

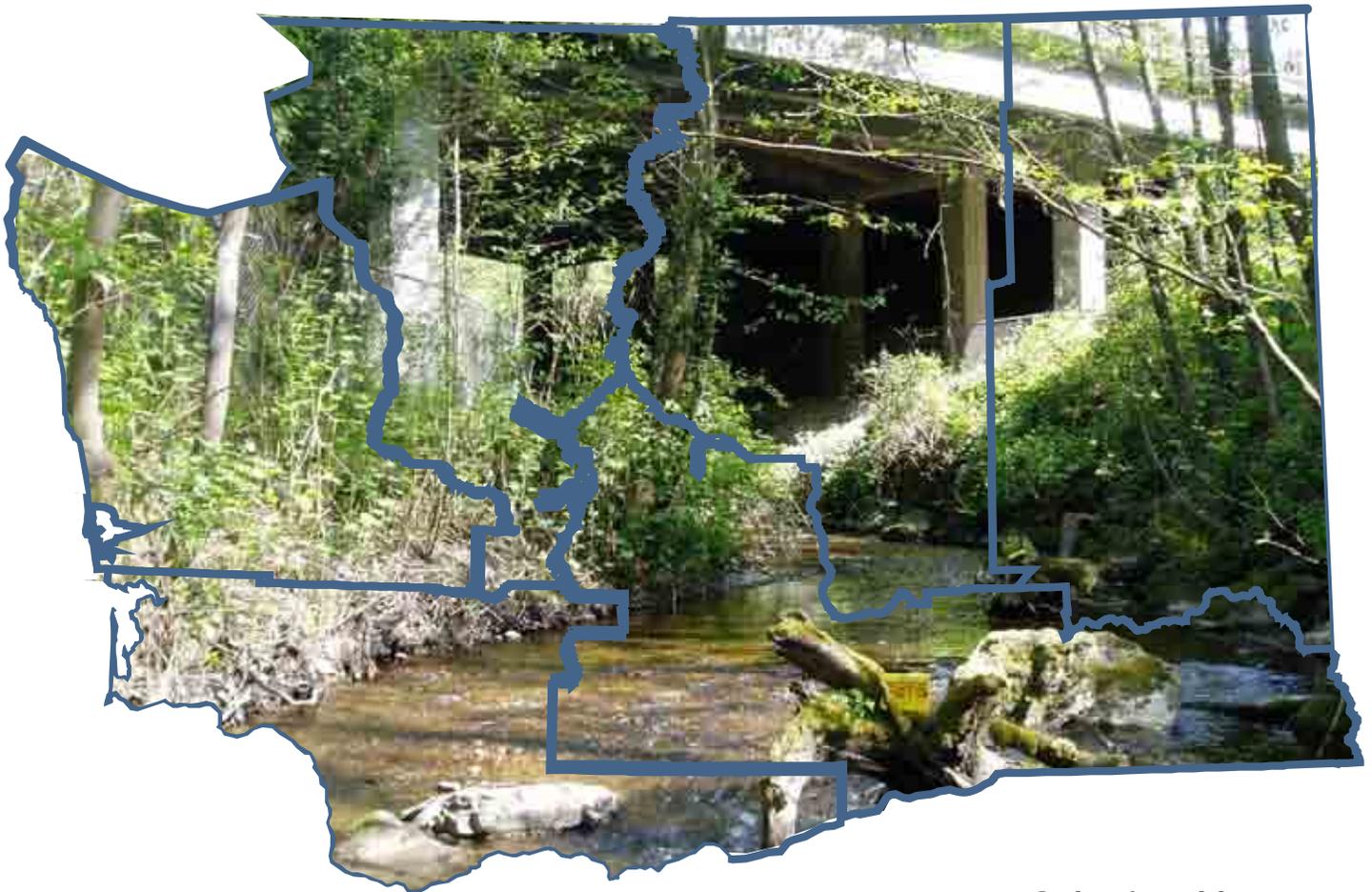


Washington State  
Department of Fish and Wildlife

# WSDOT FISH PASSAGE INVENTORY

*Progress Performance Report*

**June 2008**



Submitted by:  
Eva Wilder  
and  
Mike Barber



Washington State  
Department of Transportation



## Washington State Department of Fish and Wildlife

*HABITAT PROGRAM  
TECHNICAL APPLICATIONS DIVISION*

Progress Performance Report  
For  
WSDOT Fish Passage Inventory

June 2008



## Washington State Department of Transportation

*FISH PASSAGE BARRIER REMOVAL PROGRAM*

This report is also available in a pdf format at: [http://www.wsdot.wa.gov/environment/fishpass/state\\_highways.htm](http://www.wsdot.wa.gov/environment/fishpass/state_highways.htm).

Additional data can be obtained by contacting Fish and Wildlife Biologist, Eva Wilder, e-mail: [wildeelw@dfw.wa.gov](mailto:wildeelw@dfw.wa.gov), phone: (360) 902-2411.

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## Introduction

Restoration of declining salmon and trout populations ranks high in the development of management plans for streams, lakes, and wetlands in Washington State. One of the major problems facing salmon and trout populations is an inability to utilize their historic rearing and spawning grounds due to fish passage barriers that block access to upstream habitat. Realizing this, the Washington Department of Fish and Wildlife (WDFW) and the Washington Department of Transportation (WSDOT) have worked cooperatively since 1991 to inventory and correct fish barriers at state highway crossings.

Prior to 1991, WSDOT addressed the correction of fish passage barriers as required by Hydraulic Project Approvals (HPA) issued for highway construction and maintenance projects. In 1991, in cooperation with the Washington State Legislative Transportation Committee, WSDOT committed funding from its Highway Construction Program to develop an inventory of fish passage barriers to anadromous fish species at state highway crossings. WSDOT contracted with Washington Department of Fisheries (prior to the merger of Washington Departments of Fisheries and Wildlife) to conduct the inventory and habitat studies necessary to prioritize state route barriers for correction.

This report summarizes the WSDOT's fish passage barrier correction plan. Included in this report are corrections performed during road projects and fish passage corrections with dedicated I-4 funding since 1991. WSDOT barrier corrections completed in 2007, long-term scoping and planning for future barrier corrections, and fish use evaluations of planned and completed fish passage barrier projects are reported for each of the six WSDOT management regions.

## Fish Passage Inventory

Prior to the merger of Washington Departments of Fisheries and Wildlife in 1994, the WSDOT culvert inventory was salmon-centric; fish passage barrier assessments were conducted up to 7% stream gradient, which marked the presumed upper limit of salmon habitat. Stream crossings located upstream of the point where the stream gradient exceeded the 7% gradient were not inventoried. Subsequent to the merger, fish passage barrier inventories were expanded to include higher gradient steelhead trout habitat. The first gradient changes were implemented in July 1995. Following these changes, all culvert evaluations and physical surveys were done for WSDOT stream crossings up to 12% gradient criteria. In February 1998, WDFW modified the gradient criteria from 12 to 20% to include resident fish

Since 1991, WSDOT has spent over \$47.37 million to inventory, conduct habitat studies, prioritize, and correct fish passage barriers in Washington streams. As a result of those combined efforts, access to over 2,149,165\* square meters of salmonid habitat, or, over 782 linear kilometers (486 miles) once blocked by fish passage barriers has been restored.

\* The amount of habitat once blocked by barriers was measured during habitat surveys and estimated using the Geographic Information System (GIS) software.

and to adhere to the current forest practice rules. Under the new criteria, all fish bearing stream crossings were to be assessed. These criteria changes related to gradient occurred about midway in the comprehensive inventory of all state highway stream crossings. In 1998, the WSDOT contracted with the WDFW to commence a more extensive inventory of barrier crossing using the current fish passage criteria (*WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* 1998, revised 2000).

The expanded inventory has been completed on the entire state route system of 11,335.45 kilometers (7,043.52 miles).

The statewide results of the expanded WSDOT fish passage inventory are shown in Table 1.

In the past, during every odd year, WDFW reviewed upcoming transportation projects to provide WSDOT with advance notice of fish passage barriers in project vicinities in hopes of integrating fish passage barrier repairs with road construction projects. With the conclusion of the inventory of all the WSDOT-owned highways, only the crossings that require additional information within the transportation project areas will be re-evaluated and the results forwarded to the appropriate WSDOT regional office.

**WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual can be accessed on the web at: <http://wdfw.wa.gov/hab/engineer/fishbarr.htm>**

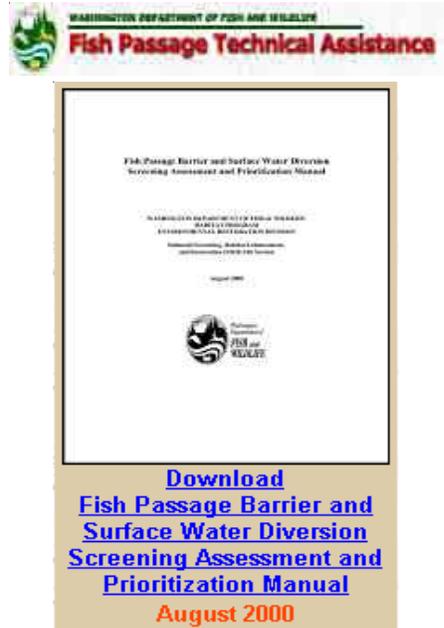


Table 1. Number of Fish Bearing Crossings and Barrier Crossings Requiring Fish Passage Repair Based on the WSDOT Expanded Fish Passage Inventory.

Source	Fish-bearing Stream Crossings	Fish Passage Barriers	Barriers with Significant Habitat Gain	Barriers with Limited Habitat Gain <sup>1</sup>	Barriers with Habitat Threshold Gain Not Determined	Barriers Fixed <sup>2</sup>
WDFW 2008 Fish Passage and Diversion Screening Inventory Database	3,185	1,859	1,440	393	26	218

<sup>1</sup> Barriers that do not meet current WDFW threshold habitat gain criteria to justify correction using dedicated funding until higher priority barriers are corrected.

<sup>2</sup> Two hundred and eighteen WSDOT fish passage barriers have been reported as replaced or retrofitted for fish passage; however, 48 of those require additional work to meet current fish passage criteria (See Appendices C for each WSDOT region).

## Fish Passage Inventory Updates

During the ongoing WSDOT inventory, 6,469 crossings in natural drainages have been inspected:

- Of the 6,469 natural crossings, 3,185 have been identified as fish bearing.
- Approximately 58% (1,859) of the examined fish bearing crossings were identified as barriers (Table 1).
- Additionally, 82 crossings require further analysis to determine fish passage barrier status.
- Seventy-seven percent of known barriers (1,440) have a significant habitat gain (at least 200 m) and will be prioritized for near-term correction using dedicated fish passage barrier correction funds.
- Another 393 barriers with limited habitat gain (less than 200 m) will be considered for correction once the high priority barriers are corrected, or they may be corrected during road maintenance or Safety and Mobility projects, or when they reach the end of their life.
- Currently, 26 fish passage barrier crossings are scheduled for verification of significant habitat gain.

A habitat assessment is conducted for all identified WSDOT fish passage barriers with a significant habitat gain as a basis for prioritization of fish passage restoration projects. Three methods of habitat assessment have been used; Full Physical Surveys (FS), Threshold Determinations (TD), and Expanded Threshold Determinations (ETD), per the *WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (August 2000, located on the Internet at: <http://www.wdfw.wa.gov/hab/engineer/fishbarr.htm>). The Full Physical Survey is used to qualify and quantify habitat, the ETD method is to estimate the quantity and quality of the habitat, while the TD verifies the existence of a significant reach of habitat without a gradient or a natural barrier either downstream or upstream of a fish passage barrier crossing. To expedite the prioritization process, all habitat assessments since 2005 have been performed using a Reduced Sampling Full Physical Survey (RSFS). The only difference between the FS and the RSFS is the number of samples collected per stream reach. Only one sample per reach is taken during a RSFS regardless of the reach length, provided that the habitat characteristics remain unchanged throughout the reach.

A complete list of all the WSDOT-owned fish passage barriers is included in Appendix A of each WSDOT region.

A significant reach is defined as a section of stream having at least 200 linear meters of usable habitat without a gradient or natural point barrier.

## Regional Statistics

WSDOT has six geographic management regions:

Northwest, North Central, Olympic, Southwest, South Central, and Eastern (See Figure 1). Within the geographical area of the Northwest Region, WSDOT has established the Urban Corridors Office (UCO) that develops, designs, and delivers a multi-billion dollar program of Seattle area projects. Barrier culverts identified for UCO projects are not listed separately, but are included within the Northwest region inventory. A summary of fish passage barrier assessment of the entire state route system in Washington State is shown in Table 2.

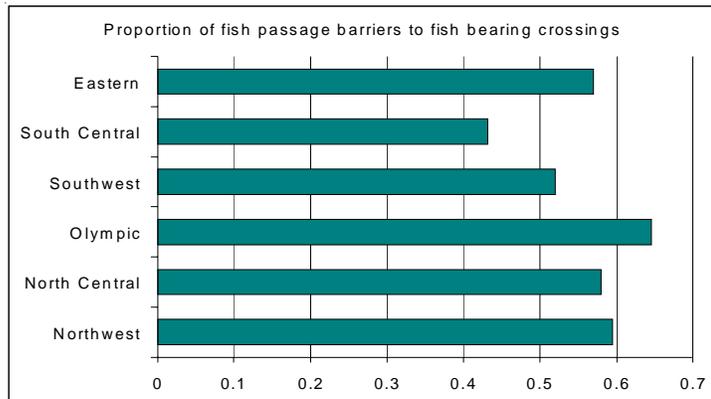


Table 2. Fish passage barrier assessment in six WSDOT regional management areas.

WSDOT Region	Fish-bearing Crossings	Fish Passage Barriers	Barriers with Significant Habitat Gain	Barriers with Limited Habitat Gain <sup>1</sup>	Barriers with Habitat Threshold Gain Not Determined	Crossings Repaired <sup>2</sup>
Northwest	942	561	410	146	4	100
North Central	205	119	90	25	4	15
Olympic	909	590	462	126	3	62
Southwest	676	351	269	74	8	22
South Central	146	63	53	5	5	6
Eastern	307	175	156	17	2	13
<b>Total</b>	<b>3,185</b>	<b>1,859</b>	<b>1,440</b>	<b>393</b>	<b>26</b>	<b>218</b>

<sup>1</sup> Barriers that do not meet WDFW current, 200 m, threshold habitat gain criteria to justify correction using dedicated funding until higher priority barriers are corrected.

<sup>2</sup> Two hundred and eighteen WSDOT fish passage barriers have been replaced or retrofitted, however, 48 of those require additional work to meet current fish passage criteria (See Tables 3 and 4).

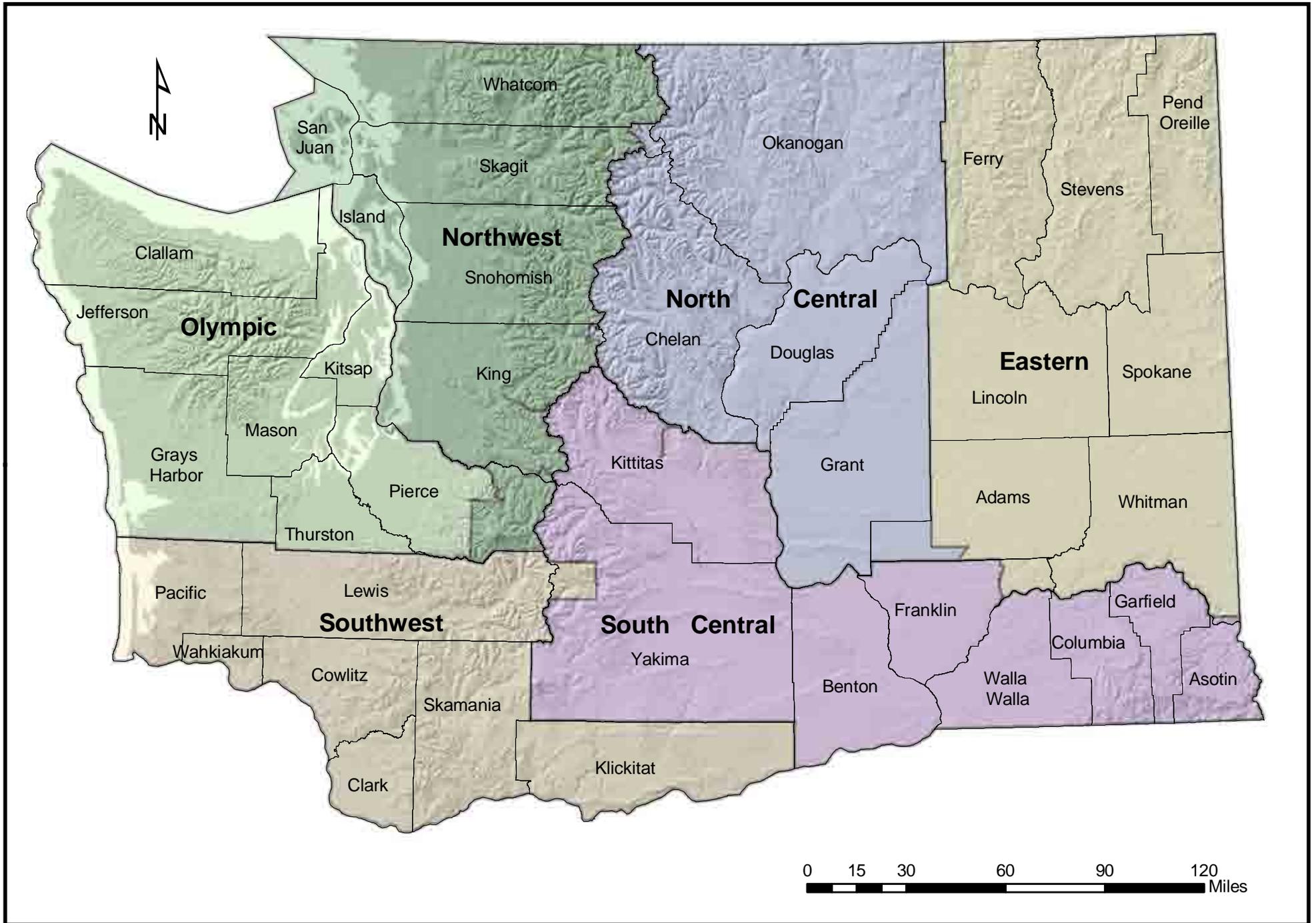


Figure 1. WSDOT Regions.

## WSDOT Fish Passage Barrier Correction Plan

WSDOT approaches fish passage barriers correction in three ways:

- First, each biennium, the Legislature appropriates funds for stand-alone correction projects to address some of the highest priority barriers. These “dedicated correction” projects are part of the WSDOT Environmental Retrofit Program (I4).
- Second, when WSDOT plans a highway safety or mobility project, it reviews the project area for barrier correction opportunities. If it will require a Hydraulic Project Approval (HPA), all associated barriers will be corrected as part of the highway construction project. If no HPA is required, WSDOT evaluates whether barriers within the project boundary can be corrected more efficiently as part of the highway project.
- And third, some fish passage barriers are corrected as a result of routine maintenance on failing culverts. Generally, however, corrections completed through maintenance are small-scale repair projects and do not typically include a full culvert replacement

This approach to fish passage barrier correction does not assume habitat will immediately be used by targeted salmonids. Although in some cases salmonids will start utilizing stream reaches previously blocked by barrier culverts almost immediately, many years may be required before newly opened habitat is fully utilized. Fish management decisions, such as supplementation or harvest adjustments, may be needed to jump-start the recolonization of newly accessible habitat. Additional factors, other than the loss of stream habitat caused by fish migration barriers, can affect fish production. Other problems threatening salmonid habitat include stormwater, pollution, surface water diversions, hydropower, and general habitat degradation or loss.

Fish passage problems in Washington are shared among federal, state, tribal, county, city, and private owners. The 1,859 WSDOT-owned fish barriers currently identified during the WSDOT Fish Passage Inventory are estimated to block more than 5,000\* linear kilometers (3,107 miles) of potential salmonid

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\* The amount of habitat once blocked by barriers was measured during habitat surveys and estimated using the Geographic Information System (GIS) software.

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In Washington, WSDOT is responsible for an estimated 11,335.45 kilometers (7,043.52 miles) of highways, while counties are responsible for an estimated 86,904 kilometers (54,000 miles) and cities for an additional 26,055 kilometers (16,190 miles) of roads (Washington State County Road Administration Board).

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habitat. To realize the full potential habitat gain, other non-WSDOT barriers will also need to be corrected.

### **Stand-Alone Fish Passage Barrier Correction with Dedicated I-4 Funding**

Each biennium, through legislative appropriation, dedicated funding within the WSDOT Environmental Retrofit Program (I-4) budget is set aside to provide for a sequential correction of high priority fish passage barriers identified during the WSDOT inventory. Stand-alone fish passage barrier correction projects are prioritized to provide the largest gains in habitat and the greatest production benefits for both anadromous and resident fish species. Among the many factors determining a project's priority are: amount of habitat gained, the degree of passability improvement, species-specific production potential of the gained habitat, benefits or drawbacks from increased mobility to species present, stock status of species present (WDFW Salmonid Stock Inventory, SaSI\*\*), and cost of the project. All the factors are consolidated in a numeric Priority Index (PI) model and contained within the WDFW Fish Passage and Diversion Screening Inventory (FPDSI) Database providing an objective relative priority ranking for each project.

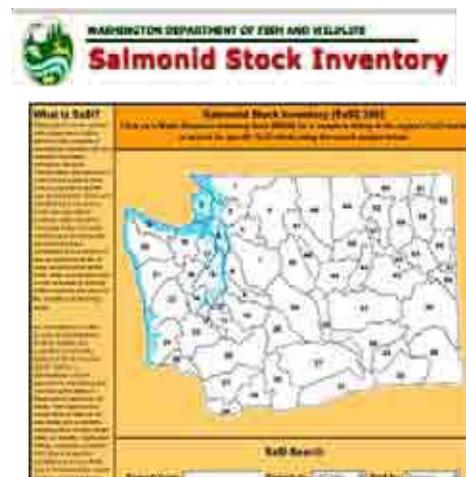
### **Ten Year Planning Document**

At the request of WSDOT, WDFW prepares a prioritized list of fish passage projects to be constructed and evaluated over the next five biennia. The Ten Year Plan is the result of a process of project evaluation, scoping, development of conceptual designs, and budgeting. The Ten Year Plan is regularly updated as projects are identified, prioritized, scoped, and refined. Project scoping is a multi-phased process that is carried out by WDFW biologists, environmental engineers, and WSDOT headquarters and regional staff.

### **Fish Passage Project Scoping Process**

The first step in the scoping process involves verification of inventory and assessment data and filling in any data gaps. Next, WDFW biologists confirm completion of inventory work and prioritization effort for each barrier culvert and verify that habitat conditions and species expected to benefit are correctly reflected in the PI for each barrier. In addition to the PI, other factors for fish passage project selection, such as additional human-made barriers in the watershed, project feasibility, likelihood for success, other restoration efforts in the watershed, and project costs are also considered. All scoping information is summarized and a map is generated to show the location of additional human-made barriers located downstream and

\*\* Washington Department of Fish and Wildlife. 2003. SaSI 2002. Olympia, WA. Available at <http://wdfw.wa.gov/fish/sasi/>.



The current (as of February 2008) Ten Year Plan document can be found in Appendix D of each WSDOT region.

upstream of the WSDOT barrier. Once biological scoping is complete, projects that successfully meet the verification process have a WDFW scoping engineer assigned to develop conceptual designs for barrier correction. If the PI drops below the current scoping threshold as a result of changes the biologist makes, the project is deferred until higher priority projects are completed. Some projects that require correction of other fish passage barriers or that require correction of habitat deficiencies in the watershed prior to a development of a correction strategy may be placed on hold.

Once the WDFW scoping engineer has identified all reasonable conceptual design options, a pre-scoping meeting is held. Participants in this meeting are, at a minimum, the WDFW scoping biologist, scoping engineer and area habitat biologist (AHB). WSDOT participants include the regional scoping engineer and representatives of the Environmental Services Office, Regional Program Management, Regional Environmental Office, and Regional Project Development Office. The outcome of this meeting is a consensus decision on which conceptual design option will be pursued. A stakeholder concurrence form is generated that documents the outcome of the meeting and includes the cost estimate for the selected design option. Once each participant present at the meeting reviews and concurs with the information on the concurrence form, pre-project scoping is complete and the project is eligible to be placed on the Ten Year Plan. Figure 2 outlines the complete scoping, design, and barrier removal process through the I-4 program.

Appendix C of each WSDOT region includes all the fish passage barriers that are currently being scoped by WDFW.

**WSDOT Fish Passage Barriers Corrected with I-4 (Stand-Alone) Dedicated Funding**

Since 1992, 72 fish passage projects at high priority sites have been completed by WSDOT and WDFW’s Technical Applications (TAPPS) Division using dedicated funding for stand-alone barrier corrections (see Table 3). Fish passage barriers corrected in 2007 include fishway construction at Catherine Creek on SR 92 (Figures 3, 5, and 5), fishway construction at Swamp Creek on I-5 (Figures 6, 7, and 8), and fishway construction at Swamp Creek on I-405 (Figures 9, 10, 11, and 12).

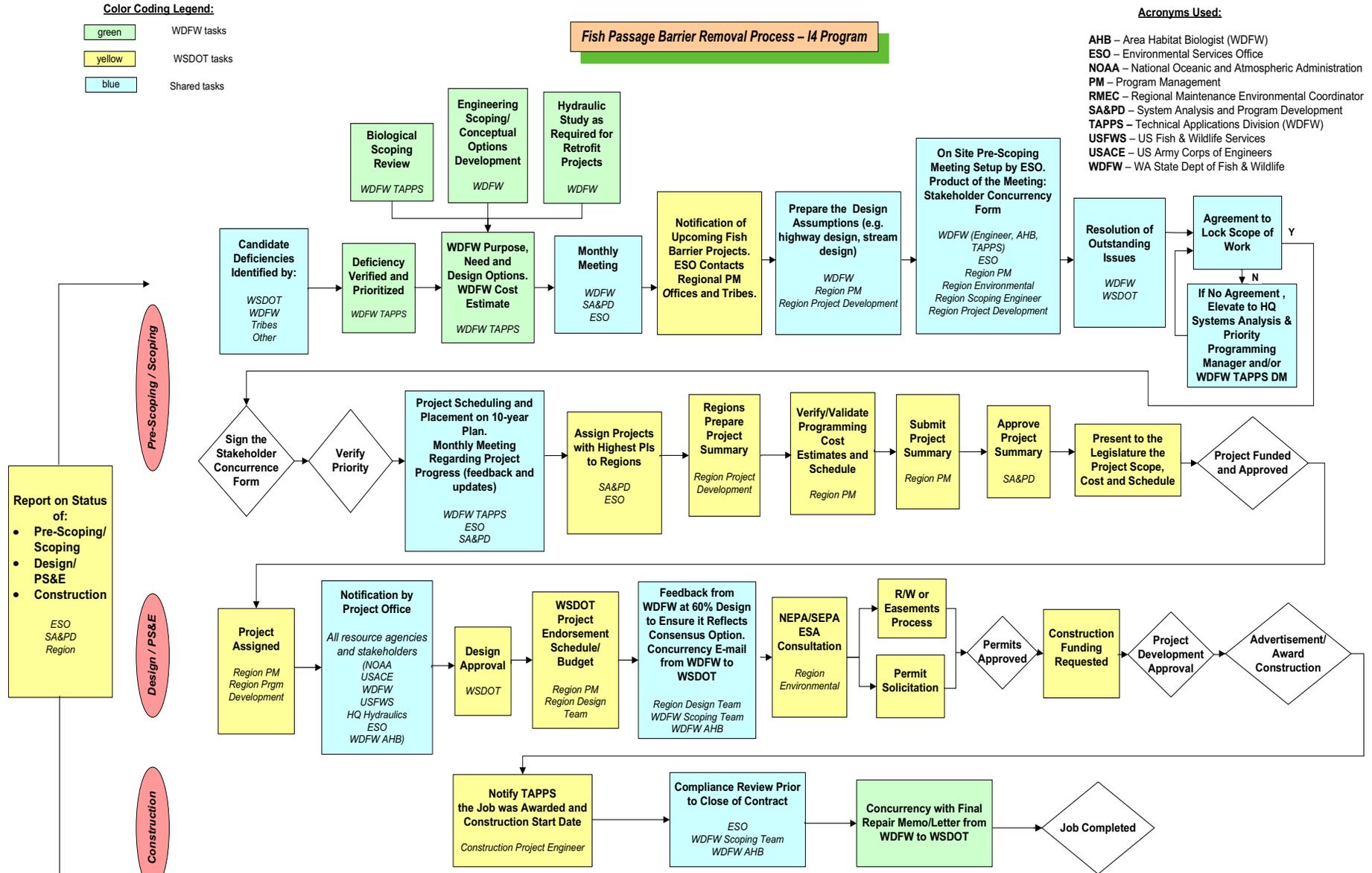


Figure 2. Fish Passage Barrier Scoping and Removal Process - I-4 Program.

**Addendum No. 1 - Please replace with these pages**

Please note that the last column in the table (Total Cost \$) has been updated to more accurately reflect the actual cost of the fish passage project. These values may include right-of-way, engineering, and construction costs. Previous editions of this table in earlier reports had construction costs only for some of the projects. This project cost information was compiled from WSDOT's accounting systems.

Table 3. Fish Passage Projects Completed with Dedicated I-4 Funds

**District I - NORTHWEST**

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$
990142	SR 202	11.96	Evans Cr Fishway	08.0106	1992		4.5	319,044
03.0181	0.50* I-5	219.41	Fisher Cr Fishway	03.0181	1992	32.07	14.4	19,990
01.0626	0.35 SR 11	18.6	Chuckanut Cr Fishway	01.0626	1993	38.28	2.7	68,788
991712	US 2	18	Unnamed tributary to Skykomish R Culvert Replacement	07.0864	1993	19.22	1.7	60,000
990014	SR 542	3.5	Squalicum Cr Fishway	01.0552	1994	38.09	4.7	68,000
990346	SR 164	8.3	Pussywillow Cr Culvert Replacement	10.0048	1996	15.48	5.8	117,566
05.0021	4.10 I-5	216.73	WF Church Cr Fishway	05.0021	1998	34.61	1.6	17,101
990433	SR 900	19.5	Tibbets Cr Fishway	08.0169	1999	23.16	0.7	147,000
991160	SR 530	25.94	Schoolyard Cr Fishway	05.0145	1999	21.32	1.3	360,289
990622	I-5	211.5	Unnamed tributary to Pilchuck Cr Fishway	05.0065	2000	42.03	8.2	45,107
991210*	SR 99	6.86	WF Hylebos Cr Fishway	10.0014	2002	37.46	3.4	105,968
991741	SR 534	1.2	Unnamed tributary to Bulson Cr Fishway	03.0199	2002	28.02	7.9	790,555
08.0268	0.80 I-405	10.12	Coal Cr	08.0268	2002	34.58	8.2	155,710
990291	SR 530	44	Moose Cr Culvert Replacement	05.0257	2002	23.88	6.7	140,000
990317	SR 530	44.27	Fink Cr Culvert Replacement	05.0257A	2002	23.98	6.7	140,000
994411	I-90	15.48	Tibbets Cr Bridge	08.0169	2004	25.93	9.4	5,536,555
991821	SR 92	0.47	Stevens Cr Culvert Replacement	07.0147	2005	22	2.1	634,398
991122*	SR 9	48	Gribble Cr Retrofit	03.0227	2005	21.92	4.3	322,176
993090	I-5	182.73	Swamp Cr Fishway	08.0059	2007	58.42	10.8	433,648
08.0059	7.00 I-405	29.75	Swamp Cr Fishway	08.0059	2007	61.62	11.4	436,324
07.0148	1.30 SR 92	1.93	Catherine Cr Fishway	07.0148	2007	24.76	7.3	377,749
<b>District I Total Estimated Linear Habitat Gain (km):</b>							<b>123.8</b>	
<b>District I Total Estimated Expenditure:</b>								<b>10,295,968</b>

\*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information refer to Appendix IA.

Table 3. (cont.)

**District II - North Central**

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$
990149	SR 971	8.9	First Cr Bridge	47.0096	1999		17	287,000
990145	SR 971	9.1	First Cr Bridge	47.0096	1999		17	287,000
980108	SR 153	29.28	Beaver Cr Culvert Replacement	48.0307	2000	37.85	9.6	765,461
990382	US 2	87.67	Skinney Cr Culvert Replacement	45.0701	2001	14.01	3.5	480,000
990383	US 2	88.03	Skinney Cr Culvert Replacement	45.0701	2001	12.15	4	480,000
990381	US 2	87.1	Skinney Cr Culvert Replacement	45.0701	2002	13.5	3	480,000
990228	SR 20	181.34	Little Boulder Cr Culvert Replacement	48.1400	2005	15.67	5	567,336
990282	US 2	70.21	Mill Cr Culvert Replacement	45.0956	2006	19.09	11.6	1,674,411
980124	SR 20	206.85	Frazer Cr Culvert Replacement	48.0309	2006	19.05	12.3	700,915
980114	SR 20	205.84	Beaver Cr Culvert Replacement	48.0307	2006	43.61	9.3	700,915
<b>District II Total Estimated Linear Habitat Gain (km):</b>							<b>75.3</b>	
<b>District II Total Estimated Expenditure:</b>								<b>6,423,038</b>

**District III - OLYMPIC**

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$
990448*	US 101	246.4	Tumwater Cr Fishway	18.0256	1991	16.25	8.9	19,991
990323	SR 3	33.7	Parish Cr Fishway	15.0220	1992		1.6	14,835
990021	US 101	253.85	Bagley Cr Fishway	18.0183	1994	48.12	10.5	40,704
990219*	US 101	267.18	Johnson Cr Fishway	17.0301	1995	31.46	7.3	121,945
990348	SR 112	3.99	Rasmussen Cr Culvert Replacement	19.0230	1996	15.42	1.3	545,699
990197	US 101	171.7	Huelsdonk Cr Fishway	20.0437 D	1996	24.69	1.1	18,594
990178*	US 101	146.85	Harlow Cr Fishway	21.0134	1996	25.68	5.5	82,685
990169	US 101	189.4	Grader Cr Fishway	20.0237	1996	24.48	4.5	189,964

\*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information refer to Appendix IA.

Table 3. (cont.)

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$	
991581	US 101	104.9	Unnamed tributary to Fairchild Fishway	22.0052	1997	19.46	5.5	198,126	
990224	SR 3	57.1	Kinman Cr Culvert Replacement and Baffles Installation	15.0368	1997	28.95	3.6	365,902	
990143	US 101	105.6	Fairchild Cr Fishway	22.0051	1997	20.3	4.2	195,742	
991502	US 101	101.1	Unnamed tributary to SB Big Cr Culvert Replacement	22.0059	1998	20.62	3.8	250,899	
990400*	US 101	162.6	Steamboat Cr	20.0574	1998	27.53	7.4	23,000	
991263	US 101	162.15	Big Cedar Cr Baffles Installation	20.0576	1998	19.73	2.4	121,328	
990278	SR 108	8.89	McDonald Cr Fishway	14.0023	1998	23.21	1.4	260,615	
991270*	SR 109	36.43	Unnamed tributary to Pacific Ocean Fishway	21.0715	1999	12.18	3.1	189,566	
990466	US 101	246.9	Valley Cr Baffles and Roughened Channel	18.0249	2000	33.07	2	102,297	
991797*	SR 3	25.31	Sweetwater Cr Culvert Replacement	15.0504	2001	16.96	1.1	261,000	
161180	US 101	167.44	Fletcher Cr Fishway	20.0426	2003	20.61	2.2	19,005	
991501	US 101	103.65	Unnamed tributary to Big Cr Fishway	22.0057	1997	17.07	3.4	97,800	
991501	US 101	103.65	Unnamed tributary to Big Cr Fishway Tune up	22.0057	2003	17.07	3.4	28,527	
18.0234	1.10	US 101	250	Ennis Cr Fishway Upgrade	18.0234	2004	31.33	8.9	58,165
19.0110	0.50	SR 112	32.02	Jim Cr Culvert Replacement	19.0110	2004	28.5	14.1	870,000
17.0285	0.20	US 101	270.98	Jimmycomelately Cr Bridge	17.0285	2004	31.09	10.4	1,282,482
990384	SR 106	0.85	Skobob Cr Bridge	16.0004	2005	19.96	1.4	1,731,000	
990713	SR 112	54.35	Bear Cr Culvert Replacement	19.0014	2006	17.21	3.7	666,151	
990714	SR 112	24.91	Unnamed to Pysht R Culvert Replacement	19.0113K	2006	25.36	1.6	647,773	
<b>District III Total Estimated Linear Habitat Gain (km):</b>							<b>121</b>		
<b>District III Total Estimated Expenditure:</b>								<b>8,383,804</b>	

\*Fish passage project, which is currently a partial or a total barrier to fish passage. For more information refer to Appendix IA.

## District IV - SOUTHWEST

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$
990171	SR 6	8.9	Green Cr Fishway Upgrade	24.0341	1992		1.8	8,000
990363	US 101	29.8	SF Nemah R Fishway	24.0503	1994	34.34	4.4	34,986
990211	SR 14	66	Jewett Cr Culvert Replacement	29.0342	1998	10.2	0.2	413,000
990035	SR 4	35.6	Birnie Cr Fishway	25.0281	1999	30.28	3.9	66,656
991684	SR 506	2.33	Unnamed tributary to Stillwater Cr Culvert Replacement	26.0429B	2000	16.62	1.3	99,000
990036	SR 409	3.85	Birnie Cr Fishway	25.0281	2001	28.98	3.9	262,483
990220	SR 4	4.5	Johnson Cr Culvert Replacement	24.0581	2001	28.74	3.4	319,000
991440	SR 503	49.03	Kenyon Cr Fishway	27.0320	2001	24.07	1.4	230,578
990071	SR 401	8.8	Cement Cr Fishway	24.0598	2002	36.55	6.5	224,161
990377	US 12	81.22	Silver Cr Culvert Replacement	26.0540	2003	33.83	6.8	631,088
992223	SR 142	13.4	Snyder Canyon Cr Fishway Tune up	30.0018	2006	23.19	6.3	192,360
30.0068	0.40 SR 142	20.2	Bowman Cr Bridge	30.0068	2006	32.35	36.7	2,286,538
<b>District IV Total Estimated Linear Habitat Gain (km):</b>							<b>76.5</b>	
<b>District IV Total Estimated Expenditure:</b>								<b>2,286,538</b>

## District VI - EASTERN

SiteId	Road	MP	Stream	WRIA	Year	PI	Lineal Gain (km)	Total Cost \$
990299	SR 20	309.96	NF O'Brien Cr Culvert Replacement	52.0394A	2001	4.31	1.7	302,000
990300	SR 20	310.06	NF O'Brien Cr Culvert Replacement	52.0394A	2001	3.5	1.5	302,000
990312	SR 20	309.31	NF O'Brien Cr Culvert Replacement	52.0394	2001	6.29	13.4	302,000
<b>District VI Total Estimated Linear Habitat Gain (km):</b>							<b>16.6</b>	
<b>District VI Total Estimated Expenditure:</b>								<b>906,000</b>

# Catherine Creek

## Before Construction



Figure 3. Catherine Creek - Project location: SR 92 at milepost 1.93, northeast of Lake Stevens.

Figure 4. A 2.4 m wide concrete box equipped with wooden baffles. This fishway was identified as a fish passage barrier due to insufficient water depth and excessive water surface drops created by the baffles.

## After Construction



Figure 5. WSDOT replaced the wooden baffles with steel baffles equipped with low flow notches. Additionally, three concrete weirs with low-flow notches were installed downstream of the culvert. The new fishway provides a better access to almost 7.3 km of habitat to coho salmon and steelhead, resident and sea-run cutthroat trout.

## Swamp Creek Before Construction



Figure 6. Swamp Creek - Project location: I-5 at milepost 182.73, north of Bothell.



Figure 7. Two round corrugated steel culverts, 1.74 m in diameter were identified as fish passage barriers due to excessive water velocity.

## After Construction



Figure 8. The Swamp Creek culverts were retrofitted with four concrete weirs having low-flow notches. The new fishway effectively backwaters the culvert providing better access to almost 10.76 km of habitat to sockeye, coho and chinook salmon, and steelhead, resident cutthroat, and searun cutthroat trout.

# Swamp Creek

## Before Construction



Figure 9. Swamp Creek - Project location: I-405 at milepost 29.75, north of Bothell.

Figure 10. A double 2.4 m wide, concrete box culvert was identified as fish passage barrier due to excessive water velocity inside.

## After Construction



Figure 11. Fishway at Swamp Creek.

Figure 12. WSDOT retrofitted the culvert with seven concrete weirs which backwater the culverts and provide better access to almost 11.4 km of habitat to sockeye, coho and chinook salmon, and steelhead, resident cutthroat, and searun cutthroat trout.

## Fishways

In addition to culverts, WSDOT owns and maintains 157 fishways statewide. Regular inspections and maintenance are essential in the continued successful operation of fishways. Eighty-nine fishways are currently considered durable and efficient, providing 100% fish passage, and as such have been placed on a regular inspection schedule. Fishways, which require routine maintenance for fish passage but are not fish passage barriers are also regularly inspected. Fishways that are barriers to fish passage and cannot be improved by routine operation and maintenance are taken off the inspection schedule and placed on a barrier list. Just like the rest of the fish passage barriers, the barrier fishways are included in the scoping and prioritizing process that will ultimately lead to their repair or replacement. Sixty-eight such fishways have been placed on the fish passage barrier list. As new fishways are discovered through the inventory process, they are evaluated for fish passage and, if passable, placed on the inspection schedule.



Figure 13. An example of an efficient fishway at Chuckanut Creek on SR 11 that provides complete passage to chum and coho salmon, and steelhead, resident and searun cutthroat trout. The fishway, built in 1993, consists of a combination of 9 steel and plastic baffles and a three step weir-pool fishway at the apron.

The current (as of February 2008) list of barrier fishways and non-barrier fishways that need maintenance for fish passage can be found in Appendix B of each WSDOT region.



Figure 14. An example of a failed fishway at Ross Creek on SR 503 that has been placed on the barrier list and is no longer inspected. The fishway consisted of a number of baffles, of which only remnants remain. A steel plate at the culvert outlet adds to the overall outfall drop, which is now approximately 0.73 m, obstructing fish passage for coho salmon, and steelhead, resident cutthroat, and searun cutthroat trout.

## **WSDOT Transportation Improvement Projects (Barriers fixed as part of highway safety and mobility projects)**

Integration of fish passage repairs with road project construction is a cost-effective way to accelerate barrier correction and reduce mobilization costs. WDFW and WSDOT integrate fish passage barrier correction into planned WSDOT transportation improvement projects whenever possible.

Prior to the completion of the inventory of the WSDOT highway system in 2007, WDFW conducted expedited inventories of fish passage barriers within the boundaries of the future safety and mobility projects. The inventories took place at least one year prior to the anticipated construction dates to accommodate WSDOT transportation project long-range budgeting and planning requirements. Every odd year, WDFW requested and received a list of proposed transportation projects from each of the six WSDOT regions. WDFW examined the milepost vicinities of upcoming transportation projects and scheduled an inventory of the project area if needed. Following the inventory, WDFW provided a list of identified fish passage barriers within the proposed transportation project to the appropriate WSDOT region. The need to carry on transportation project reviews has been eliminated with the conclusion of the state-wide inventory, however, additional ad hoc transportation reviews will be performed if needed in the future.

All fish passage barriers identified within the upcoming transportation project should be considered for correction, including barriers with limited habitat gain that are not considered for correction with dedicated funding (I-4 subprogram).

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### **Consultation**

It is important that WSDOT notify WDFW's Technical Applications Division (TAPPS) whenever a WSDOT fish passage barrier is scheduled for correction, or has been corrected during road construction or routine maintenance. WDFW/ TAPPS will schedule an inspection of all WSDOT fish barrier corrections and update the fish passage database to accurately reflect the status of corrected WSDOT fish passage barriers and include them in the annual progress report.

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### **Information**

Additional data regarding fish passage barrier status within project vicinity can be obtained by contacting WDFW Fish and Wildlife Biologist, Eva Wilder; e-mail: [wildeelw@dfw.wa.gov](mailto:wildeelw@dfw.wa.gov); phone: (360) 902-2411.

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## Evaluation of Stand-Alone I-4 Retrofit Projects, Before and After Barrier Removal

The goal of the evaluation program is to accomplish the following:

- Determine fish utilization upstream and downstream of sites prior to and one year after project construction.
- Evaluate new fish passage projects for design, durability, and efficiency for one year following construction.
- Provide long-term effectiveness monitoring of selected sites to evaluate various design options and the changes in fish utilization over an extended period of time.

WDFW evaluates I-4 stand alone fish passage barrier correction projects to ensure they are functioning properly. All projects completed by WSDOT are evaluated for one year following construction. During this period, any design deficiencies are noted and corrected whenever possible.

Adult spawner surveys are a direct way to determine species presence or absence above and below a newly completed fish passage project or to evaluate a pre-project barrier. Three such surveys are conducted per year for each project. The surveys are conducted 500 meters below and above the project, or to the confluence with a larger body of water downstream, or to a natural barrier upstream. The survey may be relocated according to where fish are likely to spawn if there is no spawning habitat within 500 m upstream or downstream of the fish passage project.

If resources allow, adult surveys may be conducted in subsequent years if salmonids are not detected upstream of the fish passage project in the first year after construction.

On a select number of sites, representing various fish passage design options, adult spawner surveys and fish passage structure assessments will occur over an extended period. This will provide insight into the long-term adult utilization patterns and the durability and efficiency of various design options.

Twenty seven adult coho salmon were observed upstream of the 2007 Catherine Creek fish passage project at SR 92 during a spawner survey in November 2007 and one adult coho salmon in January 2008. No fish were observed upstream of the Swamp Creek fishways at I-405 and I-5 locations during this year surveys. A pair of adult coho was observed upstream of the Snyder Canyon fishway on SR 142 that was retrofitted in 2006.

Appendix G for each WSDOT region shows the results of spawner surveys conducted for dedicated funding projects that will be built in the near future and for projects built in 2006 and 2007 as well as for long-term monitoring project sites.

## **Barriers Corrected in the course of WSDOT Transportation Projects**

One hundred forty six fish passage barriers were corrected by WSDOT during transportation and other projects since 1982. Nine fish passage barriers were corrected in 2007 during road improvement projects. A failing Terrell Creek culvert at SR 548 was replaced with a fish passable structure as part of a maintenance program (Figures 15, 16, and 17).

An oxbow that was disconnected from Nason Creek during SR 207 construction was reconnected in a project involving replacement of two undersized culverts (Figures 18, 19, 20, and 21). Two culverts on Dogfish Creek were replaced during an ongoing SR 305 and SR 307 widening project (Figures 22 through 28). An undersized culvert on SR 542 was replaced with a fish passable culvert as a result of a road improvement project in 2007 (Figures 29 and 30). A road widening project on SR 524 resulted in wetland reconnection on each side of SR 524 (Figures 31, 32, 33). Two culverts at unnamed tributaries to Paradise Creek were replaced with fish passable culverts during a road widening and realignment project in 2007 on SR 270 (Figures 234 through 37). An undersized culvert on SR 24 was replaced during a road improvement project at an unnamed tributary to the Yakima River (Figures 38 and 39).

Table 4. Fish Passage Projects Completed through Other Funding Sources.

REGION I - NORTHWEST

Site ID	Road	MP	Stream	WRIA	Project Year	PI	Lineal Gain (km)	Project Type	Fish Passage Satisfactory Yes/ No
05.0018	2.00 SR 532	6.14	Church Cr	05.0018	1961	36.1	27.7	Culvert	No
08.0049	3.00 I-5 NB	177.67	McAlear Cr	08.0049	1988		4.5	Culvert	Yes
996965	I-90	20.42	Unnamed to Issaquah Cr	08.0186	1990			Culvert	Yes
995411	I-5	246.75	Chuckanut Cr	01.0626	1993	9.24	0.2	Culvert	No
08.0077	0.20 SR 527	6.57	Penny Cr	08.0077	1994		8.5	Culvert	No
990272	SR 104	29.65	McAlear Cr	08.0049	1995	48.75	5.4	Culvert	Yes
08.0070A	0.01 SR 527	4	Sulphur Springs Cr	08.0070A	1995		3.2	Culvert	Yes
08.0075	0.70 SR 527	4.46	Silver Cr No2	08.0075	1995		2.6	Culvert	Yes
08.0070B	0.30 SR 527	6.32	Nickel Cr	08.0070B	1995		1.3	Culvert	Yes
990644	SR 530	31.01	Unnamed to Stillaguamish R	05	1995	14.38	1.3	Culvert	No
991168	SR 530	31.9	Unnamed to Stillaguamish R	05	1995			Culvert	Yes
991519	SR 18	19.59	Unnamed to Carey Cr	08.0218A	1996	16.25	1.8	Bridge	Yes
990064	SR 18	19.76	Carey Cr	08.0218	1996			Bridge	Yes
990271	SR 530	29.63	Mc Govern Cr	05.0168	1996			Culvert	Yes
991162	SR 530	31.2	Unnamed to Stillaguamish R	05.0168X	1996			Culvert	Yes
991164	SR 530	32.51	Unnamed to Stillaguamish R	05	1996		0.2	Culvert	No
991154	SR 530	55.07	Hatchery Cr	04.1062	1996		0.4	Culvert	No
991153	SR 530	55.9	Unnamed	04.0707	1996			Culvert	Yes
991059	SR 531	8.71	Edgecomb Cr	07.0060	1996		1.4	Culvert	No
990390	SR 18	8.9	Soosette Cr	09.0073	1997	22.76	5.3	Bridge	No
991155	SR 530	54.6	Lyle Cr	04.1064	1997		2.1	Culvert	Yes
07.0383A	0.50 SR 202	13.8	Dry Cr	07.0383A	1998		2.8	Culvert	Yes
101S-23	SR 203	7.83	Unnamed to Harris Cr	07.0285	1998			Culvert	Yes
997679	SR 509	25.69	Miller Cr	09.0371	1998		2.8	Culvert	No
994239	SR 520	6.27	Yarrow Cr	08.0252	1998		3.2	Culvert	Yes
105 R042117a	SR 164	8.24	Unnamed to White R	10.0048	2000		7.3	Culvert	No
991708	SR 20	90.13	Unnamed to Skagit R	04	2000			Bridge	Yes
105 R071916a	SR 410	48.29	Boundary Cr	10.0250	2000	7.55	0.6	Culvert	No
990294	SR 528	2.47	Munson Cr	07.0073	2000		1.1	Culvert	No
01.0228	4.80 SR 542	6.55	Anderson Cr	01.0228	2000		16	Culvert	No
DM10	SR 20	114.94	Damnation Cr	04.1844	2001			Bridge	Yes
993115	I-405	29.67	Martha Cr	08	2002	11.21	2.8	Culvert	Yes
08.0110	0.10 SR 202	11.05	Rutherford Cr	08.0110	2002		0.877	Culvert	Yes
990262	SR 522	1.87	Maple Leaf Cr	08.0033	2002	13.29	2.4	Culvert	Yes
990344	SR 9	28.38	Portage Cr	05.0036	2002			Culvert	Yes
991166	SR 9	32.2	Unnamed to Stillaguamish R	05.0129A	2002			Culvert	Yes
LP23	SR 9	35.46	Unnamed	05.0080B	2002			Culvert	Yes
LP27	SR 9	35.52	Unnamed	05.0080C	2002			Culvert	Yes
LP28	SR 9	35.7	Unnamed	05	2002			Culvert	Yes
990625	SR 9	38.57	Unnamed	05.0080H	2002			Culvert	Yes

Table 4. (cont.)

