



US Army Corps
of Engineers®
Seattle District

REFERENCE BIOLOGICAL EVALUATION SPECIFIC PROJECT INFORMATION FORM



For Scientific Measurement Devices
Version: November 18, 2004

1. **Referenced Biological Evaluation:** Programmatic Biological Evaluation, Scientific Measurement Devices in: Programmatic Biological Evaluation for the State of Washington for Salmonid Species Listed or Proposed by the National Marine Fisheries Service and U.S. Fish and Wildlife Service Under the Endangered Species Act. October 13, 2000. U.S. Army Corps of Engineers, Seattle District, Regulatory Branch.¹
USFWS Programmatic Reference Number: 1-3-00-I-1524 & 1-3-00-IC-I525
NMFS Programmatic Reference Number: WSB-00-582
2. **Date:** _____
3. **Applicant:** _____ **Corps Reference No.:** _____
Address: _____
City: _____ State: _____ Zip: _____
4. **Agent:** _____
Address: _____
City: _____ State: _____ Zip: _____
5. **Location(s) of Activity:**
Section: _____ Township: _____ Range: _____
Latitude: _____ Longitude: _____
Waterbody: _____ County: _____
6. **Threatened or Endangered Species Present** (both listed and proposed):

<u>Species</u>	<u>Distance to Occurrence</u> (i.e. to nest, perch tree)	<u>Effect Determination (no effect or not likely to adversely affect)</u>
7. **Work Description** – Describe what type of devices would be installed/replaced; how many devices would be installed/replaced: _____

¹ For construction description and effects analysis.

8. **Construction Techniques** – Describe how installation/replacement would be done; how long installation would take; the type of equipment that would be used: _____

9. **Why Doesn't the Programmatic Consultation for “Scientific Measurement Devices” Apply? Which Conservation Measures or General Implementation Conditions Do You Not Meet?**

10. **Why is the Project “Not Likely to Adversely Affect” Without Meeting all the Conservation Measures or General Implementation Conditions** (include Justification/Effects Analysis in addendum if needed)? **How Have You Minimized Impacts?** _____

11. **Forage Fish Habitat** – only complete this section if the project is in tidal waters.

Check box if Washington Department of Fish and Wildlife (WDFW) documented habitat is present. Go to the WDFW website for this information: <http://wdfw.wa.gov/fish/forage/forage.htm>, then search for each species under the link to Biology, then the link to Documented Spawning Grounds (if available, please attach a copy of the Hydraulic Project Approval from WDFW):

Surf Smelt:

Pacific Herring:

Sand Lance:

If there is no WDFW documented habitat present, please describe the type of substrate and elevation and presence of aquatic vegetation at the project area. For example:
At +10 to +5 feet above MLLW, there is no aquatic vegetation, the substrate consists of large cobbles.
At +5 to +1 foot above MLLW, there is eelgrass and the substrate consists of fine sand.

In addition, please submit photographs showing the entire project area. The photographs should be taken at ground level and at low tide and should show a panoramic view of the entire project area in the dry. Photographs should clearly show the presence or absence of vegetation and the substrate composition. Close up photographs of the substrate and/or vegetation should be included if there are

any areas of particular interest. To most accurately reflect vegetation distribution, photos should be taken at low tide during June 1 through October 1.

12. **Conservation Measures to be Implemented** (check all that apply and will be done):

- Work is done within the approved work window.
- No work is done over or within 300 feet of vegetated shallows (except where such vegetation is limited to State-designated noxious weeds), or spawning habitat for listed, proposed or forage species.
- No uncured concrete shall come into contact with the waterbody.
- No land leveling or grading is conducted.
- No fill is placed in wetlands or waterward of OHW or MHHW.
- Work does not include weirs and flumes.
- Placement does not require the de-watering of a stream or waterbody.
- Work will be done during low flow and when possible in the dry.
- No fill is placed in wetlands or waterward of OHW.

In Fresh Waters Including the Columbia River Mainstem, the Snake River and Baker Bay:

- No new piling is placed.

In Marine/Estuarine Waters *excluding* Baker Bay:

- Only one new pile is placed.
- The pile is not treated with creosote or pentachlorophenol.

13. **Drawings** – Attach copies of location, plan, and elevation/section drawings. Photographs of site recommended, but are optional.

I as the applicant have read all the activity and waterway specific conditions and the general implementation conditions for the “Not Likely to Adversely Affect” Programmatic Consultation, dated May 30, 2001. I understand that informal consultation with National Marine Fisheries Service and U.S. Fish and Wildlife Service is initiated with this form. I will not proceed with construction until I receive written notification from the U.S. Army Corps of Engineers that the proposed work is authorized.

Applicant

Date



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Drawing Guidance



Drawings must be submitted, incorporating the following information, as it applies to your project. For definitions of the terms, see attached glossary.

Suggested guidance for completion of drawings. Three types of illustrations are very helpful to properly depict the proposed activity: Vicinity Map, Plan View, and Cross-Sectional View. Drawings are best prepared using clear printing, black ink, and the fewest number of sheets possible. Include the scale. The importance of clear accurate drawings cannot be overstated. If you have questions regarding completing the drawings, you may call the U.S. Army Corps of Engineers, Regulatory Branch at (206) 764-3495.

