

CHANGES TO THE BS FEP GOALS AND OBJECTIVES CHAPTER 7/20/2018

This document has been prepared by staff for the benefit of the Ecosystem Committee, to identify how the goals and objectives structure has been revised between the February 2018 and July 2018 drafts. Staff comments indicated in red. Some text from the July 2018 draft has been excluded, for brevity.

2 Goals and objectives

2.1 Council's ecosystem vision statement

In February 2014, the Council adopted an ecosystem policy that expressed the Council's intent to continue moving towards EBFM:

UNCHANGED

2.2 Ecosystem Goals

The FEP, though not legally binding, incorporates explicit principles, policies, and guidelines for ecosystem-based management to be implemented in Fishery Management Plans, including measures designed to meet the mandates of the Magnuson-Stevens Fishery Conservation and Management Act, other applicable law, and six established Ecosystem Goals (Figure 2-1):

1. Rebuild, restore, and maintain fish stocks at levels sufficient to protect, maintain, and restore food web structure and function; [*FEP Team recommends rewording as Maintain, rebuild and restore*]
2. Protect, restore, and maintain the ecological processes, trophic levels, diversity, and overall productive capacity of the system;
3. Conserve habitats for fish and other wildlife;
4. Provide for subsistence, commercial, recreational, and non-consumptive uses of the marine environment;
5. Avoid irreversible or long-term adverse effects on fishery resources and the marine environment;
6. Provide a legacy of healthy ecosystems for future generations.

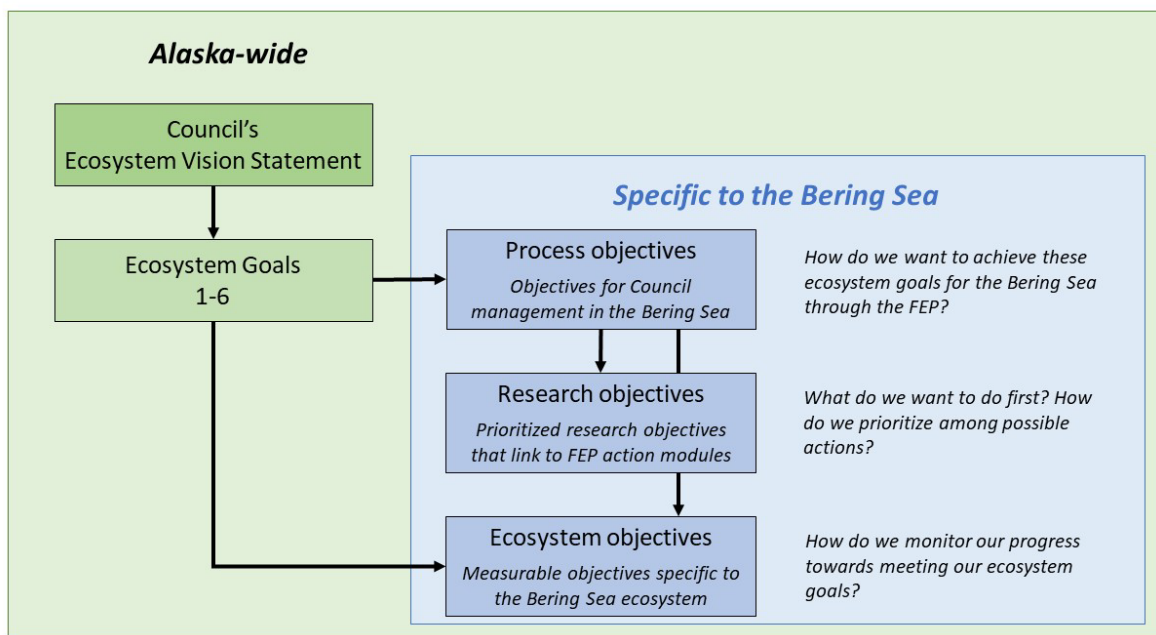
UNCHANGED WORDING, BUT THE NEW GOAL 1 WAS ORIGINALLY GOAL 2, and VICE VERSA.

