

GRAND COULEE– BELL 500-kV TRANSMISSION LINE
PROJECT

APPENDIX C:
BIOLOGICAL DATA

Table of Contents

Table C-1.	Wetlands Identified within the Corridor.....	1
Table C-2.	Vegetation Species Identified within the Corridor.....	7
Table C-3.	Wildlife species identified as potentially occurring within the corridor	11
ESA Letter	16

Table C-1. Wetlands Identified within the Project Area.

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From Access Roads	Potential Construction Impacts From Towers
Wetland 1*	1	Palustrine, emergent	No Impact: existing access road through this wetland will be closed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 2*	3.3	Palustrine, emergent, seasonally flooded	No Impact: existing access road is 25 ft. from wetland and no road improvements are proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 3 ^{ab}	4.7-4.8	Palustrine, emergent, seasonally flooded	No Impact: wetland is 75 ft. from south side of access road and 100 ft. from north side of access road; no road improvements are proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 4 ^c	5.2-5.3	Palustrine emergent, seasonally flooded	Low to Moderate: wetland is 5 ft. from north side of road; sediments could enter wetland from road widening along the south side of the road	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 5*	5.4-5.5	Palustrine emergent, seasonally flooded	No Impact: wetland is 75 ft. from north side of access road; no road improvements proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint.
Wetland 6*	5.4-5.5	Palustrine emergent, seasonally flooded	No Impact: wetland is 75 ft. from south side of access road; no road improvements proposed.	No Impact: wetland is more than 100 ft. from proposed tower footprint.
Wetland 7	5.7-5.8	Palustrine emergent, seasonally flooded	No Impact: wetland is 50 ft. from north side of road; no road improvements are proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 8	5.7-5.8	Palustrine, emergent, open water, semipermanently flooded	Low: wetland is 10 ft from south side of road and sediments from road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint

Table C-1 (cont'd)

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From	
			Access Roads	Towers
Wetland 9	6.2-6.3	Palustrine, emergent with scrub/shrub edge, seasonally flooded	Low to Moderate: wetland extends to road edge; sediments from road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 10*	32.5-32.6	Palustrine, emergent with forested portions near access road	Low to Moderate: wetland is adjacent to existing road; sediments from road improvements and road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 11 ^c	32.6-32.7	Palustrine, emergent, semipermanently flooded	Low to Moderate: wetland is adjacent to existing road in several areas; sediments from road improvements and road use could enter wetland	No Impact: location of proposed structure was moved to avoid wetland; proposed location is at least 50 ft. from wetland Low: existing wood pole is in wetland; to remove pole, cut rather than excavate
Wetland 12 ^c	33.5-33.6	Palustrine, emergent, seasonally flooded	Low: wetland is adjacent to existing road; sediments from road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 13*	33.7–33.8	Palustrine, emergent	Low: no road improvements proposed; wetland adjacent to existing road; sediments from road use could enter wetland	No to Low Impact: wetland is 70 ft. from proposed structure
Wetland 14 ^c	33.8-33.9	Palustrine, emergent, seasonally flooded	Low to Moderate: wetland adjacent to existing road; sediments from road improvements and road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 15 ^c	34.1-34.2	Palustrine, emergent, seasonally flooded	Low to Moderate: no road improvements proposed; wetland is adjacent to existing road; sediments from road improvements and road use could enter wetland	No Impact: wetland is more than 100 ft from proposed tower footprint. Low: existing pole is within 50 ft. of wetland so cut rather than excavate pole

Table C-1 (cont'd)

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From	
			Access Roads	Towers
Wetland 16*	35.1	Palustrine, emergent	No Impact: wetland greater than 100 ft. from road	No Impact: wetland is more than 100 ft. from proposed tower
Wetland 17*	35.3	Palustrine, emergent	No Impact: wetland within 10 ft. north of existing road; new road will be constructed away from wetland to avoid impacts	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 18 ^{abc}	37.3-37.4	Palustrine, emergent, temporarily flooded	Moderate: culvert replacement will introduce a small amount of fill into wetland	No Impact : wetland is more than 100 ft. from proposed tower footprint
Wetland 19 ^{abc}	38.2-38.3	Palustrine, emergent, seasonally flooded	Low: wetland adjacent to existing road; sediments from road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 20 ^c	38.3-38.4	Palustrine, emergent, temporarily flooded	No Impact : wetland is more than 100 ft. from road	No Impact : wetland is more than 100 ft. from proposed tower footprint
Wetland 21*	38.6-38.7	Palustrine, emergent and scrub shrub, permanently flooded	Low to Moderate: wetland adjacent to existing road; sediments from road improvements and road use could enter wetland	No Impact: wetland is more than 100 ft from proposed tower footprint Low: existing pole is within 50 ft. of wetland so cut rather than excavate pole
Wetland 22	39.6-39.7	Palustrine, emergent, seasonally flooded	Low to Moderate: wetland adjacent to existing road; sediments from road improvements and road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 23*	39.6-39.7	Palustrine, emergent, seasonally flooded	None: wetland is more than 100 ft. from road	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 24	39.7–39.8	Palustrine, emergent, seasonally flooded	No Impact: existing road though this area will be closed	No to Low Impact: proposed structure is on a cliff above this wetland; BMPs should prevent any materials from falling into wetland