Vicinity Map. A copy of a county or city road map, or a U.S. Geological Survey topographic map may be used. Include:

- a. North arrow.
- b. Name of waterbody (and river mile if appropriate).
- c. Location of the proposed activity (indicate with a circle, arrow, X, or similar symbol).

Plan View. This drawing illustrates the proposed project area as if you were looking down at the site from overhead.

- a. North arrow.
- b. Name of waterbody and direction of water flow.
- c. Location of existing shoreline relative to proposed work and relative to habitat areas (listed in item 7).
- d. Dimensions of the activity or structure and impervious surfaces and the distance it extends into the waterbody and/or related resource/habitat areas (listed in item 7), as appropriate.
- e. Habitat Areas: If present, the following habitat areas must be shown on the plan view:
 1. Wetland delineation
 2. Riffle/pool complex delineation
 3. Side- and off-channel habitat
 4. Vegetated shallows
 5. Snake River and Ozette Lake sockeye salmon spawning areas
 6. Forage fish spawning areas (herring, surf smelt, sand lance, etc.)
 7. ESA Listed or proposed fish spawning areas (chinook salmon, chum salmon, steelhead, bull trout, and cutthroat trout)

Cross-Sectional View. This drawing illustrates the proposed activity as if it were cut from the side and/or front. Include:

- a. Location of water elevation relative to the bank or shore.
- b. Water depth at waterward face of project.
- c. Dimensions of the activity or structure, and the distance it extends into the waterbody and/or related resource/habitat areas (listed in item 7), as appropriate.
- d. Indicate dredge and/or fill areas as appropriate.
- e. Indicate types and location of resource/habitat areas (listed in item 7).

Glossary of Terms

EELGRASS – Eelgrass (*Zostera marina* or *Zostera japonica*) is a rooted plant that grows in intertidal and shallow subtidal estuarine and marine areas. It is distinguished by flat, grass-like leaves up to 1.4 cm (about 3/4 of an inch) wide and can be over 3 meters (6 feet) in length (height and width varying by species). The upright stems originate from an underground rhizome. The seeds are enclosed in elongated membranous, translucent packets. Eelgrass occurs up to about 1.8 meters (6 feet) above MLLW and as deep as 6.6 meter (22 feet) below MLLW, elevations varying by species. Both species grow well in sandy or muddy substrate and may be found along both low and moderate energy shorelines throughout Puget Sound. [US Army Corps of Engineers, 1984]

FORAGE FISH / FORAGE SPECIES – As used in this document, these are generic terms for all of those fish species that as adults are small enough that salmonids may prey upon, particularly in the estuarine or marine environment. The primary forage fish in estuarine or marine areas include herring, surf smelt, and sand lance. (Also known by the term “bait fish.”)

INTERTIDAL VASCULAR PLANTS – Fleishy plants that grow between the extreme high tide and extreme low tide areas of brackish or saltwater systems. Examples include brass buttons, Lyngby’s sedge, pickleweed, Pacific silverweed, salt grass, saltweed (fat hen), and Seaside plantain. [Corps, 1984]

KELP – Large brown alga or seaweed that grows in the intertidal region and are also plentiful below the low-tide line (Phylum *Phaeophyta*). A feature of many kelp is a holdfast consisting of a mass of stuffy root like structures. This type of holdfast, looking like something fished out of a jar of mixed pickles, is limited to the brown algae. Float bladders are another distinctive characteristic of many representatives of this group. [Kozloff, 1993]

LISTED SPECIES – Any species of fish, wildlife or plant, which has been determined to be endangered or threatened under section 4 of the Act. [50 CFR 402.02]

MACROALGAE – Algae (red, brown or green) where each plant is large enough to distinguish with the naked eye, usually referring to algae that grows in estuarine or marine systems. Algae may occur as individual plants in the intertidal or low tide areas such as Kelp or as thin membranes, or thick rubbery sometimes warty sheets that can be found on rocks in the intertidal area. [Kozloff, 1993]

RIFFLE AND POOL COMPLEXES – Riffle and pool complexes are one of 6 “special aquatic sites.” Steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a steaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife. [40 CFR 230.45(a) Subpart E]

SPAWNING AREA – These are substrates into and upon which aquatic species will lay their eggs. Salmonid spawning areas vary by species, ESU, or DPS. Typically, salmon species eggs require 30 to 90 days of incubation. Salmon species alevin typically remain in the gravel for 30 to 150 days, emerging as fry in the spring or summer months. Total time in the gravel is typically 60 to 240 days. Bull trout eggs require a minimum of 200 days of incubation. Bull trout fry have been found to stay in gravel for 3 weeks after emergence, for a total time in gravel of 221 days. Known areas are identified by species in the WDFW StreamNet database. Forage fish spawning areas are identified in the Washington State Department of Fish and Wildlife’s 1995 “Puget Sound Intertidal Baitfish Spawning Beach Survey Project” document.

VEGETATED SHALLOW – Vegetated shallows are one of 6 “special aquatic sites.” Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass, eelgrass, kelp, other macroalgae, and intertidal vascular plants in estuarine and marine systems as well as a number of freshwater species in streams and lakes. [40 CFR 230.43(a) Subpart E]

WETLANDS – Wetlands are one of 6 “special aquatic sites.” “Wetlands” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. [33 CFR 328.3(b) and 40 CFR 230.41(a)(1)]