



WESTERN  
PACIFIC  
REGIONAL  
FISHERY  
MANAGEMENT  
COUNCIL

## **Three-Year Plan for the Scientific and Statistical Committee of the Western Pacific Regional Fishery Management Council 2024 – 2026**

### **Introduction**

The Scientific and Statistical Committee’s (SSC’s) primary responsibility is to provide ongoing scientific advice for fishery management decisions. The Magnuson-Stevens Fishery Conservation and Management Act<sup>1</sup> (MSA) states that the advice may include but not limited to:

“recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices.”

In providing scientific advice to the Council, the SSC forms working groups to discuss the particular issues in detail between the meetings and give a report to the SSC as a body during its regular meetings. SSC members also participate in peer-reviews of stock assessments and other scientific products for domestic and international fisheries management. The SSC members provide scientific support through projects, analyses, report development, and work products submitted to the Council and reported to the SSC for endorsement. The SSC maintains various research priority documents after vetting through different Council Advisory groups. These include the MSA Five-Year Research Priority, Cooperative Research Priority, and Management Strategy Evaluation Priorities.

### **SSC Three-Year Plan**

The SSC Three-Year Plan will help the SSC and the Council to project the SSC workload in a three-year horizon. This may include action items that are already ongoing, upcoming actions, scientific products anticipated for review, scientific workshop development, and other projects that would generate scientific products to support fishery management decisions. Additional items may be added to the plan as new management priorities emerge. The plan is structured on a four meeting outlook to map the formation of the working groups as needed.

The SSC Three-Year Plan for 2024 to 2026 will focus on the following thematic areas:

- 1) Scientific Advice for Limit Specifications
- 2) Scientific Advice for Management Actions
- 3) Development and Review of Stock Assessment and Other Scientific Products  
Informing Fishery Management

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<sup>1</sup> MSA § 302(g)(1)(B)

- 4) Science to Support Climate-Ready Fisheries and Climate-Informed Fishery Management
- 5) Scientific and Research Priorities to Advance Fishery Management
- 6) Organizational Coordination

### 1) Scientific Advice on Limit Specifications

- a. Setting Acceptable Biological Catch (ABC) for Island Fisheries (routine) – The SSC will deliberate on the new information that was subject to WPSAR review, and make recommendations to the Council for ABC.
- b. Pelagic Management Unit Species (MUS) Specifications (routine) – the SSC will review, per any incoming scientific information, the feasibility of catch limits for US and Participating Territories and any transfer of catch from the Territories. At their June meetings, following Pelagic Plan Team meetings, the SSC may provide annual reviews of multi-year specifications, in case new scientific information is available or if RFMO conservation and management measures allow transfers
- c. Develop catch limits for Pelagic MUS (routine) – the US may need to develop catch limits for billfish stocks that are in an overfished/overfishing situation, yet are under international jurisdiction.
- d. Review and Update of P\* Process – a review and update of the P\* process is expected to occur after the Guam BMUS stock assessment in 2024. The SSC is expected to provide input on this process, including addressing the June 2023 SSC NS1 Working Group recommendation to update the P\* process to be more adaptive to account for near-term directional shifts in productivity, including the use of proportional harvest threshold tables. Productivity shifts may be directly or indirectly affected by climate change. This process may also need to be applicable to the use of catch or effort limit determination based on assessments using spawning potential ratio (SPR).

### 2) Scientific Advice on Management Actions

- a. Review of MUS Revisions– The SSC will provide scientific input on revisions to the Bottomfish Management Unit Species (BMUS) lists under the American Samoa and the Mariana Fishery Ecosystem Plans (FEPs), as well as potential movement or joint-inclusion of incidentally-caught pelagic species into the archipelagic FEPs. Activities may include review of scientific information associated with defining BMUS species complex and stock definitions. As the Council’s small-boat initiatives move forward, there may be opportunities to provide greater attention and detail to the small-boat fisheries including pelagic trolling and handlining that are often overshadowed by the larger longline fisheries.
- b. Implementation of Electronic Monitoring (EM) in the Western Pacific longline fisheries – The Council, PIRO and PIFSC, in coordination with industry, are developing a pre-implementation program for EM with a priority placed on the Hawaii longline fishery, with a primary monitoring goal for protected species monitoring with secondary objective being for discard accounting. The SSC will

provide scientific and technical input on the pre-implementation program development, progress, and associated Council actions.