Table C-1 (cont'd)

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From	
			Access Roads	Towers
Wetland 25 ^c	39.7–39.8	Palustrine, emergent, semipermanently flooded	No Impact: existing road though this area will be closed	No Impact: proposed structure is on a cliff above this wetland; BMPs should prevent any materials from falling into wetland
Wetland 26 ^c	40.2-40.3	Palustrine, emergent, seasonally flooded, open water	No Impact: wetland is 75 ft. from south side of access road. No road improvements proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 27*	40.2-40.3	Palustrine scrub/shrub	Low: wetland adjacent to existing road; sediments from road use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 28*	40.3-40.4	Palustrine, scrub/shrub, forested, seasonally flooded in bottom of 50 ft. deep hole	No Impact: wetland is more than 100 ft. from existing access road	No Impact: edge of hole is about 70 ft. from proposed tower footprint
Wetland 29	40.3-40.4	Palustrine, scrub/shrub, forested, seasonally flooded in bottom of 50 ft. deep hole	No Impact: wetland is more than 100 ft from existing access road	No Impact: top of hole is more than 100 ft. from proposed tower footprint
Wetland 30 ^c	40.4-40.6	Palustrine, emergent, temporarily flooded	Low: one portion of wetland crossed by road; no road improvements proposed but sediments could enter road from road use	Low: proposed structure will be relocated about 30 ft. from wetland so sediments may enter wetland
Wetland 31	40.6-40.7	Palustrine, emergent fringed with scrub/shrub and forest, temporarily flooded	No Impact: wetland is 75 ft. from south of road and no road improvements proposed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 32	40.8-40.9	Palustrine, emergent with scrub/shrub fringe, semipermanently flooded	No to Low Impact: wetland adjacent to existing road; sediments from road improvements and use could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint

Table C-1 (cont'd)

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From	
			Access Roads	Towers
Wetland 33	55.4-55.5	Palustrine, emergent, seasonally flooded	No Impact: wetland is at least 100 ft. from road	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 34	68.7-68.8	Palustrine, emergent, seasonally flooded	Low to Moderate: road goes through wetland, which is 10 ft from road; sediments from road improvements within existing road footprint could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 35	69.2	Palustrine, emergent, seasonally flooded	Low to Moderate: wetland 50 ft. from road; sediments from road improvements within existing road footprint could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 36	69.3-69.4	Palustrine, emergent, seasonally flooded	Low to Moderate: road crosses wetland; sediments from road improvements within existing road footprint could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 37*	69.3-69.4	Palustrine, emergent, seasonally flooded	Low to Moderate: road crosses wetland; sediments from road improvements within existing road footprint could enter wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 38	70.8-70.9	Palustrine, forested, open water	No Impact: wetland 75 ft. from road and road improvements proposed will avoid wetland.	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 39	71.4-71.5	Palustrine, emergent, seasonally flooded	Low to Moderate Impact: wetland is 10 ft. from road; road improvements may introduce sediments into wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint

Table C-1 (cont'd)

Wetland Number	Near or Between Existing Line Mile	Wetland Description	Potential Construction Impacts From	
			Access Roads	Towers
Wetland 40 ^c	71.4-71.5	Palustrine, emergent, semipermanently flooded	No to Low Impact: wetland is 25 ft. from road; road improvements may introduce sediments into wetland	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 41 ^b	75.8-76.2	Riverine, intermittent streambed, temporarily flooded (Deep Creek)	No Impact: existing road system will not be improved at creek crossings	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 42 ^b	77.2-77.4	Lacustrine, open water, permanently flooded (Spokane River)	No Impact: portion of access road within wetland, leading to existing wood pole structure will no longer be used once the pole is removed	No Impact: wetland is more than 100 ft. from proposed tower footprint
Wetland 43	82.5-82.6	Palustrine, aquatic bed, permanently flooded (sewage treatment pond)	No Impact: road is more than 50 ft. from pond edge	No Impact: wetland is more than 100 ft. from proposed tower footprint

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^a Wetland descriptions based on NWI classification scheme, modified as needed based on filed verification.

