Summary of NMFS EFH Workshop
Held November 6 - 8, 2001, in Juneau, AK

NMFS EFH Workshop, Tuesday, November 6

1. The group **convened** at 10:30 am, 1/2 hour later than the planned starting time. The delayed start was to give the workshop team[1] time to accommodate changes suggested by the EFH Committee, which met on Monday the 5th and Tuesday morning.

2. Cindy Hartmann **welcomed** the participants, and introduced Ellen Hall as the moderator.

3. The group **introduced** themselves (name, agency/affiliation, technical area of expertise)

4.Alan Olson presented a **NEPA overview**, discussed the draft purpose and need statement **(Attachment 1**), reviewed the scoping comments (Scoping Comments and Issue Matrix, **Attachment 2**) and the summary of significant issues (Significant Issues that Suggest Alternative Actions - see **Attachment 3** for summary table of significant issues)[2.] Handouts: copy of PowerPoint presentation, scoping summary, scoping summary matrix of significant issues.

5. Various people presented **descriptions of potential EFH Alternatives**

Linda Behnken presented the **EFH Committee's concepts**, which reflected their Monday/Tuesday morning consensus on David Witherell's paper and theAuk Bay Lab paper and their own variations/options. This included 11 alternatives total.

Jon Heifetz presented the **Auke Bay Lab's concepts**, and noted that all concepts were adequately represented by the Committee's range of 11 alternatives

Matt Eagleton presented a **paper related to alternatives discussion**, and indicated that his discussion points focused on alternatives already brought up; no new alternatives

Anne Hollowed, via phone, presented an additional alternative (#12) that would use a **cluster approach**, a combination of approaches #2 and #8.

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[1] The "Workshop Team" refers to Cindy Hartmann, NMFS coordinator, and Lon Hachmeister, Ellen Hall, and Alan Olson of Foster Wheeler Environmental, the EIS contractor.
[2] The current list of significant issues does not include new input from the Committee, which elected not to take up that agenda item at their meeting on Monday the 5th.

Alternative 4: Following discussion, #4 was separated into #4a and #4b. **4a** is a strictly **abiotic approach**, **4b** combines **biotic and abiotic**.

Alternative 13: K. Koski suggested alternative #13, directed solely for **salmon**. This approach would use the Alaska Stream Catalogue for Salmon to designate EFH.

Alternative 14: Alan Olson suggested alternative #14, an **adaptive management** approach

The workshop team later prepared a handout that summarizes all 15 approaches (Summary of Potential Alternatives for EFH Designation).

6. Instead of having the group **evaluate alternatives against significant issues**, Mike Payne suggested that the group accept/adopt the EFH Committee's evaluation that had already been done. Mike then summarized the Committee's evaluation for the group.

7. The Committee provided a suggested list of points for the technical specialists to address during their evaluation of alternatives. That list of points was discussed and adopted as **criteria for alternative evaluation**. The points include the following:

- Feasibility for analysis
- Scientific merits of each approach
- Efficacy of option in meeting requirements of Magnuson-Stevens Act (spawning, feeding, breeding, and growth to maturity)
- Data availability
- Possible consolidation of options
- Should one approach work for all FMP species or do individual species require a distinct approach to EFH designation?

The group discussed the list and added some additional points, including the following:

- Feasibility of doing an effects analysis
- Multispecies focus
- Risk averse approach

The workshop team later prepared a matrix of the 15 alternatives and the 10 evaluation criteria, based on the day's discussion and the criteria suggested on the original agenda for the day. Two evaluation criteria (multispecies and risk aversion) were inadvertantly left off the matrix, but were added by the groups during their Wednesday exercise.

8. John Olson and Matt Eagleton ended the day with a **GIS presentation** showing the available database of information and how it can be used to produce maps. The group asked questions and discussed the validity of the data, data gaps, etc.

NMFS EFH Workshop, Wednesday, November 7

1. The workshop **convened** at 8:30 am

2. The workshop team handed out the summary of alternative EFH approaches, a list naming those assigned to each breakout group (ground fish, salmon, and crabs/scallops), an agenda, and instructions for the day.

