Squid Fishery Advisory Committee Meeting 6
October 6, 2023, 9am-1pm
via Zoom teleconference

KEY OUTCOMES MEMORANDUM

OVERVIEW

The Squid Fishery Advisory Committee (SFAC or Committee) held its sixth meeting on October 6, 2023. The goals of the meeting were to:

- Check in with SFAC members who were not present at the last meeting on their desired outcomes for the squid fishery management review;
- Review and discuss changes in fishing gear since the FMP; and
- Review and discuss observations from dockside sampling data and habitat/wildlife impacts since the FMP.

PARTICIPANTS

The following SFAC members attended: Caitlin Allen-Akselrud, Richie Ashley, Ryan Augello, Ken Bates, Joe Cappuccio, David Crabbe, Mark Fina, Russell Galipeau, Corbin Hanson, Greg Helms, Nick Jurlin (alternate for John Barry), Porter McHenry, Tom Noto, Brian Susi-Blair, Joe Villareal, Anthony Vuoso, Anna Weinstein and Dan Yoakum. Ken Towsley was absent.

Katie Grady, Briana Brady, John Ugoretz, Dianna Porzio and Trung Nguyen with the CDFW convening team participated. Todd Van Epps of CDFW participated as a law enforcement representative. Scott McCreary and Debbie Schechter with CONCUR served as neutral facilitators. Susan Ashcraft, Marine Advisor to the Fish and Game Commission, was also present as a listener.

MEETING MATERIALS

The SFAC Meeting 6 Agenda was provided.

KEY OUTCOMES

Below is a summary of the main topics discussed during the SFAC meeting. This summary provides an overview of the main topics, primary points and options raised in discussions, and next steps. It is neither a detailed transcript nor a decision document.

1. Welcome, Agenda Review

Katie Grady welcomed SFAC members and shared the schedule of SFAC meeting dates and topics. Scott McCreary reviewed the agenda. Katie

reminded the SFAC of its charge to review and advise CDFW on potential changes to the California market squid fishery management framework, which includes the seasonal catch limit (118,000 tons), gear restrictions, a weekend closure, sustainable levels of egg escapement, fishery logbooks, and area closures.

2. SFAC Member Goals for this Fishery

Katie explained that while the available metrics indicate the market squid fishery is sustainable and there is no evidence that overfishing is occurring, CDFW wants to take a proactive approach and consider how the existing squid fishery management framework may hold up as we experience more environmental extremes. At the last SFAC meeting, the convening team did a mid-course check-in with the SFAC regarding members' goals for the process and key issues to help guide and inform the remainder of the SFAC process. SFAC members responded to the three questions below:

1. Do you like this framework (seasonal catch limit, gear restrictions, weekend closure, sustainable levels of egg escapement, fishery logbook, area closures)?
2. What would you change (add, remove, alter) and how would you accomplish that? Can you provide details?
3. How will this framework hold up as we experience more environmental extremes (climate change)?

Responses from SFAC members at the last SFAC meeting were summarized in the SFAC Meeting 5 Summary. SFAC members who were not present at Meeting 5 were invited to share their responses to the questions. Responses are summarized below.

<u>1. Do you like this framework?</u>

Most respondents did not specifically address this question of the merits of the framework. One noted that the SFAC process is a good one. Some SFAC members mentioned the importance of monitoring and adaptive management. Gear changes, open access, conservation areas, and effort controls were mentioned as areas for discussion by SFAC members.

<u>2. What would you change(add/remove/alter) and how would you accomplish that?</u> The table below includes responses from SFAC Meetings 5 and 6 categorized by topic and the timing in which the topic is scheduled for discussion.

