



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office  
510 Desmond Dr. SE, Suite 102  
Lacey, Washington 98503

In Reply Refer to: **01EWF00-2015-I-0104**

**October 20, 2016**

**xRef:**

**1-3-00-I-1524 (2000 Phase 1)**  
**1-3-04-PI-0803 (2004 Phase 1)**  
**1-3-05-PI-0032 (2005 RGP 1)**  
**13410-2009-I-0421 (2009 Phase 1 & RGP 1)**

Michelle Walker, Chief Regulatory Branch  
Seattle District, Corps of Engineers  
ATTN: Regulatory Branch (Baird)  
P.O. Box 3755  
Seattle, Washington 98124-3755

Dear Ms. Walker:

Subject: Renewal of Phase 1 Programmatic (statewide) and Regional General Permit (RGP) 1 (Watercraft Lifts in Fresh and Marine Waters-Statewide)

This letter is in response to your request to reinitiate informal consultation for the Programmatic Biological Evaluation (PBE) for the State of Washington for Salmonid Species Listed or Proposed by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service under the Endangered Species Act (Phase 1 Programmatic) and Regional General Permit (RGP) 1 (watercraft lifts). On August 25, 2014, the U.S. Fish and Wildlife Service (Service) provided an extension for the RGP 3 Programmatic (activities in Lake Washington, Lake Sammamish, Lake Union and the Ship Canal) (Ref# 13410-2009-I-386-R001). We received your email requesting renewal of the Phase 1 Programmatic and RGP 1 on August 26, 2014.

Since the programmatic were first developed, several new species have been listed and critical habitat has been designated or proposed for them, and one species was delisted:

- Streaked horned lark (*Eremophila alpestris strigata*) and critical habitat;
- Four subspecies of the Mazama pocket gopher (*Thomomys mazama* – *T.m. pugetensis*, *T.m. glacialis*, *T.m. tumuli*, and *T.m. yelmensis*) and critical habitat;

- Taylor’s checkerspot butterfly (*Euphydryas editha taylori*) and critical habitat;
- Oregon spotted frog (*Rana pretiosa*) and proposed critical habitat;
- Western yellow-billed cuckoo (*Coccyzus americanus*) (no proposed critical habitat in Washington state); and
- Brown pelican (*Pelecanus occidentalis*) (delisted in 2009).

The Service is providing our concurrence with the determination of “may affect, not likely to adversely affect” (NLAA) for the following species and their designated critical habitat (Table 1).

Table 1. Federally listed species and their designated critical habitat addressed in this consultation.

<b>Species Name</b> ( <i>Scientific Name</i> )	<b>Critical Habitat</b>	<b>Determination of Effect</b>
Bull trout ( <i>Salvelinus confluentus</i> ) Coastal/Puget Sound DPS Columbia River DPS	Yes Yes	NLAA NLAA
Marbled murrelet ( <i>Brachyramphus marmoratus</i> )	N/A - not affected by the action	NLAA
Northern spotted owl ( <i>Strix occidentalis</i> )	N/A - not affected by the action	NLAA
Western snowy plover ( <i>Charadrius alexandrinus</i> )	N/A - not affected by the action	NLAA
Columbia white-tailed deer ( <i>Odocoileus virginianus leucurus</i> )	N/A - not affected by the action	NLAA
Oregon spotted frog ( <i>Rana pretiosa</i> ) (listed 2014)	N/A - not affected by the action	NLAA
Western yellow-billed cuckoo ( <i>Coccyzus americanus</i> ) (listed 2014)	N/A - not proposed in WA. State	NLAA
Streaked horned lark ( <i>Eremophila alpestris strigata</i> ) (listed 2013)	N/A - not affected by the action	NLAA

The U.S. Army Corps of Engineers – Seattle District (Corps) also made “may affect, not likely to adversely affect” determinations for the species and/or critical habitats listed in Table 2 below. However, based on the proposed conservation measures (CMs) in the PBE and/or locations of the actions (marine and freshwater rivers and lakes), the

proposed actions will not affect the species listed in Table 2 or result in modification of their habitat. Therefore, we will not address these species or their critical habitat further. If the Corps determines that a project will affect any of the newly listed species or those listed in Table 2, that project will need to undergo an individual consultation.

Table 2. Federally listed species or their critical habitat for which there will be “no effect” with inclusion of the proposed CMs described in the PBE or due to project location.

<b>Species and/or Designated Critical Habitat</b>	<b>Scientific Name</b>
Short-tailed albatross	<i>Phoebastria albatrus</i>
Pygmy rabbit	<i>Barchylagus idahoensis</i>
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>
Bradshaw’s desert parsley	<i>Lomatium bradshawii</i>
Nelson’s checker-mallow	<i>Sidalcea nelsoniana</i>
Water howellia	<i>Howellia aquatilis</i>
Ute ladies’-tresses	<i>Spiranthes diluvialis</i>
Western snowy plover critical habitat	<i>Charadrius alexandrinus</i>
Streaked horned lark critical habitat (listed 2013)	<i>Eremophila alpestris strigata</i>
Taylor’s checkerspot butterfly (listed 2013)	<i>Euphydryas editha taylori</i>
Mazama pocket gopher (listed 2014)	<i>Thomomys mazama spp.</i>

This consultation has been conducted in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The Corps consulted with the Service on previous versions of the following:

- Phase 1 Programmatic for 10 Activities in 2000 (FWS 1-3-00-I-1524), in 2004 (1-3-04-PI-0803), and in 2009 (13410-2009-I-0421).
- RGP 1 for Watercraft Lifts in Washington State in 2005 (1-3-05-PI-0032), and again in a combined consultation that also included Phase 1 in 2009 (13410-2009-I-0421).

Over the past several years, we have reviewed and consulted on a large number of routine projects submitted as Reference Biological Evaluations (RBEs) under the Phase 1 Programmatic and the RGP 1. Most of these actions met the requirements of the programmatic; however, frequent minor exceptions prompted a request from the Corps to add additional activities into these programmatic (see list below).

Based on our analysis of effects to listed species, we have determined that the following modifications to this programmatic consultation can be included and covered under this updated Programmatic consultation because they would not result in adverse effects to listed species under the Service’s jurisdiction: 1) no work window required for installation of mooring buoys, 2) increase pile sizes allowable for piling replacements to a maximum of 12-inch diameter piles with a maximum of 225 impact-hammer pile strikes

per day in marine waters and the lower Columbia River, 3) increase maximum number of piles installed per project to 100 in the Ports of Tacoma and Seattle, 4) allow a maximum of 40 cy of nearshore fill in marine and freshwater areas, and 5) add a new category which allows pile jacket repairs.