Site ID	Road	MP	Stream	WRIA	Project Year	PI	Lineal Gain (km)	Project Type	Fish Passage Satisfactory Yes/ No
LP32	SR 9	38.69	Unnamed	05	2002		0.8	Culvert	No
NC180	SR 9	39.69	Unnamed to Lk McMurray	03	2002		0.9	Culvert	No
NC170	SR 9	39.87	Unnamed to Lk McMurray	03	2002		0.6	Culvert	No
995398	SR 9	69.88	Unnamed Samish R	03	2002		0.6	Culvert	No
08.0183	1.00 I-90	17	EF Issaquah Cr	08.0183	2003		10	Natural	Yes
991199	SR 167	23.65	Upper Springbrook Cr	09.0020	2003			Culvert	Yes
990208	SR 18	12.7	Jenkins Cr	09.0087	2003			Bridge	Yes
990209	SR 18	13.8	Jenkins Cr	09.0087	2003			Bridge	Yes
995977	SR 20	25.77	Unnamed to Penn Cove	06.0003	2003			Culvert	Yes
101S-27	SR 203	12.76	Deer Cr	07	2003			Bridge	Yes
991189	SR 527	6.99	Unnamed to North Cr	08	2003			Culvert	Yes
995981	SR 9	0.88	Unnamed to Little Bear Cr	07	2003			Culvert	Yes
990136	SR 11	6.84	Edison Sl	03.0001	2004			Culvert	Yes
991486	SR 167	25.65	Unnamed	09.0006	2004			Culvert	Yes
105 S012018a	SR 509	10.71	Lakota Cr	10.0386	2004			Culvert	Yes
990434	SR 542	15.32	Jim Cr	01	2004			Culvert	Yes
995578	SR 542	44.14	Unnamed to NF Nooksack R	01	2004			Culvert	Yes
995580	SR 542	44.34	Unnamed to NF Nooksack R	01	2004			Culvert	Yes
991620	SR 161	33.9	Unnamed to EF Hylebos Cr	10.0016	2005			Culvert	Yes
991576	SR 18	18.19	Taylor Cr	08.0326	2005	20.54	3.3	Bridge	Yes
990426	SR 18	18.43	Taylor Cr	08.0326	2005	25.48	1.6	Bridge	Yes
992374	SR 522	18.44	Unnamed Evans Cr	07.0211	2005	21.2	2.7	Culvert	Yes
990016	SR 522	18.77	Unnamed Evans Cr	07	2005	6.42	0.4	Culvert	Yes
102 N171	SR 527	7.38	Mill Cr	08.0070	2005			Culvert	Yes
993087	SR 527	9.33	Unnamed Ruggs Lk	08	2005			Culvert	Yes
995582	SR 542	45.51	Unnamed to NF Nooksack R	01	2005		0.2	Culvert	Yes
995584	SR 542	45.57	Unnamed to NF Nooksack R	01	2005			Culvert	Yes
991448	SR 9	67.33	Unnamed to Samish R	03.0078	2005	12.68	2.1	Culvert	No
990376	I-405	19.12	Forbes Cr	08.0242	2006		1.3	Culvert	No
08.0320	1.30 SR 18	16.94	Downs Cr	08.0320	2006		7.2	Bridge	No
995979	SR 20	14.65	Crockett Lk	06.0053	2006			Culvert	Yes
992631	SR 522	17.87	Unnamed Evans Cr	07.0211	2006	13.36	1.4	Culvert	Yes
995980	SR 9	0.97	Unnamed to Little Bear Cr	08	2006		0.5	Bridge	Yes
990316	SR 9	1.16	Ashley Cr	08.0083	2006	14.24	1.8	Culvert	Yes
370220	SR 9	96.1	Easterbrook Cr	01.0686	2006			Culvert	Yes
370219	SR 9	96.6	Bone Cr	01.0685	2006			Culvert	Yes
996459	SR 524	13.05	Whistle Cr	08	2007			Culvert	Yes
990578	SR 542	28.3	Unnamed to Boulder Cr	01.0425	2007		3.2	Culvert	Yes
981788	SR 548	6.35	Terrell Cr	01.0089	2007	46.82	18.2	Culvert	Yes

Table 4. (cont.)

## REGION II - NORTH CENTRAL

Site ID	Road	MP	Stream	WRIA	Project Year	PI	Lineal Gain (km)	Project Type	Fish Passage Satisfactory Yes/ No
991762	SR 26	1.79	Sand Hollow Cr	41.2151	2006	15.67	5.4	Culvert	No
992058	SR 262	13.19	Irrigation Ditch	41	2005			Culvert	Yes
992705	SR 207	1.3	Unnamed to Nason Cr	45	2007		1	Culvert	Yes
990202	US 97	158.32	Iron Cr	39.1209	2002		13.8	Culvert	No
995038	US 2	57.8	Unnamed to Tye R	07	2007		0.2	Culvert	No

## REGION III - OLYMPIC

990480	SR 112	49.48	Whiskey Cr	19.0020	1955	12.73	2.724	Culvert	No
15.0051 0.10	SR 302	11.36	Little Minter Cr	15.0051	1982		15.6	Culvert	No
15.0051 0.20	SR 302	11.42	Little Minter Cr	15.0051	1982		15.4	Culvert	No
14.0010 0.10	US 101	356.8	Countyline Cr	14.0010	1985		1.9	Culvert	No
14.0009A 0.06	US 101	357.9	Holiday Valley Cr	14.0009A	1986		1.8	Culvert	Yes
18.0021 5.40	US 101	260.95	Matriotti Cr	18.0021	1989		7.5	Culvert	No
22.0351 0.10	US 12	12.48	Camp Cr	22.0351	1993		4.7	Culvert	Yes
996952	SR 160	3.8	Curley Cr	15	1995			Culvert	Yes
991644	US 101	175.17	Unnamed to Old Joe Sl	20.0440B	1997			Culvert	Yes
990164	US 101	186.3	Fuhrman Cr	20.0237E	1997			Culvert	Yes
990156	US 101	186.41	Frakker Cr	20.0237O	1997			Culvert	Yes
990716	US 101	186.45	Unnamed to Frakker Cr	20.0237X	1997			Culvert	Yes
991512	US 101	186.7	Forgotten Marsh	20.0237N	1997			Culvert	Yes
22.0349 0.70	US 12	12.36	Unnamed to Metcalf Sl	22.0349	1997		10	Culvert	Yes
105 R050320a	SR 167	12.05	Jovita Cr	10.0033	1998	22.4	4.1	Culvert	No
991852	SR 303	6.9	Barker Cr	15.0255	1998			Culvert	Yes
990121	SR 305	12.8	Dogfish Cr	15.0285	1998			Culvert	Yes
990249	US 101	174	Lost Cr	20.0440	1998	17.72	1.3	Bridge	Yes
991532	US 12	13.8	Unnamed to Chehalis R	22.0354	1998			Culvert	Yes
991690	US 101	111.9	Unnamed to Stevens Cr	22	1999		1.3	Culvert	No
990370	US 101	359.6	Schneider Cr	14.0009	1999			Bridge	Yes
991295	SR 105	31.1	Unnamed to South Bay	22	2000			Culvert	Yes
991729	SR 112	19.56	Unnamed to Clallam R	19	2001	7.5	0.2	Culvert	Yes
991545	SR 112	19.89	Unnamed to Clallam R	19.0129A	2001	10.43	0.2	Culvert	Yes
990144	SR 112	48.49	Field Cr	19.0026	2001	17.39	8.9	Culvert	No
15.0280 1.00	SR 308	1.15	Big Scandia Cr	15.0280	2002	21	0.6	Culvert	No
990910	SR 106	6.95	Dalby Cr	14	2003	20.16	0.9	Culvert	Yes
115 MC176	SR 106	7.06	Alderbrook Cr	14	2004			Culvert	Yes
991636	SR 706	8.02	Unnamed to Nisqually R	11.0008A	2005			Culvert	Yes
991227	SR 706	9.81	Unnamed to Nisqually R	11.0222	2005			Culvert	Yes
991275	US 101	130.6	Unnamed to Ten O'Clock Cr	21	2005			Culvert	Yes
990998	SR 305	11.62	SF Dogfish Cr	15	2006	15.7	1.5	Culvert	Yes

Table 4. (cont.)

Site ID	Road	MP	Stream	WRIA	Project Year	PI	Lineal Gain (km)	Project Type	Fish Passage Satisfactory Yes/ No
991853	SR 305	12.1	SF Dogfish Cr	15	2006		1.1	Culvert	Yes
991854	SR 305	12.29	SF Dogfish Cr	15	2006		0.6	Culvert	Yes
15.0285 H 0.50	SR 305	12.34	SF Dogfish Cr	15.0285 H	2006		0.9	Culvert	Yes
990122	SR 307	0.07	Dogfish Cr	15.0285	2007	32.07	14.9	Culvert	Yes
<b>REGION IV - SOUTHWEST</b>									
990119	SR 14	55.8	Dog Cr	29.0130	1998		0.1	Culvert	No
991698	US 101	24.13	Unnamed to Willapa Bay	24.0673	1999	21.45	0.7	Culvert	Yes
992272	I-5	42.4	Unnamed to Cowlitz R	26.0129	1999	12.05	1.2	Culvert	Yes
992271	SR 142	3.65	Knight Cr	30.0008	2001			Culvert	Yes
992462	US 101	28.92	Roaring Cr Sl	24.0563	1997			Culvert	Yes
992311	US 101	53.56	Old Mill Pond Cr	24	2004	15.68	0.6	Culvert	Yes
991397	SR 4	25.91	Unnamed to Skamokawa R	25	2001			Culvert	Yes
990948	US 12	127.44	Dry Cr	26.1119	1999			Culvert	Yes
990116	SR 142	5.2	Dillacort Cr	30.0009	1998	7.55	1	Culvert	Yes
991415	SR 401	3.22	Unnamed to Columbia R	24	2003			Culvert	Yes
<b>REGION V - SOUTH CENTRAL</b>									
990189	US 97	37.14	Highbridge Springs	37	1994	6.13	1.1	Culvert	No
990440	SR 241	9.17	Unnamed to Sulphur Cr	37	2002			Culvert	Yes
990436	US 97	57.2	Toppenish Cr	37.1178	2000			Bridge	Yes
990409	SR 410	82.8	Wash Cr	38	2002	5.41	0.2	Culvert	No
990995	SR 261	5.5	Unnamed to Tucannon R	35	2005			Culvert	No
990988	SR 24	1.07	Unnamed to Yakima R	37	2007		3.7	Culvert	Yes
<b>REGION VI - EASTERN</b>									
992006	SR 21	172.17	Lambert Cr	60.0327	2001	5.96	19.3	Culvert	Yes
990350	SR 20	388.13	Renshaw Cr	62.0310	1997		0.1	Culvert	No
990250	SR 20	384.95	Lost Cr	62.0322	1998		13.9	Culvert	No
990243	US 395	263.72	Little Boulder Cr	60.0210	2006			Culvert	Yes
990180	SR 21	155.06	Harvest Cr	52.0352	2003			Culvert	Yes
990351	SR 20	389.5	Renshaw Cr	62.0310	1997		4.5	Culvert	No
990881	SR 20	380.1	Unnamed to Lk Thomas	59	2000		8.3	Culvert	No
991471	SR 31	18.22	Three Mile Cr	62.0051	2006		7.4	Culvert	Yes
995837	SR 270	4.29	Unnamed to Paradise Cr	34	2007		2.6	Culvert	Yes
999625	SR 270	9.08	Unnamed to Paradise Cr	34	2007			Culvert	Yes

## Terrell Creek

### Before Construction



Figure 15. Terrell Creek - Project location: SR 548 at milepost 6.35, north of Bellingham.



Figure 16. A round steel culvert, 3.81 m in diameter was a barrier to fish passage due to 0.61m outfall drop. The upstream end of culvert was damaged further impeding fish passage.

### After Construction



Figure 17. In 2007, the steel culvert was replaced with a 5.28 m wide concrete arch stream simulation culvert. This project improved fish access to 18 km of upstream habitat for chum and coho salmon, and steelhead, searun and resident cutthroat trout.

## Nason Creek

### Before Construction



Figure 18. Nason Creek - Project location: SR 207 at milepost 1.3, northwest of Wenatchee.



Figure 19. A round concrete culvert, 0.92 m in diameter was restricting fish passage due to excessive velocity.

### After Construction



Figure 20. The small concrete culvert was replaced with a 3.7 m wide corrugated aluminum culvert reconnecting a 0.87 km of long oxbow of Nason Creek that was disconnected from the main channel when the highway was originally built. The project will restore valuable spawning and rearing habitat and off-channel refuge (See Figure 21 on the right, above) for chinook salmon, steelhead, resident cutthroat and bull trout.

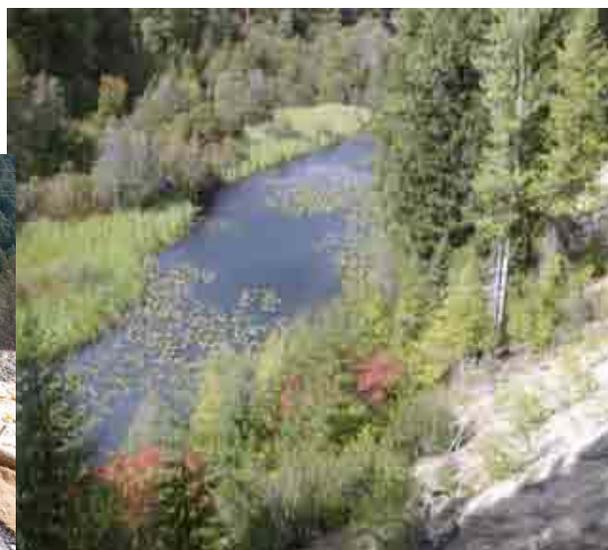


Figure 21. Off-channel habitat upstream of the SR 207 crossing.

## Dogfish Creek Before Construction



Figure 22. Dogfish Creek - Project location: SR 307 at milepost 0.07, north of Poulsbo.



Figure 23. A round concrete culvert, 1.50 m in diameter was a velocity barrier.

## After Construction



Figure 24. WSDOT replaced the smaller round culvert with a concrete box, 3 m wide. This project was a part of a SR 305 widening project, during which seven other fish passage barriers were replaced in 2006 with passable structures. Almost 15 km of upstream habitat will be more accessible to chum, coho salmon, and chinook salmon as well as steelhead, searun cutthroat and resident cutthroat trout.



Figure 25. A carcass of an adult chinook salmon was observed in the new culvert.

## Dogfish Creek Before Construction



Figure 26. Dogfish Creek - Project location: Bond Road at milepost 0.12, in Poulsbo.



Figure 27. Two round, corrugated steel culverts, each 1.07 m in diameter are shown. The culverts were considered a fish passage barrier due to an excessive slope.

## After Construction



Figure 28. The Bond Road culvert was replaced jointly by WSDOT and the City of Poulsbo during an intersection improvement project. The new concrete box culvert, 4.5 m wide has a natural streambed material throughout and improves fish access to over 15 km m of habitat for chum, chinook and coho salmon, and steelhead, searun and resident cutthroat trout.

## Unnamed tributary to Boulder Creek

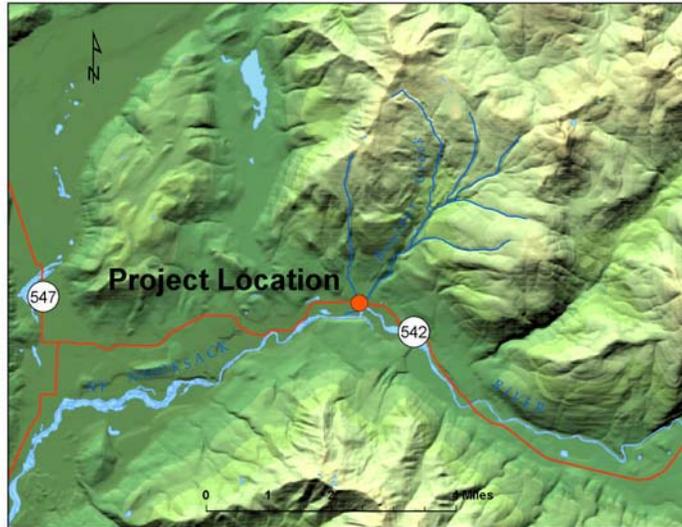


Figure 29. Unnamed tributary to Boulder Creek - Project location: SR 542 at milepost 28.30, northeast of Bellingham and east of Nooksack.

### After Construction



Figure 30. This project replaced a smaller, 0.9 m round culvert with a concrete box that has natural streambed material throughout the culvert. The new culvert improves passage to coho and chinook salmon, and steelhead, resident cutthroat and bull trout to over 3.2 km of upstream habitat.

# Whistle Creek

## Before Construction



Figure 31. Whistle Creek - Project location: SR 524 at milepost 13.05, east of Bothell.



Figure 32. A 0.62 m in diameter, round corrugated steel culvert was a barrier to fish passage due to 1.1 m outfall drop and a 1.96% slope.

## After Construction



Figure 33. The road widening project replaced the barrier culvert with a 2.4 m wide squash corrugated steel culvert with natural streambed material placed throughout the culvert. The new crossing reconnects wetlands on each side of SR 524.

## Unnamed tributary to Paradise Creek



Figure 34. Unnamed to Paradise Creek- Project location: SR 270 at milepost 4.29, east of Pullman.

### After Construction



Figure 35. A 2.6 m wide corrugated aluminum culvert with natural streambed material throughout the culvert was installed in place of a 1.3 m wide concrete box that was considered a barrier due to a 1.4% slope. The new crossing restores habitat connectivity for resident trout.

## Unnamed tributary to Paradise Creek



Figure 36. Unnamed tributary to Paradise Creek - Project location: SR 270 at milepost 9.08, east of Pullman.

### After Construction



Figure 37. A 2.62 m round corrugated aluminum culvert with a natural streambed was installed in place of a 0.46 m wide round concrete culvert during a SR 270 road realignment and widening project restoring habitat connectivity for resident trout.

## Unnamed tributary to Yakima River



Figure 38. Unnamed tributary to Yakima River-  
Project location: SR 24 at milepost  
1.07, just east of Yakima.

### After Construction



Figure 39. WSDOT replaced a squash corrugated steel culvert, 2.27 m wide with a round 3.63 m corrugated aluminum culvert, improving resident cutthroat and steelhead trout's, and chinook salmon's access to 3,700 meters of seasonal habitat upstream while improving drainage.

## Commonly Asked Questions about WSDOT Fish Passage Barrier Culverts

### ***How can I find out if there are fish passage barriers in my project area?***

A list of WSDOT fish passage culverts can be found in the WSDOT Fish Passage Inventory Annual report, which is located on WSDOT's Biology Program Webpage. For additional information please contact:

- *Jon Peterson - WSDOT Fish Passage Coordinator 360-705-7499 or peterjn@wsdot.wa.gov*
- *Eva Wilder - WDFW 360-902-2411 or wildeelw@dfw.wa.gov*

### ***What is a PI?***

PI stands for Priority Index and is a numeric indicator used to consolidate the many factors related to a fish barrier removal project (such as expected passage improvement, production potential of the blocked stream, fish stock health, etc.) The PI is used for developing prioritized lists of stand-alone fish barrier removal projects. Stand-alone fish barrier removal projects are prioritized by WDFW to target sequential correction of barriers that have the largest gains in fish habitat and the greatest production benefits for fish (higher the PI the greater the benefits). The PIs for most culverts are listed in the WDFW database and are included in the Appendix C of each WSDOT region.

### ***What if a culvert barrier does not have a PI? Does that mean the culvert is a low priority?***

It means that WDFW inventoried the culvert but has not yet completed the habitat assessment work necessary to calculate the PI. WSDOT can ask WDFW to complete the work necessary to establish a PI if that information is needed for a particular project. The PI plays an important role in the prioritization of I-4 Fish Barrier removal projects, however, it should not be a factor in deciding which culverts are replaced as part of a highway project.

### ***What about a culvert that is listed a partial barrier – does it still need to be fixed?***

The culvert is still considered a barrier. The percent passability is factored into the PI. A partially passable culvert will have a lower PI than a totally impassable culvert with all other factors being equal.

### ***A culvert on a highway project has a low PI. Does this mean that it doesn't need to be fixed?***

If a transportation (safety or mobility) project involves work on a fish barrier culvert that requires a Hydraulic Project Approval (HPA), then WSDOT is required to fix the barrier as part of that project.

### ***What if there are conflicting information about whether a culvert within a project boundary is a barrier or not – what should be done to resolve this?***

Contact Jon Peterson at WSDOT or Eva Wilder at WDFW to determine if the culvert is a barrier or not.

***A fish passage barrier culvert within a project's limit has less than 200 meters of habitat upstream from the culvert. Does it need to be fixed?***

If work on the culvert requires an HPA then yes, the culvert does need to be corrected or replaced. The minimum 200 meters of habitat criteria is used for stand-alone culverts being corrected using I-4 funds and not those being fixed as part of a highway construction project.

***Should a fish passage barrier culvert that will cost fourteen million dollars to replace with a fish passable one that only provides fish passage to a very short degraded section of stream that ends in a storm water pond be fixed?***

In very rare cases, an exception may be made if it is determined that a barrier correction requiring an HPA would provide an extremely minimal gain for fish and require extraordinary high cost. Consideration of this exception would require agreement with WDFW and would not be based on the presence of other human-made barriers in the stream. In this case, it is understood that WSDOT is ultimately responsible to correct the barrier in the future, and may be required to provide mitigation to compensate for the habitat loss resulting from the presence of the barrier until it is corrected.

***While getting ready to complete permitting for a project, two new fish barrier culverts were discovered. There are no funds left in the project; can I-4 funds be used to fix these culverts?***

This question emphasizes the importance of early identification of deficiencies that need to be fixed as part of any highway safety and mobility construction project. I-4 funds are not available to fix culverts that would ordinarily be fixed as part of a highway construction project (no matter when they are found in the project process). This would defeat the purpose of having a stand-alone retrofit program that targets the highest priority culverts that would otherwise not be corrected during a highway project anytime in the near future.

***A project office has been assigned to design a fish passable culvert. Are there any guidelines to help in designing this project?***

Design of fish barrier correction is based on the latest version of WDFW's Design at of Road Culverts for Fish Passage manual (available on line at <http://wdfw.wa.gov/hab/engineer/cm/>). Engineering assistance and guidance is also available by contacting WDFW's Technical Applications Division.

***Does a barrier culvert within a road project that doesn't need an HPA need to be fixed as part of this highway project?***

Serious consideration should be given to correcting the barrier, even though WSDOT is not required to do so. The cost of the barrier correction relative to the overall cost of the project should be considered. Also, in this case, the quantity and quality of the upstream habitat should be considered in making the decision. It needs to be remembered that relatively few fish passage barriers are fixed under the I-4 Fish Passage Program. Opportunities to correct barriers should be capitalized on during projects while crews and equipment are mobilized to significantly reduce the number of fish passage barriers under state highways. One can't forget that if the barrier is not fixed during the road project, it remains on the barrier list and

must be fixed at some point in the future. Sometimes avoiding fixing the culvert during the current highway project may make future corrections difficult and costly, if for example, the current project buries the culvert with fifty feet of fill or blocks it with a retaining wall.

***The plans to widen the road over a fish passage barrier culvert include construction of vertical retaining walls to avoid touching the culvert and an HPA. Is that OK?***

Technically the answer is yes. If a project does not require an HPA there is no requirement to make the culvert fish passable. However, project offices should carefully consider the cost of making it passable at some future date after the construction of the retaining walls. The barrier will need to be fixed eventually, so any action taken to avoid correcting the barrier will only add to the cost of making it passable in the future. It may make more sense to fix the culvert now than to triple the cost of fixing it when another project comes along in a few years that can't avoid an HPA and must make the culvert fish passable.

Appendix VID. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
990106	US 395	247.77	Deadman Cr	60.0008	11.48	NF	Future					1,002,000	

Region's **Total** \$:

1,002,000

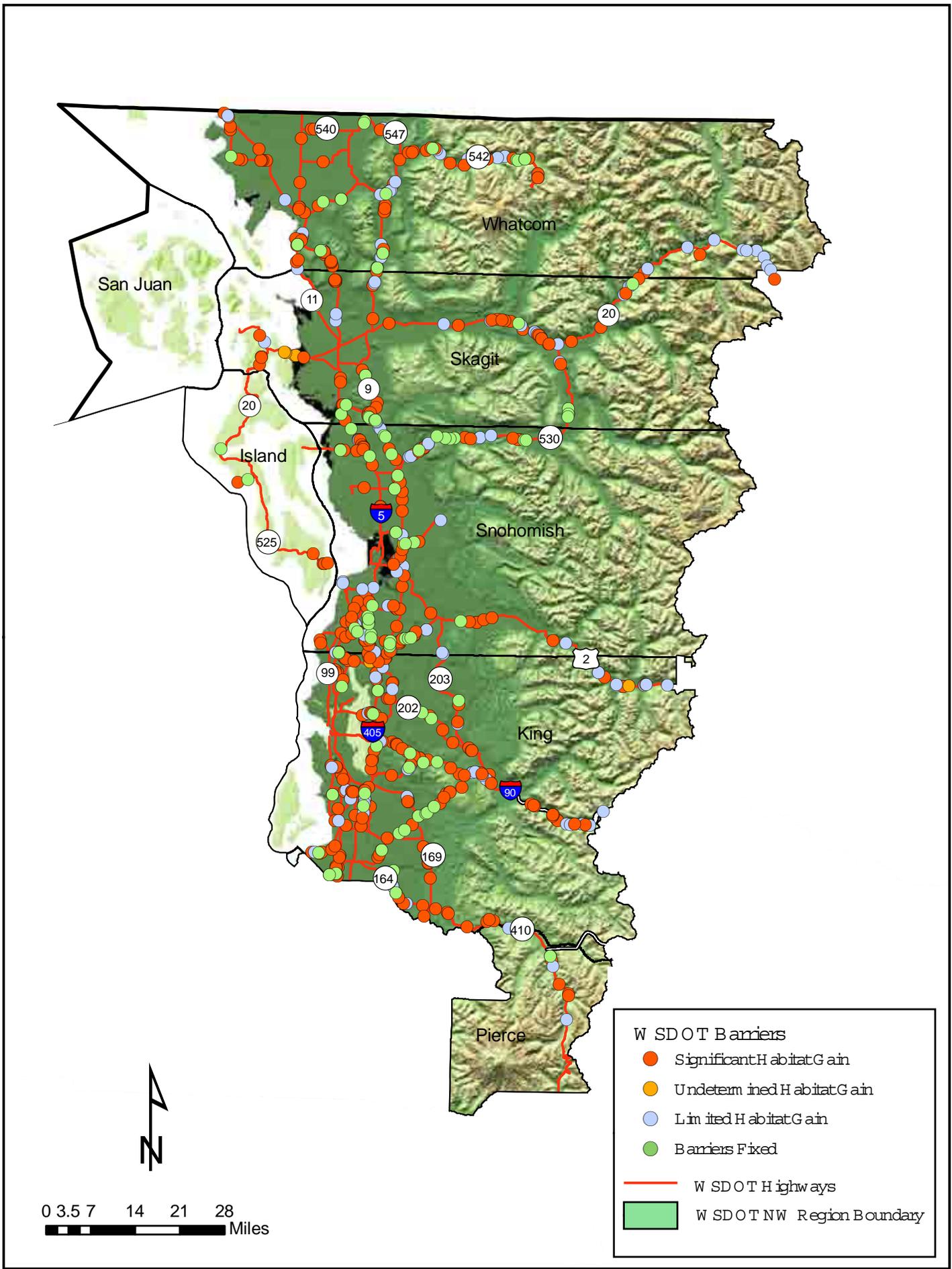


Figure 40. Northwest Region Fish Passage Barriers, February 2008.

Appendix IA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
998967	I-405	0.61	Gilliam Cr	09	67	Yes		1.1	RND	SST	2.83	2.83	304.4	0	0.2		
995470	I-405	2.31	Unnamed to Springbrook Cr	09	0	Yes		1.1	RND	OTH	1.22	1.22	270	0			
994406	I-405	3.06	Thunder Hills Cr	08	0	Yes	4.56	1.1	RND	OTH	1.3	1.3	140.9	0.13	4.47	794	684
999410	I-405	6.31	Clover Cr	08	0	Yes	0	1.1	RND	CST	0.61	0.61	0.9	0.41			
996032	I-405	7.62	Gypsy Cr	08	33	Yes		1.1	RND	OTH	0.61	0.61	94.4	0	1		
998971	I-405	7.83	Unnamed to Lk Washington	08	33	Yes		1.1	RND	CST	0.46	0.46	47	0	4.9		
998972	I-405	7.9	Unnamed to Lk Washington	08	33	Yes		1.1	RND	OTH	0.31	0.31	74.8	0	2.62		
998973	I-405	9.2	Unnamed to Lk Washington	08.0281	0	Yes				Earthen dam with a 1.83 RND standpipe							
992385	I-405	15.09	Yarrow Cr	08.0252	0	Yes	28.47	1.1	RND	OTH	0.75	0.75	204.8	0.8		2,001	10,761
990376	I-405	19.12	Forbes Cr	08.0242	67	Yes		1.1	RND	SST	1.98	1.98	85.6	0	-0.12		
992654	I-405	20.95	Unnamed to Juanita Cr	08.0238	33	Yes		1.1	RND	CST	1.14	1.14	220.9	0	3		
998602	I-405	21.94	Juanita Cr	08.0230	0	Yes		1.1	RND	CST	1.22	1.22	110.1	0.78	4.2		
993106	I-405	25.33	Unnamed to North Cr	08	0	No		1.1	RND	CST	0.76	0.76	114.6	0.45	6.3	90	
08.0070 A 0.25	I-405	26.46	Perry Cr	08.0070 A	67	Yes	11.22	1.1	RND	PCC	1.52	1.52	112.3	0	2.4	885	1,707
993109	I-405	26.87	Unnamed to North Cr	08	0	Yes	9.33	1.1	RND	CST	1.05	1.05	0.9	0	3	595	270
993111	I-405	27.74	Unnamed to North Cr	08	0	Yes				Earthen dam with a 0.91 RND PCC standpipe							
995857	I-405 NB on-ramp	0.42	Gilliam Cr	09.0032	67	Yes		1.1	RND	SPS	1.9	1.9	34.1	0	0.49		
993898	I-405 ROW	29.67	Martha Cr	08	67	Yes	12.36	1.1	RND	PCC	0.91	0.91	9.9	0	1.41	2,817	1,825
998974	I-405 SB	12.51	Unnamed to Mercer Sl	08	0	No		1.1	RND	PCC	0.61	0.61	0.9	1		155	
998979	I-405 SB	21.44	Unnamed to Juanita Cr	08	0	No		1.1	RND	CST	0.76	0.76	44.7	2.6	3		
998977	I-405 SB	27.83	Unnamed to North Cr	08	0	Yes		1.1	RND	CST	0.76	0.76	0.9	0.46			
995292	I-5	141.49	Unnamed to EF Hylebos Cr	10.0016	33	Yes	6.79	1.1	RND	PCC	1.22	1.22	81.1	0	0.73	1,229	900
992364	I-5	143.6	Unnamed to EF Hylebos Cr	10.0013	0	Yes	10.79	1.1	RND	PCC	0.91	0.91	745			1,314	3,855
996029	I-5	153.31	Unnamed to Green R	09.0036	0	No		1.1	RND	SPS	1.6	1.6	200	0.05	9	182	
995976	I-5	153.45	Unnamed to Green R	09.0033	0	Yes		1.1	RND	SPS	1.6	1.6	207.7	0.15	9.6		
994562	I-5	174.71	Thornton Cr	08.0030	33	Yes	18.09	1.2	RND	PCC	1.75	1.75	465	0	2	2,516	1,965
994562	I-5	174.71	Thornton Cr	08.0030	33	Yes	18.09	2.2	RND	PCC	1.75	1.75	465	0	2	2,516	1,965
993116	I-5	180.63	Scriber Cr	08.0061	33	Yes		1.1	RND	OTH	1.75	1.75	109.9	0	0.72		
996229	I-5	183.33	Unnamed to Swamp Cr	08	0	No		1.1	RND	PCC	0.3	0.3	144	0.17		48	
102 N218	I-5	186.93	Unnamed to North Cr	08.0070	33	No	2.94	1.1	RND	PCC	0.75	0.75	0.9	0.22		152	47
993091	I-5	187.64	Unnamed to Silver Lk	08	33	Yes		1.1	RND	PCC	0.91	0.91	25	0			
995262	I-5	189.9	Unnamed to Wood Cr	07	0	No		1.1	RND	PCC	0.76	0.76	324.3	0.07	4	40	
995284	I-5	203.22	Unnamed to WF Quilceda Cr	07.0051	67	Yes		1.1	RND	CST	0.76	0.76	85.6	0	1.84		
102 Q058	I-5	203.24	Unnamed to WF Quilceda Cr	07.0049	33	Yes		1.1	SQSH	CST	1.25	0.85	72	0			
992181	I-5	213.27	Unnamed to Pilchuck Cr trib	05.0065B	0	Yes	7.94	1.1	SQSH	CST	0.7	0.45	36.7	0.46	3.28	275	156

Appendix IA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
992182	I-5	213.27	Unnamed to Pilchuck Cr trib	05.0065C	0	Yes	12.24	1.1	SQSH	CST	0.7	0.45	37.2	0.37	2.97	982	880
991979	I-5	213.29	Unnamed to Unnamed	05.0065C	0	Yes	12.24	1.1	RND	CST	0.61	0.61	62	0.15	4.5	916	880
992175	I-5	213.66	Unnamed to Pilchuck Cr	05.0065	33	Yes	6.02	1.1	RND	PCC	0.76	0.76	36	0.21	2.57	365	148
LP66	I-5	213.86	Unnamed to Unnamed	05	33	Yes		1.1	RND	CST	0.48	0.48	11.4	0	0.44		
996077	I-5	214.38	Freedom Cr	05.0185	0	Yes		1.1	RND	OTH	0.61	0.61	115.1	0.54	3.81		
996074	I-5	214.65	Unnamed to Freedom Cr	05	33	No		1.1	RND	CAL	0.61	0.61	44.7	0	4	120	
996071	I-5	214.73	Unnamed to Freedom Cr	05	33	Yes		1.1	RND	CAL	0.61	0.61	74.7	0	1.67		
996073	I-5	214.74	Unnamed to Freedom Cr	05	33	Yes		1.1	RND	CST	0.76	0.76	47.9	0	1.52		
03.0181 0.50	I-5	219.41	Fisher Cr	03.0181	67	Yes		1.1	RND	SPS	2.44	2.44	127.4	0	2		
991725	I-5	224.62	Maddox Cr	03.2966	33	Yes	13.6	1.1	RND	PCC	1.52	1.52	76.8	0		6,938	7,699
995228	I-5	235.65	Unnamed to Samish R	03	0	No		1.1	RND	CST	0.91	0.91	122	1.3	5.3	26	
995239	I-5	241.03	Unnamed to Friday Cr	03	0	Yes				Erosion control chain link gabions							
370614	I-5	243.43	Unnamed to Lk Samish	03.0017	33	Yes	6.64	1.1	RND	PCC	1.07	1.07	0.9	0	1.1	850	570
FR73	I-5	243.91	Unnamed to Samish Lk	03	0	Yes		1.1	RND	CST	1.37	1.37	31.2	0.33	9.1		
990025	I-5	244.2	Barnes Cr	03.0036	33	Yes	10.02	1.1	RND	CST	1.83	1.83	26.1		5.14	532	716
FR75	I-5	245.76	Unnamed to Lake Cr	03.0042	0	Yes	20.63	1.2	RND	SPS	1.83	1.83	68.9	0.5	0.3	2,703	3,980
FR75	I-5	245.76	Unnamed to Lake Cr	03.0042	0	Yes	20.63	2.2	RND	SPS	1.83	1.83	69.2	0.5	0.2	2,703	3,980
995411	I-5	246.75	Chuckanut Cr	01.0626	0	Yes	9.24	1.2	RND	OTH	1.42	1.61	106.4	0	3.1	240	586
995411	I-5	246.75	Chuckanut Cr	01.0626	0	Yes	9.24	2.2	RND	OTH	1.42	1.61	106.3	0	2.9	240	586
994233	I-5	250.55	Padden Cr	01.0622	0	Yes	14.29	1.1	BOX	CPC	1.52	1.55	131.5	0.13	3.72	592	976
995699	I-5	251.36	Unnamed to Connelly Cr	01	0	Yes	4.57	1.1	RND	PCC	1.07	1.07	53.4	1.3	10.7	575	355
991036	I-5	255.15	Squalicum Cr	01.0552	67	Yes	58.2	1.2	RND	CST	2.44	2.44	68.6	0	-0.83	34,827	98,138
991036	I-5	255.15	Squalicum Cr	01.0552	67	Yes	58.2	2.2	RND	CST	2.44	2.44	68.6	0	-0.89	34,827	98,138
990022	I-5	256.28	Baker Cr	01.0553	33	Yes	28.66	1.1	SQSH	SPS	3.51	2	122.7	0.3	1.8	18,331	29,032
995703	I-5	259.08	Unnamed to Unnamed	01.0148	33	No		1.1	RND	OTH	0.46	0.46	91.3	0	1.2	110	
995329	I-5	264.16	Unnamed to Unnamed	03.0043	0	Yes	13.06	1.1	BOX	CPC	1.8	1.22	61	1.05	2.3	628	620
995714	I-5	268.25	Unnamed to Unnamed	01	33	Yes		1.1	RND	CST	1.6	1.6	0.9				
995726	I-5	275.33	Cain Cr	01.0001	33	Yes		1.2	RND	CST	0.76	0.76	48.9	0	0.8		
995726	I-5	275.33	Cain Cr	01.0001	33	Yes		2.2	RND	CST	0.76	0.76	48.9	0	0.8		
995727	I-5	275.53	Unnamed to Cain Cr	01	67	No		1.1	RND	PCC	0.76	0.76	46.2	0	1.1	4	
102 M048	I-5 Service Rd	177.85	Unnamed to McAleer Cr	08.0049	33	Yes	7.84	1.1	RND	CAL	0.95	0.95	50	0.9	1.1		
995297	I-5 Ext 142 SB	142	Unnamed to EF Hylebos Cr	10.0016	0	Yes	6.51	1.1	RND	PCC	0.76	0.76	145.6	0.05	2.2	558	254
995293	I-5 Ext 142 SB	142.15	Unnamed to Hylebos Cr	10.0016	33	Yes	3.01	1.1	RND	PCC	0.76	0.76	78.1	0	0.68	201	18
995299	I-5 Ext 143 NB	143	Unnamed to Hylebos Cr	10.0013	67	Yes	8.58	1.1	RND	PCC	0.76	0.76	205	0	0.3	725	2,347
995300	I-5 Ext 143 NB	143	Unnamed to Hylebos Cr	10.0013	33	Yes	8.58	1.1	RND	OTH	0.76	0.76	65.7	0	1.6	725	2,347

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
996076	I-5 Ext 210 NB	210.01	Unnamed to Stillaguamish R	05	0	Yes		1.1	RND	PCC	1.22	1.22	174.5	0	4.4		
995242	I-5 Ext 218 NB	218	Unnamed to Unnamed	03.0184	33	Yes		1.1	RND	OTH	1.07	1.07	182.9	0.1	0.7		
995245	I-5 Ext 240 NB	240	Unnamed to Friday Cr	03	0	Yes		1.1	RND	OTH	0.76	0.76	67.3	0.4	2.2		
995246	I-5 Ext 240 NB	240	Unnamed to Friday Cr	03	0	Yes		1.1	RND	PCC	0.61	0.61	30.5	0.9	2.3		
995236	I-5 Ext 240 SB	240	Unnamed to Friday Cr	03	0	Yes		1.1	RND	PCC	0.61	0.61	16.8	0.11	7.7		
995240	I-5 Ext 240 SB	240	Unnamed to Friday Cr	03	0	Yes		1.1	RND	CST	1.07	1.07	43.1	1.35	3.9		
995259	I-5 Ext 240 SB	240	Unnamed to Friday Cr	03	0	Yes		1.1	RND	PCC	0.61	0.61	47.3	0.12	7		
995247	I-5 Ext 246 NB	246	Unnamed to Lake Cr trib	03	33	No		1.1	RND	PCC	0.76	0.76	21.5	0	1.4	64	
995248	I-5 Ext 246 NB	246	Unnamed to Lake Cr trib	03	67	No		1.1	RND	PCC	0.76	0.76	29.5	0.05	2.7	137	
995233	I-5 Median	240.95	Unnamed to Friday Cr	03	0	Yes		1.1	RND	CST	0.61	0.61	12.5	0	6		
995227	I-5 NB	234.65	Unnamed to Samish R	03	0	No		1.1	RND	PCC	0.76	0.76	41.8	0.35	6.1	40	
995232	I-5 NB	240.95	Unnamed to Friday Cr	03	33	Yes		1.1	RND	PCC	0.61	0.61	21.3	0	1.7		
995250	I-5 NB	243.96	Unnamed to Samish Lk	03	0	Yes		1.1	RND	CST	1.45	1.45	59.2	0.17	4.4		
995705	I-5 NB Ext 252	251.83	Unnamed to Connelly Cr	01	0	No		1.1	RND	OTH	0.61	0.61	97.4	0	11.2	18	
998964	I-5 NB off-ramp	154.48	Unnamed to Unnamed	09	0	Yes		1.1	RND	PCC	0.91	0.91	191.8	1.2	3.7	241	
992003	I-5 NB on-ramp	256	Baker Cr	01.0553	67	Yes	25.69	1.1	SQSH	CST	2.87	2.01	28.2	0.07	1.6	18,331	11,892
995295	I-5 NB ROW	141.17	Unnamed to EF Hylebos Cr	10.0016	67	Yes	9.2	1.1	RND	PCC	0.61	0.61	16.5	0	1.3	2,523	3,096
102 M046	I-5 off Ext 177	177.85	McAleer Cr	08.0049	67	Yes	44.83	1.1	RND	CST	1.68	1.68	84.2	0	0.94	5,029	434,195
994561	I-5 ROW	174.85	Thornton Cr	08.0030	0	Yes	23.76			Concrete dam						2,335	19,020
995234	I-5 SB	240.95	Unnamed to Friday Cr	03	33	Yes		1.1	RND	PCC	0.61	0.61	20.8	0	1.4		
995238	I-5 SB	241.03	Unnamed to Friday Cr	03	33	Yes		1.1	RND	PCC	1.07	1.07	31.9	0	0.2		
994501	I-5 SB	244.2	Barnes Cr	03.0036	33	Yes	10.01	1.1	RND	PVC	1.52	1.52	24.5	0	6.25	532	716
995256	I-5 SB ext 246	246.12	Unnamed to Unnamed	03.0043	0	Yes	14.5	1.1	BOX	CPC	2.46	1.21	48.8	0.46	3.75	941	992
995255	I-5 SB ext 246	246.22	Unnamed to Unnamed	03.0043	0	Yes	13.33	1.1	BOX	CPC	1.56	1.22	16.6	0.47	3.6	753	666
995235	I-5 SB ROW	240.95	Unnamed to Friday Cr	03	0	Yes		1.1	RND	CST	0.61	0.61	49.8	0.36	12.2		
CR122	I-5/Henson Rd	225.24	Martha Washington Cr	03.2970	33	Yes	9.82	1.1	RND	CST	0.91	0.91	124	0		1,210	1,045
996030	I-5NB off-ramp	154.39	Gilliam Cr	09.0032	67	Yes		1.1	RND	PCC	1.53	1.53	650	0			
994412	I-90	10.21	Richards Cr	08.0261	67	No		1.1	OTH	OTH	0.91	0.91	216	0		192	
996251	I-90	10.52	Sunset Cr	08.0262	0	Yes		1.1	OTH	OTH	1.7	1.9	175	1.15			
996252	I-90	12.03	Squibbs Cr	08.0156	0	Yes				Earthen dam with a 1.22 RND PCC standpipe							
996478	I-90	12.75	Unnamed to Lk Sammamish	08	0	Yes		1.1	RND	CST	1.07	1.07	0.9	2			
996479	I-90	12.93	Unnamed to Lk Sammamish	08	0	Yes		1.1	RND	PCC	0.61	0.61	0.9	0			
996480	I-90	13.01	Unnamed to Lk Sammamish	08	0	Yes		1.1	RND	PCC	0.76	0.76	89.8	0	8.5		
992798	I-90	13.83	Lewis Cr	08.0162	0	Yes	30.43	1.1	OTH	PCC	1.52	1.52	313.3	0	4.6	3,956	6,663
994415	I-90	14.71	Unnamed to Lk Sammamish	08	0	Yes		1.1	RND	OTH	1.07	1.07	153	0.12	10		

