

# Temporary Recreational Structures

## 1.0 Summary of Activity

### 1.1 For all Fresh Waters excluding the Columbia River mainstem

Placement of temporary buoys, markers, small floating docks, and similar devices or structures that are for recreational use during specific events such as water skiing competitions and boat races, provided that:

1. Work is done within the approved work window.
2. No work is done over or adjacent to vegetated shallows (except where such vegetation is limited to State-designated noxious weeds) or habitat for listed or proposed species.
3. No large woody debris is removed.
4. Such devices and structures do not exceed 4 per acre
5. Any small floating docks are no larger than 400 square feet in size and multiples (no more than 4) are spaced at least the distance of the longest dock length.
6. No new piling is driven.
7. All wooden components are pre-painted and dried prior to installation and no treated wood is used.
8. Such devices and structures remain in the water no longer than 60 days.
9. Such devices and structures are removed within 15 days after use has been discontinued.
10. Such devices and structures are anchored securely.
11. Flotation shall be completely contained to prevent breakup, and the anchor and anchor lines do not drag. [from NWP 11]

### 1.2 For the Columbia River Mainstem including the Snake River and Baker Bay

Placement of temporary buoys, markers, small floating docks, and similar devices or structures that are for recreational use during specific events such as water skiing competitions and boat races, provided that:

1. Work is done within the approved work window.
2. No work is done over or adjacent to vegetated shallows (except where such vegetation is limited to State-designated noxious weeds) or habitat for listed or proposed species or spawning habitat for forage species (i.e. forage fish for pacific salmon).
3. No large woody debris is removed.

4. Such devices and structures do not exceed 4 per acre
5. Any small floating docks are no larger than 400 square feet in size and multiples (no more than 4) are spaced at least the distance of the longest dock length.
6. No new piling is driven.
7. All wooden components are pre-painted and dried prior to installation and no treated wood is used.
8. Such devices and structures remain in the water no longer than 60 days.
9. Such devices and structures are removed within 15 days after use has been discontinued.
10. Such devices and structures are anchored securely.
11. Flotation shall be completely contained to prevent breakup, and the anchor and anchor lines do not drag. [from NWP 11]
12. Work is not done within one mile of a known steller sea lion haul-out.

### **1.3 For all Marine/Estuarine Waters excluding Baker Bay**

Placement of temporary recreational structures in marine waters is not covered under this programmatic.

## **2.0 Programmatic Description**

Individual permits (IPs), letters of permission (LOPs), and Nationwide Permit 11 (NWP 11) may authorize the placement of temporary recreational structures into navigable waters of the U.S. in Washington State. These can include temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as water skiing competitions and boat races or seasonal use, provided that they are only in the water for a maximum 60 days and are removed 15 days after use has discontinued. At Corps owned and operated reservoirs, the reservoir manager must approve each buoy or marker individually. In Washington State, the Corps does not own all the land within the reservoirs at Corps facilities, so this activity is not tracked. This programmatic biological evaluation applies only to such activities that are limited in scope and location, do not involve placing piling, remain in the water for only a maximum of 60 days, and will be removed 15 days after use has discontinued. Work that cannot be designed or constructed to fit under this biological evaluation must go through individual informal or formal ESA consultation with the USFWS. All temporary recreational structures, including those described in this section, require individual informal or formal consultation with the National Marine Fisheries Service (NMFS) if such work may affect listed or proposed species under NMFS jurisdiction.

## **3.0 Project Location**

In all navigable fresh, only in the counties of Washington State where the National Marine Fisheries Service and U.S. Fish and Wildlife Service have concurred that the project is not likely to adversely affect

listed species and designated critical habitat and will not jeopardize proposed species or destroy or adversely modify proposed critical habitat.

## **4.0 Project Description**

This programmatic biological evaluation does not cover any interrelated and/or interdependent work activities in any of the designated critical habitat areas, except those activities distinctly specified

## **5.0 Project Construction Description<sup>1</sup>**

### **Placement of buoys and temporary recreational structures**

The placement of temporary buoy, marker, or recreational structure in freshwaters and the Columbia River is relatively the same.

### **Construction Equipment**

The equipment used includes the vessel (to place the temporary buoy, marker, or structure), the structure, the buoy, the anchor, and the anchor line or cable.

### **Construction Methods**

Access to the temporary buoy, marker, or structure location may be from small boats or from a “Buoy Tender” or barge and tug. A “Buoy Tender” is an open decked vessel with a mounted crane used for buoy placement. The buoy tender is at a minimum 65 feet in length. Barges may be as long as 500 feet, length of barge used depends on depth of buoy placement and size of buoy. The tug boat is a maximum of 60 feet in length with engine power equivalent to an 100-foot long pleasure vessel. For smaller buoys, a smaller vessel averaging 22 feet in length may be used.

A temporary buoy is placed at a minimum depth of 10 feet at low water. The maximum depth could be as much as 200 feet or more, such as for temporary race course markers in the Puget Sound (sailboat races). For typical placement of larger temporary buoys from a buoy tender, the anchor is connected to a “trip wire” or “chalk” (a tripping device) on the side of the boat, the chain/nylon rope is “faked” or folded back and forth along the deck of the vessel, and the buoy is tied off along the same side of the boat as the anchor. The vessel is brought to a stop or an extremely slow speed. The anchor is lowered to be partially suspended in the water before release, minimizing splash disturbance. The “trip wire” is released, dropping the anchor allowing the chain/nylon rope to thread into the water and finally untying and releasing the buoy. If released with a crane versus a “trip wire”, the anchor is also partially suspended in the water before completely released.

Temporary log booms and floating docks may be placed by individual property owners without benefit of an attached anchor, but rather, may be tied with nylon rope or a combination of nylon and chain to bulkheads or permanent structures, such as docks, piling, markers or buoys. Temporary floating docks are small enough to drag out of the water during inclement weather for storage on the uplands until summer returns.

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<sup>1</sup> Information about project construction methods provided by personal communication with John Pell, Navigation Expert, Corps of Engineers, Regulatory Branch, and Eric Winters, Chief of Floating Plan, Corps of Engineers, Navigation Branch on February 16, 2000.  
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the State of Washington

The temporary ski jumps are generally anchored with a 500-pound weight on each corner positioned so that the jump moves a little, but not a lot. The anchors do not move, but the temporary ski jump must move in response to wave action and skiers skiing over them while jumping.

## **Materials Used**

For small temporary buoys, the buoy is a maximum of 4- feet radius (some as small as 1 foot radius). The anchor is made of fully cured concrete or steel, with a maximum weight of 200 pounds for small anchors and an average weight of 500 pounds for larger anchors. Small anchors are no larger than 2 feet high and 3 feet wide, and large anchors are no larger than 4 feet high and 2-1/2 feet wide. Sometimes anchors are 55-gallon drums filled with concrete, sand, or the like and then sealed. The line from anchor to buoy is either a combination of chain and nylon rope or chain and cable. The temporary buoys or markers are generally made of either styrofoam or plastic - some may be inflatable. The length of line for small or large temporary buoys varies based on the scope needed. The scope determines the ratio of length to depth based on currents in the waterbody. The minimum would be 10-feet deep; the maximum would be approximately 200-feet deep. Therefore, the average scope is a ratio of 20:1 line length to depth.

