

## **Appendix F**

### **Project-Specific Protocols and Conservation Measures for Listed and Proposed Threatened and Endangered Birds, Mammals, and Plants under U.S. Fish and Wildlife Service Jurisdiction**

All protocols outlined in this appendix apply only to those listed or proposed species and designated or proposed critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (FWS). The appendix separates protocols in the following order:

- General Protocols for ALL species and critical habitat (including fish species) – listed and proposed
- General Protocols for ALL LISTED Bird, Mammal, Insect and Plant Species and Designated Critical Habitat
- General Protocols for ALL PROPOSED Bird, Mammal, Insect and Plant Species
- Species Specific Protocols and Conservation Measures

## **I. General Protocols for ALL Species and Critical Habitat (Including Fish Species) – Listed and Proposed**

**G1:** The Corps will make an effect determination for every listed and proposed species (and their critical habitat, as necessary) on the species list obtained for each project from the U.S. Fish and Wildlife Service (USFWS).

## **II. General Protocols for LISTED Bird, Mammal, Insect, and Plant Species and Designated Critical Habitat**

**GNF1:** If the Corps determines that the proposed work would have "**no effect**" on a specific threatened or endangered bird, mammal, or plant species (and its designated critical habitat, as applicable), **the programmatic consultation would be valid** for that species (and its designated critical habitat, as applicable).

**GNF2:** If the Corps determines that the work "**may affect, is not likely to adversely affect**" a specific threatened or endangered bird, mammal, or plant species (and its

designated critical habitat, as applicable), **the programmatic consultation would be valid for that species unless the USFWS determines that the work will result in take** of that listed species (and its designated critical habitat, as applicable).

**GNF3:** If the Corps determines that the work "**may affect, is likely to adversely affect**" a specific threatened or endangered bird, mammal, or plant species (and its designated critical habitat, as applicable), **individual consultation for that species is required** (and its designated critical habitat, as applicable).

### **III. General Protocols for PROPOSED Bird, Mammal, Insect, and Plant Species and Proposed critical habitat**

**GNF4:** If the Corps determines that the proposed work would "**not jeopardize the continued existence**" of a specific proposed threatened or endangered bird, mammal, or plant species, **the programmatic consultation would be valid** for that species.

**GNF5:** If the Corps determines that the proposed work would "**not destroy or adversely modify**" specific proposed critical habitat, **the individual formal conference for that proposed critical habitat is required.**

**GNF6:** If the Corps determines that the proposed work would "**jeopardize the continued existence**" of a specific proposed threatened or endangered bird, mammal, or plant species or "**destroy or adversely modify**" proposed critical habitat, **the programmatic consultation would be valid** for that species.

#### **IV. SPECIES Specific Protocols and Conservation Measures**

The Corps will use the following protocols to determine if a proposed project is not likely to adversely affect listed and proposed threatened or endangered species (and their critical habitat, as necessary) on the USFWS species list. The conservation measures for the species on the USFWS species list for the specific project would be implemented as appropriate to the project at hand.

*Italicized information* refers to “conservation measures” outlined in Activity Description Chapter (Chapter 6).

##### ***Fish***

##### **Bull Trout & Cutthroat Trout**

##### **Conservation Measures**

The following conservation measures will be implemented to avoid and minimize impacts to bull trout and cutthroat trout:

**BTCT1:** Fish Passage barriers may not be removed in those streams where bull trout are isolated above the barrier from non-native species, such as brown or brook trout [*Cons. Meas. (b)(i)*]

**BTCT2:** Water quality and quantity treatment will be completed for all projects adding more than 14 square meters (150 square feet) of new impervious surface.

**BTCT3:** No contractor staging areas will be allowed within 150 feet of any jurisdictional wetland, stream, river or drainage as identified by a qualified biologist and confirmed by the Corps, unless site specific review completed by the Corps indicates that no impacts to the sensitive resource areas will occur due to topography or other factors. [*Cons. Meas. (m)(ii)*]

**BTCT4:** Removal of vegetation will be minimized to the greatest extent possible. Native vegetation will be replanted at disturbed sites. A revegetation plan will be provided to the USFWS for review with the Individual Programmatic Biological Assessment (IPBA) and approval prior to construction. [*Cons. Meas. (w)*]

**BTCT5:** Temporary material storage piles will not be placed within the 100-year floodplain from October 15 to April 15 (during the rainy season)<sup>1</sup>.