November & January	Complete/Ongoing	October & November	November & January
Effort/Fishery Dynamics	**Monitoring**	**Gear/Habitat**	**Access**
Later Sunday opening primarily in Monterey Bay (e.g., at dark)	Test electronic logs and move away from paper logbooks	Gear alterations to protect bottom habitat (e.g., ribline)	Improve small-scale access: Discuss this earlier to allow more time to deliberate
Half-day closure to slow down fishing during the week/ consider safety at sea specific to Monterey Bay area	Include information about lightboats on fish tickets	Additional area closures and gear restrictions to protect seabirds	Permit process and transfers—make it more transparent
Less time and effort fishing to provide more spawning opportunities	Improve understanding of shift in resource	Managing gear near and transit through closed areas	
Management measure that changes based on stock-status, used to replace seasonal cap	Concentrate monitoring in conservation areas	Allow jigging for squid for commercial purposes	
	More routine check on stock status and opportunities to apply adaptive management	Ensure compliance with existing lighting regulations	

3. How will this framework hold up as we experience more environmental extremes?

Multiple SFAC members described a need for flexibility in fishing operations in order to adapt to climate change. A couple of SFAC members mentioned the need to consider protecting additional habitat areas and ecological hotspots in

the future as climate change causes species to migrate or shift.

The following additional issues were raised by SFAC members during this discussion:

- Look at examples of squid fishery management controls in other geographic areas and what has worked/not worked.
- Consider how to assist industry in areas where there is little market infrastructure.
- The fishery is more inconsistent now and there's interest in working toward a more consistent fishery.

Katie explained that the issues identified in the table will inform the process moving forward including topics and schedule for future SFAC meetings.

3. How Has Fishing Gear Changed Over Time?

Katie presented data on fishing gear use over time in order to observe any changes and identify implications of observed changes. Katie noted that the data presented are raw preliminary data from landings, logbooks, dockside sampling, and permit records. The following data were shared and discussed:

- Squid landing by gear type: These data indicate that the lampara net was the predominant gear type in the early 1980s but was in limited use after that. Seine became the predominant gear type in the late 1980s. Brail landings stayed consistent with the exception of an increase around 2011 when the fishery was prolific. An SFAC member noted that lampara was primarily used for small scale fishing.
- Permit activity: CDFW's data system shows that the number of vessel permits has dropped from 92 when the FMP was implemented to 69 currently. Brail permits have increased from 22 to 47 in that time period. The drop in lightboat permits from 61 to 30 is primarily due to upgrades from light to brail permits. An SFAC member mentioned that the initial spike in light to brail upgrades was due to a 2-ton loophole that was removed in 2014.The FMP included capacity goals, which are intended to produce a "moderately productive" fleet but there is a lack of information on how these specific goals (55 vessels, 34 light boats, and 18 brail permits) were set and whether they serve a purpose.
- Seine vessel length over time (from logbooks): While some data from recent years are lacking, available data indicate no apparent change in vessel size since 2000. The average vessel length is 60 feet. SFAC members

noted that vessels became wider rather than longer to increase capacity and that boats must be 58 feet or smaller to fish in Alaska.

- Net length (e.g., circumference; from logbooks): Data on net length is similarly incomplete but available data show no major changes over time, with an average of approximately 1,300 feet. SFAC members noted that the length is based on the circle size needed to make room for the lightboat and to encircle the squid.
- Net depth (from logbooks): Data on net depth is similarly incomplete but available data suggest no significant changes with an average of approximately 160 feet. SFAC members had differing perspectives on whether net depth and the weighting of the net has changed. Nets may be deeper and rigging different when fishing in Monterey Bay compared to other areas of the state. SFAC members noted that most vessels have multiple nets of varying depths for different purposes and that the ability to use different sizes was important to maintaining profitability, flexibility, and safety.

Katie presented additional data on net type and depth from dockside interviews. The Department began random sampling during offloads in the late 1990s, which include interviews with vessel operators. Questions about gear use began in 2009. The following data were presented and discussed:

- Average net depth (from dockside sampling): This graph shows that nets are deeper in the north and shallower in the south starting in 2019.
- Average fishing depth (from dockside sampling): This graph shows some fluctuation year to year. Beginning in 2019, fishing depth increases in the south and decreases in the north. An SFAC member noted that water is shallower from Monterey north relative to the south. Other members noted that the fishery is unpredictable and variable due to El Nino cycles, and expressed concern over regulations that may restrict flexibility in adapting to those changes. There was a question about incorporating SST with these data and Katie responded that the different spatial resolutions of the data can make it difficult to draw comparisons.
- Mesh size (from dockside sampling): Mesh size increased between 2010 and 2013 and then stayed fairly constant. SFAC members explained that changes in mesh size are likely due to interchanging smaller mesh nets for sardine and anchovy. CDFW does not believe there is a management issue related to mesh size, as juvenile squid are rarely found in dockside samples. There was a question about whether brail data were included and potentially driving mesh size down during that timeframe. Katie responded that brail landings comprise a very small portion of samples,

but she would confirm that brail nets were not skewing mesh size for seine nets.

