Western Pacific Regional Fishery Management Council

**Report of the Main Hawaiian Islands Deep 7
Bottomfish SEEM Working Group Meeting**
May 7, 2024, 1:00 pm to 4:00 pm
Western Pacific Regional Fishery Management Council Office

Jason Helyer, SEEM Working Group Chair, opened the meeting at 1:08 pm. Members in attendance included Pua Borges, Adam Ayers, Marlowe Sabater, Bryan Ishida, David Sakoda, Clay Tam, Gil Kualii, Roy Morioka, Ed Watamura, Amanda Padilla, Abraham Apilado Jr., Nathan Abe, Len Nakano and Craig Severance.

Others in attendance included Zach Yamada, Asuka Ishizaki, and Thomas Remington.

1. Overview of the SEEM Process

Zach Yamada, Council staff, provided the overview of the Social, Economic, Ecological and Management Uncertainty (SEEM) scoring process. The SEEM dimensions were standardized in 2018 by the Social Science Planning Committee. This structured framework was published as an internal PIFSC report and was used here and will be used in future SEEM analyses (Hospital et al 2019).

The working group reviewed the various aspects of the SEEM dimensions for the main Hawaiian Islands (MHI) Deep 7 bottomfish. For the Social Dimension, the working group considered whether the fishery perpetuates cultural and traditional values, provides culturally important fish, contributes to food security, and if there are community concerns regarding the ACL. For the Economic Dimension, the working group considered whether any ACL decision would compromise the financial security of the fishery and its participants, affect other industries, create unexpected change in demand, impact the importance of the fishery to domestic and export markets, and whether imports would create displacement of local catch. For the Ecological Dimension, the working group considered whether the target species have strong ecological importance, whether potential impacts of changing ocean conditions would affect the fishery productivity, and whether fishing pressure would shift to other species when ACLs are restrictive. For the Management Uncertainty Dimension, the working group considered two sub-dimensions: 1) monitoring uncertainty; and 2) management and enforcement uncertainty. Monitoring uncertainty considers the availability of licensing and reporting requirements, presence of fine-scale reporting, the delay between data collection and data processing, ability to conduct in-season tracking, communicating landings to the community, and ability to monitor changes in fishing effort that are not reflected in the assessment. Management uncertainty

considers whether there are existing regulatory measures in place adequate to protect the stock, in-season accountability measures, and whether management can distinguish local catch from imported catch in the markets.

As a group, each dimension was scored by consensus. The final score was tallied, and the sum is the reduction score from the acceptable biological catch (ABC). The Social, Economic, and Ecological criteria scores will be used to set the amount of reduction from the ABC to the annual catch limit (ACL). The Management criteria are used to set the annual catch target (ACT) at some level below the ACL. The catch associated with the resulting risk of overfishing will be the recommended ACL.

A working group noted that when SEEM first came about, the first two meetings were very different. The first had fishers present, while the second had none. The process is a work in progress. When the MSA Reauthorization made us establish ABC and ACL control rules we looked at potential SEEM dimensions. Some of the Deep 7 fish are cultural icons for holidays or celebrations. Fish with high cultural significance may be given a low or zero score to keep from having an additional reduction and to make the fish available. A number of Deep 7 SEEMs only did zero for the first three dimensions. But management uncertainty is an important one. Some members expressed skepticism about the use of Hawaii Marine Recreational Fishing Survey [HMRFS] data). The SSPC started looking at this process and pushed for standardization of the process. The working document for that is worth a read. It has two kinds of scoring suggestions - general and easy vs. complex. Severance suggested we stick to the general scoring. As a work in progress, we have made a lot of headway to make this an effective way to look at these risk dimensions and to get fishers talking about how fishery operates and is conducted.

2.   Scoring of the SEEM Dimensions and Criteria Scores
Helyer led the working group by describing relevant criteria for each dimension as well as any indications regarding suggested scoring.

a.   Social
The working group discussed the social importance of having red fish during the holiday season. During the holidays, bottomfish play a key role, and there are increased motivations for fishers to harvest these species since they can be sold for high retail prices up to $30 per pound. The group said that the bottomfish fishery is important as a whole, especially considering its contribution to fish flow. These species benefit fishermen as well as fishing communities when they are given away as gifts individually or at cultural events that cross ethnic groups, creating important social ties.

The working group agreed there is a social importance for the Deep 7 bottomfish species but also that the importance does not warrant any further reduction in the SEEM score to account for social uncertainties. The score for this dimension for the Deep 7 bottomfish fishery is 0.

b.   Ecological

The working group said the Deep 7 fishery is primarily an opakapaka and onaga fishery. Over time, the fishery has seen a decrease in fishermen who target onaga, especially the bottomfish fishers based at Kewalo. The fishery has shifted and there is a need to look at fishing operations and how the fishers apply themselves. The younger fishers are not generally anchoring or doing multi-day trips, and this is evident at the auction at Pier 38. Historically, there were rows of bottomfish available at the auction, but there is little bottomfish. There were only 71 days bottomfish were available out of 271 open days of the auction in 2023. The fishery is an artisanal fishery that does not interact significantly with the habitat. The working group members said the fishery is mostly dependent on the weather and currents, which are big factors, especially if fishers make multi-day trips. A member said that onaga requires a deep drop that takes time compared to shorter drops for opakapaka and other species.