To improve efficiency on Corps permit consultations, while providing adequate protection of federally listed species, we are providing this letter of concurrence that addresses activities included in the previous programmatic with the minor modifications listed above. Please refer to this consultation as the “2016 Renewal of the Phase 1 Programmatic and RGP 1.” Each covered activity is described below. The conservation measures required for each covered activity are provided in the Appendices.

Please note that since previous programmatic seldom addressed the following activities, we are no longer including them in this consultation: 1) *Fish and Wildlife Harvesting* and 2) *Oil Spill Containment*.

### **Descriptions of Covered Activities– Phase 1 Programmatic**

The following are brief descriptions of the covered activities conducted under the Phase 1 Programmatic. Refer to Appendix A for CMs applicable to these activities; our concurrence with an effects determination of “may affect, likely to adversely affect” is based on implementation of all the applicable CMs in Appendix A.

#### 1. Aids to Navigation

- Installation, replacement, or repair of navigation aids and regulatory markers, including placement of buoys.

#### 2. Mooring Buoys

- Placement of mooring buoys for single boat, non-commercial use.
- Mooring buoys cannot exceed four per acre at any time.
- Mooring buoys can be installed any time of year unless they are in or within 328 ft (100 meters) of documented forage fish spawning habitat; when spawning habitat is present, work will occur during the appropriate in-water work window.

#### 3. Temporary Recreational Structures

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

- All wooden components are pre-painted and dried prior to installation and no treated wood is used.
- Such devices and structures are anchored securely.
- Temporary docks are limited to 400 ft<sup>2</sup> or less in size and multiple docks must be spaced at least a full dock width apart. Larger docks or when docks are spaced at less distance than a full dock apart will require written agreement from the Service prior to permit issuance.
- Structures and devices must be removed within 30 days after use has been discontinued and may remain in the water no longer than 90 days total each calendar year.
- Floats that are used on a seasonal basis will be removed during the off-season and stored either on land (beach or upland area) or in a location that is secure from storm events (e.g., sheltered cove or existing boathouse).
- No new piles will be installed.
- Structures and/or devices do not exceed four per acre at any time.

#### 4. Piling Repair and Replacement

##### **Freshwater**

Repair or replacement of up to 20 piles per structure (or site) over the duration of the programmatic (10 years). The “Specific Project Information Form” (SPIF) must describe the size and type of pile, number of piles that will be installed per day, and the number of strikes that will be needed for each pile that will be installed or proofed using an impact driver. Bull trout presence in the lower Columbia River is much less likely than in other freshwater systems; therefore, there are different allowable activities in each of these freshwater systems (as described below in Table 1).

Work will be completed within 14 days during the approved work window. Activities below the ordinary high water mark (OHWM) will occur during the approved in-water work window appropriate for the waterbody (consult the Service for correct windows). All pile driving will occur during daylight hours. No piles are associated with log raft booms. No sheet piling may be used in lieu of pole piling. Projects proposing impact pile driving, including proofing, of steel piles larger than 10-inches in diameter in freshwater systems other than lower Columbia River, must be submitted for individual consultation.

Table 1. Pile Replacements in Freshwater.

	<b>Size</b>	<b>Installation Method</b>	<b>Limit of Pile Strikes Per Day</b>	<b>All freshwater</b>
<b>Steel Piles in all freshwaters including the lower Columbia River</b>	Smaller than 12-inch diameter	Vibratory or impact	No limit	No more than 20 piles
<b>Steel Piles in all freshwaters except the lower Columbia River</b>	12-inch diameter	Vibratory only	No impact pile driving	No more than 20 piles
<b>Steel Piles in Lower Columbia River (does not apply to other freshwaters)</b>	12-inch diameter	Vibratory or impact	Less than 225 strikes/day	No more than 20 piles
<b>Concrete (all freshwaters including lower Columbia River)</b>	24 inches in diameter	Vibratory or impact	No limit	No more than 20 piles
<b>Wood (all freshwaters including lower Columbia River)</b>	No size limit	Vibratory or impact	No limit	No more than 20 piles
<b>Plastic/ Fiberglass (all freshwaters including lower Columbia River)</b>	No size limit	Vibratory or impact	No limit	No more than 20 piles

*Steel Piles*

Steel piles are limited to those that are 12 inches in diameter or less. For steel piles smaller than 12 inches in diameter, vibratory pile installation will be used to the greatest extent possible and impact driving will be limited to proofing or locations where vibratory installation is not feasible. Pile strikes are not limited for piles smaller than 12-inch diameter. For all 12-inch diameter steel piles, vibratory installation must be used in all freshwater except the lower Columbia River; impact-hammer pile driving may be used to proof 12-inch-diameter steel piles in the lower Columbia River, but proofing is not covered under this programmatic in any other freshwater areas. A bubble curtain and/or block will be used during proofing for sound attenuation. Bubble curtains will meet the attached performance standards in Appendix C. Consult the Service for the appropriate approved in-water work window for the freshwater system where the work is being completed.

### *Concrete Piles*

Concrete piles are limited to those that are 24 inches in diameter or smaller. Impact-hammer pile driving may be used to install concrete piles and there is no limit to number of pile strikes per day. Up to 20 piles may be installed in freshwater areas.

### *Wood and Plastic Piles*

Wood and plastic piles may be any size and may be installed with either impact or vibratory pile driving. There is no limit to the number of pile strikes per day. Up to 20 piles may be installed in freshwater.

### *Pile Repairs*

- Up to 40 wood piles can be repaired by the following methods:
  - Stubbing, which generally consists of cutting the deteriorated piles, detaching them from the pile caps, and then installing and adhering new sections of steel or wood pile to the remaining wood pile stub;
    - Shoring frames may be used to support the building structure during pile removals/installation.
    - Steel pile sections may have a metal plate welded inside the bottom to prevent the pile from slipping down over the wood stub.
    - Replacement stubs may extend over the top of the wood pile stub and have an epoxy applied (epoxy is approved for underwater use).
  - Fiber-form jackets, which generally consists of wrapping fiber-form jackets around the deteriorated pile section and installing rebar around the pile;
    - Can be secured by bands and sealed at the bottom by sealant plugs to allow grout to be pumped inside the jacket.
    - Once grout is cured, jackets are removed and the repaired pile is supported by rebar and grout.

### **Marine Waters**

Repair or replacements of up to 20 piles per structure or site may occur in any marine waters in Washington State, except in the Ports of Tacoma and Seattle, where up to 100 piles can be installed. The SPIF must describe the size and type of pile, number of piles that will be installed per day, and the number of strikes that will be needed for each pile that will be installed or proofed using an impact

driver. Bull trout presence in marine waters depends on location, but generally they are least likely to be present during the approved in-water work window, between they July 16 and February are 15.

