WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Main Hawaiian Island SEEM Working Group Meeting
July 21, 2020
1:00 to 4:00 pm
Council Conference Room and Via Google Hangout
Honolulu, Hawaii

Participants: Jason Helyer (Chair, HDAR), Justin Hospital (PIFSC-EOD), Craig Severance (SSC), David Sakoda (HDAR), Tom Ogawa (HDAR), Brett Schumacher (PIRO-SFD), Clay Tam (AP Chair), Nathan Abe (CF), Eddie Ebisui III (CF)

Council staff: Zachary Yamada, Marlowe Sabater

DRAFT REPORT

1. Introductions

The meeting started at 1:00 pm. Western Pacific Regional Fishery Management Council (Council) staff welcomed meeting participants and highlighted the importance of the involvement of the Hawaii Department of Aquatic Resources (HDAR) and the fishing community in the federal decision making process. The Social, Ecological, Economic, and Management (SEEM) scores generated by the SEEM working group are used by the Council as a buffer to lower a stock's acceptable biological catch (ABC) for an annual catch limit (ACL) specification for the Main Hawaiian Islands (MHI) uku (*Aprion virescens*) stock.

2. Overview of the SEEM* process

A social scientist from the Pacific Islands Fisheries Science Center (PIFSC) provided the overview of the SEEM Uncertainty Analysis, which is used to quantify risk levels associated with uncertainties for SEEM factors after performing a P* analysis for a stock to lower its ABC to an ACL. The various SEEM dimensions were standardized in 2018 by the Council's Social Science Planning Committee (SSPC), and the SEEM framework was published as an internal PIFSC report to be used in future SEEM analyses (Hospital et al., 2019).

The working group reviewed the various dimensions of the SEEM Uncertainty Analysis The social dimension is scored based on whether the stock perpetuates cultural and traditional values, provides culturally important fish, contributes to food security, and if there are community concerns regarding a high or low ACL. The economic dimension is scored based on if any ACL decision will compromise the financial security of the fishery and the participants, whether other industries will be affected by a new ACL specification, the impacts of unexpected changes in demand for the stock, the importance of the stock to domestic and export markets, and whether imports of the species would create displacement of local catch. The ecological dimension is scored based on whether the target species has strong ecological importance, whether impacts of changing ocean condition will affect the productivity of the stock, and whether fishing pressure will shift to other species when ACLs are restrictive for the target stock. The management uncertainty dimension is divided into two sub-dimensions: 1) monitoring uncertainty; and 2) management and enforcement uncertainty. Monitoring uncertainty is scored

based on availability of licensing and reporting requirements, fine-scale reporting, duration of lag for data processing, in-season tracking, and communication of landings to the community, and the ability to monitor changes in fishing effort not reflected in the stock assessment. Management uncertainty is scored based on whether there are existing regulatory measures in place adequate to protect the stock, existing in-season accountability measures, and whether management can distinguish local catch from imported fish in the markets.

Each dimension was scored by the working group through individual scoring process. Each member scored from a range of 0 to 10. The score for the dimension is the average of all the scores. The final SEEM score was equal to the sum of each of the dimensions and represents the total reduction score from the ABC for MHI uku. The catch associated with the resulting risk of overfishing will be the ACL based on the SEE dimensions and the ACT is based on the M dimension.

The working group discussed the if there exists the possibility of additional management measures being implemented for uku, including the potential for federal permits, a no-sale rule, and/or a bag limit similar to fishers targeting Deep 7 bottomfish in the MHI. There was concern regarding how additional management would impact the non-commercial sector of the MHI uku fishery, but also an understanding that most of the viable data for the stock comes from commercial fishers. HDAR would likely not support a full closure of the uku fishery parallel to federal rulemaking, but there may be some local support for a registry for the fishery. The idea of sector allocation was briefly reviewed.

3. Scoring of the SEEM* Dimensions and Criteria Scores

a. Social

The SEEM working group stated that there is not a specific time in the year where uku is needed for any special occasions. Non-commercial fishers are not always able to catch red fish, which highly sought after for New Year's festivities, so they resort to catching fish like uku as a substitute. The uku fishery was recognized as a growing fishery that other fisheries will shift to if other target species are being caught at low rates. Uku is a highly desirable species that is usually kept when caught and has a relatively long shelf life. The working group agreed that uku holds particular social importance. Each member of the working group gave their score and this score was then averaged; the overall score for the social dimension was **1.0.**

b. Economic

The working group noted that there is not a specific gear type needed to target uku, as it is one of the few fish that can be targeted with handline, troll, spear, and shoreline gears. Fishermen present in the working group suggested that there was not a large market for uku, and the COVID-19 pandemic has caused prices for the species to slightly decline. However, it is expected that the fishery will rebound depending on management through the pandemic. Uku was once seen as bycatch, since fishers would transition from targeting ahi or onaga to targeting uku if the target species did not have good catch rates. The working group generated an average score for the economic dimension of **0.9**.

