



Evaluation of Bycatch in the California Halibut Fishery

14 March 2023

Presented to:

Marine Resources Committee

Presented by:

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Environmental Program Manager

Marine Region



Outline

- Background
- Bycatch Criteria
- Priority Species
- Outreach
- Methods
- Preliminary Results
- Conclusions
- Next Steps





Background

Assessing and Addressing Bycatch per the Marine Life Management Act (Act)

- Step 1: collection of data - DONE
- Step 2: Distinguish target - DONE
- **Step 3: Determining acceptability – in progress**
- Step 4: Address unacceptable bycatch



Bycatch Criteria

- Determining “acceptable” types and amounts of bycatch (Fish and Game Code §7085(b))
 - Legality of take
 - Threat to sustainability
 - Impacts on fisheries
 - Ecosystem impacts



Photo Credit: CDFW



Priority Species

- Pacific angel shark
- Brown Smoothhound
- California skate
- Bat ray
- Rock crab
- Barred sand bass
- California sea lion
- Brandt's cormorant
- Giant sea bass
- Great white shark
- Sublegal California halibut
- Humpback whale



Outreach

- Email to over 500 stakeholders
- Focused notification and survey to gill net fleet (20 permittees)
- Direct conversations with key representatives (9 permittees)



Photo Credit: CDFW

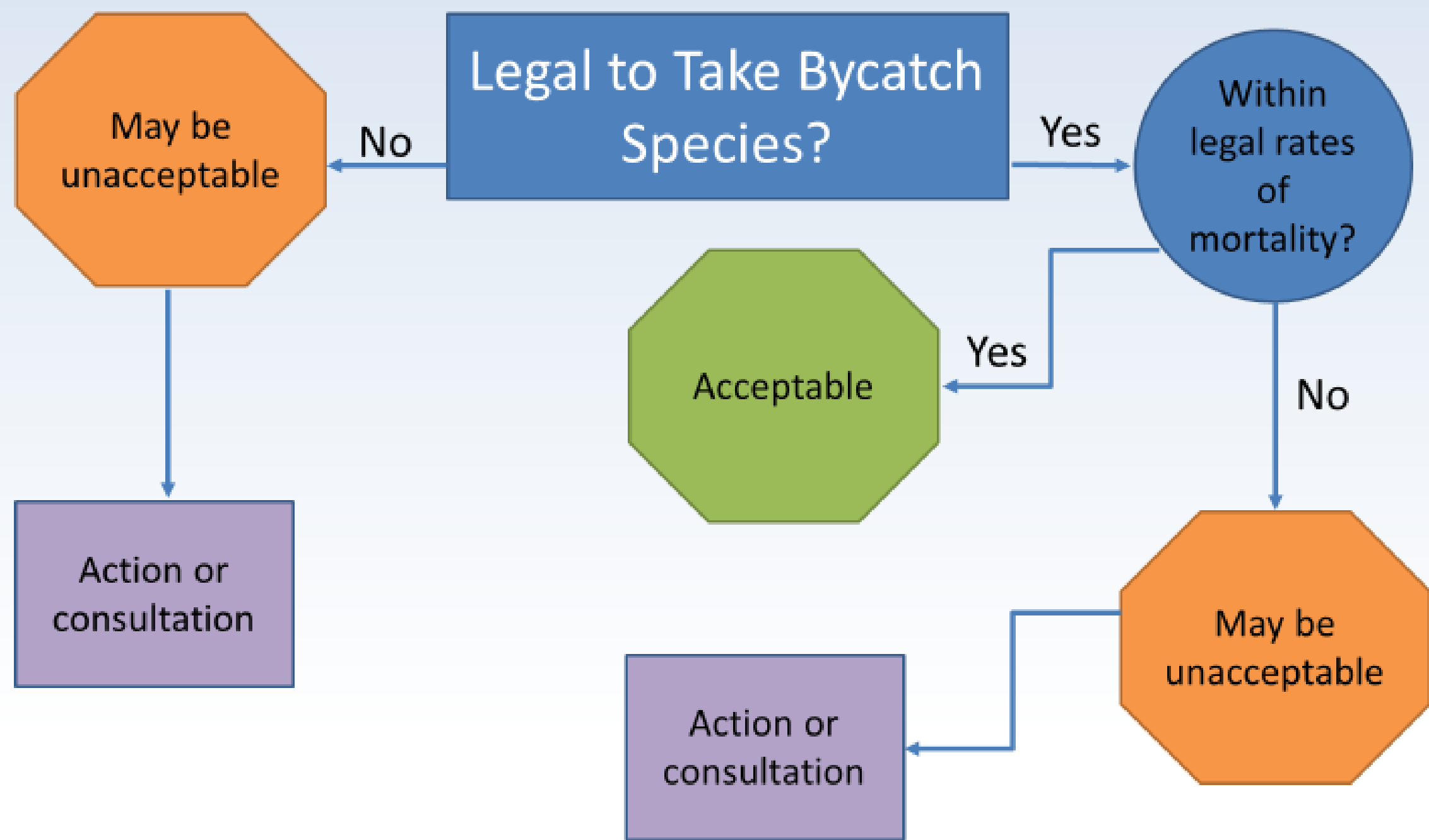


Legality of Take of the Bycatch Species

- Covered under existing law?
- Prohibitions against take?
- Restrictions that require discard?
- Known discard mortality rate?
- Permit requirements to retain?
- Incidental take allowance?



