WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

DRAFT Report of the Joint Fishery Ecosystem Plan Team Meeting
May 7, 2025
8:30 a.m. – 5:00 p.m.
Council Office
Honolulu, Hawaii

1. PPT Welcome and Introductions

Emily Crigler, Pelagic Fishery Ecosystem Plan Team (Plan Team) Chair, opened the meeting, reviewed meeting protocols, and invited Plan Team members to introduce themselves. Plan Team members in attendance included Jason Helyer, Bryan Ishida, Jenny Suter, Lynn Rassel, Minling Pan, Domingo Ochavillo, Sean Felise, Eric Cruz, Jude Lizama, Phoebe Woodworth- Jefcoats, Michelle Scully, Jason Philibotte, Frank Roberto, Brent Tibbatts, Ashley Tomita, Felipe Carvalho, Robert Ahrens, Jenny Stahl, and Michael Kinney.

2. 2024 Archipelagic and Pelagic Annual SAFE Reports

A. Fisher Observations

Clay Tam, Pacific Islands Fisheries Group (PIFG), provided a presentation summarizing an initiative started by Roy Morioka and Tam during the COVID-19 pandemic to collect and document observations and experiences from fishers regarding notable environmental and operational changes affecting fisheries. The goal was to ensure that fishers' voices and traditional knowledge were captured to better understand fish stock conditions and supplement the annual SAFE report. The project has evolved into a collaborative effort with agencies and continues into its fourth year, including an annual summary at the beginning of the year and monthly discussions during Advisory Panel meetings.

The initiative primarily focuses on at-sea observations within the small boat fishery sector. In 2024, only 70 days of fishing resulted in landings at the auction, illustrating a shift in market dynamics and an increase in full-time commercial fishing, especially on the neighbor islands. Observations collected span biological indicators like juvenile recruitment (abundance, species, seasonality) and environmental factors such as water temperature, wind, ocean currents, and natural disasters. These observations also extend to fishery-affecting anomalies and operational factors, including shark depredation, fuel prices, infrastructure, market access, regulations, and tourism.

Regional highlights included key themes across jurisdictions. In American Samoa, issues included the lack of a central market, reliance on roadside and direct sales, high fuel costs, and limited fuel access, compounded by shark depredation. In CNMI and Guam, fishers noted fewer trips by highliners and continued shark interactions. In Hawai‘i, infrastructure challenges like competition for harbor space in Kaua‘i and insufficient dock maintenance were noted, causing fishers to travel farther to launch. Shark depredation remains a widespread and growing concern, particularly in nearshore areas and around FADs used by tourists on the Big Island. Management regulations have significantly impacted nearshore and bottomfish fisheries. In Guam, aggressive shark behavior within southern marine protected areas has become especially problematic.

Plan Team discussion on this module update included the following:

- Pan noted that the taste for ta'ape (bluestripe snapper) has changed in the fishing community and asked why. Tam explained there is renewed interest and marketing for ta'ape, including uses like making wallets from their skins. Efforts to reduce their population also contribute, as they displace native species. In West and South Pacific Islander communities, large ta'ape used to be caught for gatherings but are now declining. Many reef fish are being replaced by import; parrotfish now come frozen from Vietnam and fresh from Christmas Island. Despite these changes, uhu (parrotfish) remains a preferred fish, though poke bowls are now more popular than reef fish.
- Tibbatts mentioned that in Guam, taking sharks is legal, but shark finning is prohibited.
- Gough asked how social media is impacting fisheries in Hawaii. Tam responded that social media helps fishers market their catch conveniently. High-end consumers buy from the UFA, while poke-grade fish are often marketed via social media. Neighbor islands without auctions may rely more on this method. However, fishers must balance marketing time with the desire to return to fishing.
- Suter asked why bottomfish only shows up at the auction 70 days a year and noted roadside sales' impact. Tam attributed this to shark depredation and low catch volume. If fishers are far from town, it may not be worth the trip unless they have a large catch.
- Stahluter mentioned a new paper on photo identification of OWT as an advisory. Tam said shark species identification is challenging, especially nearshore where some species are not commonly observed.
    - Stahluter added that a shark ID guide is available online, specifically covering photo identification and residency patterns for OWT sharks.

