



North Pacific Fishery Management Council

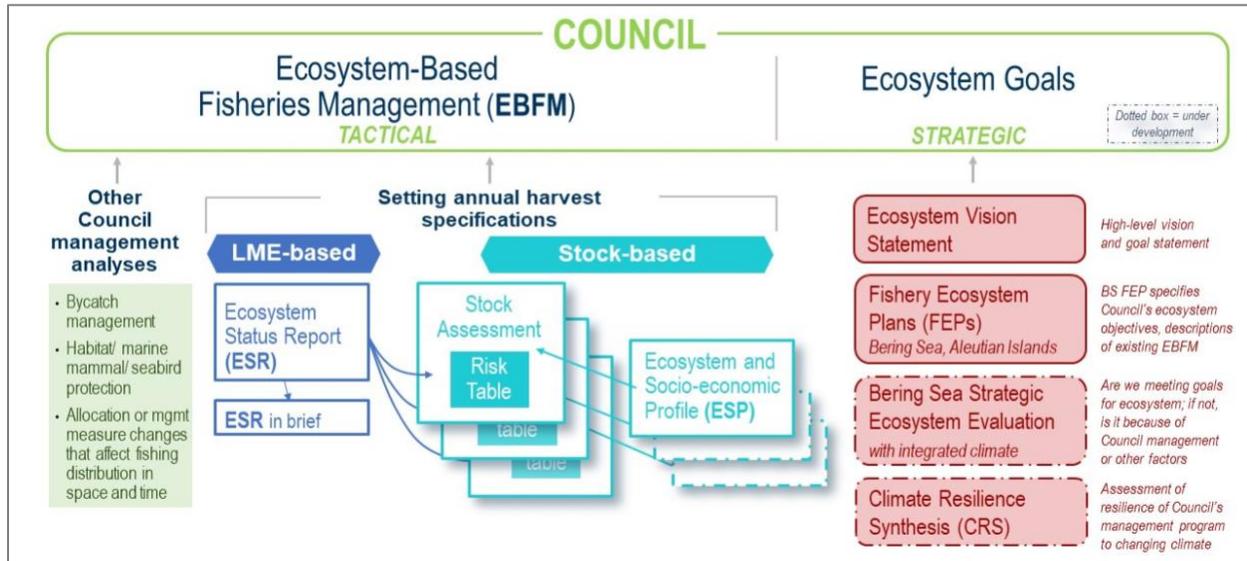
Simon Kinneen, Chair | David Witherell, Executive Director
1007 W. 3rd Avenue, Suite 400, Anchorage, AK 99501
Phone 907-271-2809 | www.npfmc.org

North Pacific Fishery Management Council Ecosystem-based Fishery Management

The North Pacific Council has utilized an ecosystem approach to fisheries for many years. We set conservative catch limits that incorporate ecosystem considerations; habitat, marine mammal, seabird, bycatch, and forage fish protections are built into the fishery management plans; and we have extensive reporting and monitoring through industry-funded observers and electronic monitoring. Moving towards EBFM is a process and as new information or tools become available, the Council responds by improving the fishery management program.

Over the years, the Council has articulated an ecosystem vision statement and comprehensive ecosystem-based goals and objectives for the groundfish fishery management plans. Ecosystem factors are considered annually during harvest specifications, and the Council has developed two Fishery Ecosystem Plans for the Aleutian Islands and the Bering Sea, which each build on lessons learned from our and national experiences.

NPFMC Ecosystem-based Fishery Management Reports and Products

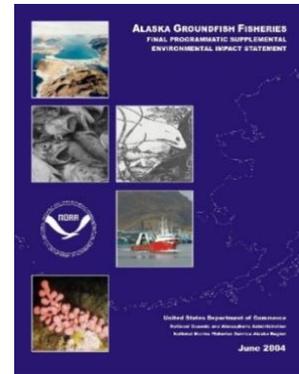


Strategic documents

EBFM management policies

Ecosystem Vision Statement – In February 2014, the Council adopted an Ecosystem Policy that shall be given effect through all of the Council’s work, including long-term planning initiatives, fishery management actions, and science planning to support ecosystem-based fishery management. The Ecosystem Policy includes three parts: a value statement, a vision statement, and an implementation strategy.

[Groundfish management policy](#) – The Council originally adopted its groundfish management policy in 2004. The management approach incorporates forward-looking conservation measures that address different levels of uncertainty in order to ensure the continued sustainability of managed species. A series of 45 objectives are identified to prevent overfishing, promote sustainable fisheries and communities, preserve the food web, manage incidental catch and reduce bycatch and waste, avoid impacts to seabirds and marine mammals, reduce and avoid impacts to habitat, promote equitable and efficient use of fishery resources, increase Alaska Native consultation, and improve data quality, monitoring and enforcement. The Council applies the philosophy captured in the groundfish policy to its management of all Council fisheries.