c. Ecological

The working group indicated that the most important ecological factor is that the uku fishery is dependent on the ahi fishery, and that fishers would shift their effort away from uku if the ahi are running and vice versa. Fishermen present in the working group noted that the species is not herbivorous and generally considered a fallback species. There could be further ecological studies on uku in the future to further understand their impact on the surrounding ecosystem. The average working group score for the ecological dimension was **0**.

d. Management Uncertainty

The monitoring uncertainty sub-dimension was discussed initially by the working group. There are lag in the available data given that they are reported monthly. As creel survey data are collected and reported, there is the ability to close the fishery to allow managers to catch up with the data before re-opening the fishery.

After the presentation of possible uku allocation scenarios (see below), the working group decided to rank monitoring for scenarios 2 and 3 as separate scores. Under scenario 3, the working group noted that there would be no value for an annual catch target (ACT) because there is no in-season tracking of catch. The working group scored the monitoring sub-dimension under scenario 3 as **0**. Under scenario 2, given that the commercial data is reported monthly and the non-commercial data is estimated for two-month spans, the average working group score was **2.1**.

The working group noted that under the aforementioned scenarios, the ACL would only affect fishing in federal waters as opposed to state waters. The State does not have the mechanism to close down their fishery if the ACL were to be reached, and the associated SEEM score reflects this situation. One working group member suspected that a large amount of the uku fishing grounds are in State waters, but a larger portion could be from the offshore banks that are in federal waters. The average working group score for the management sub-dimension was **3**.

4. Finalizing the SEEM* scores

The total working group score was **7**, which would lead to a 7% buffer from the ABC. The resulting ACL would be set a 41% risk of overfishing, and the ACT would be set at a 36% risk of overfishing.

5. General Discussion on the Allocation Option

Council staff gave a presentation on possible uku allocation scenarios and discussed the pros and cons for each scenario. Under scenario 1, management would create commercial and non-commercial sector for the MHI uku fishery. Each sector would have its own ACL and in-season accountability measures (AMs). Under scenario 2, in-season AMs and the ACLs would be tracked solely through the commercial fishery. Under scenario 3, management would use the total ACL, then apply post-season AMs.

Scenario	Pros	Cons
Create commercial and non-commercial sectors:	• Will have separate ACLs/ACTs • Will be tracked separately and managed separately • Each sector will be independent	• High variability in the HMRFS data • One month lag in CML data • No regulations to manage the non-commercial fishery

Separate ACLs and in season AMs	one another	
Track commercial only: ACLs and in season AMs for commercial only	• Similar process with Deep 7 bottomfish • Separate the management of non-commercial fishery • Only 1 sector to track catch	• Non-commercial fishery is left unmanaged • No regulations to regulate the non-commercial fishery • Catch in the state waters will continue • Has a potential to exceed the ACL and the commercial guys will take the hit
Total ACLs: Apply post-season AMs	• No in-season tracking • Take 3 year average for CML ad 5 year average for HMRFS • No fishery closure • Likely not to exceed the ACL/ACT	• Highlights the management gap • Contradicts the 2020-2021 AMs

The working group discussed the allocation scenarios for uku, noting that Hawaii is unique in that the commercial and non-commercial fishers are not in opposition with one another and that avoiding such a division would be ideal. HDAR representatives noted that a non-commercial bag limit could be considered to avoid variability in data, but that they also want to avoid fishers moving from management under a commercial marine license (CML) at the risk of losing those data. There was support among the working group for scenario 3 due to the inherent variability of the non-commercial catch data. The risk under scenario 3 would be the least, and an ACT value in scenario 3 would act as a guard for post-season accountability. While there was also discussion by the working group in support of scenario 2 due to the high quality of the Deep 7 bottomfish commercial data, it was suggested that the lack of accountability for non-commercial uku fishers would put a larger burden on commercial uku fishers.

6. Summary of scores and SEEM* recommendations

The SEEM working group discussed the need for greater participation from non-commercial fishermen in the uku fishery to improve the data from that sector, with a registry potentially being a viable option to support enhanced data collection. A non-commercial license would be ideal if it were to be supported by Hawaii state legislature.

The SEEM working group finalized the following scores for each of the SEEM dimensions:

Dimension	**Score**
Social	1.0
Economic	0.9
Ecological	0.0
Management Uncertainty	5.1
Total	**7.0**

The SEEM scores generated by the working group would set the ACL at a 41% risk of overfishing and the ACT at a 36% risk of overfishing, which would be applied to the 2021-2023 fishing years.