net evaluation process offers MRC the opportunity to provide constructive feedback, help refine approaches based on diverse perspectives, and optimize the application of the tools outlined in the master plan for fisheries as intended.

(B) Update on California Halibut Trawl Grounds Assessment

At the March 2024 MRC meeting, the Department presented research collaboratively conducted with commercial fishing vessels to complete an <u>evaluation of CHTG</u> against performance criteria outlined in California Fish and Game Code Section 8495 (Exhibit 2 provides details on CHTGs, review requirements, and the Department evaluation). MRC requested information on tow time distribution within the CHTG assessment and the broader fishery. While the CHTG evaluation focused on bycatch and habitat impacts in the southern CHTG, it did not analyze the effect of tow time on catch.

The Department has prepared a report (Exhibit 3) comparing tow times in the fishery with those observed during the CHTG assessment, for receipt and discussion today. The Department report summarizes tow durations and catch/release disposition (live or dead) from the CHTG assessment; it also compares the average tow times in the CHTG assessment to those of the fishery, including federal waters off California. Finally, the report identifies specific datasets (from the Department and the National Oceanic and Atmospheric Administration), to be used in the full California halibut trawl bycatch evaluation scheduled for later this year.

Significant Public Comments (N/A)

Recommendation

Commission staff: Solicit input, ask clarifying questions, and identify areas for further exploration that may emerge during the discussion.

Exhibits

- 1. <u>Staff summary from Agenda Item 3, March 19, 2024 MRC Meeting (for background purposes only)</u>
- 2. <u>Staff summary from Agenda Item 2, March 19, 2024 MRC Meeting (for background purposes only)</u>
- 3. Department report: California Halibut Tow Time Assessment, dated July 18, 2024

Committee Direction/Recommendation (N/A)

3. Bycatch Evaluation in Support of the California Halibut Fishery Management Review (Agenda item limited to 60 minutes)

| Tod | ay's Item | Information | Action 🛛 |
|-----|--|--|--|
| (A) | update on the Departmen fishery management mea | t's progress in developing re | <i>gillnet fishery:</i> Receive a verbal gulatory options for near-term anagement measures supported information gaps. |
| (B) | Committee direction on California halibut trawl | next steps for bycatch eve fishery | aluation, specific to the |
| Sun | nmary of Previous/Future | Actions | |
| • | Commission referred Califo review to Marine Resources | | August 19-20, 2020 |
| • | Commission referred bycate halibut management review | | December 15-16, 2021 |
| • | Received updates on bycat commercial California halib fisheries | | March 24 and July 14, 2022; MRC |
| • | Received and discussed De evaluation report; MRC rece bycatch acceptability evalua set gillnet fishery (approved December 2022) | ommendation to conduct ation for California halibut | November 17, 2022; MRC |
| • | Received and discussed De bycatch evaluation for the C fishery | | March 14 and 16, 2023; MRC |
| • | Received and discussed De bycatch acceptability for se recommendation to develop address bycatch concerns (in August 2023) | <i>t gill net gear</i> , MRC management options to | July 20, 2023; MRC |
| • | Received and discussed por measures to address set gi recommendation for near- approach for specified mea approved MRC recommend and scheduled near-term ru | Ilnet bycatch; MRC and long-term regulatory sures (Commission dation in December 2023 | November 16, 2023; MRC |
| • | Today receive and discus in developing near- and lo options for California hali | ong-term regulatory | March 19, 2024; MRC |
| • | Commission notice hearing | for near-term rulemaking | April 17-18, 2024 |

Background

Management review of the California halibut fishery commenced in late 2020, consistent with the requirements of the Marine Life Management Act (MLMA) and using the framework outlined in 2018 Master Plan for Fisheries, A Guide for Implementation of the Marine Life Management Act (master plan) for meeting those requirements. A key requirement of the fishery management review is evaluating and addressing unacceptable bycatch in a way that limits bycatch to acceptable types and amounts.

The California halibut fishery management review has presented the first opportunity to use the <u>four-step framework for evaluating bycatch laid out in Chapter 6 of the master plan</u>, to: (1) collect information on the type and amount of catch, (2) distinguish target, incidental, and bycatch species, (3) determine "acceptable" types and amounts of bycatch, and (4) address unacceptable bycatch.

In November 2022, the Department provided a bycatch assessment report for the commercial trawl and set gillnet California halibut fisheries, fulfilling steps 1 and 2 of the bycatch evaluation framework. In December 2022, the Commission approved an MRC recommendation to separate evaluation of the set gill net gear type from the trawl gear type for the remaining California halibut bycatch evaluation steps. The Commission supported moving forward with steps 3 and 4 for the California halibut set gillnet fishery first, to be followed by the California halibut trawl fishery.

