



## **CA Halibut Trawl Bycatch Evaluation Data Discussion Webinar October 15, 2025, 9am-11:30am**

### **Webinar access information**

Click this link to access the meeting: [Join the meeting now](#)

Meeting ID: 243 527 425 701 9

Passcode: w7Xo2Ys9

Or **call-in** using phone #: +1 916-535-0984, Conference ID: 268567117#

### **Agenda**

9:00 Welcome, introductions, and agenda review

9:05 Overview of the bycatch evaluation process

- Review of bycatch evaluation process
- Proposed process

9:15 Data sources

- WCGOP
- CDFW sources
- Other data sources

10:15 Open discussion of proposed analysis

11:15 Next steps and timeline

11:30 Adjourn



# Statewide California Halibut Trawl Bycatch Assessment Data Webinar



Photo credit: CDFW



Photo credit: CDFW

*15 October 2025*

*Presented by:*

**California Halibut  
Management Project Team  
Marine Region**



# Meeting Agenda

- Welcome, Introductions, and Agenda Review
- Overview Bycatch Evaluation Process
- Data Sources
- Break
- Open Discussion of Proposed Analysis
- Next Steps and Timeline
- Closing Remarks and Adjourn





# Teams Webinar Logistics

- Cameras on is encouraged
- Please use the raise hand icon for any questions or comments
- Please keep microphone on mute when not speaking
- Unmuting: To speak
  - Click microphone on top right of your screen
  - State your name
- Chat Function
  - For troubleshooting and clarifying questions only
  - For technical difficulties (send a chat or call 831-400-2539)







# It's nice to meet you!

- CDFW Project Team Introductions
- Rename, if able: To help identify yourself and other participants
  - Click “People/Participants” in meeting controls
  - Locate your name and click the three dots/“More” and choose “Edit Display name/Rename”
  - Enter your full name (first and last) and any identifying sector(s)



Photo credit: CDFW



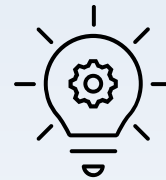
# Meeting Agreements



Focus on strategies and solutions that move the conversation forward



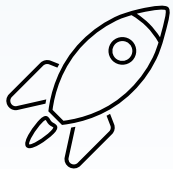
Keep Comments Concise and Focused



There are no Bad Questions or Ideas



No interruptions, be courteous to speakers



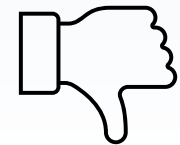
Attack Problems not each other's Point of View



Listen for Understanding



Be Present



No Personal Attacks



# Webinar Goals

- Share and discuss data sources that will be used in the bycatch evaluation process for the CA halibut trawl fishery
- Overview of the bycatch criteria and data analysis process
- Discussion and opportunities for future engagement

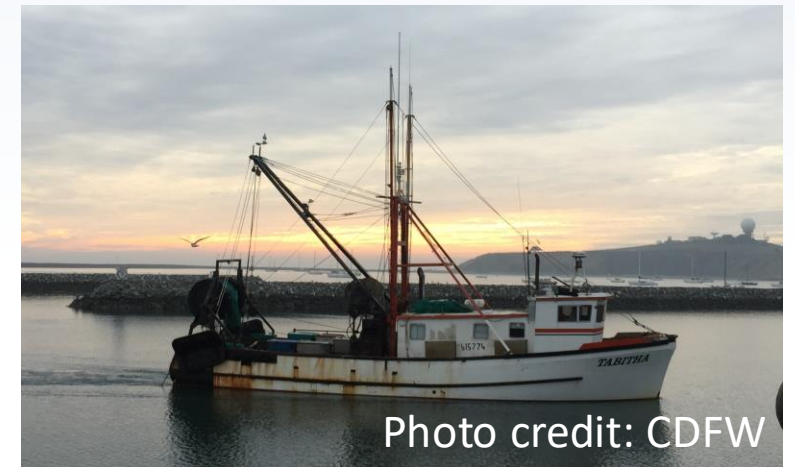


Photo credit: CDFW



# 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**





# 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



# Bycatch Evaluation Process

**Step 1. Collection of information: Fishery-reported data, observer data, spatial data, bycaught species data, and bycatch reports**