Work installing 20 piles will be completed within 14 days during the approved work window, and work installing 100 piles will be completed within 90 days. All pile driving will occur during daylight hours. No piles are associated with log raft booms. No sheet piling may be used in lieu of pole piling. Projects proposing impact pile driving, including proofing, of steel piles larger than 12-inches in diameter in marine waters, must be submitted for individual consultation.

Table 2. Pile Replacements in Marine Waters.

	<b>Size</b>	<b>Installation Method</b>	<b>Limit of Pile Strikes Per Day</b>	<b>All marine areas</b>	<b>Port of Tacoma and Seattle</b>
<b>Steel Piles</b>	Smaller than 12-inch diameter	Vibratory or impact	No limit	20 piles limit	No more than 100 piles
<b>Steel Piles</b>	12-inch diameter	Vibratory or impact	Less than 225 strikes/day	20 piles limit	No more than 100 piles
<b>Concrete</b>	24 inches in diameter or smaller	Vibratory or impact	No limit	20 piles limit	No more than 100 piles
<b>Wood</b>	No size limit	Vibratory or impact	No limit	20 piles limit	No more than 100 piles
<b>Plastic/ Fiberglass</b>	No size limit	Vibratory or impact	No limit	20 piles limit	No more than 100 piles

### *Steel Piles*

Steel piles are limited to those that are 12 inches in diameter or smaller. For steel piles smaller than 12-inch diameter, vibratory pile installation will be used to the greatest extent possible and impact driving will be limited to proofing or locations where vibratory installation is not feasible. For 12-inch diameter piles, proofing is limited to 225 pile strikes per day. Pile strikes are not limited for piles smaller than 12 inches in diameter. A bubble curtain and wood or Micarta block will be used as sound attenuation during impact pile driving or proofing. Up to 100 steel piles may be replaced in the industrial waterfront areas of the Ports of Seattle and Tacoma; however, a maximum of 225 strikes per day are permitted for impact pile driving or proofing.



### *Concrete Piles*

Concrete piles are limited to those that are 24 inches in diameter or less. Impact pile driving may be used to install concrete piles and there is no limit to number of pile strikes per day. Up to 20 piles may be installed in marine areas, except the Port of Tacoma and Seattle, where up to 100 piles can be installed. There is no limit to the number of pile strikes per day.

### *Wood and Plastic Piles*

Wood and plastic piles may be any size and may be installed with either impact or vibratory pile driving. There is no limit to the number of pile strikes per day. Up to 20 piles may be installed in marine areas, except the Ports of Tacoma and Seattle, where up to 100 piles can be installed.

### *Pile Repairs*

- Up to 40 wood piles can be repaired by:
  - Stubbing (generally consists of cutting the deteriorated piles, detaching them from the pile caps, and then installing and adhering new sections of steel or wood pile to the remaining wood pile stub).
    - Shoring frames may be used to support the building structure during pile removals/installation.
    - Steel pile sections may have a metal plate welded inside the bottom to prevent the pile from slipping down over the wood stub.
    - Replacement stubs may extend over the top of the wood pile stub and have an epoxy applied (epoxy is approved for underwater use).
  - Fiber-form jackets (generally consists of wrapping fiber-form jackets around the deteriorated pile section and installing rebar around the pile).
    - Can be secured by bands and sealed at the bottom by sealant plugs to allow grout to be pumped inside the jacket.
    - Once grout is cured, jackets will be removed and the repaired pile will be supported by rebar and grout.

### Other Criteria for Pile Replacements in Marine Waters

- Work windows in marine areas will be limited to July 16 to February 15 or work windows for specific tidal reference areas for protection of forage fish

spawning. For more information on tidal reference areas and work windows, go to: <http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Permit-Guidebook/Endangered-Species/>

- The approved in-water work window for the lower Columbia River currently is October 1 through December 31.
- No piles may be installed that are associated with log raft booms.
- No sheet piling may be used in lieu of pole piling.
- No impact pile driving at primary feeding times during the marbled murrelet nesting season (2 hours after sunrise, and 2 hours before sundown).

#### 5. Minor Bank Stabilization - Freshwater

- The placement of missing rock along the bank is limited to areas that were previously armored and where sub-base native soils are not exposed.
- Repairs will not exceed the footprint of the previously armored bank. All repairs are in-kind and in-place at the existing structure. Actions that exceed the existing footprint or are not in-kind or in-place at the existing structure must be consulted on individually.
- Excavation is not permitted for this activity.
- Reclaiming eroded areas is not permitted for this activity.

#### 6. Minor Repairs of Existing Bank Stabilization -Marine/Estuarine

- The activity includes the repair of existing wave wall and seawall components located along marine and estuarine nearshore areas.
- Repairs will not extend beyond 10 percent of the existing footprint of the stabilization area or 50 linear ft maximum, whichever is smaller.
- Repairs generally consist of replacing or realigning large rocks or concrete panels. All repairs are in-kind and in-place at the existing structure. Actions that exceed the existing footprint or are not in-kind or in-place at the existing structure must be consulted on individually.
- Reclaiming eroded areas is not permitted.
- Repairs that include construction of new bulkheads water-ward of the replaced structure are not covered under this programmatic and must be submitted for individual consultation.

## 7. Installation, Maintenance and Operation of Scientific Measurement Devices

- Placing new or replacing old devices with a new unit of the same dimensions. Examples of such devices include, but are not limited to, staff gages, tide gages, water recording devices, water quality testing and improvement devices, and similar structures.
- The measuring devices may need to be secured to piles or buoys.
- Upland facilities will not have a footprint greater than 25 ft<sup>2</sup>.
- Overwater structures will not be greater than 10 ft<sup>2</sup>. These structures are only permitted within marine/estuarine waterbodies.
- Installation of fish traps, egg/alevin sampling, and soil borings are not covered under this programmatic.
- Work will be done during low flow or low tide and, when possible, in the dry.
- Up to three new piles may be installed per project (following pile installation criteria above).

Excluded activities: No leveling, grading, dewatering or re-routing of water is permitted. No fill placement in wetlands or water-ward of the OHWM or Mean Higher High Water line (MHHW). Installation, repair, and/or maintenance of weirs and flumes are not permitted.

## 8. Tideland Markers

- The activity includes the placement of tideland markers, either by a single piling or buoys.
- Work may only occur in marine/estuarine waters.

