

## **APPENDIX K**

### **WATERBODIES CROSSED BY THE CAPACITY REPLACEMENT PROJECT**

TABLE K-1

**Waterbodies Crossed by the Capacity Replacement Project**

Facility/County	Waterbody Name	Milepost	Flow Type <sup>a</sup>	Crossing Width (feet) <sup>b</sup>	Fishery Classification	State Water Quality Classification <sup>c</sup>	WDNR Stream Type <sup>d</sup>	Proposed and (Alternative) Crossing Method <sup>e</sup>	In-stream Work Window <sup>f</sup>
Pipeline Facilities									
Sumas Loop/ Whatcom	Wetland Ditch	1484.4	I	4	None	A	NA	Dry open-cut	7/1 to 9/30
	Wetland Ditch	1484.4	I	4	None	A	NA	Dry open-cut	7/1 to 9/30
	Wetland Ditch	1484.0	I	7.5	None	A	NA	Dry open-cut	7/1 to 9/30
	Wetland Ditch	1483.9	I	6.5	None	A	NA	Dry open-cut	7/1 to 9/30
	Wetland Ditch	1483.9	I	6	None	A	NA	Dry open-cut	7/1 to 9/30
	Wetland Ditch	1483.9	I	6	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1483.6	I	<10	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1483.4	I	8.5	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1483.3	I	6.5	None	A	NA	Dry open-cut	7/1 to 9/30
	Saar Creek	1483.1	P	20	Coldwater	A	1	Dam and Pump (Flume)	7/1 to 9/30
	Upland Ditch	1483.0	I	5	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1483.0	I	4	None	A	NA	Dry open-cut	7/1 to 9/30
	Saar Creek	1482.8	P	20	Coldwater	A	1	Dam and Pump (Flume)	7/1 to 9/30
	Trib. to Lake Creek	1481.4	P	4	None	AA	5	Dry open-cut	7/1 to 9/30
	Trib. to Lake Creek	1481.0	P	<10	None	AA	4	Flume	7/1 to 9/30
	Wetland Ditch	1480.9	I	1	None	A	NA	Dry open-cut	7/1 to 9/30
	Trib. to Kinney Creek	1480.0	I	1	None	A	5	Dry open-cut	7/1 to 9/30
	Trib. to Kinney Creek	1480.0	I	2	None	A	5	Dry open-cut	7/1 to 9/30
	Kinney Creek	1479.1	P	<10	Coldwater	A	3	Flume	7/1 to 9/30
	Breckenridge Creek	1478.9	P	30	Coldwater	A	3	Flume	7/1 to 9/30
	Upland Ditch	1478.2	I	3	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1478.2	I	2	None	A	NA	Dry open-cut	7/1 to 9/30
	Swift Creek	1477.6	I	15	Coldwater	A	3	Flume	7/1 to 9/30
	Unnamed Tributary	1477.1	I	6	Coldwater	A	3	Flume	7/1 to 9/30
	Unnamed Tributary	1477.0	I	3	Coldwater	A	3	Flume	7/1 to 9/30
	Unnamed Tributary	1476.9	I	4	Coldwater	A	3	Flume	7/1 to 9/30
	Trib. to Sumas River	1476.8	P	4	Coldwater	A	3	Flume	7/1 to 9/30
	Pond outlet	1476.8	I	3	None	A	3	Flume	7/1 to 9/30
	Trib. to Sumas River	1476.4	I	<10	None	A	5	Dry open-cut	7/1 to 9/30
	Upland Ditch	1476.3	I	3	None	A	NA	Dry open-cut	7/1 to 9/30
	Upland Ditch	1476.3	I	2	None	A	NA	Dry open-cut	7/1 to 9/30
	Trib. to Sumas River	1476.2	P	7	Coldwater	A	3	Flume	7/1 to 9/30
	Trib. to Sumas River	1476.1	I	5	None	A	3	Flume	7/1 to 9/30
Dale Creek	1475.9	P	<10	Coldwater	A	3	Flume	7/1 to 9/30	

TABLE K-1 (cont'd)

