



Three-Year Plan for the Scientific and Statistical Committee of the Western Pacific Regional Fishery Management Council

Year 2021 – 2023

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 Act¹ (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 meeting 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 are the MSA Five-Year Research Priority, Cooperative Research Priority, Management Strategy Evaluation Priorities, and Insular and Pelagic Fisheries Research Plans.

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 different working groups that shall meet before the SSC meeting.

The SSC Three-Year Plan for 2021 to 2023 will focus on the following items under each of the following thematic areas: 1) Limit specification (ABC or quotas) for pelagic and island fisheries; 2) Stock Assessment Development; 3) Protected Species; 4) Document reviews; 5)

¹ MSA § 302(g)(1)(B)

Workshop Planning; 6) Projects for Fisheries Management; 7) Ecosystem-Based Fishery Management

1) Limit Specifications

- a. Setting Acceptable Biological Catch for Island Fisheries – the SSC will be deliberating on the new information that was subject to WPSAR review for the main Hawaiian island deep seven bottomfish
- b. Bigeye Tuna Specification – 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.
- c. Develop catch limits for Pelagic MUS – the US may need to develop catch limits for billfish stocks that are in a overfished/overfishing situation, yet are under international jurisdiction.

2) Stock Assessment Development

- a. American Samoa Territory Bottomfish Stock Assessment – SSC members will participate as a consultant in the development of the American Samoa territory bottomfish stock assessment. The SSC member will participate in the data workshop series and work with the stock assessment scientist in the modelling aspect.
- b. Marianas BMUS Species Complex and Stock Definition – SSC members will form a working group to review the Plan Team report on redefining the BMUS complex in the Marianas and whether an archipelagic-wide assessment is warranted.
- c. Working Group on the Stock Definitions of Archipelagic and Pelagic Fisheries - National Standards 3 (NS3) of the MSA does not provide clear guidance defining stocks relative to management units in US 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.
- d. Providing Critical Scientific Information to Address International Overfishing - After an international RFMO science committee or provider considers an MUS in any Council FEP to be overfished or experiencing overfishing, Council staff or NMFS should 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 should 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.
- e. Incorporating climate variability in the stock projections and developing dynamic harvest control rules – stock assessments already incorporate the historical effects of climate change on stock productivity. Future assessments should include

different climate change scenarios in the stock projections that would allow fishery managers informed decisions accounting for climate change impacts. The SSC shall work with stock assessment scientists in developing the approach. The SSC shall work on a climate-informed dynamic harvest control rules recognizing that the fishery ecosystem is not static.

3) Protected Species

- a. BiOp Reviews – ESA consultations for the Hawaii deep-set longline fishery, American Samoa longline fishery, and the MHI and Territory bottomfish fisheries are ongoing. When draft Biological Opinions are available, SSC members will be tasked to provide review and identify scientific issues regarding the impacts assessment and any potential RPMs/RPAs to the Council. These BiOps may also contain RPMs/RPAs that require Council management action, and the SSC will be tasked to provide scientific input as those needs arise.
- b. Council Action on Revising Seabird Mitigation Measures for the Hawaii Longline Fishery – The SSC will be tasked to provide scientific input on the Council action to revise seabird mitigation measures, which is currently scheduled for Council action. The associated EFP study will be conducted and 2021, and the SSC will also review the results of that project.
- c. Council Action on Wire Leader Prohibition in the Hawaii Longline Fishery – The SSC will be tasked to provide scientific input on the regulatory amendment to prohibit wire leaders in the Hawaii longline fishery. A portion of this analysis will overlap with the outcomes of the Oceanic Whitetip Shark Working Group addressing MSA 304(i) obligations.
- d. SSC Working Group on FKW Alternative Measures – The SSC formed a working group to develop recommendations on alternative approaches to weak hooks for reducing impacts to false killer whales (FKWs) in the Hawaii deep-set longline fishery. WG will present its progress at the March 2021, with work expected to continue through the June 2021 meeting.

4) Document Review

- a. Archipelagic and Pelagic Annual SAFE Report Review – as part of complying with the requirements of the FEP and National Standard 2, the SSC shall 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.
- b. Western Pacific Stock Assessment Review – between 2021 and 2023, the SSC is looking at two reviews, first is the WPSAR of the American Samoa bottomfish benchmark assessment and second is the review of the Essential Fish Habitat delineation method for insular fisheries
- c. International Stock Assessment Review – The SSC will like to review stock assessment briefings and working groups prior to the WCPFC Science Committee, to inform positions of the US at Committee
- d. National Standard 1 Technical Guidance Memorandum – NMFS will be releasing two Technical Guidance Memoranda under the National Standard 1. The first is the Tech Memo on biological reference points and second is on the data limited