**BTCT6:** All in-water work must comply with appropriate work windows as agreed upon by USFWS.<sup>2</sup>

**BTCT7:** During bridge removal projects, as much of the existing structure as possible shall be removed before finally dismantling the structure to limit the amount of material and debris from entering receiving waters. This shall include all roadbed material, decking, concrete curbs, etc.

**BTCT8:** Concentrated accumulations of bird feces, road grit, sand, and loose paint chips shall be removed as much as practicable from bridges before dismantling.

## ***Birds***

### **Brown Pelican**

#### **Conservation Measures**

The following conservation measure will be implemented to avoid and minimize impacts to brown pelicans:

**BP1:** From June 1 through October 31, no explosives or pile drivers will be used from one hour before sunset to one hour after sunrise within 0.5 mile of Sand and Goose Islands in Grays Harbor, Dead Man Island in Willapa Bay, or any other brown pelican night roosts in Pacific and Grays Harbor Counties.<sup>3</sup>

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<sup>1</sup> The standard freshwater work windows for salmonid species prohibit any work during the rainy season.

<sup>2</sup> USFWS may coordinate with Washington Department of Fish and Wildlife (WDFW) in the development of work windows to protect listed bull trout and cutthroat.

<sup>3</sup> Distances are based on conservation measures outlined in the USFWS Programmatic Biological Assessment for Restoration Activities (1999).

## **Bald Eagle**

Projects meeting one or more of the conditions below **may affect, but are not likely to adversely affect** bald eagles:

- ◆ Projects located farther than ½ mile of a nest, wintering concentration, or communal roost which remove trees suitable for bald eagle perching.
- ◆ Projects located farther than 660 feet from a nest occurring from August 16 to December 31 (outside the nesting season) that result in minor modifications to nesting, perching, roosting, or wintering habitat (< 10 perch trees total for the programmatic over 5 years).

## **Conservation Measures**

The following conservation measures will be implemented to avoid and minimize impacts to bald eagles:

**BE1:** If work generates noises above ambient levels within an area utilized by bald eagles for winter foraging, no work shall occur from 1 November through 15 March of any year (winter foraging season: 1 November – 15 March).<sup>4</sup>

**BE2:** If work generates noises above ambient levels within a one-mile radius of a bald eagle nest visible from the project site or ½ mile of a nest not visible from the project site, no work shall occur from 1 January through 15 August of any year (nesting season: 1 January – 15 August).<sup>5</sup>

## **Marbled Murrelet**

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** marbled murrelets:

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<sup>4</sup>The standard freshwater work windows for salmonid species prohibit any work during the bald eagle winter foraging periods.

<sup>5</sup>The standard freshwater work windows for salmonid species prohibit work only during the first part of the bald eagle nesting period.

- ◆ Projects located within ¼ mile of suitable marbled murrelet nesting habitat that:
  - Occur from August 5 to September 15 (the late breeding season);
  - Result in increased human activity, disturbance and noise above the ambient levels (with the exception of blasting, helicopter, pile driving, or jack hammer use); **and**
  - Do not alter marbled murrelet nesting habitat.
- ◆ Projects located within ¼ mile of unoccupied suitable marbled murrelet nesting habitat (as determined by USFWS approved protocol nesting surveys) conducted between April 1 and September 15.

### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to marbled murrelets:

**MM1:** If work is proposed that includes smoke and/or generates noises above ambient levels within ¼ mile (1.0 mile for blasting, helicopter, pile driving, or jack hammer use) of an occupied nesting or forage habitat, no work shall occur from 1 April through 15 September of any year (nesting or “early breeding season”: 1 April through 5 August; fledging or “late breeding season”: 6 August through 15 September).<sup>6</sup>

### Northern Spotted Owl

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** spotted owls:

- ◆ Projects located further than ¼ mile from known spotted owl activity centers that:
  - Are conducted from March 1 through September 30 (the breeding season);
  - Generate noise, excluding blasting, above ambient levels; **and**
  - Do not modify suitable habitat.

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<sup>6</sup>Work windows are based on recommendations listed in USFWS, 1999. In some areas, the standard marbled murrelet and salmonid work closures prohibit work year-round. Work window modification may be done via the tiered consultation review.