(A) Evaluation of Bycatch in the California Halibut Set Gillnet Fishery

In July 2023, the Department completed Step 3 of the bycatch evaluation framework and, in August 2023, the Commission approved the MRC recommendation to proceed to Step 4 of the bycatch evaluation framework to develop a suite of potential management measures to address bycatch concerns and data gaps.

In November 2023, the Department presented a suite of potential management measures for the set gillnet fishery, proposing a regulatory approach focused on several measures for near-term implementation and others to be explored and developed on a longer timeline. The near-term recommendations included soak time limits, increased gear markings, and mesh depth limits, while the long-term recommendations included developing a pilot project for electronic monitoring, electronic logbooks, and observer coverage. See Exhibit 1 for background information about the potential management measures.

At its December 2023 meeting, the Commission approved the MRC recommendation to support the Department developing a set gillnet rulemaking consisting of soak time limits (with a range of 24 to 48 hours), mesh height restrictions (25-mesh depth or net height maximum for California halibut-targeted set gill nets and 50-mesh depth or net height maximum for white seabass-targeted set gill nets), and gear marking developed in consultation with stakeholders. In addition, the Commission requested that, at today's MRC meeting, the Department provide an update on the rulemaking as well as information about potential electronic monitoring, electronic technology, and observer coverage for discussion purposes.

Update

Since December, Department staff has focused on engaging with members of the set gillnet fleet and Department law enforcement, to discuss elements of the near-term rulemaking. In February, the Commission approved adding the near-term rulemaking to its schedule to begin in April 2024. The Department has been developing rulemaking documents while simultaneously initiating exploratory efforts into potential long-term management measures.

Moreover, Commission and Department staffs learned about additional analyses of set gillnet bycatch recently conducted by the academic partner who completed the bycatch assessment report for trawl and set gill net California halibut fisheries, along with his graduate student. Their additional analyses use modeling techniques to better understand the impacts and drivers of bycatch in the set gillnet fishery for several sensitive species (e.g., marine mammals, tope sharks). They have shared preliminary results with Commission and Department staffs on estimated historical bycatch, drivers of bycatch risk, and bycatch hotspots, providing important context that could help inform soak time limits and potential future spatial/temporal closures. Their results also reinforce the Department's review of bycatch acceptability and demonstrate the type of analyses that would be helpful if conducted prior to any spatial or temporal closures. Key results, which the researchers agreed to allow us to share, include:

- The estimated yearly bycatch of California sea lion, northern elephant seal, harbor seal, and harbor porpoise falls well below the potential biological removal¹ for each species.
- Temporal and spatial variables (latitude, longitude, and depth) were more important than distance to shore, temperature, soak time, mesh size, or island area in determining the drivers of bycatch risk for the species evaluated.
- Marine mammal and shark species demonstrated different spatial bycatch hotspots. For example, California sea lions and harbor seals were more frequently captured in the northern region (at or above 34°N) around the Channel Islands, closer to shore, and in shallow water depths. In contrast, tope sharks were more often captured in the southern region away from the Channel Islands, offshore, and in deep water depths.

The academics are currently finishing their final report and manuscript, which will be shared with the Commission and Department to help inform future potential management measures.

Today's Meeting

Today the Department will provide a verbal summary of outreach efforts to engage the set gillnet fleet and interested stakeholders on the proposed near-term management measures, development of the near-term set gillnet rulemaking, and expected timeline. For long-term measures, the Department will share progress on options for electronic monitoring; it does not have an update on observer coverage or spatial/temporal closures at this time.

¹ Potential biological removal is defined by the Marine Mammal Protection Act as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.

(B) Committee Direction on Next Steps for Bycatch Evaluation, Specific to the California Halibut Trawl Fishery

Given the anticipated timeline for completing Step 4 of the bycatch evaluation framework for the California halibut set gillnet fishery, the Department is poised to continue the bycatch evaluation process for the California halibut trawl fishery, starting at Step 3 of the framework. As mentioned in Agenda Item 2, the Department's evaluation of the California halibut trawl grounds in state waters will contribute to the broader evaluation of bycatch in the fishery for the trawl gear type. The Department is ready to proceed with Step 3 of the bycatch evaluation framework across both state and federal waters for the California halibut trawl fishery.