^b Wetland located or extended outside of the corridor

^c Wetland larger than NWI mapped

* Wetland not identified on NWI

Table C-2. Vegetation Species Identified within the Corridor

Common Name	Scientific Name	Non-native Species
Grass		
Agoseris	<i>Agoseris</i> sp.	
Bluebunch wheatgrass	<i>Agropyron spicatum</i> or <i>Pseudoroegneria spicata</i>	
Bluegrass	<i>Poa</i> sp.	
Bottlebrush squirreltail	<i>Sitanium hystrix</i>	
Bulbous bluegrass	<i>Poa bulbosa</i>	√
Cheatgrass	<i>Bromus tectorum</i>	√
Crested wheatgrass	<i>Agropyron cristatum</i>	
Giant wildrye	<i>Elymus cinereus</i>	
Idaho fescue	<i>Festuca idahoensis</i>	
Meadow barley	<i>Hordeum brachyantherum</i>	
Medusahead	<i>Taeniatherum caput-medusae</i>	√
Needle-and-thread grass	<i>Stipa comata</i>	
Reed canarygrass	<i>Phalaris arundinacea</i>	√
Ripgut brome	<i>Bromus ridigus</i>	√
Sandberg's bluegrass	<i>Poa sandbergii</i> or <i>Poa secunda</i>	
Wheat	<i>Triticum aestivum</i>	
Forbs		
Alumroot	<i>Heuchera cylindrica</i>	
Balsamroot	Various species of <i>Balsamorhiza</i>	
Baltic rush	<i>Juncus balticus</i>	
Basalt daisy	<i>Erigeron basalticus</i>	
Biscuitroot	Various species of <i>Lomatium</i>	
Bitterroot	<i>Lewisia rediviva</i>	
Buckwheat	Various species of <i>Eriogonum</i>	
Camas	<i>Camassia quamash</i>	
Canada thistle	<i>Cirsium arvense</i>	√
Cat-tail	<i>Typha latifolia</i>	
Cinquefoil	Various species of <i>Potentilla</i>	
Clarkia	<i>Clarkia pulchella</i>	
Clover-fern	<i>Marsilea vestita</i>	
Common larkspur	<i>Delphinium nuttallianum</i>	
Common silverweed	<i>Potentilla anserina</i>	
Common tansy	<i>Tanacetum vulgare</i>	√
Cushion daisy	<i>Erigeron poliospermus</i>	
Cushion phlox	<i>Phlox hoodii</i>	

Table C-2 (cont'd)

Common Name	Scientific Name	Non-native Species
Daisy	Various species of <i>Erigeron</i>	
Dalmatian toadflax	<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	√
Dandelion	<i>Taraxacum officinale</i>	√
Death camas	<i>Zygadenus venosus</i>	
Delphinium	<i>Delphinium</i> sp.	
Desert buckwheat	Various species of <i>Eriogonum</i>	
Desert paintbrush	<i>Castilleja chromosa</i>	
Diffuse knapweed	<i>Centaurea diffusa</i>	√
Dogbane	<i>Apocynum</i> sp.	
Fameflower	<i>Talinum spinescens</i>	
Fern-leaved lomatium	<i>Lomatium dissectum</i>	
Fiddleneck	<i>Amsinckia</i> sp.	
Flax	<i>Linum perenne</i>	
Geranium	<i>Geranium</i> sp.	
Globe mallow	<i>Sphaeralcea</i> sp.	
Goatsbeard	<i>Tragopogon</i> sp.	√
Groundsel	<i>Senecio foetidus</i>	
Leafy spurge	<i>Euphorbia esula</i>	
Linear-leaf daisy	<i>Erigeron linearis</i>	
Line-leaf Indian lettuce	<i>Montia linearia</i>	
Long-leaf Phlox	<i>Phlox longifolia</i>	
Longstalk starwort	<i>Stellaria longipes</i>	
Lupine	<i>Lupinus</i> sp.	
Milk-vetch	<i>Astragalus</i> sp.	
Mint	<i>Mentha arvensis</i>	
Mouse-tail	<i>Myosurus</i> sp.	
Mullein	<i>Verbascum thapsus</i>	
Navarretia	<i>Navarretia</i> sp.	
Oregon sunshine	<i>Eriophyllum lanatum</i>	
Owl-clover	<i>Orthocarpus</i> sp.	
Penstemon	<i>Penstemon</i> sp.	
Pepperweed	<i>Lepidium</i> sp.	
Perennial sowthistle	<i>Sonchus arvensis</i>	√
Phacelia	<i>Phacelia</i> sp.	
Phlox	<i>Phlox</i> sp.	
Piper's daisy	<i>Erigeron piperianus</i>	
Pondweed	<i>Potamogeton</i> sp.	
Popcorn flower	<i>Plagiobothrys</i> sp.	
Prairie smoke	<i>Geum triflorum</i>	