- ◆ Projects located in suitable spotted owl habitat that:
  - Are conducted from October 1 to February 28 (outside of the breeding season);
  - Generate noise, excluding blasting, above ambient levels; **and**
  - Do not modify suitable habitat.
- ◆ Projects located within ¼ mile of known spotted owl activity centers which have been determined to be non-nesting for the year that:
  - Are conducted during the early breeding season (March 1 to July 15);
  - Generate noise above ambient levels; **and**
  - Do not modify suitable habitat.

### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to northern spotted owls:

**NSO1:** If work is proposed that includes smoke and/or generates noises above ambient levels within ¼ mile of an occupied nesting or forage habitat, no work shall occur from 1 March through 30 September of any year (foraging season: 1 March through 30 September; nesting season: 1 March through 1 July; fledging season: 1 August through 30 September).<sup>7</sup>

### **Spotted Owl Designated Critical Habitat**

Projects meeting one or more of the following conditions **may affect, but will not likely adversely affect** spotted owl critical habitat:

- ◆ Projects which involve minimal modification of less than 1.0 acre per year which may degrade, but are not likely to adversely affect constituent elements of suitable or critical habitat.

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<sup>7</sup>Work windows are based on recommendations listed in USFWS, 1999. In some areas, the standard spotted owl and salmonid work closures prohibit work year-round. Work window modification may be done via the tiered consultation review.

- ◆ Projects which modify less than 1.0 acre per year of younger stands within areas designated as critical habitat that are not likely to impede development of constituent elements.
- ◆ Projects that result in short-term degradation of dispersal habitat, but are not likely to adversely affect its suitability as dispersal habitat.<sup>8</sup>
- ◆ Projects that involve minimal temporary modification of less than 1.0 acre per year of dispersal habitat located within areas designated as critical habitat.

### Western Snowy Plover

#### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to western snowy plover:

**WSP1:** Projects located within 1/4 mile (1 mile for blasting or pile driving) of nesting areas will not occur from March 15 through September 30.<sup>9</sup>

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<sup>8</sup> Dispersal habitat will be defined by the following characteristics (adapted from the Washington Forest Practices Board Permanent Rules for the Northern Spotted Owl, effective July 1, 1996.):

- Timber stands 5.0 acres or larger;
- 70 percent or more canopy cover;
- 70 percent or more of the stand in conifer species greater than 6 inches diameter base height (dbh);
- A minimum of 130 trees per acre with a dbh of at least 10 inches or a basal area of 100 square feet of 10-inch dbh or larger trees;
- A minimum of 20 feet between the top of the understory vegetation and the bottom of the live canopy;  
**and**
- With the lower boles relatively clear of dead limbs.

<sup>9</sup>The standard freshwater work windows for salmonid species prohibit work only during the first part of the snowy plover nesting periods.

## ***Mammals***

### **Canada Lynx**

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** Canada lynx:

- ◆ Projects located at elevations above 3,000 feet and that involve:
  - Vegetation management of less than 1.0 acre of native forest per year; **and**
  - Will not result in increased off-road vehicle access to areas above 3000 feet.

### **Columbian White-Tailed Deer**

Projects meeting the following condition **may affect, but are not likely to adversely affect** Columbian white-tailed deer:

- ◆ Projects located within Wahkiakum County within 2 miles of the Columbia River that:
  - Do not alter woodland habitat or tidal spruce forest communities;
  - Do not enable higher traffic speeds; **and**
  - Do not result in a permanent alteration of the plant community.

### **Conservation Measures**

The following conservation measures will be implemented to avoid and minimize impacts to Columbian white-tailed deer:

**CWTD1:** Fencing placed on Puget Island, the Hunting Islands, Price Island, and within 2 miles of the banks of the Columbia River between two miles east of Cathlamet and 2 miles west of Skamokawa Creek in Wahkiakum County will not be greater than 4-feet high and will use only three-strand barbed wire.

