

ENDANGERED SPECIES ACT HANDBOOK

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1. FEDERAL TRANSIT ADMINISTRATION: HISTORY AND PURPOSE

History and Purpose

Congress established the Department of Transportation (DOT) in 1966. The mission of the DOT, a cabinet-level executive department of the United States government, is to develop and coordinate policies that will provide an efficient and economical national transportation system, with due regard for need, the environment, and the national defense.

The Department of Transportation contains the Office of the Secretary and twelve individual operating administrations: the United States Coast Guard, the Federal Aviation Administration, the Federal Highway Administration, the Federal Motor Carrier Safety Administration, the Federal Railroad Administration, the National Highway Traffic Safety Administration, the Federal Transit Administration, the Maritime Administration, the Saint Lawrence Seaway Development Corporation, the Research and Special Programs Administration, and the Bureau of Transportation Statistics, each headed by a presidential appointee.

Acknowledging the connection between transportation systems and the needs of urban areas, President Johnson established the Urban Mass Transportation Administration on July 1, 1968. The UMTA was changed in 1991 when President Bush signed the Intermodal Surface Transportation Efficiency Act (ISTEA), providing a six-year reauthorization to restructure the department's highway, highway safety, and transit programs. One effect of this legislation was that the Urban Mass Transportation Administration became the Federal Transit Administration.

Today's Federal Transit Administration ("FTA") is the principal source of Federal financial assistance to America's communities for the planning, development, and improvement of public transportation systems. Public transportation includes buses, subways, light rail, commuter rail, monorail, passenger ferryboats, and trolleys. FTA is one of eleven modal administrations within the U.S. Department of Transportation. FTA functions through a Washington, DC, headquarters office and ten regional offices that assist transit agencies in all 50 states.

For complete information on FTA programs, visit our website at <u>http://www.fta.dot.gov</u>.

2. ENVIRONMENTAL SCOPING

2.1 The NEPA Umbrella

President Nixon signed the **National Environmental Policy Act of 1969** ("**NEPA**") on January 1, 1970. Today, NEPA is the basic national charter for environmental protection. It's purpose is "to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." The NEPA process is a committed partnership among Federal, State, and local governments to take actions that protect and restore the environment. NEPA requires FTA to carefully consider the environmental effects of each proposed project before making a decision to fund it.

National legislation, by its nature, is complex and often perceived as burdensome. However, this is not the intent nor structure of the NEPA process. NEPA is designed for use as an "overarching procedural construct" under which the multitude of legal requirements, environmental concerns, and public interests are united under a single "umbrella" policy (NEPA). This common misunderstanding causes many to approach the various requirements as obstacles or hurdles and thus cause significant frustration and delay. Understanding and coordinating such efforts will result in a better, more efficient, and timelier NEPA process.

The Endangered Species Act of 1973 ("ESA") functions, at least in part, within the framework of the NEPA process. ESA focuses on environmental preservation at the species level and is construed to directly affect federal land and projects. However, it sometimes applies to state, local, and private programs as well. A full understanding of the ESA process in the NEPA context will increase efficiency and avoid unnecessary delays or redundant processes.

FTA is committed to presenting this information in the clearest and easiest way possible. We understand that our Grantees have limited resources and that such education is the best way to use these resources in a streamlined and efficient manner. We are here to assist you in the best way possible and hope that this handbook may be used as an easy and accessible guide to answering questions about the Endangered Species Act and its relationship to NEPA. Included are detailed procedural guides to ESA compliance as well as various templates to assist you in understanding the ESA process as part of an FTA Grant Application.

2.2 Overview of the Endangered Species Act

The Endangered Species Act ("ESA") was adopted in 1973 to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species." It states that all Federal agencies shall utilize their authorities to conserve such species and shall coordinate with State and local agencies to resolve issues in concert with the conservation of endangered species. In 1978 The Department of the Interior, through the United States Fish and Wildlife Service (USFWS), and the Department of Commerce, through the National Marine Fisheries Service (NMFS), established procedures for the Act's consultation process by implementing regulations to carry out Section 7 consultations (50 CFR 402). NMFS and USFWS share jurisdiction to implement the Act. USFWS is responsible for terrestrial plants, animals, and freshwater fish, while NMFS is responsible for marine (saltwater) and anadromous (freshwater/saltwater) fish species. Today the Secretaries of the Interior and Commerce share responsibilities for conducting Section 7 consultation.

Section 7 of ESA states that any action authorized, funded, or carried out by a federal agency must not jeopardize the continued existence of a listed species nor adversely modify the designated "critical habitat" of such species. Please note the following critical sections of the ESA Regulations:

<u>Section 2</u> – Findings, Purpose, and Policy: provides critical context for all local work on ESA response and an indication of the legislative intent behind the Act

<u>Section 4</u> – Determination of Endangered Species and Threatened Species: provides guidance regarding the promulgation of protective rules (e.g., 4(d) rules!), the steps within the listing determination process, the designation of critical habitat, and recovery plans.

