

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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Action Memo

File Number: Cons 16-007

Agenda Date4/4/2016

Agenda Number:D1

Dan Hull, Chairman Chris Oliver, Executive Director

SUBJECT:

EFH 5-Year Review - Review draft report; Ecosystem Committee report

STAFF CONTACT: Steve MacLean

ACTION REQUIRED:

Review report, action as necessary

BACKGROUND:

The 1996 provisions to the Sustainable Fisheries Act require regional Fishery Management Councils to describe and identify Essential Fish Habitat (EFH) for all fisheries, and to minimize to the extent practicable the adverse effects of fishing on EFH. The Magnuson-Stevens Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". The Act also states that Councils are required to review EFH every five years. This report summarizes the 2016 review of EFH in the Council's FMPs. Based on this review, the Council will decide whether revisions to or reevaluation of EFH and EFH management measures are necessary. If the Council determines that revisions to EFH are necessary, the Council will initiate FMP amendments and the requisite analyses.

This review of EFH included evaluating new environmental and habitat data, development of new models to evaluate EFH, updating models to assess fishing impacts on EFH, updating models to assess non-fishing impacts on EFH, and assessing information gaps and research needs.

In Alaska, most EFH descriptions for groundfish have been limited to qualitative statements on the distribution of adult life stages. While useful, these descriptions could be refined by using species distribution models and available data from a number of sources. For this review, scientists at NMFS Alaska Region, the Alaska Fisheries Science Center, and academic researchers produced species distribution models of EFH for all major species of groundfish and invertebrates in the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska. Models and text descriptions of EFH were generated for each species where data exist for egg, larval, juvenile, and adult life history stages in four seasons. From these, complimentary distribution maps were generated that showed the location of EFH. These modeling methods were reviewed by the Council's SSC in February 2015, outputs are presented here for the first time.

The model-based descriptions of EFH and maps were evaluated by stock assessment authors who were asked to conclude whether the updated descriptions and maps better represented EFH for their species. Authors were also asked to review and edit a series of tables that identify biological and habitat associations for their species. Table 6 in the report, reproduced below, summarizes the stock assessment authors' responses.

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| EFH component | Council FMP | Recommendations and information |
|---|--------------------|---|
| EFH descriptions of individual species or complexes | BSAI Groundfish | Amendments are recommended for all species or complexes All stock authors recommended use of updated maps to describe EFH |
| | GOA Groundfish | Amendments are recommended for all species or complexes except for sculpins All stock authors recommend use of updated maps to describe EFH except for sculpins Recommendations to combine some species into complexes to describe EFH New information available to describe EFH for species for which EFH has not been described |
| | BSAI Crab Scallop | Amendments are recommended for all species or complexes Revisions to habitat and biological associations Recommend use of updated maps to describe EFH No ch anges to EFH are warranted |
| | Salmon | Amendments recommended for all species or complexes Recommend use of updated maps to describe EFH |

During the 2015 EFH cycle, the NPFMC requested several updates to the Long-term Effect Index (LEI) that estimated the eventual proportional reduction of habitat features from a theoretical unaffected habitat sate, should patterns of fishing intensities be continued indefinitely. In response, the Fishing Effects (FE) model was developed that is based on interaction between habitat impact and recovery. This model is presented to the Council for the first time here. It should be noted that estimates of fishing effects have not been updated on the existing definitions of EFH, rather this assessment will be conducted after the Council determines whether revisions to EFH are warranted.

A review of non-fishing impacts on EFH is not yet available, but will be provided to the Council in June 2016.

This report concludes the Council's responsibility to review EFH every 5 years. At this point, the Council's primary decision is to determine whether, based on the information presented in this report, revision to any of the Council's FMPs are warranted. Any revisions would require FMP amendments and the requisite analyses to comply with NEPA and RFA requirements and EO 12866. The questions before the Council can be summarized as follows:

- 1. Are revisions to EFH definitions in any of the Council's FMPs warranted?
- 2. Is a new evaluation on the effects of fishing on EFH necessary?
- 3. Should any new conservation measures be considered to mitigate adverse impacts of fishing?
- 4. Is there a need to identify HAPC priorities and initiate a call for proposals for candidate HAPC sites?
- 5. Does the Council wish to identify new priorities for EFH research for the next five years?