**Step 2. Distinguish target, incidental, and bycatch (discard) species**

**Special status and species of interest and importance**

**Ecological Risk Assessment/Productivity Susceptibility Analysis**

**Exceed Vulnerability Score Threshold?**

**Step 3. Determine acceptable types and amounts**



# Engagement Efforts

- Highlights:
  - Regional approach should be considered
  - Species of interest: green sturgeon, Dungeness crab, elasmobranchs
  - Concerns regarding definition of discards (regulatory, discretionary, incidental)
  - Concerns regarding use of the term “bycatch”, discard is the preferred term
  - Concerns about potential bycatch impacts to sub-legal halibut
  - Integration of fishermen’s expertise in interpreting data

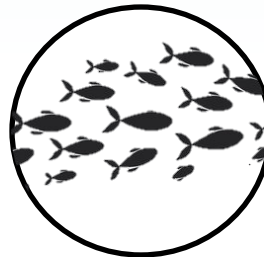
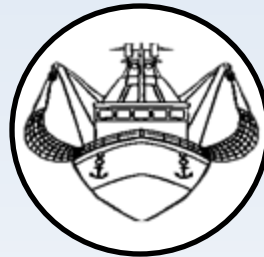




# Data for Bycatch Assessment



Photo credit: CDFW



- Fishery-dependent data
  - Trawl logs
  - Fish tickets
  - Observer data
  - Bycatch reports
- Fishery-independent data
  - Spatial/habitat data
  - Species life history information
  - Research
- Stock assessments
- Other information?



# West Coast Groundfish Observer Program (WCGOP)

- Collaboration between the Pacific States Marine Fisheries Commission and the National Marine Fisheries Service in response to the 2000 west coast groundfish fishery failure
- Goal: collection of year-round discard rates for Pacific coast-wide groundfish fisheries



Photo Credit:  
CDFW





# WCGOP Data

- Document fishing operations, catch, protected species interactions, and collect biological samples
  - sample of discard rates by gear, area, and time
    - Combined with landings to determine total mortality of the observed fishery
    - Inform sustainable fisheries management



Credit: CDFW





# WCGOP Data Confidentiality

- Confidentiality
  - MOU, NDA
  - Rule of 3
- Is data available to the public?
- Default mortality



Credit: NOAA Fisheries



# WCGOP Bycatch and Mortality Reports

- Observer Coverage Rates
- Fishery Management Reports
  - Groundfish mortality reports
- Protected Species Reports
- ESA Listed Reports
  - Fishing effort
  - Green sturgeon
- Marine Mammal and Seabird Reports
- <https://www.fisheries.noaa.gov/west-coast/fisheries-observers/west-coast-fishery-observer-bycatch-and-mortality-reports#fishery-management-reports>



# WCGOP and the CA Halibut Trawl Fishery

- Observation
  - 2003-2021 - 15% median of statewide fleet
    - 2022- 17% of statewide fleet
  - Observed all vessel trips within assigned period
  - Catch data collected every tow for the trip
- As of January 1, 2025 halibut trawl fishery is no longer observed by WCGOP



# WCGOP Data QAQC

- Department has confidential data for halibut trawl
- QAQC process by staff
  - Established parameters on depth, tow length and duration, start/ end locations (land or water)
  - Checked sub-set of data(>1,100) that were outside these parameters
    - Compared against fishermen logs
    - Note differences
    - Plan to work WCGOP on addressing these differences in their data



A stack of several square sticky notes in various colors including lime green, yellow, and pink, arranged in a fan-like pattern on a dark grey background. The topmost sticky note is lime green and features the text "Break Time!" written in a black, casual script font.

Break  
Time!



# Bycatch Evaluation Process

## Four step process:

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# Bycatch Evaluation Process

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**Ecological Risk Assessment/Productivity Susceptibility Analysis**

**Exceed Vulnerability Score Threshold?**

**Step 3. Determine acceptable types and amounts**

Collect Information

Distinguish Species

Acceptability

Address Bycatch



# Collect Information: Master Plan Criteria

- Gather information on all species caught in the fishery
- Unavailable data can be prioritized in ESRs and FMPs