## 9. Beach and Substrate Nourishment - (previously titled Nearshore Fill for State HPA Mitigation Requirements)

- The activity includes the placement of suitable substrate material for shoreline enhancement actions to improve forage fish spawning habitat.
- Up to 40 cy of fill material may be placed water-ward of the OHWM and MHHW without Service notification. Projects proposing more than 40 cy of fill must be submitted for individual consultation.
- All actions require a HPA permit confirming the habitat enhancing feature and suitability of the fill material.
- Placement of fill cannot be used as mitigation for new structures (e.g., bulkheads) under this programmatic, unless those structures are also addressed in this programmatic consultation.
- Substrate used must be appropriate for location and target species.

### Descriptions of Covered Activities – RGP 1 – Watercraft Lifts and Boat Canopies

This RGP covers the construction and replacement of watercraft lifts and translucent canopy covers within fresh and marine/estuarine waters in Washington State. This RGP is applicable in all waters of the United States, including navigable waters within the State of Washington except in the mainstem of the Snake River, the mainstem of the Columbia River above Priest Rapids Dam, and portions of the Pend Oreille River. RGP 1 covers the installation or replacement of serviceable watercraft lifts including repairs (hinges, floats, footings, etc.) that are below the OHWM or MHHW and translucent canopy covers on new or existing watercraft lifts. The programmatic consultation covers the installation of up to two piles that can be 8- to 12-inches in diameter (Table 3) and the Service is concurring with a determination of “may affect, not likely to adversely affect” the covered species when all the CMs in Appendix B are implemented.

All actions proposed under RGP 1 will comply with the existing conditions as stated in the revised January 29, 2007 BA:

- There is no limit on the number of watercraft lifts and/or translucent canopies that may occur at an existing dock or facility.
- In all freshwater systems and marine areas only two new 8- to 12-inch-diameter piles (steel or non-treated wood) may be driven and only if necessary for watercraft lift installation. Vibratory or impact installation is permitted with no restriction on total number of pile strikes in marine waters and lower Columbia River only (no proofing of piles larger than 10 inches in diameter is permitted in other freshwater systems). Only vibratory pile driving is permitted in freshwater, no impact pile driving or proofing is permitted in freshwater systems (Table 3).

Table 3. Pile Installation/Replacements for RGP 1.

	Size	Installation Method	Limit of Pile Strikes Per Day	All marine and freshwater systems
<b>Steel Piles</b>	Up to 10 inches in diameter	Vibratory or impact	No limit	No more than 2 piles
<b>Steel Piles</b>	12 inches in diameter	Vibratory or impact	Less than 225 strikes/day in marine waters only (no impact proofing permitted in freshwater other than the lower Columbia River)	No more than 2 piles
<b>Wood or concrete</b>	No size limit	Vibratory or impact	No limit	No more than 2 piles

### **Summary of Procedures for Using the Programmatic or RPG**

The applicant will submit a SPIF to the Corps for actions that are proposed under this programmatic. All projects that are determined by the Corps to comply with the Programmatic receive a statement of compliance by the Corps. When adequate information necessary to complete the consultation received, the Service will respond to the Corps by email or with a letter with their decision regarding consistency with the Programmatic.

When projects that do not meet the specific description and criteria covered in the programmatic, including all applicable CMs, a Reference Biological Evaluation (RBE) may be submitted to the Service when the individual consultation request is submitted. This procedure applies only to those projects that would result in “may affect, not likely to adversely affect” determinations, and where there are only minor deviations from the action currently included in the programmatic. The RBE must clearly identify why the proposed project does not meet the programmatic letter of concurrence and must clearly explain any modifications, exclusions, or additions of CMs. The Corps may propose additional CMs, or modify or exclude existing CMs specific to the activity under review. The Service’s intent is to respond to these RBE consultations within 30 days of receipt; however, the project cannot proceed until either an email or a letter, documenting coverage under the programmatic, is received from the Service.

### **Activities Not Covered Under the Programmatic Letter of Concurrence**

The following activities are not covered and require individual consultation.

1. Activities that would occur within 110 meters of suitable nesting habitat for marbled murrelets and within 110 meters of suitable foraging, nesting, and/or roosting habitat for northern spotted owls.
2. Activities in areas that are currently occupied by Oregon spotted frog and/or may be suitable habitat for this species. These areas include, but are not limited to, the following geographic locations:

Locations where they are currently known to be present: a) Sumas River, b) Black Slough on the South Fork Nooksack River, c) Samish River, d) wetlands on Joint Base Lewis-McChord in the Muck Creek watershed, e) Black Lake, Black River and Fishpond Creek (Thurston County), f) wetlands with hydrologic connections to Troutlake Creek and Conboy Lake in Yakima County, and g) Outlet Creek, Fraiser Creek and Chapman Creek in Klickitat County.

Locations where they are not currently known to be present, but were historically present: a) wetlands in the lower Skagit River watershed (west of the I-5 corridor), b) Woods Creek in the Skykomish River (near Monroe), c) wetlands in farmland along the lower Green River, d) Chambers Creek and Spanaway Lake

(Pierce County/Joint Base Lewis-McChord), and e) McLane Creek and Pattison Lake (Thurston County).

Before an effects determination is made for the Oregon spotted frog the suitability of habitat in the action area should be assessed. See Appendix D for a description of suitable habitat and a protocol for surveying for habitat suitability.

3. Activities located in geographic areas containing bull trout local populations as identified in the final recovery plan or most recent document.
4. All actions that could result in indirect effects and/or interdependent or interrelated actions that are not considered in this programmatic letter of concurrence. Examples include but are not restricted to the following:
  - a. Placement of beach nourishment/spawning substrate to mitigate for the construction or repair of a bulkhead outside of Corps jurisdiction.
  - b. Replacement of a dock associated with an upland development that will remove riparian vegetation or mature trees that provide shade and nutrients to bull trout waterbodies.
5. Impact pile driving or proofing of steel piles greater than 10 inches in diameter in freshwater (except in the lower Columbia River, where some limited proofing is permitted for 12-inch diameter piles).
6. Exceeding 225 strikes per day when impact pile driving or proofing steel piles in marine waters for 12-inch diameter steel piles.
7. Removal of woody vegetation, except for the construction of over-water structures located in the San Juan Islands that demonstrate in the SPIF that avoidance is not possible. If woody vegetation removal cannot be avoided, actions on the San Juan Islands must comply with CM-60 (Phase 1 CMs, Appendix A).
8. Activities that occur in areas containing species and/or suitable habitat in Table 1, in which “No Effect” determinations were made.

Additionally, this programmatic does not cover actions within the Lake Washington/Lake Sammamish basins. Activities in that watershed are covered under the *Concurrence for Selected Activities in Lake Washington/Lake Sammamish Basins* (FWS Ref. # 2009-I-0386-R001).