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996472	I-90	15.92	Unnamed to Unnamed	08	67	Yes		3.3	RND	PCC	1.07	1.07	83.8	0	1.08		
996472	I-90	15.92	Unnamed to Unnamed	08	67	Yes		2.3	RND	PCC	1.07	1.07	83.8	0	0.6		
996472	I-90	15.92	Unnamed to Unnamed	08	67	Yes		1.3	RND	PCC	1.07	1.07	84.1	0	1.03		
991182	I-90	16.21	Unnamed to Tibbetts Cr	08	67	Yes		1.1	RND	CST	1.37	1.37	114.5	0	0.6		
08.0183 1.60	I-90	18.83	EF Issaquah Cr	08.0183	33	Yes	46.85	1.1	ARCH	SPS			0.9			12,900	39,818
994410	I-90	23.13	Soderman Cr	07.0390	33	Yes	11.14	1.1	RND	CST	2.13	2.13	134.5	0.11	4.2	1,075	1,892
994864	I-90	26.9	Unnamed to Good Cr	07	0	No		1.1	RND	CST	0.91	0.91	160	0.48	12	140	
994865	I-90	26.99	Good Cr	07.0456	0	No		1.1	RND	OTH	1.45	1.45	0.9	0.52		143	
994866	I-90	28.32	Unnamed to Kimball Cr	07	0	Yes	1.8	1.1	RND	PCC	0.76	0.76	125	0.62	13	992	260
994937	I-90	28.85	Unnamed to Unnamed	07	0	No		1.1	RND	CST	0.61	0.61	97.7	1.1	12.5	73	
994929	I-90	29.74	Unnamed to Kimball Cr	07.0454	0	No		1.1	RND	CST	0.61	0.61	100.8	1.4	3.5	129	0
994877	I-90	30.45	Unnamed to SF Snoqualmie R	07.0469C	0	Yes	3.17	1.1	RND	CST	1.68	1.68	176.8	0	5	1,920	1,257
994882	I-90	38.19	Unnamed to SF Snoqualmie R	07	0	Yes	2.07	1.1	RND	CST	0.91	0.91	136.1	0	7.3	998	454
990575	I-90	38.67	Unnamed to SF Snoqualmie R	07.0492	33	Yes	3.11	1.1	ELL	SPS	2.1	2.28	172.4	0	3.85	1,859	1,743
990072	I-90	38.83	Unnamed to SF Snoqualmie R	07.0493	0	Yes	2.98	1.1	RND	SPS	1.52	1.52	172.4	0.69	3.85	654	982
990265	I-90	42.18	Mason Cr	07.0499	0	Yes	2.36	1.1	SQSH	SPS	2.25	1.79	118.9	0.49	3.1	471	388
994887	I-90	43.12	Unnamed to SF Snoqualmie R	07	33	Yes	1.97	1.1	RND	CST	1.22	1.22	97.3	0	2.13	611	561
994891	I-90	43.42	Unnamed to SF Snoqualmie R	07	0	Yes		1.1	RND	PCC	0.76	0.76	61.1	1	4.6		
994894	I-90	45	Unnamed to SF Snoqualmie R	07	0	No		1.1	RND	PCC	0.91	0.91	72.4	0.26	4	15	
994995	I-90	45.73	Unnamed to SF Snoqualmie R	07	0	No		1.1	RND	CST	0.76	0.76	114.2	1.6	6.6	143	
992931	I-90	48.09	Humpback Cr	07.0512	0	Yes	5.67	1.2	BOX	CPC	3.38	2.49	61.8	0.54	7.6	3,454	12,893
992931	I-90	48.09	Humpback Cr	07.0512	0	Yes	5.67	2.2	BOX	CPC	3.38	2.49	61.8	0.54	7.7	3,454	12,893
992933	I-90	48.66	Unnamed to SF Snoqualmie R	07	0	No		1.2	BOX	CPC	3.15	2.45	31.4	0.24	2.26	125	
992933	I-90	48.66	Unnamed to SF Snoqualmie R	07	0	No		2.2	BOX	CPC	3.15	2.45	31.4	0.24	2.26	125	
994907	I-90	52.12	Unnamed to SF Snoqualmie R	07	33	No		1.1	RND	CAL	1.66	1.66	113.9	0.31	3.5	161	
994868	I-90 EB	28.52	Unnamed to Kimball Cr	07.0461	0	Yes	2.55	1.1	RND	CAL	0.61	0.61	44.8	0.59	0.6	579	524
990424	I-90 EB	46.24	Talapus Cr	07.0508	0	Yes	3.45	1.2	BOX	PCC	3.06	1.87	35.8	0	8	536	1,763
990424	I-90 EB	46.24	Talapus Cr	07.0508	0	Yes	3.45	2.2	BOX	PCC	1.98	3.05	25		5	536	1,763
994899	I-90 EB	46.3	Talapus Cr	07.0508	33	Yes	3.12	1.2	BOX	CPC	3.04	1.84	29.3	0	5	262	1,763
994899	I-90 EB	46.3	Talapus Cr	07.0508	33	Yes	3.12	2.2	BOX	CPC	3.05	1.84	30.6	0	5	262	1,763
994911	I-90 Ext 27 EB	25.37	Unnamed to Coal Cr	07	0	No		1.1	RND	CST	0.76	0.76	175	0.26		140	
994912	I-90 Ext 42 EB	40.67	Unnamed to SF Snoqualmie R	07	0	Yes	2.3	1.1	RND	CST	1.22	1.22	216	0		340	700
994927	I-90 Ext 42 WB	40.63	Mason Cr	07.0499	33	Yes	2.01	1.1	RND	CST	1.87	1.87	41.5	0	5.3	367	301
990865	I-90 Ext 45 EB	43.87	Unnamed to SF Snoqualmie R	07	67	No		1.1	RND	CST	1.52	1.52	85.3	0	1	78	
994914	I-90 Ext 47 EB	46.19	Unnamed to SF Snoqualmie R	07	0	Yes	2.2	1.1	RND	SPS	1.89	1.89	26.1	5	3.8	327	579

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994985	I-90 Ext 31 WB	28.81	Unnamed to SF Snoqualmie R	07.0469	33	Yes	3.28	1.1	BOX	CPC	1.85	1.22	123.7	0	0.6	3,204	2,146
992941	I-90 Ext 47 WB	46.18	Unnamed to SF Snoqualmie R	07	0	Yes	2.01	1.1	RND	CST	1.89	1.89	50.6	0.09	2.5	244	404
994994	I-90 ROW	47.35	Unnamed to SF Snoqualmie R	07	33	No				Timber puncheon culvert						161	
994984	I-90 WB	24.85	Unnamed to Lake Cr	07	0	Yes		1.1	RND	CPC	1.33	1.33	225	1.45			
994938	I-90 WB	28.56	Unnamed to Kimball Cr	07.0461	0	Yes	2.64	1.1	RND	CAL	0.91	0.91	69.4	0.62	14	677	603
994919	I-90 WB	47.35	Unnamed to SF Snoqualmie R	07	0	No		1.1	RND	CST	1.52	1.52	105.5	1.65	6.3	193	
996475	I-90 WB off-ramp	17	NF Issaquah Cr	08.0181	0	Yes		1.2	RND	CST	0.91	0.91	37.7	0	4.85		
996475	I-90 WB off-ramp	17	NF Issaquah Cr	08.0181	0	Yes		2.2	RND	CST	0.91	0.91	37.6	0	4.81		
996963	I-90 WB on-ramp	17	NF Issaquah Cr	08.0181	67	Yes		1.2	RND	CST	1.07	1.07	0.9	0			
996963	I-90 WB on-ramp	17	NF Issaquah Cr	08.0181	67	Yes		2.2	RND	CST	1.07	1.07	0.9	0			
990111	SR 104	25.7	Willow Cr	08.0011	0	Yes	8.36	1.1	BOX	PCC	1.83	0.91	152.4	0.6	2.5	692	482
996208	SR 104	29.33	Unnamed to Ballinger Lk	08	0	No		1.1	RND	OTH	0.46	0.46	61.7	0	1.1	148	
990653	SR 104	30.67	Unnamed to Lyon Cr	08.0053	33	Yes	11.38	1.1	RND	CST	0.76	0.76	17	0.17	2.9	3,000	1,196
990654	SR 104	31.08	Unnamed to Lyon Cr	08.0053	33	Yes		1.1	RND	PCC	0.91	0.91	20	0	1.8		
990253	SR 104	31.3	Lyon Cr	08.0052	33	Yes	18.56	1.1	BOX	PCC	1.37	1.83	59.4	0	1	11,365	8,502
991623	SR 104	31.73	Unnamed to Lyon Cr	08	33	Yes		1.1	RND	CAL	0.76	0.76	20	0	3.7		
995312	SR 11	14.24	Unnamed to Samish Bay	01	0	No		1.1	BOX	CPC	0.9	0.94	20.9	3	9.6	114	
995313	SR 11	15.45	Unnamed to Pleasant Bay	01.0634	0	Yes		1.1	OTH	OTH	0.76	0.76	103.7	1.78	0.07		
995314	SR 11	15.93	Unnamed to Chuckanut Bay	01.0633	0	Yes		1.1	RND	SST	1.22	1.22	38.9	0	12		
995796	SR 11	18.47	Unnamed to Chuckanut Cr	01	0	Yes		1.1	RND	PCC	0.61	0.61	0.9	0.37		321	
990581	SR 11	18.65	Unnamed to Chuckanut Cr	01.0627	0	Yes	12.35	1.1	RND	PCC	0.61	0.61	50.2	0.63	2.9	1,138	4,842
994389	SR 11	20.25	Padden Cr	01.0622	0	Yes	22.72	1.1	RND	CPC	1.52	1.52	704	0		4,213	5,292
994386	SR 11	21.08	Padden Cr	01.0622	33	Yes	18.85	1.2	BOX	CPC	1.5	0.95	24.6	0	2.2	1,247	1,561
994386	SR 11	21.08	Padden Cr	01.0622	33	Yes	18.85	2.2	BOX	CPC	1.5	0.95	24.5	0	2.1	1,247	1,561
992062	SR 161	33.48	unnamed to Hylebos Cr	10.0006	0	Yes		1.1	RND	PCC	0.46	0.46	33.1	1.6	0.57		
992064	SR 161	33.79	Unnamed to EF Hylebos Cr	10	0	Yes		1.1	RND	CST	0.75	0.75	0.9	0.55			
992360	SR 164	5.89	Unnamed to White R	10	67	Yes		1.1	BOX	CPC	1.83	1.24	15.5	0	0.7		
996279	SR 164	7.01	Unnamed to White R	10	33	No		1.1	RND	PCC	0.61	0.61	27.8	0	0.8	161	
105 R042117a	SR 164	8.24	Unnamed to White R	10.0048	67	Yes		1.1	RND	SST	3.3	3.3	65.7		6.2		
991213	SR 164	9.06	Second Cr	10.0050	0	Yes	11.1	1.1	RND	PCC	1.22	1.22	36.6	1.16	2	2,376	1,506
991837	SR 164	10.21	Unnamed to Unnamed	10	67	Yes		1.1	RND	CST	0.91	0.91	32	0	1.9		
996281	SR 164	10.65	Unnamed to Unnamed	10	67	No		1.1	RND	PCC	0.46	0.46	12.2	0	1.5	100	
991839	SR 164	13.33	Unnamed to Newaukum Cr	09	0	Yes		1.1	RND	OTH	1.22	1.22	45.8	0.58	3.01		
996308	SR 164 ROW	7	Unnamed to White R	10	67	No		1.1	RND	PVC	0.46	0.46	5.8	0	2	98	
990394	SR 167	21.64	Spring Brook Cr	09.0005	67	Yes		1.1	RND	PCC	0.91	0.91	52.1	0	0.54		

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995469	SR 167	22.63	Unnamed to Springbrook Cr	09	0	No		1.1	RND	PCC	0.61	0.61	43.5	0	0.6	95	
991681	SR 167	23.94	Unnamed to Springbrook Cr	09	67	Yes		1.1	RND	CST	0.61	0.61	50.1	0	0.2		
991200	SR 167	24.16	Unnamed to Spring Brook Cr	09	67	No		1.1	RND	CST	0.76	0.76	51.4	0	1.7	102	
995467	SR 167	24.72	Unnamed to Springbrook Cr	09	33	No		1.1	RND	CST	0.61	0.61	47.8	0	0.8	158	
995468	SR 167	24.81	Unnamed to Springbrook Cr	09.0006	33	No		1.1	RND	CST	0.83	0.83	47	0.05	1.8	58	
991202	SR 167	26.1	Unnamed to Springbrook Cr	09	67	Yes		1.1	BOX	CPC	1.3	0.91	1070				
997637	SR 169	4.77	Unnamed to Green R	09	0	Yes		1.1	RND	PCC	0.46	0.46	32.9	0.45	10.3		
997691	SR 169	7.15	Unnamed to Jones Lk	09	33	Yes		1.1	RND	OTH	0.46	0.46	27.9	0	1.5		
997692	SR 169	7.25	Unnamed to Rock Cr	09	33	Yes		1.1	RND	PCC	0.91	0.91	33.2	0.1	4.4		
997693	SR 169	8.27	Unnamed to Unnamed	09	33	Yes		1.2	RND	CST	0.61	0.61	23.3	0	3.7		
997693	SR 169	8.27	Unnamed to Unnamed	09	33	Yes		2.2	RND	PCC	0.61	0.61	22.5	0	4.7		
997694	SR 169	8.29	Unnamed to Rock Cr	09	33	Yes		1.1	RND	PCC	0.91	0.91	71.6	0	1.1		
997695	SR 169	9.95	Covington Cr	09.0083	33	Yes		1.1	BOX	CPC	1.83	1.53	24.5	0	0.4		
996492	SR 169	17.92	Unammed to Cedar R	08	33	Yes		1.1	RND	PCC	0.46	0.46	57.3	0	1.43		
996493	SR 169	18.06	Unammed to Cedar Cr	08	0	No		1.1	RND	PCC	0.46	0.46	14.1	0	2.94		
996494	SR 169	18.48	Unammed to Cedar R	08	33	Yes		1.1	RND	PCC	0.46	0.46	17.7	0	1.41		
996496	SR 169	18.77	Unammed to Cedar R	08	0	No		1.1	RND	OTH	0.46	0.46	26.5	0.07	2.4	125	
996514	SR 169 ROW	18.06	Unammed to Cedar R	08	0	Yes		1.1	RND	CST	0.46	0.46	12.5	0.42	6.49		
996277	SR 18	0.29	Unammed to Unnamed	10	67	Yes		2.2	RND	CST	1.22	1.22	103.3	0	0.48		
996277	SR 18	0.29	Unammed to Unnamed	10	67	Yes		1.2	RND	PCC	0.91	0.91	103.8	0	0.59		
995298	SR 18	0.45	Unammed to EF Hylebos Cr	10.0016	0	Yes	4.81	1.2	RND	PCC	0.46	0.46	70.2	0	2.03	394	76
995298	SR 18	0.45	Unammed to EF Hylebos Cr	10.0016	0	Yes	4.81	2.2	RND	PCC	0.76	0.76	69.1	0	2.03	394	76
997660	SR 18	7.51	Unammed to Big Soos Cr	09	0	Yes		1.1	RND	SPS	1.52	1.52	105.9	1	13.2		
997661	SR 18	8	Unammed to Soosette Cr	09	0	Yes		1.1	RND	SPS	1.52	1.52	152.4	1.65	6.8		
990390	SR 18	8.9	Soosette Cr	09.0073	67	Yes	22.76			7 wooden log controls under bridge						5,339	16,657
997669	SR 18	15.14	Unammed to Unnamed	09	0	Yes		1.1	RND	PCC	0.91	0.91	87.7	0	5.2		
08.0320 1.30	SR 18	16.94	Downs Cr	08.0320	33	Yes										7,242	
995474	SR 18	21.15	Unammed to Holder Cr	08	0	Yes		1.1	ELL	CST	1.16	1.27	128	0.55			
990173	SR 18	22.16	Holder Cr	08.0178	0	Yes	23.5	1.1	BOX	CPC	3.05	3.35	66.4	1.04	7	14,636	25,225
995971	SR 18	22.82	Unammed to Holder Cr	08.0220	0	Yes	17.18	1.2	ELL	CST	1.64	1.37	76	0.19	3.5	5,091	6,875
995971	SR 18	22.82	Unammed to Holder Cr	08.0220	0	Yes	17.18	2.2	ELL	CST	1.64	1.37	78.9	0.13	3.4	5,091	6,875
995973	SR 18	23.45	Unammed to Unnamed	08	0	Yes	9.59	1.1	RND	CST	0.61	0.61	35.9	0	3.23	739	724
995974	SR 18	23.55	Unammed to Unnamed	08	33	Yes	5.53	1.1	RND	CST	0.91	0.91	43.3	0.22	1.27	574	485
07.0396 0.80	SR 18	25.67	Deep Cr	07.0396	33	Yes	15.93	1.1	RND	CST	3.66	3.66	80.5		2	3,377	9,493
990236	SR 18	27.64	Lake Cr	07.0393	33	Yes	20.65	2.2	RND	PCC	1.07	1.07	24.5	0	1.14	2,168	14,558

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990236	SR 18	27.64	Lake Cr	07.0393	33	Yes	20.65	1.2	RND	PCC	1.07	1.07	24.5	0	0.4	2,168	14,558
997646	SR 181	7.3	Unnamed to Unnamed	09	67	Yes		1.1	BOX	CPC	6.11	2.13	30.5	0	0.66		
995978	SR 20	12.96	Crockett Lk	06.0053	33	Yes	34.35	1.2	RND	OTH	0.76	0.76	0.9			5,857	110,033
995978	SR 20	12.96	Crockett Lk	06.0053	33	Yes	34.35	2.2	RND	PCC	0.91	0.91	0.9			5,857	110,033
FD41	SR 20	44.74	Unnamed to Skagit Bay	03	67	Yes	28.68	1.1	RND	PCC	1.22	1.22	37.4	0	1.3	8,203	61,498
996320	SR 20	46.1	Unnamed to Campbell Lk	03	0	Yes	10.24	1.1	RND	PCC	0.46	0.46	35.8	0	1.03	590	591
FD36	SR 20	50.49	Unnamed to Swinomish Ch	03	Unk	Unk				Fill under SR20 Bridge							
FD37	SR 20	50.65	Fornsby Sl	03.0153	Unk	Unk				Fill under SR20 Bridge							
PA106	SR 20	52.34	Unnamed to Padilla Bay	03.0116	Unk	Unk				Fill under SR20 Bridge							
PA107	SR 20	52.6	Telegraph Sl	03.0118	0	Unk				Fill under SR20 Bridge							
995432	SR 20	53.9	Unnamed to Indian Sl	03.0108	33	Yes		1.2	RND	CST	0.91	0.91	86.1	0	-0.5		
995432	SR 20	53.9	Unnamed to Indian Sl	03.0108	33	Yes		2.2	RND	CST	0.91	0.91	85.6	0	-0.5		
991142	SR 20	69.08	Unnamed to Coal Cr	03	67	Yes		1.1	RND	PCC	0.46	0.46	15.4	0	1.3		
995438	SR 20	77.75	Unnamed to Unnamed	03	67	No		1.1	RND	CST	0.61	0.61	30.2	0	1.25	74	
991149	SR 20	80.2	Unnamed to Skagit R	03	33	Yes		1.1	RND	PCC	0.46	0.46	13.6	0	0.7		
997394	SR 20	85.39	Unnamed to Skagit R	04	33	No		1.1	RND	PCC	0.61	0.61	23.5	0	3.6	108	
991445	SR 20	85.63	Unnamed to Skagit R	04.0434	0	Yes		1.1	RND	PCC	0.61	0.61	20.5	0.1	1.1		
997397	SR 20	86.59	Unnamed to Skagit R	04	0	Yes		1.1	RND	CST	0.76	0.76	18.6	1.15	3.5		
991151	SR 20	87.31	Eagle Cr	04	33	Yes		1.1	SQSH	CST	1.55	1.08	24.5	0	3.8		
GR9	SR 20	87.7	Fish Cr	04	67	Yes		1.1	RND	PCC	0.61	0.61	23.4	0	0.73		
GR23	SR 20	88.82	Unnamed to Skagit R	04	33	Yes		1.1	RND	PCC	0.61	0.61	30.2	0.1	1.6		
997401	SR 20	90.63	Unnamed to Unnamed	04	0	No		1.1	RND	PCC	0.76	0.76	32.9	0	22.5	80	
JK2	SR 20	91.3	Unnamed to Skagit R	04.0176X	0	Yes		1.1	RND	OTH	0.61	0.61	94.5	0	3.3		
991706	SR 20	93	Unnamed to Skagit R	04.0647	0	No		1.1	RND	CST	0.61	0.61	44.9	7	4.68	145	
991707	SR 20	93.21	Unnamed to Skagit R	04	0	No		1.1	RND	CPC	1.76	1.76	34.8	0.32	10.63	162	
994276	SR 20	93.29	Unnamed to Skagit R	04	0	No		1.1	RND	CST	1.21	1.21	50	1.53	6.7	9	
991709	SR 20	93.7	Unnamed to Skagit R	04	0	No		1.1	RND	CST	1.87	1.87	49	0.1	12.11	12	
991710	SR 20	93.84	Unnamed to Skagit R	04.0649	67	Yes	5.78	1.2	RND	PCC	0.61	0.61	16.5	0.09	1.8	426	459
991710	SR 20	93.84	Unnamed to Skagit R	04.0649	67	Yes	5.78	2.2	RND	CST	0.61	0.61	16.5		1.39	426	459
991711	SR 20	94.1	Unnamed to Skagit R	04.0650	33	Yes		2.2	BOX	PCC	1.52	0.91	25.5	0.46	5.2		
991711	SR 20	94.1	Unnamed to Skagit R	04.0650	33	Yes		1.2	BOX	PCC	1.52	0.91	25.5	0.46	5.2		
994308	SR 20	94.47	Unnamed to Skagit R	04.0654	0	Yes	8.33	1.1	RND	CST	0.76	0.76	36.8	0.25	8.5	1,232	1,555
991125	SR 20	94.68	Unnamed to Skagit R	04.0655	0	No		1.1	RND	CST	1.83	1.83	59.2	0.02	12.7	96	
991126	SR 20	94.82	Unnamed to Skagit R	04.0657	0	Yes	4.64	1.1	RND	CST	1.83	1.83	92.3	0.26	10.9	484	210
994225	SR 20	96.12	Unnamed to Skagit R	04.0671	67	Yes	1.68	1.1	RND	PCC	0.46	0.46	15	0	0.76	4,401	87

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991127	SR 20	96.23	Unnamed to Skagit R	04.0672	0	Yes	4.8	1.1	RND	PCC	0.91	0.91	24	0.18	3.08	476	1,924
997404	SR 20	97.62	Unnamed to Skagit R	04	0	No		1.1	RND	OTH	0.46	0.46	82.7	0.2	8.9	23	
990410	SR 20	99.95	Sutter Cr	04.1345	0	Yes	7.42	1.1	RND	PCC	1.52	1.52	23.8	1.58	2	497	579
995097	SR 20	105.34	Unnamed to Skagit R	04	33	No		2.2	RND	CST	0.91	0.91	17.9	0.13	2.6	188	
995097	SR 20	105.34	Unnamed to Skagit R	04	33	No		1.2	RND	CST	1.22	1.22	25.4	0.09	3.9	188	
CD18	SR 20	105.42	Backus Cr	04.1407	67	Yes		1.1	SQSH	SPS	3.87	2.52	21	0	3		
991130	SR 20	112.54	Unnamed to Skagit R	04	0	No		1.1	RND	CST	1.22	1.22	18.8	0.2	8.8	102	
991131	SR 20	112.9	Unnamed to Skagit R	04	0	Yes		1.1	SQSH	CST	1.53	1.07	13.6	0.43	1.6		
994946	SR 20	114.14	Unnamed to Skagit R	04	0	No		1.1	RND	CST	1.22	1.22	15.6	2.1	7.1	100	
994947	SR 20	114.71	Unnamed to Skagit R	04	0	No		1.1	RND	CST	0.91	0.91	17.3	0.75	2.1	117	
DM7	SR 20	116.25	Unnamed to Skagit R	04	0	Yes		1.1	RND	CST	0.91	0.91	27.9	0.6	0		
DM5	SR 20	117.61	Unnamed to Newhalem Ponds	04	33	Yes		2.2	RND	CST	0.91	0.91	19.1	0.42	5		
DM5	SR 20	117.61	Unnamed to Newhalem Ponds	04	33	Yes		1.2	RND	CST	1.07	1.07	19.8	0	1.7		
991452	SR 20	118.41	Babcock Cr	04.1862	67	No		1.1	RND	OTH	0.61	0.61	15	0	1.5	137	
997031	SR 20	126.44	Unnamed to Diablo Lk	04	67	No		1.2	RND	PVC	0.61	0.61	19	0.1	4	61	
997031	SR 20	126.44	Unnamed to Diablo Lk	04	67	No		2.2	RND	PVC	0.61	0.61	19	0.1	5	61	
997588	SR 20	129.63	Unnamed to Diablo Lk	04	67	Yes		1.1	RND	PCC	0.91	0.91	21	0	1	200	
997409	SR 20	134.25	Happy Cr	04.2195	0	No		1.1	RND	SPS	1.91	1.91	42.2	0.9	2.63	20	
997420	SR 20	139.17	Unnamed to Ruby Cr	04	0	No		1.1	RND	CST	0.91	0.91	28.7	0.22	16.16	100	
997422	SR 20	139.75	Unnamed to Ruby Cr	04.2308	0	No		1.1	RND	CST	1.83	1.83	33.9	0.42	25.37	21	
997425	SR 20	141.48	Unnamed to Granite Cr	04.2314	0	No		1.1	RND	SPS	1.52	1.52	30.2	1.65	5.8	2	
997426	SR 20	143.13	Beebe Cr	04.2322	0	No		1.1	RND	SPS	1.45	1.45	47.6	3	18.6	8	
997427	SR 20	144.51	Unnamed to Granite Cr	04.2330	0	No		1.2	RND	CST	1.83	1.83	24.8	1.2	7.8	110	
997427	SR 20	144.51	Unnamed to Granite Cr	04.2330	0	No		2.2	RND	CST	1.83	1.83	24.7	0.25	9.5	110	
997429	SR 20	145.45	County Line Cr	04.2363	0	No		1.1	RND	CST	1.45	1.45	29.5	0.7	10.62	18	
997435	SR 20	147.07	Cabinet Cr	04.2376	0	Yes		1.1	ELL	CST	1.95	2.21	63.1	1.8	8.14		
996319	SR 20 ROW	46.14	Unnamed to Campbell Lk	03	0	Yes	9.41	1.1	RND	PCC	0.61	0.61	31.8	0		672	631
995427	SR 20 Spur	49.07	Unnamed to Fidalgo Bay	03	0	No		1.1	RND	CST	0.91	0.91	90	0	6.9	79	
995430	SR 20 Spur	50.48	Unnamed to Fidalgo Bay	03	0	Yes		1.1	RND	OTH	0.91	0.91	97.7	0	5.9		
102 L062	SR 202	0.1	Little Bear Cr	08.0080	67	Yes	42.1	1.1	BOX	PCC	3.05	1.83	43.6	0	0.06	29,619	69,832
996917	SR 202	0.97	Unnamed to Sammamish R	08	67	No		1.1	RND	OTH	0.61	0.61	24.2	0	1.2	152	
996921	SR 202	4.17	Unnamed to Sammamish R	08	33	Yes	27.3	1.1	RND	CAL	0.84	0.84	16.8	0	2.8	3,014	8,321
996925	SR 202	4.25	Unnamed to Sammamish R	08	33	Yes		1.1	RND	PCC	0.91	0.91	55.2	0	3.3		
991181	SR 202	5.27	Unnamed to Sammamish R	08.0101	0	No		1.1	RND	OTH	1.22	1.22	58.9	3.4	11.55	48	
990325	SR 202	13.22	Patterson Cr	07.0376	67	Yes		1.1	BOX	CPC	1.53	0.91	11.1	0	-0.5		

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995194	SR 202	16.79	Unnamed to Patterson Cr	07	67	Yes		1.1	RND	PCC	0.61	0.61	15.8	0	2.1		
991174	SR 202	19.69	Unnamed to Unnamed	07.0378	67	Yes		1.2	BOX	CPC	1.22	0.65	12.9	0	0		
991174	SR 202	19.69	Unnamed to Unnamed	07.0378	67	Yes		2.2	RND	PCC	0.46	0.46	16.5	0	1.2		
101S-22	SR 202	22.56	Unnamed to Snoqualmie R	07.0429	33	Yes	6.47	1.1	BOX	CPC	1.86	1.54	29.8	0.22	4.8	630	547
101SA-06	SR 202	23.18	Skunk Cr	07.0436	33	Yes		1.1	BOX	CPC	1.2	0.6	30.1	0.1	2		
995200	SR 202	23.22	Unnamed to Skunk Cr	07	33	Yes		1.1	RND	PCC	0.61	0.61	30.7	0	3.8		
995203	SR 202	28.76	Unnamed to SF Snoqualmie R	07	67	Yes		2.2	RND	PCC	0.91	0.91	18.9	0	0.6		
995203	SR 202	28.76	Unnamed to SF Snoqualmie R	07	67	Yes		1.2	RND	PCC	0.91	0.91	19.1	0	0.4		
996930	SR 202 ROW	1.03	Unnamed to Sammamish R	08	67	No		1.1	RND	PCC	0.3	0.3	12.1	0	0.91	49	
101L-01	SR 203	3.97	Unnamed to Griffin Cr	07.0365	33	No		1.1	RND	PCC	0.46	0.46	19.3	0.14	3	120	
991720	SR 203	4.37	Unnamed to Snoqualmie R	07	33	Yes		1.1	RND	OTH	0.61	0.61	49.2	0	2.2		
995167	SR 203	7.26	Unnamed to Horseshoe Lk	07	33	Yes		1.1	RND	OTH	0.61	0.61	23.6	0	3.9		
991716	SR 203	13.6	Unnamed to Snoqualmie R	07.0219A	67	Yes	10.96	1.1	RND	PCC	1.22	1.22	45.4	0	1.4	421	725
995181	SR 203	14.1	Unnamed to Snoqualmie R	07	33	Yes		1.1	RND	PCC	0.61	0.61	15.3	0	4.1		
995184	SR 203	18.19	Unnamed to Snoqualmie R	07	0	No		1.1	RND	PCC	0.91	0.91	0.9			30	
995186	SR 203	18.48	Unnamed to Snoqualmie R	07.0238	33	No		1.1	RND	PCC	0.91	0.91	52.5	0.05	2.8	167	
995137	SR 204	0.21	Unnamed to Ebey Sl trib	07	0	Yes		1.1	RND	OTH	0.76	0.76	59	1.6	4.1		
995138	SR 204	0.54	Unnamed to Ebey Sl	07	33	Yes		1.1	RND	PCC	1.3	1.3	67.2	0	6.3		
995141	SR 204	0.96	Unnamed to Ebey Sl	07	0	Yes		1.1	RND	PCC	0.46	0.46	49.1	0.42	6.4		
995150	SR 204	1.19	Unnamed to Ebey Sl	07.0093	0	Yes		1.1	RND	PCC	0.91	0.91	76.7	0.18	6.8		
995151	SR 204	1.64	Unnamed to C292+C572	07	33	No		1.1	RND	PCC	0.46	0.46	31.7	0	2.3	51	
995152	SR 204	1.8	Unnamed to Ebey Sl	07	0	Yes		1.1	RND	PCC	0.91	0.91	60.9	0	4.3		
991205	SR 410	23.83	Unnamed to Boise Cr	10	67	Yes		1.1	RND	PCC	1.07	1.07	41.6	0	1.13		
990474	SR 410	25.19	Watercress Cr	09	33	Yes		1.1	BOX	CPC	1.22	1.22	22.2	0.15	0.68		
991218	SR 410	27.25	Unnamed to Boise Cr	10	0	Yes		1.1	RND	PCC	0.61	0.61	23.8	0.43	3		
990043	SR 410	27.44	Boise Cr	10.0057	67	Yes		1.2	BOX	PCC	1.83	1.83	32.6	0	1.28		
990043	SR 410	27.44	Boise Cr	10.0057	67	Yes		2.2	BOX	PCC	1.83	1.83	32.6		1.28		
996622	SR 410	31.48	Unnamed to White R	10	33	Yes		1.1	RND	PCC	0.61	0.61	27.4	0	0.4		
996625	SR 410	35.29	Unnamed to White R	10	33	Yes		1.1	RND	PCC	1.52	1.52	21.9	0	3.8		
990082	SR 410	35.77	Clay Cr	10.0103	0	Yes	12.53	1.1	BOX	PCC	1.83	1.83	38.4	6.1	14	668	1,678
990102	SR 410	36.49	Cyclone Cr	10.0105	0	Yes		1.1	BOX	PCC	2.44	2.44	28.6	0.12	9		
991219	SR 410	39.18	Unnamed to White R	10	0	No		1.1	RND	PCC	0.76	0.76	16.4	0.36	4	36	
996661	SR 410	40.31	Unnamed to White R	10	0	No		1.1	RND	PCC	0.61	0.61	15.3	0.21	8.9	102	
996662	SR 410	40.51	Unnamed to White R	10	0	No		1.1	RND	PCC	0.76	0.76	21.3	0.67	1.2	48	
105 R022221a	SR 410	41.42	Unnamed to White R	10	67	Yes		1.1	RND	PCC	0.91	0.91	14.4	0	5.3		

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105 R071916a	SR 410	48.29	Boundary Cr	10.0250	33	Yes	7.55	1.1	RND	PCC	1.22	1.22	29.6		2.4	596	647
996664	SR 410	48.94	Unnamed to Unnamed	10	0	Yes		1.1	RND	PCC	0.61	0.61	22	0.7	7.8		
991012	SR 410	49.93	Unnamed to White R	10	33	No		1.1	SQSH	CST	1.4	1.01	24.5	0.24	1.7	0	
996671	SR 410	53.01	Unnamed to White R	10	67	Yes		1.1	SQSH	CST	1.05	0.83	28.2	0	3.9		
105 R072016a	SR 410	55.29	Dry Cr	10	0	Yes		1.1	BOX	CPC	1.54	1.54	25.8	3.5	5.5		
991016	SR 410	55.51	Unnamed to White R	10	0	Yes		1.1	BOX	PCC	1.68	1.83	37.2	3.14	5.5		
105 R072018a	SR 410	59.57	Unnamed to White R	10	67	No		2.2	RND	PCC	0.76	0.76	13	0	6.8	37	
105 R072018a	SR 410	59.57	Unnamed to White R	10	67	No		1.2	RND	PCC	0.76	0.76	13	0	6.6	37	
996266	SR 509	9.18	Unnamed to Puget Sound	10	0	Yes		1.1	RND	CST	0.76	0.76	40.1	0.64	2.9		
991651	SR 509	9.6	Unnamed to Puget Sound	10	33	No		1.2	RND	PCC	0.76	0.76	75.1	0	4.3	166	
991651	SR 509	9.6	Unnamed to Puget Sound	10	33	No		2.2	RND	PCC	0.76	0.76	75	0	4.4	166	
996270	SR 509	10.96	Lakota Cr	10.0386	0	Yes		1.1	RND	PCC	1.07	1.07	41.5	0.24	3.71		
996272	SR 509	11.43	Unnamed to Lakota Cr	10.0387	0	Yes		1.1	RND	OTH	0.46	0.46	285.1	0.3	0.16		
991192	SR 509	13.49	Unnamed to Puget Sound	09.0385	0	Yes		1.1	RND	CST	1.07	1.07	36.6	1.22	6.4		
997675	SR 509	14.23	Unnamed to Poverty Bay	09.0384	0	Yes		1.1	RND	PCC	0.61	0.61	440	10			
09.0377 2.12	SR 509	21.8	Des Moines Cr	09.0377	33	Yes	20.43	1.2	BOX	CPC	2.14	1.22	16.7	0.6	0.54	1,120	12,590
09.0377 2.12	SR 509	21.8	Des Moines Cr	09.0377	33	Yes	20.43	2.2	BOX	CPC	2.14	1.22	16.6	0.6	0.54	1,120	12,590
997679	SR 509	25.69	Miller Cr	09.0371	67	Yes		2.2	RND	SPS	1.83	1.83	0.9	0			
997679	SR 509	25.69	Miller Cr	09.0371	67	Yes		1.2	RND	SPS	1.83	1.83	0.9	0			
997678	SR 509	28.9	NF Hamm Cr	09	0	No				Concrete dam with a standpipe						70	
997681	SR 509	29.06	Lost Fork Hamm Cr	09	0	Yes		1.1	RND	CST	0.91	0.91	227	3.7			
997682	SR 509	29.2	Lost Fork Hamm Cr	09	0	Yes		1.1	RND	PCC	0.46	0.46	0.9				
997645	SR 515	3.97	Panther Cr	09.0006	67	Yes		1.1	RND	PCC	0.91	0.91	65.4	0	1.3		
991191	SR 516	0.41	Barnes Cr	09.0380	67	Yes		1.1	RND	OTH	0.61	0.61	29.5	0	2.3		
997674	SR 516	1.28	Unnamed to Massey Cr	09	0	No		1.1	RND	OTH	0.5	0.5	47.8	0	3.5	164	
997649	SR 516	2.98	Unnamed to Green R	09.0043	0	Yes		1.1	RND	CST	0.91	0.91	111.6	0	7.51		
997651	SR 516	5.8	Springbrook Cr	09.0005	67	Yes		1.1	RND	CST	1.22	1.22	185	0			
997670	SR 516	10.58	Unnamed to Big Soos Cr	09	67	Yes		1.1	RND	PCC	0.91	0.91	55.5	0	0.88		
998886	SR 518	2.27	Unnamed to Gilliam Cr	09	0	Yes	3.16	1.1	RND	CST	0.91	0.91	0.9	0		236	95
992651	SR 518	2.59	Unnamed to Gilliam Cr	09	0	No	0.97	1.1	RND	CST	0.6	0.6	0.9	0		80	22
997697	SR 518 WB	3.57	Unnamed to Green R trib	09	0	No		1.1	RND	CST	0.46	0.46	60.8	0		171	
994459	SR 520	4.48	Unnamed to Lk Washington	08.0257	33	Yes	14.8	1.1	RND	CST	1.52	1.52	58.4		3	2,391	985
998987	SR 520	4.81	Unnamed to Lk Washington	08	33	Yes		1.1	RND	CST	1.22	1.22	65.2	0	4.2		
994117	SR 520	5.42	Unnamed to Lk Washington	08	0	No		1.1	RND	CST	0.91	0.91	98.7	4.42	8.07	33	
994119	SR 520	5.81	Unnamed to Lk Washington	08	0	Yes	5.69	1.1	RND	PCC	1.27	1.27	104	0	3.05	994	336

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991736	SR 520	6.04	Yarrow Cr	08.0252	67	Yes	23.18	2.2	RND	CST	1.22	1.22	60	0	0.24	5,586	13,702
991736	SR 520	6.04	Yarrow Cr	08.0252	67	Yes	23.18	1.2	RND	CST	1.22	1.22	60.8	0	0.98	5,586	13,702
994705	SR 520	6.44	Unnamed to Yarrow Cr	08	0	Yes	5.24	1.1	RND	CST	0.91	0.91	112	1	3.9	708	486
990167	SR 520	7.9	WF Goff Cr	08	0	Yes		1.2	RND	CST	0.91	0.91	79.5	0.54	5.18		
990167	SR 520	7.9	WF Goff Cr	08	0	Yes		2.2	RND	CST	0.91	0.91	79.4	1.45	5.18		
994449	SR 520 EB off-ramp	6.03	Yarrow Cr	08.0252	67	Yes	23.12	1.1	RND	CST	1.22	1.22	62.4	0	0.42	5,399	13,511
994704	SR 520 Maint. Yard	6.4	Unnamed to Yarrow Cr	08	33	Yes	6.58	1.1	SQSH	CST	0.91	0.91	132	0	3.5	977	671
994238	SR 520 WB off-ramp	6.27	Yarrow Cr	08.0252	67	Yes	22.7	1.1	SQSH	CST	1.07	0.75	33.4	0	1.65	3,355	12,144
994227	SR 520 WB on-ramp	5.95	Yarrow Cr	08.0252	67	Yes	23.18	1.2	RND	CST	1.22	1.22	29.8	0	0.77	5,655	13,720
994227	SR 520 WB on-ramp	5.95	Yarrow Cr	08.0252	67	Yes	23.18	2.2	RND	CST	1.22	1.22	30.1	0.08	0.57	5,655	13,720
994234	SR 520 WB on-ramp	5.95	Yarrow Cr	08.0252	67	Yes	22.08	1.2	RND	CST	1.22	1.22	38.2	0	0.76	5,754	13,826
994234	SR 520 WB on-ramp	5.95	Yarrow Cr	08.0252	67	Yes	22.08	2.2	RND	CST	1.22	1.22	38.8	0	0.34	5,754	13,826
990430	SR 522	2.86	Thornton Cr	08.0030	67	Yes		1.1	BOX	CPC			0.9				
990655	SR 522	6.63	Unnamed to Lk Washington	08.0056	0	Yes	18.94	1.1	OTH	OTH	1.46	1.46	200.6	0.77	6	5,185	14,607
996928	SR 522	9.6	Horse Cr	08	33	Yes		1.1	RND	OTH	0.91	0.91	788	0			
993083	SR 522	11.31	Unnamed to Sammamish R	08	67	Yes		1.1	RND	PCC	1.52	1.52	96.4	0	0.2		
996910	SR 522	11.59	Unnamed to Sammamish R	08	67	No		1.1	RND	PCC	1.52	1.52	60.6	0	0.68	134	
996916	SR 522	12.86	Unnamed to Little Bear Cr	08	0	Yes	19.09	1.1	RND	CST	1.14	1.14	196	0	1.2	713	288
996913	SR 522	13.66	Unnamed to Little Bear Cr	08	0	Yes	6.41	1.1	RND	PCC	0.61	0.61	54.6	0	3.86	1,042	696
994430	SR 522	14.25	Howell Cr	08.0082	0	Yes	2.37	1.2	RND	OTH	0.46	0.46	55.6	0	5.7	500	393
994430	SR 522	14.25	Howell Cr	08.0082	0	Yes	2.37	2.2	RND	OTH	0.46	0.46	55.4	0	5.8	500	393
994432	SR 522	14.38	Unnamed to Little Bear Cr	08	33	No		1.1	RND	PCC	0.46	0.46	56.5	0	5.9	83	
994440	SR 522	16.54	Unnamed to Crystal Lk	08	67	Yes		1.1	RND	PCC	0.91	0.91	53.4	0	0.4		
992371	SR 522	17.48	Unnamed to Evans Cr	07.0211	33	Yes	6.11	1.1	RND	PCC	0.76	0.76	55	0	0.21	393	260
992632	SR 522	17.82	Unnamed to Evans Cr	07.0211	67	Yes	13.23	1.1	RND	PCC	0.91	0.91	88.1	0	0.5	1,150	11,520
992378	SR 522	19.26	Anderson Cr	07.0212	0	Yes	12.06	1.1	RND	PCC	0.9	0.9	116	0.23	12	328	824
992381	SR 522	19.35	Unnamed to Anderson Cr	07	0	Yes	7.37	1.1	RND	CST	0.91	0.91	84.3	0.8	22.7	603	318
992382	SR 522	19.44	Unnamed to Anderson Cr	07	0	Yes	1.79	1.1	RND	CST	0.76	0.76	0.9	0	10	1,250	127
992383	SR 522	19.57	Unnamed to Anderson Cr	07	0	Yes	1.55	1.1	RND	CST	0.91	0.91	90.8	0	15.7	291	105
990139	SR 522	20.21	Elliott Cr	07.0214	0	Yes	15.78	1.1	RND	PCC	0.9	0.9	117	0	4	2,294	4,413
994128	SR 522	21.95	Unnamed to Skykomish R	07.0814	67	Yes	15.87	1.1	RND	CST	0.61	0.61	46.7	0	0.72	1,450	1,615
994125	SR 522	21.97	Unnamed to Skykomish R	07.0814	67	No	8.24	1.1	RND	CST	0.76	0.76	48.3	0	1.72	119	119
996880	SR 522 ROW	12.86	Unnamed to Little Bear Cr	08	67	Yes	16.21	1.1	RND	PCC	1.22	1.22	29.2	0	0.48	932	304
996915	SR 523	1.24	Unnamed to Thornton Cr	08	0	Yes		1.1	RND	PCC	0.76	0.76	41.4	0.12	2.03		
993103	SR 524	3.89	Scriber Cr	08.0061	33	Yes	9.92	1.2	SQSH	CST	1.8	1.1	40.9	0.02	0.48	1,698	975

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993103	SR 524	3.89	Scriber Cr	08.0061	33	Yes	9.92	2.2	SQSH	CST	1.8	1.1	39.9	0	0.42	1,698	975
992846	SR 524	5.54	Golde Cr	08.0062	0	Yes	10.8	1.1	RND	PCC	0.91	0.91	4.7	0.61	1.2	450	485
993100	SR 524	6.95	Martha Cr	08	0	Yes	11.61	1.1	RND	OTH	0.91	0.91	0.9	0		2,500	1,403
993122	SR 524	7.02	Martha Cr	08	67	Yes	11.97	1.1	RND	PCC	0.91	0.91	6.9	0	1.01	2,659	1,607
993121	SR 524	7.07	Martha Cr	08	67	Yes	11.76	1.1	RND	PCC	0.91	0.91	7.2	0	0.65	2,592	1,498
991053	SR 524	8.06	Unnamed to North Cr	08	0	No		1.1	RND	PCC	0.46	0.46	29	0.15	2.6	100	
991641	SR 524	9.1	Unnamed to North Cr	08	0	Yes	12.28	1.1	RND	PCC	0.46	0.46	14.9	0.06	2.9	1,147	883
996461	SR 524	12.07	Unnamed to Little Bear Cr	08	0	Yes		1.1	RND	CST	0.46	0.46	20	0	3.59		
996460	SR 524	14.28	Daniels Cr	08.0122A	67	Yes		1.1	RND	PCC	0.61	0.61	19	0	2.1		
994124	SR 524	14.38	Daniels Cr	08.0122A	33	Yes		2.2	RND	PCC	0.46	0.46	41.1	0	2.2		
994124	SR 524	14.38	Daniels Cr	08.0122A	33	Yes		1.2	RND	PCC	0.46	0.46	41	0	2.17		
994123	SR 524	14.52	Unnamed to Crystal Lk	08	67	Yes		1.1	RND	PCC	0.91	0.91	31.8	0	1.23		
996205	SR 524 SP 3	0.3	Shelleberger Cr	08.0010	33	Yes		1.1	RND	PCC	0.76	0.76	32.9	0.2	1.8		
991176	SR 525	1.1	Unnamed to Swamp Cr	08	0	Yes		1.1	RND	CST	0.91	0.91	53.1	0	5.35		
991054	SR 525	2.05	Unnamed to Swamp Cr	08.0065	0	Yes		1.1	RND	OTH	0.61	0.61	86.1	0	4.2		
996203	SR 525	7.56	Unnamed to Possesion Bay	08	0	No		1.1	RND	OTH	0.46	0.46	185	0		143	
996188	SR 525	7.82	Unnamed to Possesion Bay	08	0	No		1.1	RND	PCC	0.61	0.61	57.9	0.6	22.4	163	
995994	SR 525	9.14	Clinton Cr	06	0	Yes	9.15	1.1	OTH	CST	0.61	0.61	0.9	2.4		1,367	755
995986	SR 525	9.54	Clinton Cr	06	0	Yes	6.48	1.1	RND	OTH	0.61	0.61	41	0.17	4.7	567	197
995984	SR 525	9.7	Clinton Cr	06	0	Yes	5.71	1.1	RND	PCC	0.61	0.61	27	0.68	3	272	59
995992	SR 525	11.99	Unnamed to Unnamed	06	67	Yes		1.1	RND	PCC	0.46	0.46	37.8	0	0.5		
995127	SR 526	2.96	Merrill and Ring Cr	07.1725	33	No		1.1	RND	CST	1.07	1.07	161.6	0	5.3	96	
991187	SR 527	0.58	Unnamed to Sammamish R	08	67	Yes		1.1	BOX	CPC	1.35	0.95	11.8	0	2.1		
996177	SR 527	0.82	Unnamed to Unnamed	08	33	Yes		1.1	RND	PCC	0.61	0.61	17	0	3.1		
996178	SR 527	1.37	Unnamed to Sammamish R	08	0	Yes		1.1	BOX	CPC	2.45	1	17.5	0	3.26		
993084	SR 527	2.78	Unnamed to North R	08	33	Yes	8.93	1.1	RND	CST	1.22	1.22	66	0.15	1.5	616	338
08.0077 0.20	SR 527	6.57	Penny Cr	08.0077	33	Yes		1.1	BOX	PCC	1.22	1.22	44	0.22			
990294	SR 528	2.47	Munson Cr	07.0073	67	Yes		1.1	SQSH	CST	1.39	0.97	22.9		-0.4		
990574	SR 530	23.98	R	05.0136	0	No		1.1	RND	CST	0.91	0.91	51.8	0.2	3	140	
990627	SR 530	24.29	R	05	0	No		1.1	RND	SST	1.52	1.52	3	0.61	6	0	
991159	SR 530	24.65	Unnamed to Stillaguamish R	05.0137	0	Yes	18.6	1.1	RND	PCC	1.22	1.22	56.4	0.3	2.5	4,520	7,332
990629	SR 530	25.74	Unnamed to Trafton Cr	05.0148	33	Yes		1.1	RND	PCC	0.46	0.46	20.5	0	4.34		
996092	SR 530	25.88	Unnamed to Trafton Cr	05.0148	0	Yes		1.1	RND	PCC	0.61	0.61	20.4	0.16	5.15		
990628	SR 530	26.29	Unnamed to Unnamed	05	67	Yes		1.1	RND	PCC	0.46	0.46	23.1	0	1.65		
991161	SR 530	26.4	Unnamed to Unnamed	05	33	No		1.1	RND	PCC	0.46	0.46	25.3	0	2.29	169	