**CWTD2:** Projects located on Puget Island, the Hunting Islands, Price Island, and within 2 miles of the banks of the Columbia River between two miles east of Cathlamet and 2 miles west of Skamokawa Creek in Wahkiakum County will not occur from June 1 through June 30 (the fawning period).<sup>10</sup>

## **Gray Wolf**

### **Conservation Measures**

The following conservation measures will be implemented to avoid and minimize impacts to gray wolves:

**GW1:** Projects generating noise above ambient levels within ¼ mile (1 mile for blasting) of any known gray wolf den or rendezvous site will not occur from March 15 through June 30.<sup>11</sup>

**GW2:** Projects will not increase trail or road densities within gray wolf habitat.

**GW3:** Projects generating noise above ambient levels or otherwise creating disturbances will not occur within ¼ mile (1.0 mile for blasting) of occupied ungulate winter habitat<sup>12</sup> from December 1 to April 15<sup>13</sup>; **and**

**GW4:** Projects generating noise above ambient levels or otherwise creating disturbances will not occur within ¼ mile (1.0 mile for blasting) of calving, fawning, or kidding grounds<sup>14</sup> from December 1 to June 15.<sup>15</sup>

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<sup>10</sup>The standard freshwater work windows for salmonid species prohibit any work during the Columbia White Tailed Deer foraging periods.

<sup>11</sup>The standard freshwater work windows for salmonid species in Chelan, Okanogan, Pierce, and Snohomish Counties prohibit any work during the gray wolf denning period.

<sup>12</sup>Determination of “occupied ungulate winter habitat” will be based on determinations from USFWS during the IPBA consultation/coordination process.

<sup>13</sup>The standard freshwater work windows for salmonid species prohibit any work during the ungulate wintering period.

<sup>14</sup>Determination of “location and limits of calving, fawning, or kidding grounds” will be based on determinations from USFWS during the IPBA consultation/coordination process.

<sup>15</sup>The standard freshwater work windows for salmonid species in Chelan, King, Lewis, Okanogan, Pierce, Skagit, Snohomish, and Whatcom Counties prohibit any work during the calving, fawning, or kidding period.

## Grizzly Bear

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** grizzly bears:

- ◆ Projects located within core habitat that will not degrade or destroy key grizzly bear foraging habitat (as described in Conservation Measures GB2 and GB3).

### Conservation Measures

The following conservation measures will be implemented to avoid and minimize impacts to grizzly bears:

**GB1:** Projects generating noise above ambient levels within ¼ mile (1 mile for blasting) of any known grizzly bear den site will not occur from October 15 through May 15.<sup>16</sup>

**GB2:** Projects generating noise above ambient levels and located within core habitat within ¼ mile (1.0 mile for blasting) of early season grizzly bear foraging areas (e.g., low elevation grass/forb habitat, deciduous forest, riparian forest, shrubfields, montane meadows, avalanche chutes) will not occur from March 15 to July 15 if the activity will last for more than one day.<sup>17</sup>

**GB3:** Projects generating noise above ambient levels and located within core habitat within ¼ mile (1.0 mile for blasting) of late season grizzly bear foraging areas [e.g., high elevation berry fields, shrub fields, fruit/nut sources, wet forest openings, alpine and subalpine meadows, montane meadows (moist, cool, upland slopes dominated by coniferous trees)] will not occur from July 16 to November 15 if the activity will last for more than one day.<sup>18</sup>

**GB4:** Projects will not increase trail or road densities within grizzly bear core habitat.

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<sup>16</sup>The standard freshwater work windows for salmonid species in Pend Oreille, Skagit, and Whatcom Counties prohibit any work during the grizzly bear denning period. The salmonid work windows in Chelan, King, Kittitas, Okanogan, Pierce, Snohomish, and Yakima Counties prohibit work during all of the grizzly bear denning period except for some high elevation waterways where the work windows extend into late October.

<sup>17</sup>The standard freshwater work windows for salmonid species prohibit work only during the first part of the early season foraging period.

<sup>18</sup>The standard freshwater work windows for salmonid species prohibit work only during most of the late season foraging period.

### Pygmy Rabbit

No species specific protocols proposed.

### Woodland Caribou

Projects meeting the following condition **may affect, but are not likely to adversely affect** woodland caribou:

- ◆ Projects located east of the Pend Oreille River, Pend Oreille County at elevations greater than 4,000 feet that:
  - Produce noise above ambient noise levels; **or**
  - Produce disturbance levels above normal.

### *Insects*

#### Oregon Silverspot Butterfly

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** Oregon silverspot butterfly:

- ◆ Projects located in the Pacific coastal area of Pacific County within 200 feet of sand dune, salt-spray meadows or open field habitats which do not contain the larval host species, early blue violet, as determined by a survey conducted by a qualified biologist in the early part of the growing season.

