# EFH ASSESSMENT TEMPLATE

This template is intended to aid in the preparation of EFH assessments.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a Federal fisheries management plan. The MSA requires Federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA §305(b)(2)).

EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (MSA §3). For the purpose of interpreting this definition of EFH: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle (50 CFR 600.110). Adverse effect means any impact which reduces quality and/or quantity of EFH, and may include direct (*e.g.*, contamination or physical disruption), indirect (*e.g.*, loss of prey or reduction in species fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

The length of the EFH Assessment can vary depending on the magnitude of the potential impacts to EFH, but all EFH Assessments must include the following information: (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects, of the proposed action on EFH, the managed species, and associated species, such as major prey species, including affected life history stages; (3) the Federal agency's views regarding the effects of the action on EFH; and (4) proposed mitigation, if applicable (50 CFR 600.920(g)(2)).

The EFH mandate applies to all species managed under a federal Fishery Management Plan (FMP). In Washington, Oregon, and California, there are three FMPs, covering groundfish, coastal pelagic species, and Pacific salmon. Therefore, Federal agencies must consider the impact of a proposed action on all three types of EFH. A brief description of each type follows. Detailed descriptions are contained in the references following the EFH Assessment template.

> *Groundfish:* EFH for Pacific coast groundfish is defined as the aquatic habitat necessary to allow for groundfish production to support long-term sustainable fisheries for groundfish and for groundfish contributions to a healthy ecosystem. Descriptions of groundfish EFH for each of the 83 species and their life stages result in more than 400 EFH identifications. When these EFHs are taken together, the groundfish EFH includes all waters from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California seaward to the boundary of the U.S. EEZ.
>
> *Coastal pelagic species:* Amendment 8 to The Coastal Pelagic Species Fishery Management

Plan describes the habitat requirements of five pelagic species: Northern anchovy, Pacific sardine, Pacific (chub) mackerel, jack mackerel and market squid. These four finfish and market squid are treated as a single species complex because of similarities in their life histories and habitat requirements. EFH for coastal pelagic species is defined as: The east-west geographic boundary of EFH for CPS is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between $10^{o}$ – $26^{o}$ C. The southern boundary is the U.S.-Mexico maritime boundary. The northern boundary is more dynamic, and is defined as the position of the $10^{o}$ C isotherm, which varies seasonally and annually.

*Pacific salmon - chinook, coho, and Puget Sound pink salmon:* EFH for the Pacific coast salmon fishery means those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem. To achieve that level of production, EFH must include all those streams, lakes, ponds, wetlands, and other currently viable water bodies and most of the habitat historically accessible to salmon in Washington, Oregon, Idaho, and California. In the estuarine and marine areas, salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years).

This template is intended only as a guide to preparing an EFH assessment, and can be modified as the writer sees fit. The text in red is taken from an example and must be modified to fit the proposed action. The text in **bold blue** is explanatory, and should be removed from the final product.

If the EFH assessment is included as a part of, a Biological Assessment (BA) or Biological Evaluation (BE) that will be provided to NMFS, the information already supplied in the BA or BE can be referenced, and does not need to be repeated in the EFH assessment. Headings which do not provide the information required by the EFH regulations, such as the Action Agency and Project Name, which have already been identified do not need to be repeated in the EFH Assessment. If it is included as part of a BA/BE, it must be clearly identified as an EFH Assessment, it must be separated from the ESA components of the BA/BE.

The Pacific Fisheries Management Council has issued descriptions of EFH for the species regulated under three Federal fisheries management plans: groundfish, coastal pelagic species, and Pacific salmon.

**ESSENTIAL FISH HABITAT ASSESSMENT FOR COASTAL DREDGING PROJECTS**

**Action Agency**
US Army Corps of Engineers, Portland District

**Project Name**
The Maintenance Dredging Program for the Oregon Coastal Projects

**Essential Fish Habitat Background**
The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires Federal agencies to consult with NMFS on activities that may adversely affect Essential Fish Habitat (EFH).

The objective of this EFH assessment is to determine whether or not the proposed action(s) "may adversely affect" designated EFH for relevant commercially, federally-managed fisheries species within the proposed action area. It also describes conservation measures proposed to avoid, minimize, or otherwise offset potential adverse effects to designated EFH resulting from the proposed action.

**Description of the Project/Proposed Activity**

**Describe the project or reference description in previous sections of the BA. If previous section referenced, provide a brief description (1 or 2 lines) of the project. The species and life-history stages affected are noted here. They can be listed in table form (see Table 1) and referenced.**

**The Groundfish FMP groups the various EFH descriptions into seven units called "composite" EFHs. This approach focuses on ecological relationships among species and between the species and their habitat, reflecting an ecosystem approach in defining EFH. Seven major habitat types are proposed as the basis for such assemblages or "composites". These major habitat types are readily recognizable by those who potentially may be required to consult about impacts to EFH, and their distributions are relatively stationary and measurable over time and space. The list of groundfish species with EFH should be based on the EFH composite within the action area. An action area may contain more than one composite (e.g., rocky shelf and non-rocky shelf), and the species list should include all groundfish species contained in all of the composites.**

**The seven "composite" EFH identifications are as follows.**

1. **Estuarine - Those waters, substrates and associated biological communities within bays and estuaries of the EEZ, from mean higher high water level (MHHW, which is the high tide line) or extent of upriver saltwater intrusion to the respective outer boundaries for each bay or estuary as defined in 33 CFR 80.1 (Coast Guard lines of demarcation).**

2. **Rocky Shelf - Those waters, substrates, and associated biological communities living**

**on or within ten meters (5.5 fathoms) overlying rocky areas, including reefs, pinnacles, boulders and cobble, along the continental shelf, excluding canyons, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).**