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990632	SR 530	26.68	Unnamed to Stillaguamish R	05.0151X	67	Yes		1.1	RND	PCC	0.61	0.61	27.8	0	0.72		
990631	SR 530	26.7	Unnamed to Trafton Cr	05.0147	0	Yes		1.1	RND	PCC	0.76	0.76	24.5	0.27	4.9		
990633	SR 530	26.87	Unnamed to Stillaguamish R	05.0151	0	Yes		1.1	RND	PCC	0.91	0.91	24	0.33	2.17		
990630	SR 530	27.46	Unnamed to Stillaguamish R	05.0150	0	Yes		1.1	RND	PCC	0.76	0.76	16.9	1.38	2.9		
990634	SR 530	27.66	Unnamed to Stillaguamish R	05.0152X	67	No		1.1	RND	PCC	0.46	0.46	17.1	0	1.46	44	
990361	SR 530	27.75	Ryan Falls Cr	05.0152	33	No		1.1	RND	CST	1.43	1.43	23.8	0.18	1.5	40	
990644	SR 530	31.01	Unnamed to Stillaguamish R	05	67	Yes	14.38	1.1	RND	CAL	1.22	1.22	19.5		0	1,296	285
991164	SR 530	32.51	Unnamed to Stillaguamish R	05	67	No		1.1	RND	PVC	0.46	0.46	21.3	0	2.02	164	
990639	SR 530	34.3	Unnamed to Stillaguamish R	05	33	Yes		1.1	RND	PCC	0.61	0.61	22.9	0	2		
990640	SR 530	35.24	Unnamed to Montaque Cr	05.0217X	67	Yes		1.1	RND	PCC	0.46	0.46	10.4	0	4.04		
995402	SR 530	36.67	Unnamed to Stillaguamish R	05	0	No		1.1	RND	OTH	0.46	0.46	23.8	0.77	9.7	111	
995404	SR 530	36.83	Unnamed to Stillaguamish R	05	67	No		1.1	RND	PCC	0.3	0.3	23	0	1.2	70	
990650	SR 530	38.6	Unnamed to Stillaguamish R	05	67	No		1.1	RND	PCC	0.61	0.61	0.9	0	1	76	
990246	SR 530	42.14	Little French Cr	05.0253	0	Yes	12.47	1.2	RND	PCC	1.22	1.22	47.5	2.29	1	996	821
990246	SR 530	42.14	Little French Cr	05.0253	0	Yes	12.47	2.2	RND	PCC	1.22	1.22	47.5		5	996	821
990151	SR 530	42.99	Fortson Cr	05.0254	0	Yes	15.37	1.1	SQSH	CST	1.52	0.91	30.5	1.13	1.5	1,030	1,391
990652	SR 530	43.34	Unnamed to Fortson Ponds	05	67	Yes		1.1	RND	PCC	0.76	0.76	25.2	0	2.22		
991154	SR 530	55.07	Hatchery Cr	04.1062	67	Yes		1.1	BOX	PCC	3.7	1.8	19.4	0.1	0	351	
990188	SR 530	64.09	Hilt Cr	04.0678	67	Yes		1.1	SQSH	CST	5	3.3	21.2	0	0.2		
997712	SR 530	64.41	Unnamed to Hilt Cr	04	0	No		1.1	RND	CAL	0.61	0.61	18.1	1.57	2.4	30	
991751	SR 531	3.8	Cougar Cr	05.0041	67	Yes		1.1	RND	OTH	0.76	0.76	26.1	0	2.1		
991059	SR 531	8.71	MF Quilceda Cr	07.0000	67	Yes	15.73	1.1	RND	PCC	0.76	0.76	17.1		1.2		
05.0018 2.00	SR 532	6.14	Church Cr	05.0018	67	Yes	36.1	1.1	BOX	CPC	1.83	2.44	51.2		0.5	27,681	100,818
990080	SR 532	6.68	Unnamed to Church Cr	05.0020	0	Yes		1.1	RND	CST	0.61	0.61	68.7	0.65	2.77		
990890	SR 532	8.71	Unnamed to Sunday Lk	05.0061	67	Yes		1.1	RND	CST	0.76	0.76	54.1	0	2.8		
990624	SR 532	9.75	Unnamed to Pilchuck Cr	05.0065	33	Yes	31.55	1.1	RND	PCC	1.22	1.22	61	0	0.67	4,570	8,657
CR2	SR 534	0.53	Unnamed to Carpenter Cr	03	67	Yes		1.1	RND	PCC	0.91	0.91	10.9	0	2.1		
995265	SR 534	0.6	Unnamed to Carpenter Cr	03	0	Yes		1.1	RND	CST	0.76	0.76	67.7	0.25	2.7		
992987	SR 539	0.04	SF Baker Cr	01.0554	33	Yes	19.56	1.1	SQSH	CST	2.39	1.75	124.9	0	0.5	8,890	2,116
991973	SR 539	0.3	Baker Cr	01.0553	0	Yes	7.17	1.1	RND	OTH	0.91	0.91	54.3	0.05		792	1,562
990015	SR 539	0.3	Spring Cr	01.0556	33	Yes	33.8	2.2	RND	CST	1.22	1.22	30	0.25		7,868	11,540
990015	SR 539	0.3	Spring Cr	01.0556	33	Yes	33.8	1.2	RND	CST	1.22	1.22	30	0.25		7,868	11,540
990112	SR 539	4.3	Deer Cr	01.0165	33	Yes	31.44	1.1	BOX	PCC	1.22	1.37	14.6	0	2	7,609	20,821
991473	SR 539	11.08	Unnamed to Bertrand Cr trib	01	0	Yes		2.2	RND	PCC	1.22	1.22	17.1	0.46	1.5		
991473	SR 539	11.08	Unnamed to Bertrand Cr trib	01	0	Yes		1.2	RND	PCC	1.22	1.22	17.1	0.21	1.5		

Appendix IA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991803	SR 542	2.4	Toad Lk Cr	01.0560	0	Yes	13.41	1.1	RND	PCC	1.55	1.55	62.5	0.3	2.5	1,591	3,204
01.0228 4.80	SR 542	6.55	Anderson Cr	01.0228	67	Yes		1.2	BOX	CPC	2.44	2.44	0.9				
01.0228 4.80	SR 542	6.55	Anderson Cr	01.0228	67	Yes		2.2	BOX	CPC			0.9				
990582	SR 542	14.07	Unnamed to Nooksack R	01	0	No		1.1	RND	PCC	0.7	0.7	40.8	0	3	98	
990584	SR 542	15.05	Unnamed to Nooksack R	01	67	Yes		1.1	RND	OTH	0.61	0.61	23.6	0	1.86	228	
990585	SR 542	15.08	Unnamed to NF Nooksack R	01	33	Yes		1.1	RND	OTH	0.76	0.76	19.2	0	4		
991060	SR 542	16.07	Unnamed to Nooksack R	01	0	No		1.1	RND	PCC	0.91	0.91	13.3	0.6	1	188	
995776	SR 542	16.21	Unnamed to Unnamed	01	0	No		1.1	RND	PCC	0.76	0.76	43.1	0	6.3	104	
991107	SR 542	16.28	Unnamed to Nooksack R	01.0337	33	No		1.1	RND	PCC	1.07	1.07	30.5	0	3	115	
995777	SR 542	17.38	Unnamed to NF Nooksack R	01	0	Yes		1.1	RND	PCC	0.61	0.61	27.6	1.8	8		
990589	SR 542	17.85	Unnamed to NF Nooksack R	01	0	No		1.1	RND	PCC	0.91	0.91	30.5	0.7	6.9	90	
991705	SR 542	21.45	Unnamed to Kendall Cr	01	33	Yes		1.1	SQSH	CST	1.06	0.7	11.3	0.36	2.7		
991113	SR 542	23.95	Unnamed to High Cr	01	0	Yes		1.2	RND	CST	0.61	0.61	19.8	0	3.1		
991113	SR 542	23.95	Unnamed to High Cr	01	0	Yes		2.2	RND	CST	0.61	0.61	19.9	0.3	3.6		
995770	SR 542	24.25	Unnamed to High Cr	01	33	Yes		1.1	RND	CST	0.91	0.91	24.4	0.3	0.8		
990577	SR 542	24.49	Unnamed to High Cr	01	67	Yes		1.1	RND	CST	0.61	0.61	16.5	0.3	0.7		
991621	SR 542	24.9	High Cr	01.0407	33	Yes	21.37	1.1	RND	CST	1.89	1.89	15.2	0	1.5	3,882	10,279
991640	SR 542	27.21	Unnamed to Nooksack R	01	33	Yes		1.1	RND	PCC	0.61	0.61	19.8	0.55	2		
990046	SR 542	28.01	Bruce Cr	01	67	Yes		1.1	RND	PCC	1.07	1.07	17.2	0	2.6		
990023	SR 542	28.74	Baptist Camp Cr	01.0433	67	Yes	8.36	1.1	RND	PCC	0.45	0.45	12.5	0.11	2.7	512	810
995409	SR 542	28.87	Unnamed to NF Nooksack R	01	0	Yes	8.41	1.1	RND	PCC	0.76	0.76	18	0	11.1	300	188
990580	SR 542	29.02	Unnamed to NF Nooksack R	01	0	No		1.1	RND	PCC	0.61	0.61	63.5	0	10.8	108	
990596	SR 542	29.91	Unnamed to NF Nooksack R	01	0	No		1.1	RND	PCC	0.3	0.3	0.9	0.66	6.1	0	
990187	SR 542	32	Hedrick Cr	01.0463	0	Yes	16.63	2.2	BOX	PCC	1.83	1.83	24.4	0	3.5	551	576
990187	SR 542	32	Hedrick Cr	01.0463	0	Yes	16.63	1.2	BOX	PCC	1.83	1.83	24.4	0	3.5	551	576
990602	SR 542	34.49	Unnamed to NF Nooksack R	01	0	Yes		1.1	RND	PCC	0.76	0.76	19.8	0.91	2		
995413	SR 542	35.55	Unnamed to NF Nooksack R	01	0	No		1.1	RND	CST	0.46	0.46	17.9	1.2	12.2	88	
990603	SR 542	36.61	Lookout Cr	01	0	Yes		1.1	RND	CST	1.22	1.22	25	1.1	7		
990604	SR 542	38.15	Deerhorn Cr	01	0	No	9.02	2.2	RND	CST	1.83	1.83	23.8	1	7.4	172	235
990604	SR 542	38.15	Deerhorn Cr	01	0	No	9.02	1.2	RND	CST	1.83	1.83	23.8	0.9	7.3	172	235
990605	SR 542	38.38	Unnamed to NF Nooksack R	01	0	Yes		1.1	RND	CST	0.91	0.91	18.3	0.91	7	216	
995561	SR 542	38.86	Unnamed to NF Nooksack R	01	0	No		1.1	RND	PCC	0.46	0.46	18.3	0.4	8.4	38	
990606	SR 542	38.98	Chain-up Cr	01	0	Yes	17.41	1.1	RND	PCC	1.66	1.66	24.6	0.3	10.9	306	491
995567	SR 542	40.77	Unnamed to NF Nooksack R	01	0	No		1.1	BOX	CPC	1.84	1.84	23.9	1.1	15.3	38	
995571	SR 542	42.13	Unnamed to NF Nooksack R	01	67	No		1.1	RND	PVC	0.91	0.91	18.1	0.04	3.7	64	

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995577	SR 542	43.52	Unnamed to NF Nooksack R	01	67	Yes		1.2	BOX	CPC	1.84	1.84	16.1	0.08	1.07		
995577	SR 542	43.52	Unnamed to NF Nooksack R	01	67	Yes		2.2	BOX	CPC	1.84	1.84	16.1	0.08	1.07		
995585	SR 542	46.11	Unnamed to NF Nooksack R	01	67	Yes		1.2	BOX	CPC	1.83	1.23	12.2	0	1.6		
995585	SR 542	46.11	Unnamed to NF Nooksack R	01	67	Yes		2.2	BOX	CPC	1.83	1.23	12.2	0	2.3		
995439	SR 542	49.44	Unnamed to Bagley Cr trib	01	0	Yes		1.1	RND	OTH	0.61	0.61	29.5	1.5	10		
995695	SR 542	49.74	Unnamed to Bagley Cr trib	01	0	No		1.1	RND	PVC	0.61	0.61	14.7	0	10.9	95	
995595	SR 542	52.97	Unnamed to Razor Hone Cr	01	0	No		1.2	RND	PCC	0.61	0.61	11.5	0		99	
995595	SR 542	52.97	Unnamed to Razor Hone Cr	01	0	No		2.2	RND	PCC	0.61	0.61	11.5	0		99	
995443	SR 542	53.05	Unnamed to Unnamed	01	67	No		1.1	RND	PCC	0.61	0.61	14.2	0	4.4	153	
996168	SR 544	3.51	Unnamed to Green Lk	01	33	Yes		1.1	RND	OTH	0.61	0.61	13.6	0.3	-1.3		
996163	SR 546	1.47	Unnamed to Fishtrap Cr	01.0213	0	Yes		1.1	BOX	CPC	1.85	1.22	1400	0			
996164	SR 546	2.01	Unnamed to Fishtrap Cr	01.0214	33	Yes		1.1	BOX	CPC	1.85	1.22	982	0			
995772	SR 547	6.16	Unnamed to Saar Cr	01	0	No		1.1	RND	PCC	0.46	0.46	17	0	0.45	38	
995774	SR 547	6.71	Unnamed to Saar Cr	01	33	Yes		1.1	RND	PCC	0.61	0.61	39.1	0	1.33		
996003	SR 548	0.29	California Cr	01.0082	33	Yes		1.1	RND	PCC	0.91	0.91	45.7	0	0.57		
996006	SR 548	0.87	Unnamed to California Cr	01	33	Yes		1.1	RND	CAL	0.46	0.46	19.1	0	0.89		
996007	SR 548	1.14	Unnamed to Unnamed	01	67	Yes		1.1	RND	PCC	0.61	0.61	23.4	0	1.97		
996008	SR 548	1.24	Unnamed to California Cr	01.0079	33	Yes	10.64	1.1	RND	PCC	0.61	0.61	26.1	0.2	2.03	1,574	471
996142	SR 548	4.27	Unnamed to Fingleson Cr	01	0	Yes		1.1	RND	PCC	0.61	0.61	22.2	0.4	2.4		
990429	SR 548	4.67	Terrell Cr	01.0089	0	Yes	31.43	1.1	RND	PCC	1.83	1.83	40.8	0.5	2.5	11,313	52,518
996153	SR 548	10.55	Unnamed to California Cr	01.0047	67	Yes		1.2	RND	PCC	0.61	0.61	17.7	0	3.39		
996153	SR 548	10.55	Unnamed to California Cr	01.0047	67	Yes		2.2	RND	SST	0.91	0.91	18	0	2.6		
996155	SR 548	11.19	Unnamed to Drayton Harbor	01.0044	33	Yes		1.1	RND	PCC	0.91	0.91	19.1	0	0.26		
996156	SR 548	13.8	Cain Cr	01.0001	0	Yes		1.1	RND	OTH	1.53	1.53	239	0			
102 L012	SR 9	0.17	Howell Cr	08.0082	33	Yes	4.63	1.1	RND	OTH	0.53	0.53	80	0		637	887
991810	SR 9	4.15	Unnamed to Unnamed	07	67	No		1.1	RND	PCC	0.46	0.46	0.9	0		175	
995982	SR 9	10.61	Cemetery Cr	07.0118	33	Yes		1.1	RND	CST	0.61	0.61	45.3	0.28	0.77		
995087	SR 9	12.57	Unnamed to Unnamed	07	33	Yes		1.1	RND	PCC	0.61	0.61	51.4	0	2.06		
999168	SR 9	14	Unnamed to Pilchuck R	07	67	No		1.1	RND	PCC	0.46	0.46	33.8	0	1.7	50	
995086	SR 9	16.66	Hulbert Cr	07.0086	0	Yes		1.1	RND	CST	0.61	0.61	0.9	2.5			
991814	SR 9	18.79	Unnamed to Lk Stevens	07.0149	33	No		1.1	RND	OTH	0.61	0.61	87.7	0	1.4	135	
995084	SR 9	22.72	Unnamed to Quilceda Cr	07	33	Yes		1.1	RND	PCC	0.46	0.46	26	0	2.1		
102 Q028	SR 9	24.44	Unnamed to MF Quilceda Cr	07	67	Yes		1.1	RND	PCC	1.52	1.52	51.9	0.23	1.2		
995082	SR 9	25.75	Unnamed to Unnamed	07	0	Yes		1.1	RND	PCC	0.91	0.91	35.2	0.5	0.85		
990255	SR 9	27.25	Unnamed to Portage Cr	05.0058	33	Yes		1.1	RND	PCC	1.22	1.22	23.9	0	5.5		

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996079	SR 9	27.94	Unnamed to Unnamed	05	67	Yes		1.1	RND	PCC	0.61	0.61	58.6	0	1.53		
990019	SR 9	31.06	Harvey Cr (Armstrong Cr)	05.0126	67	Yes	36.94	1.1	BOX	PCC	1.85	1.96	18.8	0	1.06	27,505	93,372
996080	SR 9	33.2	Roth Cr	05	33	Yes		1.1	RND	PVC	0.61	0.61	15.4	0	1.6		
996085	SR 9	36.95	Unnamed to Unnamed	05	0	No		1.1	RND	PCC	0.31	0.31	13.5	0.67	8.14	38	
LP19	SR 9	37.26	Unnamed to Unnamed	05	0	No		1.1	RND	OTH	0.61	0.61	31.8	0	12.33	34	
996088	SR 9	38.14	Unnamed to Unnamed	05	0	No		1.1	RND	PCC	0.61	0.61	11.6	0.33	5.61	52	
996089	SR 9	38.27	Unnamed to Unnamed	05	0	No		1.1	RND	PVC	0.61	0.61	14.3	0.18	3.64	111	
LP31	SR 9	38.64	Unnamed to Unnamed	05	67	No		1.1	RND	CST	0.46	0.46	14	0	2.14	30	
LP32	SR 9	38.69	Unnamed to Unnamed	05	33	Yes		1.1	RND	PCC	0.76	0.76	11.4	0	4.3		
NC158	SR 9	39.16	Unnamed to Lk McMurray	03	0	Yes		1.1	RND	PCC	0.46	0.46	23.7	0.35	9.4		
995275	SR 9	39.51	Unnamed to Lk McMurray	03	0	No		1.1	RND	PVC	0.61	0.61	18.5	0.1	17.3	100	
NC180	SR 9	39.69	Unnamed to Lk McMurray	03	33	Yes		1.1	RND	PCC	1.07	1.07	15.7	0.35	8.6		
NC170	SR 9	39.87	Unnamed to Lk McMurray	03	33	Yes		1.1	RND	CST	0.91	0.91	25.7	0	3		
990641	SR 9	40.09	Unnamed to Lk McMurray	03	67	Yes		1.1	RND	PCC	0.91	0.91	12.5	0	1.9		
NC166	SR 9	40.77	Unnamed to Lk McMurray	03	33	Yes		1.1	RND	CAL	1.22	1.22	15.1	0.05	6.8		
990091	SR 9	41.04	Norway Park Cr	03.0265	33	Yes	11.55	1.1	RND	CST	0.76	0.76	44.6	0	2.8	1,115	1,047
991451	SR 9	41.5	Unnamed to Lake Cr	03.0264	33	No	5.37	1.1	RND	CST	1.21	1.21	16.2	0	4.3	104	211
991120	SR 9	42.36	Lake Cr	03.0227	67	Yes		1.1	RND	CST	1.91	1.91	17.4	0	-0.57		
NC163	SR 9	43.08	Unnamed to Lake Cr	03	67	Yes		1.1	RND	CST	0.91	0.91	12	0	2.2		
991122	SR 9	48	Gribble Cr	03.0227	33	Yes	21.92	1.1	RND	PCC	1.22	1.22	21.1	0.06	1.7	4,291	18,551
NC69	SR 9	49	WF Nookachamps Cr trib	03	67	Yes		1.1	BOX	CPC	1.22	1.55	11.1	0	4.7		
HC53	SR 9	59.08	Unnamed to Unnamed	03	33	Yes		1.1	RND	PCC	0.61	0.61	11.9	0	3.6		
SR67	SR 9	64.45	Unnamed to Samish R	03	33	No		1.1	RND	OTH	1.14	1.14	15.9	0	3.7	199	
995390	SR 9	64.93	Unnamed to Samish R	03	0	No		2.2	RND	CST	0.76	0.76	15.9	0.55	6.4	44	
995390	SR 9	64.93	Unnamed to Samish R	03	0	No		1.2	RND	CST	0.61	0.61	16.2	0.4	4.2	44	
991136	SR 9	65.07	Unnamed to Samish R	03	0	No		1.1	RND	PCC	1.22	1.22	13.7	0	2.9	122	
991447	SR 9	66.85	Unnamed to Samish R	03	67	Yes		1.1	RND	PCC	0.91	0.91	11.1	0.15	2.7		
991448	SR 9	67.33	Unnamed to Samish R	03.0078	33	Yes	12.68	1.1	BOX	CPC	2.45	1.57	11.8	0	5.5	2,101	2,042
995392	SR 9	67.46	Unnamed to Samish R	03	0	No		1.1	RND	PCC	0.61	0.61	31.5	0	8.8	83	
995395	SR 9	69.1	Unnamed to Samish R	03	0	No		1.1	RND	PCC	0.76	0.76	23.3	0.29	5.6	60	
995396	SR 9	69.15	Unnamed to Samish R	03	0	No		1.1	RND	PCC	0.76	0.76	22.8	0.72	3.3	173	
995398	SR 9	69.88	Unnamed to Samish R	03	0	Yes		1.1	RND	PCC	0.61	0.61	29.8	0	6		
991106	SR 9	70.6	Unnamed to Samish R	03	0	Yes		1.1	RND	OTH	0.76	0.76	13.7	0.55	6		
995780	SR 9	70.81	Unnamed to SF Nooksack R	01.0263	33	No		1.2	RND	PCC	0.91	0.91	26.8	0	8	154	
995780	SR 9	70.81	Unnamed to SF Nooksack R	01.0263	33	No		2.2	RND	PCC	0.91	0.91	26.4	0	7.6	154	

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995783	SR 9	71.54	Unnamed to SF Nooksack R	01	67	No		1.1	RND	PCC	0.76	0.76	17.6	0.14	2.9	81	
992344	SR 9	76.91	Unnamed to Black Sl	01	0	Yes	11.83	1.1	RND	PCC	0.61	0.61	35.2	0.05	2.47	665	1,053
992345	SR 9	77.12	Unnamed to Black Sl	01	67	Yes	8.37	1.1	RND	PCC	0.7	0.7	18.4	0	0.04	643	752
992350	SR 9	77.43	Unnamed to Unnamed	01	67	Yes	12.91	1.1	RND	PCC	0.7	0.7	10.7	0.17	0.06	1,400	1,054
992356	SR 9	77.99	Unnamed to SF Nooksack R	01.0247	67	Unk		1.1	RND	PCC	0.9	0.9	14.5		0.3		
991842	SR 900	15.86	Unnamed to May Cr	08	67	Yes	21.51	1.1	BOX	PCC	1.22	0.91	13.7	0.21	1	2,155	50,198
990432	SR 900	19.14	Unnamed to Tibbetts Cr	08.0169X	67	No		1.1	RND	CST	0.61	0.61	12.3	0	2.28	125	
991185	SR 900	19.4	Unnamed to Tibbetts Cr	08.0174	0	No		1.1	BOX	PCC	0.91	0.91	11.6	0.21	2	60	
991184	SR 900	20.09	Unnamed to Tibbetts Cr	08.0172	33	Yes	9.49	1.1	BOX	PCC	0.91	1.22	11	0.3	1	200	279
991723	SR 900	20.34	Unnamed to Tibbetts Cr	08.0171	0	Yes	12.47	1.1	BOX	PCC	0.94	1.52	10.7	2.26	3	650	1,187
996885	SR 908	5.33	Unnamed to Unnamed	08	0	No		1.1	BOX	CPC	0.91	1.22	60.8	0.54	8.07	144	
996886	SR 908	5.4	Unnamed to Unnamed	08	0	Yes		1.1	BOX	CPC	0.91	1.22	74.8	0.45	6.83		
996887	SR 908	5.69	Peter's Cr	08.0104	0	Yes	7.98	1.1	BOX	CPC	1.22	1.85	74.3	0	5.7	820	516
992641	SR 92	0.22	Unnamed to Stevens Cr	07	0	Yes		1.1	RND	PCC	0.91	0.91	42	0	1.88		
991827	SR 92	0.78	Unnamed to Lake Stevens	07.0150	67	Yes		1.1	RND	OTH	0.61	0.61	64.8	0	0.8		
991830	SR 92	2.2	Unnamed to Catherine Cr	07	33	No		1.1	RND	PCC	0.61	0.61	22.3	0.05	1.8	156	
990233	SR 92	2.73	Little Pilchuck Cr	07.0146	67	Yes		1.1	BOX	PCC	3.66	1.83	0.9				
995155	SR 92	7.78	Unnamed to Unnamed pond	07	33	No		1.1	RND	CST	0.69	0.69	36.2	0.12	0.86	68	
102 N183	SR 96	0.47	North Cr	08.0070	33	Yes	32.09	1.1	SQSH	CST	1.8	1.2	37	0	0.8	3,976	4,502
995209	SR 96	4.04	Unnamed to Unnamed	07	0	No		1.1	RND	PCC	0.61	0.61	25.2	0.35	3.4	57	
995326	SR 96	5.29	Thomas Cr	07.0108	0	Yes		1.1	RND	CST	1.66	1.66	0.9	0			
995214	SR 96	5.86	Unnamed to Unnamed	07	0	Yes		1.1	RND	PCC	0.46	0.46	17.6	0.56	5.5		
995215	SR 96	5.98	Unnamed to Unnamed	07.0123	33	Yes		1.1	RND	PCC	0.76	0.76	16	0	2.9		
995216	SR 96	6.09	Unnamed to Unnamed	07.0120	0	Yes		1.1	BOX	CPC	1.35	0.93	15	1.15	1.2	265	
995217	SR 96	6.49	Unnamed to Ebey Sl trib	07	0	Yes		1.1	RND	CST	0.91	0.91	24.9	2.15	2.13		
991210	SR 99	6.86	WF Hylebos Cr	10.0014	67	Yes	37.46	1.1	BOX	PCC	1.83	1.83	23.9		2.4	3,364	19,503
995963	SR 99	22.33	Riverton Cr	09	0	Yes		1.1	BOX	CPC	0.91	0.97	34.4	0	7.5		
997684	SR 99	23.41	Unnamed to Duwamish R	09	0	Yes		1.1	RND	PCC	1.52	1.52	49.3	0.58	4.3		
997685	SR 99	24.71	NF Hamm Cr	09	33	Yes		1.1	RND	CST	0.91	0.91	0.9			248	
997687	SR 99	24.86	NF Hamm Cr	09	67	Yes		2.2	RND	CST	1.22	1.22	0.9			443	
997687	SR 99	24.86	NF Hamm Cr	09	67	Yes		1.2	RND	CST	1.22	1.22	0.9			443	
996216	SR 99	49.01	Unnamed to Lund's Gulch Cr	08	33	Yes		1.1	RND	CAL	0.91	0.91	47.5	0	4.7		
993849	SR 99	51.45	Unnamed to Swamp Cr	08	0	Yes	14.79	1.1	RND	CAL	0.76	0.76	175	0		620	721
993834	SR 99	52.7	Swamp Cr	08.0059	67	Yes	17.15	1.1	BOX	CPC	1.21	1.27	37.7	0	1.03	2,919	3,171
102 N192	SR 99	54.23	North Cr	08.0070	33	Yes	21.31	1.1	RND	OTH	0.76	0.76	73.2	0	0.26	518	2,313

Appendix IA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
995046	US 2	3.59	Unnamed to Unnamed	07	0	No		1.1	RND	CST	0.91	0.91	94.6	0	12	143	
995108	US 2	12.94	Unnamed to French Cr	07.0193	67	Yes	8.71	1.1	BOX	CPC	3.08	2.6	41	0.32	0.3	5,295	5,660
101NORT-36	US 2	19.3	Unnamed to Skykomish R	07	33	Yes		1.1	RND	PCC	0.61	0.61	36.6	0			
101NORT-33	US 2	20.53	Unnamed to Skykomish R	07	33	Yes		1.1	RND	PCC	0.61	0.61	52	0	0.3		
101NORT-32	US 2	20.53	Unnamed to Unnamed	07	0	Yes		1.1	RND	OTH	0.61	0.61	33.6	0	6		
101OWEN-02	US 2	21.75	Unnamed to Skykomish R	07	33	Yes	16.55	1.1	RND	PCC	0.91	0.91	33.8	0.1	2	3,176	2,814
07.0939 0.40	US 2	23.08	Wagleys Cr	07.0939	33	Yes	50.82			Log and concrete weirs attached to a dam						15,105	45,461
991822	US 2	34.35	Unnamed to Skykomish R	07	0	Yes		1.2	RND	PCC	1.22	1.22	20.9	0	27		
991822	US 2	34.35	Unnamed to Skykomish R	07	0	Yes		2.2	RND	PCC	1.22	1.22	20.8	0	27		
991825	US 2	36.73	Unnamed to SF Skykomish R	07	0	No		1.1	RND	CST	1.07	1.07	79.3	0	14	121	
995058	US 2	44.23	Unnamed to SF Skykomish R	07	0	No		1.1	RND	PCC	1.51	1.51	41	1.7	7	196	
995059	US 2	44.26	Unnamed to SF Skykomish R	07	33	No		1.1	RND	PCC	1.22	1.22	25.4	0	8	24	
995000	US 2	45.47	Unnamed to SF Skykomish R	07.1298	67	Yes		1.1	RND	PCC	1.22	1.22	19.5	0	1		
995060	US 2	47.75	Unnamed to SF Skykomish R	07	33	No		1.1	RND	PCC	1.51	1.51	16	0	3.5	53	
995002	US 2	48.78	Unnamed to SF Skykomish R	07	0	No		1.1	RND	OTH	0.46	0.46	70.6	0.16	6	38	
995020	US 2	48.94	Unnamed to SF Skykomish R	07	0	Yes		1.1	RND	PCC	1.22	1.22	15.4	0.26	7.8	225	
995021	US 2	49.87	Unnamed to SF Skykomish R	07	0	Yes		1.1	OTH	OTH	1.22	1.22	46.6	0.6	0.8		
995062	US 2	52.39	Unnamed to Tye R	07	33	Yes	4.86	1.1	RND	CST	1.22	1.22	35.2	0	4	907	652
995063	US 2	52.47	Unnamed to Tye R	07	33	No		1.1	RND	PCC	0.91	0.91	23.9	0	8.7	13	
995023	US 2	52.7	Unnamed to Tye R	07	33	Yes		1.1	RND	PCC	1.22	1.22	17.7	0	6.3		
995024	US 2	52.75	Unnamed to Tye R	07	33	No		1.1	RND	PCC	0.91	0.91	23	0	6	124	
995031	US 2	56.19	Unnamed to Tye R	07	0	No		1.1	RND	CST	0.91	0.91	29.2	0.19	22	46	

<sup>1</sup>SR signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

<sup>2</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Codes Used for Culvert Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular

ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium

SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber  
 MRY - masonry  
 OTH - other

PVC - plastic

Appendix IB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
990376	I-405	19.12	Forbes Cr	08.0242	67	04/03/2007	Annual	CC	MNR	Not all the newly installed weirs meet criteria with some exceeding 0.25m outfall drop criteria. Weirs need to be reset.
08.0070 A 0.25	I-405	26.46	Perry Cr	08.0070 A	67	10/14/2004	Discontinued	BC	MNR	Recommended replacement of a missing baffle in culvert to eliminate sheetflow at the culvert outlet.
03.0181 0.50	I-5	219.41	Fisher Cr	03.0181	67	10/13/2004	Discontinued	BC	MNR	More baffles are needed below the downstream most baffle to correct a depth problem for fish access. Expansion ring baffles were recommended.
990025	I-5	244.2	Barnes Cr	03.0036	33	01/13/2004	Discontinued	SBC, LC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
995411	I-5	246.75	Chuckanut Cr	01.0626	0	05/26/2004	Discontinued	BC, SBC, CC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990022	I-5	256.28	Baker Cr	01.0553	33	05/25/2004	Discontinued	BC; SBC	MNR	Recommended replacement with a new culvert.
992978	I-5 NB Ext 256	256.34	Baker Cr	01.0553	100	05/25/2004	Discontinued	BF	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
08.0183 1.60	I-90	18.83	EF Issaquah Cr	08.0183	33	05/13/1994	Discontinued	SBC	MNR	The middle sackrete control is deteriorating and threatening to blow out. It needs to be repaired or replaced.
105 R042117a	SR 164	8.24	Unnamed to White R	10.0048	67	10/02/2007	Annual	BC	MNFP	Several weirs are leaking. Repair or replace leaking weirs.
996277	SR 18	0.29	Unnamed	10	67	03/02/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990390	SR 18	8.9	Soosette Cr	09.0073	67	03/03/2008	Discontinued	SBC	MNR	Outfall drops at log controls underneath the bridge exceed fish passage criteria. An engineering review is needed to determine correction option, e.g., removal or reinstallation.

Appendix IB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
08.0320 1.30	SR 18	16.94	Downs Cr	08.0320	33	03/03/2008	Annual	SBC	MNR	Major repair needed; 10 out of 12 controls have outfall drops exceeding 0.24 m.
990173	SR 18	22.16	Holder Cr	08.0178	0	12/30/2003	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
07.0396 0.80	SR 18	25.67	Deep Cr	07.0396	33	04/22/1997	Discontinued	BC; SBC	MNR	The culvert baffles are badly deteriorated, and velocities in combination with outfall drop block coho and juveniles. Rebuilding is needed. Engineering required.
03.0354A 0.04	SR 20	77.7	Little Carey's Cr	03.0354A	100	03/05/2008	Annual	BC; SBC	MNFP	Remove large beaver dam from the inside of the culvert.
990142	SR 202	11.96	Evans Cr	08.0106	100	11/05/2007	Annual	BC; WP; SBC	MNFP	Remove 5" diameter log spanning culvert apron and the exit slot of the weir pool fishway.
105 R071916a	SR 410	48.29	Boundary Cr	10.0250	33	12/29/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
997679	SR 509	25.69	Miller Cr	09.0371	67	08/25/2005	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
994459	SR 520	4.48	Unnamed to Lk Washington	08.0257	33	12/30/2003	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990430	SR 522	2.86	Thornton Cr	08.0030	67	09/20/1999	Discontinued	BC; PC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
08.0077 0.20	SR 527	6.57	Penny Cr	08.0077	33	04/13/2006	Discontinued	BC; SBC	MNR	The box culvert is not backwatered sufficiently to eliminate sheet flow in the upper half (at least).
990294	SR 528	2.47	Munson Cr	07.0073	67	01/16/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.

Appendix IB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
990644	SR 530	31.01	Unnamed to Stillaguamish R	05	67	01/16/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
991059	SR 531	8.71	MF Quilceda Cr	07.0000	67	01/15/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
05.0018 2.00	SR 532	6.14	Church Cr	05.0018	67	10/13/2004	Discontinued	SBC	MNR	More downstream controls are needed to correct an excess drop at the downstream most log control. Baffles are also recommended to correct sheeting flow in the culvert at low flows.
01.0228 4.80	SR 542	6.55	Anderson Cr	01.0228	67	10/10/2007	Annual	BC; WP	MNR	The fishway fills w/gravel every year and is being considered a CED project but still maintainable.
991210	SR 99	6.86	WF Hylebos Cr	10.0014	67	04/20/2006	Discontinued	BC; SBC	MNR	The outfall drop at the fifth log control down from the culvert is now at 0.46m (18"). The rock (bed) control is totally washed out. The problem may continue to get worse and should be corrected.
07.0939 0.40	US 2	23.08	Wagleys Cr	07.0939	33	08/19/2003	Discontinued	WP	MNR	Remove the old dam and fishway structure to allow fish passage. The fishway is totally non-functional. Flow goes under most of the structure, and the wooden components have deteriorated to the point of leaking everywhere.

**Fishway Type:**

**BF** - baffled flume  
**BC** - baffled culvert  
**SBC** - streambed control  
**WP** - weir pool  
**PC** - pool-chute  
**CC** - concrete control

**Condition:**

**MNR** - requires replacement  
**MNFP** - requires maintenance for fish passage

Appendix IC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	MP	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
990025	I-5	244.2	Barnes Cr to Samish Lk	03.0036	10.02	716	Pending						27-Dec-07		Scope	
FR75	I-5	245.76	Unnamed to Lake Cr	03.0042	20.63	3,980	Pending	Done	Retrofit	499,000	Replacement	599,000			Scope	
991036	I-5	255.15	Squalicum Cr to Bellingham Bay	01.0552	58.2	98,138	EngRequested	Done	Replacement	1,966,520	LC	171,698	14-Nov-07		Const/T10	2018
990022	I-5	256.28	Baker Cr to Squalicum Cr	01.0553	28.66	29,032	Pending	Done	Replacement	1,500,000			28-Jun-06		Const/T10	2012
992003	I-5 NB	256	Baker Cr to Squalicum Cr	01.0553	25.69	11,892	Done	Pending							Const/T10	2012
995256	I-5 SB	246.12	Unnamed to Unnamed	03.0043	14.5	992	Pending								Scope	
992798	I-90	13.83	Lewis Cr to Lk Sammamish	08.0162	30.43	6,663	Done/01	Done/01	Retrofit	3,500,000					Const/T10	2014
08.0183	I-90	18.83	EF Issaquah Cr to Issaquah Cr	08.0183	46.85	39,818	Done	Done	Replacement	1,178,395	Fishway	205,703	20-Apr-06	24-Jan-07	Const/T10	2010
994389	SR 11	20.25	Padden Cr to Bellingham Bay	01.0622	22.72	5,292	EngRequested	Pending		1,039,000					Const/T10	2010
994386	SR 11	21.08	Padden Cr to Bellingham Bay	01.0622	18.85	1,561	Pending	Pending							Scope	
990390	SR 18	8.9	Soosette Cr to Soos Cr	09.0073	22.76	16,657	Pending								Scope	
995978	SR 20	12.96	Crockett Lk to Keystone Harbor	06.0053	34.35	110,033	EngRequested	Pending				0			Scope	
102 L062	SR 202	0.1	Little Bear Cr to Sammamish R	08.0080	42.1	69,832	Pending	Done	Retrofit	499,000	Bridge	1,000,000	08-Jan-08		Scope	
996913	SR 522	13.66	Unnamed to Little Bear Cr	08	6.41	696	Pending								Scope	
996880	SR 522	12.86	Unnamed to Little Bear Cr	08	16.21	304	Pending								Scope	
995994	SR 525	9.14	Clinton Cr to Puget Sound	06	9.15	755	Pending								Scope	
995986	SR 525	9.54	Clinton Cr to Puget Sound	06	6.48	197	Pending								Scope	
990644	SR 530	31.01	Unnamed to NF Stillaguamish R	05	14.38	285	Pending	Done	Replacement	152,000	Fishway	72,000			Scope	
990151	SR 530	42.99	Fortson Cr	05.0254	15.37	1,391	Pending	Pending							Scope	
991059	SR 531	8.71	MF Quilceda Cr to Quilceda Cr	07.0000	15.73	-999	Pending								Scope	
05.0018	SR 532	6.14	Church Cr to Stillaguamish R	05.0018	36.1	100,818	EngRequested	Pending							Scope	
990624	SR 532	9.75	Unnamed to Pilchuck Cr	05.0065	31.55	8,657	Done	Done/00	Retrofit	143,000					Const/T10	2010
992987	SR 539	0.04	SF Baker Cr to Baker Cr	01.0554	19.56	2,116	Pending	Pending							Scope	
990015	SR 539	0.3	Spring Cr to Baker Cr	01.0556	30.61	11,540	Pending	Pending	Replacement	741,811			15-Oct-07		Const/T10	2010
991803	SR 542	2.4	Toad Lk Cr to Squalicum Cr	01.0560	13.41	3,204	Done/01	Done/00	Replacement	345,000					Const/T10	
991621	SR 542	24.9	High Cr to Kendall Cr	01.0407	21.37	10,279	Done/01	Done/97	Retrofit	222,000					Const/Oth	
990023	SR 542	28.74	Baptist Camp Cr	01.0433	8.36	810	Done	Done	Replacement	405,000					Const/T10	2008
990187	SR 542	32	Hedrick Cr to Nooksack R	01.0463	16.63	576	Done 06/01	Done/04	Bridge	2,200,000					Const/T10	2014
990606	SR 542	38.98	Chain-up Cr to NF Nooksack R	01	17.41	491	Pending	Pending	Replacement	681,000			03-Oct-07	27-Dec-07	Const/T10	2010
990429	SR 548	4.67	Terrell Cr to Birch Bay	01.0089	31.43	52,518	EngRequested	Done	Retrofit	250,000	Replacement	750,000	18-Sep-07	05-Feb-08	Const/T10	2018
991122	SR 9	48	Gribble Cr	03.0227	21.92	18,551	Pending	Done	Replacement						Scope	
991448	SR 9	67.33	Unnamed to Samish R	03.0078	12.68	2,042	Defer	Done	Retrofit	99,000	Replacement	599,000			Defer	
991842	SR 900	15.86	Unnamed to May Cr	08	21.51	50,198	Pending/PS	Pending							Scope	

Appendix IC.WSDOT Dedicated Funding Project Scoping Progress Report.

996887	SR 908	5.69	Peter's Cr to Sammamish R	08.0104	7.98	516	Defer	Pending							Defer	
102 N183	SR 96	0.47	North Cr to Sammamish R	08.0070	31.35	4,502	Done	Done	Replacement	600,000			24-Jan-05		Scope	
991210	SR 99	6.86	WF Hylebos Cr	10.0014	37.46	19,503	EngRequested	Pending							Scope	
102 N192	SR 99	54.23	North Cr to Sammamish R	08.0070	21.31	2,313	Pending	Done	Replacement	600,000			24-Jan-05		Scope	
02	US 2	21.75	Unnamed to Skykomish R	07	16.55	2,814	Pending								Scope	
07.0939 0.40	US 2	23.08	Wagleys Cr to Skykomish R	07.0939	50.82	45,461	EngRequested	Done	Replacement	599,000	Remove dam	499,000	20-Feb-08		Scope	

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

Appendix ID. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
990023	SR 542	28.74	Baptist Camp Cr	01.0433	8.36	F	Sched	424,000					
990624	SR 532	9.75	Unnamed to Pilchuck Cr	05.0065	31.55	F	Sched	223,000	257,000				
1.60	I-90	18.83	EF Issaquah Cr	08.0183	46.85	NF	Future		1,178,395				
990606	SR 542	38.98	Chain-up Cr	01	17.41	F	Sched		866,654				
994389	SR 11	20.25	Padden Cr	01.0622	22.72	F	Sched		1,039,000				
990015	SR 539	0.3	Spring Cr	01.0556	30.61	F	Future		741,811				
992003	I-5 NB	256	Baker Cr	01.0553	25.69	NF	Future						
990022	I-5	256.28	Baker Cr	01.0553	28.66	NF	Future			1,500,000			
990187	SR 542	32	Hedrick Cr	01.0463	16.63	NF	Future				2,200,000		
992798	I-90	13.83	Lewis Cr	08.0162	30.43	NF	Future				3,500,000		
990429	SR 548	4.67	Terrell Cr	01.0089	31.43	NF	Future						3,837,028
991036	I-5	255.15	Squalicum Cr	01.0552	58.2	NF	Future						8,341,855

Region's **Total \$:**      **647,000**    **4,082,860**    **1,500,000**    **5,700,000**      **12,178,883**

Appendix IE.Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	20-Nov-00	Coho	Downstream	Pre-project	1	3	10	13	9
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	31-Oct-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	31-Oct-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	07-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	07-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	18-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	18-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	25-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	25-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	02-Dec-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	02-Dec-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	10-Dec-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	10-Dec-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	17-Dec-02	Coho	Downstream	Pre-project	1.2	71	3	74	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	17-Dec-02	Coho	Upstream	Pre-project	0.4	17	0	17	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	24-Dec-02	Coho	Upstream	Pre-project	0.4	23	4	27	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	24-Dec-02	Coho	Downstream	Pre-project	1.2	171	7	178	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	30-Dec-02	Coho	Upstream	Pre-project	0.4	17	13	30	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	30-Dec-02	Coho	Downstream	Pre-project	1.2	72	101	173	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	04-Jan-03	Coho	Downstream	Pre-project	1.2	5	58	63	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	04-Jan-03	Coho	Upstream	Pre-project	0.1	0	4	4	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	11-Nov-07	Coho	Downstream	Post-project	0.3	2	1	3	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	11-Nov-07	Coho	Upstream	Post-project	0.3	27	0	27	
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	26-Nov-07	Coho	Upstream	Post-project	0.31	0		0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	26-Nov-07	Coho	Downstream	Post-project	0.31	0	0	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	15-Jan-08	Coho	Upstream	Post-project	0.31	0	1	0	0
07.0148	1.30	SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	15-Jan-08	Coho	Downstream	Post-project	0.31	0	0	0	0
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	18-Dec-00	Coho	Downstream	Pre-project	2.56	0	7	0	18
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	18-Dec-00	Coho	Upstream	Pre-project	0.65	1	0	0	16

Appendix IE.Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count	
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	27-Nov-07	Coho	Downstream	Post-project	0.31	0	0	0	0
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	27-Nov-07	Coho	Upstream	Post-project	0.31	0	0	0	0
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	15-Jan-08	Coho	Upstream	Post-project	0.31	0	0	0	0
08.0059	7.00	I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	15-Jan-08	Coho	Downstream	Post-project	0.31	0	0	0	0
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	12-Nov-03	Coho	Downstream	Pre-project	0.3	0	0	0	2
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	12-Nov-03	Coho	Upstream	Pre-project	0.2	0	0	0	3
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	24-Nov-03	Coho	Downstream	Pre-project	0.3	3	0	0	
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	24-Nov-03	Coho	Upstream	Pre-project	0.2	0	1	0	0
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	09-Dec-03	Coho	Upstream	Pre-project	0.2	2	0	0	1
990023	SR 542	28.74	Baptist Camp Cr	01.0433			2008	1	Incomplete	09-Dec-03	Coho	Downstream	Pre-project	0.3	8	1	0	5
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	26-Sep-00	Chinook	Downstream	Pre-project	4.4	1		1		
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	26-Sep-00	SRCutthroat	Downstream	Pre-project	4.4	1		1		
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	26-Sep-00	Sockeye	Downstream	Pre-project	4.4	36		36		
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	18-Dec-00	Coho	Downstream	Pre-project	3.3	2	7	9	34	
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	27-Nov-07	Coho	Upstream	Post-project	0.31	0	0	0	0	
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	27-Nov-07	Coho	Downstream	Post-project	0.31	0	0	0	0	
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	15-Jan-08	Coho	Downstream	Post-project	0.06	0	0	0	0	
993090	I-5	182.7	Swamp Cr	08.0059	7.66	2007	1	Incomplete	15-Jan-08	Coho	Upstream	Post-project	0.31	0	0	0	0	

## APPENDIX II - NORTH CENTRAL REGION

- A. Fish Passage Barriers Inventoried as of February 2008
- B. Fishways Needing Repairs or Maintenance for Fish Passage
- C. Dedicated Funding Scoping Progress Report

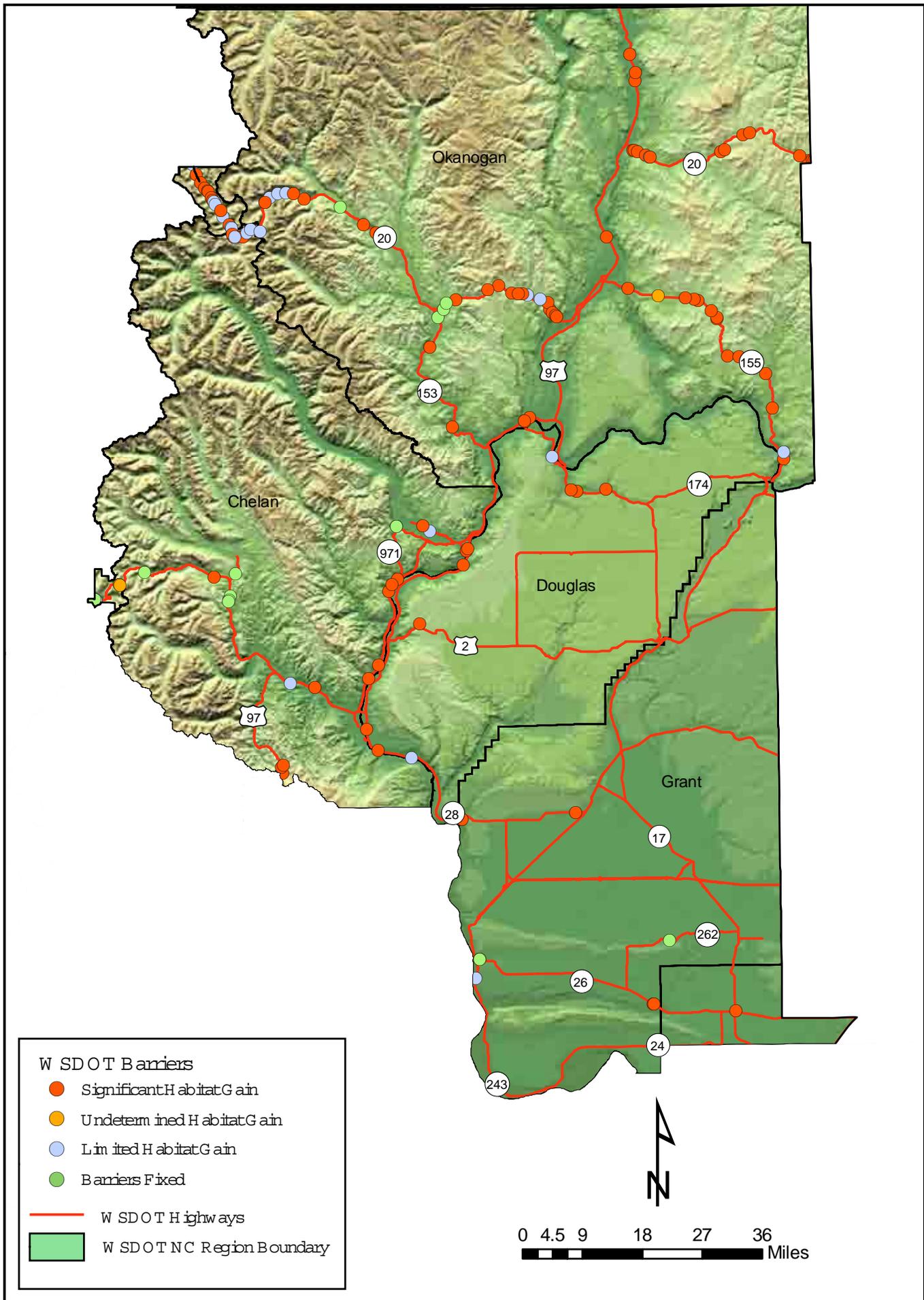


Figure 41. North Central Region Fish Passage Barriers, February 2008.