The temporary recreational structures covered by the PBE include: log booms, floating docks, and ski jumps. Temporary log booms that use untreated logs are covered under this programmatic biological evaluation. Temporary floating docks are generally constructed of untreated wood and are small enough to drag out of the water during inclement weather for storage on the uplands until summer returns. Temporary water skiing jumps are generally made of wood and are painted before placement in the water so skiers easily see them.

## **Cleanup**

Any left over materials will be collected and properly disposed.

## **Construction Timing**

The placement of the temporary buoy, marker, or structure occurs in a matter of minutes. The anchor drops at a rate of 10 feet per second, no matter the size. These temporary structures typically stay in place a minimum of 1 or 2 days to maximum of 2 months. Any temporary structure that will be in the water for longer than 2 months (60 days) will not be covered under this programmatic biological evaluation. The exception to this 60-day condition may be the temporary placement of a buoy with signage alerting citizens of temporary shellfish closure areas. The impacts and conditions for temporary tideland markers are covered under this programmatic biological evaluation for "Tideland Markers". Removal of the temporary structure is dependent on when the levels of contaminants within the shellfish reach an acceptable level for human consumption, so these may remain for the duration of the closure period. All work is done within the approved work windows when listed, proposed or forage species are least likely to be present.

## **6.0 Action Area Description**

The action area includes all navigable fresh waters and adjacent terrestrial areas within 1 mile of the proposed project in Washington State. This programmatic biological evaluation does not cover any interrelated and/or interdependent activities in any of the designated critical habitat areas or areas used by listed or proposed species, except those activities distinctly specified. Therefore, there is no interrelated and/or interdependent work in any upland or wetland areas that would be considered designated critical habitat.

## **6.1 For Fresh waters in Washington State excluding the Columbia River mainstem**

The action area for placement of temporary recreational structures is the location of the structure (i.e., temporary floating docks or markers), the perimeter around the temporary structure where boats may be temporarily moored (maximum of a 100-foot diameter around the temporary structure), the length of the line and placement of the anchor(s), the buoy swing around the anchor (an average radius of 5 feet), within a 25-foot radius<sup>2</sup> around the anchor placement for potential water quality impacts, and a 1-mile above water radius for noise and visual impacts associated with construction activities.

The use of the structures is an indirect and interrelated affect. Activities within the action area may include increased use of the water by persons recreating in the area, using boats, flotation devices, swimming, etc. and may include use of the entire waterbody (i.e., lake) or a good portion of the waterbody. In other cases, the placement of the temporary structure may only include the area directly adjacent to that structure (i.e., 100-feet around the temporary structure).

## **6.2 For the Columbia River mainstem in Washington State, including Snake River and Baker Bay**

The action area for temporary recreational structures is the location of the structure (i.e. temporary floating docks or markers), the perimeter around the temporary structure where boats may be temporarily moored (maximum of a 100-foot diameter around the temporary structure), the length of the line and placement of the anchor(s), the buoy swing around the anchor (an average radius of 5 feet), within a 25-foot radius<sup>3</sup> around the anchor placement for potential water quality impacts, and a 1-mile above water radius for noise and visual impacts associated with construction activities.

The use of the structures is an indirect and interrelated affect. Typical use of the area may include increased use of the water by persons recreating in the area, using boats, etc. and may include use of a good portion of the waterbody (i.e., Columbia River Gorge). In other cases, the placement of the temporary structure may only include the area directly adjacent to that temporary structure (i.e., 100-feet around the temporary structure).

## **6.3 For All Marine/Estuarine Waters in Washington State excluding Baker Bay**

Placement of temporary recreational structures in marine waters is not covered under this programmatic.

# **7.0 Species and Habitat Information**

## **Species Present**

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<sup>2</sup> The determination of impact area for potential water quality impacts is based on personal communication with John Malek, Sediment Management, Environmental Protection Agency, on May 10, 2000. Mr. Malek stated that typically turbidity impacts of a pile driving, anchor placement or the like would not exceed a 15-foot radius, a 25-foot radius is the maximum extent of impact, regardless of substrate type and currents at a project site.

<sup>3</sup> The determination of impact area for potential water quality impacts is based on personal communication with John Malek, Sediment Management, Environmental Protection Agency, on May 10, 2000. Mr. Malek stated that typically turbidity impacts of a pile driving, anchor placement or the like would not exceed a 15-foot radius, a 25-foot radius is the maximum extent of impact, regardless of substrate type and currents at a project site.

The plants, animals, insects, and fish present in the project area are provided in Table 1 through Table 4. Details on each species can be found in Appendix B.

Table 1. Sensitive Terrestrial Animals and Insects Potentially Occurring in Designated Project Areas

<b>Species Name</b> <i>Scientific Name</i>	<b>Status</b>	<b>Fresh Water Areas</b> <b>(excluding the</b> <b>Columbia River</b> <b>mainstem)</b>	<b>Mainstem Columbia</b> <b>River Area</b> <b>(including Snake River</b> <b>and Baker Bay</b>
Brown Pelican <i>Pelecanus occidentalis</i>	E	X	X
Marbled Murrelet <i>Brachyramphus marmoratus</i>	T	X	X
Northern Spotted Owl <i>Strix occidentalis</i>	T	X	
Short-Tailed Albatross <i>Phoebastria albatrus</i>	E	X	X
Western Snowy Plover <i>Charadrius alexandrinus</i>	T	X	X
Canada Lynx <i>Lynx canadensis</i>	T	X	
Columbia White-Tailed Deer <i>Odocoileus virginianus leucurus</i>	E	X	X
Gray Wolf <i>Canis lupis</i>	E	X	
Grizzly Bear <i>Ursus arctos horribilis</i>	T	X	
Pygmy Rabbit <i>Barchylagus idahoensis</i>	E	X	X
Woodland Caribou <i>Rangifer tarandus caribou</i>	E	X	
Oregon Silverspot Butterfly <i>Speyeria zerene hippolyta</i>	T	X	X

Table 2. Sensitive Marine Animals Potentially Occurring in Designated Project

Species Name <i>Scientific Name</i>	Status	Fresh Water Areas (excluding the Columbia River mainstem)	Mainstem Columbia River Area (including Snake River and Baker Bay)
Blue Whale <i>Balaenoptera musculus</i>	E		
Fin Whale <i>Balaenoptera physalus</i>	E		
Humpback Whale <i>Megaptera novaeangliae</i>	E		
Sei Whale <i>Balaenoptera borealis</i>	E		
Sperm Whale <i>Physeter macrocephalus</i>	E		
Killer Whale <i>Orcinus orca</i>	E		
Steller Sea Lion <i>Eumetopias jubatus</i>	T		X
Green Sea Turtle <i>Chelonia mydas</i>	T		
Leatherback Sea Turtle <i>Dermochelys coriacea</i>	E		
Loggerhead Sea Turtle <i>Caretta caretta</i>	T		