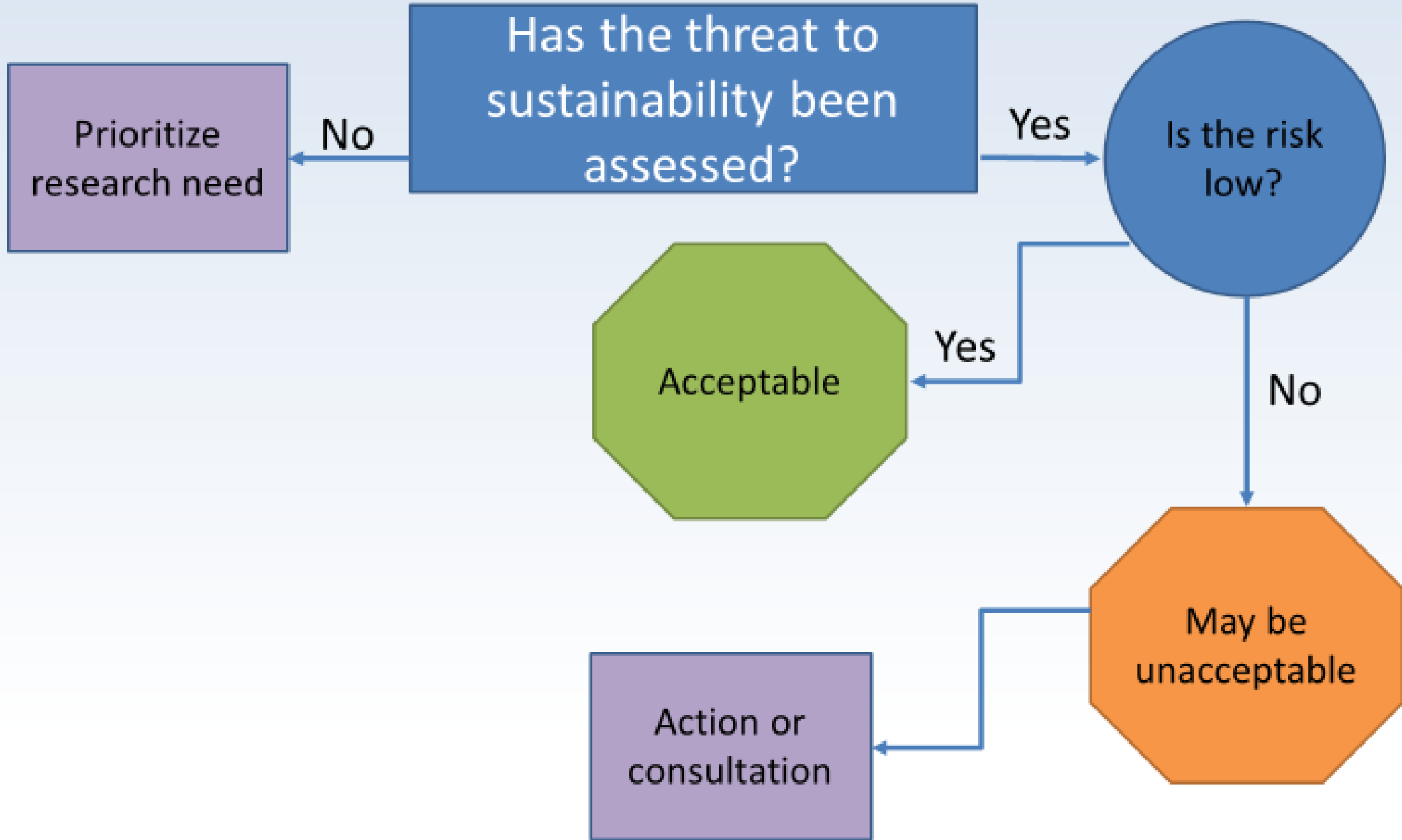
Photo Credit: CDFW





Threat to Sustainability of the Bycatch Species

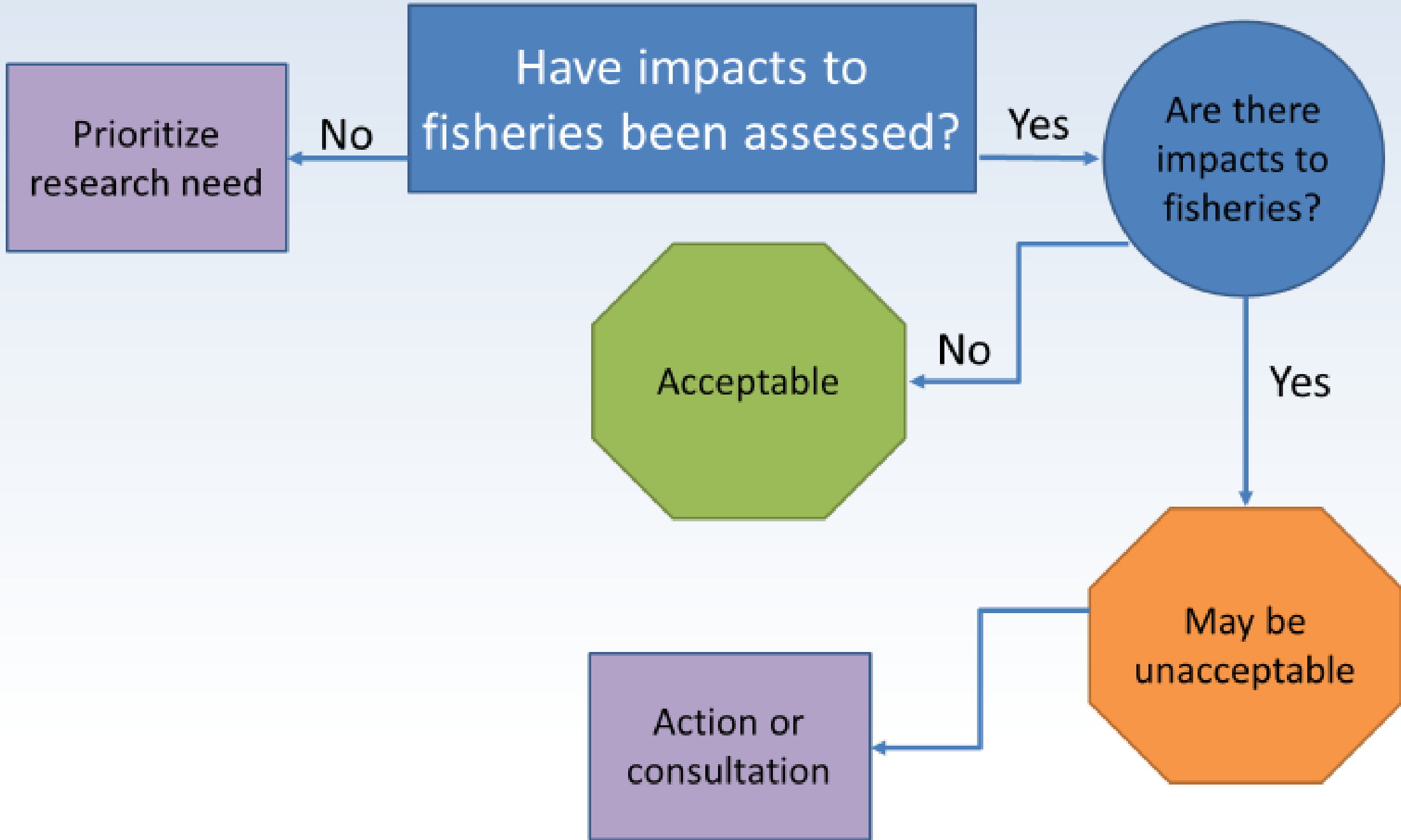
- Risk assessment?
- Status estimate or stock assessment?
- Effective state or federal management measures?
- Product of recreational catch and release?
- Estimated discard mortality?
- Post-release mortality studies?
- Probability of mortality exceedance?