Appendix IIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
992048	SR 150	2.25	Unnamed to Lk Chelan	47	0	Yes		2.2	RND	CST	0.61	0.61	18.5	0	9.6		
992048	SR 150	2.25	Unnamed to Lk Chelan	47	0	Yes		1.2	RND	CST	0.61	0.61	18.4	0	11.2		
999308	SR 150	3.8	Unnamed to Lk Chelan	47	0	No		1.1	RND	CST	0.91	0.91	17.3	0	18.02	174	
993416	SR 153	7.62	Squaw Cr	48.0043	0	Yes	4.94	1.1	BOX	CPC	1.22	1.22	27.6	1.35	0.76	6,309	6,356
993423	SR 153	24.3	Leecher Canyon Cr	48.0265	0	Yes	3	1.1	RND	PCC	0.45	0.45	42	0		2,553	871
999262	SR 155	32.29	Peter Dan Cr	53.0014	33	Yes		1.1	RND	SPS	1.22	1.22	66	0	5.1		
999263	SR 155	33.31	Unnamed to LK Roosevelt	53.0012	0	No		1.1	RND	SPS	2.22	2.22	81	0	14.19	46	
999374	SR 155	41.53	Little Nespelem R	51	0	Yes		1.1	BOX	CPC	2.44	1.83	20.7	0.8	3.43		
999376	SR 155	47.11	Smith Cr	51	33	Yes		1.1	RND	CST	1.22	1.22	22.7	0	1.63		
999378	SR 155	52.13	Unnamed Cr	51.0036	0	Yes		2.2	RND	CST	0.61	0.61	17.1		4.1		
999378	SR 155	52.13	Unnamed Cr	51.0036	0	Yes		1.2	RND	CST	0.61	0.61	17.3		4.5		
998314	SR 155	53.96	Unnamed to Unnamed	50	67	Yes		1.1	RND	CST	0.61	0.61	22.5	0	3.6		
993992	SR 155	60.76	Omak Cr	49.0138	67	Yes	6.47	1.2	RND	PCC	1.22	1.22	19.6	0	1.8	4,285	7,029
993992	SR 155	60.76	Omak Cr	49.0138	67	Yes	6.47	2.2	RND	PCC	0.91	0.91	16.9	0.37	1.7	4,285	7,029
993993	SR 155	60.92	Trail Cr	49.0179	33	Yes	9.42	1.1	RND	PCC	1.22	1.22	17.3	0	2.1	11,310	15,742
993995	SR 155	62.41	Unnamed to Omak Cr	49.0173	0	Yes	3.48	1.1	RND	PCC	0.91	0.91	33.6	0.2	5.86	1,955	1,830
993997	SR 155	65.05	Clark Cr	49.0165	0	Yes	6.49	1.1	RND	CST	0.76	0.76	34.3	0.42	3.23		2,366
993998	SR 155	65.59	Swimptkin Cr	49.0160	0	Yes	10.85	1.1	RND	CST	0.91	0.91	21.2	0.19	3.29		18,455
992845	SR 155	66.94	Stapaloop Cr	49.0152	33	Yes	9.58	1.1	RND	CST	1.9	1.9	45.5	0.46	2.3	20,221	21,629
994008	SR 155	71.1	Haley Cr	49.0143	33	Unk		1.1	RND	CST	0.61	0.61	20.9	0	2.06		
990288	SR 155	75.81	Mission Cr	49.0139	0	Yes	6.67	1.1	BOX	CPC	2.45	2.45	42.9	1.02	9.2	8,773	2,645
991582	SR 17	126.52	Unnamed to EF Foster Cr	50	0	Yes		1.1	RND	OTH	1.22	1.22	31.3	0	2.9		
990153	SR 17	131.21	Unnamed to EF Foster Cr	50	0	Yes		1.1	BOX	PCC	1.22	1.22	21.3	1.1	3.66		
990154	SR 17	132.05	Unnamed to EF Foster Cr	50	0	Yes		1.1	BOX	PCC	1.22	1.22	23.6	0.28	2.54		
997831	SR 173	2.93	Dry Cr	50	0	No		1.1	RND	SPS	3.05	3.05	73.4	5.2	5.77	141	
994050	SR 173	11.8	Swamp Cr	49.0002	67	Yes		1.2	RND	CST	1.52	1.52	28.1	0.37	0.8		
994050	SR 173	11.8	Swamp Cr	49.0002	67	Yes		2.2	RND	CST	1.52	1.52	28.2	0.56	0.6		
997436	SR 20	148.43	Unnamed to Granite Cr	04	0	Yes		1.1	RND	CST	1.07	1.07	27.8	0.35	20.93	524	
997437	SR 20	149.42	Unnamed to Granite Cr	04	0	Yes		1.1	RND	CST	0.99	0.99	44	0	13.95		
997438	SR 20	150.02	Unnamed Cr	04	0	Yes		1.1	RND	CST	1.14	1.14	26.9	0	10.88		
997439	SR 20	150.13	Unnamed to Unnamed	04	0	Yes		1.1	RND	CST	1.07	1.07	36.3	1.5	5.76		
997441	SR 20	151.27	Unnamed to Granite Cr	04	0	Yes		1.1	RND	CST	0.61	0.61	21.1	0.3	7.71		
997442	SR 20	151.66	Unnamed Cr	04.2413	33	Yes		1.1	RND	CST	0.91	0.91	24.5	0	5.13		
997443	SR 20	152.03	Unnamed to Granite Cr	04	33	No		1.1	RND	CST	0.76	0.76	18.6	0	2.53	64	
997445	SR 20	152.46	Unnamed to Granite Cr	04	0	No		1.1	RND	CST	0.91	0.91	26.7	1	8.74	120	
997448	SR 20	153.71	Swamp Cr	04.2429	0	Yes		1.1	ELL	CST	2.55	2.97	35.7	1.85	8.16		

Appendix IIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
997453	SR 20	154.67	Unnamed to Granite Cr	04	0	No		1.1	RND	CST	1.52	1.52	30.3	0.65	0.92	116	
997114	SR 20	156.3	Porcupine Cr	04.2453	0	Yes		1.2	ELL	CST	1.32	1.63	31.2	1.45	10.9		
997114	SR 20	156.3	Porcupine Cr	04.2453	0	Yes		2.2	ELL	CST	1.32	1.63	30.4	0.6	11.2		
997575	SR 20	156.81	Unnamed to Granite Cr	04	0	No		1.1	RND	CST	1.07	1.07	26	0.6	4.47	30	
997576	SR 20	156.86	Unnamed to Unnamed	04	0	No		1.1	RND	CST	1.07	1.07	31.9	0.2	14.3	115	
999306	SR 20	157.88	Bridge Cr	47	0	Yes		1.1	ELL	CST	1.3	1.45	50.2	0.4	5.2		
999313	SR 20	158.36	Unnamed to Bridge Cr	47	0	Yes		1.1	RND	SPS	2.21	2.21	23.2	0	7.97		
999315	SR 20	158.5	Unnamed to Bridge Cr	47	0	No		1.1	RND	CST	0.76	0.76	19.1	0.27	4.34	65	
999316	SR 20	158.78	Bridge Cr	47	33	Yes		1.1	RND	SPS	2.59	2.59	38.4	0	1.28		
999317	SR 20	159.89	State Cr	47	0	Yes		1.1	RND	SPS	2.59	2.59	135.9	1.3	7.2		
999319	SR 20	160.74	Unnamed to State Cr	47	0	No		1.1	RND	CST	1.22	1.22	44.6		10.8	27	
999320	SR 20	161.51	Unnamed to State Cr	47	0	No		1.1	RND	CST	0.76	0.76	30.5	0.27	4.52	12	
993055	SR 20	163.61	Unnamed to Early Winters Cr	48	0	No		1.1	RND	CST	1.22	1.22	81.9	2.05	14.4	130	
990342	SR 20	168.25	Pine Cr	48.1528	0	Yes	5.44	1.1	SQSH	SPS	3.47	2.24	19.3	0.8	4.91	5,058	9,331
993163	SR 20	168.3	Unnamed to Early Winters Cr	48	0	No		1.1	RND	CST	0.91	0.91	22.3	0.47	7.21	70	
993171	SR 20	169.31	Unnamed to Early Winters Cr	48	0	No		1.1	RND	CST	0.76	0.76	19.2	0.75	7.54	160	
993179	SR 20	170.73	Silver Star Cr	48	0	No		1.1	ARCH	SPS	2.48	1.8	37.8	0	10.55	0	
993184	SR 20	171.97	Unnamed to Early Winters Cr	48	0	No		1.1	RND	CST	1.22	1.22	27.1	0	18.5	11	
990468	SR 20	173.16	Varden Cr	48.1479	0	Yes	4.66	1.1	SQSH	SPS	5.5	2.38	31.1	0.1	10.4	360	1,235
993207	SR 20	174.98	Pekin Cr	48	0	Yes	3.05	1.1	SQSH	SPS	2.32	1.66	19.6	0.32	5.5	641	1,161
993230	SR 20	185.93	Boesel Canyon Cr	48	0	Yes	4.93	1.1	RND	CST	0.61	0.61	25.8	0.42	10.3	378	342
980378	SR 20	188.17	Unnamed to Methow R	48	33	Yes	7.72	1.1	SQSH	CST	0.91	0.61	24.4	0	3.25	300	142
980131	SR 20	208.44	Unnamed to Frazer Cr	48.0309A	0	Yes	6.61	1.1	RND	CST	0.46	0.46	15	0	6.08	465	234
993405	SR 20	213.99	Frazer Cr	48.0309	33	Yes	3.29	1.1	RND	CST	0.61	0.61	18.3	0	6	1,801	2,020
993815	SR 20	215.96	Summit Cr	49.0054	33	Yes	2.17	1.1	RND	CST	0.91	0.91	114.2	0	6.8	456	415
993817	SR 20	218.48	Summit Cr	49.0054	33	Yes	4.11	1.1	RND	CST	0.91	0.91	18.9	0.2	3.1	4,657	5,298
990406	SR 20	219.38	Summit Cr	49.0054	0	Yes	5.78	1.1	RND	CST	1.37	1.37	29.1	1.1	18.93	13,563	13,877
991687	SR 20	220.1	Unnamed to Summit Cr	49	33	Yes	4.65	1.1	RND	OTH	0.76	0.76	35.7	0.21	4.4	978	8,669
993818	SR 20	220.85	Summit Cr	49.0054	0	No		1.1	RND	PCC	1.22	1.22	23.4	0.47	7.2	199	
990247	SR 20	223.18	Little Loup Cr	49.0052	0	No		1.1	OTH	OTH	2	3.19	112.5	1.5	4.8	131	
990418	SR 20	224.49	Tallant Cr	49.0065	0	Yes		1.1	RND	PCC	1.07	1.07	22.3	0	5.4		
993824	SR 20	225.6	Tallant Cr	49.0065	33	Yes		1.1	RND	PCC	1.52	1.52	25.9	0	1.7		
990419	SR 20	226.27	Tallant Cr	49.0065	0	Yes		1.1	BOX	CPC	1.18	2.49	25.5	1.15	4.2		
990420	SR 20	226.96	Tallant Cr	49.0065	0	Yes		1.1	RND	CST	1.83	1.83	32	1.7	5.6		
990421	SR 20	227.22	Tallant Cr	49.0065	33	Yes		1.3	RND	CST	0.76	0.76	17.8	0	3.3		
990421	SR 20	227.22	Tallant Cr	49.0065	33	Yes		2.3	RND	OTH	0.61	0.61	18.4	0	4.7		

Appendix IIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
990421	SR 20	227.22	Tallant Cr	49.0065	33	Yes		3.3	RND	CST	0.91	0.91	19.1	0	5.1		
994020	SR 20	263.4	Bonaparte Cr	49.0246	33	Yes	3.89	1.1	BOX	CPC	3.06	1.86	30	0	2.3		4,252
994021	SR 20	263.62	Bonaparte Cr	49.0246	33	Yes	4.21	1.1	BOX	CPC	3.06	1.86	28.8	0.23	2.27		5,857
994022	SR 20	264.08	Bonaparte Cr	49.0246	33	Yes	4.89	1.1	BOX	CPC	3.06	1.84	29.9	0.28	3.92		10,625
994025	SR 20	265.57	Unnamed to Bonaparte Cr	49	0	Yes		1.1	RND	PCC	0.61	0.61	25.3	0	13.9		
994030	SR 20	266.09	Bonaparte Cr	49.0246	33	No		1.1	BOX	CPC	3.05	1.84	28.7	0.32	2.3	30	
994031	SR 20	266.22	Bonaparte Cr	49.0246	67	Yes	2.14	1.1	BOX	CPC	3.05	1.85	25.8	0	2.77	222	794
994035	SR 20	278.6	Bonaparte Cr	49.0246	67	Yes	6.62	1.1	BOX	CPC	2.15	1.82	15.1	0	1.7		72,435
994037	SR 20	279.3	Bonaparte Cr	49.0246	0	Yes	9.57	1.1	BOX	CPC	2.15	1.84	29.4	0	1.7		104,274
994043	SR 20	283.52	Unnamed to Bonaparte Cr	49	67	Yes		1.1	RND	CST	0.76	0.76	20.4	0	2.2		
994047	SR 20	284.52	Unnamed to Bonaparte Cr	49	67	Yes		1.1	RND	PCC	0.76	0.76	23	0	2.4		
999348	SR 20	295.16	Maple Cr	52.0383	0	Yes		1.1	BOX	CPC	1.22	1	51.5	0	4.2		
999349	SR 20	296.89	West Fork Granite Cr	52.0379	33	Yes		1.1	BOX	CPC	2.44	1.22	19.1	0	1.2		
990993	SR 243	25.29	Unnamed to Columbia R	41	0	No		1.1	RND	CST	1.07	1.07	22.9	0.46	8	30	
991762	SR 26	1.79	Sand Hollow Cr	41.2151	0	Yes	15.67	1.1	RND	CST	1.82	1.82	89.9	2.8	3.2	5,406	5,700
990570	SR 26	29.87	Crab Cr Wasteway	41	33	Yes		1.1	RND	CST	2.23	2.23	23.5	0	1.6		
990571	SR 26	29.95	Crab Cr Wasteway	41	0	Yes		1.1	RND	CST	1.22	1.22	26.8	0	9		
997815	SR 26	42.7	Unnamed to Unnamed	36	0	Yes		1.2	RND	CST	2.21	2.21	58.1	3	0.95		
997815	SR 26	42.7	Unnamed to Unnamed	36	0	Yes		2.2	RND	CST	2.21	2.21	58.1	3	0.94		
991776	SR 28	2.31	Unnamed to Columbia R	44	33	Yes		1.1	RND	PCC	1.22	1.22	38.4	0	6.8		
991947	SR 28	2.32	Sand Canyon Springs	44.0756	0	Yes	13.78	1.1	BOX	CPC	1.52	1.52	19.8	1.95	5.7	3,352	2,398
997474	SR 28	7.44	Unnamed to Columbia R	44	0	No		1.1	RND	PCC	0.46	0.46	27.8	0.35	4.8	125	
990882	SR 28	22.72	Lynch Coulee	41	0	Yes	9.06	1.1	BOX	PCC	3.66	3.05	113.4		3	4,751	4,375
997814	SR 28	40.66	Unnamed to Unnamed	41	0	Yes		1.1	RND	PCC	0.61	0.61	23.6	0.44	2.3		
995057	US 2	56.86	Unnamed to Tye R	07	0	No		1.1	RND	CST	0.61	0.61	53.8	0.24	5.3	167	
995037	US 2	57.66	Unnamed to Tye R	07	0	No		1.1	RND	CST	0.61	0.61	47.2	0.2	6.5	61	
995038	US 2	57.8	Unnamed to Tye R	07	67	Unk		1.1	RND	PVC	0.74	0.74	45.6	0	1.8		
995051	US 2	58	Unnamed to Tye R	07.1695	0	No		1.1	RND	PCC	0.91	0.91	30.1	0.04	3	122	
995055	US 2	64.32	Unnamed to Tye R trib	07	0	Unk		1.1	BOX	CPC	1.3	1.3	49.5	0.65	19.7		
995056	US 2	64.46	Unnamed to Tye R	07.1716	0	Unk		1.1	BOX	CPC	1.85	1.85	56.2	0	11.8		
992755	US 2	82.06	Unnamed to Nason Cr	45	0	Yes	4.23	1.1	RND	CST	0.91	0.91	0.9	1.5		1,100	1,025
996888	US 2	107.43	Unnamed to Wenatche R	45.0214	0	No		1.1	OTH	OTH	1.9	0.45	115.9	0	5.21	125	
996890	US 2	111.46	Unnamed to Wenatchee R	45.0072	0	Yes		1.1	ARCH	CST	1.84	1.17	37.5	3.5	0.99		
998309	US 2	146.02	Pine Canyon	44	0	Yes		1.1	RND	SPS	3.05	3.05	178.7	0.32	8.6		
991948	US 97	152.92	Mill Cr	39.1188	0	Yes	6.11	1.1	RND	PCC	0.91	0.91	111.9	0.37	5.41	3,075	2,262
990202	US 97	158.32	Iron Cr	39.1209	67	Yes		1.1	SQSH	SPS	2.57	1.81	24	0	3.5		

Appendix IIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
990413	US 97	159.26	Swauk Cr	39.1157	67	Yes	9.02	1.1	SQSH	SPS	2.69	1.83	24.5	0	1.2	7,024	14,464
990414	US 97	159.67	Swauk Cr	39.1157	0	Yes	10.74	1.1	SQSH	SPS	2.72	1.86	36.1	0.97	2.05	5,402	9,814
990444	US 97	164.7	Tronsen Cr	45.0346	0	Yes	5.61	1.2	RND	PCC	0.61	0.61	67.1	0.6	5	1,330	1,348
990444	US 97	164.7	Tronsen Cr	45.0346	0	Yes	5.61	2.2	RND	PCC	0.61	0.61	67.1	0.09	5	1,330	1,348
990445	US 97	165.77	Tronsen Cr	45.0346	0	Yes	7.5	1.1	RND	CST	1.07	1.07	36.6	0.24	4.5	3,030	4,316
990446	US 97	166.23	Tronsen Cr	45.0346	0	Yes	8.12	1.1	RND	CST	1.07	1.07	30.5	0.52	3.5	3,110	5,297
997564	US 97	232.94	Unnamed to Columbia R	44	0	Yes		1.1	ELL	SPA	2.59	3.43	44	0.86	6.55		
997566	US 97	235.3	Beebe Cr	47	33	Yes		1.1	RND	CST	1.22	1.22	43.5	0.08	2.13		
997567	US 97	235.65	Unnamed to Columbia R	47	33	Yes		1.1	RND	CAL	0.91	0.91	34.3	0.12	2.65	283	
992051	US 97	260.28	Swamp Cr	49.0002	0	Yes		1.1	RND	PCC	1.24	1.24	0.9	0			
993915	US 97	261.24	Unnamed to Columbia R	49	0	Yes	5.17	1.1	BOX	CPC	2.44	2.42	91.9	0	2.2	1,320	8,884
990217	US 97	299.03	Johnson Cr	49	33	Yes	4.88	1.1	SQSH	CST	1.9	1	21.6	0.34	5	11,104	10,566
993964	US 97	324.67	Mosquito Cr	49.0321	67	Yes		1.1	RND	PCC	2.13	2.13	16.7	0.04	1.4		
991643	US 97	325.87	Unnamed to Okanogan R	49	67	Yes		1.1	RND	PCC	1.22	1.22	28.1	0	2.88		
993971	US 97	328.16	Whistler Canyon Cr	49	33	Yes	4.44	1.1	RND	PCC	0.91	0.91	35.3	0	1.4	2,890	919
990411	US 97 AR	205.1	Swakane Cr	46	33	Yes		1.1	RND	OTH	2.13	2.13	56	0	2.99		
999326	US 97 AR	207.63	Tenas George Canyon	46	0	Yes		1.1	RND	OTH	0.91	0.91	21.5	0	3.9		
999330	US 97 AR	219.63	McKinstry Canyon	46.0378	0	Yes		1.1	RND	CST	1.22	1.22	40.8	0.6	3.3		
992045	US 97AR	220.76	Byrd Canyon Cr	46.0380	33	Yes	15.07	1.1	RND	PCC	0.91	0.91	48.3	0	3.26	3,700	2,134
992043	US 97AR	222.02	Oklahoma Gulch	46.0002	0	Yes	12.89	2.2	RND	OTH	1.22	1.22	44.3	0	3.87	2,574	5,631
992043	US 97AR	222.02	Oklahoma Gulch	46.0002	0	Yes	12.89	1.2	RND	OTH	1.22	1.22	44.3	0	3.99	2,574	5,631

<sup>1</sup>SR signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

<sup>2</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Codes Used for Culvert Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber  
 MRY - masonry  
 OTH - other  
 PVC - plastic

Appendix IIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
990882	SR 28	22.72	Lynch Coulee	41	0	1/23/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990202	US 97	158.32	Iron Cr	39.1209	67	10/4/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
994035	SR 20	278.6	Bonaparte Cr	49.0246	67	10/24/2007	Annual	SBC	MNR	Rock controls do not completely backwater the culvert and do not address the sheetflow problem. An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.

**Fishway Type:**

- BF** - baffled flume
- BC** - baffled culvert
- SBC** - streambed control
- WP** - weir pool
- PC** - pool-chute
- CC** - concrete control

**Condition:**

- MNR** - requires replacement
- MNFP** - requires maintenance for fish passage

Appendix IIC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	Milepost	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
991947	SR 28	2.32	Sand Canyon Springs to Columbia R	44.0756	13.78	2,398	Pending								Scope	
990882	SR 28	22.72	Lynch Coulee to Columbia R	41	9.06	4,375	Pending								Scope	
992045	US 97AR	220.76	Byrd Canyon Cr to Columbia R	46.0380	15.07	2,134	Pending								Scope	
992043	US 97AR	222.02	Oklahoma Gulch to Columbia R	46.0002	12.89	5,631	Pending								Scope	

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

## APPENDIX III - OLYMPIC REGION

- A. Fish Passage Barriers Inventoried as of February 2008
- B. Fishways Needing Repairs or Maintenance for Fish Passage
- C. Dedicated Funding Scoping Progress Report
- D. Ten Year Plan
- E. Dedicated Project Evaluations – Adult Spawner Surveys

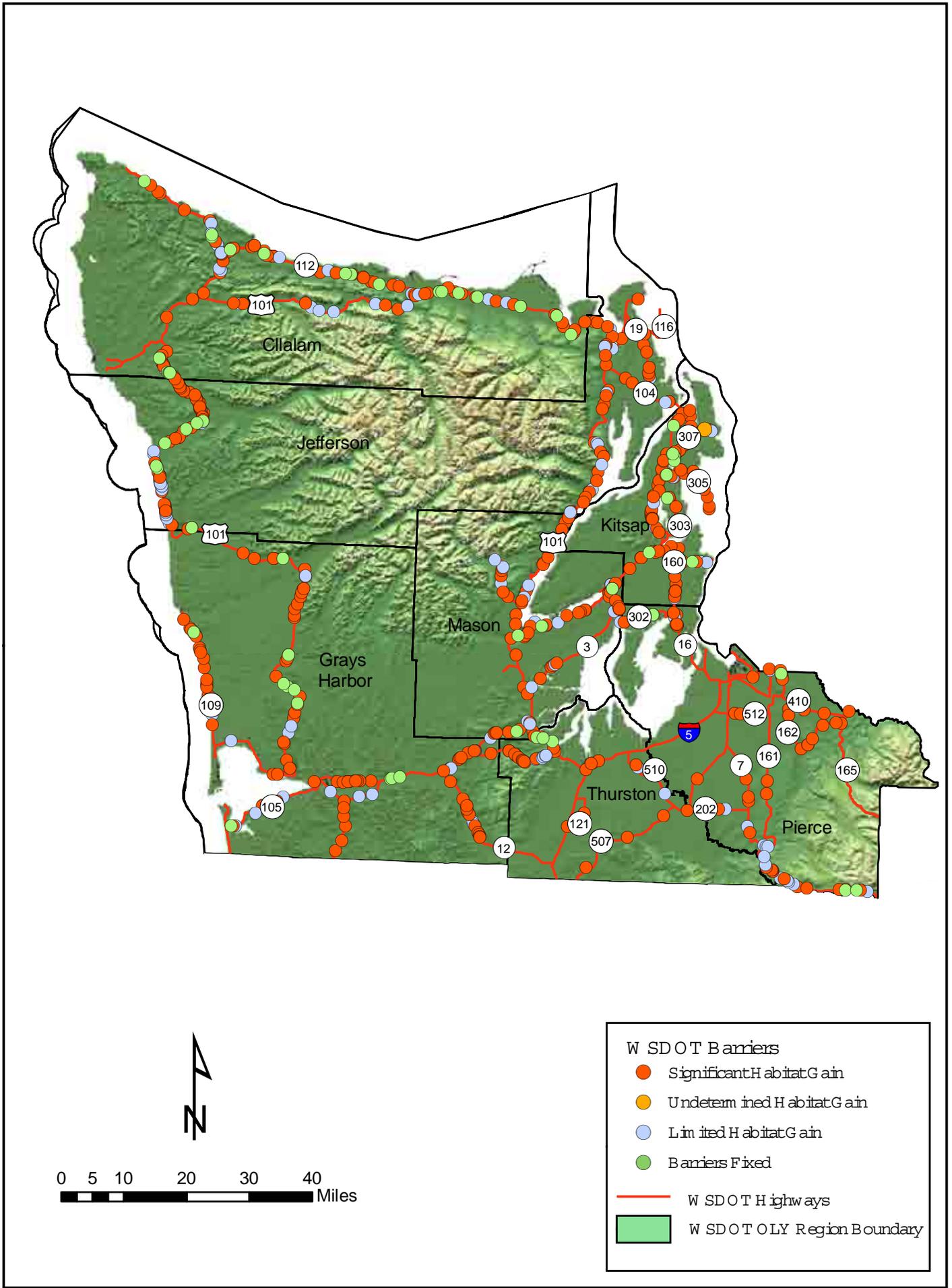


Figure 42. Olympic Region Fish Passage Barriers, February 2008.

Appendix IIIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991499	I-5	94.57	Unnamed to Beaver Cr	23	0	Yes	12.31	1.1	RND	PCC	1.22	1.22	64.5	0	1.2	483	545
990292	I-5	105.52	Moxlie Cr	13.0027	67	Yes		1.1	RND	CST	1.22	1.22	88.5	0	0.4		
990199	I-5	105.85	Indian Cr	13.0026	0	Yes	28.26	1.1	RND	CST	0.91	0.91	100.6	0	3	5,026	18,204
990200	I-5	106.83	Indian Cr	13.0026	67	Yes	19.33	1.1	RND	CST	0.91	0.91	80.5	0	0.58	2,531	15,037
997706	I-5	172	Unnamed to Deschutes R	13	0	Yes		1.1	RND	OTH	0.76	0.76	197	0.38			
162173	SR 104	4.25	Unnamed to Barnhouse Cr	17.0213b3	33	Yes	12.58	1.1	RND	CST	0.76	0.76	93.9	0.03	3.72	963	1,467
991978	SR 104	5.75	Unnamed to Chimacum Cr	17.0212	33	Yes		1.1	RND	CAL	0.8	0.8	52.8	0	1.2		26,831
991983	SR 104	12.05	Unnamed to Hood Canal	17	0	No		1.1	RND	CST	0.63	0.63	65.5	0	10.2	115	
162192	SR 104	12.57	Unnamed to Squamish Harbor	17	0	Yes	10.5	1.1	RND	CST	0.91	0.91	103.3	0	7.6	932	1,082
992196	SR 104	12.7	Unnamed to Squamish Harbor	17.0185	0	Yes	12.89	1.1	RND	CAL	0.7	0.7	60.5	0.53	1.75	1,822	2,276
990710	SR 104	16.55	Unnamed to Port Gamble	15	67	Yes	13.81	1.1	RND	PCC	0.91	0.91	39.6	0	5	1,617	1,898
992200	SR 104	17.82	Unnamed to Port Gamble	15	0	Yes		1.1	BOX	PCC	0.92	0.92	33.2	0.22	2.22		
992202	SR 104	19.39	Unnamed to Port Gamble	15	0	Yes	4.37	1.1	RND	PCC	0.83	0.83	30.2	0	5.2	531	153
996729	SR 104	22.23	Unnamed to Grovers Cr	15.0304	33	Unk		1.1	RND	PCC	0.61	0.61	30	0	-0.06		
992205	SR 104	22.47	Grovers Cr	15.0299	33	Yes		1.1	BOX	CPC	0.92	0.92	19.3	0	1.14		
992207	SR 104	22.95	Unnamed to Appletree Cove	15.0309	0	Yes	17.22	1.1	BOX	CPC	0.92	0.92	23.6	0	3.69	2,349	3,461
992208	SR 104	23.37	Unnamed to Appletree Cove	15	0	No	4.37	1.1	RND	PCC	0.45	0.45	24.9	0.41	1.69	198	34
991301	SR 105	31.38	Unnamed to South Bay	22.1321	33	Yes	1.78	1.1	RND	PCC	1.07	1.07	21.2	0.1	1.7	620	233
993007	SR 105	31.79	Unnamed to South Bay	22	0	No		1.1	RND	PCC	0.65	0.65	29.4	0	1.5	150	
990905	SR 105	36.26	Unnamed to South Bay	22	33	No		1.1	RND	PCC	0.61	0.61	48.4	0	1.5	34	
980275	SR 105	38.1	Unnamed to Johns R	22	0	Yes	12.85	1.1	RND	PCC	0.61	0.61	38.1	0	5	320	448
980274	SR 105	38.28	Unnamed to Johns R	22	33	No		1.1	RND	PCC	0.46	0.46	22.9	0	2	124	0
994782	SR 105	38.9	Unnamed to Grays Harbor	22.1269	0	No		1.1	RND	PCC	0.76	0.76	59.5	0	2.5	181	
991298	SR 105	40.5	Unnamed to South Bay	22	0	Yes	6.45	1.1	RND	PCC	1.07	1.07	73.2	0.24	3	228	170
991302	SR 105	41.76	Unnamed to Grays Harbor	22	0	No		1.1	RND	PCC	0.46	0.46	23.2	0.34		77	
996115	SR 106	2.07	Unnamed to Skokomish R trib	16	0	Yes	5.62	1.1	RND	PCC	0.61	0.61	14.7	0.65	3.4	636	98
996116	SR 106	2.36	Unnamed to Skokomish R trib	16	33	Yes	3.03	1.1	RND	PCC	0.46	0.46	12.3	0	1.54	528	100
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0	Yes	13.03	1.1	RND	PCC	0.91	0.91	12.2	1.37	6	437	678
996383	SR 106	4.11	Unnamed to Hood Canal	16	0	Yes		1.1	RND	PCC	0.46	0.46	16.1	0	12		
997163	SR 106	5.45	Unnamed to Hood Canal	14	33	No		1.1	RND	PCC	0.46	0.46	0.9	0.55	5	14	
997166	SR 106	7.64	Unnamed to Hood Canal	14	0	Yes		1.1	RND	OTH	0.3	0.3	14.3	0	6.4		
997168	SR 106	7.71	Unnamed to Hood Canal	14	0	Yes		1.1	RND	PCC	0.46	0.46	12.4	1.15	6.5		
997176	SR 106	9.7	Unnamed to Hood Canal	14	33	No		1.1	RND	PCC	0.46	0.46	0.9	0	6	9	
997182	SR 106	11.57	Unnamed to Hood Canal	14.0136	33	Yes		1.1	RND	PCC	1.22	1.22	14.5	0	6.49		
990450	SR 106	12.3	Twano Cr	14.0134	33	Yes		1.1	BOX	CPC	1.22	1.22	12.3	0	2.8		

Appendix IIIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991246	SR 106	13.5	Twanoh Falls Cr	14.0132	33	Yes		1.1	BOX	PCC	1.22	1.22	10.5	0	1.18		
991245	SR 106	13.84	Unnamed to Hood Canal	14.0131	0	Yes		2.2	BOX	PCC	1.22	1.22	2.7	1.52			
991245	SR 106	13.84	Unnamed to Hood Canal	14.0131	0	Yes		1.2	BOX	OTH	1.22	1.04	14.9	1.1			
997184	SR 106	14.61	Unnamed to Hood Canal	14.0130	33	Yes		1.1	RND	OTH	0.76	0.76	11.7	0	2.4		
115 MC190	SR 106	14.72	Mulberg Cr	14	33	Yes	10.86	1.1	RND	PCC	0.61	0.61	12	0.16	9.92	273	317
115 MC218	SR 106	19.57	Unnamed to Hood Canal	14.0124	0	Yes		1.1	BOX	OTH	1.23	0.92	11.1	0.9	3		
997260	SR 106	19.84	Unnamed to Hood Canal	14	33	Yes		1.1	RND	PCC	0.46	0.46	13.2	0	3.2		
996412	SR 106 ROW	2.33	Unnamed to Unnamed	16	0	Yes	3.71			Rip rap erosion control						522	100
993043	SR 107	0.76	Unnamed to Little North R	24	67	Yes	9.56	1.1	RND	CAL	0.75	0.75	29.2	0	3.96	744	704
990911	SR 107	3.29	Unnamed to Preachers Sl	22	67	No		1.1	RND	PCC	0.61	0.61	19.5	0	1.23	80	
991727	SR 107	5.49	Unnamed to Chehalis R	22	0	No		1.1	RND	PCC	0.46	0.46	27.4	1	0	30	
993659	SR 108	0.18	Unnamed to EF Wildcat Cr	22	67	No	8	1.1	RND	PCC	0.76	0.76	16.4	0	1	192	287
997209	SR 108	4.27	Unnamed to MF Wildcat Cr	14	67	No		1.1	RND	PCC	0.61	0.61	15.5	0	2.59	109	
997210	SR 108	5.2	Unnamed to Skookum Cr trib	14	0	Yes		1.1	RND	PCC	0.76	0.76	38.4	0.64	4.53		
991237	SR 108	5.5	Unnamed to Skookum Cr	14	33	Yes	12.21	1.1	RND	PCC	0.91	0.91	26	0	4.2	2,814	3,568
990385	SR 108	5.54	Skookum Cr	14.0020	67	Yes	15.9	1.1	BOX	CPC	1.86	1.86	25.4	0	0.35	490	1,537
991672	SR 108	7.62	Unnamed to Skookum Cr	14.0000	0	Yes	12.58	1.1	RND	CST	1.52	1.52	16.1	0.51	1	1,230	1,774
997224	SR 108	9.35	Unnamed to Skookum Cr trib	14	67	Yes		1.1	RND	PCC	0.61	0.61	13.3	0	3.16		
997225	SR 108	9.47	Kamilche Cr	14.0022	67	Yes	19.11	1.1	RND	SPS	1.52	1.52	22	0.15	0.41	2,867	5,611
997229	SR 108	11.37	Unnamed to Skookum Cr	14	67	No		1.1	RND	PCC	0.91	0.91	17.4	0	2.59	132	
990921	SR 109	2.71	Unnamed to Grays Harbor	22	67	Yes		1.1	RND	PCC	0.46	0.46	15.8	0	1.15		
991835	SR 109	3.41	Unnamed to Grays Harbor	22	33	Yes	9.21	1.1	RND	PVC	0.61	0.61	42.4	0.21	1	200	330
994806	SR 109	13.39	Unnamed to Kurtz Sl	22	33	No		1.1	RND	OTH	0.83	0.83	48.3	0	2.7	70	
990920	SR 109	19.4	Unnamed to Connor Cr	21	67	Yes		1.1	RND	PCC	0.91	0.91	14.9	0	1.2		
997311	SR 109	21.12	Unnamed to Copalis R	21	33	No	6.46	1.1	RND	OTH	0.7	0.7	50	0		92	
997360	SR 109	24.23	Unnamed to Boone Cr trib	21	33	No	6.12	1.1	RND	PCC	0.91	0.91	16.6	0	3.3	99	74
997363	SR 109	24.56	Unnamed to Boone Cr	21	67	Yes	9.93	1.1	RND	CST	1.22	1.22	19.3	0	1.27	1,659	2,090
991265	SR 109	26.1	Unnamed to Pacific Ocean	21.0764	0	Yes	10.52	1.1	RND	SST	1.22	1.22	22	0.2	1.6	500	1,948
997780	SR 109	27.05	Unnamed to Pacific Ocean	21	67	Yes		1.1	RND	PCC	0.91	0.91	12.4	0	1.05		
997781	SR 109	27.41	Unnamed to Pacific Ocean	21	67	Yes		1.1	RND	PCC	0.91	0.91	12.6	0	4.6		
990138	SR 109	28.1	Elk Cr	21.0761	67	Yes	16.48	2.2	RND	PCC	0.61	0.61	19.7	0	0.99	5,561	14,666
990138	SR 109	28.1	Elk Cr	21.0761	67	Yes	16.48	1.2	BOX	PCC	1.22	1.22	20.2	0	2.5	5,561	14,666
997784	SR 109	30.26	Unnamed to Pacific Ocean	21	0	Yes		1.1	RND	OTH	0.76	0.76	0.9	0.17			
997786	SR 109	31.93	Unnamed to Moclips R	21	67	Yes		1.1	RND	PCC	0.76	0.76	24.2	0	1.49		
991272	SR 109	33.1	Unnamed to Pacific Ocean	21.0728	0	Yes	14.45	1.1	RND	PCC	1.52	1.52	45.7	0	1.9	3,972	4,665

Appendix IIIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991266	SR 109	33.4	Unnamed to Pacific Ocean	21	0	Yes	11.36	1.1	RND	PCC	0.91	0.91	29.3	0.4	3	482	548
997787	SR 109	33.87	Unnamed to Pacific Ocean	21.0727	33	Yes	12.26	1.1	RND	PCC	1.22	1.22	31.5	0	3.96	1,937	2,389
990922	SR 109	35.73	Unnamed to Pacific Ocean	21.0718	0	Yes	9.46	1.1	RND	PCC	0.61	0.61	18	0.24	5	575	270
997790	SR 109	36	Unnamed to Pacific Ocean	21	0	Yes		1.1	RND	CAL	0.91	0.91	0.9	0			
991271	SR 109	36.38	Unnamed to Pacific Ocean	21.0716	0	Yes	11.07	1.1	RND	PCC	1.07	1.07	16.5	0.21	5.9	816	1,482
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	67	Yes	12.18	1.1	RND	PCC	1.07	1.07	21	0	2.48	3,081	3,593
990923	SR 109	37.11	Unnamed to Pacific Ocean	21.0714	33	Yes		1.1	RND	PCC	0.91	0.91	31.7	0	1		
990924	SR 109	37.43	Unnamed to Pacific Ocean	21.0713	33	Yes		1.1	RND	PCC	0.91	0.91	16.9	0	4.1		
990927	SR 109	39.15	Unnamed to Pacific Ocean	21.0711	0	Yes	12.7	1.1	RND	PCC	1.07	1.07	30.5	0.58	4	871	1,840
990205	SR 112	5.17	Jansen Cr	19.0228	67	Yes		2.2	RND	PCC	1.82	1.82	17.1	0	1.7		
990205	SR 112	5.17	Jansen Cr	19.0228	67	Yes		1.2	RND	PCC	1.82	1.82	17.3	0	0.8		
990559	SR 112	6.95	Unnamed to Strait of Juan de Fuca	19	67	Yes		1.1	RND	PCC	1.83	1.83	13.5	0.25	1.6		
991739	SR 112	7.35	Olsen Cr	19.0227	67	Yes		2.2	RND	PCC	1.83	1.83	13.2	0	0.6		
991739	SR 112	7.35	Olsen Cr	19.0227	67	Yes		1.2	RND	PCC	1.83	1.83	13.4	0	0.89		
991259	SR 112	12.26	Unnamed to Hoko R	19.0148A	33	Yes		1.1	RND	PCC	0.61	0.61	16.1	0.2	1.6		
996684	SR 112	17.14	Unnamed to Clallam R	19	0	Yes	17.22	1.1	RND	CST	1.08	1.08	112.3	0	3.5	1,429	1,538
996687	SR 112	17.65	Unnamed to Clallam R	19	67	No		1.1	RND	CST	0.61	0.61	36.3	0	0.19	96	
996691	SR 112	19.36	Unnamed to Clallam R	19	0	No		1.1	RND	OTH	0.46	0.46	15.5	1.15	6	90	
991731	SR 112	21.1	Unnamed to Green Cr	19	0	Yes	9.81	1.1	RND	CST	1.52	1.52	19.8	0.98	1	418	305
996694	SR 112	21.64	Unnamed to Unnamed	19	33	No		1.1	RND	OTH	0.46	0.46	20.1	0.65	5.8	155	
996552	SR 112	23.07	Unnamed to Green Cr	19	67	No		1.1	RND	CST	0.61	0.61	25.4	0	2.4	170	
996554	SR 112	24.26	Unnamed to Pysht R	19	33	Yes		1.1	RND	PCC	0.46	0.46	15.3	0.04	3.2		
996555	SR 112	24.77	Unnamed to Pysht R	19	67	Yes		1.1	RND	PCC	0.64	0.64	17.1	0	0.99		
996556	SR 112	25.2	Unnamed to Pysht R	19	0	Yes		1.1	RND	OTH	0.76	0.76	40.9	0.5	1.5		
991730	SR 112	25.6	Unnamed to Pysht R	19	67	Yes	20.31	1.1	RND	PCC	0.76	0.76	19.3	0	1.6	3,347	4,003
991732	SR 112	29.12	Indian Cr	19.0112	0	Yes	15.98	1.1	RND	CST	0.61	0.61	39.6	0.03	3	2,567	3,623
990941	SR 112	29.7	Unnamed to Butler Cr	19	0	Yes	11.94	1.1	RND	PCC	0.76	0.76	44.2	0	1	1,351	1,739
991258	SR 112	29.71	Butler Cr	19.0112	0	Yes	13.48	1.1	RND	PCC	0.76	0.76	47.2	0.61	3	2,262	2,824
996424	SR 112	31.46	Unnamed to Jim Cr	19	0	Yes		1.1	RND	SST	0.91	0.91	46	0.4	8.3		
996426	SR 112	32.85	Unnamed to Joe Cr	19	33	No		1.1	RND	PCC	0.76	0.76	18.5	0	42	107	
996427	SR 112	33.02	Unnamed to Joe Cr	19	0	No		1.1	RND	CST	0.61	0.61	22.3	0.3	3.5	88	
990214	SR 112	33.21	Joe Cr	19.0109	67	Yes	19.37	2.2	RND	SPS	1.52	1.52	35.4	0.26	1	7,158	9,506
990214	SR 112	33.21	Joe Cr	19.0109	67	Yes	19.37	1.2	RND	SPS	1.52	1.52	35.4	0.26	1	7,158	9,506
996430	SR 112	34.12	Unnamed to Deep Cr	19	0	Yes		1.1	RND	PCC	0.76	0.76	0.9	0			
996431	SR 112	34.2	Unnamed to Deep Cr	19	33	Yes		1.1	RND	PCC	0.76	0.76	69.5	0	3.91		

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
996432	SR 112	34.28	Unnamed to Deep Cr	19	0	Yes		1.1	RND	PCC	0.76	0.76	99.8	0.35	7.1		
990715	SR 112	35.28	Unnamed to Strait of Juan de Fuca	19	0	No	10.93	1.1	RND	CST	1.21	1.21	17.8	0.45	2.7	182	237
996528	SR 112	44.32	Unnamed to Murdock Cr	19.0079	0	Yes		1.1	RND	OTH	0.91	0.91	28.8	1	4		
996529	SR 112	45.66	Unnamed to Murdock Cr	19	67	No		1.2	RND	OTH	0.61	0.61	16.6	0	1.7	137	
996529	SR 112	45.66	Unnamed to Murdock Cr	19	67	No		2.2	RND	OTH	0.61	0.61	16.6	0.05	1	137	
990304	SR 112	47.1	Nelson Cr	19.0032	0	Yes	20.42	1.1	BOX	CPC	1.83	1.53	28.6	0.02	2	4,684	2,334
990144	SR 112	48.49	Field Cr	19.0026	67	Yes	17.39	1.1	ARCH	PCC	5.5	2.7	44.1	0	0.89	8,926	15,945
990480	SR 112	49.48	Whiskey Cr	19.0020	33	Yes	12.73	1.1	BOX	CPC	2.13	1.83	51.8		4	2,724	4,409
996536	SR 112	49.62	EF Whiskey Cr	19.0022	33	Yes		1.1	RND	CST	1.22	1.22	35.5	0.05	3.1		
996539	SR 112	51.53	Itsa Cr	19	0	Yes		1.1	RND	OTH	0.46	0.46	19.8	0.4	2.5		
991738	SR 112	51.6	Uptha Cr	19	33	Yes		1.1	RND	OTH	0.61	0.61	22.3	0	4.8		
991660	SR 112	52.9	Nordstrom Cr	19.0011	67	Yes	11.46	1.1	RND	CST	1.52	1.52	32.2	0	0.8	4,855	5,648
991661	SR 112	53.5	Falls Cr	19.0012	33	Yes		1.1	RND	CST	1.52	1.52	42.8	0	0.8	942	606
991686	SR 112	56.5	Unnamed to Coville Cr	19.0003	0	Yes	12.94	1.1	BOX	CPC	2.44	2.44	51.8	0.06	5	2,770	3,099
996541	SR 112	57.05	Unnamed to Coville Cr	19	0	No		1.1	RND	PCC	0.61	0.61	49.9	0.4	3.9	150	
990092	SR 112	57.61	Coville Cr	19.0001	0	Yes	22.03	1.2	RND	PCC	1.22	1.22	39.9	0	2	15,710	26,640
990092	SR 112	57.61	Coville Cr	19.0001	0	Yes	22.03	2.2	RND	PCC	1.22	1.22	39.9	0	2	15,710	26,640
995802	SR 112	60.27	Unnamed to Elwha R	18	0	No		1.1	RND	CST	0.91	0.91	26.8	0.84	5.5	0	
995803	SR 112	60.71	Unnamed to Elwha R	18.0277	33	Yes		1.1	RND	CST	1.22	1.22	43.5	0.05	4.3		
996578	Yard	22.99	Unnamed to Green Cr	19	33	No		1.1	RND	PCC	0.61	0.61	16.7	0	2.3	199	
991733	SR 113	0.9	Unnamed to Beaver Cr	20	0	Yes	9.04	1.1	RND	CST	1.22	1.22	64	0.65	3	363	224
997103	SR 113	5.58	Unnamed to Beaver Cr	20.0328	67	Yes		1.1	RND	CST	2.9	2.9	19.9	0	2.4		
997105	SR 113	6.08	Unnamed to Unnamed	20	33	No		1.1	RND	CST	0.61	0.61	22.3	0	5.8	87	
996563	SR 113	6.55	Unnamed to Unnamed	19	0	No		1.1	SQSH	CST	1.29	1.17	0.9			125	
996571	SR 113	8.35	Unnamed to Pysht R	19	0	Yes		1.1	RND	CST	0.91	0.91	45.9	0.93	3.2		
996573	SR 113	9.7	Unnamed to Pysht R	19	0	Yes		1.1	RND	PCC	0.91	0.91	20.6	1.12	8.6		
996574	SR 113	9.81	Unnamed to Pysht R	19	33	Yes		2.2	RND	PCC	1.22	1.22	63.4	0	7.2		
996574	SR 113	9.81	Unnamed to Pysht R	19	33	Yes		1.2	RND	PCC	1.22	1.22	62.3	0	7.4		
995521	SR 116	1.64	Unnamed to Port Townsend Bay	17	0	Yes	4.71	1.1	RND	PCC	0.61	0.61	19	0.53	4	240	49
995908	SR 119	2.76	Dow Cr	16.0112	0	Yes		1.1	ELL	SPS	2.94	3.15	30.8	1.65	0.91		
995019	SR 119	3.98	Unnamed to Skokomish R	16	33	Yes		1.1	RND	CST	1.25	1.25	10.4	0	1.44		
995913	SR 119	5.66	Unnamed to Lk Cushman	16	33	No		1.1	RND	OTH	0.3	0.3	10.2	0.11	9.8	49	
995915	SR 119	7.02	Unnamed to Lk Cushman	16	0	Yes		1.1	RND	PCC	0.61	0.61	9.8	0.3	3.3		
995916	SR 119	7.8	Unnamed to Lk Cushman	16	0	Yes		1.1	RND	CST	1.25	1.25	17.9	3.4	3.3		
995917	SR 119	8.2	Unnamed to Big Cr	16	33	Yes		1.1	RND	CST	0.61	0.61	32.1	0.21	2.5		

