



U.S. Army Corps of Engineers  
Seattle District, Regulatory Branch

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## **SUPPLEMENTAL ESA INFORMATION FOR NEW OR EXPANDED OVERWATER STRUCTURES**

*This is a list of common issues related to overwater structures in both Fresh water and Marine/Estuarine waters. Not all questions or comments will apply to every project. There may be site-specific questions raised that are not included in this list. Provide information on those that are pertinent to your project.*

### **Project Description:**

- Describe the purpose of the project – i.e. private boat moorage, commercial boats, swimming platform, etc.
- Is there any potential to minimize the size of the structure any further?
- Describe all elements of the project with dimensions – i.e. float, ramp, pier, “x” number of piles.
- Describe material used – steel, concrete, wood treated with “x” chemical.
- Describe method of access to the site – i.e. barge and tug.
- Describe construction method – hammer pile driver, vibratory pile driver, etc.
- How long will it take to construct the project?
- Describe construction sequence – access, removal of material, placement of structure, clean-up and disposal.
- When do you propose to construct the project?
- Describe any upland elements of the construction/disposal location.
- Describe any temporary access areas created in the uplands or other areas temporarily disturbed in the uplands, how will they be restored? Is there a revegetation plan?

### **Action Area:**

*NOTE: In order to cover all the potential impacts to all the listed species that may be affected by your project, the action area may be quite large. However, you need only provide environmental baseline/effects information for the potential area of effect for each habitat element, pathway or indicator. For example, you may have a radius of “x” feet/miles around the project for potential noise impacts to eagles, a radius of “y” feet around the project for potential water quality impacts to salmon, and a radius of “z” feet around the project for potential impacts to riparian and aquatic vegetation for salmon habitat. Your total action area will be the greatest distance of all of these potential areas of effect combined.*

- Include the proposed structure and any ancillary elements (dredging, bulkhead, cement sidewalk to access, etc.).
- Describe all elements of construction including, but not limited to, access roads, barge/tug access area, staging areas, equipment washout areas, stockpiling areas.

- Include all interrelated/interdependent activities with the structure – i.e. a new boat house on the uplands is built in association with a new pier – the boat house is an interdependent activity.
- Include the potential areas of effect in relation to potential impacts to habitat pathways/indicators for that species – i.e for fish there is a concern about sediment suspension – what is the potential distance that the construction and/or operation may impact water quality (increase sediment levels both temporary and permanent).

### **Species Habitat Information:**

- How does the listed species utilize the action area – i.e. juvenile fish may migrate through the area, bald eagles may nest in the area, marbled murrelets may forage in the area.
- In the action area, is there essential habitat (holding and spawning areas) for forage fish or other species that may be a primary food source for the listed species?

### **Environmental Baseline:**

- Describe the habitat in the action area considering the potential area of effect discussed under Action Area. This may be described by:
  - Substrate (sand, mud, cobble).
  - Presence or absence of aquatic vegetation (in marine waters – eelgrass, kelp or macroalgae).
  - Water depths or extent of photic zone in the action area (in marine waters – intertidal and subtidal areas).
  - Presence or absence of natural beach complexity features (large woody debris, rocks).
  - Results of species use from known surveys in the area or similar areas.
- Describe the amount of human activity in the action area.
  - Are there other overwater structures in the action area and where are they, what are their length in relation to the proposed structure?
  - Are there any known contaminated soils in the area – listed State Model Toxic Sites, listed EPA Superfund sites? Old creosote piling to be removed?
  - Has the shoreline in the action area been altered by armoring? If so, to what extent?
  - Is there overhanging vegetation in the project area and in the action area? What are the dominant plant species? Are invasive, non-native species dominant?

### **Effects of the Action:**

- What are the temporary impacts to water quality and fish from the construction?
  - Impacts during pile driving?
  - Impacts during barge/tug access – propwash?
  - Impacts from potential sedimentation and erosion runoff during construction?
  - Impacts from oil/contaminant runoff from equipment? From washout areas?
  - Impacts from resuspending known contaminants in the substrate during construction?
- What are the impacts to water quality and fish from the operation of the structure?
  - Leaching from treated wood used during construction?
  - Oil or other contaminants spilled from boat operation?

- What are the potential impacts (temporary and permanent) to forage fish habitat?
  - Impacts during construction – barge grounding? Equipment/stockpiling on the beach?
  - Impacts from the operation of the structure – propwash and scour from the boat going to and from the pier?
  - Shading impacts from the structure blocking light to aquatic vegetation?
- What are the potential impacts to refuge areas?
  - Removal of natural beach complexity features?
  - Lowering of intertidal/subtidal habitats – propwash and scour from the boat going to and from the pier?
  - Overwater structure creating salmonid predator habitat?
  - Overwater structure causing juvenile fish to move to deeper waters around structure – increased predation?