- fisheries. The SSC will be tasked to review and provide comments. Working groups will be formed to provide an in-depth review and provide a report.
- e. NMFS Science Policies – the SSC will be reviewing science policy documents including Electronic Technologies Policy, NS2-related policies etc
 - f. Review of the Council’s research priorities – the WPRFMC maintains different 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 on the last quarter of the year in time for the AGM drafting by NMFS and the funding RFP development in the subsequent year.
 - g. Review of Status Determination Criteria under a revised MSA – Status determination criteria under a revised MSA may require stocks deemed overfished to be instead determined “depleted”. However, overfished and depleted may have differing connotations. The SSC should provide some clarity or suggest criteria for when a stock is overfished vs. depleted.
 - h. Review and monitoring of ongoing negotiations in areas beyond national jurisdiction – The UN Convention for the Conservation of Biodiversity in Areas Beyond National Jurisdiction (BBNJ) and deep-sea mining authorized under the International Seabed Authority (ISA) may have deleterious impacts on WP Region fisheries and their ecosystems. This will compound the effects of climate change with disproportionate impacts to fisheries. The SSC should monitor the development of these ongoing negotiations and their associated activities, review their impacts on fisheries and their ecosystems as new information arises, and make recommendations accordingly at their discretion.

5) Workshop Planning

- a. Workshop on bigeye tuna management in WCPO longline fisheries – comes with 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 CMM-2018-01, specifically management measures for WCPFC longline fisheries targeting tropical tunas, taking into account contemporaneous economic cost-benefit analyses and best available science. The SSC should guide Council staff in framing the workshop and objectives.

6) Project for Fisheries Management

- a. Applying the EFH Delineation Model to Uku and Territory Bottomfish – SSC member developed the EFH delineation model. This project will apply the model to the management unit species, particularly to *Aprion virescens* and the territorial BMUS complex. The results of the project will be subject to WPSAR to refine the EFH definition for these species
- b. Assessing threat abatement using area-based vs. non-area-based management tools in the WP Region – 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 based runoff, pollution, illegal fishing, exotic species, etc. An SSC subcommittee could analyze the efficacy of management tools to most effectively address such threats specific to the WP Region.

7) Ecosystem-Based Fishery Management

- a. Review of the Ecosystem Indicators and Thresholds – The Council is working with the Donovan Lab at Arizona State University that would identify the ecosystem and climate change indicators that influences the near shore fisheries and determines the thresholds in those indicators that would trigger management actions. The SSC shall review the final technical report and provide recommendations on how to operationalize the product to support near shore fisheries management.
- b. 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 render fishery opportunities. Distributions of MUS and their prey sources may also be affected, which need to be considered under reauthorization if the MSA. The SSC should review the impacts of distribution and ‘regime shifts’ and provide any guidance to help inform adaptive management.

Schedule of Meetings and Working Group Sessions

2021							
<i>Inter-session</i>	March	<i>Inter-session</i>	June	<i>Inter-session</i>	September	<i>Inter-session</i>	December
FKW WG	Deep 7 BF ABC Setting Initial Action	FKW WG	Deep 7 BF ABC Setting Final Action	SSC WG SG3	NS1 TG SG3 Data Poor Stocks	AS Stock Assess Data WS	AS Stock Assess Data WS report
OCS WG		BiOp review?		AS Stock Assess Data WS	NS1 TG SG1 Bio Ref Pts	EFH Delineation WPSAR	
NPO Striped Marlin Action Team	Wire leader amendment	BET longline management in WCPO	Uku ABC Setting Final Action	SSC WG SG1	Seabird mitigation measures (anticipated final action)	Stock definitions of Island and Pelagic MUS WG	
	NPO striped marlin catch limits		FKW WG	WCPFC SC17	Research Priority review	WCPFC PAC	
	Seabird mitigation measures		BiOp review?				
	FKW WG		Annual SAFE report review				
	BiOp review?						
2022							
<i>Inter-session</i>	March	<i>Inter-session</i>	June	<i>Inter-session</i>	September	<i>Inter-session</i>	December
SSC SG on MA BMUS Complex and Stock definition	Uku and Territory BF EFH Review		SSC SG on MA BMUS report	MA Stock Assess Data WS	Research Priority review	MA Stock Assess Data WS	
			Annual SAFE report review	WCPFC SC18		WCPFC PAC	
2023							
<i>Inter-session</i>	March	<i>Inter-session</i>	June	<i>Inter-session</i>	September	<i>Inter-session</i>	December
SSC subgroup on the nearshore EBFM project	Nearshore fishery ecosystem indicators and threshold	AS BF Stock Assess WPSAR	Annual SAFE report review	WCPFC SC19	AS BF WPSAR report	P* and SEEM Analysis WG	ABC Setting for AS BMUS
				BET stock assessment	AS BF Stock Assessment Report	WCPFC PAC	
					Research Priority review		