Table C-2 (cont'd)

Common Name	Scientific Name	Non-native Species
Prairie star flower	<i>Lithophragma sp.</i>	
Puccoon	<i>Lithospermum ruderale</i>	
Pussy-toes	<i>Antennaria sp.</i>	
Rushes	Various species of <i>Juncus</i>	
Scarlet gilia	<i>Gilia aggregata</i>	
Sedge	Various species of <i>Carex</i>	
Shore buttercup	<i>Ranunculus cymbalaria</i>	
Showy milkweed	<i>Asclepias speciosus</i>	
Slender cinquefoil	<i>Potentilla gracilis</i>	
Spikerush	Various species of <i>Eleocharis</i>	
St. John's wort	<i>Hypericum perforatum</i>	√
Sticky geranium	<i>Geranium viscosissimum</i>	
Stonecrop	<i>Sedum sp.</i>	
Teasel	<i>Dipsacus sylvestris</i>	√
Thyme desert buckwheat	<i>Eriogonum thymoides</i>	
Tule	<i>Scirpus sp.</i>	
Tumble mustard	<i>Sisymbrium altissimum</i>	√
Utah thistle	<i>Cirsium utahense</i>	
Western blue flag iris	<i>Iris missouriensis</i>	
Wild lettuce	<i>Lactuca sp.</i>	√
Wild onion	<i>Allium sp.</i>	
Yarrow	<i>Achillea millefolium</i>	
Yellow bell	<i>Fritillaria pudica</i>	
Shrubs		
Big sagebrush	<i>Artemisia tridentata</i>	
Bitterbrush	<i>Purshia tridentata</i>	
Blanket-flower	<i>Gaillardia aristata</i>	
Blue elderberry	<i>Sambucus cerulea</i>	
Chokecherry	<i>Prunus virginiana</i>	
Golden currant	<i>Ribes aureum</i>	
Douglas' maple	<i>Acer douglasii</i>	
Hawthorn	<i>Crataegus monogyna</i>	
Mock orange	<i>Philadelphus lewisii</i>	
Nootka rose	<i>Rosa nutkana</i>	
Oceanspray	<i>Holodiscus discolor</i>	
Poison oak or ivy	<i>Rhus radicans</i>	
Red osier dogwood	<i>Cornus stolonifera</i>	
Rose	Various species of <i>Rosa</i>	
Serviceberry	<i>Amelanchier alnifolia</i>	

Table C-2 (cont'd)

Common Name	Scientific Name	Non-native Species
Snowberry	<i>Symphoricarpus albus</i>	
Stiff sagebrush	<i>Artemisia rigida</i>	
Thimbleberry	<i>Rubus parviflorus</i>	
Wax or white currant	<i>Ribes cereum</i>	
Wood's rose	<i>Rosa woodsii</i>	
Trees		
Aspen	<i>Populus tremuloides</i>	
Black cottonwood	<i>Populus trichocarpa</i>	
Douglas fir	<i>Pseudotsuga menziesii</i>	
Pacific willow	<i>Salix lasiandra</i>	
Ponderosa pine	<i>Pinus ponderosa</i>	
Spring birch	<i>Betula occidentalis</i>	
Willow	Various species of <i>Salix</i>	

Table C-3. Wildlife species identified as potentially occurring within the corridor.