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995918	SR 119	8.35	Unnamed to Big Cr	16	67	No		1.1	RND	CAL	0.61	0.61	12.2	0.13	2.8	70	
995924	SR 119	10.8	Unnamed to Lk Cushman	16	0	No		1.1	RND	CST	0.46	0.46	21.6	0.9	12	54	
990962	SR 121	4.04	Blooms Ditch	23.0684	67	Yes	13.79	1.1	RND	PCC	1.22	1.22	12.4	0	1.2	4,939	11,778
991939	SR 16	14.63	Unnamed to McCormick Cr	15	0	Yes	21.29	1.1	RND	PCC	0.76	0.76	131.1	0	4.04	1,791	1,958
991941	SR 16	14.86	McCormick Cr	15.0065	33	Yes	21.42	1.1	RND	OTH	1.22	1.22	67.1	0		2,401	3,305
991942	SR 16	15.02	Unnamed to McCormick Cr	15.0066	0	Yes	24.47	1.1	RND	CST	0.46	0.46	78.6	0	6.96	1,859	5,252
105 K051618a	SR 16	16.59	Goodnough Cr	15.0063	33	Yes		1.1	RND	CST	1.25	1.25	141.6	0.65	6.75		
996760	SR 16	19.28	Unnamed to Burley Cr	15	0	No		1.1	RND	OTH	0.61	0.61	73.3	0.82	9.84	115	
991866	SR 16	19.54	Unnamed to Burley Cr	15	0	Yes	2.58	1.1	RND	PCC	0.91	0.91	81.6	0.55	7.8		
998155	SR 16	20.06	Unnamed to Burley Cr	15	0	No		1.1	RND	OTH	0.91	0.91	56.5	0.25	5.13	180	
993576	SR 16	20.2	Unnamed to Burley Cr	15	0	Yes		1.1	RND	PCC	0.91	0.91	108.7	0	5.27		
991516	SR 16	20.36	Unnamed to Burley Cr	15	33	Yes	8.04	1.1	RND	PCC	1.07	1.07	45.7		3.5	817	308
991867	SR 16	20.44	Unnamed to Burley Cr	15	33	Yes		1.1	RND	PCC	0.91	0.91	76.2				
996752	SR 16	21.58	Unnamed to Burley Cr	15	0	Yes		1.1	RND	OTH	1.07	1.07	89.5	0	4.1		
990050	SR 16	22.7	Burley Cr	15.0056	67	Yes		1.1	RND	PCC	1.37	1.37	137.2	0	1		
990270	SR 16	27.1	Unnamed to Ross Cr	15.0210	0	Yes	26.45	1.1	RND	CST	1.22	1.22	140.2	0.1	2.5	4,778	12,226
990017	SR 16	28.1	Anderson Cr	15.0211	33	Yes	38.6	1.1	RND	PCC	1.52	1.52	63.8	0	1.8	9,295	49,945
996753	SR 16	28.1	Anderson Cr	15.0211	67	Yes	32.33	1.1	RND	PCC	1.52	1.52	44.1	0	0.32	9,295	49,945
991670	SR 16	28.6	Unnamed to Sinclair Inlet	15.0215	0	Yes		1.1	RND	OTH	0.76	0.76	162	0			
991944	SR 16 Ext 15 EB	15.21	McCormick Cr	15.0065	33	Yes	34.69	1.1	RND	CST	1.52	1.52	57.1	0	1.26	4,851	9,074
990366	SR 160	2.29	Salmonberry Cr	15.0188	33	Yes		1.1	SQSH	SPS	2.26	1.71	18.8	0.46	0.2		
991567	SR 160	4.5	Unnamed to Curley Cr	15.0186	0	Yes		1.1	RND	CST	0.76	0.76	53.4	0.32	4.5		
996954	SR 160	5.13	Unnamed to Sinclair Inlet	15.0183	33	No	3.69	1.1	RND	PCC	0.46	0.46	17.5	0	0.8	133	54
996955	SR 160	6.06	Unnamed to Puget Sound	15.0181	33	No		1.1	RND	PCC	0.46	0.46	35.6	0	1.1	129	
990970	SR 161	1.02	Unnamed to Mashel R	11	0	No		1.1	RND	PCC	1.22	1.22	12.6	0.75	1.2	176	
990971	SR 161	1.33	Unnamed to Mashel R	11	67	No		1.1	RND	PCC	0.46	0.46	14	0	2.2	112	
990972	SR 161	12.85	SF Muck Cr	11.0028	67	Yes		1.1	BOX	CPC	1.84	1.25	13	0.08	0.2		
995475	SR 161	14.89	Unnamed to Unnamed	11.0036	33	Yes		1.1	RND	PCC	0.91	0.91	16	0.4	1.1		
105 S011918a	SR 161	32.78	Unnamed to Hylebos Cr	10.0015	33	No		1.1	RND	PCC	0.61	0.61	41.7	0	7.36	113	
997974	SR 161	32.9	Unnamed to Unnamed	10	0	Yes		1.1	RND	PCC	0.61	0.61	32.5	0	5.3		
991214	SR 162	3.7	Unnamed to Puyallup R	10.0399	33	Yes		1.1	RND	CST	0.61	0.61	108	0			
991215	SR 162	4.82	Ball Cr	10.0405	67	Yes	14.01	2.2	RND	OTH	0.45	0.45	17.6	0	2.3	2,482	5,060
991215	SR 162	4.82	Ball Cr	10.0405	67	Yes	14.01	1.2	RND	OTH	0.45	0.45	18.4	0	1.5	2,482	5,060
105 R021121a	SR 162	11.04	Card Cr	10	67	Yes	23.48	1.1	BOX	CPC	0.95	0.63	9.2	0	1.85	2,908	6,148
105 R032517a	SR 162	12.42	Rauch Cr	10	67	Yes		1.1	RND	CST	0.76	0.76	14.2	0	2.04		

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105 R032918d	SR 162	12.44	Rauch Cr	10	67	Yes		1.1	RND	CST	0.76	0.76	14.2	0	3.08		
996291	SR 162	13.64	Unnamed to S Prairie Cr	10	67	Yes		1.2	RND	CST	0.95	0.95	19	0	0.94		
996291	SR 162	13.64	Unnamed to S Prairie Cr	10	67	Yes		2.2	RND	CST	0.95	0.95	18.6	0	0.32		
105 R033020A	SR 162	16.66	Unnamed to South Prairie Cr	10	67	Yes		1.2	RND	PCC	0.76	0.76	11.7	0	1.1		
105 R033020A	SR 162	16.66	Unnamed to South Prairie Cr	10	67	Yes		2.2	RND	PCC	0.76	0.76	11.9	0	0.8		
105 R040517a	SR 162	19.11	Unnamed to South Prairie Cr	10	33	Yes		1.1	RND	PCC	0.91	0.91	49.3	0.27	7.7		
105 R033018B	SR 165	19.76	Spiketown Cr	10.0449	67	Yes		1.1	BOX	CPC	1.2	1.25	10.6	0	1.37		
15.0208 0.00	SR 166	2.54	Unnamed to Sinclair Inlet	15.0208	33	Yes		1.1	RND	OTH	0.91	0.91	124.1	0			
15.0201 0.90	SR 166	4.52	Wilson Cr	15.0201	33	Yes		1.1	BOX	CPC	1.22	1.22	94.9	0	3		
991211	SR 167	10	Milwaukee Canal	10.0032	67	Yes		1.2	ARCH	SPS	4.31	2.7	64.2	0.1	-0.38		
991211	SR 167	10	Milwaukee Canal	10.0032	67	Yes		2.2	ARCH	SPS	4.31	2.7	64.3	0.13	-0.48		
996290	SR 167	11.37	Unnamed to Milwaukee Canal	10	67	Yes		1.1	BOX	CPC	1.55	1.23	77.9	0	0.5		
105 R050320a	SR 167 Ext 8 NB	12.05	Jovita Cr	10.0033	67	Yes	22.4	1.2	SQSH	CST	2.36	1.85	113.4	0	1.07	4,075	20,394
105 R050320a	SR 167 Ext 8 NB	12.05	Jovita Cr	10.0033	67	Yes	22.4	2.2	SQSH	CST	2.36	1.85	113.4	0	1.07	4,075	20,394
996288	SR 167 Ext 8 NB	11.72	Unnamed to Milwaukee Canal	10	33	Yes		1.1	RND	CST	1.37	1.37	88.5	0.29	1		
105 R050320b	SR 167Ext 8	10.67	Milwaukee Canal	10.0034	67	Yes		2.2	BOX	CPC	3.95	2.4	40.9	0	-0.2		
105 R050320b	SR 167Ext 8	10.67	Milwaukee Canal	10.0034	67	Yes		1.2	BOX	CPC	3.95	2.4	39.4	0	-0.2		
995526	SR 19	2.49	Unnamed to Ludlow Cr	17	33	No		1.1	RND	PCC	0.46	0.46	17.9	0	3.1	120	
995529	SR 19	2.93	Unnamed to Ludlow Cr	17	33	Yes		1.1	RND	OTH	0.38	0.38	18	0	4.2		
995532	SR 19	3.48	Unnamed to Ludlow Cr	17	33	Yes		1.1	RND	PCC	0.46	0.46	22.3	0.1	5.6		
990711	SR 19	4.3	Swansonville Cr	17.0205A	0	Yes	14.11	1.1	RND	PCC	0.61	0.61	24.4	0.76	2	3,178	1,986
991579	SR 19	6.82	Unnamed to EF Chimacum Cr	17	0	Yes		1.1	RND	PCC	0.61	0.61	19.4	0	6.2		
995741	SR 19	8.12	Unnamed to Chimacum Cr	17	33	Yes		1.1	RND	PCC	0.91	0.91	25	0	3.1		
995743	SR 20	0.65	Unnamed to Discovery Bay	17.0218	0	Yes	10.36	1.1	BOX	CPC	0.92	0.92	60.7	1.7	9	1,208	1,110
995745	SR 20	1.12	Unnamed to Discovery Bay	17	0	No		1.1	BOX	CPC	0.92	0.92	32.4	0.53	15.9	40	
995748	SR 20	1.39	Unnamed to Discovery Bay	17.0217	0	No		1.1	BOX	CPC	0.92	0.92	0.9	0.97		59	
995753	SR 20	3.67	Unnamed to Discovery Bay	17	0	Yes	7.41	1.1	BOX	CPC	0.92	0.92	44.2	1	2.6	1,027	335
995759	SR 20	11.63	Kah Tai Sl	17	33	Yes		1.1	RND	PCC	0.3	0.3	339.7	0			
997231	SR 3	2.11	Unnamed to Goldsborough Cr	14	0	No		1.1	RND	PCC	0.76	0.76	153	0		85	
997235	SR 3	4.67	Unnamed to Oakland Bay	14	0	Yes		1.1	RND	PCC	0.83	0.83	56.4	0	4.9		
997365	SR 3	7.16	Unnamed to Oakland Bay	14.0050	0	Yes	12.59	1.1	RND	PCC	0.46	0.46	17.5	0.6	6.6	661	1,351
997368	SR 3	7.59	Unnamed to Oakland Bay	14	0	Yes		1.1	RND	PCC	0.46	0.46	17.9	0.32	4.9		
997369	SR 3	7.96	Unnamed to Oakland Bay	14	33	No		1.1	RND	CAL	0.61	0.61	31.7	0.2	2.5	88	
997371	SR 3	8.28	Unnamed to Oakland Bay	14	33	Yes		1.1	RND	PCC	0.61	0.61	13.9	0.24	2.6		
991987	SR 3	21.29	Unnamed to Case Inlet	14	33	No		1.1	RND	CST	0.45	0.45	40.4	0	3.7	29	

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991795	SR 3	23.94	Unnamed to Hood Canal	14	0	Yes		1.1	RND	PCC	0.6	0.6	24.2		4.8		
991796	SR 3	24.71	Unnamed to Lynch Cove	14	0	Yes		1.1	RND	PCC	0.46	0.46	36	1.07	8		
996732	SR 3	24.91	Unnamed to Hood Canal	15	0	No	2.49	1.1	RND	PCC	0.3	0.3	0.9	0.05		137	43
996734	SR 3	25.15	Unnamed to Hood Canal	15.0123	0	Yes		1.1	RND	PCC	0.61	0.61	15.9	0.4	6.5		
991797	SR 3	25.31	Sweetwater Cr	15.0504	67	Yes	16.96	1.1	BOX	PCC	2.5	1.5	12.9	0	0.1	1,096	1,479
996735	SR 3	26.13	Unnamed to Union R	15	0	Yes		1.1	RND	OTH	0.61	0.61	0.9	0			
999626	SR 3	26.26	Mindy Cr	15	0	Yes		1.1	RND	CST	0.3	0.3	130	0			
991991	SR 3	26.4	Unnamed to Union R	15.0504	33	Yes	17.43	1.1	OTH	PCC	0.5	0.5	128	0		1,815	2,135
991993	SR 3	28	Gorst Cr	15.0216	0	Yes	10.49		Rip rap dam							1,277	894
991728	SR 3	29.63	Unnamed to Union R	15.0512	0	Yes	9.7	1.1	BOX	PCC	1.22	1.22	13.7	0.34	2.5	915	1,162
990168	SR 3	32.1	Gorst Cr	15.0216	33	Yes	10.49	1.1	BOX	CPC	1.25	1.25	53	0	1.96	1,277	894
991585	SR 3	34.27	Unnamed to Gorst Cr	15.0217	33	Yes		1.1	RND	PCC	0.91	0.91	68.7	0	4.7		
996508	SR 3	38.41	Unnamed to Puget Sound	15.0226	0	Yes		1.1	RND	PCC	1.07	1.07	359.2	1.3	2.2		
996796	SR 3	39.45	Unnamed to Dyes Inlet	15	0	No		1.1	RND	CST	0.61	0.61	85.2	0.57	3.8	137	
15.0229 0.10	SR 3	40.96	Chico Cr	15.0229	67	Yes	48	1.2	BOX	CPC	2.44	2.44	122.3	0	0.4	35,048	265,684
15.0229 0.10	SR 3	40.96	Chico Cr	15.0229	67	Yes	48	2.2	BOX	CPC	2.45	2.45	119.7		0.4	35,048	265,684
996742	SR 3	41.52	Unnamed to Dyes Inlet	15.0241	0	Yes		1.1	RND	CST	1.07	1.07	99.8		6		
996745	SR 3	41.81	Unnamed to Dyes Inlet	15	0	Yes		1.1	RND	CST	0.61	0.61	93.1		11.4	541	
996747	SR 3	42.21	Unnamed to Dyes Inlet	15.0243	0	Yes		1.1	RND	CST	0.91	0.91	88.2		9.66		
996748	SR 3	42.56	Unnamed to Dyes Inlet	15.0244	0	Yes		1.1	RND	OTH	1.22	1.22	223.9	0	7.3		
996856	SR 3	43.58	Koch Cr	15.0245	0	No		1.1	OTH	CST	1.07	1.07	0.9	0.7		48	
990708	SR 3	44.62	Unnamed to Strawberry Cr	15.0247	0	Yes	15.89	1.1	RND	CST	1.22	1.22	93.9	1	3.5	705	843
15.0246 0.96	SR 3	44.8	Strawberry Cr	15.0246	67	Yes	16.33	1.1	RND	CPC	1.68	1.68	0.9			1,998	3,525
993013	SR 3	46.09	Unnamed to Clear Cr	15	33	Yes	10.35	1.1	RND	CAL	0.61	0.61	112.7	0	5.6	407	2,460
996801	SR 3	46.82	Unnamed to Clear Cr	15	0	Yes		1.1	RND	CAL	0.46	0.46	100.8	0.9	8.15		
996803	SR 3	47.72	Unnamed to Clear Cr	15.0254	67	Yes		1.1	RND	CST	1.37	1.37	65.5				
996804	SR 3	49.48	Big Scandia Cr	15.0280	33	Yes	16.5	1.1	RND	CST	1.37	1.37	66.4	0.25	1.3	1,924	1,874
991241	SR 3	50.85	SF Johnson Cr	15.0282	0	Yes	6.19	1.1	RND	CST	0.91	0.91	182.9	0.18	8	200	147
990218	SR 3	50.94	MF Johnson Cr	15.0283	0	Yes	14.43	1.1	RND	CST	1.52	1.52	121.9	0	5	252	348
991744	SR 3	52.21	Johnson Cr	15.0283	0	Yes	9.06	1.1	RND	CST	0.92	0.92	67.4	0.22	2.87	1,050	333
991242	SR 3	57.23	Unnamed to Kinman Cr	15	0	Yes		1.1	RND	PCC	0.76	0.76	27.3	0	2.64		
991613	SR 3	57.87	Unnamed to Hood Canal	15	33	Yes		1.1	RND	PCC	0.61	0.61	30.6	0.04	2.91		
991240	SR 3	58.21	Unnamed to Hood Canal	15	0	Yes	12.71	1.1	RND	PCC	0.61	0.61	27.4	0.03	4	1,689	1,866
990395	SR 3	58.49	Spring Cr	15.0364	0	Yes	13.37	1.1	RND	PCC	0.91	0.91	33.2	0	1.79	1,441	1,578
996810	SR 3	59.39	Unnamed to Hood Canal	15.0363	0	No		1.1	RND	OTH	0.61	0.61	80.9	0	5.68	115	

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991612	SR 3	59.52	Unnamed to Hood Canal	15.0361	0	Yes		1.1	RND	PCC	0.61	0.61	40.1	0	6.4		
996811	SR 3	59.55	Unnamed to Unnamed	15.0362	0	Yes		1.1	RND	PCC	0.61	0.61	36.6	0	5.17		
996795	SR 3 on-ramp	40.99	Unnamed to Chico Cr	15.0240	33	Yes	12.86	1.1	RND	CAL	0.91	0.91	53.8	0	2.56	1,215	682
991907	SR 3 ROW	40.97	Unnamed to Chico Cr	15.0240	33	Yes	16.26	1.1	RND	CST	0.91	0.91	14.6	0.5	2.2	1,587	876
996794	SR 3 SB off-ramp	41.08	Unnamed to Chico Cr	15.0240	0	Yes	8.43	1.1	RND	OTH	0.61	0.61	129.9	0	3.8	1,019	638
996798	SR 3 on-ramp	39.13	Unnamed to Dyes Inlet	15.0228	0	Yes		1.1	RND	CST	0.61	0.61	156.3	1.73	6.4		
996699	SR 300	2.36	Unnamed to Union R	15	67	Yes		1.1	RND	OTH	1.22	1.22	13.5	0.2	2.01		
996700	SR 300	2.38	Unnamed to Union R	15	67	No		1.1	RND	PCC	0.46	0.46	15.9	0	2.45	89	
991559	SR 302	0.9	Unnamed to North Bay	15.0001	0	Yes	11.44	1.1	RND	CST	0.76	0.76	25.9	0.64	1	483	576
996763	SR 302	1.25	Unnamed to Coulter Cr	15	0	No		1.2	RND	CST	0.46	0.46	31	0.36	1.52	128	
996763	SR 302	1.25	Unnamed to Coulter Cr	15	0	No		2.2	RND	CST	0.46	0.46	30.8	0.32	1.4	128	
996765	SR 302	1.86	Unnamed to North Bay	15	0	Yes		1.1	RND	OTH	0.46	0.46	11.5	0.06	3.8		
991522	SR 302	2.1	Unnamed to North Bay	15	67	Yes		1.1	RND	PCC	0.91	0.91	14	0	0.56		
991239	SR 302	2.36	Unnamed to Case Inlet	15	0	Yes	5.01	1.1	RND	CST	0.46	0.46	14.2	0.55	2.25		
991523	SR 302	2.48	Unnamed to North Bay	15	0	Yes		1.1	RND	CST	0.91	0.91	16.4	0.34	4.6		
991526	SR 302	4.6	Unnamed to Case Inlet	15	0	No		1.1	RND	OTH	0.61	0.61	19.2	0.6	6.9	171	
991527	SR 302	5.5	Unnamed to Rocky Bay	15	33	Yes		1.1	RND	PCC	1.37	1.37	57.8	0	4.8		
15.0051 0.10	SR 302	11.36	Little Minter Cr	15.0051	67	Yes		1.1	BOX	CPC	1.83	1.22	17.1				
15.0051 0.20	SR 302	11.42	Little Minter Cr	15.0051	67	Yes		1.1	BOX	CPC	1.83	1.25	16.8				
996783	SR 302	15.95	Unnamed to Henderson Bay	15	33	Yes		1.1	RND	PCC	0.76	0.76	63.1	0	1.8		
105 K051518a	SR 302	16.15	Goodnough Cr	15.0063	33	Yes		1.1	RND	PCC	1.38	1.38	63.6	0	4.1		
996785	SR 302	16.44	Unnamed to Henderson Bay	15	0	No		1.1	RND	PCC	0.31	0.31	122	2		77	
990345	SR 302SP PURDY	15.8	Purdy Cr	15.0060	67	Yes		1.1	BOX	CPC	1.85	1.85	24.8	0	0.5		
990997	SR 303	4.41	Unnamed to Steele Cr	15	67	Yes		1.2	RND	OTH	0.91	0.91	64.1	0	0.87		
990997	SR 303	4.41	Unnamed to Steele Cr	15	67	Yes		2.2	RND	OTH	0.91	0.91	65.7	0	0.93		
994086	SR 303 off-ramp	6.62	Hoot Cr	15.0256C	33	Yes		2.2	RND	CST	0.91	0.91	0.9	0			
994086	SR 303 off-ramp	6.62	Hoot Cr	15.0256C	33	Yes		1.2	RND	CST	0.91	0.91	36.7	0	1.72		
994085	SR 303 off-ramp	6.77	Hoot Cr	15.0256C	67	Yes		1.2	RND	CST	0.91	0.91	19	0	0.05		
994085	SR 303 off-ramp	6.77	Hoot Cr	15.0256C	67	Yes		2.2	RND	CST	0.91	0.91	18.6	0	0.3		
994320	SR 305	0.38	Unnamed to Eagle Harbor	15.0324	0	Yes	26.26	1.1	RND	OTH	1.22	1.22	103.8	0.06	5	1,873	9,715
994324	SR 305	0.73	Unnamed to Eagle Harbor	15.0324	0	Yes	21.41	1.1	RND	PCC	0.76	0.76	49.7	1.1	2.29	1,151	8,846
994325	SR 305	2.44	Unnamed to Murden Cove	15.0321	33	Yes	29.44	1.1	BOX	CPC	1.52	1.22	46.4	0	0.32	2,358	3,715
994326	SR 305	3.73	Unnamed to Manzanita Bay	15.0344	0	Yes		1.1	RND	PCC	0.76	0.76	39.7	0.65	5		
991958	SR 305	7.28	Klebeal Cr	15.0296	0	Yes	29.48	1.1	RND	PCC	1.22	1.22	61.3	0	2.46	3,767	8,345
994327	SR 305	8.94	Unnamed to Liberty Bay	15.0293	0	Yes		2.2	RND	PCC	0.91	0.91	88.7	2.35	0.81		

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994327	SR 305	8.94	Unnamed to Liberty Bay	15.0293	0	Yes		1.2	RND	PCC	0.91	0.91	89.3	0.86	2.51		
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0	Yes	24.15	1.2	RND	PCC	0.91	0.91	70.1	0.3		2,803	7,364
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0	Yes	24.15	2.2	RND	PCC	0.91	0.91	70.1	0.15		2,803	7,364
991742	SR 305	9.88	Bjorgen Cr	15.0290	0	Yes	17.21	1.1	RND	PCC	0.91	0.91	39.6	1.63	1	1,520	1,793
991855	SR 305	12.59	Unnamed to SF Dogfish Cr	15	67	Yes		1.1	RND	PCC	0.46	0.46	24.1	0	1.78		
996943	SR 305 ROW	12.16	SF Dogfish Cr	15	33	Yes		1.1	RND	PCC	0.46	0.46	11.1	0	0.8		
990123	SR 307	0.49	Dogfish Cr	15.0285	33	Yes	27.97	1.1	RND	PCC	1.21	1.21	14.7	0.15	0.75	7,891	6,798
991998	SR 307	0.98	Unnamed to Unnamed	15	0	Yes	5.99	1.1	RND	PCC	0.3	0.3	9.5	0.32	5.46	480	287
991997	SR 307	0.98	Unnamed to Unnamed	15	0	Yes	5.99	1.1	RND	PCC	0.45	0.45	16.5	0	5.2	480	287
991999	SR 307	1.34	Unnamed to Dogfish Cr	15.0286	67	Yes	20.92	1.1	RND	CST	1.21	1.21	21.4	0.6	0.32	3,372	3,834
991572	SR 307	1.45	Unnamed to Unnamed	15	33	Yes	16.41	1.1	RND	CST	1.21	1.21	33.8	0.35	2.15	1,024	1,406
991851	SR 307	2.5	Unnamed to Gamble Cr	15.0358	0	Yes	9.23	1.1	RND	OTH	0.45	0.45	336	0	3.5	220	114
996931	SR 308	0.3	Clear Cr	15.0249	33	Yes		1.1	RND	PCC	0.91	0.91	34.1	0	1.67		
990235	SR 308	0.94	Big Scandia Cr	15.0280	33	Yes	23.62	1.1	RND	CST	1.83	1.83	47	0	1.26	5,548	7,340
15.0280 1.00	SR 308	1.15	Big Scandia Cr	15.0280	67	Yes	21	1.1	RND	SPS	1.85	1.85	89.1	0	2.6	6,430	9,257
992008	SR 308	1.33	Little Scandia Cr	15.0279	0	Yes	16.06	1.1	RND	CST	1.05	1.05	100.3	0.1	2.76	1,524	1,579
991000	SR 308	2.16	Unnamed to Puget Sound	15.0278	0	Yes	19.25	1.1	RND	PCC	0.76	0.76	34.1	0	2.43	1,576	1,893
996933	SR 308	2.41	Unnamed to Liberty Bay	15	0	No		1.1	RND	PCC	0.46	0.46	21.8	0	3.4	110	
996932	SR 308	2.57	Unnamed to Liberty Bay	15.0277	0	Yes		1.1	RND	PCC	0.61	0.61	26.6	0.6	5.5		
996617	SR 410	14.04	Fennel Cr	10.0406	67	Yes		2.2	BOX	CPC	1.83	1.83	51	0	0.2		
996617	SR 410	14.04	Fennel Cr	10.0406	67	Yes		1.2	BOX	CPC	1.83	1.83	51	0	0.2		
996618	SR 410	17.26	Fennel Cr	10.0406	67	Yes		1.1	RND	PCC	0.76	0.76	22.3	0	0.4		
996619	SR 410	21.73	Unnamed to LkTapps Canal	10	0	Yes		1.1	RND	PCC	0.91	0.91	26.9	0.1	1.1		
125 1502W11B	SR 507	8.22	Unnamed to Skookumchuck R	23	33	Unk		1.1	RND	PCC	1.25	1.25	0.9	0	1		
997703	SR 507	18.9	Unnamed to McIntosh Lk	13	67	Yes		1.1	RND	PCC	1.22	1.22	28.4	0	1		
995891	SR 507	25.96	Unnamed to Yelm Cr	11	67	Yes		1.1	RND	OTH	1.07	1.07	54.2	0	0.7		
995893	SR 507	30.61	Schorno Cr	11.0055	33	Yes		1.1	RND	SPS	2.25	2.25	29.4	0	1.1		
991049	SR 507	36.35	Lacamas Cr	11.0022	33	Yes	37.62	2.3	SQSH	CST	1.83	1.14	27	0	1.45	24,287	82,900
991049	SR 507	36.35	Lacamas Cr	11.0022	33	Yes	37.62	3.3	SQSH	CST	1.83	1.14	27.3	0	0.58	24,287	82,900
991049	SR 507	36.35	Lacamas Cr	11.0022	33	Yes	37.62	1.3	SQSH	CST	1.83	1.14	26.1	0	0.6	24,287	82,900
990656	SR 510	5.64	Unnamed to McAllister Cr	11.0328	67	Yes	9.18	1.1	RND	PCC	0.61	0.61	100.6	0	1	1,449	1,790
991052	SR 510	6.28	Unnamed to McAllister Cr	11	0	No		1.1	RND	OTH	0.61	0.61	31.3	0.5	5.5	170	
991051	SR 510	12.97	Thompson Cr	11.0041	33	No		1.1	RND	PCC	1.37	1.37	16.1	0.18	1.4	115	
997920	SR 512	3.3	Unnamed to Clover Cr	12.0015	67	Yes		1.1	RND	CST	1.22	1.22	71.8	0.22	0.6		
990412	SR 512	4.17	Swan Cr	10	67	Yes		1.1	RND	CST	1.52	1.52	63	0	0.49		

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997605	SR 7	17.38	Unnamed to Alder Lk	11	0	No		1.1	RND	PCC	0.91	0.91	29.2	0	9	31	
997609	SR 7	18.28	Unnamed to Alder Lk	11	33	No		1.1	RND	PCC	0.61	0.61	24.6	0	2.7	7	
997612	SR 7	18.5	Unnamed to Alder Lk	11	0	No		1.1	RND	PCC	0.76	0.76	27	0	6	33	
990677	SR 7	19.15	Unnamed to Alder Lk	11	0	Yes		1.1	RND	PCC	0.76	0.76	35.8	0.48	12.9		
997615	SR 7	19.79	Unnamed to Alder Lk	11	33	No		1.1	RND	PCC	0.61	0.61	35.7	0	7.8	185	
990679	SR 7	21.3	Unnamed to Alder Lk	11.0136	33	Yes		2.2	RND	PCC	0.91	0.91	36.6	0.05	4		
990679	SR 7	21.3	Unnamed to Alder Lk	11.0136	33	Yes		1.2	RND	PCC	0.91	0.91	36.6	0.05	4		
990680	SR 7	21.41	Unnamed to Alder Lk	11	33	Yes		1.1	RND	PCC	0.61	0.61	25.2	0.32	2.94		
990681	SR 7	21.58	Unnamed to Alder Lk	11	67	Yes		1.1	RND	PCC	0.91	0.91	57.9	0.02	1.8		
990682	SR 7	21.68	Unnamed to Alder Lk	11.0133	67	Yes		1.1	BOX	PCC	1.52	1.52	37.3	0	4.7		
990683	SR 7	22.83	Unnamed to La Grande Reservoir	11.0130	33	Yes		1.1	RND	PCC	0.76	0.76	25.9	0.2	3		
990684	SR 7	23.32	Unnamed to La Grande Reservoir	11.0129	0	No		1.1	BOX	CPC	1.28	0.93	48	2	12.44	6	
990685	SR 7	24.83	Unnamed to Nisqually R	11.0128	0	No		1.1	RND	CST	0.76	0.76	26	0.5	7	0	
997623	SR 7	28.02	Unnamed to Mashel R	11	33	No		1.1	RND	SST	0.61	0.61	36.1	0.32	0.5	75	
990686	SR 7	32.4	Unnamed to Silver Lk	11	67	Yes		1.1	RND	PCC	0.46	0.46	18.4	0.12	0.59		
997628	SR 7	33.52	Unnamed to Cranberry Lk	11	67	No		1.1	RND	PCC	0.46	0.46	13.4	0	2.31	136	
991225	SR 7	37.5	Unnamed to South Cr	11.0032	67	Yes		1.1	SQSH	CST	1.39	0.99	23.3	0	4		
990688	SR 7	38.12	Unnamed to South Cr	11	67	Yes		1.1	RND	PCC	0.61	0.61	23.1	0	0.51		
990297	SR 7	41.17	Muck Cr	11.0018	67	Yes	24.61	1.2	BOX	CPC	1.52	1.55	26.1	0	1.1	8,388	31,441
990297	SR 7	41.17	Muck Cr	11.0018	67	Yes	24.61	2.2	BOX	CPC	1.52	1.55	26.3	0	1	8,388	31,441
991229	SR 702	4.53	Unnamed to Nisqually R trib	11.0058	67	Yes		1.1	RND	CST	0.91	0.91	16.5	0	1.5		
995899	SR 702	5.6	Unnamed to Horn Cr	11	67	No		1.1	RND	PCC	0.61	0.61	17.2	0	1.9	10	
995476	SR 706	0.2	Unnamed to Nisqually R	11	33	Yes		1.1	RND	PCC	1.07	1.07	32.1	0.62	1.9		
991226	SR 706	1.75	Unnamed to Nisqually R	11	67	Yes		1.1	BOX	CPC	1.83	1.54	19.7	0.09	1.3		
991235	SR 706	6.01	Unnamed to Nisqually R	11	67	Yes		1.1	RND	PCC	0.91	0.91	20.5	0.09	2.5		
991637	SR 706	8	Unnamed to Nisqually R	11	33	Yes		1.1	SQSH	CST	1.5	0.96	36.1	0	4.5		
995074	SR 706	10.43	Unnamed to Nisqually R	11.0224	0	Yes		2.2	RND	PCC	0.91	0.91	15.4	0.7	0.8		
995074	SR 706	10.43	Unnamed to Nisqually R	11.0224	0	Yes		1.2	RND	PCC	0.91	0.91	15.1	0.55	1.8		
995095	SR 706	10.45	Unnamed to Unnamed	11	67	Yes		1.1	RND	PCC	0.76	0.76	25.6	0	1.3		
995077	SR 706	11.62	Unnamed to Nisqually R	11	0	No		1.1	RND	PCC	1.22	1.22	18.7	2.2	10	169	
991063	SR 8	0.1	Unnamed to Cloquallum Cr	22	33	Yes	9.5	1.1	RND	CST	0.91	0.91	72.8	0	1.5	234	656
993723	SR 8	1.27	Unnamed to Cloquallum Cr	22	67	Yes	13.28	1.1	RND	PCC	0.46	0.46	50.8	0	0.6	767	1,420
993727	SR 8	1.37	Unnamed to Cloquallum Cr trib	22	33	No	8.45	1.1	RND	PCC	0.46	0.46	51.1	0	0.08	155	196
993724	SR 8	3.16	Unnamed to Wildcat Cr	22	0	Yes	11.91	1.1	RND	CST	1.3	1.3	62.3	0	5.5	1,393	1,085
993725	SR 8	3.51	Unnamed to Wildcat Cr	22	0	Yes	10.25	1.1	RND	CST	0.91	0.91	51.8	0	10	346	596

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991066	SR 8	3.72	Unnamed pond	22	0	Yes	14.17	1.1	RND	CST	0.76	0.76	72	0.38	0.3	418	4,339
22.0507 0.10	SR 8	5	MF Wildcat Cr	22.0507	33	Yes		1.1	BOX	CPC			0.9			22,169	
990770	SR 8	6.1	Unnamed to EF Wildcat Cr	22	67	Yes	8.77	1.1	RND	CST	0.91	0.91	46.1	0	0.6	359	438
990133	SR 8	6.3	EF Wildcat Cr	22.0503A	33	Yes	52.71	1.2	BOX	CPC	3.06	2.43	90	0.06	0.3	21,924	70,277
990133	SR 8	6.3	EF Wildcat Cr	22.0503A	33	Yes	52.71	2.2	BOX	PCC	2.87	2.44	89.9	0.06	0.25	21,924	70,277
990773	SR 8	9.1	Unnamed to Mox Chehalis Cr	22	33	Yes	20.63	1.1	BOX	CPC	1.22	1.22	42.8	0	0.81	2,481	2,311
990693	SR 8	12.15	Unnamed to Kennedy Cr	14	0	Yes	3.61	1.1	BOX	PCC	1.22	0.91	30.5	1.28	3	1,770	2,205
990694	SR 8	12.16	Unnamed to Kennedy Cr	14	0	Yes	3.61	1.1	BOX	PCC	1.22	0.91	31.1	0	6	1,770	2,205
997197	SR 8	13.25	Unnamed to Kennedy Cr	14	33	Yes		1.1	BOX	PCC	1.83	1.22	38	0	1.93		
990695	SR 8	13.25	Unnamed to Kennedy Cr	14	0	Yes		1.1	BOX	PCC	1.83	1.22	50.4	0	6.15		
990692	SR 8	13.51	Unnamed to Kennedy Cr	14	0	Yes	3.54	1.2	BOX	PCC	1.52	1.22	42	0.12	4.77	1,354	1,361
997198	SR 8	13.51	Unnamed to Kennedy Cr	14	0	Yes	3.23	2.2	BOX	PCC	1.52	1.22	43.7	0.29	4.41	1,354	1,361
990692	SR 8	13.51	Unnamed to Kennedy Cr	14	0	Yes	3.54	2.2	BOX	PCC	1.52	1.22	42	0.2	4.77	1,354	1,361
997198	SR 8	13.51	Unnamed to Kennedy Cr	14	0	Yes	3.23	1.2	BOX	PCC	1.52	1.22	43.7	0.29	4.41	1,354	1,361
990696	SR 8	14.09	Unnamed to Kennedy Cr	14	33	Yes	2.72	1.1	BOX	PCC	1.83	1.22	51	0	1.27	1,217	707
990697	SR 8	14.8	Unnamed to Kennedy Cr	14	67	Yes	1.65	1.2	RND	PCC	0.76	0.76	48.2	0.03	0.7	395	143
990697	SR 8	14.8	Unnamed to Kennedy Cr	14	67	Yes	1.65	2.2	RND	PCC	0.76	0.76	48.1	0	0.87	395	143
990698	SR 8	14.93	Unnamed to Kennedy Cr	14	33	Yes		1.1	RND	PCC	0.76	0.76	60.4	0	0.81		
990700	SR 8	15.19	Unnamed to Kennedy Cr	14	0	Yes	2.94	1.1	BOX	PCC	1.83	0.91	60.1	0	5.21	1,260	962
997201	SR 8	15.35	Kennedy Cr	14.0012	67	Yes		1.1	BOX	PCC	1.83	1.22	50.6	0	0.71		
997206	SR 8	17.07	Unnamed to Perry Cr	14	33	No		1.1	RND	PCC	0.61	0.61	47.8	0.18	3.62	75	
990703	SR 8	17.17	Unnamed to Perry Cr	14	33	Yes	3.81	1.1	BOX	PCC	1.83	1.22	61	0	2.5	2,483	3,045
997207	SR 8	18.28	Unnamed to Perry Cr	14	67	No		1.1	RND	PCC	0.91	0.91	16.5	0	1.58	188	
990704	SR 8	18.28	Unnamed to Perry Cr	14	0	No		1.1	RND	PCC	0.91	0.91	24.9	0.96	12.76	156	
990705	SR 8	18.61	Unnamed to Perry Cr	14	0	No		1.1	RND	PCC	0.91	0.91	92.3	0.3	11.39	30	
990706	SR 8	18.99	Unnamed to Perry Cr	14	0	No		1.1	RND	PCC	0.91	0.91	15.2	0.75	2.5	149	
990707	SR 8	18.99	Unnamed to Perry Cr	14	0	No		1.1	RND	PCC	0.91	0.91	47.6	1	12.32	90	
996275	SR 99	0.44	Unnamed to Hylebos Cr	10	67	Yes		1.1	BOX	CPC	1.22	1.25	35.5	0	0		
992493	US 101	68.99	Unnamed to Lower Salmon Cr	24.0106	67	Yes	17.2	2.2	RND	PCC	0.91	0.91	34.1	0.24	0.17	4,606	7,163
992493	US 101	68.99	Unnamed to Lower Salmon Cr	24.0106	67	Yes	17.2	1.2	RND	PCC	0.76	0.76	34.8	0	1	4,606	7,163
992510	US 101	71.02	Joe Cr	24.0129	67	Yes	24.98	2.2	BOX	CPC	1.52	1.52	50.5	0.25	1.04	6,682	16,917
992510	US 101	71.02	Joe Cr	24.0129	67	Yes	24.98	1.2	BOX	CPC	1.52	1.52	50.5	0.25	1.04	6,682	16,917
992526	US 101	73.35	Unnamed to North R trib	24	33	Yes	11.67	1.1	ARCH	CPC	0.9	1	51.2	0	2.3	1,405	991
992534	US 101	75.05	Unnamed to Little North R	24	0	Yes	12.23	1.1	RND	CST	0.91	0.91	56.8	0.44	2.55	831	676
991908	US 101	76.48	Mosquito Cr	24.0137	67	Yes	20.36	1.1	RND	SST	1.22	1.22	38.7	0	1.19	3,563	5,820

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
993670	US 101	80.4	Unnamed to Chehalis R	22	0	No		1.1	RND	CST	0.91	0.91	84.9	0	1.84	150	
993673	US 101	84.15	Unnamed to Grays Harbor	22	0	Yes	13.94	1.1	OTH	OTH	0.61	0.61	1438	0		2,045	743
993674	US 101	89.48	Unnamed to Hoquiam R	22	67	Yes	7.41	1.1	RND	PCC	0.61	0.61	31.1	0	0.5	462	224
993681	US 101	89.48	Unnamed to Hoquiam R	22	67	Yes	6.25	1.1	RND	CST	0.61	0.61	20	0.5		498	224
993679	US 101	90.73	Unnamed to Hoquiam R	22	33	Yes	17.35	1.1	RND	PCC	0.61	0.61	54.3		2	323	4,450
993695	US 101	93.49	Unnamed to WF Hoquiam R	22	33	Yes	11.5	1.1	RND	PCC	0.91	0.91	23.1	0	4.5	300	294
990732	US 101	93.79	Unnamed to WF Hoquiam R	22	0	Yes	11.16	1.1	RND	PCC	0.91	0.91	24.8	0	4	940	381
993698	US 101	95.46	Unnamed to WF Hoquiam R	22	0	No		1.1	RND	CST	0.61	0.61	27	0.2	1.7	125	
991691	US 101	96.87	Unnamed to WF Hoquiam R	22	0	No		1.1	RND	PCC	0.91	0.91	18.3	0.18	5	50	
993702	US 101	98.47	Unnamed to WF Hoquiam R	22	67	Yes	11.02	1.1	RND	PCC	0.91	0.91	24.5	0	1.7	1,037	1,098
993704	US 101	99.45	Unnamed to WF Hoquiam R	22	67	Yes	14.7	1.1	RND	PCC	0.91	0.91	24.6	0	1.8	1,144	855
990729	US 101	100.9	Unnamed to SB Big Cr trib	22	0	Yes	17.97	1.1	RND	PCC	0.61	0.61	39.6	0.21	3	1,202	2,895
990032	US 101	102.14	Unnamed to SB Big Cr	22.0059	67	Yes	25.82	1.1	SQSH	CST	1.77	1.09	22.1	0	-0.5	7,870	19,327
993714	US 101	107.42	Mopang Cr	22.0044	67	Yes	10.24	1.1	RND	PCC	0.99	0.99	31.7	0	1.1	400	545
993717	US 101	110.84	Unnamed to Stevens Cr	22	33	Yes	11.14	1.1	RND	PCC	0.61	0.61	33.2	0	4.6	404	324
990731	US 101	111.34	Unnamed to Stevens Cr	22.0064A	33	Yes	14.44	1.1	OTH	OTH	1.22	1.22	22.6	0	2.2	1,162	3,052
991690	US 101	111.9	Unnamed to Stevens Cr	22	67	Yes		1.1	BOX	PCC	1.72	1.23	28.2	0	1.2		
997066	US 101	117.38	Unnamed to Unnamed	20	33	Yes		1.1	RND	CST	0.61	0.61	26.1	0	2.72		
997301	US 101	118.09	Unnamed to Cook Cr	21	67	Yes		1.1	RND	PCC	0.76	0.76	32.2	0	-0.34		
997302	US 101	118.35	Unnamed to Unnamed	21	33	Yes		1.1	RND	PCC	0.76	0.76	42.2	0.26	7.1		
997304	US 101	119.6	Unnamed to Skunk Cr	21	33	Yes		1.1	RND	PCC	0.61	0.61	14.7	0	-0.75		
997305	US 101	120.33	Unnamed to Cook Cr	21	67	Yes		1.1	RND	PCC	0.61	0.61	24.3	0	1.8		
997307	US 101	121.68	Unnamed to Hathaway Cr	21	67	Yes		1.1	RND	PCC	0.76	0.76	25.4	0	1.5		
990182	US 101	122.4	Hathaway Cr	21.0457	33	Yes		1.1	BOX	PCC	1.22	1.22	19.5	0.09	2.2		
997309	US 101	122.92	Unnamed to McCalla Cr	21	0	Yes		1.1	RND	PCC	0.76	0.76	22	0.38	0.73		
990276	US 101	123.05	McCalla Cr	21.0456	33	Yes	9.57	1.1	RND	PCC	0.91	0.91	18.5	0.12	1.2	861	1,118
990537	US 101	125.2	Unnamed to Quinault R	21	33	Yes		1.1	RND	PCC	0.91	0.91	25.1	0.01	-0.04		
990538	US 101	125.25	Unnamed to Unnamed	21	33	No		1.1	RND	PCC	0.91	0.91	22.6	0.12	0.18	150	
991653	US 101	126.24	Unnamed to Quinault R	21	0	Yes	7.69	1.1	RND	PCC	1.47	1.47	29.9	0.35	3	278	117
990543	US 101	131.96	Unnamed to Ten O Clock Cr	21	33	Yes		1.1	RND	PCC	0.91	0.91	17	0	2.2		
990544	US 101	132.2	Unnamed to Ten O Clock Cr	21	33	Yes		1.1	RND	PCC	0.91	0.91	14.7	0	0.95		
990452	US 101	135.26	Unnamed to Lunch Cr	21	67	Yes		2.2	BOX	PCC	2.45	1.22	16.1	0	0.9		
990452	US 101	135.26	Unnamed to Lunch Cr	21	67	Yes		1.2	BOX	PCC	2.45	1.22	16.1	0	0.86		
990883	US 101	137.35	Crane Cr	21.0370	33	Yes		1.1	RND	CST	1.22	1.22	44.8	0.12	1		
990548	US 101	142.48	Unnamed to Harlow Cr	21	0	Yes		1.1	RND	CST	1.22	1.22	19.5	0.46	2	200	

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990457	US 101	142.68	Unnamed to	21	33	Yes		1.1	RND	CST	1.22	1.22	26.1	0	0.76		
990178	US 101	146.85	Harlow Cr	21.0134	67	Yes	25.68	1.2	BOX	CPC	2.44	1.86	25		1.5	5,525	16,925
990178	US 101	146.85	Harlow Cr	21.0134	67	Yes	25.68	2.2	BOX	CPC	2.44	1.86	25		1.5	5,525	16,925
990148	US 101	147.49	Fisher Cr	21.0018	33	Yes	29	1.2	BOX	CPC	1.52	1.22	24.2	0.04	1.8	5,132	12,568
990148	US 101	147.49	Fisher Cr	21.0018	33	Yes	29	2.2	BOX	CPC	1.52	1.22	24.2	0.04	1.9	5,132	12,568
997342	US 101	152.47	Unnamed to Queets R	21	67	Yes		1.1	SQSH	CST	1.4	1	33.7	0	0.8		
997344	US 101	153.01	Unnamed to Queets R	21	0	No		1.1	RND	CST	0.61	0.61	35.6	0.5	4.4	91	
991268	US 101	153.76	Unnamed to Pacific Ocean	21.0015	0	No	5.6	1.1	BOX	PCC	1.52	1.52	23.8	0.58	3	62	100
997345	US 101	154.27	Unnamed to Pacific Ocean	21.0014	0	No		1.1	BOX	CPC	1.22	1.22	24.8	2.3	7.1	33	
990549	US 101	154.45	Unnamed to Pacific Ocean	21	0	No		1.1	BOX	PCC	1.22	1.22	28.5	1.37	4.2	54	
990722	US 101	154.88	Unnamed to Pacific Ocean	21	33	No		1.1	BOX	PCC	1.22	1.22	39.6	1.35	3	150	
990550	US 101	154.9	Unnamed to Pacific Ocean	21	67	Yes		1.1	BOX	PCC	1.22	1.22	25.9	0	3.2		
990723	US 101	155.13	Unnamed to Pacific Ocean	21	0	Yes	12.78	1.2	BOX	PCC	1.22	1.22	39	1.37	3	2,613	1,338
990723	US 101	155.13	Unnamed to Pacific Ocean	21	0	Yes	12.78	2.2	BOX	PCC	1.22	1.22	39	1.37	3	2,613	1,338
991267	US 101	155.35	Unnamed to Pacific Ocean	21.0011	0	Yes	19.92	2.2	BOX	PCC	1.22	1.22	38.1		1.8	4,193	8,440
991267	US 101	155.35	Unnamed to Pacific Ocean	21.0011	0	Yes	19.92	1.2	BOX	PCC	1.22	1.22	38.1	1.19	1.8	4,193	8,440
997355	US 101	155.8	Unnamed to Pacific Ocean	21	0	Yes		1.2	RND	PCC	0.61	0.61	16	0.83	1.8		
997355	US 101	155.8	Unnamed to Pacific Ocean	21	0	Yes		2.2	RND	PCC	0.61	0.61	15.8	0.83	1.25		
991276	US 101	156.1	Unnamed to Pacific Ocean	21	0	Yes		1.1	BOX	CPC	1.52	1.52	22	0	2.5		
991277	US 101	156.15	Unnamed to Pacific Ocean	21	0	Yes		1.1	RND	PCC	0.91	0.91	16.8	0.3	6		
997349	US 101	158.26	Unnamed to Pacific Ocean	21	33	Yes		1.1	BOX	CPC	1.52	1.52	28.3	1.6	2	200	
990724	US 101	158.7	Unnamed to Pacific Ocean	21	0	No		1.1	BOX	PCC	1.52	1.52	34.8	3	0.5	1	
997356	US 101	159.03	Unnamed to Pacific Ocean	21	33	No		1.1	RND	PCC	0.91	0.91	36	0	2	117	
990725	US 101	159.14	Unnamed to Pacific Ocean	21	0	No		1.1	OTH	OTH	0.61	0.91	36.4	0	4.06	77	
990726	US 101	159.24	Unnamed to Pacific Ocean	21	67	No		1.1	RND	PCC	0.91	0.91	61	0.16	2	45	
997352	US 101	159.29	Unnamed to Pacific Ocean	21	0	No		1.1	RND	PCC	0.91	0.91	31.9	0.45	6.8	144	
997353	US 101	159.39	Unnamed to Pacific Ocean	21	0	No		2.2	RND	PCC	0.61	0.61	39.5	0.6	3.5	66	
997353	US 101	159.39	Unnamed to Pacific Ocean	21	0	No		1.2	RND	PCC	0.61	0.61	40.6	0.6	3.9	66	
990727	US 101	159.63	Unnamed to Pacific Ocean	20	0	No		1.1	BOX	CPC	1.55	1.55	61	3.5	1	12	
996217	US 101	159.94	Unnamed to Pacific Ocean	20	0	No		1.1	RND	PCC	0.61	0.61	19.2	1	4.38	136	
996218	US 101	160.17	Unnamed to Pacific Ocean	20	0	No		1.1	RND	PCC	0.61	0.61	22.1	0.42	13.9	81	
996220	US 101	160.42	Unnamed to Pacific Ocean	20	0	No		1.1	RND	PCC	0.91	0.91	88.5	2	11.3	78	
990728	US 101	160.75	Unnamed to Pacific Ocean	20	0	Yes		1.1	BOX	PCC	1.52	1.55	39.9	0.65	3		
996223	US 101	160.89	Unnamed to Pacific Ocean	20	0	Yes		1.1	BOX	CPC	1.53	1.53	33.6	0.82	7.61		
990718	US 101	161.07	Unnamed to Pacific Ocean	20	0	Yes		1.1	BOX	PCC	0.95	0.95	39.6	0.87	2.5		