Table 3. Sensitive Plants Species Potentially Occurring in Designated Project Areas

Species Name <i>Scientific Name</i>	Status	Fresh Water Areas (excluding the Columbia River mainstem)	Mainstem Columbia River Area (including Snake River and Baker Bay)
Bradshaw's Desert Parsley <i>Lomatium bradshawii</i>	E	X	X
Golden Paintbrush <i>Castilleja levisecta</i>	T	X	X
Kincaid's Sulphur Lupine <i>Lupinus sulphureus ssp. Kincaidii</i>	T	X	
Marsh Sandwort <i>Arenaria paludicola</i>	E	X	
Nelson's Checker-Mallow <i>Sidalcea nelsoniana</i>	T	X	X
Showy Stickseed <i>Hackelia venusta</i>	PE	X	
Spalding's Silene <i>Silene spaldingii</i>	PT		
Water Howellia <i>Howellia aquatilis</i>	T	X	X
Wenatchee Mountain Checker-Mallow <i>Sidalcea oregana var. calva</i>	E	X	
Ute Ladies'-Tresses <i>Spiranthes diluvialis</i>	T	X	X

Table 4. Sensitive Fish Species Potentially Occurring in Designated Project Areas

Species Name <i>Scientific Name</i> Evolutionary Significant Unit (ESU)/Distinct Population Segment (DPS)	Status	Fresh Water Areas (excluding the Columbia River mainstem)	Mainstem Columbia River Area (including Snake River and Baker Bay)
Bull Trout <i>Salvelinus confluentus</i>			
Coastal/Puget Sound DPS	T	X	
Columbia River DPS	T	X	X
Chinook Salmon <i>Oncorhynchus tshawytscha</i>			
Puget Sound ESU	T	X	
Snake River Fall Run ESU	T	X	X
Snake River Spring/Summer-run ESU	T	X	X
Lower Columbia River ESU	T	X	X
Upper Columbia River Spring-run ESU	E	X	X
Upper Willamette River ESU	T		X
Sockeye Salmon <i>Oncorhynchus nerka</i>			
Ozette Lake ESU	T	X	
Snake River ESU	E		X
Coho Salmon <i>Oncorhynchus kisutch</i>			
Puget Sound/Strait of Georgia ESU	C	X	
Lower Columbia River/SW WA ESU	C	X	X
Chum Salmon <i>Oncorhynchus keta</i>			
Hood Canal Summer-run ESU	T	X	
Columbia River ESU	T	X	X
Steelhead Trout <i>Oncorhynchus mykiss</i>			
Upper Columbia River ESU	E	X	X
Middle Columbia River ESU	T	X	X
Lower Columbia River ESU	T	X	X
Snake River Basin ESU	T	X	X
Upper Willamette River ESU	T	?	X
Puget Sound ESU	T	X	

## 8.0 Activity History and Status

Table 5is a breakdown of the number of Nationwide Permit 11 (NWP 11 – Temporary Recreational Structures) verifications authorized by the Corps of Engineers. The breakdown is organized by year and waterbody. The waterbody includes all creeks, streams, and unnamed tributaries that flow into it unless otherwise noted. Each of the waterbodies is categorized as below:

### 8.1 Freshwater

All fresh waters within Washington State including all rivers, tributaries, lakes, and reservoirs (regardless of size) and excluding the Columbia River mainstem. (i.e., Snoqualmie River, Skagit River, Puyallup River, Nisqually River, Cowlitz River, Yakima River, Wenatchee River, Snake River, Pend Oreille River, Lake Washington, Lake Sammamish, Lake Chelan, Moses Lake, Baker Lake, Spanaway Lake, etc).



## 8.2 Columbia River

Mainstem Columbia River within Washington State, including the Snake River, Baker Bay, and reservoirs/lakes (i.e. Lake Entiat, Lake Wallula, Franklin D. Roosevelt Lake, Priest Rapids Lake, etc). Data for all tributaries are included under “fresh water” areas.

To determine the number of authorized temporary recreational structure verifications, all finalized permit actions were queried against the key word “NWP 11” and cross-referenced with the work types “buoy”, “float”, “boom” and “breakwater.” The cross-referencing ensures that the activity is properly categorized and each NWP 11 verification is only counted once. NWP 11 activities do not require “notification” to the Corps, therefore the data set below represents only those activities where the Corps was notified and a verification was actually issued. NWP 11 activities are for Rivers and Harbors Act Section 10 waters only, therefore the data represents activities authorized within navigable waters. The following data also includes before- and, when applicable, after-the-fact authorizations. In comparing the Corps database with one year of data from WDFW (1998) for other activities (WDFW information does not separate temporary recreational structures from other buoys, piling, piers, or floats), the Corps database represents less than 1 % of the actual number of temporary recreational structures.

Table 5. Historical Record of Corps Authorization of Buoys/Floats/Booms

<b>WATERBODY</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
Marine	0	1	0	1	0
Fresh	0	2	1	0	0
Columbia River	1	0	2	2	0
<b>Total</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>

As of August 2005, this programmatic has been used 11 times since authorization.

## 9.0 Environmental Baseline

The environmental baseline is provided in Appendix C.

## 10.0 Effects of the Action

### 10.1 Direct effects

Because the effects are relatively the same for all the listed or proposed species, the effects analysis does not distinguish between project area region/waterbody. The event that necessitates the placement of the temporary recreational structure is not covered under this programmatic biological evaluation. However, increased use of the water is expected during summer months. Structures and / or buoys placed in open water have the potential to affect species associated with open water such as fish and birds. Since temporary recreational structures are placed at an average depth of 45 feet high water, the area is generally used as an adult fish migratory corridor, with juveniles staying in the shallower waters. Effects

to listed or proposed species associated with the placement of temporary recreational structures in any of the waters of the U.S. in Washington State are outlined below:

1. Water quality (anchor placement): Temporary water quality impacts may occur with the placement of the temporary buoys as the anchor drops and a small amount of sediment is temporarily suspended in the water column. Because the anchor drops in a matter of seconds and settles, sediment suspension is unlikely to exceed a radius of 25 feet from the anchor and would settle out of the water column to background levels in no more than an hour, depending on sediment type and currents. If the anchor is not installed properly or the weight is not sufficient, the anchor may drag along the substrate, causing additional sediment suspension. The Corps' experience is that this is rare. Buoys will be anchored securely so that the anchor line does not drag. All temporary structures made of wood must be untreated, except for pre-painted and pre-dried wooden structures. Temporary log booms may have bark attached to them when placed in the water. If this is the case, some sloughing of bark may occur during the time the temporary boom is in place. This is not expected to have a significant effect on water quality. Under this informal programmatic consultation, no treatment of temporary log booms or other temporary recreational structures is allowed. Using these methods of installation, temporary water quality impacts associated with the anchor placement are insignificant and/or discountable.
2. Water quality (propwash): In most cases, temporary recreational structures are placed in deep water where propwash would not occur. In shallow waters, the boat placing the temporary buoy may cause some sediment suspension associated with propwash. The boat is stopped or moving extremely slowly during anchor placement so the disturbance with the propwash is extremely small. If a tug and barge are used, the placement is done very quickly (matter of minutes) and the work is done in the approved work window when listed or proposed species are less likely to be present. Any turbidity associated with propwash from the boat or tug and barge would settle out of the water column to background levels in no more than an hour, depending on depth, sediment type and currents. The floats will be sufficiently anchored so they do not drag. Using these methods of installation, all temporary water quality impacts are insignificant and/or discountable.
3. Habitat Health (Forage Fish): Under the terms of this informal programmatic consultation, the temporary recreational structure will not be placed over or adjacent to vegetated shallows. Vegetated shallows provide refuge for juvenile salmonids and support forage species that the listed or proposed species are dependent upon.. Boat activity near or adjacent to vegetated areas has been documented to damage and/or destroy the vegetated areas. (NOAA, 1998) The temporary structures will be placed so that the vessel and buoy are not over or adjacent (within 300-feet) to vegetated shallows. Under the terms of this informal programmatic consultation, the anchor is installed properly or the weight is sufficient to ensure that the anchor does not drag along the substrate, destroying the substrate. The substrate may support benthic invertebrates that juvenile listed or proposed fish species are dependent upon for forage. Species within the action area may be forced into deeper water during installation or removal of the temporary recreational structures, and during the recreational activity. Fish typically spend more time in cooler waters during the day and when the weather is warmer, so the effects to fish are temporary and immeasurable. The recreational activities do not take place at night when fish may be migrating through the action area (USACE, 1999). Using these methods of installation, impacts to habitat health are insignificant and/or discountable.
4. Disturbance: The presence and operation of equipment (i.e., vessel) may have an effect on listed species. Visual disturbance and loud noises can displace listed species from foraging. However, construction activities would be short-term and potential impacts to listed species would be minimized by implementing timing restrictions (Appendix D and E) designed to avoid or minimize impacts.

## 10.2 Indirect effects

Typically, a number of boats and people are expected to utilize the temporary recreational structures while they are in place. In some cases, up to 1,000 additional boats (i.e., hydroplane races) may be within the action area (i.e., lake). Potential increases of shading of the water column, and turbidity, albeit temporarily may occur. Small amounts of fuel and oil and garbage could potentially spill into the water during normal operations of the recreational event. Boats are not fueled in the area of the temporary recreational activity, but at fuel docks. The amount of temporary shading, temporary turbidity, and fuel and oil spillage is minimal and effects would not be measurable. In addition, the potential exists for hundreds or even thousands of people and automobiles to utilize the shorelines adjacent to the temporary recreational activity. The utilization of the shoreline by this many people and vehicles stresses the shoreline and surrounding uplands, but these effects are discountable (Stelle, 1999).

During warm weather, there would be an expected increase in people swimming, diving, boating, and recreating in the water. Increased use of the water itself is not covered in this programmatic biological evaluation, but would include the following potential indirect effects: fuel and oil spillage from boats and other water craft; disturbance of the substrate and increased turbidity when people dive or swim in the water; increased wave action due to the increased use of watercraft on the water; minor disturbance of species near the shorelines where people are recreating; and for fish displacement into deeper waters during boating or waterskiing events. This consultation does not cover any interrelated and/or interdependent work or activities in any of the designated critical habitat areas (except those distinctly specified).

## 10.3 Others

For all other pathways and indicators not specifically mentioned above, the activity will not alter the present environmental baseline.

## 10.4 Determination of Effect

Activities covered by this document may affect certain threatened and endangered species, species proposed for listing as threatened or endangered, and designated or proposed critical habitat for those species (summarized in Table 6 through Table 9). The determinations for each species assumes the following:

For all Fresh Waters excluding the Columbia River mainstem:

- Work is done within the approved work window.
- No work is done over or adjacent to vegetated shallows (except where such vegetation is limited to State-designated noxious weeds) or habitat for listed or proposed species.
- No large woody debris is removed.
- Such devices and structures do not exceed 4 per acre.
- Any small floating docks are no larger than 400 square feet in size and multiples (no more than 4) are spaced at least the distance of the longest dock length.
- No new piling is driven.
- No treated wood is used.

- Such devices and structures remain in the water no longer than 60 days.
- Such devices and structures are removed within 15 days after use has been discontinued.
- Flotation shall be completely contained to prevent breakup.
- Such devices and structures are anchored securely and the anchor and anchor lines do not drag.  
[from NWP 11]

For the Columbia River Mainstem including the Snake River and Baker Bay:

- Work is done within the approved work windows for listed species and/or forage fish.
- No work is done over or adjacent to vegetated shallows (except where such vegetation is limited to State-designated noxious weeds) or habitat for listed or proposed species, or prey/fish species.
- No large woody debris is removed.
- Such devices and structures do not exceed 4 per acre.
- Any small floating docks are no larger than 400 square feet in size and multiples (no more than 4) are spaced at least the distance of the longest dock length.
- No new piling is driven.
- No treated wood is used.
- Such devices and structures remain in the water no longer than 60 day.
- Such devices and structures are removed within 15 days after use has been discontinued.
- Flotation shall be completely contained to prevent breakup.
- Such devices and structures are anchored securely and anchors are installed so that anchor lines do not drag.

For all Marine/Estuarine Waters excluding Baker Bay:

Placement of temporary recreational structures in marine waters is not covered under this programmatic.

### **Brown Pelican (*Pelecanus occidentalis*)**

The proposed activity will have “no effect” brown pelicans. In Washington, brown pelicans inhabit only coastal marine waters. The proposed activity will not occur in coastal marine waters and will not result in temporary displacement of brown pelicans.

### **Marbled Murrelet (*Brachyramphus marmoratus*)**

The proposed activity “may affect, but is not likely to adversely affect” marbled murrelets and their critical habitat. The proposed activity may result in temporary displacement of marbled murrelets during construction due to the associated noise and visual disturbance. Direct mortality or sub-lethal effects are unlikely. The proposed activity will not alter or impact critical habitat because activity would not be associated with old growth habitat. In addition, construction and recreational activity will be temporary (structures are allowed in the water for a maximum of 60 days and must be removed 15 days after activity is discontinued) and work would be prohibited in or near critical habitat areas and during sensitive nesting or foraging periods as described in Appendix E.

### **Northern Spotted Owl (*Strix occidentalis*)**

The proposed activity “may affect, but is not likely to adversely affect” the northern spotted owl and its critical habitat. The proposed activity may result in temporary displacement of spotted owls during construction due to the associated noise and visual disturbance. Direct mortality or sub-lethal effects are unlikely. The proposed activity will not alter or impact current spotted owl prey and habitat because construction and recreational activity will be temporary (structures are allowed in the water for a maximum of 60 days and must be removed 15 days after activity is discontinued) and work would be prohibited in or near critical habitat areas and during sensitive nesting or foraging periods as described in Appendix E.