Common Name	Species Name	Associated Habitat Type
Mammals		
Badger	<i>Taxidea taxus</i>	Agricultural Steppe Ponderosa pine forest
Black-tailed jackrabbit	<i>Lepus californicus</i>	Steppe
Bobcat	<i>Lynx rufus</i>	Steppe Ponderosa pine forest
Bushy-tailed woodrat	<i>Neotoma cinerea</i>	Steppe Ponderosa pine forest
Columbian ground squirrel	<i>Spermophilus columbianus</i>	Ponderosa pine forest
Coyote	<i>Canis latrans</i>	Agricultural Steppe Ponderosa pine forest
Deer mouse	<i>Peromyscus maniculatus</i>	Agricultural Steppe Ponderosa pine forest
Elk	<i>Cervus elaphus</i>	Ponderosa pine forest
Great Basin pocket mouse	<i>Perognathus parvus</i>	Agricultural Steppe
Least chipmunk	<i>Eutamias minimus</i>	Steppe
Little brown myotis	<i>Myotis lucifugus</i>	Ponderosa pine forest
Long-tailed weasel	<i>Mustela frenata</i>	Ponderosa pine forest
Mantled ground squirrel	<i>Spermophilus lateralis</i>	Ponderosa pine forest
Mountain lion	<i>Felis concolor</i>	Ponderosa pine forest
Mule deer	<i>Odocoileus hemionus</i>	Agricultural Steppe Ponderosa pine forest
Northern flying squirrel	<i>Glaucomys sabrinus</i>	Ponderosa pine forest
Northern grasshopper mouse	<i>Onychomys leucogaster</i>	Steppe
Northern pocket gopher	<i>Thomomys talpoides</i>	Agricultural Steppe Ponderosa pine forest
Nuttall's cottontail	<i>Sylvilagus nuttallii</i>	Steppe
Ord's kangaroo rat	<i>Dipodomys ordii</i>	Steppe
Porcupine	<i>Erethizon dorsatum</i>	Ponderosa pine forest
Pygmy rabbit	<i>Brachylagus idahoensis</i>	Steppe
Red squirrel	<i>Tamiasciurus hudsonicus</i>	Ponderosa pine forest
Sagebrush vole	<i>Lagurus curtarius</i>	Steppe
Silver-haired bat	<i>Lasiorycteris noctivagans</i>	Ponderosa pine forest
Striped skunk	<i>Mephitis mephitis</i>	Agricultural Steppe

Table C-3 (cont'd)

Common Name	Species Name	Associated Habitat Type
Mammals		
Washington ground squirrel	<i>Spermophilus washingtoni</i>	Steppe
Western harvest mouse	<i>Reithrodontomys megalotis</i>	Steppe
Western jumping mouse	<i>Zapus princeps</i>	Ponderosa pine forest
White-tailed deer	<i>Odocoileus virginianus</i>	Agricultural Steppe Ponderosa pine forest
White-tailed jackrabbit	<i>Lepus townsendii</i>	Steppe
Yellow pine chipmunk	<i>Eutamias amoenus</i>	Ponderosa pine forest
Yellow-bellied marmot	<i>Marmota flaviventris</i>	Steppe
Birds		
American goldfinch	<i>Carduelis tristis</i>	Steppe
American kestrel	<i>Falco sparverius</i>	Steppe Ponderosa pine forest
American robin	<i>Turdus migratorius</i>	Steppe Ponderosa pine forest
Bald eagle	<i>Haliaeetus leucocephalus</i>	Ponderosa pine forest
Barn swallow	<i>Hirundo rustica</i>	Steppe
Black-billed magpie	<i>Pica pica</i>	Steppe Ponderosa pine forest
Black-throated gray warbler	<i>Dendroica nigrescens</i>	Ponderosa pine forest
Blue grouse	<i>Dendragapus obscurus</i>	Ponderosa pine forest
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	Steppe Ponderosa pine forest
Brewer's sparrow	<i>Spizella breweri</i>	Steppe
Brown creeper	<i>Certhia familiaris</i>	Ponderosa pine forest
Brown-headed cowbird	<i>Molothrus ater</i>	Steppe
Burrowing owl	<i>Speotyto cunicularia</i>	Steppe
California quail	<i>Callipepla californica</i>	Steppe
Canada goose	<i>Branta canadensis</i>	Agricultural
Cassin's finch	<i>Carpodacus cassinii</i>	Ponderosa pine forest
Chipping sparrow	<i>Spizella passerina</i>	Steppe Ponderosa pine forest
Chukar	<i>Alectoris chukar</i>	Steppe
Cliff swallow	<i>Hirundo pyrrhonota</i>	Steppe
Common flicker	<i>Colaptes auratus</i>	Ponderosa pine forest
Common nighthawk	<i>Chordeiles minor</i>	Steppe Ponderosa pine forest
Common raven	<i>Corvus corax</i>	Steppe Ponderosa pine forest
Cooper's hawk	<i>Accipiter cooperii</i>	Ponderosa pine forest