Impacts on Fisheries that Target the Bycatch Species

- A directed fishery?
- If yes, has bycatch and mortality been accounted?
- Is the management strategy affected?
- Impacts considered in an FMP or ESR?
- A federal rebuilding plan?
- Prohibition on retention or management allowance?
- Impacts to directed fishery?



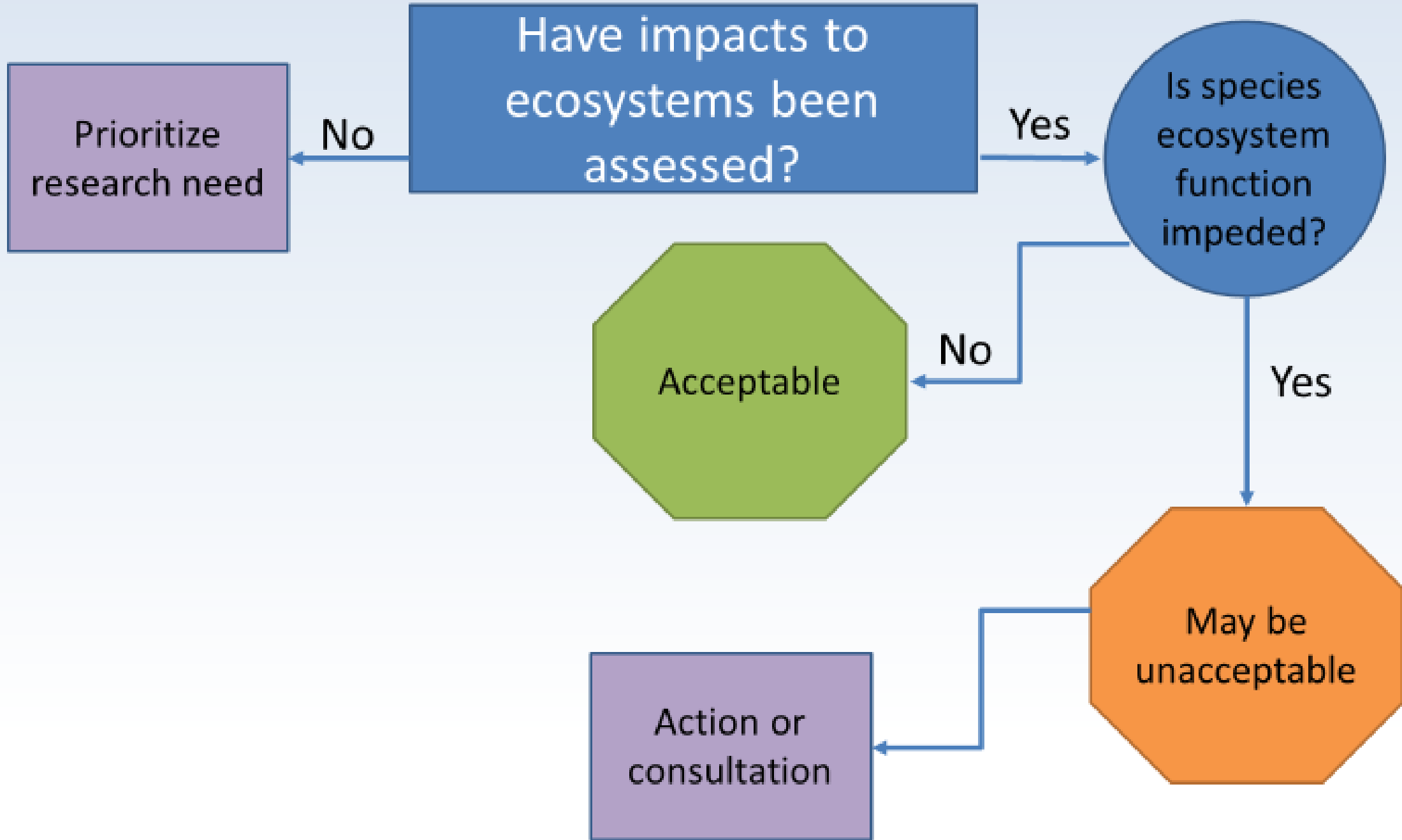


Ecosystem Impacts

- Ecosystem role of the bycatch species?
- Increased risk from bycatch mortality?