### **Short-Tailed Albatross (*Phoebastria albatrus*)**

The proposed activity will have “no effect” on short-tailed albatross. In Washington, short-tailed albatross inhabit only coastal and offshore marine waters. The proposed activity will not occur in coastal and offshore marine waters.

### **Western Snowy Plover (*Charadrius alexandrinus*)**

The proposed activity will have “no effect” on western snowy plover and its proposed critical habitat. Plovers inhabit only ocean beach areas in Pacific and Grays Harbor counties; southwest Washington is furthest known northern area for snowy plovers.

### **Canada Lynx (*Lynx canadensis*)**

The proposed activity would have “no effect” on Canada lynx. The proposed activity would occur in navigable waters and would not occur near remote areas of the Selkirk Mountains or the Cascade Range where lynx occur. Because there would be no overlap of the proposed activity action area and Canada lynx or their habitat, the proposed activity would have no potential to affect Canada lynx.

### **Columbia White-Tailed Deer (*Odocoileus virginianus leucurus*)**

The proposed activity “may affect, but is not likely to adversely affect” Columbia white-tailed deer. Any construction noise or activities along the lower Columbia River from River Mile (RM) 50 to RM 52 may result in temporary displacement of Columbia white-tailed deer due to the associated noise and visual disturbance. Direct mortality or sub-lethal effects are unlikely. To minimize impacts, construction and recreational activity will be temporary (structures are allowed in the water for a maximum of 60 days and must be removed 15 days after activity is discontinued) and work will be prohibited in or near sensitive habitat areas as specified in Appendix E.

### **Gray Wolf (*Canis lupis*)**

The proposed activity would have “no effect” on gray wolves. The proposed activity would occur in navigable waters and would not occur near remote areas of the Selkirk Mountains or the Cascade Range where gray wolves occur. Because there would be no overlap of the proposed activity action area and gray wolves or their habitat, the proposed activity would have no potential to affect gray wolves.

### **Grizzly Bear (*Ursus arctos horribilis*)**

The proposed activity would have “no effect” on grizzly bears. The proposed activity would occur in navigable waters and would not occur near remote areas of the Selkirk Mountains or the Cascade Range where grizzly bears occur. Because there would be no overlap of the proposed activity action area and grizzly bear or their habitat, the proposed activity would have no potential to affect grizzly bear.

### **Pygmy Rabbit (*Barchylagus idahoensis*)**

The proposed activity “may affect, but is not likely to adversely affect” pygmy rabbits. Pygmy rabbits occur in the shrub steppe habitat of Douglas County, Washington. Activities could occur adjacent to habitats (e.g., along the Columbia River mainstem) that support the pygmy rabbit. The indirect effects of thousands of people along the shoreline could affect pygmy rabbits and their habitat via trampling and high-density human presence. All associated construction and the recreational activity will be temporary, as structures are allowed in the water for a maximum of 60 days and must be removed 15 days after activity is discontinued.

### **Woodland Caribou (*Rangifer tarandus caribou*)**

The proposed activity would have “no effect” on woodland caribou. The proposed activity would occur in navigable waters and would not occur in or near the Selkirk Mountains where woodland caribou occur. Because there would be no overlap of the proposed activity action area and woodland caribou or their habitat, the proposed activity would have no potential to affect woodland caribou.

### **Oregon Silverspot Butterfly (*Speyeria zerene hippolyta*)**

The proposed activity “may affect, but is not likely to adversely affect” Oregon silverspot butterflies and their critical habitat. Oregon silverspot butterflies inhabit coastal salt spray marshes and open meadows. In Washington, Oregon silverspot butterflies may be extirpated. However, areas suitable for recolonization or reintroduction occur in southwest Washington. Activities near sand dune, salt-spray meadows or open field habitat in the Pacific coastal and Willapa Bay areas of Pacific County could impact the butterfly or their habitat. The early blue violet is a host species for the butterfly larvae, and no activity would be allowed where blue violet is detected by a plant survey conducted at the appropriate time of year. To minimize potential impacts construction and recreational activity will be temporary (structures are allowed in the water for a maximum of 60 days and must be removed 15 days after activity is discontinued and work will be prohibited in or near sensitive habitat areas as specified in Appendix E.

**Blue Whale (*Balaenoptera musculus*)**  
**Fin Whale (*Balaenoptera physalus*)**  
**Humpback Whale (*Megaptera novaeangliae*)**  
**Sei Whale (*Balaenoptera borealis*)**  
**Sperm Whale (*Physeter macrocephalus*)**  
**Killer Whale (*Orcinus orca*) and Critical Habitat**  
**Steller Sea Lion (*Eumetopias jubatus*)**  
**Green Sea Turtle (*Chelonia mydas*)**  
**Leatherback Sea Turtle (*Dermochelys coriacea*)**  
**Loggerhead Sea Turtle (*Caretta caretta*)**

Since the placement of temporary recreational structures in marine waters is not allowed under the programmatic, this proposed activity will have “no effect” on marine mammals or sea turtles. Work is not allowed within one mile of a known steller sea lion haul-out.

### **Bradshaw's Desert Parsley (*Lomatium bradshawii*)**

The proposed activity “may affect, but is not likely to adversely affect” Bradshaw's desert parsley. Bradshaw's desert parsley occurs in wet meadows. Populations of desert parsley have been identified near streams in Clark County, Washington, areas that could potentially be affected by recreational activities. The potential exists for hundreds or even thousands of people and automobiles to utilize the shorelines adjacent to the temporary recreational activity. The utilization of the shoreline by this many people and vehicles could possibly affect Bradshaw's desert parsley and its habitat. In or near potentially suitable habitat areas surveys to determine the presence of Bradshaw's desert parsley can help avoid and minimize potential impacts.

### **Golden Paintbrush (*Castilleja levisecta*)**

The proposed activity would have “no effect” on golden paintbrush. Golden paintbrush occurs in small populations in uplands in the Puget Trough, San Juan County, and Clark County. It is unlikely that species or habitat would be affected by the proposed activity because the proposed activity is associated with navigable waters and surrounding shorelines, away from upland areas. In addition, work would be prohibited in or near sensitive areas as specified in Appendix E.

### **Kincaid's Sulphur Lupine (*Lupinus sulphureus ssp. Kincaidii*)**

The proposed activity would have “no effect” on Kincaid's sulphur lupine. Kincaid's sulphur lupine occurs in upland prairie habitat in southwest Washington. It is unlikely that species or habitat would be affected by the proposed activity because the proposed activity is associated with navigable waters and the surrounding shorelines, away from upland areas. In addition, work would be prohibited in or near sensitive areas as specified in Appendix E.

### **Marsh Sandwort (*Arenaria paludicola*)**

The proposed activity would have “no effect” on the marsh sandwort. Marsh sandwort may be extirpated in Washington, but marsh sandwort historically occurred in freshwater wetlands. Surveys to determine the presence of marsh sandwort can help avoid and minimize potential impacts. Because it may be extirpated there is an insignificant and discountable chance that activities would affect marsh sandwort habitat.