#### Conservation Measures

The following conservation measures will be implemented to avoid and minimize impacts to the Oregon silverspot butterfly:

**OSB1:** On all projects in Pacific County located within 200 feet of sand dune, salt-spray meadow or open field habitat, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

## ***Plants***

### **Bradshaw's Desert-Parsley**

No species specific protocols proposed.

### **Golden Paintbrush**

Projects meeting the condition below **may affect, but are not likely to adversely affect** golden paintbrush:

- ◆ Projects located in Island, San Juan, or Thurston Counties within 200 feet of grassland/prairie habitat which do not contain golden paintbrush, as determined by a survey conducted by a qualified biologist between April 1 and May 31.

### **Conservation Measure**

The following conservation measure will be implemented to avoid and minimize impacts to the golden paintbrush:

**GB1:** On all projects located within 200 feet of suitable grasslands and prairies, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

### **Kincaid's Lupine**

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** Kincaid's lupine:

- ◆ Projects located in Lewis County within 200 feet of native upland prairies and open oak woodlands that do not contain Kincaid's lupine as determined by a survey conducted by a qualified biologist between April 1 and June 30.

### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to the golden paintbrush:

**KL1:** On all projects located within 200 feet of suitable grasslands and prairies, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

### Marsh Sandwort

No species specific protocols proposed.

### Nelson's checker-mallow

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** Nelson's checker-mallow:

- ◆ Projects that are located in the Willapa Hills/Coast Range of Lewis or Cowlitz Counties within 200 feet of wet, remnant grasslands and prairies which do not contain Nelson's checker-mallow as determined by a survey conducted by a qualified biologist between May 15 and September 30.

### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to the Nelson's checker-mallow:

**NCM1:** On all projects located within 200 feet of suitable wet, remnant grasslands and prairies in the Willapa Hills/Coast Range of Lewis or Cowlitz Counties, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

### **Showy Stickseed**

No species specific protocols proposed.

### **Spalding's Silene**

No species specific protocols proposed.

### **Water Howellia**

Projects meeting the following condition **may affect, but are not likely to adversely affect** water howellia:

- ◆ Projects located in Pierce, Clark or Spokane Counties within 200 feet of potentially suitable wetland areas which do not contain water howellia as determined by a survey conducted by a qualified biologist between May 25 and July 15.

### **Conservation Measures**

The following conservation measures will be implemented to avoid and minimize impacts to the water howellia:

**WH1:** Water quality and quantity treatment will be completed for all projects that add more than 150 square feet of new impervious surface to the project area.<sup>19</sup>

**WH2:** On all projects located within 200 feet of suitable grasslands and prairies, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

### **Wenatchee Mountains Checker-Mallow**

Projects meeting the following condition **may affect, but are not likely to adversely affect** Wenatchee Mountains checker-mallow:

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<sup>19</sup> Same conservation measure as BTCT1.

- ◆ Projects that are located in Pendleton or Camas Creek watersheds, Chelan County, within 200 feet of potentially suitable habitat which do not contain Wenatchee Mountains checker-mallow, as determined by a survey conducted by a qualified biologist between June 15 and August 15.

### Conservation Measure

The following conservation measure will be implemented to avoid and minimize impacts to the Wenatchee Mountains checker-mallow:

**WCM1:** On all projects located within 200 feet of suitable grasslands and prairies, no foreign material (such as pavement slurry) will be sidecast outside of the project footprint.

### Wenatchee Mountains Checker-Mallow Critical Habitat

Projects meeting the following condition **may affect, but are not likely to adversely affect** Wenatchee Mountains checker-mallow critical habitat:

**WCMCH1:** Projects located in the Pendleton and Camas Creek watersheds, Chelan County, which affect the hydrology of wetland habitat.

### Ute ladies'-tresses

Projects meeting one or more of the following conditions **may affect, but are not likely to adversely affect** Ute ladies'-tresses:

- ◆ Projects located in Okanogan or Kittitas Counties between 1,500 and 7,000 feet elevation within 200 feet of springs, river meanders, floodplains, wetlands, or riparian areas suitable for supporting Ute ladies'-tresses which do not contain *Spiranthes* spp. as determined by a survey conducted by a qualified biologist between July 15 and September 15.
- ◆ Projects located in Okanogan or Kittitas Counties between 1,500 feet and 7,000 feet elevation that do not alter wetland or riparian vegetation and hydrology.