<u>Section 7</u> – Interagency Cooperation: provides guidance regarding the conference and consultation processes that focus on activities involving federal agencies, the issuance of **biological opinions**, and exemptions for federal agency actions.

<u>Section 9</u> – **Prohibited Acts:** provides guidance regarding activities determined to result in **take.**

<u>Section 10</u> – Exceptions: provides guidance regarding the issuance of incidental take permits and the development of habitat conservation plans.

3. ESA CONSULTATION

3.1 FTA Procedure for ESA Compliance:

The following outlines FTA's approach to Section 7 consultation requirements and to coordinating ESA compliance with NEPA:

- <u>Grantee obtains species lists/critical habitat from resource agencies.</u> USFWS provides all current species and critical habitat listings for terrestrial/freshwater species; NMFS provides listings for marine/anadromous species. Candidate or proposed species lists may also be provided but are not required under ESA Section 7.
- 2. <u>Grantee prepares ESA Checklist and NEPA Worksheet.</u> To be completed by Grantee at the outset of a project. If species lists are provided for the project area but no impact on species is expected to occur, completion of the ESA checklist screens out such "no-effect" projects early in the process. The NEPA worksheet helps determines the scope of environmental review (CE, EA, or EIS).
- 3. <u>FTA determines if biological analysis is needed.</u> Based on the ESA checklist, FTA determines whether further biological analysis is required. If the checklist demonstrates no effect on listed species or habitat AND if the project does not involve major construction then Grantee/FTA can make a no effect determination. This ends the consultation process for the project and does not require NMFS/USFWS concurrence. FTA will send a letter to the Services notifying them of the no effect determination. However, if more information is needed or the checklist indicates a potential effect or major construction activity, a Biological Assessment (BA) including a recommended "effects determination" must be prepared by the Grantee. Upon completion of the BA, Grantee will send four copies to FTA for its review.

(NOTE: The BA only needs to consider the NEPA preferred alternative.)

- 4. <u>FTA initiates informal consultation.</u> During preparation of a BA, FTA, with assistance from the Grantee, will coordinate with NMFS/USFWS and begin informal consultation regarding potential effects on listed species or habitat.
- 5. <u>FTA makes effects determination.</u> Based on the BA and informal consultation, FTA will make a determination whether the project is or is not likely to adversely effect listed species or habitat ("may affect not likely to adversely affect", "likely to adversely affect"). If the project is not likely to have an adverse effect ("may affect not likely to adversely affect"), FTA requests concurrence from NMFS and/or USFWS. Once concurrence is received, the consultation process is completed for the project. However, if FTA or NMFS/USFWS determine that the project is likely to have an adverse effect, formal consultation must begin.

- <u>FTA conducts formal consultation</u>. During formal consultation, FTA works directly with NMFS/USFWS to formulate a Biological Opinion and Incidental Take Statement. The Grantee assists FTA as appropriate during the consultation process.
- 7. <u>FTA issues environmental determination.</u> The consultation process is completed when the project has received a no effect determination, OR it has received concurrence from NMFS/USFWS that it is not likely to have an adverse effect OR a Biological Opinion/Incidental Take Statement is issued. Only then can FTA issue an environmental determination (i.e., FONSI or ROD). FTA will incorporate any findings and mitigation commitments from the consultation process into the environmental documentation and determination.**
- 8. <u>FTA awards grant.</u> This can occur only when NEPA, ESA, and all other required processes are complete.** Conservation measures identified through the consultation process for avoiding or minimizing impacts to listed species or critical habitat could be included in the final grant or construction funding award.

** If ESA compliance is not possible prior to environmental determination:

Standard FTA procedure states requires that ESA consultation be completed before issuing its environmental determination. However, in the specific case that NMFS or USFWS requires final design stage for consultation completion, or in cases where a project will be significantly delayed without immediate environmental determination, FTA may issue an environmental determination (i.e., FONSI or ROD) while the ESA process is still pending.

For FTA to alter its ordinary process, Grantee must provide FTA with reasonable assurance that ESA requirements will be satisfied. FTA will then act on the request for accelerated NEPA determination.

Until all necessary concurrences or biological opinions are received from the Services, no project activities will be allowed to occur that could cause an irreversible or irretrievable commitment of resources, or in other ways limit the development or implementation of alternatives identified through the ESA **consultation.** This includes any activities that involve ground disturbance, such as geotechnical drilling or Phase II site investigations. It could also include final design, PS&E, or real estate acquisition. If the Grantee wishes to proceed with such activities while the ESA consultation is pending, it may request special permission to do so from FTA and demonstrate that such activities will have no effect on listed species or the consultation. Even if special permission is given, construction, constructionrelated, and pre-construction activities will be prohibited until ESA consultation is complete. Case-specific parameters shall be developed so that no irreversible or irretrievable commitment of resources shall occur prior to completion of consultation. When ESA consultation has been completed, FTA will confirm that the NEPA document and determination adequately addresses all consultation issues. FTA may at that time request more NEPA documentation, if necessary.