The working group scored this dimension with a 0.

c. Economic

The economic contribution of the Deep 7 fishery is related to markets, hotels, restaurants, and wholesalers. The working group said the catch is too far below the ACL to warrant a reduction to prevent overfishing. In terms of the landscape of wholesalers, the buyers have not been purchasing as much bottomfish, and the markets are susceptible to flooding. A member said it takes effort to create a sustainable market to prevent flooding, and one must bring in bottomfish year around to change this fish from being the special of the day to a regular item on restaurant menus. On Kauai, there were over 10 markets, stores, and restaurants that would buy bottomfish in the 1990s. Today, there is only one wholesaler who buys a limited amount of bottomfish. Fishers are able to catch their fish but face issues regarding where to sell it. The group talked about the importance of the Northwest Hawaiian Island fleet and how the establishment of the monument created a large gap in market demand. Another economic consideration that does not support an ACL reduction includes the cost of operations, which includes ice, electronics, boat repair, fuel, and other expenditures.

The working group scored this dimension with a 0, noting that there is a need to improve the market demand for fresh, local bottomfish.

d. Management Uncertainty: 2 Dimensions
e. Monitoring Uncertainty

The working group noted that the efficiency of the monthly catch reporting has improved. The State of Hawaii DAR representative said that compliance with Deep 7 bottomfish reporting is high, but there are issues with sales via non-traditional markets such as social media sales. DAR also has dealer reporting data that has been used to verify commercial bottomfish caught and sold. In terms of monitoring, compliance has improved, and the working group discussed the feasibility of a carry-over accountability measure for unused portions of the ACL to apply to the following fishing years. Members said this measure should be further explored for future management. As fishers, they are used to getting things taken away and this management tool

would be a good idea for transparency and morale. PIFSC staff noted new technical guidance on phase in and carry over control rules. A member suggested that the AP could be given a presentation on this if they wanted to make a recommendation to the Council

The working group scored this dimension with a 0 noting there have been improvements in reporting and there is room for improvement in assessing unreported catch.

f. Management Uncertainty

The working group recognized there has been improved management since the last SEEM meeting held in 2018 along with the opening of the remaining bottomfish restricted fishing areas (BRFAs) around Hawaii.

A working group member said he is somewhat skeptical of the use of HMRFS data in the assessment. From 2005 to 2010, results from two independent surveys suggested that non-commercial boats were catching a quarter to half of the catch compared to full time commercial bottomfish fishermen. There is a need for adequate outreach and education on bag limits. A working group member suggested that the score be revised to 1. Another member said bottomfish gear is specific to that fishery and non-commercial fishers could not afford to go fishing and to have a fishing level or catch rate equivalent to commercial fishers. Helyer clarified that the ACL only tracks commercial catch and HMRFS was used to estimate stock status. Further discussion on the use of HMRFS should be raised in the research track assessment working group. Regarding compliance and management of commercial catch, there are CML holders who may not be reporting properly.

Another member said the notion of shark depredation was not properly addressed, and the data being collected are not as good as they should be. They feel that their catch could be compromised by depredation. He agreed that improved management from 2018 would support a score of 1 for this dimension.

Sabater said noted that during the first data workshop prior to the 2024 benchmark assessment, the working group agreed to move forward without using HMRFS data directly and instead to use a ratio estimator using updated data with corrections to how it was previously calculated. They found that it was safer to use a ratio estimator instead of HMRFS direct data input into the stock assessment. Revisiting the HMRFS data and the ratio from commercial to non-commerical catch is the highest priority to be evaluated further. Along with this, the fishery continues to compete with foreign imports impacting the prices fishers can secure from fish markets.

Another member said the Community Based Fishery Subsistence Areas around the Hawaiian Islands are another factor to consider in future P* and SEEM working groups. The group discussed the lack of data around Kahoolawe and the inability to sample fishing grounds around the island. In light of the BRFAs opening, this is another factor to consider for access and management.

The working group revised the 2018 score of 2.41 to 1.0, noting there are new management factors that could both negatively and positively impact the fishery.

3. Public Comment
There was no request for public comment.

4. Finalizing the SEEM scores
The final SEEM reduction score is a sum of the Social, Economic, Ecological and Management Uncertainty criteria and represents a one percent reduction in the risk of overfishing from the ABC to determine an appropriate ACL. The sum of the SEEM reduction scores is 1.0, which would determine the ACL at a risk of overfishing that is one percent lower than that of the ABC.

5. Summary of scores and SEEM report
The following are the scores for the SEEM analysis:

SEEM Dimension	SEEM Scores
Social Dimension	0 percent reduction
Ecological Dimension	0 percent reduction
Economic Dimension	0 percent reduction
Management Dimestion	1 percent reduction

The P* Working Group determined a reduction score of 10, resulting in a recommendation to manage the fishery at a 40% risk of overfishing. This is related to an ABC of 498,000 lb according to catch projections included in the recent benchmark stock assessment (Syslo et al. 2024). Combined with the SEEM reduction score of 1, the fishery would be managed at a 39% risk of overfishing. This is associated with an ACL of 493,000 lb according to catch projections.

Meeting adjourned at 2:50 p.m.