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991261	US 101	161.5	Unnamed to Pacific Ocean	20.0000A	0	Yes	9.19	1.1	RND	CST	1.22	1.22	56.4	1.34	1.5	277	572
990400	US 101	162.6	Steamboat Cr	20.0574	0	Yes	27.53	1.3	BOX	CPC	1.83	1.83	37.5	0	1	7,434	26,208
990400	US 101	162.6	Steamboat Cr	20.0574	0	Yes	27.53	2.3	BOX	CPC	1.83	1.83	0.9	0	1	7,434	26,208
990400	US 101	162.6	Steamboat Cr	20.0574	0	Yes	27.53	3.3	BOX	CPC	1.83	1.83	0.9	0	1	7,434	26,208
991262	US 101	163.13	Unnamed to Pacific Ocean	20	0	Yes	11.68	1.1	BOX	PCC	1.83	1.83	52.4	1.65	3	638	1,873
996224	US 101	164.57	Unnamed to Pacific Ocean	20	0	No		1.1	BOX	PCC	0.91	0.91	57.7	0	9.49	60	
996225	US 101	165.11	Unnamed to Cedar Cr	20	0	No		1.1	RND	PCC	0.61	0.61	53.8	0	12.57	86	
990551	US 101	168.3	Unnamed to Hoh R	20	67	Yes		2.2	BOX	PCC	1.52	1.52	26	0	0.81		
990551	US 101	168.3	Unnamed to Hoh R	20	67	Yes		1.2	BOX	PCC	1.52	1.52	26	0	0.81		
990717	US 101	169.45	Unnamed to Hoh R	20	67	Yes		1.1	BOX	PCC	0.91	0.91	18.5	0	1		
997051	US 101	169.89	Unnamed to Nolan Cr	20	33	Yes		1.1	RND	CST	0.61	0.61	12.3	0	1.95		
997052	US 101	169.94	Unnamed to Nolan Cr	20	33	Yes		1.1	RND	PCC	0.61	0.61	16.2	0	1		
990553	US 101	170.12	Unnamed to Hoh R	20	67	Yes		1.1	BOX	PCC	1.54	1.54	27.3	0	0.88		
997054	US 101	171.29	Unnamed to Hoh R	20	67	Yes		1.1	RND	CST	0.61	0.61	19.6	0.03	0.36		
990721	US 101	172.73	Unnamed to Pins Ck	20	67	Yes		1.1	RND	PCC	0.61	0.61	15.5	0	1.9		
997055	US 101	174.43	Unnamed to Hoh R	20	67	Yes		1.1	RND	PCC	0.46	0.46	33	0	3.3		
997059	US 101	174.79	Unnamed to Old Joe Sl	20	0	No		1.1	RND	CST	0.61	0.61	21.1	0	17	14	
991645	US 101	175.04	Unnamed to Old Joe Sl	20	0	No		1.1	RND	CST	0.84	0.84	26.2	0	25	188	
991647	US 101	175.45	Unnamed to Hoh R	20	67	Yes	8.72	1.1	BOX	PCC	1.52	1.52	20.1	0.03	0.5	853	578
991598	US 101	175.91	Unnamed to Hoh R	20	33	Yes		1.1	RND	PCC	0.61	0.61	13.3	0	0.6		
997064	US 101	176.12	Unnamed to Hoh R	20	67	Yes		1.1	RND	OTH	0.46	0.46	14.4	0	1.5		
997063	US 101	176.55	Unnamed to Hoh R	20	0	Yes		1.1	RND	PCC	0.61	0.61	17.2	0	1.4		
997068	US 101	177.58	Unnamed to Unnamed	20	33	Yes		1.1	RND	CST	0.61	0.61	21.5	0	2.7		
997070	US 101	177.77	Unnamed to Hoh R	20	0	No		1.1	RND	CST	0.61	0.61	29.8	0.25	3.16	189	
997071	US 101	177.8	Unnamed to Unnamed	20	33	Yes		1.1	RND	CST	0.61	0.61	26.6	0.15	2.52		
997072	US 101	177.97	Unnamed to Unnamed	20	33	Yes		1.1	RND	PCC	0.61	0.61	22.2	0	2.03		
991595	US 101	178.03	Unnamed to Unnamed	20	33	Yes		1.1	RND	PCC	0.91	0.91	24.2	0	3.72		
991589	US 101	178.3	Unnamed to Hell Roaring Cr	20	0	Yes	10.99	1.1	OTH	OTH	1.45	1.45	21.3	0.18	2	4,102	6,882
991590	US 101	178.63	Unnamed to Hell Roaring Cr	20	0	Yes		1.1	RND	CST	0.76	0.76	24.4	0.7	4		
991591	US 101	179.13	Unnamed to Hell Roaring Cr	20	33	Yes	9.88	1.1	OTH	OTH	1.83	1.83	30.5	0.25	1	3,433	6,314
991592	US 101	179.57	Hell Roaring Cr	20.0441	0	Yes		1.1	OTH	OTH	1.22	1.22	35	0.4	3		
997078	US 101	179.73	Unnamed to Hell Roaring Cr	20	33	Yes		1.1	RND	PCC	0.46	0.46	19.5	0	1.8		
991593	US 101	180.2	Unnamed to EF Hell Roaring Cr	20	0	Yes		1.1	OTH	OTH	1.22	0.93	42.7	0.05	1		
991575	US 101	181.2	Unnamed to Dowans Cr	20	67	Yes		2.2	BOX	PCC	1.52	1.52	21.3	0	1.31		
991575	US 101	181.2	Unnamed to Dowans Cr	20	67	Yes		1.2	BOX	CPC	1.52	1.52	21.3	0	1.31		

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991574	US 101	181.46	Unnamed to Dowans Cr	20.0248A	33	Yes	8.24	1.1	RND	PCC	1.22	1.22	28.5	0	2.2	677	1,585
991507	US 101	182.2	Unnamed to Dowans Cr	20	33	Yes		1.1	OTH	OTH	1.22	0.91	61	0	5		
997080	US 101	182.32	Unnamed to Unnamed	20	0	Yes		1.1	OTH	OTH	1.22	0.91	30.4	0	21		
991508	US 101	182.84	Unnamed to Dowans Cr	20	0	Yes		1.1	RND	OTH	1.22	0.91	75.7	1.4	8.94		
991509	US 101	183.05	Unnamed to Dowans Cr	20	0	Yes		1.1	OTH	OTH	1.22	0.91	67.2	0.27	7.9		
997081	US 101	183.11	Unnamed to Unnamed	20	0	Yes		1.1	OTH	OTH	1.22	0.95	75	0.21	7.23		
997082	US 101	183.44	Unnamed to Dowans Cr	20	0	Yes		1.1	RND	OTH	1.22	1.22	21	1	5.72		
991510	US 101	183.87	Unnamed to Bogachiel R	20	0	Yes		1.1	RND	OTH	0.91	0.91	27.2	3.2	5.1		
990269	US 101	184.66	May Cr	20.0247	67	Yes	19.21	1.1	RND	CST	3.05	3.05	58.5	0	0.73	12,990	23,129
997087	US 101	184.87	Unnamed to Bogachiel R	20	0	Yes		1.1	RND	PCC	0.61	0.61	28	2.3	3.6		
997090	US 101	187.12	Unnamed to Bogachiel R	20	67	Yes		1.1	RND	PCC	0.46	0.46	14.7	0	3.7		
997091	US 101	187.18	Unnamed to Bogachiel R	20	67	Yes		1.1	RND	PCC	0.46	0.46	12.9	0	2.39		
991513	US 101	187.37	Unnamed to Unnamed	20	0	No		1.1	RND	SST	0.91	0.91	33.8	0	20.78	29	
991515	US 101	187.79	Unnamed to Bogachiel R	20	33	Yes		1.1	RND	PCC	0.61	0.61	29.9	0	4.88		
991505	US 101	188.09	Unnamed to Bogachiel R	20	0	Yes		1.1	RND	PCC	0.91	0.91	32.1	0.15	2.4		
997093	US 101	188.19	Unnamed to Bogachiel R	20	33	Yes		1.1	RND	PCC	0.61	0.61	21.6	0.2	3.66		
997095	US 101	188.42	Unnamed to Bogachiel R	20	33	Yes		1.1	RND	PCC	0.61	0.61	15.8	0	6.2	200	
997096	US 101	188.64	Unnamed to Bogachiel R	20	0	Yes		1.1	RND	CST	0.61	0.61	23.1	0.1	4.8		
991264	US 101	189.15	Unnamed to Grader Cr	20	33	Yes	7.39	1.1	RND	PCC	0.61	0.61	24.4	0	3	302	164
997098	US 101	190.05	Unnamed to Mill Cr	20	33	Yes		1.1	RND	PCC	1.22	1.22	27.4	0	1.3		
997097	US 101	191.12	Uncle John's Cr	20	33	Yes		1.1	RND	PCC	0.91	0.91	18.5	0	1.35		
20.0312 0.60	US 101	197.1	Swanson Cr	20.0312	67	Yes	15.75	1.1	BOX	CPC	1.83	1.52	28.2		1.48	6,644	20,009
997107	US 101	202.71	Unnamed to Sol Duc R	20	33	Yes		1.1	RND	PCC	0.91	0.91	41.4	0	1.74		
990554	US 101	209.32	Wisem Cr	20.0336	67	Yes	13.7	1.1	RND	CST	1.52	1.52	21.3	0	0.66	3,273	6,036
997108	US 101	210.22	Unnamed to Sol Duc R	20	67	No		1.1	RND	CST	0.91	0.91	17	0	0.59	159	
997109	US 101	210.78	Unnamed to Sol Duc R	20	67	Yes		1.1	RND	PCC	0.91	0.91	23.9	0	-0.2		
991565	US 101	221	Unnamed to Lk Crescent	19	33	Yes		1.1	BOX	PCC	1.36	1.24	37.1	0.3	1.42		
996391	US 101	222.11	Eagle Cr	19.0075	0	No		1.2	SQSH	CST	1.07	1.36	20.1	1.07	3.6	190	
996391	US 101	222.11	Eagle Cr	19.0075	0	No		2.2	SQSH	CST	1.08	1.33	20.1	0.45	3.6	190	
996393	US 101	223.76	LaPoel Cr	19.0073	0	No		1.1	BOX	CPC	1.86	1.87	19	0.46	7.4	150	
996398	US 101	226.24	Smith Cr	19.0069	33	No		1.1	BOX	CPC	1.83	1.84	19.3	0	3.4	140	
995812	US 101	234.71	Unnamed to Indian Cr	18.0293	33	No		1.1	RND	PCC	1.22	1.22	29.4	0	2.6	92	
995817	US 101	236.35	Unnamed to Indian Cr	18	0	Yes		1.1	RND	SST	0.91	0.91	30	0.31	5.5		
18.0283 2.00	US 101	238.35	Indian Cr	18.0283	67	Yes		1.1	ARCH	CPC	5.96	4.5	0.9				
995826	US 101	240.23	Unnamed to Elwha R	18	0	No		1.1	ARCH	CPC	0.8	0.82	63.5	0.51	5.4	120	

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995835	US 101	242.53	Unnamed to Elwha R	18.0277	0	Yes		1.1	BOX	CPC	0.91	0.91	25.1	0.42	4.3		
995540	US 101	243.08	Unnamed to Unnamed	18	0	No		1.1	BOX	CPC	0.9	0.93	25.2	0.05	12.3	160	
990128	US 101	244	Dry Cr	18.0265	0	Yes		1.1	BOX	CPC	2.44	2.44	25	0.73	1		
995542	US 101	244.52	Unnamed to Dry Cr	18	67	Yes		1.1	RND	PCC	0.61	0.61	26.4	0	1.4		
990448	US 101	246.4	Tumwater Cr	18.0256	67	Yes	16.25	1.1	BOX	PCC	2.13	2.44	0.9			8,928	16,969
990326	US 101	248.1	Peabody Cr	18.0245	0	Yes	15.39	1.1	RND	PCC	2.13	2.13	914.4	0	2	2,296	2,033
990481	US 101	249.4	White Cr	18.0235	0	Yes	16.88	1.1	RND	CST	1.37	1.37	243.8	0.4	3.5	2,215	5,945
990240	US 101	250.5	Lees Cr	18.0232	0	Yes	21.14	1.1	BOX	CPC	1.22	1.83	85.3		11	11,288	14,173
995543	US 101	253.7	Unnamed to Bagley Cr	18	0	Yes		1.1	RND	CST	0.61	0.61	0.9				
995544	US 101	255.65	Unnamed to Siebert Cr	18	33	No		1.1	RND	PCC	0.46	0.46	41.3	0.2	1.4	186	
994471	US 101	256.9	Unnamed to Siebert Cr	18	0	Yes	9.09	1.1	RND	PCC	0.65	0.65	38.4	0	6.5	914	527
994474	US 101	258.65	Unnamed to Unnamed	18	0	No		1.1	BOX	PCC	1.65	1.65	32.5	0	9.67	105	
990555	US 101	259.79	Unnamed to Josun Ditch	18	0	Yes	7.24	1.1	RND	PCC	0.55	0.55	37.2	0	2.04	1,086	450
18.0021	5.40 US 101	260.95	Matriotti Cr	18.0021	67	Yes		1.1	RND	CST	1.52	1.52	41.5	0	0.36		
995481	US 101	266.59	Unnamed to Johnson Cr	17	0	Yes		1.1	RND	PCC	0.61	0.61	61.8	0	1.4		
990219	US 101	267.18	Johnson Cr	17.0301	67	Yes	31.46	1.1	BOX	PCC	3.05	3.05	69.5	0.52	2	7,252	18,912
991667	US 101	268.54	Unnamed to Sequim Bay	17.0300	0	Yes		1.1	RND	PCC	0.91	0.91	111.1		7		
991666	US 101	269.24	Unnamed to Sequim Bay	17.0297	0	Yes	8.54	1.1	RND	PCC	0.91	0.91	44.9	0	5	861	839
991735	US 101	271.22	Unnamed to Sequim Bay	17	67	Yes	8.27	1.1	RND	PCC	0.61	0.61	33	0	0.75	317	609
990712	US 101	271.57	Unnamed to Sequim Bay	17.0284	0	Yes	7.18	1.1	RND	OTH	0.61	0.61	120	0.31	3	896	198
991850	US 101	271.83	Unnamed to Sequim Bay	17	33	Yes	9.91	1.1	RND	PCC	0.61	0.61	37.7	0	3	1,108	540
990075	US 101	271.98	Chicken Coop Cr	17.0278	0	Yes	30.9	1.1	BOX	PCC	0.91	1.22	53.3	1.13	2	6,092	5,607
990134	US 101	274.25	Eagle Cr	17.0272	67	Yes		1.1	RND	PCC	0.46	0.46	19.7	0	1.5		
995484	US 101	275.72	Unnamed to Discovery Bay	17	0	Yes		1.1	RND	PCC	0.84	0.84	38.9	0	3		
995485	US 101	276.22	Unnamed to Discovery Bay	17	67	Yes		1.1	RND	PCC	0.61	0.61	38	0.1	1.2		
990090	US 101	277.9	Contractors Cr	17.0270	0	Yes	15.67	1.1	BOX	PCC	1.22	1.22	73.2	0.37	2	3,787	3,597
995488	US 101	278.66	Unnamed to Discovery Bay	17.0269	0	No		1.1	RND	PCC	0.61	0.61	40.9	0.9	1.9	150	
995489	US 101	279.76	Unnamed to Discovery Bay	17.0268	0	Yes		1.1	RND	PCC	0.91	0.91	68.2	0.35	13.1		
995490	US 101	281.61	Unnamed to Discovery Bay	17	0	Yes		1.1	RND	PCC	0.76	0.76	40.8	2	0.06		
995491	US 101	281.72	Unnamed to Discovery Bay	17	0	Yes	13.49	1.1	RND	PCC	0.61	0.61	122.2	0.11	2.9	2,014	2,337
995493	US 101	282.01	Unnamed to Discovery Bay	17	0	No		1.1	RND	OTH	0.46	0.46	61.7	0.52	2.37	100	
995497	US 101	283.57	Unnamed to Snow Cr	17	0	Yes		1.1	ELL	CST	1.66	1.1	25.5	0.9	8		
995499	US 101	289.36	Unnamed to Leland Cr	17	67	Yes	6.76	1.1	RND	PCC	0.46	0.46	16.8	0	1.61	379	280
995500	US 101	289.91	Unnamed to Leland Cr	17	67	No		1.1	RND	PCC	0.61	0.61	19.3	0	1.39	50	
990896	US 101	290.35	Unnamed to Leland Cr	17.0080	67	Yes	19.76	1.2	BOX	CPC	1.83	1.22	13.7	0	0	3,700	7,269

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990896	US 101	290.35	Unnamed to Leland Cr	17.0080	67	Yes	19.76	2.2	BOX	CPC	1.83	1.22	14.3	0	0.56	3,700	7,269
995502	US 101	291.79	Unnamed to Leland Cr	17.0079	33	Yes	13.05	1.1	RND	PCC	0.61	0.61	20.8	0	2.1	2,066	779
990241	US 101	292.52	Leland Cr	17.0077	33	Yes	36.68	1.1	BOX	CPC	2.45	1.83	44.1	0	-0.04	23,068	67,554
995509	US 101	299.86	Spencer Cr	17.0004	33	Yes		2.2	RND	PCC	0.61	0.61	18.2	0	1.32		
995509	US 101	299.86	Spencer Cr	17.0004	33	Yes		1.2	RND	PCC	0.61	0.61	17.8	0	1.18		
995513	US 101	300.35	Unnamed to Spencer Cr	17	33	No		1.1	RND	PCC	0.91	0.91	16.6	0.09	3.2	90	
995515	US 101	300.62	Unnamed to Spencer Cr	17	33	No		1.1	RND	PCC	0.61	0.61	13.6	0.13	5.6	70	
995518	US 101	301.88	Spencer Cr	17.0004	33	Yes		1.1	BOX	CPC	1.84	1.85	29.4	0.25	1.08		
994484	US 101	303.01	Marple Cr	17.0001	33	Yes	20.05	1.1	ELL	CST	3.13	2.91	55.1	0	2.8	2,755	6,506
990449	US 101	304.24	Turner Cr	16.0559	0	No		1.1	RND	PCC	1.22	1.22	36.6	0.46	9	96	
995931	US 101	305.59	Unnamed to Hood Canal	16	0	Yes		1.1	RND	CST	0.61	0.61	45.8	1.1	3.5		
990899	US 101	307	Unnamed to Hood Canal	16	67	Yes	13.55	1.1	BOX	CPC	1.83	1.83	36.5	0	1.6	1,115	1,207
999584	US 101	308.74	Unnamed to Hood Canal	16	0	No		1.1	RND	OTH	0.46	0.46	32.2	0.65	22.52	168	
995934	US 101	309.29	Unnamed to Pleasant Harbor	16	0	Yes	8.65	1.1	RND	PCC	0.46	0.46	21.1	0.3	5.2	532	436
995936	US 101	310.4	Unnamed to Hood Canal	16	67	Yes		1.1	BOX	CPC	1.17	1.24	21	0	3.7		
995939	US 101	311.16	Unnamed to Hood Canal	16.0350	0	Yes		1.1	BOX	CPC	1.25	1.23	27	0.79	7.9		
991603	US 101	314.1	Unnamed to Hood Canal	16.0331	67	Yes	9.06	2.2	BOX	PCC	1.83	1.83	23.3	0.45	2.47	2,265	3,940
991603	US 101	314.1	Unnamed to Hood Canal	16.0331	67	Yes	9.06	1.2	BOX	PCC	1.83	1.83	23.3	0.45	2.47	2,265	3,940
991604	US 101	314.38	Unnamed to Hood Canal	16	0	No		1.1	RND	PCC	0.91	0.91	17.1	0.46	12.6	40	
996104	US 101	314.88	Unnamed to Hood Canal	16	67	Yes		1.1	RND	PCC	0.46	0.46	11.3	0	0.53		
991606	US 101	315.19	Schaerer Cr	16.0326	67	Yes	13.4	1.2	BOX	CPC	1.83	1.83	16.6	0	3.3	250	580
991606	US 101	315.19	Schaerer Cr	16.0326	67	Yes	13.4	2.2	BOX	CPC	1.83	1.83	16.6	0	3.3	250	580
996108	US 101	316.06	Unnamed to Hood Canal	16	0	No		1.1	RND	PCC	0.91	0.91	19.2	2.5	17.7	192	
995007	US 101	316.19	Unnamed to Hood Canal	16	0	Yes		1.1	RND	PCC	0.91	0.91	0.9	0.1			
996109	US 101	316.3	Unnamed to Hood Canal	16	0	No		1.1	BOX	CPC	1.83	1.83	16.5	0.19	5.4	15	
996120	US 101	317.39	Unnamed to Hood Canal	16	0	No		1.1	RND	PCC	0.61	0.61	26.5	0.49	12.5	65	
991615	US 101	317.45	Unnamed to Hood Canal	16	0	Yes		1.1	BOX	CPC	1.22	1.22	21	0.94	5		
991614	US 101	322.83	Unnamed to Hood Canal	16	0	Yes	9.09	2.2	RND	PCC	0.91	0.91	29.3	0.3	4	571	450
991614	US 101	322.83	Unnamed to Hood Canal	16	0	Yes	9.09	1.2	RND	PCC	0.91	0.91	29.3	0.3	4	571	450
991608	US 101	324.1	Unnamed to Hood Canal	16	0	Yes	1.23	1.1	RND	PCC	0.91	0.91	38.7	0.09	7.5	402	57
991610	US 101	324.31	Unnamed to Hood Canal	16	0	Yes	4.97	1.1	RND	PCC	0.91	0.91	36.3	0	4.4	400	360
990407	US 101	329.15	Unnamed to Hood Canal	16	0	No		1.1	RND	PCC	0.61	0.61	20.1	1.37	6	76	
996355	US 101	329.73	Unnamed to Hood Canal	16	0	No		1.2	RND	PCC	0.61	0.61	15.4	0.45	7.5	90	
996355	US 101	329.73	Unnamed to Hood Canal	16	0	No		2.2	RND	CST	0.61	0.61	16.2	0.8	12	90	
996356	US 101	330.25	Unnamed to Hood Canal	16	33	Yes		1.1	RND	PCC	0.61	0.61	19.3	0.27	7.2	208	

Appendix IIIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
996358	US 101	331.18	Unnamed to Hood Canal	16	0	No		1.1	RND	PCC	0.61	0.61	0.9	0		34	
991254	US 101	331.83	Unnamed to Hood Canal	16	0	Yes	6.6	1.2	RND	PCC	0.91	0.91	0.9			364	129
991254	US 101	331.83	Unnamed to Hood Canal	16	0	Yes	6.6	2.2	BOX	PCC			0.9			364	129
996360	US 101	332.15	Unnamed to Hood Canal	16	0	Yes		1.1	RND	CST	0.61	0.61	19	0.85	3.3	227	
996366	US 101	334.4	Unnamed to Hood Canal	16	0	Yes		1.1	RND	PCC	0.61	0.61	54.5	0	2.7	273	
991250	US 101	335.93	Unnamed to Hood Canal	16	67	Yes		1.1	RND	PCC	0.61	0.61	14.9	0	1.8	236	
996371	US 101	338.37	Unnamed to Skobob Cr	16	67	Yes		1.1	RND	PCC	0.46	0.46	17.9	0	1.5		
996374	US 101	341.57	Purdy Cr	16.0005	67	Yes		1.1	RND	CAL	0.91	0.91	17.2	0	1.08		
115 MC093	US 101	346.95	Coffee Cr	14.0036	67	Yes	28.97	1.3	RND	CST	1.33	1.45	130.1	0.02	1.41	21,444	52,066
115 MC093	US 101	346.95	Coffee Cr	14.0036	67	Yes	28.97	2.3	RND	CST	1.3	1.4	130		1.48	21,444	52,066
115 MC093	US 101	346.95	Coffee Cr	14.0036	67	Yes	28.97	3.3	RND	CST	1.3	1.4	130		1.3	21,444	52,066
115 MC180	US 101	348.21	Unnamed to Mill Cr	14	33	Yes	10.54	1.1	RND	CST	0.91	0.91	67.5	0.1	1.8	445	473
997158	US 101	354.01	Unnamed to Unnamed	14	0	Yes		1.1	RND	PCC	0.91	0.91	47	0.35	1.55		
997159	US 101	354.22	Unnamed to Skookum Cr	14	33	No		1.1	RND	PCC	0.91	0.91	59.7	0	2.13	70	
115 MC144	US 101	355.58	Unnamed to Totten Inlet	14	0	Yes	11.95	1.1	RND	CST	1.2	1.3	72.4	0.12	2.18	749	437
997157	US 101	356.48	Unnamed to Schneider Cr	14	33	Yes		1.1	RND	PCC	0.91	0.91	58.8	0.55	1.57		
14.0010 0.10	US 101	356.8	Countyline Cr	14.0010	67	Yes		1.1	RND	PCC	1.52	1.52	65.2				
997161	US 101	357.4	Unnamed to Schneider Cr	14	33	Yes		1.1	RND	PCC	0.91	0.91	58.5	0.1	2.1	218	
991477	US 101	360.6	Unnamed to Eld Inlet	14.0002A	33	Yes	10.1	1.1	BOX	PCC	1.83	1.83	103.4	0.3	4.66	331	350
115 MC276	US 101	361.22	Unnamed to Eld Inlet	14	0	Yes		1.1	RND	CST	0.95	0.95	86.9	0	12.87		
994478	US 101 ROW	271.22	Unnamed to Sequim Bay	17	67	Yes	8.27	1.1	RND	PCC	0.61	0.61	13.6	0	1.1	317	609
982026	US 101 ROW	309.29	Unnamed to Pleasant Harbor	16	67	Yes	6.56			Boulder controls						532	436
995760	US 101 ROW NB	284.87	Unnamed to Snow Cr	17	0	Yes		1.1	OTH	CST	0.78	0.78	33.6	1	7.8		
994788	US 12	3.76	Unnamed to Unnamed	22.0238	33	Yes	13.73	1.1	RND	PCC	0.46	0.46	31.2	0	2.3	1,144	2,859
991284	US 12	4.59	Unnamed to Max Chuck Sl	22.0253	0	Yes	12.55	1.1	OTH	OTH	1.14	1.14	96.4	0	3	1,107	1,393
991283	US 12	5.24	Unnamed to Mox Chuck Sl	22	0	Yes	8.82	1.1	RND	PCC	0.91	0.91	86.9	0	2	691	391
991285	US 12	5.38	Unnamed to Max Chuck Sl	22.0254	0	Yes	10.89	1.1	RND	PCC	0.91	0.91	91.4	0.4	1	1,338	473
991633	US 12	5.62	Unnamed to Mox Chuck Sl	22	33	Yes	5.71	1.1	RND	PCC	0.61	0.61	48.2	0	1.64	624	147
991910	US 12	6.5	Unnamed to Higgins Sl	22	0	Yes	1.81	1.1	RND	PCC	0.76	0.76	70.1	0	3	200	133
991909	US 12	6.55	Unnamed to Higgins Sl	22	0	No		1.1	RND	PCC	0.61	0.61	82.9	0.2	5.6	31	
990957	US 12	6.57	Unnamed to Higgins Sl	22	0	Yes	7.46	1.1	RND	PCC	0.76	0.76	74.7	0	2.66	655	362
990958	US 12	6.9	Unnamed to Higgins Sl	22.0257	0	Yes	6.62	1.1	RND	PCC	0.91	0.91	136.8	0	5	462	189
991911	US 12	7.26	Unnamed to Higgins Sl	22	0	Yes	7.82	1.1	RND	PCC	0.91	0.91	142.3	0.61	3.2	300	378
994791	US 12	9.04	Unnamed to Wynoochee R	22	33	Yes	19.53	1.1	RND	CST	0.91	0.91	90.5	0	0.46	2,649	9,326
991533	US 12	23.3	Unnamed to Chehalis R	22	67	Yes	7.66	2.2	RND	PCC	0.76	0.76	20.4	0.01	0.43	244	192

Appendix IIIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991533	US 12	23.3	Unnamed to Chehalis R	22	67	Yes	7.66	1.2	RND	PCC	0.76	0.76	20.5	0	0.59	244	192
994799	US 12	26.87	Unnamed to Chehalis R	22.0542	0	Yes	16.04	1.1	RND	SST	1.04	1.04	66.6	1.44	3.2	3,293	3,548
996614	US 12	27.87	Unnamed to Chehalis R	23	0	Yes		1.1	RND	PCC	0.61	0.61	25.2	0.6	4.5		
991541	US 12	28.17	Unnamed to Chehalis R	23	33	Yes	8.86	1.1	RND	PCC	0.61	0.61	30.5	0	3.24	1,145	988
991540	US 12	28.6	Unnamed to Chehalis R	23	0	Yes		1.1	RND	PCC	0.76	0.76	54	1	3.3		
996635	US 12	29	Unnamed to Unnamed	23	33	Yes		1.1	RND	PCC	0.61	0.61	68.9	0.07	3.85	300	
991535	US 12	29.19	Unnamed to Chehalis R	23	0	Yes	13.43	1.1	RND	PCC	0.91	0.91	54.2	0	1.5	3,990	2,979
991536	US 12	29.45	Unnamed to Chehalis R	23	0	Yes	10.83	1.1	RND	PCC	0.91	0.91	43.9	0	6.5	2,283	953
996659	US 12	30.74	Unnamed to Chehalis R	23	67	No		1.1	BOX	CPC	0.91	0.91	18.6	0	2.7	55	
996710	US 12	31.19	Unnamed to Chehalis R	23	33	No		1.1	RND	PCC	0.91	0.91	24.3	0	0.4	77	
996712	US 12	31.61	Unnamed to Cedar Cr	23	33	Yes	18.38	1.1	BOX	CPC	1.52	0.91	12.7	0	2.83	1,580	1,702
996714	US 12	32.69	Unnamed to Cedar Cr	23	67	Yes		1.1	RND	PCC	0.61	0.61	17.8	0	0.5		
991537	US 12	33.2	Unnamed to Chehalis R	23	33	Yes		1.1	BOX	CPC	1.22	1.22	38.1	0	3.14		
991538	US 12	33.42	Unnamed to Chehalis R	23.0619	33	Yes		1.1	BOX	CPC	1.22	1.22	43.7	0	2.26		
991539	US 12	33.6	Unnamed to Chehalis R	23	33	Yes		1.1	RND	PCC	0.91	0.91	42.2	0.17	5.36		

<sup>1</sup>SR signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

<sup>2</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Codes Used for Culvert Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber  
 MRY - masonry  
 OTH - other  
 PVC - plastic

Appendix IIIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
15.0229 0.10	SR 3	40.96	Chico Cr	15.0229	67	11/17/2004	Discontinued	BC	MNR	Install two additional baffles at the head end of the culvert to eliminate sheet flow. Current depth is app. 0.3'. Chum salmon are now having great difficulty negotiating this section of the culvert.
990400	US 101	162.6	Steamboat Cr	20.0574	0	06/07/2007	Discontinued	BC	MNR	Install baffles in lower 2/3rd of all three boxes. Log jam at creek mouth is gone and there is no longer a backwater curve upto and through culvert.
15.0280 1.00	SR 308	1.15	Big Scandia Cr	15.0280	67	12/18/2007	Discontinued	BC; SBC	MNR	There is a large log at the inlet end of the culvert/fishway that is partially blocking fish passage and poses some threat to the culvert due to potential further debris catching. It needs to be removed.
18.0173 2.40	US 101	256.1	Siebert Cr	18.0173	100	02/28/2008	Annual	BC; WP	MNR	Remove pieces of logs that were cut up by WSDOT last year and have since migrated and lodged in the LB culvert/baffles.
18.0234 1.10	US 101	250	Ennis Cr	18.0234	100	02/28/2008	Annual	BC; WP	MNR	Remove a log in the turning pool of the weir-pool section of the fishway. See attached picture.
990448	US 101	246.4	Tumwater Cr	18.0256	67	02/28/2008	Annual	BC	MNR	Remove debris at inlet of culvert/fishway. Remove the debris jam downstream of the fishway which was a result of the slide. Stabilize slide area adjacent to the fishway on the left bank side (looking downstream).
105 R050320a	SR 167 NB ext 8	12.05	Jovita Cr	10.0033	67	03/09/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990144	SR 112	48.49	Field Cr	19.0026	67	12/09/2003	Discontinued	SBC	MNR	An engineering review is needed to determine correction option.
991516	SR 16	20.36	Unnamed to Burley Cr	15	33	12/12/2003	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.

Appendix IIIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
991690	US 101	111.9	Unnamed to Stevens Cr	22	67	04/29/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
991867	SR 16	20.44	Unnamed to Burley Cr	15	33	12/12/2003	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
996742	SR 3	41.52	Unnamed to Dyes Inlet	15.0241	0	07/15/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
996745	SR 3	41.81	Unnamed to Dyes Inlet	15	0	07/20/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
996747	SR 3	42.21	Unnamed to Dyes Inlet	15.0243	0	07/20/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
996803	SR 3	47.72	Unnamed to Clear Cr	15.0254	67	08/08/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
18.0021 5.40	US 101	260.95	Matriotti Cr	18.0021	67	11/03/2004	Discontinued	SBC	MNR	All the log controls below the SR 101 are leaking and/or dewatered and have failed. Engineering required to replace the existing logs and provide fish passage.
15.0051 0.10	SR 302	11.36	Little Minter Cr	15.0051	67	11/17/2004	Discontinued	BC; SBC	MNR	The addition of an upstream culvert baffle is needed to eliminate sheet flow. The outfall drop exceeds WDFW criteria for chum passage. Rock controls need to be replaced w/a design to accommodate chum.
15.0051 0.20	SR 302	11.42	Little Minter Cr	15.0051	67	11/17/2004	Discontinued	BC; SBC	MNR	Re-space the culvert baffles and add one to eliminate a sheet flow problem below the first interior baffle. Correct the leakage (read erosion) around the ends of the downstream plank controls.

Appendix IIIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
18.0283 2.00	US 101	238.35	Indian Cr	18.0283	67	11/03/2004	Discontinued	BC	MNR	Currently, the primary problem w/the fishway is the 0.55 m drop over the entrance weir. Notch the baffle (requiring concrete cutting) to facilitate fish passage.
990480	SR 112	49.48	Whiskey Cr	19.0020	33	01/27/2004	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
115 MC093	US 101	346.95	Coffee Cr	14.0036	67	04/28/2004	Discontinued	SBC	MNR	No immediate maintenance is required. During this review, however, a velocity problem was identified in the middle culvert, and there are indicators of the same problem in the other two culverts, also. Correction of the problem will require replacement.
990219	US 101	267.18	Johnson Cr	17.0301	67	11/03/2004	Discontinued	BC; SBC	MNR	An engineering plan is required to address the existing 0.41 m drop over the exposed/bedrock control.
990240	US 101	250.5	Lees Cr	18.0232	0	04/28/2004	Discontinued	BC; PC	MNR	The culvert is 0% passable, due to slope and velocity problems, and will need to be replaced.
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	67	10/12/2004	Discontinued	WP	MNR	Short term - remove debris. Long term - Replace blown out streambed control, and replace or baffle culvert to eliminate velocity problem at upper end.
20.0312 0.60	US 101	197.1	Swanson Cr	20.0312	67	05/31/2006	Ad Hoc	BC; SBC	MNR	For interim passage, the wooden wall fishway needs to be sealed at bottom. The inlet baffle that facilitate flow through the culvert, needs to be replaced.
991049	SR 507	36.35	Lacamas Cr	11.0022	33	04/25/2006	Annual	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
15.0246 0.96	SR 3	44.8	Strawberry Cr	15.0246	67	09/12/2006	Discontinued	BC; SBC	MNR	The downstream most sacrete weir is leaking severely and needs to be repaired.

Appendix IIIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
22.0507 0.10	SR 8	5	MF Wildcat Cr	22.0507	33	11/08/2006	Discontinued	RCC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990178	US 101	146.85	Harlow Cr	21.0134	67	06/07/2007	Discontinued	BC; SBC	MNR	Replace apron baffle. Re-seal first downstream control.
14.0009A 0.06	US 101	357.9	Holiday Valley Cr	14.0009A	100	03/03/2008	Annual	WP; SBC	MNFP	Remove logs from weir pool fishway. Remove stop logs and remove gravel from the pools of the weir pool fishway. Several of the stop logs will require replacement. Clean the woody material from the inlet of the US 101 culvert and the upstream controls.
14.0010 0.10	US 101	356.8	Countyline Cr	14.0010	67	03/03/2008	Annual	BC; SBC	MNFP	Re-attach the outlet baffle at the green line inside culvert. This is the third year that this deficiency has been reported without compliance. Chum salmon are having difficulty getting through pipe.
990278	SR 108	8.89	McDonald Cr	14.0023	100	03/03/2008	Annual	WP	MNFP	Remove gravel throughout fishway. Remove log from the top pool of the fishway.

**Fishway Type:**

**BF** - baffled flume  
**BC** - baffled culvert  
**SBC** - streambed control  
**WP** - weir pool  
**PC** - pool-chute  
**CC** - concrete control

**Condition:**

**MNR** - requires replacement  
**MNFP** - requires maintenance for fish passage

Appendix IIIC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	Milepost	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
992196	SR 104	12.7	Unnamed to Squamish Harbor	17.0185	12.89	2,276	Done/01	Done/01	Replacement	806,645					Const/T10	2010
992207	SR 104	22.95	Unnamed to Appletree Cove	15.0309	17.22	3,461	Pending								Scope	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	13.03	678	Done	Done/97	Replacement	2,321,989					Const/T10	2008
991237	SR 108	5.5	Unnamed to Skookum Cr	14	12.21	3,568	EngRequested	Pending							Scope	
990385	SR 108	5.54	Skookum Cr to Skookum Inlet	14.0020	15.9	1,537	EngRequested	Pending							Scope	
991672	SR 108	7.62	Unnamed to Skookum Cr	14.0000	12.58	1,774	Pending/PS								Scope	
997225	SR 108	9.47	Kamilche Cr to Skookum Cr	14.0022	19.11	5,611	Done	Done	Replacement	900,000	Retrofit	499,000			Scope	
997363	SR 109	24.56	Unnamed to Boone Cr	21	9.93	2,090	Pending								Scope	
990138	SR 109	28.1	Elk Cr to Pacific Ocean	21.0761	16.48	14,666	EngRequested	Pending							Scope	
991272	SR 109	33.1	Unnamed to Pacific Ocean	21.0728	14.45	4,665	Done	Done	Replacement	1,180,000			20-Dec-07		Const/T10	2012
997787	SR 109	33.87	Unnamed to Pacific Ocean	21.0727	12.26	2,389	Defer								Scope	
990922	SR 109	35.73	Unnamed to Pacific Ocean	21.0718	9.46	270	Pending/PS								Scope	
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	12.18	3,593	Done	Done	Replacement	1,015,076			27-Dec-07	9-Jan-08	Const/T10	2010
990927	SR 109	39.15	Unnamed to Pacific Ocean	21.0711	12.7	1,840	Pending								Scope	
996684	SR 112	17.14	Unnamed to Clallam R	19	17.22	1,538	EngRequested	Pending							Scope	
991730	SR 112	25.6	Unnamed to Pysht R	19	20.31	4,003	Done	Done	Replacement	836,700			31-Jan-07	29-Jun-07	Const/T10	2016
991732	SR 112	29.12	Indian Cr	19.0112	15.98	3,623	Pending	Done	Replacement	439,410					Scope	
990941	SR 112	29.7	Unnamed to Butler Cr	19	11.94	1,739	Pending	Pending							Const/T10	2014
991258	SR 112	29.71	Butler Cr to Butler Cove	19.0112	13.48	2,824	Pending	Pending							Const/T10	2014
990214	SR 112	33.21	Joe Cr to Strait of Juan de Fuca	19.0109	19.37	9,506	Done	Done	Replacement	1,655,000	Bridge		31-Jan-07	29-Jun-07	Const/T10	2016
990304	SR 112	47.1	Nelson Cr to Lyre R	19.0032	20.42	2,334	Done	Done	Replacement	1,338,400			31-Jan-07	29-Jun-07	Const/T10	2016
990144	SR 112	48.49	Field Cr	19.0026	17.39	15,945	EngRequested								Scope	
990480	SR 112	49.48	Whiskey Cr	19.0020	12.73	4,409	EngRequested	Pending							Scope	
991660	SR 112	52.9	Nordstrom Cr to Salt Cr	19.0011	11.46	5,648	Pending	Done	Replacement	633,155	Retrofit	142,667			Scope	
991686	SR 112	56.5	Unnamed to Coville Cr	19.0003	12.94	3,099	Pending	Done	Replacement	1,454,000	Retrofit	101,000			Scope	
990092	SR 112	57.61	Coville Cr	19.0001	22.03	26,640	EngRequested	Pending	Replacement	599,000	Replacement	599,000			Scope	
990962	SR 121	4.04	Blooms Ditch to Black R	23.0684	13.79	11,778	EngRequested	Pending							Scope	
991516	SR 16	20.36	Unnamed to Burley Cr	15	8.04	308	Pending								Scope	
990017	SR 16	28.1	Anderson Cr to Sinclair Inlet	15.0211	38.6	49,945	EngRequested	Done	Retrofit	499,900	Replacement	590,000			Scope	
996753	SR 16	28.1	Anderson Cr to Sinclair Inlet	15.0211	32.33	49,945	Pending	Done	Replacement	590,000	Retrofit	499,000			Scope	
991215	SR 162	4.82	Ball Cr to Puyallup R	10.0405	14.01	5,060	Pending	Pending							Scope	
R021121a	SR 162	11.04	Card Cr to Carbon R	10	23.48	6,148	Pending	Done	Replacement	156,932					Scope	
R050320a	ext 8	12.05	Jovita Cr to Milwaukee Canal	10.0033	22.4	20,394	Pending	Pending							Scope	
990711	SR 19	4.3	Swansonville Cr	17.0205A	14.11	1,986	Done/01	Done	Replacement	382,000					Const/T10	2016
15.0229	0.10 SR 3	40.96	Chico Cr to Dyes Inlet	15.0229	48	265,684	EngRequested	Pending							Const/CED	
990708	SR 3	44.62	Unnamed to Strawberry Cr	15.0247	15.89	843	EngRequested	Pending							Scope	

Appendix IIIC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	Milepost	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year	
15.0246	0.96	SR 3	44.8	Strawberry Cr to Dyes Inlet	15.0246	16.33	3,525	EngRequested	Pending						Scope		
996804		SR 3	49.48	Big Scandia Cr to Liberty Bay	15.0280	16.5	1,874	Pending							Scope		
990395		SR 3	58.49	Spring Cr to Hood Canal	15.0364	13.37	1,578	Done	Pending						Const/T10	2016	
996795		Ramp	40.99	Unnamed to Chico Cr	15.0240	12.86	682	Pending							Scope		
994320		SR 305	0.38	Unnamed to Eagle Harbor	15.0324	26.26	9,715	Pending	Done	Replacement	3,415,060	Retrofit	197,496		Scope		
994324		SR 305	0.73	Unnamed to Eagle Harbor	15.0324	21.41	8,846	Pending	Pending						Scope		
994325		SR 305	2.44	Unnamed to Murden Cove	15.0321	29.44	3,715	Pending	Done	Replacement	859,752				Scope		
991958		SR 305	7.28	Klebeal Cr to Agate Passage	15.0296	29.48	8,345	Done	Done	Replacement	944,840		19-May-04		Const/T10	2010	
990709		SR 305	9.6	Unnamed to Liberty Bay	15.0291	24.15	7,364	Pending	Done	Retrofit	1,821,013	Replacement	2,436,975	9-Aug-06	Const/T10	2008	
991742		SR 305	9.88	Bjorgen Cr to Liberty Bay	15.0290	17.21	1,793	Done/01	Done/00	Retrofit	2,035,095				Const/T10	2008	
990123		SR 307	0.49	Dogfish Cr to Liberty Bay	15.0285	27.97	6,798	Pending	Done	Replacement	292,984				Scope		
991999		SR 307	1.34	Unnamed to Dogfish Cr	15.0286	20.92	3,834	EngRequested	Done	Replacement	999,900				Scope		
991572		SR 307	1.45	Unnamed to Unnamed	15	16.41	1,406	Pending	Done	Replacement	684,215				Scope		
990235		SR 308	0.94	Big Scandia Cr to Liberty Bay	15.0280	23.62	7,340	Pending							Scope		
15.0280	1.00	SR 308	1.15	Big Scandia Cr to Liberty Bay	15.0280	21	9,257	Pending							Scope		
992008		SR 308	1.33	Little Scandia Cr to Liberty Bay	15.0279	16.06	1,579	Pending							Scope		
991000		SR 308	2.16	Unnamed to Puget Sound	15.0278	19.25	1,893	Pending	Pending						Scope		
991049		SR 507	36.35	Lacamas Cr to Muck Cr	11.0022	37.62	82,900	EngRequested	Pending						Scope		
990297		SR 7	41.17	Muck Cr to Nisqually R	11.0018	24.61	31,441	Pending	Done	Replacement	915,000				Scope		
990133		SR 8	6.3	EF Wildcat Cr to Wildcat Cr	22.0503A	52.71	70,277	Done	Done	Retrofit/ LC	268,100	Bridge	24-Jan-07	29-Jun-07	Const/T10	2016	
990773		SR 8	9.1	Unnamed to Mox Chehalis Cr	22	20.63	2,311	Done	Done	Retrofit/ GC	143,100		24-Jan-07	29-Jun-07	Const/T10	2016	
992493		US 101	68.99	Unnamed to Lower Salmon Cr	24.0106	17.2	7,163	Done/01	Done/01	Replacement	1,237,000				Const/T10	2012	
992510		US 101	71.02	Joe Cr to North R	24.0129	24.98	16,917	Done/01	Done/00	Bridge	4,777,775				Const/T10	2012	
991908		US 101	76.48	Mosquito Cr to North R	24.0137	20.36	5,820	Done/01	Done/01	Replacement	1,292,136				Const/T10	2010	
993679		US 101	90.73	Unnamed to Hoquaim R	22	17.35	4,450	Done	Done	Replacement	974,300		4-Dec-06	29-Jun-07	Const/T10	2016	
990729		US 101	100.9	Unnamed to SB Big Cr trib	22	17.97	2,895	Done	Done	Replacement	864,400	Replacement	305,000	4-Dec-06	29-Jun-07	Const/T10	2016
990032		US 101	102.14	Unnamed to SB Big Cr	22.0059	25.82	19,327	Done	Done	Replacement	686,500		4-Dec-06	29-Jun-07	Const/T10	2016	
993717		US 101	110.84	Unnamed to Stevens Cr	22	11.14	324	Defer							Scope		
990731		US 101	111.34	Unnamed to Stevens Cr	22.0064A	14.44	3,052	Done	Done	Replacement	936,000	Log Controls	148,533	4-Dec-06	4-Dec-06	Const/T10	2014
990276		US 101	123.05	McCalla Cr to Boulder Cr	21.0456	9.57	1,118	Pending							Scope		
990178		US 101	146.85	Harlow Cr to Queets R	21.0134	25.68	16,925	Done	Done	Bridge	3,934,000		27-Dec-07		Const/T10	2016	
990148		US 101	147.49	Fisher Cr to Queets R	21.0018	29	12,568	Pending	Pending						Scope		
990400		US 101	162.6	Steamboat Cr to Pacific Ocean	20.0574	27.53	26,208	EngRequested	Pending				27-Dec-07		Scope		
990269		US 101	184.66	May Cr to Bogachiel R	20.0247	19.21	23,129	Pending	Pending						Scope		
20.0312	0.60	US 101	197.1	Swanson Cr to Soleduck R	20.0312	15.75	20,009	EngRequested							Scope		
990554		US 101	209.32	Wisem Cr to Sol Duc R	20.0336	13.7	6,036	Pending	Done	Replacement	378,661				Scope		

Appendix IIIC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	Milepost	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
990448	US 101	246.4	Tumwater Cr	18.0256	16.25	16,969	EngRequested	Pending							Scope	
990240	US 101	250.5	Lees Cr	18.0232	21.14	14,173	Done/01	Done/00	Replacement	1,834,131					Const/T10	2010
990219	US 101	267.18	Johnson Cr to Sequim Bay	17.0301	31.46	18,912	Done	Done	Fishway	173,000			31-Jan-07	29-Jun-07	Const/T10	2016
990075	US 101	271.98	Chicken Coop Cr	17.0278	30.9	5,607	Done 07/01	Done/97	Replacement	1,293,773					Const/T10	2010
990090	US 101	277.9	Contractors Cr	17.0270	15.67	3,597	Hold	Hold							Const/CED	
990896	US 101	290.35	Unnamed to Leland Cr	17.0080	19.76	7,269	Pending								Scope	
995502	US 101	291.79	Unnamed to Leland Cr	17.0079	13.05	779	Pending								Scope	
990241	US 101	292.52	Leland Cr to L Quilcene R	17.0077	36.68	67,554	Pending								Scope	
994484	US 101	303.01	Marple Cr to Jackson Cove	17.0001	20.05	6,506	Done	Done/04	Replacement	4,497,000			24-Jan-07	29-Jun-07	Const/T10	2016
990899	US 101	307	Unnamed to Hood Canal	16	13.55	1,207	Pending								Scope	
991606	US 101	315.19	Schaerer Cr to Hood Canal	16.0326	13.4	580	EngRequested	Pending							Scope	
115 MC093	US 101	346.95	Coffee Cr to Goldsborough Cr	14.0036	28.97	52,066	EngRequested	Pending							Scope	
115 MC180	US 101	348.21	Unnamed to Mill Cr	14	10.54	473	Defer								Scope	
994791	US 12	9.04	Unnamed to Wynoochee R	22	19.53	9,326	Done	Done	Replacement	1,048,000			4-Dec-06	29-Jun-07	Const/T10	2016
991541	US 12	28.17	Unnamed to Chehalis R	23	8.86	988	Pending	Done	Replacement	831,336					Scope	
991535	US 12	29.19	Unnamed to Chehalis R	23	13.43	2,979	Pending								Scope	
996712	US 12	31.61	Unnamed to Cedar Cr	23	18.38	1,702	EngRequested	Pending							Scope	