B. Ecosystem Considerations and Indicator Development

i. Oceanic and Climate Variables

Phoebe Woodworth-Jefcoats, PIFSC ESD, presented the module update for climate and oceanic indicators for the 2024 Pelagic annual SAFE report. A new indicator added this year is the North Pacific Gyre Oscillation (NPGO). The Oceanic Niño Index (ONI) is used to determine the phase of the El Niño–Southern Oscillation (ENSO), which influences Pacific fisheries. In 2024, conditions shifted from neutral to El Niño. The Pacific Decadal Oscillation (PDO), a long-lived multi-decadal ENSO cycle, affects ocean temperature and productivity with implications for fisheries. The NPGO, related to the PDO, was negative in 2024, also influencing ocean conditions. Tropical cyclones are tracked by occurrence, strength, and energy due to their potential impact on fishing operations.

For Hawaii, sea surface temperature (SST) continues to rise, affecting winds and fish distributions. Temperature trends at 200–300 meters depth, important for the deep-set bigeye tuna (BET) fishery, are monitored because BET have specific temperature preferences. Ocean color, measured by satellite, indicates ocean productivity. The North Pacific Subtropical Frontal Zone (STF) and Transition Zone Chlorophyll Front (TZCF) are important fishing areas for swordfish. Satellite data also estimate median phytoplankton size, which is projected to decline with climate change and has implications for the food web.

Additional indicators include fish community size structure, which is influenced by climate, and bigeye tuna weight-per-unit-effort from the previous two years, which can indicate strong recruitment pulses potentially linked to climate. The bigeye recruitment index is based on small bigeye tuna catch rates peaking 1–2 years before total catch rates peak. The bigeye catch rate

forecast leverages median phytoplankton size to predict catch rates up to four years in advance. Looking ahead, there is a focus on observational and research needs, including data availability, to improve understanding and management of these fisheries.

Plan Team discussion on this module update included the following:

- Sculley asked if CPUE plots are standardized, noting declines could be due to factors like bait changes. Woodworth-Jefcoats clarified that CPUE values are nominal
    - Sculley warned that using nominal CPUE may lead to misunderstandings.
    - Sabater agreed and noted discussions in the APT about improving CPUE presentation. He suggested omitting nominal CPUE from the annual SAFE report as part of the revamp process.
    - Council staff suggested that alternative metrics could be provided alongside nominal CPUE if nominal
- Helyer observed that the bigeye tuna (BET) forecast may be overpredicting. Woodworth-Jefcoats acknowledged this possibility due to the long (four-year) forecast window, and she is working to improve forecast robustness.
- Stahl asked if phytoplankton size decline is being examined by species. Woodworth-Jefcoats replied that they are not currently looking at the species level and are more focused on general phytoplankton trends.
- Helyer asked about long-term wind changes in Hawaii and potential connections to eddy generation. Woodworth-Jefcoats responded that long-term trends in wind strength and direction are being analyzed; climate change may now be revealing those trends.
    - Stahl noted increased variability with climate change makes forecasting harder and inquired how we should adapt.
    - Woodworth-Jefcoats acknowledged increasing difficulties in forecasting it as the baseline shifts.
- Remington prompted the Plan Team to consider exploring forecasts or recruitment indicators for yellowfin or skipjack tuna.
    - Council staff referenced past work with Hawaii troll/handline data for small BET, and asked if ocean acidification (i.e., declines in pH) can be analyzed for fishery signal loss or operational changes.
    - Woodworth-Jefcoats stated that forecasting for other tunas in consideration of pH time series has not yet been explored.
    - Pan noted a supplemental study examining SST effects on fish price and quality, especially BET, and other species are also being studied.
- Crigler asked how to integrate this ecosystem/climate data with fishery trends and enhance the "status and trends" section of the modules. For example, warm PDO phases and seabird interactions should be included in modules.
    - Woodworth-Jefcoats asked whether adding more information would require removing anything to keep content concise.
    - Crigler suggested including valuable content in annexes instead of cutting it.
    - Stahl recommended including citations to support the relevance of trends like seabird interactions.
    - Sabater emphasized selecting information with direct relevance to the fishery to support management decisions, referencing Alaska as a model.