Photo Credit: CDFW





Preliminary Results

Species	Legality of Commercial Possession	Risk to Sustainability	Risk of Impacts on Fisheries	Risk of Impacts on Ecosystem
Pacific angel shark	Legal with size and gear restrictions	Moderate	Low	Low
Brown Smoothhound	Legal with size limit	Low	Low	Unknown
California skate	Legal	Moderate	Moderate	Low
Bat Ray	Legal	Moderate	Moderate	Low
Rock Crab	May not be retained under Federal Regulations	Low	Low	Low
Barred sand bass	May not be retained	Low	Low	Low
Giant sea bass	Legal as incidental	Moderate	No directed fishery	Unknown
Great white shark	Legal as incidental	Moderate	No directed fishery	Unknown
Brandt's cormorant	Not legal to take	Low	No directed fishery	Unknown
Sublegal CA halibut	May not be retained	Low	Low	Unknown
California sea lion	Not legal to take	Moderate	No directed fishery	Moderate
Humpback whale	Not legal to take	Unknown	No directed fishery	Unknown



Conclusions

- Sharks, skates and rays
 - Moderate and unknown threats
- Marine mammals and sea birds
 - Low, moderate and unknown threats
- Finfish
 - Low to moderate threats



Photo Credit: CDFW



Next Steps

- Acceptability determination
 - “unacceptable” triggers Step 4
- Potential management measures