**Collect Information**

**Distinguish Species**

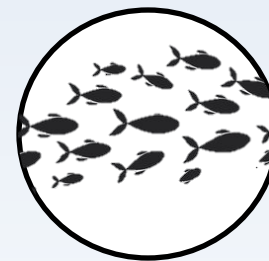
**Acceptability**

**Address Bycatch**



# Collect Information

## Data discussion at kick-off meeting





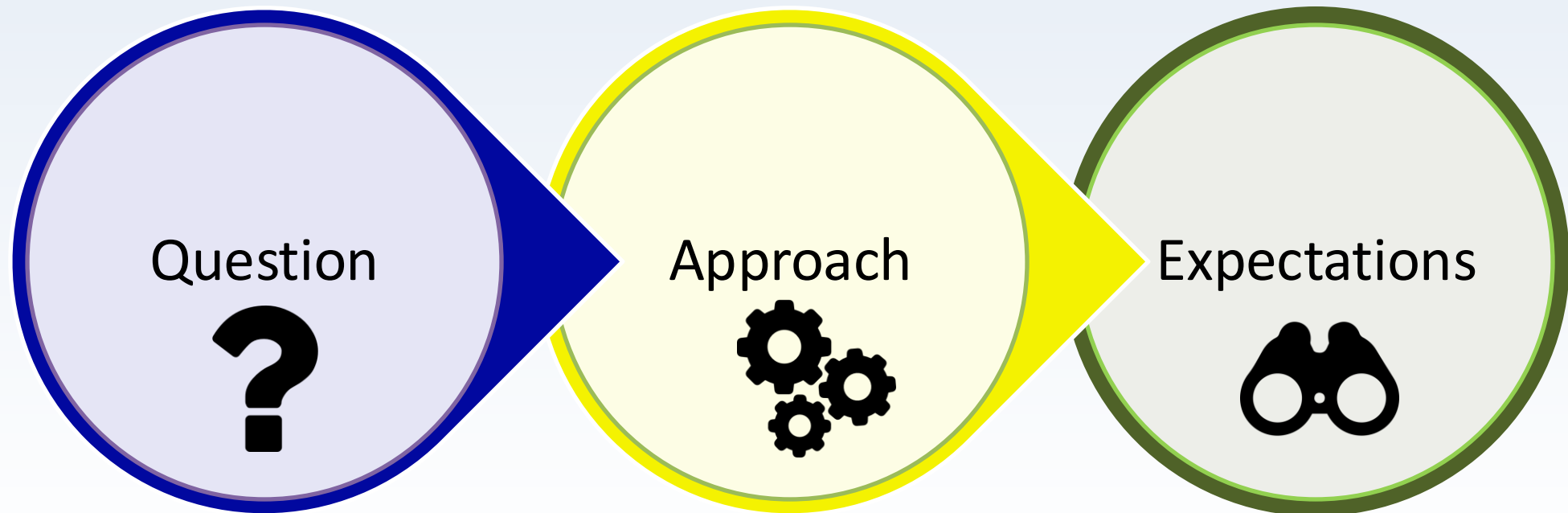
# Distinguish Species: Master Plan Criteria

**“[Bycatch is] fish or other marine life that are taken in a fishery but are not the target of the fishery. Bycatch includes discards.” §90.5 MLMA**

- Intended targets evidenced by landings data
- Marketability of landed commercial species
- Historical use patterns
- Legality, or management considerations



# Proposed Analyses Outline

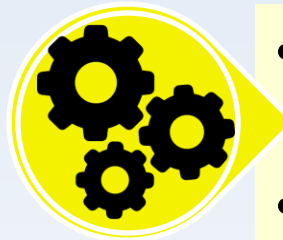




# Distinguish Species: Proposed Analyses



Which species should be considered as target species, incidental, bycatch?



- Only data where halibut was targeted and caught
- **Retained catch:** landed non-halibut species
- **Discarded bycatch:** live/dead non-halibut species + live/dead sub-legal halibut
- Delineate based on landings and historical use patterns



- Species categories are consistent with 2022 UCSB-CDFW analysis





# Distinguishing Species: Proposed Analysis

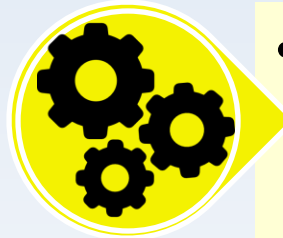
	<b>Legal sized CA halibut</b>	<b>Example:</b> Starry flounder, sand sole, Pacific angel shark, CA scorpionfish, etc.	<b>Example:</b> Big skate, CA skate, hornhead turbot, longspine combfish, etc.	<b>Example:</b> Sub-legal halibut, Dungeness crab, green sturgeon, black sea bass, etc.
Historical use patterns	Consistently landed	Frequently landed	Frequently discarded	Consistently discarded
Intended catch	Yes	Yes	No	No
Regulatory discard	No	Yes/no	Yes/No	Yes
Economic discard	No	Yes/no	Yes	No
Type of catch	<b>Target</b>	<b>Incidental catch</b>	<b>Bycatch</b>	<b>Bycatch</b>
	<b>Retained catch</b>			<b>Discarded bycatch</b>



# Prioritize Species: Proposed Analyses



Which species should be prioritized for acceptability determination?