- c. Council Actions on Improving Protected Species Management Measures – The SSC will provide scientific input on Council actions and associated scientific products to improve protected species management measures in fisheries operating under the FEPs. A pilot study for the Hawaii shallow-set longline fishery seabird measures are expected to be completed in summer 2024, which may lead to follow-up trials and/or a Council action to modify seabird mitigation measures. The Pelagic Plan Team is also undertaking a review of the shallow-set longline fishery sea turtle trip limit measure following three years of implementation data, and the SSC is expected to review the information in June 2024.
- d. Allocation of Fishery Resources – The SSC will be critical to potential fishery allocations by sector or island area as these issues are expected to be reviewed during this period. Uku ACLs are already monitored by sector and allocation considerations may be discussed. Marianas bottomfish may also need to be reviewed as a stock throughout its range as required by MSA and potential allocations between CNMI and Guam could be considered.
- e. Status Determination Criteria under the FEPs – The SSC is also expected to review the SDC for deep-water shrimp during this plan period. SDC for some MUS may also need to be applicable to the use of SPR.

### **3) Development and Review of Stock Assessment and Other Scientific Products Informing Fishery Management**

- a. Stock Assessment and Research Assessment Development (routine) – SSC members will participate in data workshops and review stock assessment data and modeling decisions and results as needed through SSC meetings and the WPSAR process. The SSC may also advise on development of research assessments, including for incidental Pelagic MUS and alternative assessment approaches for BMUS. Research assessments may also be conducted to evaluate ecosystem-based fishery management approaches. The SSC may also advise PIFSC and the Council on guidelines to address non-stationarity in stock assessments, following previous SSC advice on 2023 National Standard 1 (NS1) technical guidance.
- b. Western Pacific Stock Assessment Review (routine) – The SSC will participate in WPSAR meetings and desktop reviews as dictated by the WPSAR schedule. The SSC will also be tasked with reviewing the Terms of Reference for WPSARs and will nominate a WPSAR chair.
- c. Working Group on the Stock Definitions of Archipelagic and Pelagic Fisheries - National Standard 3 (NS3) of the MSA does not provide clear guidance defining stocks relative to management units in U.S. fisheries. A working group will ultimately provide guidance to the MSA NS3 definitions of stock based on management unit species that may be contained within a single jurisdiction,

transboundary, or straddling stock. It will develop guidelines for defining specific stocks of both archipelagic and pelagic management unit species in the Western Pacific Region. This will have implications on the jurisdiction of the stock assessment (e.g. state/territorial versus federal versus international).

- d. Providing Critical Scientific Information to Address International Overfishing (ad hoc) - After an international RFMO science committee or provider considers a MUS in any Council FEP to be overfished or experiencing overfishing, Council staff or NMFS will present the assessment results, minimum stock-size threshold (MSST) from the appropriate FEP, and US catch histories of Council-managed fisheries to the SSC at its very next meeting. The SSC will either 1) advise Council staff to explore and develop management options before the RA issues a letter to the Council (notifying it of its one-year MSA 304(i) obligations); or 2) request NMFS to work with the RFMO science provider to provide necessary scientific information, such as stock projections before the RA issues its letter to the Council. The SSC may also provide input on scientific products that may inform potential rebuilding of these stocks as well as inform U.S. positions in RFMOs.
- e. Workshop on Topical Tuna and South Pacific Albacore Tuna Management in WCPO Longline Fisheries (ad hoc) – The workshop will focus on two themes: 1) area/zone-based management versus flag-based and 2) management objectives and evaluation. The overarching goal is to develop recommendations to update WCPFC CMMs, specifically management measures for WCPFC longline fisheries targeting tropical tunas or albacore, taking into account contemporaneous economic cost-benefit analyses and best available science. The SSC will guide Council staff in framing the workshop and objectives.
- f. Biological Opinion Reviews – The SSC will review and identify scientific issues regarding the impacts assessment and any potential RPMs/RPAs to the Council for ESA consultations for fisheries managed under the Council’s FEPs. The SSC will also continue to review and provide input on the implementation of RPMs in the existing BiOps, including review of the DSLL insular false killer whale observer coverage needs in the overlap area.
- g. Review of Protected Species Scientific Products – The SSC will provide review of relevant protected species abundance estimates, risk assessments, and other related scientific products relevant to the management of fisheries under the Council’s jurisdiction. These may include false killer whale stock assessments, sea turtle risk assessments, and further application of the Protected Species Ensemble Random Forests (PSERF) model to the Hawaii deep-set longline fishery data with continued exploration of alternative Machine Learning modeling approaches.
- h. Socioeconomic Context of Fishery Data Collection – the effectiveness of fishery data collection improvement efforts will be dependent on support and cooperation from the fishing community. An evaluation of community perceptions and understanding related to data reporting is critical to gauging future support and expected

participation in new data collection systems. As needs arise, the SSC may review socio-economic and socio-cultural aspects of fisheries that affect support for new data collection approaches or SSC members with social science expertise may participate in Data Workshops to facilitate consideration of perceptions, incentives, and socio-cultural aspects of fisheries and communities.