3. Ellen **reviewed the instructions**, and gave each breakout group a sheet describing the roles of facilitator, recorder and reporter.

4. The **participants** in the Breakout groups were:

> **Groundfish Group:** Jon Heifetz, Pat Livingston, Rebecca Reuter, Craig Rose, Franz Mueter, Jeff June, Nina Mollett, Kate Troll, Korie Johnson, John Olson, Linda Behnken, Heather McCarty, Gordon Blue, Ben Enticknap, Thorn Smith, Dan Falvey
>
> **Crab/Scallop Group:** Bob Otto, Gretchen Harrington, Matt Eagleton, Doug Woodby, Stosh Anderson, Earl Krygier, Gordon Blue, Scott Smiley, Dorothy Childers, Glenn Reed
>
> **Salmon Group:** K Koski, Ron Dunlap, Sue Walker, Alan Olson, Greg Ruggerone, Cindy Hartmann

5. The breakout groups designated the following positions

> **Groundfish** -- facilitator - Pat Livingston; recorder – Rebecca Reuter; reporter – Jon Heifetz
>
> **Crab/Scallop** -- facilitator - Bob Otto; recorder - Matt Eagleton; reporter – Doug Woodby.
>
> **Salmon** -- facilitator –Sue Walker; recorder – Alan Olson/Sue Walker; reporter – Sue Walker/Cindy Hartmann

7. Breakout groups **worked through the evaluation matrix** and kept notes on alternatives they liked or disliked and why. The exercise was planned to complete in morning, but time was extended to 2:00 pm to finish evaluations.

8. Each group **reported results** to the rest of the group. There were some variations in how the groups approached and completed their task: two groups ranked alternatives and one didn't; two groups discarded one or more alternatives and one didn't; and two groups lumped alternatives into combinations of similar approaches and one didn't.

9. After reporting and discussing results, breakout groups reconvened to determine whether they wanted to change their **groupings** (or make groupings) and to define a theme for each alternative or group of alternatives.

10. Each breakout group **reported results** to the rest of the group. For the most part, their results were similar to their earlier groupings.

11. Linda Behnken indicated that the EFH Committee would find it most helpful if the scientists would take the various alternative groupings, reconcile the differences, and **create a new set of alternatives** and write a detailed description of those alternatives. A committee (EFH Consolidation Breakout Group) was nominated to meet Thursday morning to accomplish this task. EFH Consolidation Breakout Ggroup members were: Pat Livingston and Craig Rose (groundfish); K. Koski (salmon); and Gretchen Harrington and Matt Eagleton (crabs and scallops).

12. There was not enough time to do the planned **reality check exercise**. That exercise was tabled for the moment.

13. The group adjourned, with plans to start at 8:00 Thursday morning.

NMFS EFH Workshop, Thursday, November 8

1. The meeting **convened** at approximately 8:15 am, with a modified agenda[3].

2. Ellen **reviewed the planned agenda** for the day, indicating that the same breakout groups would meet again and go through the same exercise as Wednesday, this time working with HAPC definitions instead of EFH definitions.

3. Linda Behnken **reviewed the EFH Committee's recommendations as to the HAPC alternatives that should be considered**. Everyone received a copy of the Committee's HAPC alternative handout.

4. Ellen outlined the tasks to be completed. She reminded the group of the roles of facilitator, recorder, and reporter in each group, requested that the breakout groups each take good notes to be turned in at the end of the breakout sessions,

[3] The new agenda was planned by Lon, Ellen, Alan and Mike on Thursday morning before the meeting convened.

that they be prepared to report out their results, and also that anyone who had good notes from Wednesday please turn those in to Ellen so they could be copied for the record.

5. The **breakout groups** began their task at approximately 9:00 am, with instructions to reconvene at 1:00 pm. At the same time, the **EFH Consolidation Breakout Group** left to begin their consolidation task.