a. Archipelagic Update

Remington provided a presentation on archipelagic climate and oceanic indicators, standing in for Daisy Shi, PIFSC ESD. The presentation on island-scale climate and oceanographic indicators provided updates for each island area using spatially resolved data across several environmental variables. For the MHI, sea surface temperatures (SST) continued to rise, with broad implications for atmospheric and oceanic processes including wind patterns and fish distributions. Indicators show increasing thermal stress on coral reefs, variations in ocean color through Chlorophyll-A concentrations, and rainfall data from CMAP precipitation records. Local sea level in Honolulu continues to rise and is projected to increase further. In American Samoa, SST increases have been accompanied by unprecedented coral thermal stress during 2023–2024. Ocean color and rainfall patterns are also being monitored, with similar metrics used as in the MHI. Sea level rise in Pago Pago is increasing, with data collection resuming after the 2009 earthquake. For the Mariana Islands, indicators include rising SST and projected mass coral mortality in 2024 due to thermal stress. Chlorophyll-a levels, precipitation trends, and sea level rise in Guam are also being tracked. The Pacific Remote Island Area (PRIA), specifically Howland and Baker Islands, are experiencing positive Chlorophyll-a anomalies and are expected to see mass coral mortality stemming from 2024. Rainfall trends align with broader regional patterns, and sea level rise is being tracked at Wake Island. Satellite data underpinning these analyses are available through platforms such as NOAA OceanWatch and Coral Reef Watch. Additionally, a climate indicator dashboard is available for the archipelagic grids, offering access to SST, chlorophyll, and rainfall data for the MHI.

Plan Team discussion on this module update included the following:

- Gough liked the idea of putting these indicators into a fisheries context, and Sabater said the annual SAFE reports should house the interpretive text.

At this point in the meeting, Remington noted that he is still soliciting feedback from Plan Team members regarding additional, useful recruitment indices (or similar) that could be implemented into the annual SAFE reports.

Additionally, Woodworth-Jefcoats asked the Plan Team if it is prudent to change the footprint for the Mariana Archipelago grid to move the southern boundary half a degree further south. Tibbatts noted his preference to move all indicators a bit south, as this would be more useful for DAWR and the fishing community.

ii. Socioeconomics

Pan presented the module update for socioeconomics for the 2024 annual SAFE reports, beginning with summaries for insular fisheries. The archipelagic socioeconomics section highlights trends in fuel prices, landings, sales, and revenue across the four areas from 2009 to 2024. In 2024, fuel prices remained generally similar to 2023, with a slight increase observed in the CNMI. BMUS landings for 2024 showed variation between landings and sales in each area. In American Samoa, commercial BMUS landings in 2024 were under 500 pounds, reflecting a declining trend, although this figure was still 40% higher than in 2020. Over the past 17 years, the ratio of BMUS to total commercial landings averaged 17%. Prices in 2024 were comparable to 2020 levels, with the highest recorded in 2017. Trip costs rose significantly, with a 22% increase from 2023. For ECS commercial landings in American Samoa, the top 10 species showed an increase in 2024 compared to 2023, though only five were among the ECS priority species. In the CNMI, commercial landings in 2024 were similar to the previous year. BMUS prices have generally followed an upward trend, but there was a 12% decline in 2024 compared

to 2023. ECS commercial landings and revenues continued their downward trend, both in terms of total landings and value for the top species. In Guam, BMUS commercial landings made up about 19% of the total. The nominal price trend for BMUS showed a slight increase. Trip costs in 2024 rose to $43 per trip, up from a notably low figure in 2023. ECS commercial landings in Guam continued to decline overall.