**Waterbodies Crossed by the Capacity Replacement Project**

Facility/County	Waterbody Name	Milepost	Flow Type <sup>a</sup>	Crossing Width (feet) <sup>b</sup>	Fishery Classification	State Water Quality Classification <sup>c</sup>	WDNR Stream Type <sup>d</sup>	Proposed and (Alternative) Crossing Method <sup>e</sup>	In-stream Work Window <sup>f</sup>
	Trib. to Sumas River	1475.7	P	5	Coldwater	A	3	Flume	7/1 to 9/30
	Trib. to Sumas River	1475.4	I	2	None	A	5	Dry open-cut	7/1 to 9/30
	Unnamed Tributary	1475.2	I	2	None	A	5	Dry open-cut	7/1 to 9/30
	Unnamed Tributary	1474.6	I	2	None	A	5	Dry open-cut	7/1 to 9/30
	Unnamed Tributary	1474.5	I	2	None	A	4	Flume	7/1 to 9/30
	Trib. to Sumas River	1473.7	P	>10	Coldwater	A	3	Flume	7/1 to 9/30
	Trib. to Smith Creek	1473.3	P	5	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Upland Ditch	1473.1	I	<10	None	A	NA	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Upland Ditch	1472.7	I	3	None	A	NA	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Unnamed Tributary	1472.6	I	2	None	A	5	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Wetland Ditch	1472.6	I	3	None	A	NA	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Upland Ditch	1472.5	I	5	None	A	NA	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Smith Creek	1472.2	P	28	Coldwater	A	2	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Macaulay Creek	1472.0	P	4	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Macaulay Creek	1471.6	I	2	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Upland Ditch	1471.5	I	2	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Macaulay Creek	1471.0	P	>10	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)

TABLE K-1 (cont'd)

**Waterbodies Crossed by the Capacity Replacement Project**

Facility/County	Waterbody Name	Milepost	Flow Type <sup>a</sup>	Crossing Width (feet) <sup>b</sup>	Fishery Classification	State Water Quality Classification <sup>c</sup>	WDNR Stream Type <sup>d</sup>	Proposed and (Alternative) Crossing Method <sup>e</sup>	In-stream Work Window <sup>f</sup>
	Trib. to Mitchell Creek	1470.9	P	5	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Mitchell Creek-Ditch	1470.8	P	5	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Mitchell Creek	1470.1	P	4	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Mitchell Creek	1469.8	P	4	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Ditch & Unnamed Trib.	1469.2 1469.1	I	2	None	A	5	Dry open-cut	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. To Jim Creek	1468.8	I	2	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Jim Creek	1468.8	I	2	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to Jim Creek	1468.8	I	2	Coldwater	A	3	Flume	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Jim Creek	1468.7	P	10	Coldwater	A	3	HDD (flume)	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to North Fork Nooksack River	1468.4	I	20	Coldwater	A	3	HDD (dry open-cut)	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	N. Fork Nooksack River	1468.2	P	580	Coldwater	A	1	HDD (wet open-cut)	6/15 to 8/31 (odd years); 6/15 to 9/30 (even years)
	Trib. to S. Fork Nooksack River	1467.4	P	5	Coldwater	A	3	Flume	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1467.3	I	1	Coldwater	A	3	Flume	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1467.2	I	1	None	A	5	Dry open-cut	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1467.0	I	<5	Coldwater	A	3	Flume	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1466.8	I	2	Coldwater	A	3	Flume	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1466.7	I	5	Coldwater	A	3	Flume	7/15 to 8/15

TABLE K-1 (cont'd)