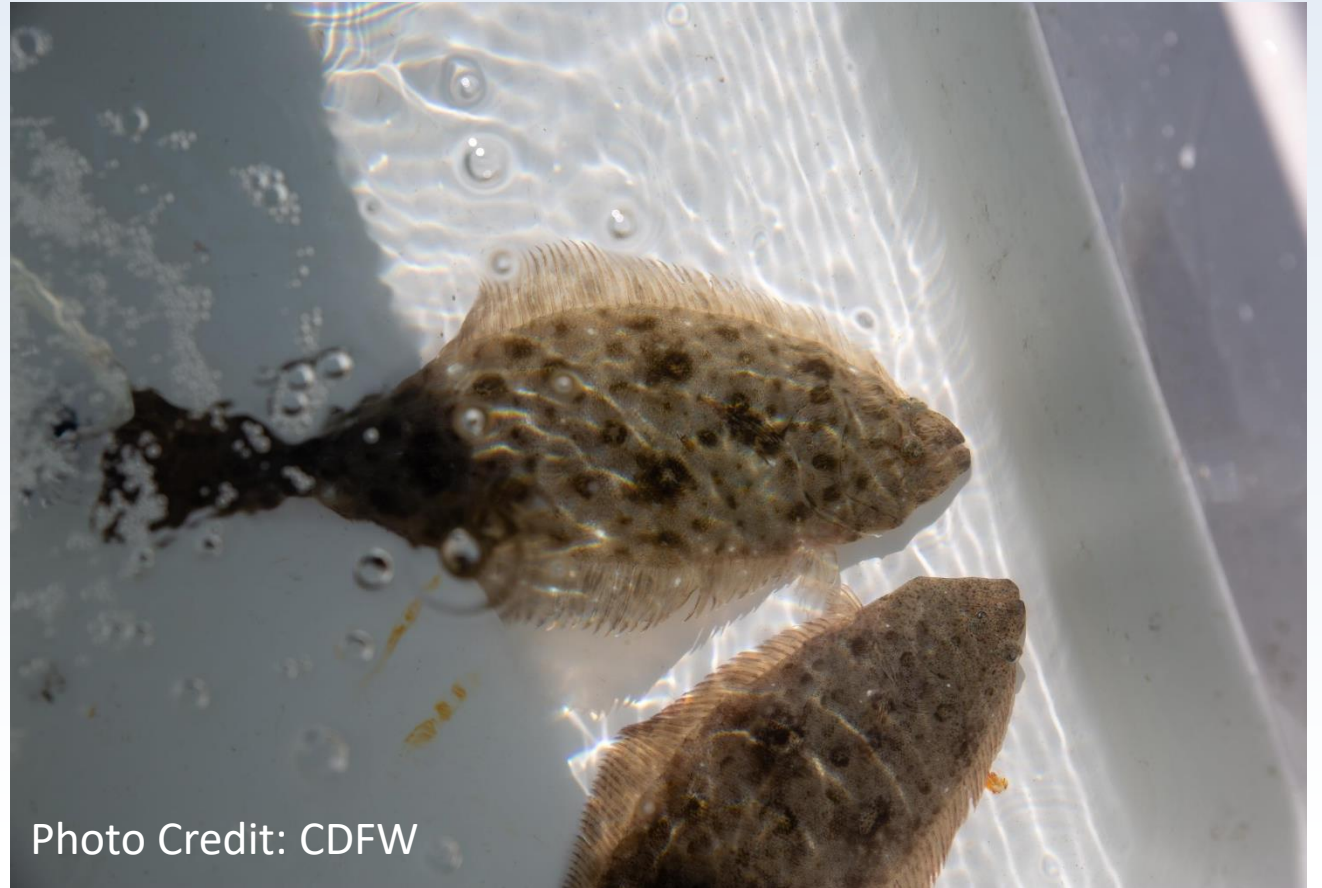


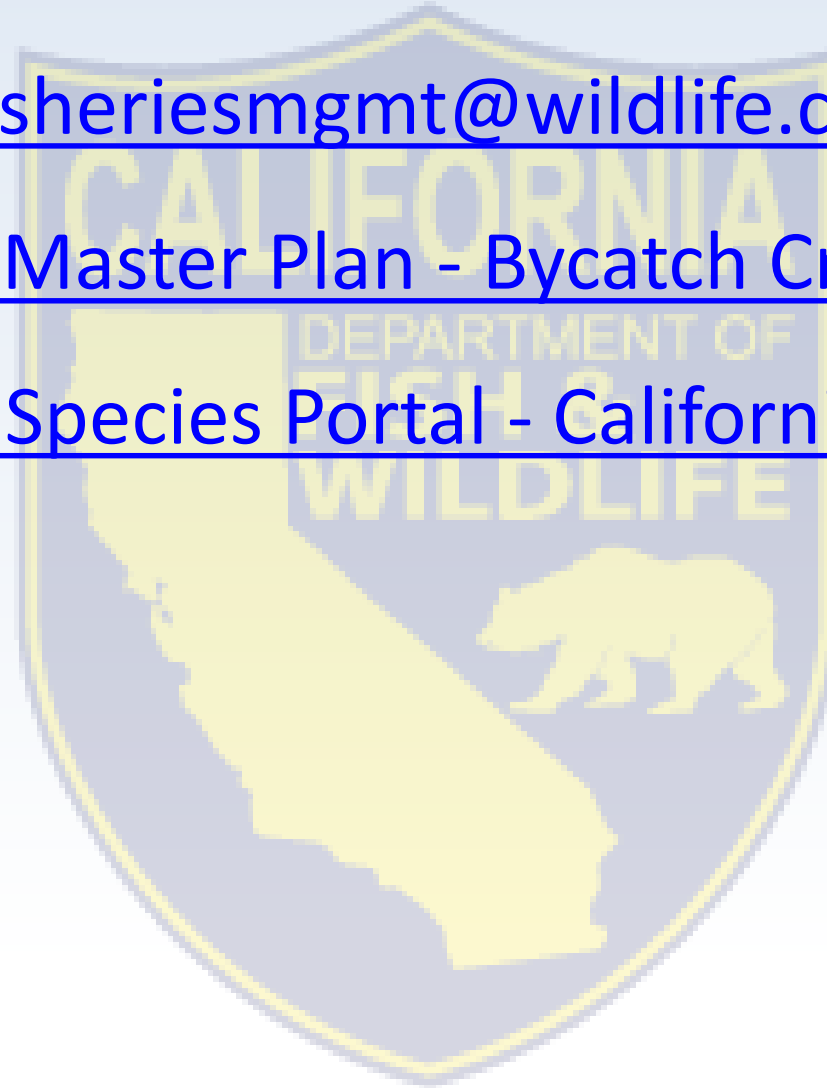
Photo Credit: CDFW

Thank You

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[MLMA Master Plan - Bycatch Criteria](#)