These goals were discussed and ultimately adopted by the Ecosystem Committee at the March and August 2015 meetings.

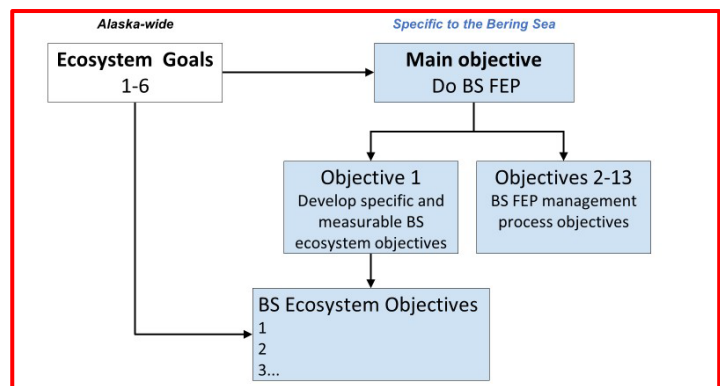
2.3 Objectives

Figure 2-1 illustrates how the Council’s vision statement and the six Ecosystem Goals described above, which are universal to the Council’s management across all of the Alaska fisheries, relate to the objectives that are specific to the Bering Sea FEP. The Council’s main purpose with the FEP is to enable the Council to move toward achieving its six Alaska-wide overarching Ecosystem Goals. As such, the FEP identifies a series of Process Objectives, which define objectives for the Council’s management of the fisheries. Related to these Process Objectives are a series of Research Objectives that the Council will use to prioritize among specific actions to further the Ecosystem Goals. Finally, linked to specific Process Objectives that call for monitoring of ecosystem trends and performance metrics are a series of Ecosystem Objectives, which take the broad, overarching Ecosystem Goals and relate them specifically to Bering Sea ecosystem attributes.

Figure 2-1 Schematic of the relationship between the Council’s ecosystem goals and the Bering Sea FEP objectives.



THIS APPROACH REFINES THE GOAL/OBJECTIVE STRUCTURE PRESENTED IN THE FEBRUARY 2018 DRAFT:



2.3.1 Process Objectives

The following Process Objectives provide the Council's objectives for implementing the Alaska-wide ecosystem goals specifically for the Bering Sea ecosystem area, through the FEP.

Unless otherwise noted, all process objectives are from the February 2018 draft, which were taken directly from the Dec 2015 Council FEP discussion paper (vetted through the Ecosystem Committee).

1. Create and implement a cohesive process for Bering Sea EBFM, using the Council's ecosystem vision statement ~~including developing an operational definition of EBFM, which provides~~ providing a mechanism for incorporating new sources of ecosystem information into Council processes, and defininges the Council's management process to improve understanding by the broader public.
 - *Obj 11 from Feb: Slight rewording by Team to highlight the Council's vision statement which serves as an operational definition of EBFM.*
2. Create a transparent process to track the Council's progress towards achieving its six ecosystem goals.
 - *NEW: Team has added this objective. It is the Council's intent is to achieve its ecosystem goals, and the purpose of the FEP is to help implement that intent. This objective would provide a measurable process to show whether this is being achieved.*
3. ~~Create~~ Maintain and improve upon the open and public process for the Council to identify ecosystem ~~goals~~ objectives and management responses
 - *Obj 2 in Feb: Team wordsmithing to clarify that a public process already exists, and intent is not to change the ecosystem goals (Section 2.2) but to consider how they should be monitored as ecosystem objectives (Section 2.3.3)*
4. Develop discrete research objectives and associated Action Modules to identify and address research and information needs.
 - *NEW: This is similar to the objective 3 above, but highlights that the FEP as a framework will function through Action Modules to address specific needs.*
5. ~~Incorporate/improve Alaska Native, local community, external stakeholder/agency involvement, Local and Traditional Knowledge, access in process.~~ Engage with communities that are in the Bering Sea ecosystem or users of the ecosystem in an open public process
 - *NEW/Adapted from Obj 10 in Feb: The original language was not in the Dec 2015 discussion paper but added later to be consistent with Council and Ecosystem Committee discussions. Team has split this into two parts, this objective dealing with engagement (using current Council language), and the next that deals with LK/TK in management.*
6. Improve incorporation of local knowledge (LK) and traditional knowledge (LK) in Council management for the Bering Sea ecosystem
 - *NEW/Adapted from Obj 10 in Feb (see explanation immediately above) and Obj 12 in Feb which (among other things) 'established a process to use ecosystem information to inform decisions for adaptive management to... consider subsistence needs and traditional knowledge.'*
7. Facilitate and organize communication of ~~Communicate~~ ecosystem science and relevant Council policy between scientists and decision makers
 - *Obj 3 in Feb: wordsmithing to add clarity and remain consistent with other parts of FEP*