### **Nelson's Checker-Mallow (*Sidalcea nelsoniana*)**

The proposed activity “may affect, but is not likely to adversely affect” Nelson's checker mallow. Nelson's checker-mallow occurs in meadows and along streams in southwest Washington and the Olympic peninsula, areas that could potentially be affected by recreational activities. The potential exists for hundreds or even thousands of people and automobiles to utilize the shorelines adjacent to the temporary recreational activity. The utilization of the shoreline by this many people and vehicles could possibly affect Nelson's checker-mallow and its habitat. In or near potentially suitable habitat areas surveys to determine the presence of Nelson's checker-mallow can help avoid and minimize potential impacts. In addition, work will be prohibited in sensitive areas as specified in Appendix E.

### **Showy Stickseed (*Hackelia venusta*)**

The proposed activity would have “no effect” on showy stickseed. Showy stickseed occurs in open mountain sites composed of loose sand or talus slopes, areas where activities would not occur. Therefore,

it is unlikely that species or habitat would be affected by the proposed activity because the proposed activity is associated with navigable waters and their shorelines, away from open mountain sites.

### **Spalding's Silene (*Silene spaldingii*)**

The proposed activity would have “no effect” on Spalding's silene. Spalding's silene occurs in upland grasslands in eastern Washington, areas where activities would not occur. Surveys to determine the presence of Spalding's silene can help avoid and minimize potential impacts. In addition, it is unlikely that species or habitat would be affected by the proposed activity because the proposed activity is associated with navigable waters and their shorelines, away from upland grasslands.

### **Water Howellia (*Howellia aquatilis*)**

The proposed activity would have “no effect” on water howellia. Water howellia occurs in seasonal wetlands in the Puget lowlands and the Columbia basin, primarily in small, vernal ponds, although some ponds may retain water throughout the year. Ponds would not be influenced or affected by proposed activity, which occurs in navigable waters. Surveys to determine the presence of water howellia can help avoid and minimize potential impacts. It is unlikely that species or habitat would be affected by the proposed activity because construction and activity would take place where plants are not expected to occur. In addition, work would be prohibited in or near sensitive areas as specified in Appendix E.

### **Wenatchee Mountain Checker-Mallow (*Sidalcea oregana var. calva*)**

The proposed activity would have “no effect” on the Wenatchee mountain checker-mallow and its critical habitat. Wenatchee mountain checker-mallow occurs in wet meadows within a small region southeast of Leavenworth, Washington—areas that are not expected to be affected by the proposed activity which occurs in navigable waters. Surveys to determine the presence of Wenatchee mountain checker-mallow can help avoid and minimize potential impacts. It is unlikely that species or habitat would be affected by the proposed activity because construction and activity would be prohibited in or near sensitive areas as specified in Appendix E.

### **Ute Ladies'-Tresses (*Spiranthes diluvialis*)**

The proposed activity “may affect, but is not likely to adversely affect” Ute ladies'-tresses. Ute ladies'-tresses can occur in wet meadows associated with meandering wetland complexes, which can occur near areas that could potentially be affected by recreational activities. The potential exists for hundreds or even thousands of people and automobiles to utilize the shorelines adjacent to the temporary recreational activity. The utilization of the shoreline by this many people and vehicles could possibly affect Ute ladies'-tresses and their habitat. In or near potentially suitable habitat areas surveys to determine the presence of Ute ladies'-tresses can help avoid and minimize potential impacts. In addition, work will be prohibited in sensitive areas as specified in Appendix E.

### **Pacific Salmon and Bull Trout**

Adult and juvenile salmonids utilize habitats within the action area as migratory corridors and rearing habitat and may be affected by construction activities. The proposed activity may result in temporary increases in suspended sediment during construction; however, turbidity is expected to be short-term. Proposed activity will not occur in or near vegetated shallows where listed salmonids or forage fish may occur and buoys/structures will be anchored securely so that the anchor lines do not drag. No treated wood will be used for structures covered by this PBE. The presence of boats and people associated with



the recreational aspect of this activity would result in greater contaminants entering the water from litter and oil/fuel leaks or accidents, thereby putting greater environmental stresses on aquatic organisms. The in-water work windows (see Appendix D) will minimize the chance that adult and juvenile salmonids are present during project construction, and forage fish spawning will be protected.

The proposed activity “may affect, but is not likely to adversely affect”:

- Snake River sockeye and their critical habitat
- Snake River spring/summer chinook and their critical habitat
- Snake River fall chinook and their critical habitat
- Snake River steelhead and their critical habitat
- Columbia River chum
- Columbia River bull trout
- Lower Columbia River steelhead
- Lower Columbia River chinook
- Middle Columbia River steelhead
- Upper Columbia River steelhead
- Upper Columbia River spring chinook
- Upper Willamette River chinook
- Upper Willamette River steelhead
- Ozette Lake sockeye
- Hood Canal summer chum
- Puget Sound chinook
- Coastal/Puget Sound bull trout/dolly varden
- Puget Sound steelhead
- Lower Columbia River/SW Washington coho salmon

The proposed activity may result in temporary increases in suspended sediment during construction; however, turbidity is expected to be short-term. Adherence to work windows will minimize potential impacts from work occurring while listed salmonids are in the project area.

Table 6. Effect Determinations for Listed Terrestrial Animals and Insects

<b>Species Name</b> <i>Scientific Name</i>	<b>Status</b>	<b>Determination</b>	<b>Rational for Determination</b>
Brown Pelican <i>Pelecanus occidentalis</i>	E	May affect, but not likely to adversely affect	Near coastal waters the proposed activity has the potential to temporarily displace brown pelican because of construction noise and the visual and noise disturbance associated with recreational activities (including large crowds). To minimize impacts construction would be limited in Pacific and Grays Harbor Counties by a work window (Appendix E).
Marbled Murrelet <i>Brachyramphus marmoratus</i>	T	May affect, but not likely to adversely affect	The proposed activity has the potential to temporarily displace marbled murrelet because of construction noise and the visual and noise disturbance associated with recreational activities (including large crowds). Construction will be prohibited in or near critical habitat areas and during sensitive nesting or foraging periods (Appendix E).
Northern Spotted Owl <i>Strix occidentalis</i>	T	May affect, but not likely to adversely affect	The proposed activity has the potential to temporarily displace spotted owls because of construction noise and the visual and noise disturbance associated with recreational activities (including large crowds). Construction will be prohibited in or near critical habitat areas and during sensitive nesting or foraging periods (Appendix E).
Short-Tailed Albatross <i>Phoebastria albatrus</i>	E	No Effect	Short-tailed albatross inhabit only coastal waters and placement of temporary recreational structures is not allowed in marine waters
Western Snowy Plover <i>Charadrius alexandrinus</i>	T	May affect, but not likely to adversely affect	Plovers inhabit only ocean beach areas in Pacific and Grays Harbor counties where the proposed activity has the potential to temporarily displace snowy plover because of construction noise and the visual and noise disturbance associated with recreational activities (including large crowds). Work will be prohibited in or near critical habitat and sensitive nesting areas (Appendix E).
Canada Lynx <i>Lynx Canadensis</i>	T	No effect	The proposed activity and associated recreation would not occur near remote areas of the Selkirk Mountains or the Cascade Range where lynx occur.
Columbia White-Tailed Deer <i>Odocoileus virginianus leucurus</i>	E	May affect, but not likely to adversely affect	Construction noise and associated recreational activities along the lower Columbia River from River Mile (RM) 50 to RM 52 may temporarily displace Columbia white-tailed deer. Work will be prohibited in or near sensitive habitat areas as specified in Appendix E.
Gray Wolf <i>Canis lupis</i>	E	No effect	The proposed activity would not occur near remote areas of the Selkirk Mountains or the Cascade Range where grey wolves occur.
Grizzly Bear <i>Ursus arctos horribilis</i>	T	No effect	The proposed activity and associated recreation would not occur near remote areas of the Selkirk Mountains or the Cascade Range where grizzly bear occur
Pygmy Rabbit <i>Barchylagus idahoensis</i>	E	May affect, but not likely to adversely affect	Pygmy rabbits occur in the shrub steppe habitat. Rabbit/habitat disturbance could occur during associated recreational activity (i.e. crowds in or near habitat).
Woodland Caribou <i>Rangifer tarandus caribou</i>	E	No effect	The proposed activity and associated recreation would not occur in or near the Selkirk Mountains where woodland caribou occur.

