

Appendix E

Fish and Wildlife Tables

Table E-1: Fish Presence/Absence and Fisheries Habitat at Waterway Crossings

Table E-2: Common and Scientific Names of Amphibian, Birds, Fish, and Mammals
Mentioned in Section 3.5, Fish and Wildlife

Table E-1: Fish Presence/Absence and Fisheries Habitat at Waterway Crossings

Waterway Name	Stream Crossing Numbers¹	Stream² Channel Width (ft)	Stream Type³	Salmonid Habitat⁴	Anad. Fish Access⁵	Fish Presence Survey⁶	Fish Presence Documented in Literature and by Fisheries Biologists⁷
S2GF TO CANADIAN BORDER 230 kV OVERHEAD TRANSMISSION LINE WATERWAY CROSSINGS							
Sumas River Basin							
Sumas Cr.	C-S1	6	P	S/R	X	CT	CT, CO
S2GF TO CANADIAN BORDER SEWER LINE WATERWAY CROSSINGS							
Sumas River Basin							
Sumas Creek	S-S1	6	P-E	S/R	X	CT, COT	CT, CO
S2GF TO CANADIAN BORDER NATURAL GAS LINE WATERWAY CROSSINGS							
Sumas River Basin							
Johnson Creek	G-S1	16	P-E	R	X	CT, CO	CO, CH, WST
Bone Creek	G-S2	4	P-E	R	X	NO	CO
Sumas R.	G-S3	20	P-E	R	X	NO	CO, CH, WST

¹ Dames & Moore stream crossing number.

² Stream channel widths represent the distance in feet between the high water marks on each bank.

³ Stream Type – The following are not official state or federal designations; they are meant to serve as indicators for the seasonal nature of stream flows and to designate whether a stream channel is natural or excavated:

P – A perennial stream with a natural channel

P-E – A perennial stream with an excavated channel

⁴ Salmonid Habitat – This column indicates if spawning (S) or rearing (R) habitat is present at the crossing site.

⁵ Anadromous Fish Access – This column is checked with an “X” if a waterway is accessible to anadromous salmonids or an “R” if only resident fish have access. If anadromous fish have been observed during Dames & Moore surveys or documented as occurring at or above a crossing, it is assumed that access exists. Also, if GIS coverage (WC 1997, WDFW 1998b, and WDFW 1999) indicates the presence of anadromous species at a waterway crossing (unless a barrier was observed during the survey), it is assumed that access exists. If GIS coverage indicates the presence of only resident fish and no anadromous fish have been documented, the waterway is considered to be accessible to resident fish populations. If no fish are present during surveys or documented and in the professional opinion of the surveying biologist, no suitable fisheries habitat exists, “NF” is entered into the column.

⁶ Fish – Indicates if fish were observed during field visits, and if so, what species were observed. Streams and ditches were walked or waded for 100 yards upstream and downstream from each crossing by a fisheries biologist. If it was possible to visually identify a fish by species from these sightings or to capture a fish with a dipnet, the

fish are identified by species. Most streams were surveyed once and no adult anadromous fish were present at the time of the surveys. All fish identified during surveys were either juveniles (anadromous or resident) or adult resident fish. This column also indicates if there are no fish present or if there is no available habitat for fish.

CT – Resident coastal cutthroat trout (*Oncorhynchus clarki clarki*)

SCT – Sea-run coastal cutthroat trout (*Oncorhynchus clarki clarki*)

CO – Coho salmon (*Oncorhynchus kisutch*)

CH – Chum salmon (*Oncorhynchus keta*)

WST – Winter-run steelhead trout (*Oncorhynchus mykiss*)

- ⁷ Documented fish presence – Species that have been documented in the literature (including databases and GIS mapping) as occurring anywhere in a stream are indicated with the appropriate abbreviation listed above under Fish Presence Survey. If a fish species has been documented (in the literature or during phone interviews with fisheries biologists) specifically at a stream crossing or a tributary above a stream crossing, the abbreviation is in bold. Sources of information are as follows: Ames and Bucknell 1981, Castle 1998, FWS 1998a, FWS 1998b, FWS 1999, Hendrick 1999, Kraemer 1998, Mongillo 1999, WDFW 1992, WDFW 1995, WDFW 1998a, WDFW 1998b, WDFW 1999, WDF 1993, and Wydoski and Whitney 1979.

**Table E-2: Common and Scientific Names of Amphibian, Birds, Fish, and Mammals
Mentioned in Section 3.5, Fish and Wildlife**

Common Name	Scientific Name
Amphibians	
Pacific treefrog	<i>Pseudacris regilla</i>
red-legged frog	<i>Rana aurora</i>
western toad	<i>Bufo boreas</i>
Birds	
American kestrel	<i>Falco sparverius</i>
American robin	<i>Turdus migratorius</i>
bald eagle	<i>Haliaeetus leucocephalus</i>
belted kingfisher	<i>Ceryle alcyon</i>
California quail	<i>Callipepla californica</i>
great horned owl	<i>Bubo virginianus</i>
marsh wren	<i>Cistothorus palustris</i>
northern harrier	<i>Circus cyaneus</i>
red-tailed hawk	<i>Buteo jamaicensis</i>
red-winged blackbird	<i>Agelaius phoeniceus</i>
Fish	
bull trout	<i>Salvelinus confluentus</i>
chinook salmon	<i>Oncorhynchus tshawytscha</i>
chum salmon	<i>Oncorhynchus keta</i>
coast cutthroat trout	<i>Oncorhynchus clarki clarki</i>
coho salmon	<i>Oncorhynchus kisutch</i>
dace	<i>Rhinichthys sp.</i>
Dolly Varden	<i>Salvelinus malma</i>
eulachon	<i>Thaleichthys pacificus</i>
largescale sucker	<i>Catostomus macrocheilus</i>
mountain whitefish	<i>Prosopium williamsoni</i>
northern pikeminnow	<i>Ptychocheilus oregonensis</i>
Pacific lamprey	<i>Entosphenus tridentatus</i>
pink salmon	<i>Oncorhynchus gorbuscha</i>

Common Name	Scientific Name
river lamprey	<i>Lampetra ayresi</i>
rainbow trout	<i>Oncorhynchus mykiss</i>
sculpin	<i>Cottus sp.</i>
threespine stickleback	<i>Gasterosteus aculeatus</i>
Mammals	
beavers	<i>Castor canadensis</i>
black-tailed deer	<i>Odocoileus hemionus</i>
mink	<i>Mustela vison</i>
muskrat	<i>Ondatra zibethicus</i>
opossum	<i>Didelphis virginiana</i>
raccoon	<i>Procyon lotor</i>
river otter	<i>Lutra canadensis</i>
skunks	<i>Mephitis spp.</i>