8. Provide a framework ~~for strategic planning~~ that would guide identify and prioritize fishery, habitat, and ecosystem research, ~~modeling, and survey~~ and information needs across disciplines.
 - *Obj 4 in Feb: Team changed language because original formulation is too narrow. Want framework of the FEP to operate across disciplines generally, and not be limited.*
9. Synthesize and update current scientific understanding ~~and ongoing monitoring~~ of Bering Sea ecosystem processes and status, including fisheries and subsistence use, to inform fishery management ~~and identify areas that need further work for our understanding of ecosystem processes~~.
 - *Obj 9 in Feb: Team has moved the monitoring component into a separate objective, below.*
10. Maintain and enhance systematic status and trend monitoring of Bering Sea ecosystem processes and status relative to ecosystem objectives to detect change.
 - *NEW/adapted from Obj 9 in Feb: Pulls monitoring into its own objective, and relates monitoring specifically to the ecosystem objectives in Section 2.3.3, which identify how the Council's ecosystem goals are made specific for the Bering Sea ecosystem.*
11. Create and track performance metrics to evaluate the effectiveness of specific management actions.
 - *NEW: Team has added to reflect the other aspect of Council's intent to move towards achieving ecosystem goals, namely the effect FEP tracking, to track whether Council management actions (including those that might result from FEP Action Modules) can be measured in terms of their effectiveness. What effect*
12. Track how FEP information is used in Council process
 - *NEW: This has been a consistent request throughout the development of the FEP, to have the FEP be 'value-added'. Team has added tracking this as an explicit objective.*
13. Establish a process to use ecosystem information to inform decisions for adaptive management, including to address change changing circumstances under novel or intensified stressors, ~~understand and consider tradeoffs among ecological, social, and economic factors of fishery harvest, and consider subsistence needs and traditional knowledge~~.
 - *Part of Obj 12 in Feb: Team restructured to focus exclusively on the first part, stressors, in this objective. Tradeoffs is addressed with cumulative effects in the objective that follows, and TK is addressed in Objective 6 above. Also, research objective 4 specifically addresses a process for guiding use of subsistence data, LK, and TK in Council process.*
14. Provide a framework for considering ~~policy options~~ management strategies and associated opportunities, risks, and tradeoffs, and cumulative effects affecting FMP Council-managed species and the broader Bering Sea ecosystem, with consideration for ecological, economic, social, and cultural factors of fishery harvest.
 - *Reworded from Obj 7 in Feb, with elements of Feb's Obj 12 and 13 included: Team combined the MSE-related Feb Obj 7 with the tradeoff language from Feb's Obj 12 (final clause) and the cumulative effects consideration from Feb's Obj 13 (to review and evaluate direct/indirect/cumulative effects of fishery management actions on the Bering Sea ecosystem).*
15. Periodically review and refine the content of the core FEP, including specification of process, ecosystem, and research objectives.
 - *NEW: Team added objective to reflect intent stated in document to periodically review and update core FEP.*

Some objectives were deleted from the February list of process objectives:

- *Obj 1 from Feb was added to the list of process objectives in the February 2018 draft by the FEP team in 2017, in response to feedback from the SSC (for example see [April 2017 minutes](#)), but has now been removed as the Team has translated the goals into ecosystem objectives in Section 2.3.3.*
 - 1. ~~Translate the overarching ecosystem goals into achievable, measurable ecosystem objectives.~~
- *Objs 5, 6, and 8 from Feb were removed from the list of process objectives, and instead included as research objectives. See staff comments below.*

2.3.2 Research Objectives

The Research Objectives provide the bridge between the Process Objectives and Action Modules to be initiated under the FEP framework. Every Research Objective is related to at least one of the Process Objectives. Additionally, each Research Objective has two equally important parts: the research question, and the avenue for that information feeding into the management process.