<b>Species Name</b> <i>Scientific Name</i>	<b>Status</b>	<b>Determination</b>	<b>Rational for Determination</b>
Oregon Silverspot Butterfly <i>Speyeria zerene hippolyta</i>	T	May affect, but not likely to adversely affect	Construction and associated recreational activities near sand dune, salt-spray meadows or open field habitat in the Pacific coastal and Willapa Bay areas of Pacific County could impact the butterfly or their habitat. Work will be prohibited in or near sensitive habitat areas as specified in Appendix E

Table 7. Effect Determinations for Listed Marine Animals

<b>Species Name</b> <i>Scientific Name</i>	<b>Status</b>	<b>Determination</b>	<b>Rational for Determination</b>
Blue Whale <i>Balaenoptera musculus</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Fin Whale <i>Balaenoptera physalus</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Humpback Whale <i>Megaptera novaeangliae</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Sei Whale <i>Balaenoptera borealis</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Sperm Whale <i>Physeter macrocephalus</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Killer Whale <i>Orcinus orca</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Steller Sea Lion <i>Eumetopias jubatus</i>	T	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Green Sea Turtle <i>Chelonia mydas</i>	T	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Leatherback Sea Turtle <i>Dermochelys coriacea</i>	E	No Effect	Placement of temporary recreational structures is not allowed in marine waters
Loggerhead Sea Turtle <i>Caretta caretta</i>	T	No Effect	Placement of temporary recreational structures is not allowed in marine waters

Table 8. Effect Determinations for Listed and Proposed Plants

<b>Species Name</b> <i>Scientific Name</i>	<b>Status</b>	<b>Determination</b>	<b>Rational for Determination</b>
Bradshaw's Desert Parsley <i>Lomatium bradshawii</i>	E	May affect, but not likely to adversely affect	Populations of desert parsley have been identified near streams areas that could potentially be affected by the proposed activity (especially large crowds associated with recreation). In or near potentially suitable habitat areas surveys to determine the presence of Bradshaw's desert parsley can help avoid and minimize potential impacts.
Golden Paintbrush <i>Castilleja levisecta</i>	T	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with upland habitat; hence, the proposed activity would not affect the species or suitable habitat.
Kincaid's Sulphur Lupine <i>Lupinus sulphureus ssp. Kincaidii</i>	T	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with upland prairie habitat; hence, the proposed activity would not affect the species or suitable habitat.
Marsh Sandwort <i>Arenaria paludicola</i>	E	No effect	Proposed activity is unlikely to occur near populations or habitat because marsh sandwort may be extirpated in Washington and the activity would be limited to offshore areas or at the shoreline where plants are not expected to occur.
Nelson's Checker-Mallow <i>Sidalcea nelsoniana</i>	T	May affect, but not likely to adversely affect	Nelson's checker-mallow occurs in meadows and along streams, areas that could potentially be affected by construction/recreational activities. In or near potentially suitable habitat areas surveys to determine the presence of Nelson's checker-mallow can help avoid and minimize potential impacts. In addition, work will be prohibited in sensitive areas as specified in Appendix E.
Showy Stickseed <i>Hackelia venusta</i>	PE	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with open mountain sites composed of loose sand or talus slopes; hence, the proposed activity would not affect the species or suitable habitat.
Spalding's Silene <i>Silene spaldingii</i>	PT	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with upland grasslands; hence, the proposed activity would not affect the species or suitable habitat.
Water Howellia <i>Howellia aquatilis</i>	T	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with small vernal ponds where activities are very unlikely; hence, the proposed activity would affect the species or suitable habitat. Work would be prohibited in or near sensitive areas as specified in Appendix E.
Wenatchee Mountain Checker-Mallow <i>Sidalcea oregana var. calva</i>	E	No effect	Construction would occur in navigable waters and indirect effects would be limited to the near shore/shoreline area. This plant is associated with wet meadows, within a small region southeast of Leavenworth, Washington; where the proposed activity is not likely to occur; hence, the proposed activity would not affect the species or suitable habitat. Work would be prohibited in or near sensitive areas as specified in Appendix E.
Ute Ladies'-Tresses <i>Spiranthes diluvialis</i>	T	May affect, but not likely to affect	Ute ladies'-tresses occurs in wet meadows associated with meandering wetland complexes, areas that could potentially be affected by construction/recreational activities. In or near potentially suitable habitat areas surveys to determine the presence of Ute ladies'-tresses can help avoid and minimize potential impacts. Work would be prohibited in or near sensitive areas as specified in Appendix E.

Table 9. Effect Determinations for Listed, Proposed, and Candidate Fish Species

Species Name <i>Scientific Name</i> Evolutionary Significant Unit (ESU)/Distinct Population Segment (DPS)	Status	Determination	Rational for Determination
Bull Trout <i>Salvelinus confluentus</i> Coastal/Puget Sound DPS Columbia River DPS	T T	May affect, but not likely to adversely affect	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.
Chinook Salmon <i>Oncorhynchus tshawytscha</i> Puget Sound ESU Snake River Fall Run ESU Snake River Spring/Summer-run ESU Lower Columbia River ESU Upper Columbia River Spring-run ESU Upper Willamette River ESU	T T T T E T	May affect, but not likely to adversely affect	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.
Sockeye Salmon <i>Oncorhynchus nerka</i> Ozette Lake ESU Snake River ESU	T E	May affect, but not likely to adversely affect	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.
Coho Salmon <i>Oncorhynchus kisutch</i> Puget Sound/Strait of Georgia ESU Lower Columbia River/SW WA ESU	C C	Will not jeopardize ("may affect, but not likely to adversely affect" if listed)	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.
Chum Salmon <i>Oncorhynchus keta</i> Hood Canal Summer-run ESU Columbia River ESU	T T	May affect, but not likely to adversely affect	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.
Steelhead Trout <i>Oncorhynchus mykiss</i> Upper Columbia River ESU Middle Columbia River ESU Lower Columbia River ESU Snake River Basin ESU Upper Willamette River ESU Puget Sound ESU	E T T T T T	May affect, but not likely to adversely affect	Proposed activity occurs in areas where fish may occur and potential impacts from turbidity, contaminants, and noise associated with construction could affect fish.