- Solicit input from stakeholders and industry about species of interest and importance
- Utilize vulnerability assessments and thresholds
  - Ecological Risk Assessment
  - Productivity Susceptibility Analysis
- Identify a priority list for Step 3 (Acceptability)



- CESA/ESA species will be included in the priority list.



# Acceptability: Master Plan Criteria

- Legality of take
- Degree of threat to the sustainability of bycatch species
- Impacts on fisheries that target the bycatch species
- Ecosystem impacts



# Acceptability: Inquiry Questions

## Legality of take

- Protected status (ESA, MMPA, etc.)?
- Gear prohibitions?
- Size, seasonal limits?
- Is the discard mortality rate known?
- Compliance with existing take permits?
- Do incidental or annual catch limits apply?



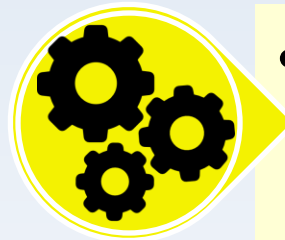
# Acceptability: Proposed Analyses



Are existing bycatch rates legal?



- Data will be available to determine this for all prioritized species



- Identify all relevant management and legal considerations
- Utilize fleetwide bycatch rates to evaluate compliance for relevant species
- Sensitivity analyses to determine mortality thresholds



# Acceptability: Inquiry Questions

## **Degree of threat to sustainability of bycaught species**

- Have vulnerability assessments been conducted?
- Reliable status estimate or stock assessment?
- Other existing state and/or federal management measures?
- What are estimated discard mortality rates?
- Post-release studies to verify mortality rates?
- Probability of exceeding mortality rates that would threaten the species?

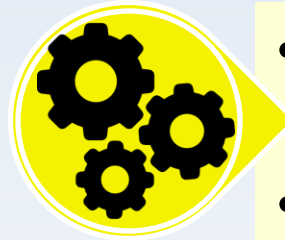




# Acceptability: Proposed Analyses



Is bycatch a threat to the sustainability of any species?  
§7085(b)(2)



- Utilize fleetwide bycatch mortality rates to evaluate compliance
- Utilize stock assessments and review management measures
- Conduct/use existing vulnerability assessments on priority species
- Sensitivity analyses to determine mortality thresholds



- Most bycatch species will be data-limited and acceptability may rely on vulnerability assessments



# Acceptability: Inquiry Questions

## Impacts on fisheries that target the bycatch species

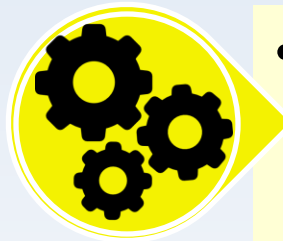
- Does a directed fishery exist?
- Has bycatch and associated discard mortality been accounted for?
- Is bycatch affecting the directed fishery management strategy?
- Are impacts explicit in ESR/FMP?
- Is the species under a rebuilding plan? Will bycatch compete with fleets that target the species?
- Management allowance?
- **Has bycatch impacted directed fishery (e.g., reduced income, fishing opportunities, social/cultural value, impacts to juveniles)**



# Acceptability: Proposed Analyses



Is bycatch a threat to other fisheries?  
§7085(b)(3)



- Identify any bycatch species that may be part of a federal rebuilding plan or state FMP
- Identify and review compliance with management allowances
- Review all information about interactions between directed fishery and bycatch



- Existing agreements and allowances will inform evaluation for most fisheries



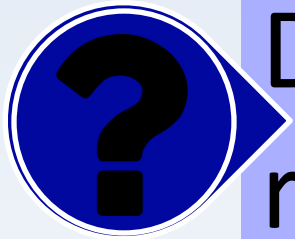
# Acceptability: Inquiry Questions

## Ecosystem Impacts

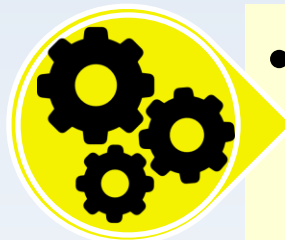
- What is the ecosystem role of bycatch species?
- Is there evidence that mortality alters ecosystem function of bycatch species?