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Mount Vernon Loop/ Snohomish	Trib. to Black Slough	1465.8	I	5	Colwater	A	3	Flume	7/15 to 8/15
	Wetland Ditch	1465.5	I	3	None	A	NA	Dry open-cut	7/15 to 8/15
	Wetland Ditch	1465.5	I	3	None	A	NA	Dry open-cut	7/15 to 8/15
	Trib. to Black Slough	1465.2	P	4	Coldwater	A	3	Flume	7/15 to 8/15
	Wetland Ditch	1465.0	I	3	None	A	NA	Dry open-cut	7/15 to 8/15
	Wetland Ditch	1464.9	I	3	None	A	NA	Dry open-cut	7/15 to 8/15
	Wetland Ditch	1464.7	I	2	None	A	NA	Dry open-cut	7/15 to 8/15
	Unnamed Tributary	1464.7	I	7	Coldwater	A	3	Flume	7/15 to 8/15
	Tinling Creek	1464.6	P	25	Coldwater	A	3	Flume	7/15 to 8/15
	Wetland Ditch	1464.5	I	5	None	A	NA	Dry open-cut	7/15 to 8/15
	Unnamed Tributary	1464.2	I	6	Coldwater	A	3	Flume	7/15 to 8/15
	Wetland Ditch	1463.8	I	6	None	A	NA	Dry open-cut	7/15 to 8/15
	Wetland Ditch	1463.7	I	6	None	A	NA	Dry open-cut	7/15 to 8/15
	Wetland Ditch	1463.5	I	3	None	A	NA	Dry open-cut	7/15 to 8/15
	Trib to Black Slough	1463.3	I	2	Coldwater	A	3	Flume	7/15 to 8/15
	Wetland Ditch	1463.0	I	<10	None	A	NA	Flume	7/15 to 8/15
	Wetland Ditch	1463.0	I	<10	None	A	NA	Dry open-cut	7/15 to 8/15
	Trib. to S. Fork Nooksack River	1461.9	P	<10	Coldwater	A	3	Flume	7/15 to 8/15
	Pilchuck Creek	1428.6	P	75	Coldwater	A	1	Wet open-cut (aerial span)	7/1 to 8/31
	Trib. to Pilchuck Creek (ditch)	1428.6	I	4	None	A	5	Dry open-cut	7/1 to 8/31
	Trib. to Pilchuck Creek	1428.5	I	1	None	A	5	Dry open-cut	7/1 to 8/31
	Armstrong Creek	1425.6	P	4	Coldwater	A	2	Flume	7/1 to 8/31
	N. Fork Stillaguamish River	1424.3	P	275	Coldwater	A	1	HDD (wet open-cut)	7/1 to 8/15
S. Fork Stillaguamish River	1423.8	P	200	Coldwater	A	1	HDD (wet open-cut)	7/1 to 8/15	
Eagle Creek	1423.5	P	<10	Coldwater	A	3	Flume	7/1 to 8/15	
Wetland Ditch	1423.0	I	3	None	A	NA	Dry open-cut	7/1 to 8/15	
Wetland Ditch	1422.8	I	<10	None	A	NA	Dry open-cut	7/1 to 8/15	
Trib. S. Fork Stillaguamish River	1422.2	I	2	None	A	5	Dry open-cut	7/1 to 8/15	
Trib. S. Fork Stillaguamish River	1421.9	I	1	None	A	5	Dry open-cut	7/1 to 8/15	
Wetland Ditch	1421.9	I	2	None	A	NA	Dry open-cut	7/1 to 8/15	