## **10.5 Essential Fish Habitat**

### **Overview**

Public Law 104-297, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Fishery Conservation and Management Act to establish new requirements for Essential Fish Habitat (EFH) descriptions in Federal fishery management plans and to require federal agencies to consult with NMFS on activities that may adversely affect EFH.

The Magnuson-Stevens Act requires all fishery management councils to amend their fishery management plans to describe and identify EFH for each managed fishery. The Pacific Fishery Management Council (1999) has issued such an amendment in the form of Amendment 14 to the Pacific Coast Salmon Plan, and this amendment covers EFH for all fisheries under NMFS jurisdiction that would potentially be affected by the proposed action. Specifically, these are the chinook, coho and pink salmon fisheries. EFH includes all streams, lakes, ponds, wetlands, and other currently viable water bodies and most of the habitat historically accessible to salmon. Activities occurring above impassable barriers that are likely to adversely affect EFH below impassable barriers are subject to the consultation provisions of the Magnuson-Stevens Act.

The Magnuson-Stevens Act requires consultation for all federal agency actions that may adversely affect EFH. EFH consultation with NMFS is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH, regardless of its location. Under Section 305(b)(4) of the Magnuson-Stevens Act, NMFS is required to provide EFH conservation and enhancement recommendations to federal and state agencies for actions that adversely affect EFH. Wherever possible, NMFS utilizes existing interagency coordination processes to fulfill EFH consultations with federal agencies. For the proposed action, this goal is being met by incorporating EFH consultation to the Endangered Species Act Section 7 consultation, as represented by this biological evaluation.

### **Location**

The location of the activity covered by this assessment has been described in detail earlier in this document (see Section 3).

### **Description of Proposed Activity**

The activity covered by this assessment have been described earlier in this document (see Section 4).

### **Potential Adverse Effects of the Proposed Activity**

Projects would occur in freshwater. EFH for ground fish (Table 10), coastal pelagics (Table 11) and salmonids (Table 12) would not be affected by proposed activity.

### **Salmon EFH**

Effects to the environmental baseline that would impact salmon species are discussed in detail in Section 10.0.

## **EFH Conservation Measures**

Conservation measures designed to protect listed species and those proposed as threatened or endangered will also help avoid and minimize impacts of the proposed activities on salmonid and groundfish EFH (see Appendix D, E, F, and G).

## **Conclusion**

In accordance with EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act, the Corps has determined that the proposed activity would not adversely impact EFH utilized by Pacific salmon and groundfish. It has been determined that the proposed action will not adversely affect EFH for federally managed fisheries in Washington waters.

Table 10. Ground Fish Species with Designated EFH and the Life History Stages that May Occur in the Action Area (PFMC, 1998a).

<b>GROUND FISH SPECIES</b>	<b>Adults</b>	<b>Spawning/ Mating</b>	<b>Large Juvenile</b>	<b>Small Juvenile</b>	<b>Larvae</b>	<b>Eggs/ Parturition</b>
Leopard Shark	X	X	N/A	X	N/A	X
Soupin Shark	X	X	N/A	X	N/A	X
Spiny Dogfish	X		X	X	N/A	X
California Skate	X	X	N/A	X	N/A	X
Ratfish	X	X	N/A	X	N/A	
Lingcod	X	X	X	X	X	X
Cabezon	X	X	X	X	X	X
Kelp Greenling	X	X	X	X	X	X
Pacific Cod	X	X	N/A	X	X	X
Pacific Whiting (Hake)	X	X	N/A	X	X	X
Sablefish				X		
Jack Mackerel	X		N/A		X	
Black Rockfish	X			X		
Bocaccio				X	X	
Brown Rockfish	X	X	N/A	X		X
Calico Rockfish	X		N/A	X		
California Scorpionfish						X
Copper Rockfish	X		X	X		X
Kelp Rockfish				X		
Quillback Rockfish	X		X	X	X	X
English Sole	X	X	N/A	X	X	X
Pacific Sanddab			N/A	X	X	X
Rex Sole	X		N/A			
Starry Flounder	X	X	N/A	X	X	X

N/A - Not Applicable. Either the species does not have a particular life stage in its life history, or when EFH of juveniles is not identified separately for small juvenile and large juvenile stages. For many species, habitats occupied by juveniles differ substantially, depending on the size (or age) of the fish. Frequently, small juveniles are pelagic and large juveniles live on or near the bottom; these life stages are identified separately in the table when sufficient information is available to do so. When juvenile habitats do not differ so substantially or when information is insufficient to identify differences, EFH is identified only for the juvenile stage (small and large juveniles combined), and N/A is listed in the column for the large juvenile stage in the table (PFMC, 1998a).



Table 11. Coastal Pelagic Species with Designated EFH and the Life History Stages that May Occur in the Action Area (PFMC, 1998a).

<b>COASTAL PELAGIC SPECIES</b>	<b>Adults</b>	<b>Spawning/ Mating</b>	<b>Large Juvenile</b>	<b>Small Juvenile</b>	<b>Larvae</b>	<b>Eggs/ Parturition</b>
Northern Anchovy	X		X		X	X
Pacific Sardine	X		X		X	X
Pacific Mackerel	X		X		X	X
Jack Mackerel	X					
Market Squid	X	N/A		N/A	N/A	N/A

N/A - Not Applicable. Either the species does not have a particular life stage in its life history, or when EFH of juveniles is not identified separately for small juvenile and large juvenile stages. For many species, habitats occupied by juveniles differ substantially, depending on the size (or age) of the fish. Frequently, small juveniles are pelagic and large juveniles live on or near the bottom; these life stages are identified separately in the table when sufficient information is available to do so. When juvenile habitats do not differ so substantially or when information is insufficient to identify differences, EFH is identified only for the juvenile stage (small and large juveniles combined), and N/A is listed in the column for the large juvenile stage in the table (PFMC, 1998a).

Table 12. Salmonid Species with Designated EFH and the Life History Stages that May Occur in the Action Area (PFMC, 1998a).

<b>PACIFIC SALMON</b>	<b>Egg</b>	<b>Larvae</b>	<b>Young Juvenile</b>	<b>Juvenile</b>	<b>Adult</b>	<b>Spawning</b>
Chinook salmon	X	X	X	X	X	X
Coho salmon	X	X	X	X	X	X
Pink salmon	X	X	X	X	X	X