### **Concurrence with the “May Affect, Not Likely to Adversely Affect” Determination**

Based on the information provided in the Programmatic Biological Evaluation for the Phase 1 Programmatic, and Regional General Permit 1, as modified, we conclude that effects to the federally listed species and their critical habitat are insignificant and/or discountable, as detailed below:

### Bull Trout

The proposed action includes CMs to reduce the potential effects to bull trout (Appendices A and B). These include no removal of native riparian vegetation in areas used by bull trout and no activities within bull trout local populations. All work conducted below the OHWM or mean lower low water (MLLW) will occur during the recommended in-water work window for the project area (except installing/replacing mooring buoys), when bull trout are least likely to be present and exposed to construction activities.

Although the covered activities/actions may result in increased turbidity during construction, impacts to water quality will be localized, short in duration, and will occur when bull trout are least likely to be present. If bull trout are present and exposed to elevated levels of turbidity, the quantity and duration of exposure is anticipated to be minimal because CMs (Appendices A and B) will be implemented to minimize the severity of the effects. Although mooring buoys may be installed any time of year, the effects will be short in duration and any turbidity associated with installation will be localized and dissipate quickly. The disturbance and turbidity associated with installing/replacing mooring buoys and all other covered activities are expected to be minimal and short duration, such that we do not expect any measureable physical effects to bull trout or a significant disruption to their normal behaviors.

Submerged aquatic vegetation may be shaded when mooring buoys and associated moored vessels, floats, watercraft lifts, or other structures are installed within or near vegetated shallows. Eelgrass and macroalgae are important forage fish spawning and rearing habitat. The proposed action includes CMs that are expected to minimize the effects to eelgrass and other aquatic vegetation such that impacts to forage fish would be negligible (Appendices A and B). All structure replacements will be located within the original footprint and new structures will be designed to minimize impacts to submerged attached aquatic vegetation and forage fish spawning habitats. Based on the implementation of the applicable CMs, we do not expect measurable effects to bull trout or their prey from shading.

Placing fill and/or fish mix gravels will result in elevated levels of turbidity and temporary noise and visual disturbance depending on placement methodology. We do not expect any permanent alteration to riparian/shoreline habitat. Fill and/or fish mix gravels will be placed during the approved in-water work window when bull trout and/or forage fish are least likely to be present. If subadults or non-spawning adult bull trout are present when the work occurs during the approved in-water work window, their exposure to elevated levels of turbidity and noise and visual disturbance would be short duration. Therefore, any disturbance and/or related effects would not result in physical impacts to individuals and we do not expect the activity to significantly affect normal bull trout behaviors.

Contaminants may be released into the aquatic environment from machinery leaks or fuel entering waterbodies, or contaminated sediments when piles are installed or removed, or when activities disturb contaminated sediment and plumes disperse them. Implementing the CMs will reduce or eliminate the risk of contaminant exposure. Although it is possible bull trout may be present and exposed to contaminants during construction activities, CMs and minimization measures will be applied to reduce or eliminate the risk of accidental release of contaminants into surface water. We do not expect bull trout to be exposed for durations or concentrations of contaminants (e.g., creosote) at levels that would result in injury or measurably affect their normal behaviors.

Prey resources are not expected to be measurably affected by construction, repair, or long-term use of floats, piers, boat lifts, canopies, docks, or other structures installed. Some of these structures may affect the growth of submerged aquatic vegetation from shading and/or prop wash. However, grating and distance requirements (from aquatic vegetation) will minimize the effects to aquatic vegetation and intertidal areas that supports bull trout prey resources (i.e., forage fish spawning areas). Although the proposed activities will result in some shading of the aquatic environment, we do not anticipate that the effects will be measurable to bull trout from impacts to prey resources and/or habitat.

Migration, overwintering, and foraging habitat may be temporarily impacted by bank stabilization repair/replacements. Repairing bank armoring or bulkheads maintains the degraded conditions by continuing to preclude natural processes in the marine shoreline and stream environments. In marine areas, bank armoring, seawalls and bulkheads impact beach-forming processes such that forage fish spawning habitat may be degraded or lost. Hardened banks within freshwater systems preclude the formation of natural meanders, side-channel formation, and limit the development of riparian habitat. Under this consultation minor bank stabilization repairs are confined to areas that are, or were already armored and activities are limited to the footprint of the existing structure. Replacing or filling-in bank armor in the same area/footprint is not expected to measurably affect bull trout because it does not preclude their use of these areas; however, the repairs will maintain the degraded baseline conditions of the habitat. Although effects to forage fish and other prey resources from prolonging the degraded habitat conditions will continue, these effects will not be measurable due to the small extent of impacts.

Installing piles can result in elevated underwater sound pressure levels that can disturb, injure, or kill bull trout. Effects and the severity of the effects depends on the pile type, installation method, amplitude of underwater sound, frequency spectrum of the sound, duration of the sound, and the duration of exposure. Impact-hammer pile driving can result in elevated underwater sound pressure levels that exceed the thresholds for onset of injury for bull trout; however, only impact-hammer pile driving of steel piles is currently associated with the onset of injury to bull trout from elevated underwater sound pressure levels. Vibratory pile driving steel piles and impact-hammer pile driving of wood, concrete, plastic, fiberglass, or other non-steel piles is not currently associated with onset of injury to bull trout. Based on timing (during the approved in-water work window),



short duration, and the amplitude and frequencies of sound generated with these types and methods of pile installations, we do not expect measurable effects to bull trout associated the installation of non-steel piles or vibratory pile driving.

Up to 100 concrete, wood, steel, or plastic piles may be installed at the Port of Tacoma or Port of Seattle via impact-hammer and/or vibratory pile driving, with no more than 225 impact strikes per day. Steel piles may be up to 12 inches in diameter, but all other types of piles may be any size. Concrete piles may be as large as 24 inches in diameter with no limit to the number of strikes per day. Steel piles may be installed with vibratory or impact-hammer pile driving, but impact strikes would not exceed 225 strikes per day. The background sound levels in these highly industrialized areas are expected to be higher than other less developed areas. The area of injury for bull trout larger than 2 grams is 50 meters from impact pile installations and the area where behavioral effects may occur extends 1,848 meters from pile installations. The habitat in Port areas is highly degraded and likely provides minimal quality prey resources. These types of piles and installation methods are not currently associated with injurious levels of underwater sound. We anticipate that three to five piles would be installed per day, taking approximately 90 days to install all 100 piles. Work will occur when bull trout are least likely to be present in the marine environment and the duration of impact pile driving will be intermittent. Additionally, we do not expect bull trout to be present or exposed to injurious levels of underwater sound in these areas. We do not expect that bull trout would be measurably affected by the levels of underwater sound associated with installing these types of piles with either vibratory or impact pile driving when strikes do not exceed 225 strikes per day.