THIS IS A WORK IN PROGRESS – Team is considering including a second part to each objective that shows not just the research question but what is the uptake into management, consistent with the intent that each action Module should have a pathway for its outcome to be used in the council process.

1. Assess Council management with respect to ecosystem-based fishery management best practices, and identify areas of success and gaps indicating areas for improvement, on a regular basis.
 - *Links to Process Objective 1*
 - *Was process objective 6 in Feb draft*
2. Identify and develop conceptual model(s) of the connected Bering Sea ecosystem components to respond to specific management questions.
 - *Links to Process Objective 7*
 - *Was process objective 5 in Feb draft*
3. ~~Build~~ Evaluate and develop resiliency ~~for~~ ~~of~~ the Council's management strategies, and investigate options for responding to changing environmental and climatic circumstances such as changes to fish distribution and abundance, shipping patterns, etc.
 - *Links to Process Objective 14*
 - *Was process objective 8 in Feb draft*
4. Develop processes to guide the use of subsistence data, local knowledge (TK), and traditional knowledge (TK) information in the Council process.
 - *Links to Process Objective 6*
 - *Language adapted from process objective 12 in Feb draft, which aimed to establish a process to use ecosystem information to inform decisions for adaptive management to consider subsistence needs and traditional knowledge.*
5. Develop methods to track whether Council research priorities are effectively articulated to partner research agencies and whether funded research is used in the Council process.
 - *Links to Process Objective 8, 4, 11, and 12*
 - *NEW, but links to research action module and language in Feb Obj 10 about external stakeholder/agency involvement and access in process, and FEP objectives to ensure value added from FEP by tracking how action modules or research affect management*

2.3.3 Ecosystem Objectives

Process objectives 10 and 11 call for status and trend monitoring of the Bering Sea ecosystem to detect change, and track the effectiveness of Council management actions. As such, this section provides some detailed Ecosystem Objectives with which to monitor the six overarching Ecosystem Goals identified in Section 2.2. Every Ecosystem Objective is related to at least one of the overarching ecosystem goals.

THIS IS A WORK IN PROGRESS - NEEDS FURTHER DISCUSSION WITH ECOSYSTEM COMMITTEE AND COUNCIL

All of the objectives in this section were developed by the FEP team subgroup and have not yet been discussed with the Ecosystem Committee. However, many of the objectives that are identified are based on objectives that have either been tracked in the Ecosystem Considerations report in the past or present, or are adapted from the Groundfish Programmatic Management Policy.

Ecosystem Goal 1: Rebuild, restore, and maintain fish stocks at levels sufficient to protect, maintain, and restore food web structure and function

1. Maintain target biomass levels for target species using available tools
Example indicator: Fish Stock Sustainability Index (FSSI)
 - *SAFE reports monitor target species relative to overfishing and overfished status. PSEIS has objective to 'Provide for periodic review of the adequacy of F40 and adopt improvements as appropriate'.*
2. Maintain presence and function of non-target species
 - *PSEIS goal is to 'Preserve the Food Web', and objective to 'Encourage research programs to evaluate current population estimates for non-target species with a view to setting appropriate bycatch limits, as information becomes available'.*
 - *Vision statement includes: 'The Council envisions sustainable fisheries that... support robust populations of marine species at all trophic levels; and that 'fishery management explicitly take into account ... fluctuations in productivity for managed species and associated ecosystem components, such as habitats and non-managed species.'*
 - *Monitoring goal from the Ecosystem Considerations report is 'maintain diversity', with objectives addressing effects of fishing on diversity, effects on functional diversity, and effects on genetic diversity.*
3. Adjust fishing-related mortality from the system to be commensurate with total productivity
Proxy indicator: 2 million mt OY cap
 - *PSEIS has objective for groundfish to 'Continue to use the 2 million mt optimum yield cap for the BSAI groundfish fisheries'.*
 - *See vision statement quote above re productivity*