Today also presents an opportunity to reflect on and learn from the California halibut set gillnet fishery's bycatch evaluation process and identify any key insights or potential areas for improvement, and for MRC to provide direction and guidance to apply to the California halibut trawl fishery evaluation.

Significant Public Comments

An environmental non-governmental organization expresses gratitude for the analysis of bycatch in the California set gillnet fishery, but deems the current level of bycatch unacceptable and states a belief that there is a need for immediate action to protect oceans. For the short-term regulatory changes, they recommend implementing an 18-hour soak time limit, enforcing stricter regulations on gear loss, and managing mesh depth. In addition, they suggest a pilot project for electronic monitoring systems and observer coverage to support data improvements. Lastly, they advocate for the retirement of latent permits, establishing hard caps on bycatch, and gradually phasing out the fishery. (Exhibit 2)

Recommendation

Commission staff: (A) Discuss updates on advancing near- and long-term management measures for the California halibut set gillnet fishery; and (B) support initiating Step 3 of the bycatch evaluation framework for the California halibut trawl fishery, encompassing both federal and state waters, and offer guidance on the evaluation approach, drawing on the experience from the set gill net process.

Department: Continue the bycatch evaluation for California halibut trawl gear in both federal and state waters.

Exhibits

- 1. <u>Staff summary from November 16, 2023 MRC meeting, Agenda Item 2</u> (for background purposes only)
- 2. Email and letter from Elizabeth Purcell, Environmental Policy Coordinator, and Teri Shore, Board of Directors, Turtle Island Restoration Network, received March 5, 2024

Committee Direction/Recommendation

The Marine Resources Committee recommends that the Commission support the Department's recommendation to move forward with an evaluation of bycatch for California halibut trawl gear, in both federal and state waters.

2. California Halibut Trawl Grounds Review

Today's Item Information ⊠ Action □

Receive and discuss Department evaluation of the California halibut trawl grounds in state waters as part of the California halibut fishery management review.

Summary of Previous/Future Actions

| • | Commission referred California halibut trawl grounds review to MRC | August 18, 2021 |
|---|--|-----------------------|
| • | Received Department proposal for review of halibut trawl grounds; MRC recommendation regarding halibut trawl grounds | November 9, 2021; MRC |
| • | Commission approved MRC recommendation to initiate review of current and new halibut trawl grounds | December 15-16, 2021 |
| • | Department update on California halibut trawl grounds review | March 24, 2022; MRC |
| • | Department update on Califoria halibut trawl grounds review | July 14, 2022; MRC |
| • | Today's update from the Department | March 19, 2024; MRC |

Background

In 1971, California law (Fish and Game Code Section 8495) established specific areas for trawling for California halibut within state waters. These areas, called the California Halibut Trawl Grounds (CHTG), were designated in southern California to provide areas for trawling this species in soft bottom habitats near the coast of Santa Barbara and Ventura counties. The law requires the Commission to review available data and scientific information and close any areas in the CHTG where it finds the use of halibut trawl gear in these areas: (1) does not minimize bycatch, (2) is likely damaging sea floor habitat, (3) is adversely affecting ecosystem health, or (4) impedes reasonable restoration of kelp, coral, or other biogenic habitats. The first assessment of the CHTG in 2008 resulted in the Commission closing one of four sub-areas. The law requires the grounds to be evaluated triennially to assess whether CHTG areas still meet the performance criteria to remain open. The evaluation presented today is the first evaluation since 2008.

In 2018, new potential CHTG areas were designated through legislation in previously closed zones off Monterey Bay and San Luis Obispo County; however, the law specifies that the new CHTG areas must remain closed until the use of trawl in these areas is evaluated against the four performance criteria to support an opening. In 2021, trawl representatives requested the Commission initiate opening these new grounds. In response, the Commission requested MRC and the Department to explore options for evaluating CHTG areas during the California halibut fishery management review.

At the November 2021 MRC meeting, the Department presented a proposed plan to evaluate both the existing and new CHTG areas using the performance criteria and guidance in 2018 *Master Plan for Fisheries, A Guide for Implementation of the Marine Life Management Act* (see Exhibit 1 for additional background). The proposed plan would involve collaboration with fishermen and possible use of the new experimental fishing permit (EFP) program, which authorizes participating fishermen to sell their catch (defined as "compensatory fishing"). In December 2021 the Commission approved an MRC recommendation to support the Department-proposed review of existing and new CHTG based on the performance criteria and bycatch evaluation guidance in the master plan for fisheries, through transparent engagement of the trawl fleet and stakeholders.