# Acceptability: Proposed Analyses



Does bycatch  
result in  
ecosystem  
impacts?  
§7085(b)(4)



- Conduct Ecological Risk Assessment(s) (ERAs) for species that do not already have one
- Use fleetwide estimated discard mortality rates (GEMM)



- Rely on/update existing guild-based ERAs for most species





# Address Bycatch: Inquiry Questions

- Are there existing bycatch minimization measures in place?
- Are potential measures likely to be effective?
- How successful are existing methods?
- Are potential measures effective in similar fisheries?
- What's the economic impact of implementation?



# Address Bycatch: Toolbox

## Master Plan Recommendations (Appendix M)

1. Gear modifications
2. Bycatch catch limits
3. Spatial and temporal measures
4. Incentive/disincentive programs
5. Minimizing “ghost fishing”
6. Full retention programs
7. Other





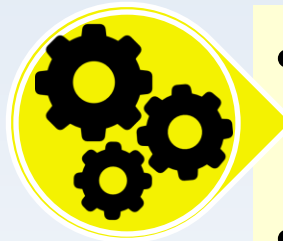
# Address Bycatch: Proposed Analyses



When and where are priority bycatch species encountered?



- Hotspots and cold spots may reveal alternative spatial management approaches



- Utilize WCGOP data to map species-specific hotspots
- Model spatial and habitat predictors of species-specific and overall bycatch
- Model time-varying predictors of species-specific and overall bycatch
  - *Season, oceanographic conditions*



# Proposed Analyses: Summary & Discussion

Master Plan Step	Question	Proposed Analysis
<b>2: Distinguish species</b>	Which species are target, incidental, and bycatch?	<ul style="list-style-type: none"><li>• Use historical use patterns to identify consistently retained and discarded species.</li></ul>
	Which species should be prioritized for step 3?	<ul style="list-style-type: none"><li>• Solicit stakeholder/industry input</li><li>• Utilize vulnerability assessments and thresholds</li></ul>
<b>3: Determine acceptability</b>	Are existing bycatch rates legal?	<ul style="list-style-type: none"><li>• Utilize fleetwide expansions to evaluate compliance for relevant species</li><li>• Sensitivity analysis when mortality rates are poorly understood.</li></ul>
	What are the impacts on species sustainability?	<ul style="list-style-type: none"><li>• Productivity susceptibility analysis to determine vulnerability.</li><li>• Sensitivity analysis when mortality rates are poorly understood.</li></ul>
	What are the impacts on directed fisheries?	<ul style="list-style-type: none"><li>• Evaluate compliance with existing management and review interactions.</li></ul>
	What are ecosystem impacts?	<ul style="list-style-type: none"><li>• Ecological risk assessments</li></ul>
<b>4: Address bycatch</b>	When and where are priority species encountered?	<ul style="list-style-type: none"><li>• Spatiotemporal and habitat models of bycatch</li></ul>



# Next Steps and Timeline

- Fall-Winter 2025 – Refine and Complete Analysis (Steps 2 and 3)
- November 6, 2025 - Presentation to Marine Resources Committee
- Ongoing - Additional meetings with stakeholders







# Closing Remarks

## Thank you!

Email: [MLMAFisheriesMgmt@wildlife.ca.gov](mailto:MLMAFisheriesMgmt@wildlife.ca.gov)

The screenshot shows the California Department of Fish and Wildlife website. The header includes the CDFW logo, navigation links (Home, Fishing, Hunting, Licensing, Conservation, Learning), and a search bar. The main content area is titled "California Halibut Scaled Management Process". On the left, there is a sidebar with "On this page" links: Overview, Trawl Bycatch Evaluation, Exploring Scaled Management, California Halibut Stock Assessment, and Related Information. The main text area has an "Overview" section. It states that CDFW is committed to partnering with the stakeholder community to make informed decisions about the management of the California halibut fishery. It includes a link to "Join the email list" to receive updates regarding California halibut management. Below this, it mentions that in 2019, CDFW assessed the state's fisheries under the 2018 Master Plan for Fisheries (PDF) framework. A small image of a flat fish lying on the ocean floor is shown with the caption "Flat fish lying on ocean floor." The text continues that a prioritization process identified California halibut (Paralichthys californicus) as a species in need of management attention due to potential risks to bycatch species (including sub legal-sized California halibut) and from a changing climate. CDFW is currently working on a California halibut management process which includes all fishery sectors statewide: recreational, commercial

<https://wildlife.ca.gov/Conservation/Marine/CA-Halibut-Scaled-Management>