[CA Marine Species Portal - California Halibut](#)





Proposed Policy on Coastal Fishing Communities

KIMI ROGERS

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California Fish and Game Commission

Presented to the Marine Resources Committee, March 14, 2023

A morning at Tuna Harbor Docksides Market





Threats to Coastal Fishing Communities (CFC)

- Disruptions from climate change
- Inadequate port infrastructure
- Aging of the fleet
- Emerging industries
- Competition for shoreside use



Purpose of Coastal Fishing Communities Policy



Formally recognize CFC goals and needs



Account for potential impacts to CFCs in fisheries management options and decisions



2022 Timeline

FEB-MAR

APR - JUN

JUN-JUL

AUG-SEP

OCT-NOV

DEC



Public Workshop
and March MRC

Integrated
feedback into
draft policy

Postponed
second workshop
and July MRC

Continued
revising

Revising draft and
presenting outline
to November MRC

Second workshop



Today's Update

1. December 1, 2022 workshop outcomes
2. Overview of proposed policy
3. Next Steps



Fishing Boats in San Diego harbor, Kimi Rogers

Policy Drafting Workshop #2

December 2022 Policy Drafting Workshop



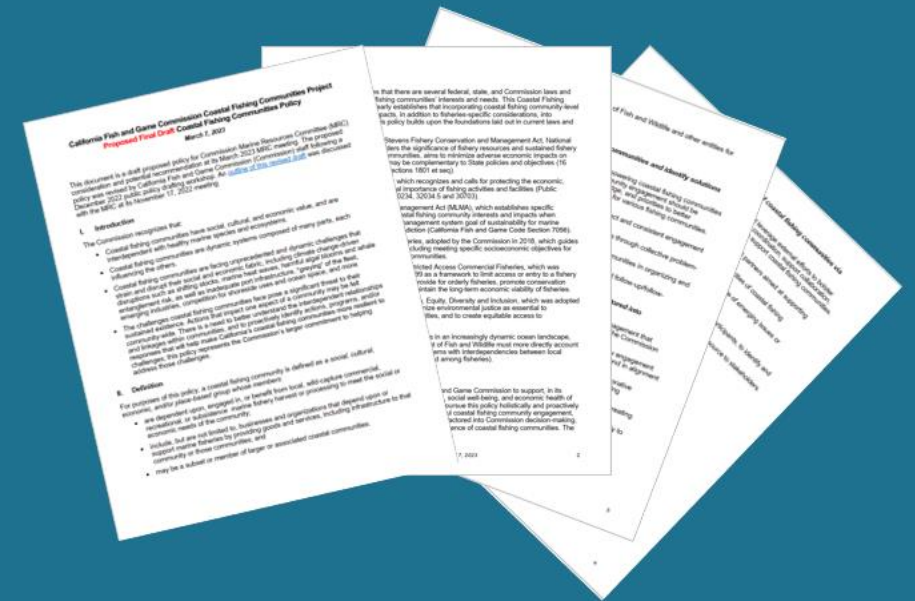
- Approximately 45 public attendees
- New connections: Agencies and CFC members
- Revised draft policy shared
- Received feedback





Key Discussions and Feedback

- External threats to communities
- Support for local problem-solving, partnerships, and governance coordination
- Policy implementation questions
- Improve clarity





Fort Bragg coastline, Kimi Rogers

Proposed Policy



Changes to the Working Definition

A coastal fishing community is a social, cultural, economic, and/or place-based group whose members:

- *are ~~fishermen~~ dependent upon, ~~or~~ engaged in, **or benefit from local, wild-capture** commercial, recreational, or subsistence **fishing marine fishery harvest or processing** to meet the social or economic needs of the community;*
- *~~this includes~~ **include**, but ~~is~~ **are** not limited to, businesses and organizations that depend on or support **fishing marine fisheries** by providing goods and services, including infrastructure **to that community or those communities;** **and***
- *~~it may be a subset or member of larger or associated coastal communities which have an interest in and/or are dependent on healthy ocean ecosystems.~~*



Policy Outline

- I. Introduction
- II. Definition
- III. Policy Setting
- IV. Policy Statement
- V. Policy Strategies
 - A. *Meaningful CFCs engagement*
 - B. *Commission action*
 - C. *Support capacity-building through partnerships*





Recommendation and Next Steps

Recommendation

- Advance the proposed policy for Commission consideration

Next Steps

- Implementation planning
- Community outreach, interagency discussions
- Resuming other CFC project efforts





THANK YOU!