Fishery Ecosystem Plans

The NPFMC uses Fisheries Ecosystem Plans (FEPs) as a tool to enhance the Council’s management programs with more ecosystem science, broader ecosystem considerations, and management policies that coordinate Council management across all Fishery Management Plans within an ecosystem.

The Council’s interest was to develop FEPs that:

- provide added value to existing Council documents, processes, and decision-making;
- deliver targeted, evolving ecosystem evaluations but does not overwhelm the audience with a compilation of ecosystem information; and
- result in measurable improvements to fishery management, but do not directly authorize management actions (action-informing rather than action-forcing).

With the development of first the [Aleutian Islands FEP](#), and building on lessons learned, subsequently the [Bering Sea FEP](#), the Council has established a broad, ongoing framework to guide policy options and associated opportunities, risks, and tradeoffs affecting FMP species and the broader Bering Sea ecosystem in a systematic manner. The FEPs are intended to:

1. Create a transparent public process for the Council to identify ecosystem goals and management responses;
2. Serve as a communication tool for ecosystem science and Council policy;
3. Provide a framework for strategic planning that would guide and prioritize fishery, habitat, and ecosystem research, modeling, and survey needs;
4. Identify connected Bering Sea and Aleutian Island ecosystem components, and their importance for specific management questions;
5. Assess Council management with respect to EBFM best practices, and identify areas of success and areas for improvement on a regular basis;
6. Provide a framework for considering policy options and associated opportunities, risks, and tradeoffs affecting FMP species and the broader Bering Sea and Aleutian Island ecosystem (e.g. evaluation of management tradeoffs among FMPs, fisheries, or with other activities); and
7. Build resiliency in Council management strategies, including options for responding to changing circumstances (e.g. climate change-driven changes to fish distribution and abundance, changes in shipping patterns, etc.).

The [Bering Sea FEP](#) is designed to provide a “core” document that identifies current procedures and best practices for EBFM, provides brief, targeted, and evolving descriptions of the interconnected physical, biological, and human/institutional Bering Sea ecosystem and through ecosystem thresholds and targets, and directs how that information can be used to guide fishery management options.

Additionally, an “action module” format that allows the Council to prioritize staff work on time-sensitive issues, and bring in an advisory taskforce of experts. Two action modules have been initiated to date.

The [Climate Change Action Module](#) has the goal to evaluate the vulnerability of key species and fisheries to climate change and to strengthen resilience in regional fisheries management. The Action Module addresses three objectives. The first product is a [draft Climate Resilience Synthesis](#); future results will also inform “climate-ready” tactical and strategic management measures, which will help ensure a productive Bering Sea marine ecosystem and healthy fisheries for decades to come.



The [Local Knowledge \(LK\), Traditional Knowledge \(TK\), and Subsistence Action Module](#)’s goal is to develop protocols for using LK and TK in management and to understand the impacts of Council decisions on subsistence resources, users, and practices. More specifically, this Action Module aims to provide a roadmap for operationalizing LK and TK (potentially through processes like Co-Production of Knowledge) in the short- to long-term, as well as to formulate methods for assessing the likelihood a given Council action may affect subsistence resources, the ability of users to access those resources or impact subsistence practices. A [draft protocol](#) was initially shared in April 2022, and outcomes are expected to inform where and how these types of knowledge and information should or could consistently enter Council processes.

Harvest specifications process

The Council considers an ecosystem-based [Ecosystem Status Report](#) each year during the harvest specifications agenda item, in order to provide stronger links between indicators that track Alaska ecosystem status and hot topics, and the setting of specifications for individual species. An “in-brief”, four-page summary is also prepared each year, summarizing current conditions, hot topics, and how ecosystem information is used in setting harvest specifications.

In addition, each groundfish stock assessment includes a [risk table](#), where the “risk” is the risk of the allowable biological catch (ABC) exceeding the true (but unknown) overfishing limit (OFL). The risk tables are intended to inform the process of adjusting the ABC from the maximum permissible when needed. Each stock is assessed from level 1 (normal) to level 4 (extreme concern) with respect to assessment, population dynamics, environmental/ecosystem, and fishery performance risk factors external to the assessment.

As well, an increasing number of assessments also include an [Ecological and Socioeconomic Profile](#), which evaluate in one place a summary of stock-specific ecosystem and socioeconomic indicators for consideration with the main stock assessment.

Example – [GOA pollock stock assessment, December 2021](#): Risk table – beginning p.24 ; ESP – p.90