3. **Nonrocky Shelf - Those waters, substrates, and associated biological communities living on or within ten meters (5.5 fathoms) overlying the substrates of the continental shelf, excluding the rocky shelf and canyon composites, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).**

4. **Canyon - Those waters, substrates, and associated biological communities living within submarine canyons, including the walls, beds, seafloor, and any outcrops or landslide morphology, such as slump scarps and debris fields.**

5. **Continental Slope/Basin - Those waters, substrates, and biological communities living on or within 20 meters (11 fathoms) overlying the substrates of the continental slope and basin below the shelf break (~200 meters or 109 fathoms) and extending to the westward boundary of the EEZ.**

6. **Neritic Zone - Those waters and biological communities living in the water column more than ten meters (5.5 fathoms) above the continental shelf.**

7. **Oceanic Zone - Those waters and biological communities living in the water column more than 20 meters (11 fathoms) above the continental slope and abyssal plain, extending to the westward boundary of the EEZ.**

**Potential Adverse Effects of Proposed Project**

**The actual EFH discussed will depend on the project location and the species present. The adverse effects discussed in the BA/BE can be referenced, and additional effects discussed here. Unless it is clear that the effects to an individual species are unique, it is not necessary to discuss the adverse effects on a species-by-species basis, as this would certainly be repetitive, and would provide no additional information. Instead, discuss the project's effects on EFH, generally. However, you should discuss the effects to salmonid, groundfish and coastal pelagic EFH separately.**

*Adverse Effects to Salmon EFH*
*Adverse Effects to Salmon EFH***Describe effects to salmonid EFH**
**Describe effects to salmonid EFH**
*Adverse Effects to Ground Fish EFH*
*Adverse Effects to Ground Fish EFH***Describe effects to groundfish EFH**
**Describe effects to groundfish EFH**

*Adverse Effects to Coastal Pelagics EFH*
*Adverse Effects to Coastal Pelagics EFH***Describe effects to coastal pelagic EFH**
**Describe effects to coastal pelagic EFH**

**EFH Conservation Measures**

**Describe the conservation measures that have been incorporated into the project that will minimize the potential adverse effects to EFH. If they have already been described, refer to that description. An example is:**

**The following measures will be implemented to minimize the potential adverse effects to designated EFH described above.**

1. **Conservation measure 1**
2. **Conservation measure 2**
3. **etc.**

**Conclusion**

**Summarize the potential effect that the project will have on EFH. This takes into account the conservation measures proposed as part of the project that were described above.**

**References**

**These are the references that provide the descriptions and definitions of EFH, and were produced by NMFS and the Pacific Fisheries Management Council. The actual references you may reference will depend on what species (groundfish, coastal pelagics, salmon) are in the action area. They are provided here for convenience.**


Casillas, E., L. Crockett, Y. deReynier, J. Glock, M. Helvey, B. Meyer, C. Schmitt, M. Yoklavich, A. Bailey, B. Chao, B. Johnson and T. Pepperell. 1998. Essential Fish Habitat West Coast Groundfish Appendix, National Marine Fisheries Service, 778 pp.

PFMC (Pacific Fishery Management Council). 1999. Amendment 14 to the Pacific Coast Salmon Plan. Appendix A: Description and Identification of Essential Fish Habitat, Adverse Impacts and Recommended Conservation Measures for Salmon (August 1999).

PFMC (Pacific Fishery Management Council). 1998. Final Environmental Assessment/Regulatory Review for Amendment 11 to the Pacific Coast Groundfish Fishery Management Plan (October 1998).

PFMC (Pacific Fishery Management Council). 1998. The Coastal Pelagic Species Fishery Management Plan: Amendment 8 (December 1998).

Table 1. Species of fishes, and life-stages with designated EFH in the action area. **(EXAMPLE ONLY)**

| Species | Eggs | Larvae | Young Juvenile | Juvenile | Adult | Spawning |
|---|---|---|---|---|---|---|
| **Groundfish** | | | | | | |
| Spiny Dogfish | | | X | X | X | |
| Ratfish | | | | X | X | |
| Lingcod | | X | | X | X | X |
| Cabezon | | X | | | | |
| Kelp Greenling | | X | | | | |
| Pacific Cod | | X | X | X | X | X |
| Pacific Whiting (Hake) | | | X | X | X | |
| Sablefish | | X | X | X | X | X |
| Darkblotched Rockfish | | | | X | X | |
| Greenstriped Rockfish | | | | X | X | |
| Thornyheads | | X | | | | |
| Pacific Ocean Perch | | | | X | X | |
| Widow Rockfish | | | X | X | | |
| Misc. Rockfish | | | | X | X | |
| Arrowtooth Flounder | | | | X | X | |
| Butter Sole | X | X | | | | |
| Curlfin Sole | X | | | | | |
| Dover Sole | X | | | X | X | |
| English Sole | X | X | X | X | X | X |
| Flathead Sole | | X | | X | X | X |
| Pacific Sanddab | | | | X | X | |
| Petrale Sole | | | X | X | X | |
| Rex Sole | X | X | | X | X | |
| Sand Sole | X | X | | | | |
| Starry Flounder | X | X | X | | | X |
| **Coastal Pelagic Species** | | | | | | |
| Northern anchovy | X | X | | X | X | |
| Pacific sardine | X | X | | X | X | |
| Pacific mackerel | X | X | | X | X | |
| Jack mackerel | | | | | X | |
| Market squid | ? | ? | ? | | X | ? |
| **Pacific Salmon** | | | | | | |
| Coho salmon | | | | X | X | |
| Chinook salmon | | | X | X | X | |