- Use of riblines (from 2020 survey): Riblines involve placing the purse line above the weighted line to reduce the likelihood of the net interacting with the sandy bottom. CDFW began asking questions about ribline use in 2020, including questions about the duration of use. There has been a steady increase in ribline use since 2010. Only one SFAC member reported using a ribline and noted that it works well to reduce interaction with the sea floor and reduce sea floor bycatch without impacting the amount of squid caught. Some noted that installing a ribline may be costly, especially if operators are using multiple nets. A couple of SFAC members expressed interest in subsidies for riblines. The State of Oregon now requires a ribline to seine commercially for market squid.

SFAC members discussed the ribline regulations for squid fishing in Oregon. While a member expressed the importance of learning from other fisheries, it was noted that fishery dynamics and economics are significantly different in Oregon. It is a relatively new fishery with little data and less experience.

4. Review Habitat Impacts, Bycatch and Interactions with Wildlife

Katie reviewed current lighting regulations in the FMP, which require a permit for lighting for commercial squid fishing, require a logbook, limit lights to 30,000 watts at any time, and require shielding of filaments to minimize the amount of light that escapes and to keep the light focused on the water. Katie presented data on lighting types, which indicate that the predominant lighting type is metal halide. Not all lights have a filament for shielding and wattage is difficult to enforce. Katie showed photos of lighting and shielding configurations. In response to a question, she stated that lighting is a form of take during fishery closures (i.e., the weekend closure) or in Marine Protected Areas and would be considered a violation. She noted that the intent of the regulations is to limit light escapement. SFAC members had several comments:

- In one photo, it is apparent that the filament is not shielded, but in most of the other photos, portions of the bulb are not covered. This should not be a concern because the requirement is for the shield to cover the filament (i.e., light producing element).
- There are a limited number of manufacturers of the lights, which are designed specifically for squid attraction and work well. Most people use these same lights.
- Lights are placed on boats where they fit and don't interfere with working gear.

- Proper shielding also helps with light penetration .
- Concern was expressed about seabirds getting disoriented from lights and susceptibility to predation in nesting/conservation areas.
- SFAC members asked to see law enforcement data on lighting violations in MPAs or on the weekends.

Due to time constraints, the topics of bycatch and interactions with marine mammals and seabirds will be deferred until the next SFAC meeting on November 15, 2023. [1]

5. Public Comment

Five members of the public provided comments at the meeting. They all requested that consideration be given to creating an open access fishery in the Fort Bragg area, particularly emphasizing the loss of fishing opportunities.

SUMMARY, NEXT MEETING, NEXT STEPS

CDFW staff expressed appreciation for the feedback provided by the SFAC and members of the public. The next SFAC meeting will be held via Zoom on Wednesday, November 15, 2023, and will focus on gear, habitat/wildlife impacts and access.

Based on the Convening Team's deliberations, the following next steps were identified:

Next Meeting:

- Based on the variety of topics and needed time for adequate review, the convening team has determined that a full day is needed for the November meeting.

SFAC Members:

- Each SFAC member is asked to review the draft meeting summary after it is distributed and propose bounded edits to address key misstatements or omissions.

Facilitation Team/Conveners:

- Prepare and distribute draft meeting summary for review by SFAC members.
- Share meeting presentations.

[1] The slide presentation for this meeting includes some information that SFAC members can review in advance of the next meeting to be better prepared to discuss this topic.

- Reassess sequence of meeting topics.

For questions regarding this meeting summary, please contact: sfac@wildlife.ca.gov