3.2 The Biological Assessment (BA)

A Biological Assessment (BA) should include the following information:

- <u>Project Description.</u> Describe the overall purpose of the project and a brief summary of project objectives. Describe (if applicable) all proposed in-water work and potential impacts to riparian vegetation. Include map overview indicating where work will occur relative to sensitive areas and/or habitat. Indicate timing (months and year, day/night) of proposed construction activity. Explain any expected changes to facility operation (i.e. increased traffic, revised use patterns, new maintenance needs, etc.) Identify both the existing amount of impervious surface and the amount of new impervious surface to result from the proposed action.
- <u>Description of Project Action Area.</u> Provide a legal description (Section, Township, Range) and vicinity map that clearly shows the project in relation to nearby waterbodies, sensitive habitats, etc. Include snapshots/photographs that may be useful to the FTA/NMFS/USFWS reviewer as well as date of conducted field assessment(s) and results of visit(s). Describe the environmental baseline (current or pre-project) condition of the habitat and the project areas. The baseline description should address all pertinent habitat parameters for the listed species.
- 3. <u>Listed Species and/or Critical Habitat.</u> Cite species and critical habitat listings provided by NMFS and/or USFWS. Append a copy of the listing to the report. Species listings should be updated every 6 months. Identify any listed, proposed species (and candidate or species of concern if appropriate), and designated or proposed critical habitat, that are known or have the potential to occur on site or in the vicinity of the project area. Identify fish by ESU (for marine/anadromous species) or DPS (for freshwater species). Include a brief section on pertinent background information including species' habitat requirements and ecology in general. Discuss the local status of the species as appropriate.
- 4. <u>Analysis of Effects on Species and Designated Critical Habitat.</u> Clearly define the action area (area of potential impacts, both indirect and direct). The action area is usually larger than the project area (i.e., the river upstream and downstream from a bridge project, waterbodies receiving stormwater). Describe impacts to the environmental baseline including all Direct Effects, Indirect Effects, Interrelated/Interdependent Effects, and Cumulative Effects (see Glossary definitions in Section 5.5):
 - *Direct Effects:* Describe all potential direct effects to listed species/habitat. This includes effects caused by either construction or by continuing operation. Include all actions that will potentially remove or destroy habitat, displace or otherwise influence the

species, either positively (beneficial effects) or negatively (adverse effects).

- *Indirect Effects:* Describe all indirect impacts (those that occur later in time) such as impacts to future food resources, or foraging areas, and impacts from increased long-term human access.
- Interrelated and Interdependent Effects: Describe and analyze any potential effects from interdependent actions (actions that have no independent utility apart from the proposed action) and interrelated actions (actions that are part of the primary action and dependent upon that action for their justification) on the species or habitat that would not occur "if not for" the proposed action.
- *Cumulative Effects:* Identify those cumulative effects (future State or private actions) within the action area that are reasonably certain to occur. Cumulative effects are not used to make the effect determination, but must be provided to the Services for their analysis. (*Please note that this definition differs from that used under NEPA as it does not include future Federal actions.*)

The BA must contain a distinct statement of the overall effect of the project on each species. It must provide consistent supporting evidence to justify the effect determination.

- <u>Mitigation Measures.</u> The BA should identify specific conservation (or mitigation) measures to minimize or compensate for project effects on the species under review. Recommendations should be discussed with the project engineer to insure that they are feasible for the project. Potential measures include: timing restrictions for some or all of the activities; clearing limitations; avoidance of specific areas; replanting with native vegetation, potential of habitat enhancement (i.e. fish passage barrier removal); best management practices (BMPs), etc.
- <u>Conclusions and Effect Determinations.</u> Summarize the proposed project and objectives, and restate the listed species that may occur near the project including potential impacts as supported by the report. Include a determination of effect for each species/habitat (Beneficial Effect, No Effect, May Affect Not Likely to Adversely Affect, May Affect Likely to Adversely Affect).
- <u>References and Appendices.</u> Include all appropriate project documents, including letters to/from USFWS and NMFS. The BA should be a complete stand-alone document for ESA purposes (i.e. separate from EIS/EA/DCE). Include citations, maps, photographs (if applicable), etc.

4. THE MAGNUSON-STEVENS FISHERY CONSERVATION & MANAGEMENT ACT (MSA)

MSA Compliance (50CFR600)

The **Magnuson-Stevens Fishery Conservation and Management Act (MSA)**, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires the inclusion of **Essential Fish Habitat (EFH)** descriptions in Federal fishery management plans. In addition, the MSA requires Federal agencies to consult with NMFS on activities that may adversely affect EFH. EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH in Region X cover groundfish, coastal pelagic species, and Pacific salmon.