Table C-3 (cont'd)

Common Name	Species Name	Associated Habitat Type
Dark-eyed junco	<i>Junco hyemalis</i>	Ponderosa pine forest
Dusky flycatcher	<i>Empidonax oberholseri</i>	Ponderosa pine forest
European starling	<i>Sturnus vulgaris</i>	Steppe
Flammulated owl	<i>Otus flammeolus</i>	Ponderosa pine forest
Golden eagle	<i>Aquila chrysaetos</i>	Steppe Ponderosa pine forest
Grasshopper sparrow	<i>Ammodramus savannarum</i>	Steppe
Gray partridge	<i>Perdix perdix</i>	Agricultural Steppe
Great horned owl	<i>Bubo virginianus</i>	Ponderosa pine forest
Hairy woodpecker	<i>Dendrocopos villosus</i>	Ponderosa pine forest
Horned lark	<i>Eremophila alpestris</i>	Agricultural Steppe
Killdeer	<i>Charadrius vociferus</i>	Steppe
Lark sparrow	<i>Chondestes grammacus</i>	Steppe
Lewis' woodpecker	<i>Asyndesmus lewis</i>	Ponderosa pine forest
Loggerhead shrike	<i>Lanius ludovicianus</i>	Steppe
Long-billed curlew	<i>Numenius americanus</i>	Steppe
Mallard	<i>Arias platyrhynchos</i>	Agricultural
Mountain bluebird	<i>Sialia currucoides</i>	Ponderosa pine forest
Mountain chickadee	<i>Parus gambeli</i>	Ponderosa pine forest
Mourning dove	<i>Zenaida macroura</i>	Steppe
Northern flicker	<i>Colaptes auratus</i>	Steppe
Northern harrier	<i>Circus cyaneus</i>	Steppe
Northern oriole	<i>Icterus galbula</i>	Steppe
Olive-sided flycatcher	<i>Nuttallornis borealis</i>	Ponderosa pine forest
Osprey	<i>Pandion haliaetus</i>	Ponderosa pine forest
Pileated woodpecker	<i>Drycopus pileatus</i>	Ponderosa pine forest
Pine siskin	<i>Spinus pinus</i>	Ponderosa pine forest
Poorwill	<i>Phalaenoptilus nuttallii</i>	Ponderosa pine forest
Prairie falcon	<i>Falco mexicanus</i>	Steppe
Pygmy nuthatch	<i>Sirra pygmaea</i>	Ponderosa pine forest
Pygmy owl	<i>Glaucidium gnoma</i>	Ponderosa pine forest
Red crossbill	<i>Loxia curvirostra</i>	Ponderosa pine forest
Red-tailed hawk	<i>Buret jamaicensis</i>	Steppe Ponderosa pine forest
Red-winged blackbird	<i>Agelaius phoniceus</i>	Steppe
Ring-billed gull	<i>Larus delawarensis</i>	Steppe
Ring-necked pheasant	<i>Phasianus colchicus</i>	Agricultural Steppe
Rough-legged hawk	<i>Buteo lagopus</i>	Steppe
Ruffed grouse	<i>Bonasa umbellus</i>	Ponderosa pine forest

Table C-3 (cont'd)