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	Trib. S. Fork Stillaguamish River	1421.3	P	4	Coldwater	A	3	Flume	7/1 to 8/15
	Olson Lake	1419.3	P	1,500	Coldwater	AA	2	Push-pull	7/1 to 8/15
	Trib. to Star Creek (ditch)	1416.0	I	1	None	A	5	Dry open-cut	7/1 to 8/15
	Upland Ditch	1415.9	I	3	None	A	NA	Dry open-cut	7/1 to 8/15
	Upland Ditch	1415.5	I	1.5	None	A	NA	Dry open-cut	7/1 to 8/15
	Upland Ditch	1415.5	I	1	None	A	NA	Dry open-cut	7/1 to 8/15
	Star Creek	1415.3	P	4	Coldwater	A	3	Flume	7/1 to 8/15
	Trib. to Little Pilchuck Creek	1414.5	I	1	None	A	5	Dry open-cut	7/1 to 8/31
	Upland Ditch	1414.1	I	4	None	A	NA	Dry open-cut	7/1 to 8/31
	Upland Ditch	1414.0	I	1	None	A	NA	Dry open-cut	7/1 to 8/31
	Upland Ditch	1413.7	I	3	None	A	NA	Dry open-cut	7/1 to 8/31
	Upland Ditch	1413.7	I	3	None	A	NA	Dry open-cut	7/1 to 8/31
	Upland Ditch	1413.1	I	4	None	A	NA	Dry open-cut	7/1 to 8/31
	Trib. to Little Pilchuck Creek	1412.1	P	4	Coldwater	A	3	Flume	7/1 to 8/31
	Trib. to Little Pilchuck Creek	1411.9	I	1	None	A	5	Dry open-cut	7/1 to 8/31
	Upland Ditch	1411.8	I	1	None	A	NA	Dry open-cut	7/1 to 8/31
	Upland Ditch	1411.6	I	3	None	A	NA	Dry open-cut	7/1 to 8/31
	Little Pilchuck Creek	1411.1	P	20	Coldwater	A	1	Flume	7/1 to 8/31
	Little Pilchuck Creek	1410.5	P	20	Coldwater	A	1	Flume	7/1 to 8/31
	Upland Ditch	1410.3	I	2	None	A	NA	Dry open-cut	7/1 to 8/31
	Catherine Creek	1409.6	P	<10	Coldwater	A	1	Flume	7/1 to 8/31
Snohomish Loop/Snohomish	Trib. to Paradise Lake/Bear Creek	1393.8	P	8	Coldwater	A	3	Flume	7/1 to 8/15
	Upland Ditch	1393.7	I	3	None	A	NA	Dry open-cut	7/1 to 8/15
	Upland Ditch	1393.5	I	3	None	A	NA	Dry open-cut	7/1 to 8/15
	Upland Ditch	1393.5	I	3	None	A	NA	Dry open-cut	7/1 to 8/15
	Trib. to Paradise Lake/Bear Creek	1393.3	P	<10	Coldwater	AA	3	Flume	7/1 to 8/15
	Trib. to Paradise Lake/Bear Creek	1393.1	P	6	Coldwater	AA	3	Flume	7/1 to 8/15
	Trib. to Paradise Lake/Bear Creek	1393.1	P	8	Coldwater	A	3	Flume	7/1 to 8/15
Snohomish Loop/King	Trib. to Paradise Lake/Bear Creek	1393.1	I	2	Coldwater	AA	3	Flume	7/1 to 8/15

TABLE K-1 (cont'd)

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Fort Lewis Loop/ Pierce	Trib. to Paradise Lake/Bear Creek	1393.0	P	3	None	AA	3	Flume	7/1 to 8/15	
	Trib. to Paradise Lake/Bear Creek	1391.2	P	<10	Coldwater	AA	3	Flume	7/1 to 8/15	
	Struve Creek	1390.2	P	14	Coldwater	A	3	Flume	7/1 to 8/15	
	Colin Creek	1389.4	P	14	Coldwater	A	3	Aerial span	7/1 to 8/15	
	Trib. to Seidel Creek	1388.6	P	<10	Coldwater	A	3	Flume	7/1 to 8/15	
	Trib. to Seidel Creek	1388.5	P	<10	Coldwater	A	3	Flume	7/1 to 8/15	
	Trib. to Bear Creek	1387.2	I	2	None	A	5	Dry open-cut	7/1 to 8/15	
	Trib. to Evans Creek	1385.8	P	>10	None	A	4	Flume	7/1 to 8/15	
	Trib. to Evans Creek	1385.8	P	<10 Existing 26" Culvert	None	A	4	Flume	7/1 to 8/15	
	Trib. to Evans Creek	1385.5	I	<1 Culverted	None	A	5	Dry open-cut	7/1 to 8/15	
	Upland Ditch	1385.0	I	3	None	A	NA	Dry open-cut	7/1 to 8/15	
	Evans Creek	1383.7	P	950	Coldwater	A	3	Push-pull	7/1 to 8/15	
	Trib. to Evans Creek	1383.4	P	>10	Coldwater	A	3	Flume	7/1 to 8/15	
	Muck Creek	1332.4	P	20	Coldwater	A	2	Flume	7/1 to 9/15	
	South Fork Creek	1332.1	I	25	Coldwater	A	2	Flume	7/1 to 9/15	
	Fort Lewis Loop/ Thurston	Lacamas Creek	1328.7	P	15	Coldwater	A	3	Flume	7/1 to 9/15
		Murray Creek	1327.9	P	3	Coldwater	A	3	Flume	7/1 to 9/15
Nisqually River		1324.3	P	160	Coldwater	A	1	Wet open-cut (aerial span)	7/1 to 8/31	
Centralia Canal		1323.9	P	40	Coldwater	A	3	Aerial span	7/1 to 9/15	
Trib. to Yelm Creek (ditch)		1320.7	I	2	None	A	5	Dry open-cut	7/1 to 9/15	
Upland Ditch		1320.5	I	1	None	A	NA	Dry open-cut	7/1 to 9/15	
Upland Ditch		1320.5	I	1	None	A	NA	Dry open-cut	7/1 to 9/15	
Trib. Yelm Creek		1320.4	I	<10	None	A	5	Dry open-cut	7/1 to 9/15	
Upland Ditch		1319.8	I	1	None	A	NA	Dry open-cut	7/1 to 9/15	
Upland Ditch		1319.6	I	3	None	A	NA	Dry open-cut	7/1 to 9/15	
Abandoned Facilities	Upland Ditch	1319.1	I	3	None	A	NA	Dry open-cut	7/1 to 9/15	
	Upland Ditch	1318.8	I	1	None	A	NA	Dry open-cut	7/1 to 9/15	
	Upland Ditch	1318.8	I	1	None	A	NA	Dry open-cut	7/1 to 9/15	