Any federal agency that authorizes, funds, or undertakes an activity that may adversely affect any EFH identified by the *Fisheries Management Councils* (see Councils for each state – Section 5.3). State agencies and private parties do not need to consult with NMFS on EFH, unless there is a federal nexus. The EFH process for FTA is as follows:

- 1. FTA/Grantee evaluate the potential impacts of the proposed projects on EFH.
- 2. If FTA determines that EFH will not be adversely affected, then no further action is required.
- If FTA determines that EFH will, or may be, adversely effected, then it must consult with NMFS. The Grantee/FTA submits an EFH Assessment to NMFS that contains: a project description, a list of species with EFH in the action area, an effect evaluation, and proposed mitigation measures to minimize EFH impacts.
- 4. NMFS reviews the EFH Assessment and provides *conservation recommendations* that minimize potential adverse affects.
- 5. FTA must provide a detailed response to NMFS within 30 days of receiving these recommendations. The response includes a description of proposed mitigation, and if inconsistent with NMFS' *conservation recommendations*, its reasons for not following the recommendations.

5. **RESOURCE DIRECTORY**

5.1 <u>Code of Federal Regulations (CFR)</u> <u>Chapter 35</u> <u>Endangered Species Act</u>

(insert here)

5.2 <u>Regional Contact Information</u> <u>for ESA Species Listing Requests and ESA Consultation</u>

A letter is sent to each of the following agencies requesting information on threatened and endangered species in addition to proposed, candidate, and species of concern:

U.S. Fish and Wildlife Service (USFWS)

Agency provides legal listings for terrestrial and freshwater species:

<u>WA:</u>

Supervisor U.S. Fish & Wildlife Service Regional Office 510 Desmond Dr. SE Lacey, WA 98503 (360) 753-9440

<u>AK:</u>

Chuck Young U.S. Fish and Wildlife Service 1011 East Tudor Road Anchorage, AK 99503-6199 (907) 786-3542 FAX: (907) 786-3306

<u> OR:</u>

Rollie White U.S. Fish and Wildlife Service 2600 S.E. 98th Avenue, Suite 100 Portland, OR 97266 (503) 231-6179 FAX: (503) 231-6195

<u>ID:</u>

Carol Wanstrom U.S. Fish and Wildlife Service 1387 South Vinnell Way, Suite 368 Boise, ID 83709-1657 (208) 378-5243 FAX: (208) 378-5262

National Marine Fisheries Service (NMFS):

Agency provides legal listings for marine and anadromous species and Essential Fish Habitat (EFH):

<u>WA:</u>

Supervisor National Marine Fisheries Service Habitat Program/Olympia Field Office 510 Desmond Dr. SE Ste. 103 Lacey, WA 98503-1273 (360) 753-9530

<u>AK:</u>

Supervisor NMFS – AK Region P.O. Box 21668 Juneau, AK 99802 (907) 586-7221

Jim Turner National Marine Fisheries Service Oregon State Branch Office Habitat Conservation Division 525 NE Oregon St. Portland, OR 97232-2737

<u>ID:</u>

Supervisor Snake River Branch 10215 W. Emerald, Suite 180 Boise, ID 83704 (208) 378-5696

5.2 <u>Regional NMFS Contact Information</u> For MSA Species Listing Requests and MSA Consultation

A letter may be sent to each of the following EFH Coordinators at NMFS requesting information on listed species under MSA and Essential Fish Habitat (EFH) in the project action area:

Northwest Region (WA, OR, ID)

Nora Berwick	NMFS Regional Habitat Conservation Division
(503) 231-6887	525 N.E. Oregon Street, #500
Fax:(503) 231-6265	Portland, OR 97232-2737

Alaska Region (AK)

Jeanne Hanson (907) 271-3029 Fax: (907) 271-3030 NMFS Regional Habitat Conservation Division 222 West Seventh Avenue, #43 Anchorage, AK 99513

Pacific Fishery Management Council (CA, WA, OR, ID) EFH Contact

John Coon (Salmon), Jim Glock (Groundfish), (Coastal Pelagics) 2000 SW 5th Avenue, #420 Portland, OR 97201 (503) 326-6352 Fax:(503) 326-6831

North Pacific Fishery Management Council (AK) EFH Contact

David Witherell 605 W. 4th Avenue, #306 Anchorage, AK 99501 (907) 271-2809 Fax: (907) 271-2817

5.4 Very Useful Websites!!!

Federal Transit Administration (All Regions): http://www.fta.dot.gov

The Code of Federal Regulations (CFR): Code of Federal Regulations: Main Page

Endangered Species Act Statute (U.S. Code): <u>United States Code</u>, <u>TITLE 16 – CONSERVATION</u>, <u>CHAPTER 35 -</u> <u>ENDANGERED SPECIES</u>