- ❖ Coastal fishing community members and organizations
- ❖ Non-governmental organizations and academic partners
- ❖ Agency representatives, especially California Department of Fish and Wildlife, California Ocean Protection Council, and California Ocean Science Trust
- ❖ Past Sea Grant fellows:
Heather Benko, Leslie Hart, Maggie McCann, Rose Dodgen, and Corinna Hong

Special thanks to Craig Shuman, Carrie Pomeroy and Huff McGonigal



Reach out!

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***New Coastal Fishing Communities
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Pending Aquaculture Lease Actions



Marine Resources Committee Meeting
March 14, 2023

RANDY LOVELL
State Aquaculture Coordinator



Pending Aquaculture Lease Actions table

Date Received	Business Name	Type of Request	Lease No.	Location	Request	Notes
Completed:						
11/14/2019 rev'd 4/7/2021	Tomales Bay Oyster Company	Amendment	M-430-05	Tomales Bay	Add additional species and culture methods	approved:
2/12/2021	Hog Island Oyster Company	Amendment	M-430-10	Tomales Bay	Add additional species	approved:
2/12/2021	Hog Island Oyster Company	Amendment	M-430-11	Tomales Bay	Add additional species	approved:
2/12/2021	Hog Island Oyster Company	Amendment	M-430-12	Tomales Bay	Add additional species	approved:
2/12/2021	Hog Island Oyster Company	Amendment	M-430-15	Tomales Bay	Add additional species	approved:
Pending:						
12/22/2016	San Andreas Shellfish	New Lease	N/A	Tomales Bay (proposed)	New lease in Tomales Bay	project review
5/31/2018	Santa Barbara Sea Ranch	New Lease	N/A	Santa Barbara (proposed)	New lease in Santa Barbara channel	CEQA review
3/25/2019	Malibu Oyster Company	New Lease	N/A	Malibu (proposed)	New lease offshore Malibu	proposal on hold
1/28/2021	Santa Barbara Mariculture	Amendment	M-653-02	Santa Barbara	Expand existing lease size	proposal on hold
10/14/2020	Cove Mussel Company	Assignment	M-430-06	Tomales Bay	Assignment (to Starbird Mariculture)	pending leaseholder actions
1/28/2019	Hog Island Oyster Company	Amendment	M-430-10	Tomales Bay	Lease boundary reconciliation and move/expansion	survey work
1/28/2019	Hog Island Oyster Company	Amendment	M-430-11	Tomales Bay	Lease boundary reconciliation	survey work
1/28/2019	Hog Island Oyster Company	Amendment	M-430-12	Tomales Bay	Lease boundary reconciliation and move	survey work done; CEQA review
1/28/2019	Hog Island Oyster Company	Amendment	M-430-15	Tomales Bay	Lease boundary reconciliation	survey work
11/14/2019 rev'd 4/7/2021	Tomales Bay Oyster Company	Amendment	M-430-05	Tomales Bay	Add additional species and culture methods	CEQA review
1/28/2021	Santa Barbara Mariculture	Amendment	M-653-02	Santa Barbara	Add additional species	CEQA review
5/27/2022	Grassy Bar Oyster Company	Amendment	M-614-01	Morro Bay	Add/reinstate additional methods	clerical review

new or expand
 transfer
 misc authorization
 boundary
 species/methods



Pending Aquaculture Lease Actions accomplished

Of the 17 listed pending actions since Mar 2022:

5 are approved; amendments being executed

1 new methods request

The remaining pending actions consist of:

5 CEQA review (various stages)

4+ Reconcile boundaries (survey work)

6 Various review, coordination, or leaseholder tasks

2 On hold by applicants



Questions ?

Thank You