6. At approximately 1:15 pm, **report outs began**. We started with **HAPC report outs**.[4] Gaining from their experience on Wednesday, the three breakout groups were able to evaluate the HAPC alternatives and do some grouping during their morning breakout session. Alan Olson reported for the salmon group (flipchart and matrix); Jeff June and Nina Mollett reported for groundfish (typed notes and flipchart), and Doug Woodby reported for crabs and scallops (flipchart and typed notes). All three groups turned in their completed evaluation matrices. HAPC results were similar to EFH results, in that the salmon group chose not to group alternatives, while the groundfish and crab/scallop groups grouped alternatives, but in slightly different ways.

7. The **EFH Consolidation Breakout Group reported** on their alternatives and provided a handout describing their 6 alternatives **(Attachment 4**). Questions and answers followed. This included a discussion about whether Alternative 6 "General Distribution" was different than Alternative 2 "Status Quo". NMFS and NOAA General Counsel will investigate further whether such a distinction is necessary. Linda Behnken indicated that the handout represented the type of information the Committee wanted, and constituted sufficient progress for the workshop. She indicated that more details would be needed before the Committee would feel prepared to forward a recommendation to Council.

8. A **HAPC consolidation breakout group was selected** to consolidate the HAPC alternatives. Members were K. Koski (representing the EFH consolidation group), John Heifetz and Jeff June (groundfish), Doug Woodby (crab/scallop), Greg Ruggerone (salmon), and Lauren Smoker (GC). The group completed their task about 4:00 pm and adjourned. A short report (**Attachment 5**) containing the consolidated HAPC alternatives was provided to the EFH Committee, without reporting back to the large group. Although the workshop team was not present at the report out, we understand that the EFH Committee indicated that the report out represented the type of information they wanted, and constituted sufficient progress for the workshop. We understand that the EFH Committee indicated that more details would be needed before they would feel prepared to forward a recommendation to Council.

[4] Most Committee members were not back from lunch yet, and we didn't want to begin the EFH report out until more Committee members were present.

9. In the meantime, the EFH Committee met separately and the remaining workshop participants viewed a **reality check demonstration** by Matt Eagleton, John Olson, and Rebecca Reuter. Their GIS presentation showed the status quo definition for a couple of species and how new digitized information compares to previously hand-drawn maps.

Questions and answers during this session focused on several related reality check and **NEPA points**, as follows:

- Given the EFH and HAPC alternative definitions, can they be drawn on a map?

- If we took all the EFH alternative maps, would they be the same or different (that is, would different areas be selected under one definition than under another)? One element of that question is that if the species are where the habitat is, then a species-based approach and a habitat-based approach could come up with the same area.

- If all the maps would be virtually the same, would the alternatives actually constitute a sufficient range of alternatives under NEPA?

These issues were not resolved, but the group seemed to be leaning toward consensus that the maps would be slightly different on a detailed scale, that they might diverge more as more data are collected and added, and that they would constitute a sufficient range of alternatives under NEPA because they used different approaches, even though they would map out the same.

7.The GIS demo group adjourned at 4:00 pm.

Attachment 1

Draft Purpose and Need Statement

November 5, 2001

The actions considered in this environmental impact statement (EIS) are needed to meet the essential fish habitat (EFH) requirements of the Magnuson-Stevens Act section 303(a)(7). EFH is defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". The Magnuson-Stevens Act requires amending fishery management plans (FMPs) to identify and describe EFH for each of the managed species and their lifestages.

The purpose of the actions is to strengthen the ability of NMFS and the North Pacific Fisheries Management Council to protect and conserve habitat of finfish, mollusks, and crustaceans. An important theme within the 1996 reauthorization of the Magnuson-Stevens Act is sustainable and risk-averse management of fisheries; it emphasizes the importance of habitat protection to healthy fisheries. Congress recognized that the greatest long-term threat to the viability of commercial and recreational fisheries is the continued loss of marine, estuarine, and other aquatic habitats.