Common Name	Species Name	Associated Habitat Type
Sage grouse	<i>Centrocercus urophasianus</i>	Steppe
Sage sparrow	<i>Amphispiza belli</i>	Steppe
Sage thrasher	<i>Oreoscoptes montanus</i>	Steppe
Savannah sparrow	<i>Passerculus aaudwichensis</i>	Steppe
Saw-whet owl	<i>Aegolius acadicus</i>	Ponderosa pine forest
Say's phoebe	<i>Sayornis saya</i>	Steppe Ponderosa pine forest
Sharp-tailed grouse	<i>Tympanuchus phasianellus</i>	Steppe
Short-eared owl	<i>Asio flammeus</i>	Steppe
Solitary vireo	<i>Vireo solitarius</i>	Ponderosa pine forest
Steller's jay	<i>Cyanocitta stelleri</i>	Ponderosa pine forest
Swainson's hawk	<i>Buret Swainsoni</i>	Steppe
Wild Turkey	<i>Meleagris gallopavo</i>	Ponderosa pine forest
Turkey vulture	<i>Cathartes aura</i>	Steppe Ponderosa pine forest
Vesper Sparrow	<i>Poocetes gramineus</i>	Steppe
Violet-green swallow	<i>Tachycineta thalassina</i>	Steppe Ponderosa pine forest
Western bluebird	<i>Sialia mexicana</i>	Ponderosa pine forest
Western flycatcher	<i>Empidonax difftcilis</i>	Ponderosa pine forest
Western kingbird	<i>Tyrannus verticalis</i>	Steppe
Western meadowlark	<i>Sternella neglecta</i>	Agricultural Steppe
Western tanager	<i>Piranga ludoviciana</i>	Ponderosa pine forest
Western wood peewee	<i>Contopus sordidulus</i>	Ponderosa pine forest
White-breasted nuthatch	<i>Sitta carolinensis</i>	Ponderosa pine forest
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	Steppe
White-headed woodpecker	<i>Dendrocopos albularvatus</i>	Ponderosa pine forest
Williamson's sapsucker	<i>Sphyrapicus thyroideus</i>	Ponderosa pine forest
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	Steppe
Reptiles/Amphibian		
Common garter snake	<i>Thamnophis sirtalis</i>	Ponderosa pine forest
Gopher snake	<i>Pituophis melanoleucus</i>	Steppe Ponderosa pine forest
Great Basin spade-foot toad	<i>Scaphiophus intermontanus</i>	Steppe
Pacific tree frog	<i>Hyla regilla</i>	Ponderosa pine forest
Racer	<i>Coluber constrictor</i>	Steppe
Sagebrush lizard	<i>Sceloporus graciosus</i>	Steppe
Short-horned lizard	<i>Phrynosoma douglassi</i>	Steppe Ponderosa pine forest
Tiger salamander	<i>Ambystoma tigrinum</i>	Ponderosa pine forest

Table C-3 (cont'd)

Common Name	Species Name	Associated Habitat Type
Western rattlesnake	<i>Crotalus viridis</i>	Steppe
Western skink	<i>Eumeces skiltonianus</i>	Steppe Ponderosa pine forest
Western toad	<i>Bufo boreas</i>	Ponderosa pine forest

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Source: WDFW (Washington Department of Fish and Wildlife). 2002.
Washington GAP Data Products [online database]. WDFW, Olympia.
URL <http://www.wa.gov/wdfw/wlm/gap/vdm.htm>.

ESA Letter



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Upper Columbia Fish and Wildlife Office
11103 East Montgomery Drive
Spokane, Washington 99206

May 15, 2002

Ms. Kerrie McArthur
6405 216th SW, Suite 100
Mountlake Terrace, WA 98043

Subject: Species List for the Bonneville Power Administration Proposed New Transmission Line Project,
Grant, Lincoln, and Spokane Counties, Washington (File #501.2900)

Reference Number: 1-9-02-SP-362

Dear Ms. McArthur:

This responds to your April 24, 2002 request for a list of threatened and endangered species that may occur in the vicinity of the Bonneville Power Administration Proposed New Transmission Line Project, located in Grant, Lincoln, and Spokane Counties, Washington. We understand that the project involves the construction of a new 550 MW electrical transmission line between Grand Coulee Dam and Spokane. Please use the above reference number for all future correspondence regarding this project.

We have reviewed the information you provided. Our records indicate that the following listed and candidate species may occur in the vicinity of the project and could potentially be affected by it:

Listed Species

Endangered

Pygmy rabbit (*Brachylagus idahoensis*)

Threatened

Bald eagle (*Haliaeetus leucocephalus*)

Bull trout (*Salvelinus confluentus*)

Ute ladies'-tresses (*Spiranthes diluvialis*), plant

Spalding's silene (*Silene spaldingii*), plant

Candidate Species

Washington ground squirrel (*Spermophilus washingtoni*)

Western sage grouse (*Centrocercus urophasianus phaios*)

Federal agencies must meet their responsibilities under section 7 of the Endangered Species Act of 1973, as amended (Act), as outlined in Enclosure A. Enclosure A includes a discussion of the contents of a Biological Assessment (BA), which provides an analysis of the impacts of the project on listed and

proposed species, and designated and proposed critical habitat. Preparation of a BA is required for all major construction projects. Even if a BA is not prepared, potential project effects on listed and proposed species should be addressed in the environmental review for this project. Federal agencies may designate, in writing, a non-federal representative to prepare a BA. However, the involved federal agency retains responsibility for the BA, its adequacy, and ultimate compliance with section 7 of the Act.