#### **4) Science to Support Climate-Ready Fisheries and Climate-Informed Fishery Management**

- a. Scenario Planning for U.S. Pacific Island fisheries – the Council through the Inflation Reduction Act (IRA) funding will be leading scenario planning efforts to ensure resiliency and responsiveness to changing climate and related impacts. The SSC may provide scientific input on products prepared for the planning effort and/or participate in the process. The SSC may also review scientific products related to ecosystem-based fishery management and management strategy evaluation.
- b. Incorporate Climate Effects and Population Trends in Predicting Protected Species Interactions in US Pacific Pelagic Fisheries – the Council through the IRA funding will be carrying out a project to consider strategies for incorporating climate effects and population trends in predicting and managing protected species interactions in U.S. Pacific pelagic fisheries. The SSC will review and provide input on the planning process for this project, and may also participate in associated workshops and consider outcomes for recommending next steps.
- c. Shifting Distributions – Climate change and physical forcing (e.g. ‘regime shifts’) may drive MUS distributions away from their historical distributions and/or away from (or towards) fishery distributions. This may introduce threats to fishery access, food production, and economies. It may also bring about new fishing opportunities. Shifts in Pelagic MUS and preferences for oceanographic conditions and how they might shift with El Niño Southern Oscillation (ENSO) and climate change may assist managers and stakeholders in knowing where the MUS will shift from, or to, in the region. The SSC with other advisory groups may help identify potential opportunity gain and loss due to these shifts. Distributions of MUS and their prey sources may also be affected, which need to be considered under the reauthorization of the MSA. The SSC will review the impacts of distribution and ‘regime shifts’ and provide any guidance to help inform adaptive management.
- d. Island Fisheries Ecosystem Indicators and Thresholds – The Council is working with a contractor to identify the ecosystem and climate change indicators that influence the nearshore fisheries and determine the thresholds in those indicators that would trigger management actions. The SSC will utilize the preliminary product and develop the scientific framework that would adopt the modeling approach and apply it to other species particularly for the management of the ecosystem component species. The SSC may review a Council CRCP project on ecosystem indicators and thresholds for the Marianas in the coming years.

- e. National Workshop of the Scientific Coordinating Subcommittee of the CCC - Western Pacific SSC member representatives will participate in the National Workshop of the SCS in Boston in August 2024. The main theme is “Applying ABC Control Rules in a Changing Environment”. The SSC will provide input on the workshop preparations, and will discuss outcomes post-workshop to consider recommendations to the Council on next steps.

Assessing Threat Abatement using Area-based vs. Non-Area-Based Management Tools (e.g., input/output controls in the WP Region optimize yield under NS1 guidance) to Inform Climate-Ready Fishery Management - Benefits of the ocean and its resources would include oxygen production, carbon sequestration, food production, employment, tourism, and biodiversity existence values. Threats would include global warming, ocean acidification, and land-based runoff, pollution, illegal fishing, exotic species, etc. Species may shift and opportunities into the future may be gained or lost for WP fisheries. An SSC working group will analyze the efficacy of management tools to most effectively address such threats specific to the WP Region and contrast those tools with management through Marine National Monuments and National Marine Sanctuaries.

- f. Fishing community resilience and adaptation to future shocks – Establishing a framework to monitor and evaluate impacts, assess resilience, and document adaptations to future external shocks such as natural or social disasters that disrupt fishery production, supply chains, and markets will be critical for efficient fishery management decisions. The SSC will provide guidance on developing this framework.

## **5) Scientific and Research Priorities to Advance Fishery Management**

- a. Review of the Council’s research priorities and informing PIFSC’s Annual Guidance Memorandum and PIFSC Science Plan (routine) – the Council maintains several research priority documents that are used to identify priorities for funding and recommendations for the Annual Guidance Memorandum for PIFSC. These are the MSRA Five Year Research Priorities, Cooperative Research Priorities, Pelagic Fisheries Research Plan, and the Management Strategy Evaluation Priorities. These documents are reviewed in the last quarter of the year in time for the AGM drafting by NMFS and the funding RFP development in the subsequent year. The SSC will annually provide input to the Council in September to inform recommendations to PIFSC. The SSC will also provide input on the draft PIFSC Science Plan as appropriate.
- b. Archipelagic and Pelagic Annual SAFE Report Review (routine) – as part of complying with the requirements of the FEP and National Standard 2, the SSC will review and endorse the draft Annual SAFE reports at its regular June meetings. The regulatory deadline for the reports is June 30 of every year.

- c. NMFS Science Policies (ad hoc) – the SSC will be reviewing science policy documents including Electronic Technologies Policy, NS2-related policies, and guidance updates to NS 4 (allocation), 8 (communities) and 9 (bycatch).