The actions covered by this EIS are specific amendments to the FMPs for Bering Sea-Aleutian Island groundfish, Gulf of Alaska groundfish, King and tanner crabs, scallops, and Pacific salmon. The Notice of Intent to prepare this EIS (66 FR 30395) specifically identified three elements of an FMP amendment to be included these actions. These are to:

- Describe and identify EFH;
- Identify habitat areas of particular concern within EFH; and
- Minimize, to the extent practicable, adverse effects on EFH caused by fishing.

These actions are among those included in the implementing regulations for EFH (50 CFR Ch. VI Part 600 Subpart J). In addition, the implementing regulations identify eight other elements that must be included when amending the FMPs. These elements are to:

- Describe the habitat requirements by life history stage for species covered by the FMP;
- Describe fishing activities that may adversely affect EFH;
- Describe options for managing adverse effects from fishing;
- Identify non-fishing related activities that may adversely affect EFH;
- Conduct a cumulative impacts analysis;
- Describe options for the conservation and enhancement of EFH;
- Identify prey species and their habitat and a description of adverse affects from fishing and non-fishing activities; and
- Identify research and information needs.

The implementing regulations provide specific guidance on methods and types of information to be included under each of the eleven elements.

Attachment 3

Significant Issues That Suggest Alternative Actions		
Criteria for Designation of EFH	24	15
Suggested Alternative for Salmon EFH	4	1
Mitigation Measures to Minimize the Adverse Effects of Fishing on EFH	36	30
HAPC	7	6
Scientific Information, Research, and Uncertainty	13	7
Significant Issues to be Analyzed in the SEIS		
Effects of EFH Designations on Non-Fishing Interests	18	4
Data Used to Analyze and Develop EFH Designations	5	5
Effects of Fishing on EFH and Mitigation Measures	12	10
Economics/Socioeconomics	15	5
Ecosystem, Wildlife and Other Non-targeted Marine Species	13	13
Regulatory Compliance	8	3
Non-Significant Issues to be Considered in the SEIS		
General Comments	13	13
Scientific Information/Research	5	5
NEPA Document and Process	20	10
Non-Significant Issues Not Considered in the SEIS		
Regulatory Compliance and Duplication	11	2
General Comments	6	4
Scientific Information/Research	2	2
NEPA Document and Process	16	6
Economics/Socioeconomics	2	2
Total	**230**	**143**

Attachment 4

Essential Fish Habitat (EFH) Consolidation Breakout Group Report

November 8, 2001

Group Members Included: Pat Livingston, Craig Rose, K Koski, Gretchen Harrington, Matt Eagleton

EFH Alternatives

EFH Alternative 1 – No Action - No EFH Designation

EFH Alternative 2 – Status quo

EFH Alternative 3 – Species based

This alternative would specify EFH designations in accordance with the criteria established in the interim final rule. This approach would allow for finer scale resolution as information improves. Areas for each species/species group and life stage specific would be separately designated and overlaid. Species groups would be taxonomic groups. The levels could be applied species by species or by lifestage, thus, a species would not be limited to level 1 for all lifestages if higher level of information exists for that lifestage.

Level 1 – EFH is the general distribution

Level 2 – EFH is known concentrations (habitat related densities)

Level 3 – EFH is the habitat contributing to the survival, reproduction and growth of a species (including those used by each life stage)

Level 4 – EFH is the habitat with the highest biological productivity

Options:

a) If a stock falls below a threshold for stock abundance (such as minimum stock size thresholds), provide for a reversion to a lower EFH classification level. This would broaden the designated area, resulting in greater protection species at low abundance levels.

b) Alternative would include a specific process (or at least a framework for the process) that includes a research and monitoring program for updating attributes and filling data gaps.

EFH Alternative 4 – Ecosystem/ Habitat Based

This alternative would specify EFH designations relative to classification of habitat types occurring in the region and the assemblages of species and life stages associated with them. Habitat types would be defined by the relevant physical and biotic data, including depth, substrate, and structure forming biota.
Stage 1- Ecosystems and all the species / species groups that occur there (ie; Terrestrial, freshwater, marine).