USFWS species listings (updated daily): http://ecos.fws.gov/ecos_public/index.do

National Marine Fisheries Service (NMFS) species listings & maps: <u>http://www.nmfs.noaa.gov/</u>

NMFS Northwest Region EFH page: <u>http://www.nwr.noaa.gov/</u>

Pacific Fisheries Management Council: http://www.pcouncil.org

Washington State Department of Ecology's (WSDOE) Water Quality Programs (including the latest information on stormwater): http://www.ecy.wa.gov/programs/wg/wghome.html

5.5 <u>Glossary</u>

<u>4(d) Rule</u> - (ESA Section 4) The protective rule (developed for a single species at a time) which prohibits take of a *threatened* species. It may also specify activities that, if adequately regulated, can be given legal coverage for the incidental take of the listed species.

Biological Assessment (BA) - Information prepared under the direction of FTA concerning listed and proposed species and designated and proposed critical habitat that may be present in the action (i.e. project) area and the evaluation of potential effects of the action on such species and habitat [50 CFR 404.02]; this assessment is evaluated by USFWS/NMFS and, if formal consultation is required, may be potentially incorporated into a Biological Opinion.

<u>Candidate Species</u> - Those species under the jurisdiction of USFWS and NMFS that have the potential to be proposed for listing. Species protections, e.g., prohibitions on take, provided by the ESA do not apply to candidate species.

<u>**Citizen Suit</u>** - (ESA Section 11) a civil suit filed to force the proper implementation of the ESA or to stop the activity of any persons or agencies (federal or non-federal) alleged to be in violation of any part of the ESA or a regulation issued under its authority. Any citizen can file a third party lawsuit regarding ESA implementation.</u>

<u>Conservation - (ESA Section 3(3))</u> ESA defines conservation as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which measures provided pursuant to the Act are no longer necessary".

<u>Consultation Procedure</u> - (ESA Section 7) After a listing decision is made final, FTA shall, in consultation with NMFS/USFWS, ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or destroy or adversely modify its critical habitat. If the resource agency finds that an action will cause the take of a listed species, it must propose mitigations or "reasonable and prudent measures" to the action. If the proponent rejects these alternatives, the action cannot proceed. Issuance of an Incidental Take Permit is a federal action subject to the consultation process.

<u>**Critical Habitat</u>** - (ESA Section 4) The specific areas within the geographical area occupied by the species, when it is listed, which contain the physical or biological features 1) essential to the conservation of the species and 2) which may require special management considerations or protection. Critical habitat may also include specific areas outside the geographical area occupied by the species when it is listed if those areas are essential for the conservation of the species (ESA Section 3(5A)). Critical habitat is described and designated by the resource agencies (USFWS/NMFS). Designations</u>

usually accompany final listing decisions, but may be delayed to allow comprehensive review of the necessary technical data.

<u>**Cumulative Effect</u>** - Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonable foreseeable future actions, *regardless of what agency or person undertakes such other actions* [40 CFR 1508.7]. Under ESA Section 7 regulations, the effects of future *state or private activities not involving federal activities*, that are reasonably certain to occur within the action area of the federal action subject to consultation [50 CFR 402.02].</u>

<u>Direct Effect</u> – Any activity that immediately affects listed species

Endangered Species - "...any species [including subspecies or qualifying DPS] in danger of extinction throughout all or a significant portion of its range." (ESA Section 3(6)) Listing status of a species is reviewed by NMFS/USFWS every five years.

Essential Fish Habitat - "Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" [62 CFR 4721]. *Waters* include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include historic areas if 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.

Evolutionarily Significant Unit - A population or group of populations of salmon that 1) is substantially reproductively isolated from other populations and 2) contributes substantially to the ecological/genetic diversity of the biological species. This term is used by NMFS in its status determinations for anadromous salmon populations [61 CFR 4721].

<u>Habitat Conservation Plan</u> - (ESA Section 10) a planning document that is a mandatory component of an Incidental Take Permit application, also known as an "HCP" (ESA Section 10(a)(2)(A)). This plan negotiated by the lead federal agency and the applicant, specifies the activities that will be covered by the Incidental Take Permit and how their effects will be minimized and mitigated. This plan also describes the geographic limits of the covered activities.

Harm - An act "which actually kills or injures" listed wildlife. Harm may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering" [50 CFR 17.3].

Indirect Effect - An effect, caused by the activity in question, that occurs later in time but is still reasonably certain to occur [50 CFR 402.02].

<u>Species</u> - (ESA Section 3) Any subspecies of fish (ESU) or wildlife (DPS) or plant species that interbreeds when mature.