In Hawaii, while the overall BMUS price trend has been increasing, 2024 saw a 20% decline in revenue, and pounds caught accounted for 89% of the total catch. Specifically, Deep 7 prices declined by 8% in 2024. The price for uku was $7.54 per pound, roughly equal to last year's price. Kona crab and shrimp landings remained low due to area closures for crab fishing in recent years. Only two vessels participated in shrimp fishing, with revenues fluctuating in recent years. Shrimp prices were variable, while Kona crab prices showed a steady increase both in nominal and inflation-adjusted terms. ECS commercial landings and revenue in Hawaii declined by 7% in 2024, continuing a downward trend that began in 2014.

Pan then presented pelagic socioeconomic trends. In Guam, the small boat pelagic fishery has seen a general decline in commercial landings over the past decade, although total landings have remained stable. Nominal fish prices have increased, but adjusted prices have remained flat. Trip costs are around $80 per trip, with fuel costs remaining relatively unchanged since 2015. In the CNMI, commercial landings declined by 33% in 2024. Over the past 20 years, the average commercial-to-total landing ratio has been around 50%. Fish prices continued to decline in 2023 and 2024, and there is no trip cost data available for 2024.

American Samoa's pelagic fishery includes both longline and small boat components. Over an 11-year period, 73% of pelagic sales have come from longline gear, while around 13% of pelagic catch from small boats is sold in local markets. Complete pelagic landing data for 2024 is unavailable, but the commercial rate was about 21% of total landings. Prices were highest between 2014 and 2019, but 2023 prices were lower than 2017–2019, and 2024 data is not yet available. The average trolling trip cost was about $107. For the longline fishery, landings in 2024 slightly increased, but revenue declined due to lower fish prices. Canned fish prices dropped 26% in 2024, with nominal prices reaching a 20-year low. Adjusted fish prices show a long-term decline. Fuel costs made up 52% of longline trip expenses in 2024. Overall trip costs were slightly lower due to decreased fuel use despite higher fuel prices. Net revenue per set fell by 6% in 2024, and a long-term downward trend in net revenue continues. Negative profits have occurred in 4 of the past 19 years, with sustained low profitability from 2022 through 2024. In Hawaii, the longline fishery accounted for 93% of commercial pelagic landings by gear type in 2024. Small boat pelagic landings have been declining since 2013, and adjusted revenue from these boats dropped by 34% in 2024. While nominal prices for all species landed by small boats have generally increased, there was an 11% drop in 2024. Commercial longline landings were higher in 2024, but total revenue declined due to lower fish prices. From 2005 to 2024, prices for bigeye tuna, yellowfin tuna, and sailfish showed an increasing trend but fell in both 2023 and 2024. Adjusted prices show a long-term decrease. Trip costs for longline vessels declined by 8%, largely due to fuel prices and shorter trips. Deep-set trip costs dropped by 8%, while shallow-set trip costs rose by 3%. Net revenue from tuna was strong in 2021, stable in 2022, and lower in both 2023 and 2024. Shallow-set swordfish revenue dropped by 37% in 2024, bringing profits close to zero. A 2022 cost-earnings survey of 61 Hawaii longline vessels found average annual revenue at $807,700, but 38% of vessels reported negative profits. While 2022 was a strong year, economic performance in 2023 and 2024 has been more challenging.

Plan Team discussion on this module update included the following:

- Ishidate noted the Hawaii BMUS decline is due to changes to habitat, with a long-term decrease also driven by highliner dropout and regulations cutting into profitability.
- Crigler asked about the American Samoa longline catch and whether it was sold to the cannery or local markets.Pan explained that four species are always sold to the cannery (albacore, yellowfin, skipjack, opah), but recently opah are also sold to local markets (i.e., 90% to cannery, 5% to local markets).
- Crigler inquired why there was a steep decrease in revenue from swordfish in Hawaii longline in 2024. Pan responded that trip costs for swordfish increased notably in 2024, leading to a sharp drop in net revenue due to both lower CPUE and declining prices. Pan added that in 2024, prices dropped across regions. The Council requested an import analysis last year, and 2024 saw a large increase in imported fish.
    - It was noted that yellowfin might be replacing bigeye in some products, and the Plan Team briefly discussed "tripling."
    - The 2024 price decrease was likely not related to fish damage.
- Pan noted that trip length increased again in 2024. If fuel prices remain steady, swordfish trip costs could rise. Tuna trip length has been gradually increasing year by year.
    - Sabater said it would be a good idea to ask the FIAC for input.
    - Council staff noted that swordfish vessels are trying to shorten trips around high catch periods linked to moon phases. Poor catch results occur when the moon timing is off. A few years ago, many fished around the same moon phase, creating port congestion and affecting market dynamics. In 2024, some vessels may shift timing to avoid this. Imports from South America reaching the East Coast around the same time also depress prices.
- Lynn Rassel, PIRO, asked how much swordfish is shipped to the East Coast.
    - Council staff replied that most is auctioned into TSA containers for air shipment, with a few deep-set vessels involved.
    - Pan added that bottlenecks in shipping containers, such as the need for pre-ordering and limited flight capacity, constrain the export market for swordfish, affecting price.
    - Tomita noted that in the data, tuna may be offloaded and swordfish reported weeks later, though they came from the same trip.
- Michael Kinney, PIFSC, pointed out no data were presented from the West Coast since 2021 and asked if that data stream had stopped. Tomita responded that the data belong to the State of California, and NOAA had a data-sharing agreement with them through 2021. She noted the need to follow up on MOUs and MOAs.
- Helyer asked about the Hawaii longline cost summary and noted only 64 vessels were included. He questioned how representative they were and whether the survey might be missing more profitable vessels.Pan replied that only 60 vessels participated in the survey, representing 43% of the fleet. Revenue from these vessels was compared to the full fleet of 143 vessels and found to be similar on average.
- O'Brien referenced a slide on challenges transitioning to electronic monitoring and said observers collect a lot of information related to cost and crew size. He asked Pan to elaborate on concerns about data collection. Pan noted a clearer picture would emerge in the future.
- Council staff referenced feedback on price per pound from industry members that indicated the decrease in fish price appears accurate. In 2024, lower profit margins were

observed across the supply chain due to weak demand; California-based vessels fishing in Hawaiian waters made longer trips spanning two moon cycles. At the start of the market season, the fishery closed in December, and fish from South America were being sold in Hawaii at a lower per-pound cost.

iii. Essential Fish Habitat

Kisei Tanaka, PIFSC ESD, presented the module update for EFH for the 2024 annual SAFE reports. Tanaka focuses on advancements in EFH modeling, particularly for the uku fishery in the MHI. A key development highlighted is the implementation of the Environmental Data Summary (EDS), an advanced data compilation tool designed to enhance in situ survey data by integrating temporally-summarized external data grids. This integration aims to provide a more comprehensive understanding of environmental factors affecting fish habitats. Additionally, Tanaka discussed the transition to a "Dynamic" EFH model that incorporates thermal performance curves. This approach allows for a more nuanced analysis of how temperature variations influence fish behavior and habitat suitability, thereby improving the accuracy of habitat predictions. These advancements are part of ongoing efforts to refine EFH designations and support sustainable fisheries management in the region.

Plan Team discussion on this module update included the following:

- Sabater asked where the application of this type of analysis stands for the Deep 7 fishery area. Tanaka responded that it can be applied, but it is best to match it using bottom sea temperature data from different sources. It is possible, but some preparation is needed to find matching bottom temperature data.
    - Sabater also asked about the Level 1 EFH analysis. Tanaka responded that Level 1 requires the lowest hurdle among EFH levels and could be derived, though not guaranteed.
- Sabater inquired about the status of finalizing the uku EFH amendment. O'Brien noted he would follow up.
- Sculley requested that maps showing fish densities include Hawaii. Kisei agreed to include them.
- Pan asked why sea surface temperatures on the windward side are lower than those on the leeward side. Tanaka explained it may just be a small temperature difference of about 0.4°C. Rassel suggested it might be due to more cloud cover on the leeward side.

iv. Marine Planning

Council staff presented the module update for marine planning for the 2024 annual SAFE reports. For PRIA, no new aquaculture operations, alternative energy installations, or major military training activities have been reported. In American Samoa, all five FADs were confirmed to be operational in 2024, supporting local fishing activity. The Mariana Islands continue to experience significant military use, particularly in the main islands, though the CNMI currently maintains only three FADs. In Hawaii, ongoing marine planning efforts are framed by the Draft Environmental Impact Statement (DEIS), with the Council emphasizing the importance of evaluating the "no action" alternative. As of January 9, 2025, many of Hawaii's FADs remain operational, providing continued support to pelagic fisheries. Overall, the presentation underscored stable conditions across jurisdictions with respect to marine use and infrastructure, while highlighting continued military presence and planning considerations in certain areas.