TABLE K-1 (cont'd)

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Facility/County	Waterbody Name	Milepost	Flow Type <sup>a</sup>	Crossing Width (feet) <sup>b</sup>	Fishery Classification	State Water Quality Classification <sup>c</sup>	WDNR Stream Type <sup>d</sup>	Proposed and (Alternative) Crossing Method <sup>e</sup>	In-stream Work Window <sup>f</sup>
Portland Lateral Take-Off/ Pierce	Trib. to East Fork Lewis River (ditch)	1232.5	I	4	None	A	3	Flume	7/1 to 8/31

<sup>a</sup> P = perennial  
I = intermittent

<sup>b</sup> Water's edge to water's edge for perennial waterbodies; bank to bank for intermittent waterbodies.

<sup>c</sup> A = Water quality that meets or exceeds the requirements for all, or substantially all, uses.

AA = Water quality that markedly and uniformly exceeds the requirements for all, or substantially all, uses.

<sup>d</sup> Washington State Department of Natural Resources (WDNR) Stream Types (Washington Forest Practices Board, 2000):

Type 1 Water - includes all waters, within their ordinary high-water mark, as inventoried a "shorelines of the state" under Revised Code of Washington (RCW) Chapter 90.58 and the rules promulgated pursuant to RCW Chapter 90.58, but not including those waters' associated wetlands as defined in RCW Chapter 90.58.

Type 2 Water - Includes segments of natural waters that are not classified as Type 1 Water and have a high fish, wildlife, or human use.

Type 3 Water - Includes segments of natural waters that are not classified as Type 1 or 2 Waters and have a moderate to slight fish, wildlife, or human use.

Type 4 Water - Includes segments of natural waters within the bankfull width of defined channels that are not classified as Type 1, 2, or 3 Waters and that are perennial waters of nonfish-bearing streams.

Type 5 Water - Includes segments of natural waters within the bankfull width of defined channels that are not classified as Type 1, 2, 3, or 4 Waters and that are seasonal nonfish-bearing streams.

<sup>e</sup> If waterbodies proposed to be crossed using the dry open-cut method are flowing at the time of construction, they would be crossed using the flume or dam and pump method. If waterbodies proposed to be crossed using the flume or dam and pump method are not flowing at the time of construction, they would be crossed using the dry open-cut method.

<sup>f</sup> Tentative window specified by the WDFW. This window may be modified by the WDFW before construction.

NA = Not applicable. The WDNR does not type wetland and upland ditches.