In other, non-Port marine areas and in the lower Columbia River, impact-hammer pile installation of up to 20 steel piles up to 12 inches diameter would occur. The sound pressure levels when piles this size are installed with impact-hammer pile driving is expected to be 200 dB<sub>peak</sub>, 184 dB<sub>rms</sub>, and 174 dB SEL (measured at 10 meters from the pile) (re: 1 $\mu$ Pa). Bull trout present in marine areas and the lower Columbia River will be larger than 2 grams because there are no spawning or early rearing areas there; only fish larger than 2 grams are expected to be present. Onset of injury to bull trout larger than 2 grams is expected when they are exposed to cumulative SELs that exceed 187 dB SEL; this threshold will be exceeded for a distance of 50 meters from pile installations assuming a maximum of 225 impact pile strikes per day. The likelihood of bull trout being present within 50 meters of the pile driving in these areas during the in-water work window is extremely low. Additionally, the work will be intermittent and short in duration. Injury to bull trout is not expected and their normal behaviors would not be measurably affected.

In freshwater systems, other than the lower Columbia River, bull trout may be present any time of year, including during the approved in-water work window, which minimizes risk of exposure, but does not eliminate it. Bull trout present may be at any life stage and may be smaller or larger than 2 grams. Onset of injury to bull trout smaller than 2 grams is 183 dB SEL and 187 dB SEL for bull trout larger than 2 grams. Impact-hammer pile installation of up to 10-inch diameter steel piles in freshwater and marine waters would

occur with no restrictions on number of pile strikes because the amplitude and range of the underwater sound associated with these pile sizes and installation method are not expected to be injurious to bull trout. For 12-inch diameter steel piles, only vibratory installation is permitted in freshwater areas (other than the lower Columbia River) because the area of injury associated with elevated underwater sound pressure levels could entirely block migration or result in injury or mortality. Additionally, the work will be completed during the approved in-water work window when bull trout are least likely to be present. Due to the timing, duration, amplitude, and range of underwater sound generated by piles of this size, we do not expect injury to bull trout or measurable effects to their normal behaviors.

### Bull Trout Critical Habitat

The final revised rule designating bull trout critical habitat (75 FR 63898 [October 18, 2010]) identifies nine Primary Constituent Elements (PCEs) essential for the conservation of the species. The 2010 designation of critical habitat for bull trout uses the term PCE. The new critical habitat regulations (81 FR 7214) replace this term with physical or biological features (PBFs). This shift in terminology does not change the approach used in conducting our analysis, whether the original designation identified primary constituent elements, physical or biological features, or essential features. In this letter, the term PCE is synonymous with PBF or essential features of critical habitat.

Because no actions are permitted in bull trout spawning and rearing areas (local populations), no effects to PCE 6 are anticipated. We have examined the anticipated effects of the project on the remaining PCEs below.

*PCE 1: Springs, seeps, groundwater sources, and subsurface water connectivity (hyporheic flows) to contribute to water quality and quantity and provide thermal refugia.*

The proposed actions do not include any activities that would significantly interrupt or affect cold water inputs from springs, seeps, groundwater sources, and/or subsurface flows to the action area. A minor amount of new impervious surfaces may be created during the installation of scientific measurement devices. However, no vegetation removal is proposed and structures would not exceed 25 ft<sup>2</sup>. It is unlikely that effects to subsurface flows associated with such a small structure would be measurable. Therefore, effects of the proposed action on this PCE are considered insignificant.

*PCE 2: Migration habitats with minimal physical, biological, or water quality impediments between spawning, rearing, overwintering, and freshwater and marine foraging habitats, including but not limited to permanent, partial, intermittent, or seasonal barriers.*

The proposed action may result in localized and temporary impacts to water quality from elevated levels of suspended sediment associated with in-water work. Impacts to the migratory corridor would be short-term and are not expected to measurably affect bull trout migration or preclude movement through the action area during or after project

implementation. Although sound pressure levels associated with pile driving could affect the migratory corridor for bull trout, these effects would be intermittent, are short in duration (up to 14 days for up to 20 piles, and 90 days for up to 100 piles, and only during daylight hours) and would not preclude use of the migration corridor. Longer duration pile driving at the Ports of Tacoma and Seattle may temporarily affect the migratory corridor; however, because the number of piles that can be driven each day is limited, and because pile strikes will not exceed 225 per day, underwater sound pressure levels would not preclude bull trout from migrating along the industrial waterfronts. Construction of new overwater structures (watercraft lifts) will result in increased shading of nearshore/intertidal habitat. However, no physical, biological, and/or water quality barriers to the migratory corridor are anticipated as a direct or indirect result of the proposed project. Therefore, effects to this PCE are considered insignificant.

*PCE 3: An abundant food base, including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish*

The proposed action may impact the food base of the bull trout through a small reduction of prey individuals associated with construction-related impacts and small losses of freshwater or marine habitat associated with new structures. These impacts are not expected to be measurable due to the CMs, mitigation, and/or other components of the project design that are expected to avoid, reduce, or compensate for the effects from these impacts. Therefore, effects to this PCE would be insignificant.

*PCE 4: Complex river, stream, lake, reservoir, and marine shoreline aquatic environments, and processes that establish and maintain these aquatic environments, with features such as large wood, side channels, pools, undercut banks and unembedded substrates, to provide a variety of depths, gradients, velocities, and structure.*

The proposed action does not include any activities that would significantly increase or decrease channel complexity in the action area or result in the loss of LWD. Also, the project would have no measurable effect on any existing side channels, pools, undercut banks, or other features in the action area that provide complex habitat for bull trout or their prey species. Although repairing and maintaining bank stabilization structures precludes the attainment of natural shoreline processes and floodplain functions, this activity will only be conducted in areas that are already armored and degraded. Additionally, the replacement of armor rock will not exceed the current footprint. Because the limited scope of these repairs, we anticipate that the proposed action would not measurably affect instream habitat. Therefore, direct and indirect effects to this PCE are considered insignificant.

*PCE 5: Water temperatures ranging from 2 to 15 °C (36 to 59 °F), with adequate thermal refugia available for temperatures that exceed the upper end of this range. Specific temperatures within this range will depend on bull trout life-history stage and form; geography; elevation; diurnal and seasonal variation; shading, such as that provided by riparian habitat; streamflow; and local groundwater influence.*

The proposed actions are not expected to result in any appreciable changes in existing water temperatures, as no activities would be planned that would result in the diversion/extraction of water, loss of mature riparian vegetation or other activities that would measurably affect water temperature. Therefore, effects of the proposed action on this PCE are expected to be insignificant.