6. TEMPLATES

6.1 Documented Categorical Exclusion (DCE) Worksheet

- 6.2 ESA Screening Checklist
- 6.3 EFH Assessment Template

DOCUMENTED CATEGORICAL EXCLUSION WORKSHEET

Note: The purpose of this worksheet is to assist sponsoring agencies in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for projects that may qualify as a documented Categorical Exclusion. Submission of the worksheet by itself does not meet NEPA requirements. FTA must concur in writing in the sponsoring agency's NEPA recommendation. Contact the FTA Region 10 office at (206) 220-7954 if you have any questions regarding this worksheet.

I. PROJECT DESCRIPTION

Sponsoring Agency	Date Submitted	FTA Project Number (if known)
Project Title		
Project Location (Include City and Street Address)		
Project Contact : Name	Phone	E-mail Address (if available)

II. NEPA CLASS OF ACTION

Answer the following questions to determine the project's potential class of action.

A Will the project significantly impact the natural, social and / or economic environment?

YES (Contact Regional FTA Office)

	(Continue)
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Actions that will significantly impact the environment require preparation of an Environmental Impact Statement. These projects typically include construction or extension of fixed transit facilities (e.g., light rail, commuter rail, ferries, exclusive busways or HOV facilities).

B Is the significance of the project's social, economic or environmental impacts unknown?

YES (Contact Regional FTA Office)	NO (Continue)			
Do other Federal regulations, such as Section require consideration of alternatives?	4(f) (parklands, refuges, historic properties),			
YES (Contact Regional FTA Office)	NO (Continue)			
Is the project likely to require detailed evaluation of more than a few potential impacts?				
YES (Contact Regional FTA Office)	NO (Continue)			
Is the project likely to generate intense public discussion or concern, even though it may be				
limited to a relatively small subset of the comr	nunity?			
YES (Contact Regional FTA Office)	NO (Continue)			

If the answer to any of these questions is "YES", contact the regional FTA office to determine whether the project requires preparation of an Environmental Assessment.

С	Does the project appear on the following list of potential Categorical Exclusions?
•	YES (Mark and Submit to Regional FTA Office) NO (Continue)
	Activities not involving or directly leading to construction (e.g., technical studies, planning, preliminary engineering)
	Utility installations along or across a transit facility
	Construction of bicycle and pedestrian facilities excluding those requiring land acquisition and construction (such as new right-of-way)
	Resurfacing and Restriping
	Installation of noise barriers
	Landscaping
	Installation of fencing, signs, pavement markings, toll facilities, control centers, vehicle test centers, small passenger shelters, traffic signals, railroad warning devices, and signal controls with no substantial land acquisition or traffic disruption
	Emergency repairs under 23 USC 125
	Acquisition of scenic easements
	Ridesharing activities
	Bus, ferry, and rail car rehabilitation (including conversions to alternative fuels)
	Alterations to facilities or vehicles to make them accessible to elderly or handicapped persons
	Program administration (including safety programs), technical assistance, and operating assistance to continue existing service or increase service to meet routine changes in demand
	Routine maintenance
	Purchase and lease of vehicles and equipment for use on existing facilities or new facilities that are also a Categorical Exclusion (including the capital cost of contracts for transit services)
	Track, railbed, and wayside system maintenance and improvements when carried out in existing right-of-way
	Installation of ITS equipment to be located solely within the transit facility and with no significant off-site impacts
	Mitigation banking

These transit projects are generally categorical exclusions under 49 CFR § 771.177 (c) and do not require further documentation unless certain circumstances exist, such as the presence of wetlands, historic buildings and structures, parklands, or floodplains in the project area. If land is to be altered and/or such circumstances exist or may exist, contact the Regional FTA office.

D	Does the project appear on following list of potential documented Categorical Exclusions?	
•	YES (Mark and Continue to Part III) NO (Contact FTA Regional Office)	
	Grade separations requiring land acquisition to replace existing at-grade railroad crossings and bridge rehabilitation (including approaches to bridges and excluding historic bridges or bridges providing access to ecologically sensitive areas)	
	Corridor Fringe Parking facilities (generally located adjacent to an Interstate highway system)	
	Carpool programs and activities requiring land acquisition and construction	
	Safety improvements including seismic retrofit and mitigation of wildlife hazards	
	Construction of new bus storage and maintenance facilities and of new ITS control centers in areas used predominantly for indust transportation purposes where such construction is consistent with existing zoning and located on a street with adequate capacity handle anticipated traffic	
	Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional required and there is not a substantial increase in the number of users	land are
	Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks, and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for proje traffic	cted bus
	Construction of rail storage and maintenance facilities (or other similarly sized support facilities) in areas used predominantly for industrial or transportation purposes where such construction is consistent with existing zoning and where there is no significant mission of the surrounding community	ioise
	Area-wide coordination of multiple ITS elements	
— ,	 Advance land acquisition including: Acquisition of underutilized private railroad rights-of-way (ROW) to ensure that adjacent land uses remain generally compatible the continued transportation use of the ROW Provisions under 49 CFR Section 771.117 (D)(12) 	e with
•		
	(Note: the eligibility of hardship and protective buys is very limited and must be approved, in writing, by the Regional FTA off before proceeding with any acquisition activities. Failure to do so will render the project ineligible for Federal participation.	fice

These projects may be categorical exclusions under 49 CFR § 771.177 (d), but require additional documentation in order for such a determination to be made.

