

ECOSYSTEM ADVISORY SUBPANEL REPORT ON AN ECOSYSTEM FISHERY MANAGEMENT PLAN

The Ecosystem Advisory Subpanel (EAS) met on May 4, 2010 to review an Ecosystem Plan Development Team (EPDT) draft report that was prepared in response to Pacific Fishery Management Council (Council) requested tasks on the initiation of an Ecosystem Fishery Management Plan (EFMP). This report summarizes the recommendations and comments from our May 4th meeting minutes (Agenda Item H.1.c, Attachment 1). Several members of the EPDT attended our May 4th session and the EAS is generally pleased with the resulting final EPDT report to the Council (Agenda Item H.1.b, Attachment 2).

Regulatory Scope

The EAS believes that what is important at this stage is to present the Council with a full range of regulatory options that clearly maps the tradeoffs of developing an advisory or informational Fishery Ecosystem Plan (FEP) versus a full Fishery Management Plan (FMP).

Review of Existing FMPs and Fishery Management Tools

It is important to first determine what existing mechanisms are useful in meeting ecosystem-based fishery management (EBFM) objectives before developing a purpose and need statement. That is, does the Council have everything it needs within existing FMPs? If not, what is lacking and what sort of plan does the Council need to reach its objectives? In line with these questions, the EAS agrees with the initial tasks recommended by the Scientific and Statistical Committee (SSC) in November 2009:

- Catalog aspects of ecosystem management that are already taking place under the current FMPs (e.g., habitat protection and protected species).
- Examine what gaps within or between the FMPs need to be filled by ecosystem based management.
- Analyze the goals and objective across the current FMPs and see if they can be more consistent.
- Analyze why it is important to augment single species management. What are the outcomes ecosystem based management may achieve that are not possible through single species management?
- Document the approaches to ecosystem management that have been used in other regions.

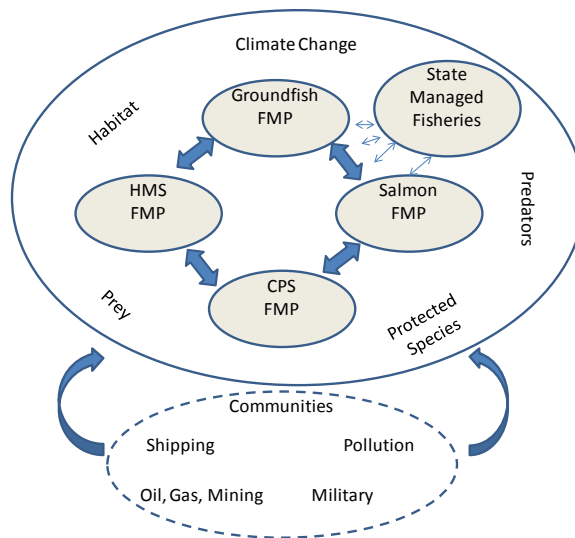
Defining EBFM and Developing a Purpose and Need

The EAS developed the following working definition of EBFM to facilitate our discussions:
EBFM is a systems approach that looks at interactions of habitats and species to optimize ecosystem services in ways that encourage sustainability of the broader marine ecosystem and the health and resilience of fisheries, fish stocks, fishing communities.

In this context, biodiversity (species, genetic, age, etc.) and the human component (viable communities, seafood supply, etc.) were discussed as example criteria for assessing ecosystem sustainability.

The EAS notes that Section 3 of the Magnuson Steven Fishery Conservation and Management Act (MSA) defines the terms “conservation and management” and “optimum yield” to include ecological, ecosystem, and marine environment considerations (see Appendix 1). The EAS recommends that the implications of these definitions to existing Council authorities should be further explored for their application to EBFM and the development of an FEP or EFMP.

Specific to development of the Council’s Ecosystem Plan, the EBFM approach would (at the highest level) consider the interrelationships of the Council’s four FMPs. The EAS illustrates this in the following diagram, which is based on the North Pacific Fishery Management Council’s Aleutian Islands FEP:



The solid oval represents the both the four Council FMPs and State managed fisheries for which direct fishery authority exists within the Council arena as well as other aspects of fishery management that the Council may want to consider and/or take action to protect (non-target predators, prey, and protected species, habitat, climate change). As stated, an EBFM approach would consider the interrelationships of the four FMPs, as well as state-managed species, non-target species, and the ecosystems they all rely on. The dashed oval below represents activities or entities that are interrelated to fisheries and fish stocks, but are generally outside the authority of fishery management agencies. The impacts to and from these entities could be considered under EBFM and, although not the direct authority of the Council, Council and/or public input on these matters could be strengthened a broader Council position based on ecosystem considerations within an EFMP.