Despite approval of a trawl grounds evaluation plan in 2021, in 2022 the Department notified MRC that it had encountered an obstacle, finding that existing law prevents issuing EFPs for testing trawling activities in closed state waters like Monterey Bay and San Luis Obispo (Fish and Game Code subdivision (a)(3) of Section 1022). Additionally, because fishermen need to sell their catch to manage the costs of participation, using scientific permits (which prohibits sale of catch) isn't feasible. As a result, the Department chose to prioritize evaluating the currently operational CHTG areas in southern California, postponing the assessment of closed CHTG areas.

Update

The Department has completed its survey and evaluation of trawling in the southern CHTGs according to the performance criteria. The Department's *Evaluation of the California Halibut Trawl Grounds* details and discusses methods, data collection, results, and conclusions (Exhibit 2).

Today, the Department will present an overview of its evaluation and conclusions, and highlight next steps in the context of the California halibut management review (Exhibit 3). No specific action is recommended at this time, recognizing that the broader evaluation of bycatch in the California halibut trawl fishery needs to be completed (see Agenda Item 3(B), this meeting).

Significant Public Comments (N/A)

Recommendation (N/A)

Exhibits

- 1. Staff summary and exhibits from November 9, 2021 MRC meeting, Agenda Item 5 (for background purposes only)
- 2. Department report: *Evaluation of the California Halibut Trawl Grounds*, dated March 2024
- 3. Department presentation

Committee Direction/Recommendation (N/A)

California Halibut Tow Time Assessment

California Department of Fish and Wildlife

Report to the Marine Resources Committee of the California Fish and Game Commission

July 18, 2024



California halibut, Paralichthys californicus. Photo credit: S. Lescht-Smith, CDFW



At the Marine Resources Committee's (MRC) March 2024 meeting, the California Department of Fish and Wildlife (CDFW) presented the MRC with the results of an assessment (Tanaka et al. 2024) of the California Halibut Trawl Grounds (CHTG). Using the Marine Life Management Act Master Plan for Fisheries (Master Plan) for guidance and best available information, including onboard observation, CDFW evaluated four Performance Criteria listed in Fish and Game Code §8495: 1) does not minimize bycatch; 2) is likely damaging the seafloor; 3) is adversely affecting ecosystem health; or 4) impedes restoration to kelp, coral, or other biogenic habitats (Performance Criteria).

The initial report focused on bycatch and habitat impact and did not include an analysis of the effect of tow time on catch in the evaluation. At the request of the MRC, CDFW has completed a compilation to compare tow times in the fishery with those in the assessment.

CHTG Assessment Tow Duration and Catch Disposition

Observed tow durations for the assessment were at the discretion of the vessel captain, not influenced by the onboard observer, and ranged from 45 to 90 minutes, with an average of 70 minutes. Comparatively, based on nine years of fishery-dependent logbook data for the CHTG, tow duration averages 105 minutes (Table 1). In the table below, North represents aggregated tows from the Monterey area north to the CA-OR border. Morro Bay includes the activities at Morro Bay and Port San Luis. South includes all tows from southern California, excluding the CHTG. CHTG represents those tows that were made within the CHTG only.

| Region | NUIMPOR OF LOWE | Average Tow Duration (minutes) | Standard Error |
|-----------|-----------------|-----------------------------------|-------------------|
| North | 5614 | 171.05 | 0.92 |
| Morro Bay | 2931 | 108.59 | 0.64 |
| South | 2457 | 83.12 | 0.84 |
| CHTG | 2848 | 105.11 | 0.95 |

Table 1. Average tow duration by region based on trawl logs 2016-2023.

To evaluate the effect of tow time on catch, the average catch count by disposition was binned into 45- to 90-minute intervals (Table 2). Percentages are for all observed animals and kept percentages reflect all retained marketable species. For the 60- and 75-minute bins, the increased percentage of dead releases are due to a greater number of pink seaperch, *Zalembius rosaceus*, and longspined combfish, *Zaniolepis latipinnis*. The CHTG assessment showed that approximately 65% of release mortality was attributed to these two species. Impacts from take on both species are accounted for in the full assessment report (Tanaka et al. 2024).

Table 2. Percentage by disposition for all observed animals based on tow length interval during CHTG assessment.

| Tow length Interval Bin (minutes) | | NT KVCSTCh Roloscod | Percentage of Bycatch | Average Percentage Bycatch Kept |
|---|----|---------------------|--------------------------|---------------------------------------|
| 45 | 1 | 3% | 95% | 2% |
| 60 | 5 | 22% | 71% | 7% |
| 75 | 15 | 13% | 78% | 9% |
| 90 | 8 | 6% | 82% | 12% |

Datasets Accessed for the CHTG Assessment

The CHTG assessment referenced CDFW and NOAA sourced information as the best available information and data. These datasets will be used in the statewide trawl bycatch evaluation.