Plan Team discussion on this module update included the following:

- Stahl asked what a Notice to Mariners (NTM) entails. Council staff explained that it is related to military activities offshore and alerts fishers to avoid those areas during exercises, regardless of weather.
    - Stahl asked if the notices are brief, and Tibbatts responded that they are usually issued on Friday for the following week's activities or about a week in advance
- Kleiber asked if Hawaii-related notices could be included in the report, Council staff confirmed, noting they would start with Kōloa Rock.
    - Sabater suggested including only notices for activities occurring on the water.
    - Council staff clarified that there is only one in-water site off Kauaʻi with two notices.
- O'Brien asked if NTMs include small craft advisories and whether both should be considered in relation to closures. Sabater stated that this may not be as relevant for marine planning. Council staff confirmed that weather is a consideration.
- Gough observed that Hawaii is the only region where fishing at FADs is recorded, and asked why others are not included
    - Tibbatts said DAWR used to collect that data but stopped because the resolution was not useful.

3. SAFE Report Revamp

Remington presented discussions from the Plan Team working group overseeing the holistic revision effort for the annual SAFE reports. Following a work item raised in May 2024, the group met intersessionally in January 2025 to identify priorities such as improving data presentation, streamlining content, and automating summaries – most of which are now being generated in R to enhance quality and efficiency. At the April 2025 working group meeting, the group focused on standardizing figures and addressing inconsistencies in data sourcing, especially for vessel participation and landings. They noted that the executive summaries are often more robust than the main report sections and recommended reducing redundancy and removing low-value elements like nominal CPUE tables. The team is also exploring external dashboards to present human dimensions data more effectively. Plan Team input was requested to guide next steps and refine the structure and content of future SAFE reports.

Plan Team discussion on this working group update included the following:

- Crigler asked about the use of templates and whether it has been done or considered. She also suggested adding a narrative section at the end of each module.
    - Stahl said templates could speed up the process and noted that shared input on written text across sections might be beneficial.
    - Tomita mentioned this year felt rushed due to staff transitions and retirements. She suggested streamlining economic information into fishery performance modules.
    - Remington agreed on the importance of collaborative narrative development and supported placing economic content where it belongs
- Suter proposed assigning someone or a working group to create a report outline and guide content structure for next year. She noted automation efforts are underway but support with queries is still needed. Suter added that “data integration” can mean many things and that templates will be useful for clarity.

- Sculley proposed incorporating standardized CPUE into the reports, with a narrative explaining observed trends, focused on assessed species
- Gough mentioned WPacFIN has five software developers automating processes and encouraged leveraging available technology and tools.
- Schemmel emphasized the need for clear ground rules while maintaining flexibility. She highlighted differences in skill levels and the need for a coordinator to manage the process and ensure jurisdictional context is included.
    - Suter noted the group started this process a year ago and acknowledged the value of breaking work into manageable tasks based on different skillsets.
- Pan stressed the importance of starting the next report cycle immediately after this one. Pan suggested beginning with a template focused on one fishery and expanding to others.
    - Tomita reminded the Plan Team that early action is key and proposed smaller group meetings before December.
- Woodworth-Jefcoats asked about the timeline and whether a preliminary report could be updated later. Remington confirmed the Council website deadline is June 30, but updates can be made after publication.
    - Sabater reiterated the June deadline is regulatory and committed to starting work much earlier for the next report. Emphasized incremental progress across contributors.