Stage 2 – Ecoregions and all species / species groups that occur there (ie; Bering Sea, Aleutian Islands)

Stage 3 – Subecoregions (includes NPFMC areas) and all species / species groups that occur there (ie; Southeastern, Bristol Bay)

Stage 4 – habitat types (nearshore, offshore) and all species / species groups that occur there.

Stage 5 - habitat types as clarified by habitat modifiers (ie; substrate structure, vegetation, salinity, depth, sea ice, biotic factors).

Current knowledge of habitat features may limit initial designation to broad types that are primarily defined by depth and area, such as the strata currently used in groundfish assessment surveys.

Analysis of species assemblages may be used to refine classification. Habitat classification and resolution can be further refined with improved knowledge of habitat use by fish and the distribution of habitat features.

A catalog of species and life stages using each habitat would be compiled, using the knowledge level criteria developed in the interim final rule. Thus the assignment of a species to the list for a habitat type may be altered based on improved knowledge of its use of that habitat. Species may be combined into assemblages where sufficient associations are demonstrated to establish the likelihood that protection of the assemblage would assure protection of each component species. The essential fish habitat for each species would be defined as the combination of all habitat types in which that species is included.

Option:

a) Alternative would include a specific process (or at least a framework for the process) that includes a research and monitoring program for updating attributes and filling data gaps.

EFH Alternative 5 – Core Area

Designation of EFH for this alternative is limited to those core areas known to be crucial to the production of species or species groups. Each phase is based on our level of understanding of the relationship between habitat and productivity.

Phase 1 - Specify the habitat areas or locations that have encompassed the highest known concentrations of all lifestages of each species over time.
Phase 2 - Specify the habitat area that encompasses the highest known concentration of the critical life stages that are most limiting to the recruitment to the adult population.

Phase 3 - Specify and designate only the habitat area that contributes most production.

Option:
a) Alternative would include a specific process (or at least a framework for the process) that includes a research and monitoring program for updating attributes and filling data gaps.

EFH Alternative 6 – General Distribution

EFH is defined on a species by species basis based on the general distribution of individual species (and their life history stages).

Attachment 5

Habitat Areas of Particular Concern (HAPC) Consolidation Breakout Group Report

November 8, 2001, 4:20 PM

Group Members Included: Doug Woodby, K Koski, Greg Ruggerone, Jeff June, Lauren Smoker, Jon Heifetz

CONSOLIDATED HAPC ALTERNATIVES

HAPC Alternative 1—NO HAPC

Under this alternative there would be no designation of HAPC in the region.

HAPC Alternative 2—Status Quo (Habitat Type) (Original Alternative 1)

This is the current system where specific habitat types are designated as HAPC, i.e. corals, pinnacles etc.

HAPC Alternative 3—Habitat-Eco-region/Ecological Based Concept (Original Alternatives 5 & 9)

This alternative starts with eco-regions and habitat types and identifies as HAPCs known or inferred habitat types or sites meeting HAPC criteria. Different levels of importance can be based on ecological processes. It incorporates the ability of both habitat type and site-specific designation but allows management action at both levels. Allows potentially different levels of management action among habitat types, sites and regions.

HAPC Alternative 4—Species Distribution "Core" Based Concept (Original Alternatives 2, 5, 7 & 8)

This alternative starts with the assumption that the distribution and abundance of the FMP species (and other species important to FMP species) gives some indication of critically important habitat types or sites that require special protection. At low levels of information we start with species distribution and abundance, filter it through the four criteria and if any one applies HAPC applies.

As more information on the interaction between habitat and FMP species/ecosystem productivity becomes available HAPC could be refined to a core habitat that could be a type or site that might be a bottleneck or keystone habitat.

HAPC Alternative 5-- Site Specific Based Concept (Original Alternatives 3 & 4)

This alternative starts with the assumption that individual sites meeting one or more of the criteria are designated HAPC sites. It doesn't allow for designation of types of habitat but constrains HAPC designation to specific defined sites or locations, such as a particular seamount. Each site would have management objectives and measures specific that site.

We considered these alternatives in combination of all EFH alternatives and found them compatible with all.