Department datasets

| Data Set | Attributes | | | | | |
|---------------------------------------|---|--|--|--|--|--|
| | Vessel name/number, date, Tow position, | | | | | |
| Trawl log tow positions | depth, retained catch by species and | | | | | |
| | estimated weight | | | | | |
| | Landing weight by species by vessel and | | | | | |
| 5 | block. Includes landing date, gear, dock price, | | | | | |
| | disposition | | | | | |
| Licensing data | Permit holders' information, vessel | | | | | |
| | specifications, permit count | | | | | |
| | Observed species (retained and discards) | | | | | |
| Department onboard observation data | count by disposition, total weight by | | | | | |
| | disposition available for most species | | | | | |
| habitat (kelp, biogenic, hard bottom) | Kelp, biogenic, hard bottom habitat. Location | | | | | |
| nabitat (Keip, biogenic, hard bottom) | and surface area of each type | | | | | |
| Trawl survey cruise reports | Survey dates, general locations, observed | | | | | |
| | catch information | | | | | |

NOAA datasets

| Data Set | Attributes | Source |
|---|--|--------|
| Raw observer data- fish and invert bycatch | Gear type, sector (LE or OA), port, tow position, depth, duration, target strategy, bycatch species, retained weight, discard count and weight | WCGOP |
| Raw observer data- marine mammal and marine birds | Species, gear type, sector (LE or OA), interaction description, encounter outcome, tow position, depth, tow duration, target | WCGOP |
| WCGOP Observer coverage rate | Percent observer coverage by sector (LE or OA) | WCGOP |
| Habitat (coral) | Location and coverage | NOAA |

Next Steps

With the completion of the CHTG assessment, CDFW is preparing to conduct a bycatch evaluation of the statewide trawl gear type, following the guidance in the <u>Master Plan</u>. CDFW will utilize all available information, including the datasets outlined above for the full evaluation. The bycatch evaluation process is expected to begin in late summer 2024.



California Halibut Fishery Management Review

16 July 2025

Presented to: Marine Resources Committee CA Fish and Game Commission Presented by: Kirsten Ramey Environmental Program Manager Marine Region

Management Priorities for CA Halibut

- 1. Enhanced Status Report completed in 2022
- 2. Ecosystem evaluation completed in 2024
- 3. CA halibut trawl grounds (CHTG) assessment completed in 2024
- 4. Management Strategy Evaluation in progress
- 5. CA halibut Stock assessment
 - Southern stock completed in 2024
 - Northern stock in progress
- 6. Bycatch evaluation
 - Gill net sector completed in 2023
 - Trawl sector in progress



Gill Net Bycatch Evaluation Recommendations

- Phase I Regulatory Package:
 - Soak time
 - Gear marking
 - Mesh depth
 - 25 meshes for CA halibut
 - 50 meshes for white seabass
- Phase II Pilot Project for dataimprovements:
 - Electronic reporting and electronic monitoring



Electronic Monitoring and Reporting

Pilot Project Goals:

- 1. Test electronic reporting (elogbook)
- 2. Integrate electronic monitoring
- 3. Test sensor technology
- 4. Evaluate scalability
- 5. Provide reporting options

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DFG FORM 174

Statewide Halibut Trawl Bycatch Assessment

Kickoff Meeting Goals:

- Make connections and establish relationships
- Support open collaborative process to share information on the bycatch evaluation process and trawl fishery
- Develop a shared understanding of the need for bycatch evaluation
- Identify information gaps and opportunities for future engagement



MLMA Master Plan Bycatch Evaluation Steps

Four step process:

- 1. Collection of information
- 2. Distinguishing target, incidental and bycatch species
- 3. Determining "acceptable" types and amounts of bycatch
 - Legality of take
 - Threat to sustainability
 - Impacts on fisheries
 - Ecosystem impacts
- 4. Addressing unacceptable bycatch



Looking Ahead at Management Priorities

- Continue to prioritize CA halibut sampling
- Implement the EM/ER pilot project
- Revisit northern stock assessment model for technical improvements
- Finalize bycatch evaluation and provide for engagement opportunities throughout evaluation



Thank You

<u>MLMA Master Plan - Bycatch Criteria</u> <u>CA Marine Species Portal - California Halibut</u>