4. Data Integration / Fishery Ecosystem Relationships

A. Establishing Links Between the Environment and Fishery Performance

Bridget Ferriess, AFSC, presented how ecosystem information is systematically incorporated into fisheries management in Alaska. Alaska manages five Large Marine Ecosystems (LMEs) and two groundfish FMPs through a comprehensive framework that includes ecosystem status reports, socioeconomic profiles, risk tables, and alternative modeling approaches. A core component is identifying timely and responsive environmental indicators that link ecosystem conditions to fish stock dynamics. Once these relationships are established, they are operationalized in annual products and integrated into stock assessment models and decision-making processes. Key takeaways include the importance of aligning ecological data with management timelines and decision points, such as setting Acceptable Biological Catch (ABC). Tools like the CEATTLE model and risk tables are used to account for environmental uncertainty and support adaptive management. Despite the progress, challenges remain in data availability, integration of local and traditional knowledge, and ecosystem synthesis. The Alaska experience offers a model for other regions aiming to incorporate ecosystem-based approaches into fisheries management, demonstrating the value of structured processes, clear communication, and cross-sector collaboration.

Plan Team discussion on this informative presentation included the following:

- Sabater asked about the nature of the Alaska region's ecosystem status reports, including how many personnel are involved and what the interactions are like between those who contributed to the reports as well as relevant stock assessments. \
- Ferris responded that the number of contributors to the ecosystem status reports for the Gulf of Alaska can easily reach 100 people, including co-authors. Over time, a well-established communal process has developed, especially in Alaska, where the status reports are widely recognized. This process offers a valuable opportunity for contributors to make their research publicly available, including work from state agencies, which can

be published early through this channel. Each July, all contributors receive templates via email, and their submissions are incorporated into the report. Ferris synthesizes the received information and follows up as needed. Three core individuals manage the overall process. For stock assessment authors, communication typically occurs in the fall. During the off-season, there is continued progress in testing ecosystem-related information. Authors either receive data from Ferris or contact the original contributors.

5. Program Planning

A. IRA Project Updates

Council staff presented on how the Council plans to utilize Inflation Reduction Act (IRA) funds to address climate change impacts and strengthen fisheries management. Under the IRA, NOAA received $3.3 billion, with $1.2 billion allocated to support six national priority areas, including $20 million designated for Regional Fishery Management Councils. The Western Pacific Council's initiatives focus on two overarching goals: improving climate resiliency in fishery management and advancing planning and implementation to support underserved communities. Four regional priority areas guide the Council's work: (1) scenario planning for longline and small boat fisheries to address climate-driven changes; (2) a regulatory review of all five Fishery Ecosystem Plans (FEPs) to enhance responsiveness and service to underserved communities; (3) updates to protected species management strategies to incorporate climate and ecosystem dynamics, using the Hawai‘i longline fishery as a case study; and (4) engaging Pacific Island communities to integrate their knowledge and build capacity through training and consultation. Projects under these priorities are already underway, including scenario planning and community engagement initiatives, with further development expected throughout the region.

Subsequently, Alex Min of Pacific Islands Fisheries Group (PIFG) provided a report on IRA Priority #4, Community Consultation and Capacity Building. Min provided an overview of recent outreach conducted in the Mariana Islands. This initiative is aimed at supporting underserved communities and enhancing their involvement in fisheries management, especially in light of increasing climate-related challenges. The outreach included community meetings and discussions held in both Guam and the CNMI during February 2024. These meetings focused on gathering local perspectives, identifying community concerns, and sharing information about the Council's role and priorities. There was strong community interest in topics such as shark depredation, fisheries infrastructure, and access to fishing areas. Engagement also emphasized the importance of direct engagement and building trust with fishers and local stakeholders. Looking ahead, the project plans to develop more tools and resources, including outreach materials, a calendar of engagement, and coordination with NOAA and local agencies, to strengthen communication, gather input, and support community capacity building in fisheries governance.

Plan Team discussion on this informative presentation included the following:

- Sabater asked how to most effectively share information with the fishing community and on which platforms, emphasizing the need to translate scientific content into common language. Min suggested simplicity, such as one-pagers, and using social media.
    - Crigler noted the ongoing struggle to convert information into plain language.
    - Stahl shared an example of working with Melanie Hutchinson on shark depredation interviews with Kona fishers. She said open-ended questions helped gather ideas on reducing shark interactions.