The proposed action does not include any activities that would directly or indirectly alter water temperature, such as the release of heated or cooled water, the extraction or addition of water, or the increase or decrease of water depth. However, a limited amount of woody vegetation less than 4 inches in diameter that shades the nearshore may be removed as part of construction associated with overwater structures on the San Juan Islands. Vegetation removal is limited to a narrow strip (cannot exceed 5 ft in width) along the shoreline and must be replaced. The removal of this amount of vegetation in limited areas adjacent to the marine environment is not anticipated to result in a measurable change in water temperature. Therefore, the effects of vegetation removal associated with overwater structures is considered insignificant to the function of this PCE.

*PCE 7: A natural hydrograph, including peak, high, low, and base flows within historic and seasonal ranges or, if flows are controlled, minimal flow departure from a natural hydrograph.*

The proposed actions would not involve the diversion, removal, or addition of water. They will not alter the natural hydrograph of the affected waterbodies and are not expected to measurably affect surface or subsurface flows to the waterbody via runoff from impervious surfaces, stormwater flows, or watershed alteration due to the limited new impervious materials that may be created. Therefore, effects to this PCE are expected to be insignificant.

*PCE 8: Permanent water of sufficient quantity and quality such that normal reproduction, growth, and survival are not inhibited.*

The proposed actions may affect this PCE. Activities that are conducted below the OHWM may impact water quality in the short-term through minor releases of sediment during construction or through other activities, but the small scale and short duration of these actions would not inhibit the normal reproduction, growth, and/or survival of bull trout. Therefore, effects of the proposed actions on this PCE are considered insignificant.

*PCE 9: Sufficiently low levels of occurrence of nonnative predatory (e.g., lake trout, walleye, northern pike, smallmouth bass); interbreeding (e.g., brook trout); or competing (e.g., brown trout) species that, if present, are adequately temporally and spatially isolated from bull trout.*

The proposed activities are not expected to have any effects to this PCE.

### Marbled Murrelets

No marbled murrelet nesting habitat will be removed, altered, or impacted from the proposed actions. However, some of the proposed actions could potentially affect marbled murrelets while they are in their nesting habitat. No activities will occur within 120 meters (360 ft or 121 yards) of occupied and/or suitable habitat during the breeding season (April 1 through September 23) (i.e., impact-hammer pile driving and heavy equipment operation in freshwater and marine shoreline areas near potentially suitable nesting habitat). Disturbance to nesting marbled murrelets from in-air sound is not expected to measurably affect their normal behaviors or physically impact individuals.

Many of the proposed activities will be conducted within marine waters, where marbled murrelets may be exposed to stressors associated with construction activities. Sound pressures generated during impact driving or proofing steel piles may result in disturbance or injury of marbled murrelets; however, we do not expect physical harm to this species because we do not expect them to be present in marine areas within the small area where injury could occur (within five meters of the pile being driven when impact pile strikes do not exceed 225 strikes per day). Activities that include pile driving are limited to existing structures, no more than 20 piles (except for areas within heavy urban or industrial waterfront locations such as the Ports of Tacoma and Seattle, in which up to 100 piles may be installed). Currently, vibratory installation of steel piles and impact-installation of concrete, wood, fiberglass, and/or plastic are not associated with injurious underwater sound pressure levels. Due to the limited scope and duration of the work, degraded conditions and low likelihood of exposure at industrial waterfront locations, and the pile installation methods described above, we do not expect measurable effects to their normal behaviors.

When proposed activities are conducted in marine waters marbled murrelets may be disturbed from elevated sound and visual disturbance. Although in-water work may take up to 14 days to complete for 20 piles or up to 90 days for 100 piles, due to the limited number of piles installed per day, and limiting impact pile strikes to 225 per day, we expect daily disturbance will be minimal. We do not expect the intermittent elevated sound pressure levels to result in reduced foraging efficiency or fitness and we do not expect a significant impairment to the normal behaviors of individuals.

For those actions that may include installation and/or replacement of more than 20 piles in the Ports of Seattle and Tacoma (up to 100 piles), the existing background levels and sources of disturbance are already very high, and additional measures are provided that further minimize the effects of the proposed action to this species. Based on available information, the density of marbled murrelet density is very low in these areas, and the maximum duration of pile driving would be 90 days. Peak foraging activity occurs shortly after sunrise and just before sunset. To reduce disturbance to foraging marbled murrelets, work is restricted to between two hours after sunrise and two hours before sunset during the marbled murrelet nesting season (April 1 to September 23). Restricting activities to outside of the prime foraging period will reduce the likelihood of interruptions of food deliveries to nestlings. Although we anticipate that some

disturbance to foraging marbled murrelets, we do not anticipate the effects to be measurable with application of the timing restrictions. Therefore, direct effects to marbled murrelets are considered insignificant.

Marbled murrelets may be indirectly affected due to temporary impacts to their prey base. Construction-related turbidity and continued impacts to beach-forming processes associated with shoreline protection may impact forage fish or their habitat. However, we anticipate that the turbidity generated will be localized and of short duration. Maintaining bulkheads and other hardened structures will preclude the formation of a natural shoreline environment. However, because the extent of repair work is limited to areas that were previously hardened, effects to forage fish from maintaining the degraded habitat conditions will not be measurable. Additionally, in-water construction is limited to the approved in-water work windows, reducing and/or eliminating impacts to spawning forage fish.

#### Northern Spotted Owl

No northern spotted owl nesting, roosting, foraging, or dispersal habitat will be removed or impacted as a result of the proposed action. Therefore, effects to northern spotted owls due to habitat impacts are anticipated to be discountable.

If work occurs adjacent to suitable habitat during the nesting season, sound and visual disturbances associated with the proposed action will be at a distance that is not known to result in a measurable modification of breeding, sheltering, or feeding behaviors. Because we anticipate that the proposed increase in sound and visual disturbance to northern spotted owls will not be measurable, effects to this species are considered insignificant.

#### Western Snowy Plover

No direct alteration of suitable nesting or foraging habitat is proposed as part of the proposed action. Disturbance of nesting western snowy plovers will be avoided because work will occur outside the nesting season (Phase 1 CM-66 in Appendix A). We anticipate that very few, if any, actions proposed under this programmatic will occur near western snowy plover habitat. Actions that may occur are limited in scope, so the potential for disturbance to foraging western snowy plovers is extremely low. Because none of the proposed activities will impact western snowy plover habitat and potential disturbance of foraging western snowy plovers will be minimized or eliminated with the implementation CMs, the proposed activities are not expected to measurably affect this species. Therefore, potential project impacts to this species are anticipated to be extremely unlikely and therefore discountable.