## **6) Organizational Coordination**

- a. Annual and Quarterly Coordination Between Council and PIFSC Regarding Annual Priorities and Status – Council staff, in coordination with the SSC Chair, shall organize regular meetings with PIFSC Division Directors and leadership to discuss fishery science needs that will lead to Council management actions. Increased coordination with PIFSC staff allows for better monitoring of progress in addressing the science needs of the SSC.
- b. PIFSC and NOAA Ongoing Research Updates – As part of the ongoing coordination between the Council and PIFSC, the SSC agenda will periodically include a section on PIFSC and NOAA ongoing research updates. Under this section, the SSC will receive presentations from PIFSC staff on research of fishery management relevance to facilitate productive dialogue between PIFSC/NOAA scientists and SSC members on ongoing work as they are in development or nearing completion. The intent is to provide the opportunity for SSC to become more familiar with ongoing PIFSC/NOAA research, PIFSC/NOAA scientists to get input/feedback from SSC before work is completed, and help facilitate the ongoing coordination for scientific needs for fishery management. Council and PIFSC staff will coordinate to schedule out presentations for this agenda section in advance.

## Schedule of Meetings and Inter-sessional Activities

2024							
<i>Inter-session</i>	<b>March</b>	<i>Inter-session</i>	<b>June</b>	<i>Inter-session</i>	<b>September</b>	<i>Inter-session</i>	<b>December</b>
MHI D7 BF Stock Assessment Benchmark WPSAR (Dec) Guam BF Stock Assessment Update WPSAR (Feb)	MHI D7 BF Stock Assessment Report Guam BF Stock Assessment Report Guam BF Data WPSAR TOR PIFSC ongoing research updates MSRA Research Priorities Draft Review	MHI BF P* and SEEM Develop options for Guam BMUS Rebuilding Updating MSRA Research Priorities 2025-2029	Annual SAFE report review ABC setting for MHI D7 BF Options for Guam BF rebuilding plan and ABC setting DSLL-IFKW overlap area obs coverage evaluation SSLL tori line project report SSLL trip limit review report Annual Review bigeye tuna and/or other MUS multi-year specifications EM Pre-implementation program plan review MSRA Research Priorities 2025-2029 Final Review CIE Review of WCNPO striped marlin assessment	Guam BF Data WPSAR (July)	Research Priority review WCPFC Advice Review of silky shark int'l stock assessment SCS8 Report Review of striped marlin rebuilding plan analyses MHI Uku Stock Assessment Update WPSAR TOR WCPFC SC20 Report PIFSC ongoing research updates	MHI Uku Stock Assessment Update WPSAR (Nov) Potential South Pacific Albacore workshop	CNMI BF & Kona Crab Stock Assessment WPSAR TORs MHI Uku Stock Assessment Report Kona Crab Stock Assessment Update TOR
2025							
<i>Inter-session</i>	<b>March</b>	<i>Inter-session</i>	<b>June</b>	<i>Inter-session</i>	<b>September</b>	<i>Inter-session</i>	<b>December</b>
Kona Crab Stock Assessment Update WPSAR (Feb) MHI Uku P* and SEEM	ABC setting for MHI Uku ABC Review Precious Coral and Deep-water Shrimp Kona Crab Stock Assessment Report PIFSC ongoing research updates	MHI Kona Crab P* and SEEM	Annual SAFE report review Annual review bigeye tuna and/or other MUS multi-year specifications CNMI BF Stock Assessment Report ABC Setting for Kona Crab	CNMI BF P* and SEEM	Research Priority review WCPFC advice ABC Setting for CNMI BF Review of oceanic whitetip shark int'l stock assessment WCPFC SC21 Report PIFSC ongoing research updates	WCPFC Tropical tuna measure review	AS BF Stock Assessment WPSAR TOR



2026							
<i>Inter-session</i>	<b>March</b>	<i>Inter-session</i>	<b>June</b>	<i>Inter-session</i>	<b>September</b>	<i>Inter-session</i>	<b>December</b>
AS BF Stock Assessment Update WPSAR (Feb)	AS BF Stock Assessment Update Report PIFSC ongoing research updates		Annual SAFE report review Possible new multi-year specifications for territorial bigeye tuna for 2027-2030		Research Priority review WCPFC advice MHI D7 BF Stock Assessment TOR Review of striped marlin int'l stock assessment Tropical tuna stock assessments WCPFC SC22 Report PIFSC ongoing research updates	MHI D7 BF Stock Assessment Update WPSAR (Nov) WCPFC Tropical tuna measure review	MHI D7 BF Stock Assessment Report MHI Uku Stock Assessment Benchmark WPSAR TOR