III. INFORMATION REQUIRED FOR DOCUMENTED CATEGORICAL EXCLUSIONS

Provide the following information if, based on the answers in Part II, the proposed project appears to be eligible as a documented Categorical Exclusion.

Maps displaying the following, as applicable, are required to assist in the review:

- Project vicinity
- Zoning
- Project Site Plan
- Floodplains

A. Detailed Project Description

- **B.** Location Attach a map or diagram, to scale, identifying the location of the project site and surrounding land uses. Note any critical resource areas, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences.
- C. Zoning Briefly describe the existing zoning of the project area.
- **D. Traffic** Describe potential traffic and parking impacts, including whether the existing roadways have adequate capacity to handle increased bus or other vehicular traffic. Include a map or diagram if the project will modify existing roadway configurations.
- **E. RESOURCES** Describe any natural, cultural, recreational, historic or other resources that might be located in the vicinity of the proposed project. Indicate whether the project will have a significant impact on the following resources:

Natural (include ESA or MSA species list(s), if applicable).

Cultural	Recreational	Historical	Other
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F. Noise / Water / Air Quality Describe whether the project will involve significant noise, water or air quality impacts. Note if the project is located in a nonattainment area.

Significant Impact (Describe): Air Quality Noise (provide map identifying sensitive receptors Vibration Water
Nonattainment Area: \Box Carbon Monoxide (CO) \Box Ozone (O ₃) \Box Particulate Matter (PM ₁₀)
Hot Spot Analysis: \Box Carbon Monoxide (CO) \Box Ozone (O ₃) \Box Particulate Matter (PM ₁₀)

- **G. Public Notification** Briefly describe any public outreach efforts undertaken on behalf of the project. Indicate opportunities for public hearings (e.g., Board meetings, open houses, special hearings). Indicate any significant concerns expressed by agencies or the public regarding the project.
- **H. Hazardous Materials** Prior to acquiring land or a facility, a hazardous materials survey must be conducted (Phase I). Describe the steps taken to determine whether hazardous materials are present on the project site. Also note the mitigation and clean-up measures that will be taken to remove any hazardous materials from the project site.
- I. **Property Acquisition** If property is to be acquired for the project, indicate whether the acquisition will result in relocation of businesses or individuals). Note: to ensure eligibility for Federal participation, grantees may not acquire property with either local or Federal funds prior to completing the NEPA process and receiving written FTA concurrence in both the NEPA recommendation and property appraisals.
- **J. Environmental Justice** Indicate whether the project will have a disproportionately high and adverse effect on minority or low-income populations. Describe any potential adverse effects. Describe outreach efforts targeted specifically at minority or low-income populations.
- **K. Related Federal and State/Local Actions** Indicate whether the proposed project is likely to require actions by other Agencies (e.g., permits) and attach materials submitted to them.
 - Section 4(f) Parklands, Recreation Areas, Refuges, Historic Properties
 Section 106 Historic and Culturally Significant Properties
 Section 404 Wetlands and Water
 Executive Orders Wetlands, Floodplains, Environmental Justice
 Clean Air Act Air Quality
 Endangered Species Act Threatened and Endangered Biological Resources
 Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat
 State and Local Requirements (Describe)

L. Mitigation Measures Describe all measures to be taken to mitigate project impacts.

Submit this form, attachments, and a transmittal letter recommending a NEPA finding to:

Federal Transit Administration, Region 10 915 2nd Avenue, Suite 3142 Seattle, WA 98174-1002

phone: (206) 220-7954

fax: (206) 220-7959

ESA SCREENING CHECKLIST

Note: The purpose of this checklist is to assist sponsoring agencies and FTA in gathering and organizing materials for environmental analysis required under the Endangered Species Act (ESA). Submission of the checklist by itself does not meet ESA requirements. This checklist is intended solely for Region X use. Please contact the FTA Region 10 office at (206) 220-7954 if you have any questions regarding this worksheet.