    - Min recalled the Kona meeting being the most heated, with many concerns raised about sharks. He suggested using open-ended questions over specific prompts.
- Kleiber mentioned ongoing work documenting fisheries infrastructure and asked whether infrastructure needs come up in discussions. Pan said in Wai‘anae, fishers mentioned that akule now school in harbors but can’t be accessed. He noted infrastructure is poor in Hawaii, with boat ramps and harbors around $1 billion behind, while it is better in the Mariana Islands.
- Ishida said fishers often do not know how to answer questions when asked directly. He suggested showing data first could be helpful and offered to provide data for future outreach. Min agreed that sharing data upfront would be beneficial.
- Schemmel asked how they could become more involved and proposed forming a group for fisher engagement. She suggested sharing a calendar to track what has been said and to avoid repetition.
    - Council staff mentioned IRA project steering committees that include PIRO and PIFSC representatives. Due to travel limitations, they will ensure local representatives stay informed.
- Stahl asked whether meetings are ever one-on-one. Min said some people are hesitant to speak during meetings, so staff remain available afterward. Additional one-on-one venues and outreach methods would help.
- Danika raised the issue of excluding some groups like canneries and markets. She asked if there is a plan to include them. Min agreed they should be included. He added that they are currently traveling with Council staff and hope to include NOAA and HDAR staff in future visits. Tables at events already include Council information.
- The Plan Team suggested including a one-pager explaining how to submit comments.

6. Other Issues

There were no other issues discussed

7. Public Comment

There was no public comment.

8. Discussion and Joint Plan Team Recommendations

The Joint Plan Teams did not make recommendations to the Council but agreed to the following work items:

- Approved by consensus, the Pelagic and Archipelagic indicator dashboards for incorporation by reference in the annual SAFE Reports. SAFE report revamp working is group encouraged to incorporate these types of resources and references with links to primary sources to streamline included content
- Regarding the Annual SAFE Report Revamp Process, existing Joint Plan Team Working Group, (members listed below) to:
    - Step 1: Review current modules to make recommendations on where content (i.e., narrative text and/or data summaries) could be streamlined and/or modified or removed, to more closely align with current requirements in the current Fishery Ecosystem Plan (such as P-star and SEEM processes) and MSA National Standards 2.

    - Step 2: Continue the development of a framework to standardize the fishery performance modules.
    - Step 3: Explore approaches to incorporate economic information and fisher observations in the fishery performance modules as opposed to the Ecosystem Considerations chapter.
    - Larger working group members comprised of Marlowe Sabater, Danika Kleiber, Minling Pan, Lynn Rassel, Jenny Suter (and WPacFIN team), Jason Helyer/Bryan Ishida, Brent Tibbats, Frank Roberto, Domingo Ochavillo, Jude Lizama, and Ashley Tomita, and Jenny Stahl. Thomas Remington and Council staff will act as overall coordinators for the larger group.
- New Joint Plan Team Working Group consisting of Michelle Sculley, Jenny Suter, Jenny Stahl, Phoebe Woodworth-Jefcoats, Eva Schemmel, Brad Gough, and Asuka Ishizaki to continue to work towards and build capacity for implementation of open science tools for data summarization efforts for SAFE report modules, adopting approaches used with Hawaii Pelagic Data, International Data, and Climate Indicator modules.
- Regarding CPUE time series in the Annual SAFE Reports, Fishery Performance Section Authors will work with the PIFSC Stock Assessment Program to include standardized CPUE time series in the Annual SAFE Reports where possible alongside nominal CPUE. Nominal CPUE time series should come with narratives expressing the caveats with those data. Authors are to operate in conjunction with the existing Pelagic Plan Team Working Group on Bigeye Tuna CPUE. This work item is intended to develop guidelines on priority management unit species, timelines, the periodicity of CPUE standardization updates (i.e., with assessment cycles), defining metrics of effort, and contents of narratives that accompany standardized CPUE time series. Products are to be shareable within open science tools.

9. Other Business and APT Closing

There was no Plan Team discussion under this agenda item.