Ecosystem Goal 2: Protect, restore, and maintain the ecological processes, trophic levels, diversity, and overall productive capacity of the system

4. Maintain key predator/prey relationships
 - *Monitoring goal from the Ecosystem Considerations report is 'maintain predator/prey relationships'. Identifying which relationships are "key" would be a research objective for the FEP.*

5. Conserve structure and function of marine communities
 - *Monitoring goal from the Ecosystem Considerations report is 'maintain diversity', with objectives addressing effects of fishing on diversity, effects on functional diversity, and effects on genetic diversity.*
 - *PSEIS goal is to 'Preserve the Food Web' and 'Continue to protect the integrity of the food web through limits on harvest of forage species.'*
- ~~6. Adjust fishing-related mortality from the system to be commensurate with total productivity~~
 - *Deleted by staff because duplicative with Objective 3*

Ecosystem Goal 3: Conserve habitats for fish and other wildlife

7. Minimize adverse impacts essential fish habitat, to the extent practicable
 - *Team intended to mirror MSA language, which actually requires to minimize to the extent practicable adverse impacts on EFH caused by fishing*
8. Minimize/avoid impacts to ecologically-sensitive habitat, including habitat areas of particular concern.
 - *PSEIS goal is 'reduce and avoid impacts to habitat', and included in approach statement is 'maintain a healthy marine resource habitat'.*
9. Minimize and/or avoid impacts to seabirds, marine mammals, and protected species
 - *PSEIS goal is 'avoid impacts to seabirds and marine mammals'; in approach statement is 'minimize human-caused threats to protected species'*
 - *Vision statement includes: 'The Council envisions sustainable fisheries that... support robust populations of marine species at all trophic levels, including marine mammals and seabirds'.*

Ecosystem Goal 4: Provide for subsistence, commercial, recreational, and non-consumptive uses of the marine environment

10. Support employment in Bering Sea fishery and fishery-related industries
 - *Vision statement includes: 'The Council envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities.'*
11. Provide opportunities for new entrants in federal fisheries
 - *Council on record with this as goal.*
12. Promote economic and community stability to harvesting (commercial and recreational) and processing sectors
 - *PSEIS objectives are 'Provide economic and community stability to harvesting and processing sectors through fair allocation of fishery resources' and 'Promote mgmt. measures that, while meeting conservation objectives, are also designed to avoid significant disruption of existing social and economic structures.'*
 - *Team discussed looking at infrastructure as a potential indicator.*
13. Promote sustainable opportunities and community resilience for subsistence users and Alaska Native communities
 - *Vision statement includes: 'The Council envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities.'*

14. Provide for directed fisheries including subsistence fisheries by minimizing bycatch mortality, to the extent practicable

- *Council actions highlight this as goal.*
- *PSEIS objective: 'Control the bycatch of prohibited species through prohibited species catch limits or other appropriate measures'*

15. Preserve the ability for stakeholders to derive non-consumptive and cultural value from the Bering Sea ecosystem

- *Team struggled with how best to identify an objective that addressed the non-consumptive aspect of this goal. We included cultural value as having a strong link with traditional use practices in the Bering Sea.*

Ecosystem Goal 5: Avoid irreversible or long-term adverse effects on fishery resources and the marine environment

Ecosystem Goal 6: Provide a legacy of healthy ecosystems for future generations

Combined objectives for goals 5 and 6:

16. Minimize risk of crossing ecosystem tipping points caused by fishery activity

- *Team suggestion. Would also link to research objectives, and climate change module.*

17. Minimize adverse impacts to fish and other wildlife associated with changes in shipping activity, tourism, and oil and gas development.

- *Team suggestion for looking cumulatively at ecosystem, not just focusing on fishing jurisdiction.*