Sponsoring Agency		Date Submitted			
Project Title			FTA Project Number (if known)		
Project I	Location (Include City and Street Ad	dress)			
Project (Contact:	Phone Number	E-mail Address (if available)		
	ase answer the following questions as licable, check "NA" in the space to the		If the question is not		
1.	1. Describe the project and its purpose. Identify the jurisdiction(s) in which the project is located.				
2.	 2. Have all other NEPA requirements been completed for this project? Yes No If so, under which NEPA Class does this project fall? (Refer to FONSI or ROD) Class I Class II Class III 				
3.	Does the project qualify as a CE or a DCE ☐ Yes □No	?			
	Has a Region X Documented Categorical I	Exclusion Worksheet been con	npleted?		

4. Has the applicant obtained Endangered/Threatened Species lists and critical habitat lists from both National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) for the project area?

☐ Yes ☐No

List NMFS species/habitat here (and attach documentation):

Endangered:

Threatened:

Proposed:

List USFWS species/habitat here (and attach documentation):

Endangered:

Threatened:

Proposed:

5. Has the applicant obtained Essential Fish Habitat (EFH) lists from NMFS (as required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA)) for the project area?

☐ Yes ☐No

List Essential Fish Habitat here (and attach documentation):

6.	List the names of your partners for the project.	Identify the project lead agency.			□ N/A
7.	Check the federal permits needed for your project. List the numbers of the nationwide permits if needed.	ACOE Nationwide ACOE Individual NPDES (Gen. or Ind.) Other	N/A	Pending	Approved
8.	Check State and local permits needed for your project. Circle jurisdiction.	HPA Surface Mining Forest Practices Shoreline Shoreline Exemption Clearing and Grading Building or Subdivision Sensitive Areas Ordinance Other	N/A	Pending	Approve d C C C C C C C C C C C C C C C C C C

9.	Which federal, State, or tribal agencies have you contacted regarding your project and its impacts?	□ N/A
	Describe any modifications to the project as a result of these contacts:	
10	What is the specific location of your project? Provide the address, zoning designation and the ¹ / ₄ section, section, township, and range.	
 11	Is the project within 300 feet of a lake, river, stream or bay, etc.? Name the waterbodies.	□ N/A
12	What is the size of the project (list area or length of disturbance), the amount of new impervious surface, and the total impervious surface?	□ N/A

In answering the following questions, please describe the impacts assuming no mitigation:

IMPACT ASSESSMENT

13	Describe the potential beneficial and adverse impacts upon aquatic resources that will be caused by construction of the project:	□ N/A
•		

14 Describe the potential beneficial and adverse impacts upon aquatic resources resulting from the maintenance, use, or operation of the project (post-construction impacts):

MĽ	ΓΙGΑΤΙΟΝ	
15	Is the project likely to alter the water quality of any water bodies such as bays, estuaries, lakes, streams, rivers or wetlands (through sedimentation, urban runoff, toxics, turbidity, etc.)?	□ N/A
	\Box Yes \Box No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	
16	Will the project discharge water or generate runoff to any water bodies such as bays, estuaries, lakes, streams, rivers or wetlands?	□ N/A
	\Box Yes \Box No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	
17	Are clearing and grading activities part of the project? What is the area of direct disturbance?	□ N/A
•	\Box Yes \Box No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	

b. What mitigation is proposed for long-term impacts?

18	Will the project remove or modify riparian vegetation within 300 feet of the water body?	□ N/A
·	\Box Yes \Box No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	
19	Will the project place a structure within—or cause any change to—the bed or banks of a body of water?	□ N/A
	\Box Yes \Box No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	
20	Will the project place fill or structures within any 100-year floodplain?	□ N/A
	\square Yes \square No (If yes, answer a and b.)	\mathbf{N}/\mathbf{A}
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	
21	Will the project divert water to or from the bay, estuary, lake, stream, river or wetland?	N/A
	☐ Yes ☐ No (If yes, answer a and b.)	
	a. What mitigation is proposed for construction impacts?	
	b. What mitigation is proposed for long-term impacts?	

Has all necessary environmental documentation been provided to FTA (request letters, agency response documentation, permit approvals)?

☐ Yes ☐No

Has all necessary environmental documentation been provided to FTA (request letters, agency response documentation, permit approvals)?

☐ Yes ☐No

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 $10^{\circ} - 26^{\circ}$ 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° 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 **bold blue** is explanatory, and should be removed from the final product (substitute for project information).

If the EFH assessment is included as a part of, a Biological Assessment (BA) that will be provided to NMFS, the information already supplied in the BA 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, it must be clearly identified as an EFH Assessment, it must be separated from the ESA components of the BA.

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 TRANSPORTATION PROJECTS (FTA)

Action Agency

Federal Transit Administration (Region X)

Project Name

Insert your project name/grant number here

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, federallymanaged 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-byspecies 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 Describe effects to salmonid EFH

Adverse Effects to Ground Fish EFH Describe effects to groundfish EFH Adverse Effects to Coastal Pelagics 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).

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

 Table 1. Species of fishes, and life-stages with designated EFH in the action area.

 (EXAMPLE ONLY)