Preparation of a BA would be prudent when listed or proposed species, or designated or proposed critical habitat, occur within the project area. Should the BA determine that a listed species is likely to be affected by the project, the involved federal agency should request section 7 consultation with the U.S. Fish and Wildlife Service (Service). If a proposed species is likely to be jeopardized by the project, regulations require conferencing between the involved federal agency and the Service. If the BA concludes that the project will have no effect on any listed or proposed species, we would appreciate receiving a copy for our information.

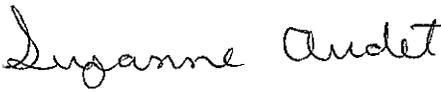
Candidate species receive no protection under the Act, but are included for your use during planning of the project. Candidate species could be formally proposed and listed during project planning, thereby falling within the scope of section 7 of the Act. Protection provided to these species now may preclude possible listing in the future. If evaluation of the subject project indicates that it is likely to adversely impact a candidate species, we encourage you to modify the project to minimize/avoid these impacts.

If you would like information concerning state listed species or species of concern, you may contact the Washington Department of Fish and Wildlife, at (360) 902-2543, for fish and wildlife species; or the Washington Department of Natural Resources, at (360) 902-1667, for plant species.

This letter fulfills the requirements of the Service under section 7 of the Act. Should the project plans change significantly, or if the project is delayed more than 90 days, you should request an update to this response.

Thank you for your efforts to protect our nation's species and their habitats. If you have any questions concerning the above information, please contact Robert Newman at (509) 893-8017.

Sincerely,


Suzanne Audet
Supervisor

Enclosure

cc: WDFW, Region 1,2
WNHP, Olympia
FWS, Ephrata

**Responsibility of Federal Agencies under Section 7
of the Endangered Species Act**

Section 7(a) - Consultation/Conferencing

- Requires: 1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;
- 2) Consultation with the U.S. Fish and Wildlife Service (Service) when a federal action may affect a listed species to ensure that any action authorized, funded, or carried out by a federal agency will not jeopardize the continued existence of listed species, or result in destruction or adverse modification of critical habitat. The process is initiated by the federal agency after determining that the action may affect a listed species; and
- 3) Conferencing with the Service when a federal action may jeopardize the continued existence of a proposed species, or result in destruction or adverse modification of proposed critical habitat.

Section 7(c) - Biological Assessment for Major Construction Activities

Requires federal agencies or their designees to prepare a Biological Assessment (BA) for major construction activities¹. The BA analyzes the effects of the action, including indirect effects and effects of interrelated or interdependent activities, on listed and proposed species, and designated and proposed critical habitat. The process begins with a request to the Service for a species list. If the BA is not initiated within 90 days of receipt of the species list, the accuracy of the list should be verified with the Service. The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable between the Service and the involved federal agency).

We recommend the following for inclusion in a BA: an onsite inspection of the area to be affected by the proposal, which may include a detailed survey of the area to determine if listed or proposed species are present; a review of pertinent literature and scientific data to determine the species' distribution, habitat needs, and other biological requirements; interviews with experts, including those within the Service, state conservation departments, universities, and others who may have data not yet published in scientific literature; an analysis of the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat; and an analysis of alternative actions considered. The BA should document the results of the impacts analysis, including a discussion of study methods used, any problems encountered, and other relevant information. The BA

should conclude whether or not any listed species may be affected, proposed species may be jeopardized, or critical habitat may be adversely modified by the project. Upon completion, the BA should be forwarded to the Service.

Major concerns that should be addressed in a BA for listed and proposed animal species include:

1. Level of use of the project area by the species, and amount or location of critical habitat;
2. Effect(s) of the project on the species' primary feeding, breeding, and sheltering areas;
3. Impacts from project construction and implementation (*e.g.*, increased noise levels, increased human activity and/or access, loss or degradation of habitat) that may result in disturbance to the species and/or their avoidance of the project area or critical habitat.

Major concerns that should be addressed in a BA for listed or proposed plant species include:

1. Distribution of the taxon in the project area;
2. Disturbance (*e.g.*, trampling, collecting) of individual plants or loss of habitat; and
3. Changes in hydrology where the taxon is found.

Section 7(d) - Irreversible or Irretrievable Commitment of Resources

Requires that, after initiation or reinitiation of consultation required under section 7(a)(2), the Federal agency and any applicant shall make no irreversible or irretrievable commitment of resources with respect to the action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternatives which would avoid violating section 7(a)(2). This prohibition is in force during the consultation process and continues until the requirements of section 7(a)(2) are satisfied.

¹ A major construction activity is a construction project, or other undertaking having similar physical impacts, which is a major action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act [42 U.S.C. 4332 (2)(c)].