There are several aspects of current fishery management that could benefit from the linkages depicted above and envisioned for EBFM:

- Area-based conservation zones, at present, are generally constant over time. However, these conservation areas could benefit from a more adaptive strategy that adjusts conservation areas according to prevailing oceanographic and ecological interactions.
- Under the trawl rationalization program, it is believed that the timing of the harvest of individual quota shares will be determined by shareholders based on market considerations. However, there may be biological justification for when and where harvest occurs that could be considered under an EFMP.
- Management decisions increasingly considers impacts to communities when establishing harvest policies, but a broad understanding of how communities operate is lacking and these considerations tend to be segregated by FMPs. An ecosystem approach could provide for a big picture consideration of the cumulative impacts to communities across all Council-managed species.
- Predicting effort in open access groundfish and albacore tuna fisheries is often highly dependent upon the availability of other fishing opportunities such as salmon. Issues of effort shift between fisheries managed under separate FMPs could be better understood from an ecosystem perspective.
- The Council currently addresses many bycatch issues that cross FMPs, e.g., salmon bycatch in groundfish and coastal pelagic fisheries, halibut bycatch in groundfish fisheries, as well as impacts to other protected resources such as sea turtles and marine mammals. An EBFM approach could help to improve how issues that cross FMPs are addressed.

Specific to the purpose of and need for a Council Ecosystem Plan, the EAS identified several specific items to be considered by the PDT in developing the purpose and need statement, specifically:

The EBFM document provides a vehicle to (1) improve information and improve decision making; (2) identify gaps in information; (3) integrate across species-specific FMPs; and (4) provide a nexus to regional and national ecosystem-related endeavors; (5) establish a platform or framework that enables management at the appropriate ecosystem scale for a species or complex of species, (6) create incentives for improved stewardship and (7) encourage innovation by offering an alternative pathway for management of a complex of species that might yield a more robust portfolio of fishing opportunities.

Specific to goals and objectives, the EAS discussed this issue in regard to whether the PFMC Ecosystem Plan would have a narrow focus (e.g., providing a better understanding of the California Current Ecosystem to the Council process to better inform Council decision making) or a broad focus (e.g., specifying measures to achieve optimal harvest levels and desired ecosystem services while maintaining a healthy and sustainable ecosystem, which could include measures beyond the scope of Council authority.) The EAS discussed the practicability of these two general approaches, but reached no conclusion or recommendation.

Framework for Future Management

The EAS supports an evolutionary process that starts with an overarching or programmatic framework as well as the potential for specific management and regulatory actions that could

build or tier off the initial framework. The EAS supports SSC comments from November 2009 for a plan framework:

“...it will be important to establish a general framework in which [an EBFM] plan will operate. This framework should allow the Council to monitor ecosystem characteristics, and take actions to protect the California Current ecosystem or particular ecosystem components as necessary to achieve the goals of the plan.”

“The plan should give the Council the ability to manage ecosystem components that are not specifically treated in the existing FMPs.”

Broad Stakeholder Involvement

In order for the EFMP to be effective and broadly supported, one objective of the plan should be to seek input from multiple stakeholders. The Council process is a good vehicle for public input, but may not routinely involve the full suite of interested stakeholders, particularly those outside the realm of fishery management.

Specific Comments on the Final EPDT Report (Agenda Item H.1.b, Att. 1)

- Broaden the goals and objectives - In order for the EFMP effort to gain traction, it needs to identify ways to achieve "win-win" solutions, i.e. improved ecosystem health and greater fisheries productivity, landings, and vitality of fishing communities. Specifically, the report should incorporate items 6 and 7 from the May 4th EAS meeting (see page 3):
 - (6) Provide a context to create incentives for improved stewardship
 - (7) Encourage innovation by offering an alternative pathway for management of a complex of species that might yield a more robust portfolio of fishing opportunities.
- Add concrete examples of how an EFMP would add value to the Council process – in other words, "How in concrete terms might it be possible for an EFMP to enhance our work?" Appendix A of the EPDT report (Example Practical Considerations for EFMP Alternatives) is a good example of how this type of exercise can inform decision-making.

Recommendations for Future Work

- Continue to develop a full range of regulatory options that clearly explains the tradeoffs between the suite of options; from developing an advisory or informational FEP to a full EFMP.
- Review and carefully consider SSC recommendations from November 2009, specifically for reviewing existing FMPs and EBFM approaches around the nation and the world.
- Request that the Council tap the collective expertise of the Management Teams and Advisory Subpanels of the four FMPs to achieve a comprehensive understanding of existing and needed ecosystem-based management tools.
- Seek to maximize stakeholder input during development and implementation of an EBFM plan.

Appendix 1

MSA Section 3(5) and Section 3(33):

(5) The term "conservation and management" refers to all of the rules, regulations, conditions, methods, and other measures

(A) which are required to rebuild, restore, or maintain, and which are useful in rebuilding, restoring, or maintaining, any fishery resource and the marine environment; and

(B) which are designed to assure that—

(i) a supply of food and other products may be taken, and that recreational benefits may be obtained, on a continuing basis;

(ii) irreversible or long-term adverse effects on fishery resources and the marine environment are avoided; and

(iii) there will be a multiplicity of options available with respect to future uses of these resources.

(33) The term "optimum", with respect to the yield from a fishery, means the amount of fish which—

(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;

(B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and

(C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

PFMC

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