#### Columbian White-Tailed Deer

The proposed action will not result in the removal of suitable habitat for the Columbian white-tailed deer. The proposed action will also not result in increased volumes or speed

of traffic and thus will not result in increased road kill. The projects covered under this action are replacement of existing structures. This consultation does not include the installation of new permanent structures (such as fences) in the uplands. We do not expect a reduction of available suitable habitat for the Columbian white-tailed deer from the proposed actions. Some individuals may be temporarily disturbed from construction-related noise and visual disturbance in or near occupied habitat; however, these effects will be temporary and are not expected to result in a measurable disruption to their normal behaviors. Because effects of proposed action to Columbian white-tailed deer are not expected to be measurable, direct and indirect effects of the action are considered insignificant.

### Oregon Spotted Frog

The proposed action will not result in the removal of suitable habitat for the Oregon spotted frog. The proposed action will not occur in areas where Oregon spotted frogs are currently known to be present, nor in areas they were historically present. However, comprehensive surveys for occupancy have not been completed and they may be present in areas not yet identified. Additionally, projects covered in this consultation may occur within suitable habitat.

The projects covered this consultation are only for replacements of existing structures, which may involve elevated levels of underwater sound pressure levels and/or sediment. However, if the project area is deemed to contain suitable habitat and involves elevated underwater sound or sediment, the project will undergo individual consultation. We do not expect a reduction of available suitable habitat for the Oregon spotted frog from the proposed actions. Some individuals or suitable habitat may be temporarily disturbed from construction-related noise and visual disturbance in or near occupied habitat; however, these effects will be temporary and are not expected to result in a measurable disruption to their normal behaviors. Because effects of proposed action to the Oregon spotted frog are not expected to be measurable, direct and indirect effects of the action are considered insignificant.

### Western Yellow-Billed Cuckoo

No suitable nesting habitat will be altered as part of the proposed action. The action will not be conducted in or result in the removal of patches of mature willow- or cottonwood-dominated riparian areas larger than 50 acres in size. There is no proposed critical habitat for the western yellow-billed cuckoo in Washington State. This migratory songbird generally arrives on the breeding grounds in mid-June and leaves by mid-September. Potential habitat for this species may be present in hardwood-dominated riparian areas along larger rivers such as the Columbia River and some of the rivers draining into Puget Sound.

We anticipate that very few, if any, actions proposed under this programmatic will occur near western yellow-billed cuckoo habitat. Available data suggest that if western yellow-billed cuckoo still breed in Washington State, the numbers are extremely low, with pairs

numbering in the single digits. Actions that may occur are limited in duration, so the potential for disturbance to foraging or nesting western yellow-billed cuckoo is extremely low. Given the extremely low numbers of western yellow-billed cuckoo expected within the action area and the low likelihood of project work being conducted in or adjacent to suitable habitat, the potential project impacts to this species are anticipated to be extremely unlikely and therefore discountable.

#### Streaked Horned Lark

No suitable nesting or foraging habitat will be altered as part of the proposed action. In Puget Sound, the proposed actions are not expected to be conducted near currently occupied sites or near potentially suitable nesting habitats. The covered activities are short in duration and limited in scope. The only locations where the proposed action would potentially affect breeding birds are along the lower Columbia River. Suitable nesting habitats along the Columbia River include dredge deposit and industrial sites along the shoreline and on islands. Vibratory installation and impact proofing steel piles has the potential to create in-air sound that could disturb nesting and foraging streaked horned larks. Because in-water construction along the Columbia River is limited to the approved work window (October 1 to December 31), which is outside of the breeding season for the streaked horned lark, effects to nesting individuals are considered discountable. Effects to foraging and overwintering birds are not expected to be measureable and are considered insignificant.

#### Recommendations

The following recommendations are provided to assist you in meeting your obligation, under sections 7(a)(1) and 2(c) of the Act, to use your authorities to promote the conservation of listed species and their habitats. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information. We also make these recommendations based on our respective responsibilities under the Fish and Wildlife Coordination Act, the Clean Water Act, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act.

- Components of in-water or overwater structures should not include treated wood or other substances that may result in exposure of aquatic biota to toxic materials.
- Any proposed actions to repair, replace, or modify bulkheads should incorporate measures to avoid or reduce impacts to shoreline processes. We recommend that existing armoring (i.e., hard structures) be removed or replaced with a beach, bioengineered structure, or soft shoreline feature. We recognize that these alternatives may not be appropriate or feasible at every site based on existing conditions and/or geological characteristics. However, where site conditions and characteristics do not preclude the use of softer, less habitat-impacting options, their use should be encouraged to reduce impacts to aquatic habitat and biota.



- We recommend that, where possible, any shoreline stabilization structures be sited above the OHW and MHHW to reduce impacts to aquatic species and nearshore habitat. Shoreline or stream bank protection features should follow the Washington Department of Fish and Wildlife's Marine Shoreline Design Guidelines (Appendix E). While impacts to listed species are often assumed to be insignificant on a project-specific level, as more bulkheads and bank armoring are repaired or replaced, the cumulative effects from these projects become significant at a basin-wide scale for many aquatic biota populations and communities.
- The applicant/contractor should make a reasonable effort to ensure that any active bird nests that may be affected by the proposed action are identified (e.g., those with eggs and/or nestlings) and that the proposed action would not occur while the nest is active, especially if the nest would be physically impacted by the proposed action.
- Trees that contain a bald eagle nest are protected and may not be removed, even if the nest is not active. Please refer to our National Bald Eagle Management Guidelines (<http://www.fws.gov/migratorybirds/baldeagle.htm>) for additional considerations for bald eagles.

This concludes informal consultation pursuant to the regulations implementing the Act (50 CFR 402.13). The project(s) should be reanalyzed if new information reveals effects of the action(s) that may affect listed species or critical habitat in a manner, or to an extent, not considered in this consultation. The project(s) should also be reanalyzed if the action(s) is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this consultation, and/or a new species is listed or critical habitat is designated that may be affected by a proposed action(s).

If you have any questions about this letter or our joint responsibilities under the Act, please contact Lindsay Wright (360-753-6037) or Martha Jensen (360-753-9000) of this office.

Sincerely,

Eric V. Rickerson, Office Manager  
Washington Fish and Wildlife Office

Attachment

cc:

USFWS, Wenatchee, WA (Krupka)  
USFWS, Spokane, WA (Eames)