

Council IRA Protected Species Workshop #1

Draft Concept Document

Overarching scope of the Council's IRA Protected Species Project: A significant component of managing the Hawai'i and American Samoa longline fisheries under the Council's Pacific Pelagic FEP is reducing impacts to protected species. These fisheries encounter a broad range of protected species during their operations, including seabirds, marine mammals, and elasmobranchs. Management measures implemented under the Pelagic FEP to address protected species interactions include gear restrictions, handling and release requirements, interaction limits, and observer coverage. Managing these impacts in the fishery requires balancing cross-taxa impacts, socioeconomic effects, linkages with ESA and MMPA, and the broader international fisheries context. This management setting is expected to increase in complexity due to uncertainties associated with effects of environmental variability on protected species population trends and distribution, target fish stock distribution and availability, and related fishing operation changes. It is necessary to better understand how the variability in environmental conditions and other factors may affect the rate of protected species interactions in the region's fisheries, and to develop and implement strategies that can respond to those changes.

Focus of Workshop #1: The first workshop will convene managers, scientists, and fishery representatives to improve understanding of how ecosystem drivers interact with protected species population trends/distributions within the context of the Hawaii longline fishery and explore alternative strategies for future management, with a focus on implications for protected species that are on a recovering trajectory.

Proposed Dates: Wednesday, October 29th - Thursday, October 30th, 2025

The workshop will consider recent examples from the Hawaii deep-set and shallow-set longline fisheries, which has experienced higher interactions with ESA-listed oceanic whitetip shark, leatherback turtles and loggerhead turtles in recent years. Recent population assessments for oceanic whitetip sharks in the Western and Central Pacific Ocean and North Pacific loggerhead turtles indicate that these populations are showing signs of recovery, whereas the Western Pacific leatherback turtles continue to be a species of concern although there are some indications that the population trend may have stabilized. Recent observed changes in interactions may also be influenced by variability in the spatial distribution of the fishing effort in recent years, as well as oceanographic conditions.

This workshop will explore a potential range of management responses to these types of interaction changes in the future, including processes for determining whether a management concern exists, evaluating population-level risks and impacts, predicting future magnitude of interactions, and strategies for managing interactions into the future while balancing the mandates of MSA, ESA, MMPA and other applicable law.

Workshop Process: In general, when there is a listed species that appears to have a recovering population, it is possible to have fishery management challenges that coincide with the recovery. When fishery interactions with protected species coincide with a recovering population, conflicts can emerge within the context of the overarching objectives of the MSA, ESA, and MMPA. The goal of this workshop is to implement a Structured Decision Making (SDM) approach to provide a framework that can be used to identify the points of contention, discuss possible options and provide a clear documentation of how different alternative management actions can specifically address areas of potential conflict. The SDM process also yields an influence diagram that provides a visual representation of key aspects of the decision model. This influence diagram provides the basis for identifying science products that help inform the decision context. Typically, the science products are used in this context to depict the known dynamics of the system of interest, including the characterization and quantification of key sources of uncertainty that help inform the context for the areas of potential conflict.

The SDM approach will be developed and documented in a web-based platform that provides participants equal access to all aspects of the decision model that will be actively developed during the workshop. This transparency helps improve the communication among participants of the workshop and increases the defensibility of the final model and its corresponding documentation. The pivot for the content proposed for this workshop is to deal with oceanic whitetip shark populations and recent ITS issues associated with activity in the deep-set fishery. Since the SDM approach can be used for any specific set of conflicts that arise in the context of the interplay among MSA, ESA and MMPA, the application developed here can provide a general roadmap for application to analogous situations in the future.

Potential agenda for a two-day workshop

Day One (10/29/25)

9-12: Presentations by participants on relevant aspects of the decision landscape. Includes a break from 10:15-10:45.

12-1 [Lunch]

1-4: Initial SDM session. This will focus on the development of an Objectives hierarchy. What are the values that underlie the longline fisheries, ESA, MSA and MMPA? For the specific issue being considered here, how can these values be framed into Objectives with concise spatial and temporal domains. The delineation of the realm of influence helps provide the context for the clear definition of Measures that will be used to assess each Objective.

Day Two (10/30/25)

9-12: Brief review of the material from yesterday. Move on to a discussion of the different Options that could be considered. Once a somewhat exhaustive list of Options is developed, the group will work to see how the Options link to the different Objectives. Includes a break from 10:15-10:45.

12-1 [Lunch]: Tom and Paul work over lunch to refine the emergent Influence Diagram.

1-4: Revisit Objectives, Measures, and Options in the context of the Influence Diagram that provides a visual depiction of the decision space. The group will then begin to discuss where the relevant science models fit into the influence diagram to help identify, and characterize important sources of Uncertainty that address the issues identified by the group.