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

## Appendix IIID. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	24.15	F	Sched	1,835,735					
991742	SR 305	9.88	Bjorgen Cr	15.0290	17.21	F	Sched	1,892,293					
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	13.03	F	Sched	2,008,125	180,454				
990075	US 101	271.98	Chicken Coop Cr	17.0278	30.9	F	Sched	479,269	841,246				
990240	US 101	250.5	Lees Cr	18.0232	21.14	F	Sched	298,268	1,511,992				
992196	SR 104	12.7	Unnamed to Squamish Harbor	17.0185	12.89	F	Sched	449,512	343,319				
991958	SR 305	7.28	Klebeal Cr	15.0296	29.48	NF	Future		944,840				
991908	US 101	76.48	Mosquito Cr	24.0137	20.36	F	Sched	383,977	871,110				
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	12.18	F	Sched	107,037	889,339				
992510	US 101	71.02	Joe Cr	24.0129	24.98	NF	Future			3,000,000			
992493	US 101	68.99	Unnamed to Lower Salmon Cr	24.0106	17.2	F	Sched		237,000	1,000,000			
991272	SR 109	33.1	Unnamed to Pacific Ocean	21.0728	14.45	F	Sched		272,000	908,000			
990731	US 101	111.34	Unnamed to Stevens Cr	22.0064A	14.44	NF	Future				936,000		
990941	SR 112	29.7	Unnamed to Butler Cr	19	11.94	NF	Future				400,000		
991258	SR 112	29.71	Butler Cr	19.0112	13.48	NF	Future				450,000		
990214	SR 112	33.21	Joe Cr	19.0109	19.37	NF	Future					1,655,000	
990729	US 101	100.9	Unnamed to SB Big Cr	22	17.97	NF	Future					864,000	
990773	SR 8	9.1	Unnamed to Mox Chehalis Cr	22	20.63	NF	Future					143,100	
990711	SR 19	4.3	Swansonville Cr	17.0205A	14.11	NF	Future					382,000	
990395	SR 3	58.49	Spring Cr	15.0364	13.37	NF	Future					678,000	
990304	SR 112	47.1	Nelson Cr	19.0032	20.42	NF	Future					1,338,400	
994791	US 12	9.04	Unnamed to Wynoochee R	22	19.53	NF	Future					1,048,000	
990219	US 101	267.18	Johnson Cr	17.0301	31.46	NF	Future					173,000	
990178	US 101	146.85	Harlow Cr	21.0134	25.68	NF	Future					3,934,000	
990133	SR 8	6.3	EF Wildcat Cr	22.0503A	52.71	NF	Future					268,100	
990032	US 101	102.14	Unnamed to SB Big Cr	22.0059	25.82	NF	Future					686,500	

Appendix IIID. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
994484	US 101	303.01	Marple Cr	17.0001	20.05	NF	Future					4,497,000	
993679	US 101	90.73	Unnamed to Hoquiam R	22	17.35	NF	Future					974,300	
991730	SR 112	25.6	Unnamed to Pysht R	19	20.31	NF	Future					836,700	

Region's **Total \$:**                    **491,014    509,000    1,000,014    1,786,000    17,478,100**

Appendix III.E.Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	15-Jan-04	Coho	Downstream	Pre-project	0.41	0	0	0	
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	15-Jan-04	Coho	Upstream	Pre-project	0.3	0	0	0	
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	26-Oct-04	Coho	Upstream	Pre-project	0.3	0	0	0	0
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	26-Oct-04	Coho	Downstream	Pre-project	0.3	0	0	0	0
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	17-Nov-04	Coho	Downstream	Pre-project	0.41	0	0	0	0
990075	US 101	271.98	Chicken Coop Cr	17.0278	0.41	2010	1	Incomplete	14-Dec-04	Coho	Downstream	Pre-project	0.41	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	11-Jan-95	Coho	Downstream	Pre-project	0.8	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	11-Jan-95	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	25-Nov-96	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	25-Nov-96	Coho	Downstream	Pre-project	0.8	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	09-Dec-96	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	09-Dec-96	Coho	Downstream	Pre-project	0.8	3	0	3	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	23-Dec-96	Coho	Downstream	Pre-project	0.8	1	1	2	1
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	23-Dec-96	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	25-Nov-97	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	25-Nov-97	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	10-Dec-97	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	10-Dec-97	Coho	Downstream	Pre-project	0.3	0	0	0	1
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	22-Dec-97	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	22-Dec-97	Coho	Upstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	09-Dec-98	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	07-Jan-99	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	29-Dec-99	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	15-Nov-00	Coho	Downstream	Pre-project	0.2	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	15-Nov-00	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	06-Dec-00	Coho	Downstream	Pre-project	0.3	0	0	0	0
990240	US 101	250.5	Lees Cr	18.0232	0.8	2010	1	Incomplete	20-Dec-00	Coho	Downstream	Pre-project	0.3	0	0	0	0
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	10-Dec-00	Coho	Downstream	Pre-project	0.2	0	6	6	4
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	17-Jan-01	Coho	Downstream	Pre-project	0.15	0	4	4	3
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	14-Nov-06	Chum	Downstream	Pre-project	0.17	6	5	0	
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	14-Nov-06	Chum	Upstream	Pre-project	0.31	0	0	0	

Appendix III E. Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	14-Nov-06	Coho	Downstream	Pre-project	0.17	0	1	0	
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	14-Nov-06	Coho	Upstream	Pre-project	0.31	2	0	0	
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	29-Nov-06	Coho	Upstream	Pre-project	0.31	0	0	0	0
990709	SR 305	9.6	Unnamed to Liberty Bay	15.0291	0.17	2008	1	Incomplete	29-Dec-06	Coho	Downstream	Pre-project	0.17	0	1	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	16-Dec-93	Chum	Downstream	Pre-project	0.01	0	8	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	05-Nov-99	Chum	Upstream	Pre-project	0.29	0	0	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	05-Nov-99	Chum	Downstream	Pre-project	0.01	0	0	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	05-Nov-99	Coho	Downstream	Pre-project	0.01	0	0	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	05-Nov-99	Coho	Upstream	Pre-project	0.29	0	0	0	
991244	SR 106	2.95	Unnamed to Skokomish R	16.0002	0.01	2008	1	Incomplete	23-Nov-99	Chum	Downstream	Pre-project	0.001	0	0	0	
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	05-Nov-99	Coho	Upstream	Post-project	0.15	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	05-Nov-99	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	19-Nov-99	Coho	Upstream	Post-project	0.15	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	19-Nov-99	Coho	Upstream	Post-project	0.15	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	14-Jan-00	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	14-Jan-00	Coho	Upstream	Post-project	0.15	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	27-Nov-00	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	27-Nov-00	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	08-Dec-00	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	08-Dec-00	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	03-Jan-01	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	03-Jan-01	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	26-Nov-01	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	26-Nov-01	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	07-Dec-01	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	07-Dec-01	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	19-Dec-01	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	19-Dec-01	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	28-Dec-01	Coho	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	28-Dec-01	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	15-Jan-02	Coho	Upstream	Post-project	0.3	0	0	0	1

Appendix III E. Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	15-Jan-02	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	08-Nov-02	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	08-Nov-02	Chum	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	26-Nov-02	Chum	Upstream	Post-project	0.3	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	26-Nov-02	Chum	Upstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	17-Dec-02	Coho	Downstream	Post-project	0.25	0	0	0	0
991270	SR 109	36.43	Unnamed to Pacific Ocean	21.0715	0.25	2010	2	Juveniles	17-Dec-02	Chum	Upstream	Post-project	0.3	0	0	0	0
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	11-Dec-97	Chum	Downstream	Pre-project	0.01	0	8	8	
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	10-Dec-00	Coho	Downstream	Pre-project	0.4	3	3	6	3
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	17-Jan-01	Coho	Downstream	Pre-project	0.38	3	3	6	3
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	14-Nov-06	Coho	Downstream	Pre-project	0.31	4	1	0	
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	14-Nov-06	Chum	Upstream	Pre-project	0.31	0	0	0	
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	14-Nov-06	Coho	Upstream	Pre-project	0.31	0	0	0	
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	14-Nov-06	Chum	Downstream	Pre-project	0.31	12	2	0	
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	29-Dec-06	Coho	Downstream	Pre-project	0.31	0	0	0	0
991742	SR 305	9.88	Bjorgen Cr	15.0290	0.38	2008	1	Incomplete	29-Dec-06	Coho	Upstream	Pre-project	0.313	0	0	0	0
992196	SR 104	12.7	Unnamed to Squamish Harbor	17.0185	0.32	2010	1	Incomplete	26-Oct-04	Coho	Downstream	Pre-project	0.3	0	0	0	0
992196	SR 104	12.7	Unnamed to Squamish Harbor	17.0185	0.32	2010	1	Incomplete	26-Oct-04	Coho	Upstream	Pre-project	0.3	0	0	0	0

## APPENDIX IV - SOUTHWEST REGION

- A. Fish Passage Barriers Inventoried as of February 2008
- B. Fishways Needing Repairs or Maintenance for Fish Passage
- C. Dedicated Funding Scoping Progress Report
- D. Ten Year Plan
- E. Dedicated Project Evaluations – Adult Spawner Surveys

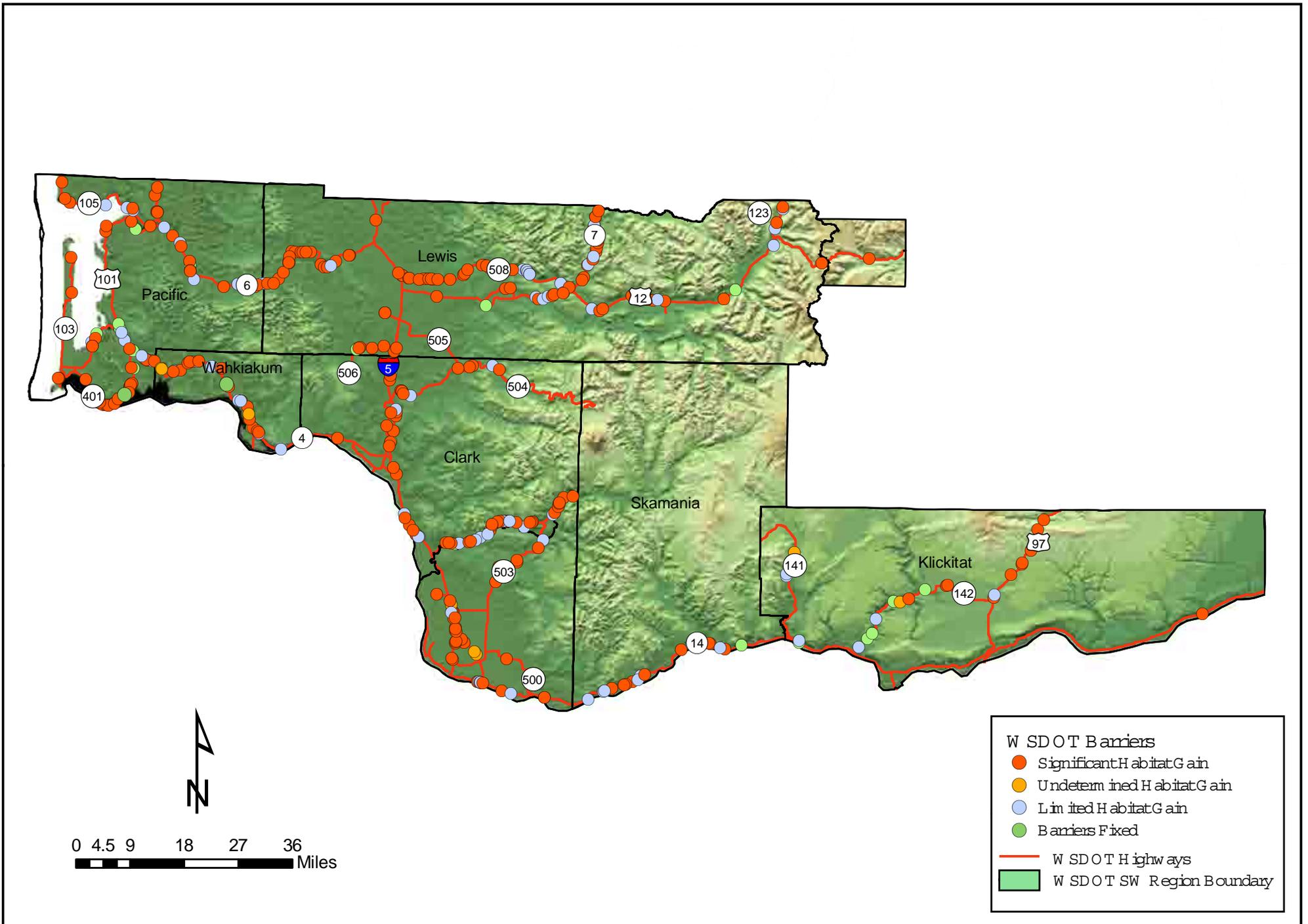


Figure 43. Southwest Region Fish Passage Barriers, February 2008.

Appendix IVA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
995866	I-205	32.28	Unnamed to Curtin Cr	28	0	Unk		1.1	RND	CST	1.07	1.07	67.5	0.38	1.7		
997193	I-205	35.18	Unnamed to Unnamed	28.0050	0	Yes		1.1	RND	CST	1.07	1.07	173.9	0.9	0.83		
997194	I-205	35.83	Unnamed to Salmon Cr	28	67	Yes		1.1	RND	CST	0.76	0.76	136.6	0	0.48		
995862	WB	0.46	Unnamed to Columbia R	28	0	Yes		1.1	RND	PCC	0.46	0.46	317.9	0	0.7		
995867	I-205 Ext 32 SB	32.77	Curtin Cr	28.0085	33	Unk		1.2	RND	CST	1.07	1.07	109.4	0	0.4		
995867	I-205 Ext 32 SB	32.77	Curtin Cr	28.0085	33	Unk		2.2	RND	CST	1.07	1.07	108.2	0	0.3		
991753	I-5	3.07	Burnt Bridge Cr	28.0143	67	Yes	21.33	1.1	BOX	CPC	1.82	1.82	140.8	0	1.08	19,184	67,438
990085	I-5	3.31	Cold Cr	28.0144	0	Yes	18.56	1.1	RND	OTH	1.2	1.2	71.3	1.6	3	4,200	6,393
994304	I-5	5.98	Unnamed to Salmon Cr	28	67	Yes	3.67	1.1	RND	PCC	1.07	1.07	106.9	0	0.29	2,595	6,834
994305	I-5	6.1	Unnamed to Salmon Cr	28	67	Yes	3.7	1.1	RND	PCC	1.07	1.07	109.6	0.15	0.83	2,742	7,084
994306	I-5	6.29	Unnamed to Salmon Cr	28	33	Yes	4.56	1.1	RND	PCC	1.07	1.07	31.7	0.55	0.85	3,294	8,055
991793	I-5	7.92	Unnamed to Whipple Cr	28.0050	67	Yes	6.46	1.1	RND	PCC	0.91	0.91	111.8	0	2.18	498	206
991792	I-5	8.07	Unnamed to Whipple Cr	28	0	Yes	11.06	1.1	RND	PCC	0.76	0.76	144.4	1.01	1.02	531	402
991794	I-5	8.42	Whipple Cr	28.0038	67	Yes	16.91	1.1	BOX	PCC	1.83	1.83	213.4	0	3	6,195	10,595
997195	I-5	8.68	Unnamed to Whipple Cr	28	0	Yes	5.49	1.1	RND	PCC	0.61	0.61	165.2	0.36	1.6	499	140
997196	I-5	10.2	Unnamed to Gee Cr	27.0168A	33	Yes		1.1	RND	OTH	0.76	0.76	158.9	0	1.05		
991868	I-5	11.23	Unnamed to Gee Cr	27.0168O	0	No		1.1	RND	OTH	0.76	0.76	138.4	0	4.9	50	
991844	I-5	11.44	Unnamed to Gee Cr	27.0168A	67	Yes	12.44	1.1	BOX	CPC	1.22	1.22	36.9	0	0.01	2,533	7,126
991846	I-5	12.42	Gee Cr	27.0168F	67	Unk		1.1	OTH	OTH	3.05	3.05	128.7	0	0		
991847	I-5	13.2	Unnamed to Gee Cr	27.0168G	0	Yes		1.1	ARCH	CPC	2.44	2.9	113.7	0.24	0.01		
994588	I-5	25.85	Mill Cr	27.0144	33	Yes	14.93	1.1	RND	CPC	1.82	1.82	68.1	0.35	1.61	1,464	5,744
990055	I-5	26.83	Bybee Cr	27.0142	0	Yes	12.36	1.1	BOX	PCC	2.44	1.83	98.2	0	5	1,070	1,901
991665	I-5	27.8	Schoolhouse Cr	27.0139	0	Yes	15.66	1.2	BOX	PCC	1.83	1.83	339.2	0.09	2.5	4,060	4,845
991665	I-5	27.8	Schoolhouse Cr	27.0139	0	Yes	15.66	2.2	RND	CST	1.83	1.83	339.2	0.09	2.5	4,060	4,845
991436	I-5	29.25	Unnamed to Columbia R	27.0137	67	Yes	18.12	1.1	RND	CST	0.91	0.91	55.3	0	0.21	6,078	12,633
994591	I-5	29.81	Unnamed to Columbia R	27.0136	33	No		1.1	OTH	OTH	0.91	0.91	149.4	0	2.16	155	
998211	I-5	36.67	Unnamed to Unnamed	26	0	Yes		1.1	RND	PCC	0.91	0.91	0.9	0			
996199	I-5	38.02	Unnamed to Coweeman R	26	0	Yes		1.1	RND	PCC	0.76	0.76	137.3	0	4.5		
992332	I-5	41.62	King Cr	26.0127	0	Yes	12.82	1.1	RND	SPS	1.6	1.6	186	0		2,997	1,385
992331	I-5	42.29	Unnamed to Cowlitz R trib	26.0128	33	Yes	9.44	1.1	RND	SST	0.9	0.9	147.5	0		1,402	381
992581	I-5	44.29	Unnamed to Cowlitz R	26.0180	0	Yes	5.7	1.1	RND	CST	0.9	0.9	152	0	1	852	274
992590	I-5	46.77	Unnamed to Cowlitz R	26.0186A	67	Yes	9.77	1.1	RND	CST	1.55	1.55	0.9	0	2	931	1,257
992591	I-5	47.49	Unnamed to Salmon Cr	26	33	Yes	5.05	1.1	BOX	CPC	1.25	1.55	136.8	0	0.71	477	303

Appendix IVA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
992592	I-5	47.88	Unnamed to Salmon Cr	26.0188	67	No		1.1	RND	CST	2.2	2.2	0.9	0		180	
992602	I-5	53.07	Unnamed to Cowlitz R	26	33	Yes	18.36	1.1	RND	PCC	1.05	1.05	90.8	0.27	0.09	3,210	3,587
992608	I-5	53.9	Unnamed to Cowlitz R	26	0	Yes	9.65	1.1	RND	CST	0.9	0.9	260	0		667	276
992343	I-5	54.4	Unnamed to Cowlitz R	26	0	No		1.1	RND	PCC	0.75	0.75	86.6	0.83	1.4	0	0
992355	I-5	54.93	Unnamed to Hill Cr	26	0	Yes	1.43	1.1	RND	PCC	0.75	0.75	88.7	0		204	54
991734	I-5	57.98	Unnamed to Foster Cr	26.0476	0	Yes	11.99	1.1	BOX	CPC	1.52	1.52	89.3	0.94	5	3,507	1,351
990152	I-5	58.63	Foster Cr	26.0475	33	Yes	20.55	1.1	BOX	CPC	3.05	2.43	52.3	0.68	0.02	6,939	4,772
995538	I-5	71.34	Unnamed to Unnamed	23	67	Yes		1.1	RND	PCC	0.61	0.61	67.7	0	0.01		
994301	I-5	81.77	China Cr	23.0870	67	Yes		1.2	BOX	CPC	2.44	1.91	78.1	0	0.06		
994301	I-5	81.77	China Cr	23.0870	67	Yes		2.2	BOX	CPC	2.44	1.91	78.1		0.06		
994555	I-5 NB	25.2	Canyon Cr	27.0147	0	No		1.1	RND	CST	1.43	1.43	0.9	0.9		169	
994553	I-5 NB	25.92	Mill Cr	27.0144	33	Yes	14.96	1.1	BOX	CPC	1.83	1.85	79.6	0	3.81	1,184	2,894
994628	I-5 NB rest area	11.26	Unnamed to Gee Cr	27.0168A	67	Yes	12.34	1.1	RND	PCC	1.37	1.37	11.9	0	0.03	2,361	6,900
994652	I-5 off ramp	11	Unnamed to Gee Cr	27.0168A	67	Yes	13.05	1.1	RND	PCC	1.22	1.22	35.9	0	0.48	2,156	6,630
991039	I-5 SB	25.31	Canyon Cr	27.0147	0	No		1.1	RND	CST	1.43	1.43	38.7	0.4	3	179	
992806	SR 100	1.67	Unnamed to Pacific Ocean	24.0754	67	Yes		1.1	BOX	CPC	1	0.95	54.5	0	1.95		
992807	SR 100	1.82	Unnamed to Pacific Ocean	24.0753	67	Yes		1.1	RND	PCC	0.91	0.91	34	0	1		
991360	SR 103	13.3	Espy Sl	24.0743	0	Yes	10.47	1.1	RND	CST	1.22	1.22	14.3	0.46	0	1,850	6,801
991328	SR 103	19.84	Stackpole Sl	24.0749	67	Yes	11.34	1.1	RND	CST	0.91	0.91	18	0	1.8	5,935	28,384
991332	SR 105	1.86	Unnamed to Willapa R	24	33	Yes	11.58	1.1	RND	PCC	0.9	0.9	26.7	0	2.1	915	784
992437	SR 105	5.95	Unnamed to Fredrickson Sl	24	33	No		1.1	RND	PCC	0.75	0.75	18.8	0	2.98	0	
991366	SR 105	6.23	Unnamed to Willapa Bay	24.0250	33	Yes	12.68	1.1	RND	PCC	1.52	1.52	32.3	0	2	1,460	1,412
992440	SR 105	7.31	Unnamed to Willapa Bay	24	33	No		1.1	RND	CST	0.75	0.75	37.9	0	2.27	42	
992447	SR 105	13.33	Unnamed to Willapa Bay	24	0	No		1.1	RND	CST	0.6	0.6	24.4	0	1.4	35	
993133	SR 105	20.12	Unnamed to Willapa Bay	24.0002A	0	Yes	1.82	1.1	RND	CST	0.6	0.6	0.9			1,210	135
991280	SR 105	21.22	Pacific Co Drain Ditch 1	24.0001	33	Yes		2.3	RND	CST	1.44	1.44	46.7	0	0.24		
991280	SR 105	21.22	Pacific Co Drain Ditch 1	24.0001	33	Yes		3.3	RND	CST	1.52	1.52	49.9	0	0.24		
991280	SR 105	21.22	Pacific Co Drain Ditch 1	24.0001	33	Yes		1.3	RND	CST	1.48	1.48	43.5	0	0.07		
993138	SR 105	24.39	Seastrand Cr	24.0003	67	Yes		1.1	RND	OTH	0.75	0.75	11.1	0	0.08		
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	0	Yes	17.54	1.1	RND	PCC	0.91	0.91	15.9	0	5	1,858	5,576
992235	SR 122	5.84	Unnamed to Mayfield Lk	26	0	Yes	10.88	1.1	BOX	CPC	2.13	2.16	45.9	2.2	4.5	216	584
991017	SR 123	2.28	Unnamed to Ohanapecosh R	26	0	No		1.2	RND	PCC	0.9	0.9	33.2	0.16	6.4	20	
991017	SR 123	2.28	Unnamed to Ohanapecosh R	26	0	No		2.2	RND	PCC	0.9	0.9	31.9	0.27	6.4	20	

Appendix IVA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991022	SR 123	3.36	Unnamed to Ohanapecosh R	26	33	Yes	2.55	1.2	RND	PCC	0.75	0.75	27.4	0.25	2.4	686	792
991022	SR 123	3.36	Unnamed to Ohanapecosh R	26	33	Yes	2.55	2.2	RND	PCC	0.75	0.75	25	0.23	3.5	686	792
991029	SR 123	6.06	Unnamed to Ohanapecosh R	26	33	No		1.1	RND	PCC	0.9	0.9	0.9			60	
991030	SR 123	6.35	Unnamed to Ohanapecosh R	26	33	Yes	1.41	1.2	RND	PCC	0.9	0.9	15.9	0	6.2	231	77
991030	SR 123	6.35	Unnamed to Ohanapecosh R	26	33	Yes	1.41	2.2	RND	PCC	0.9	0.9	16.3	0	5.4	231	77
997382	SR 14	4.8	Unnamed to Columbia R	28	67	Yes		1.1	RND	PCC	1.22	1.22	54.6	0	0.37		
997383	SR 14	4.96	Unnamed to Columbia R	28	33	No		1.1	RND	PCC	0.46	0.46	56.1	0.26	1.26	72	
997384	SR 14	5.23	Unnamed to Columbia R	28	33	Yes		1.1	RND	PCC	0.61	0.61	52	0	1.3	200	
995859	SR 14	5.27	Unnamed to Unnamed	28	33	No		1.1	RND	PCC	0.46	0.46	52	0.12	2.8	142	
999074	SR 14	9.13	Fisher Cr	28.0148	0	Yes	18.06	1.1	BOX	CPC	1.22	1.22	72.7	0.8	8	1,681	4,793
999076	SR 14	10.66	Unnamed to Columbia R	28.0151	0	No		1.1	BOX	CPC	1.22	1.85	87.5	2.2	11.4	42	
999023	SR 14	16.62	Unnamed to Unnamed	28	33	Yes		1.1	RND	CST	0.91	0.91	93.2	0.32	0.49		
999024	SR 14	16.64	Unnamed to Unnamed	28	67	No		1.1	RND	PCC	0.76	0.76	94.6		1.16	20	
999036	SR 14	28.19	Unnamed to Columbia R	28	0	No		1.1	BOX	CPC	1.08	0.94	23.4	0.14	8.1	173	
999038	SR 14	28.45	Unnamed to Unnamed	28	0	No		1.1	BOX	CPC	0.94	0.94	16.9	0	19.5	130	
999079	SR 14	29.79	Unnamed to Columbia R	28	0	Yes		1.1	BOX	CPC	0.91	0.91	24.4	0	6.96	435	
999089	SR 14	31.85	Unnamed to Indian Mary Cr	28	33	Yes		1.1	BOX	CPC	0.95	0.91	22.5	0.22	1.51		
999090	SR 14	32.23	Indian Mary Cr	28	0	Yes		1.1	BOX	CPC	0.95	0.91	38.8	0	3.71		
999092	SR 14	33.49	Unnamed to Columbia R	28	0	Yes											
990488	SR 14	34.5	Little Cr	28.0300	33	No		1.1	BOX	CPC	1.23	1.85	20.7	0	10.7	48	
999095	SR 14	35.19	Unnamed to Hardy Cr	28	0	No		1.1	RND	PCC	0.61	0.61	0.9				
990177	SR 14	36.05	Hardy Cr	28.0303A	0	Yes	8.95	1.1	BOX	CPC	3.05	3.1	24	0.76	5	1,331	4,366
999221	SR 14	44.62	Kanaka Cr	29.0018	0	Yes		1.1	BOX	CPC	2.44	3.05	32.5	0	8.03		
990967	SR 14	46.6	Souther Cr	29.0021	0	No		1.1	BOX	CPC	1.83	1.9	97	45	5.6		
990067	SR 14	47.88	Carson Cr	29.0022	0	Yes		1.1	BOX	CPC	1.83	2.45	32.2	0	4.28		
999239	SR 14	49.8	Unnamed to Wind R	29	67	Yes		1.1	RND	PCC	0.61	0.61	28.8	0.21	1.28		
999230	SR 14	50.03	Unnamed to Columbia R	29	33	Yes		1.1	BOX	CPC	0.95	0.92	27.2	0.35	4.3		
990968	SR 14	51.98	Unnamed to Columbia R	29	0	No		1.1	BOX	CPC	1.28	1.28	37.9	0.25	17.92	7	
991549	SR 14	52.84	Collins Cr	29.0128	67	Yes	12.67	1.1	RND	SPS	2.29	2.29	36.6	0	3.13	1,851	3,268
990341	SR 14	140.8	Pine Cr	31.0354	0	Yes	34.25	1.4	RND	SPS	3.05	3.05	73	0.45	1.5	125,566	490,830
990341	SR 14	140.8	Pine Cr	31.0354	0	Yes	34.25	4.4	RND	SPS	3.05	3.05	73	0.45	1.5	125,566	490,830
990341	SR 14	140.8	Pine Cr	31.0354	0	Yes	34.25	2.4	RND	SPS	3.05	3.05	73	0.45	1.5	125,566	490,830
990341	SR 14	140.8	Pine Cr	31.0354	0	Yes	34.25	3.4	RND	SPS	3.05	3.05	73	0.45	1.5	125,566	490,830

Appendix IVA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
995864	SR 14 Exit 5 EB	5.45	Unnamed to Unnamed	28	0	Yes		1.1	RND	PCC	0.61	0.61	128.8	0.02	3.5		
999202	SR 141	0.74	Jewett Cr	29.0342	0	No		1.1	BOX	CPC	1.85	2.45	24.4	0.59	4.2	58	
990483	SR 141	14.64	Wieberg Cr	29.0202	0	No		1.1	BOX	PCC	1.83	1.86	29.9	0.76	2.4	14	
990339	SR 141	15	Phelps Cr	29.0203	0	No		1.1	BOX	PCC	1.82	1.85	26.9	1.95	3.07	133	
999209	SR 141	18.95	Unnamed to Unnamed	29	0	Unk		1.1	BOX	CPC	1.22	0.91	14.9	2	0.8		
992848	SR 142	1.53	Unnamed to Klickitat R	30	0	No		1.1	RND	CST	1.22	1.22	34.4	1.7	13.25	20	
992888	SR 142	8.66	Unnamed to Klickitat R	30	0	No		1.1	RND	CST	1.07	1.07	19	1.35	9.8	120	
992908	SR 142	14.66	Skookum Canyon Cr	30.0024	67	Unk		1.1	RND	SPS	1.83	1.83	11.5	0	1.24		
992919	SR 142	16.48	Unnamed to Klickitat R	30	0	Yes		1.1	RND	PCC	1.52	1.52	12.8	1.01	4.5		
991629	SR 142	25.1	Smith-Mason Cr	30.0090	33	Yes	5.03	1.2	RND	CST	1.52	1.52	22.9	0	1.5	13,632	11,893
991629	SR 142	25.1	Smith-Mason Cr	30.0090	33	Yes	5.03	2.2	RND	CAL	1.22	1.22	18.3	1.3	5.4	13,632	11,893
990284	SR 142	25.32	Mill Cr	30.0088	67	Yes	6.19	1.1	RND	CST	2.02	2.02	14.6	0	1.5	25,149	55,510
991342	SR 4	0.68	Roaring Cr Sl	24	0	No		1.1	RND	CST	0.9	0.9	25.5	1.08	0.74	0	
992398	SR 4	2.1	Unnamed to Naselle R	24	0	No		1.1	RND	PCC	0.6	0.6	39.4	0	3.5	127	
991375	SR 4	3.8	Unnamed to Naselle R	24.0575A	67	Yes	11.93	1.1	RND	CST	0.75	0.75	23.4	0	0.85	1,877	1,702
991372	SR 4	6.36	Unnamed to Naselle R	24.0543A	0	No		1.1	RND	PCC	0.6	0.6	28.5	0.09	1.5	45	
991346	SR 4	6.97	Unnamed to Salmon Cr	24.0622	0	Yes	17.63	1.1	RND	SST	0.9	0.9	36.3	0.05	2.34	669	646
991347	SR 4	7.34	Unnamed to Salmon Cr	24.0624	67	Yes	13.57	1.1	RND	PCC	0.76	0.76	23.2	0	0.08	1,128	5,593
992403	SR 4	7.59	Unnamed to Salmon Cr	24	67	Yes	13.14	1.2	RND	PCC	0.75	0.75	28.4	0.1	0.81	954	721
992403	SR 4	7.59	Unnamed to Salmon Cr	24	67	Yes	13.14	2.2	RND	PCC	0.75	0.75	27.5	0.14	0.51	954	721
992405	SR 4	8.21	Unnamed to Salmon Cr	24	33	Yes	13.66	1.1	RND	PCC	0.75	0.75	15.6	0.36	2.8	1,021	1,196
991349	SR 4	8.42	Unnamed to Salmon Cr	24	0	No		1.1	RND	PCC	0.75	0.75	48.1	0	2.3	141	
991381	SR 4	8.73	Unnamed to Salmon Cr	24.0620A	0	Yes	9.38	1.1	RND	PCC	0.75	0.75	32.3	0.02	2	300	215
990109	SR 4	10.49	Unnamed to Campbell Cr	25	67	Unk		1.1	BOX	PCC	1.83	1.22	27.5	0	0		
990110	SR 4	10.61	Lassala Cr	25.0077	67	Unk		1.1	BOX	CPC	1.83	1.22	34.2	0	0.6		
990371	SR 4	13.7	Seal Cr	25.0104	0	Yes	28.5	1.1	BOX	PCC	1.37	1.37	15.9	0	-1.63	4,079	13,546
998998	SR 4	14.01	Unnamed to Seal Sl	25	0	No		1.1	RND	PCC	0.61	0.61	29.8	0.11	9.6	91	
999000	SR 4	15.08	Unnamed to Grays R	25	0	Yes		1.1	RND	PCC	0.83	0.83	29.8	0	8.9		
998685	SR 4	16.81	Unnamed to Grays R	25	67	Yes		1.1	RND	PCC	0.91	0.91	18.8	0	1.16		
991396	SR 4	17.19	Unnamed to Grays R	25	67	Yes		1.1	RND	PCC	0.53	0.53	51.7	0	-1.43		
998688	SR 4	17.84	Unnamed to Hull Cr	25	33	Yes		1.1	RND	PCC	0.91	0.91	14.3	0	3.4		
998690	SR 4	18.61	Unnamed to Grays R	25	0	No		1.1	RND	OTH	0.76	0.76	49	0	6.5	199	
991421	SR 4	18.8	Unnamed to Grays R	25.0093A	33	Yes		1.1	RND	PCC	0.91	0.91	24.4	0	2.5		

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998695	SR 4	21.24	Unnamed to Klints Cr	25	0	No		1.1	RND	OTH	0.91	0.91	69.3	3.5	7.67	134	
998698	SR 4	23.06	Unnamed to Eggman Cr trib	25	0	Yes		1.1	RND	OTH	0.91	0.91	60.6	0.24	10.6		
998544	SR 4	23.19	Unnamed to Eggman Cr	25	0	No		1.1	RND	OTH	0.91	0.91	82.2	0	4.68	70	
991398	SR 4	26.25	Unnamed to WF Skamokawa Cr	25	67	Yes	11.93	1.1	RND	PCC	0.91	0.91	21.7	0	1.7	1,189	1,167
991399	SR 4	26.65	Unnamed to Skamokawa R	25	67	Yes		1.1	RND	PCC	0.91	0.91	29.8		0.07		
998554	SR 4	30	Unnamed to Brooks Sl	25	33	No		1.1	RND	PCC	0.91	0.91	24.4	0	2.7	107	
991422	SR 4	30.35	Unnamed to Brooks Sl	25	0	No	3.18	1.1	RND	PCC	1.22	1.22	28	0.37	2.5	53	40
998557	SR 4	30.57	Unnamed to Brooks Sl	25	0	Yes		1.1	RND	PCC	0.76	0.76	22.3	0.75	0		
991402	SR 4	32	Unnamed to Risk Cr	25	33	Yes	0	1.1	RND	PCC	0.61	0.61	30.9	0.24	0.7		
990305	SR 4	33.15	Indian Jack Sl	25	33	Unk		1.1	RND	PCC	0.91	0.91	43.3		-0.2		
990818	SR 4	34.1	Unnamed to Elochoman Sl	25	67	Yes		1.1	RND	PCC	1.37	1.37	30.2		1.1		
998991	SR 4	35.7	Unnamed to Birnie Cr	25	33	Yes		1.1	RND	PCC	0.91	0.91	29.9	0	2.3		
998993	SR 4	36.59	Unnamed to Columbia R	25	33	Yes		1.1	RND	PCC	0.46	0.46	43.2		4		
991407	SR 4	36.88	Unnamed to Columbia R	25	33	Yes		1.1	BOX	CPC	1.27	1.83	55.6	0	2.9	65	
999008	SR 4	37.16	Unnamed to Columbia R	25	0	No		1.1	BOX	CPC	0.91	0.91	75	0.07	4	82	
998671	SR 4	41.94	Unnamed to Columbia R	25	33	No		1.1	RND	CAL	0.91	0.91	18.2	0.4	0.88	150	
999004	SR 4	52.28	Unnamed to Coal Cr Sl	25.0332	67	Yes		1.1	RND	CST	1.22	1.22	42.9	0	0.82		
992781	SR 401	0.76	Unnamed to Columbia R	24	67	Yes	6.95	1.1	RND	PCC	0.91	0.91	16.5	0.46	0.73	1,192	281
991409	SR 401	0.84	Megler Cr	24.0049	67	Yes	13.34	1.1	RND	CST	1.22	1.22	20.3	0	-0.05	1,912	2,684
991411	SR 401	1.85	Unnamed to Columbia R	24.0050	67	Yes	13.53	1.1	ELL	CST	1.42	1.6	27.8	0	0.8	3,146	3,249
991418	SR 401	4.33	Unnamed to Columbia R	24	0	Yes	5.65	1.1	RND	PCC	1.22	1.22	32.9	0.15	5	1,163	391
991377	SR 401	5.56	Unnamed to SF Naselle R	24.0584A	0	Yes	17.32	1.2	RND	PCC	0.61	0.61	28	0	1.4	2,077	1,303
991377	SR 401	5.56	Unnamed to SF Naselle R	24.0584A	0	Yes	17.32	2.2	RND	PCC	0.61	0.61	33.8	0.31	1.4	2,077	1,303
992791	SR 401	6.02	Unnamed to SF Naselle R	24	33	Yes	5.3	1.1	RND	PCC	0.9	0.9	21.5	0.54	1.3	597	452
991378	SR 401	6.03	Unnamed to SF Naselle R	24.0584B	0	Yes	7.66	1.1	RND	PCC	0.9	0.9	28.1	0.78	4.9	666	282
992792	SR 401	6.13	Unnamed to SF Naselle R	24	33	Yes	6.92	1.1	RND	PCC	0.75	0.75	27.3	0.25	2.6		99
992392	SR 401	9.18	Unnamed to SF Naselle R	24	0	Yes	6.83	1.1	RND	PCC	0.9	0.9	34.6	0	3.23	204	60
994565	SR 401 Old	5.56	Unnamed to Unnamed	24	0	Yes	15.99	1.1	RND	PCC	0.61	0.61	12.5	0	5.6	732	414
994567	SR 401 ROW	5.5	SF Naselle R	24.0584	0	Yes	15.75	1.1	RND	PCC	1.21	1.21	55.1	0	1.5	1,342	1,511
994566	SR 401(old)	5.5	Unnamed to SF Naselle R	24	0	Yes	15.12	1.1	RND	PCC	0.61	0.61	11	0.32		911	721
992262	SR 411	7.14	Unnamed to Cowlitz R trib	26	0	Yes	10.52	1.1	RND	OTH	0.85	0.85	40.5	0	1.67	621	191
992265	SR 411	9.56	Unnamed to Cowlitz R	26	67	Yes	11.38	1.1	RND	PCC	0.6	0.6	39.7	0	0.55	1,516	1,454
991783	SR 500	11.7	Unnamed to Lacamas Cr	28.0165	33	Yes		1.1	RND	PCC	0.91	0.91	16.5	0	4.2		

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999062	SR 500	18.53	Unnamed to Unnamed	28	67	Yes		1.1	RND	CST	0.99	0.99	24.1	0	2.8		
994514	SR 501	17.94	Unnamed to Gee Cr trib	27.0168D	0	Yes		1.1	RND	PCC	0.76	0.76	47.7	1.4	2.56		
991877	SR 502	0.77	Unnamed to Gee Cr	27.0168A	67	Yes	4.46	1.1	RND	PCC	0.91	0.91	18.6	0	1.4	450	90
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	33	Yes	18.88	1.1	SQSH	CST	2.11	1.55	32.9	0.3	1	3,325	3,706
991656	SR 503	15.84	Rock Cr	27.0222	33	Yes	27.45	1.2	BOX	PCC	2.15	2.15	0.9	0		13,644	32,937
991656	SR 503	15.84	Rock Cr	27.0222	33	Yes	27.45	2.2	RND	CST	1.22	1.22	42.8	0	0	13,644	32,937
991503	SR 503	19.55	Unnamed to Bitter Cr	27.0372	0	Yes	12.18	1.1	RND	CST	0.61	0.61	18.6	0.58	8	543	682
990037	SR 503	19.85	Bitter Cr	27.0367	67	Yes	14.88	1.1	SQSH	CST	1.25	0.85	12.1	0	1.9	3,045	4,102
990073	SR 503	25.36	Chelatchie Cr	27.0373	67	Yes	16.8	1.1	RND	CST	1.22	1.22	14.3	0	0.56	2,032	4,186
990842	SR 503	27.05	Unnamed to Lewis R	27	0	No		1.1	RND	CST	0.64	0.64	25	0	2	0	0
994531	SR 503	33.04	Brooks Cr	27.0431	33	Yes	15.28	1.1	BOX	CPC	1.52	1.86	33.9	0	4.95	2,072	4,603
994532	SR 503	33.28	Unnamed to Brooks Cr	27.0432	33	Yes	4.18	1.1	BOX	CPC	2.45	2.43	34.9		5	603	1,365
994533	SR 503	33.5	Unnamed to Brooks Cr trib	27.0433	0	Yes	3.44	1.1	RND	PCC	0.91	0.91	31.5	0.9	6.57	285	417
994610	SR 503	34.97	Unnamed to Lk Merwin	27.0428	0	No		1.1	RND	PCC	0.61	0.61	57.2	0	6.9	0	0
994541	SR 503	36.57	Unnamed to Rock Cr	27.0420	0	Yes		1.1	RND	PCC	0.91	0.91	47.5	0.41	12	200	
990322	SR 503	37.79	Unnamed to Lewis R	27.0417	0	No		1.1	RND	PCC	0.91	0.91	37	3.5	16.4	0	0
994545	SR 503	38.17	Unnamed to Lewis R	27.0416	0	Yes	3.48	1.1	RND	PCC	0.46	0.46	16.9	0.29	6	381	434
994546	SR 503	38.65	Unnamed to Lewis R	27.0415	0	Yes	4.84	1.1	BOX	CPC	0.91	1.57	27.1	0.76	6	600	1,625
994547	SR 503	38.85	Indian Cr	27.0411	0	No		1.1	BOX	CPC	1.85	1.85	31.9	0.1	4	0	0
994549	SR 503	39.41	Unnamed to Jim Cr	27	33	Yes	3.55	1.1	RND	PCC	0.61	0.61	32.6	0	7.55		702
994550	SR 503	39.9	Day Cr	27.0409	0	Yes	5	1.1	RND	PCC	0.75	0.75	23.6	0.2	9	1,328	1,862
990062	SR 503	40.94	Cape Horn Cr	27.0401	0	Yes	2.43	1.1	BOX	CPC	2.3	2.9	65.9	0.65	3.34	161	300
994558	SR 503	41.1	Unnamed to Lk Merwin	27.0400	0	Yes	6.34	1.1	RND	PCC	0.91	0.91	22.4	0.26	8.57	676	4,805
994557	SR 503	42.11	Unnamed to Lk Merwin	27.0398	0	Yes	3.15	1.1	RND	PCC	0.76	0.76	35.1	0.72	12.8	214	294
994560	SR 503	42.93	Marble Cr	27.0396	0	No		2.2	RND	CST	0.91	0.91	24.2	40	2.56		
994560	SR 503	42.93	Marble Cr	27.0396	0	No		1.2	RND	CST	0.91	0.91	24.6	12	7.07		
994582	SR 503	44.34	Husky Cr	27.0359	0	No		1.1	RND	PCC	1.22	1.22	0.9	15			
994583	SR 503	45.3	Unnamed to Lewis R	27	0	No		1.1	RND	PCC	0.76	0.76	0.9	0.3			
990089	SR 503	46.17	Colvin Cr	27.0392	0	Yes	15.52	1.1	RND	SPS	1.83	1.83	76.2	0.4	3.5	997	1,412
991439	SR 503	46.55	Davis Cr	27.0338	0	Yes	3.53	1.1	RND	PCC	1.37	1.37	51.8	0.17	5	769	1,925
994623	SR 503	48.19	Unnamed to Houghton Cr	27	33	No		1.1	RND	CST	0.61	0.61	42	0	4	101	
994625	SR 503	49.49	Staples Cr	27.0315	0	Yes	11.27	1.1	RND	PCC	1.37	1.37	38	1.1	2.6	696	605
994629	SR 503	50.01	Unnamed to Lewis R	27.0310	0	Yes	11.86	1.1	RND	CST	0.61	0.61	46.2	1.5		1,060	1,190

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994589	SR 503 ROW	39.41	Unnamed to Jim Cr	27	0	Yes	3.78	1.1	RND	PCC	0.61	0.61	19	0		272	607
27.0305 1.00	SR 503 ROW	50.27	Ross Cr	27.0305	33	Yes	13.28	1.1	BOX	CPC	1.83	1.52	21.4			670	1,798
991789	SR 503 SP	33.54	Unnamed to Lewis R	27	0	No		1.1	RND	PCC	1.22	1.22	50.3	0.3	20	0	
991790	SR 503 SP	34.09	Unnamed to Yale Lk	27	0	Yes	4.2	1.1	RND	PCC	1.22	1.22	30.5	1.83	12	1,154	925
991791	SR 503 SP	35.2	Unnamed to Yale Lk	27	0	Yes	3.91	1.1	RND	PCC	1.22	1.22	32	1.83	3	1,472	913
994603	SR 503 SP	35.58	Unnamed to Yale Lk	27	0	Yes	4.41	1.1	RND	PCC	0.76	0.76	40.2	0	6.03	1,383	1,129
991571	SR 503 SP	35.69	Unnamed to Dog Cr	27	0	Yes	2.87	1.1	RND	PCC	0.76	0.76	50.7	1.4	11.6	565	877
990120	SR 503 SP	35.84	Dog Cr	27.0476	0	Yes	4.66	1.1	BOX	TMB	2.44	2.44	6.7	0.3	2.5	1,090	1,768
994599	SR 503 SP	37.06	Panamaker Cr	27.0478	67	Yes		2.2	BOX	CPC	3.05	2.45	20.6	0	0		
994599	SR 503 SP	37.06	Panamaker Cr	27.0478	67	Yes		1.2	BOX	CPC	3.05	2.45	20.6	0	0		
990078	SR 503 SP	38.77	Dry Cr	27.0481	0	Yes		1.1	BOX	PCC	2.44	3.05	27.7	0	3		
991968	SR 504	2.49	Unnamed to Salmon Cr	26	0	Yes	4.07	1.1	RND	CAL	0.8	0.8	42.2	0	5	211	40
991970	SR 504	2.73	Unnamed to Salmon Cr	26	0	Yes	7.69	1.1	RND	CAL	0.6	0.6	23.7	0	3.6	370	104
992015	SR 504	2.76	Unnamed to Salmon Cr	26	0	Yes	7.41	1.1	RND	CAL	0.6	0.6	24.6	0.1	9.3	205	90
991669	SR 504	3.17	Unnamed to Salmon Cr	26	33	Yes	12.22	1.1	RND	CAL	0.8	0.8	33.5	0	2.3	775	1,206
992019	SR 504	4.55	Unnamed to Silver Lk	26	0	No	2.92	1.2	RND	CST	0.75	0.75	27.6	0.73	2.6	60	900
992019	SR 504	4.55	Unnamed to Silver Lk	26	0	No	2.92	2.2	RND	CST	0.75	0.75	27.6		2.6	60	900
991634	SR 504	17	Unnamed to NF Toutle R	26.0320	0	Yes	13.82	1.1	RND	CST	1.37	1.37	20.4	2.53	1	2,837	1,212
992028	SR 504	17.6	Unnamed to NF Toutle R	26	0	Yes	9.29	1.1	RND	PCC	1.22	1.22	55	0	1.9	1,431	1,134
992068	SR 504	22.21	Unnamed to NF Toutle R	26	0	No		1.1	RND	CST	0.75	0.75	98.1		5.2		
992074	SR 504	23.58	Unnamed to NF Toutle R	26	0	Yes	6.35	1.1	RND	CST	1.6	1.6	68.6	0	10	498	400
992244	SR 505	0.16	Unnamed to Olequa Cr	26	0	Yes	9.11	1.1	BOX	CPC	0.95	1.54	288	2.5		414	983
992246	SR 505	0.26	Unnamed to Olequa Cr trib	26	0	Yes	5.96	1.1	RND	CST	0.9	0.9	29.5	0	5.5	1,253	506
991047	SR 505	19.2	Unnamed to Unnamed	26	67	Yes	10.59	1.1	RND	CST	0.45	0.45	19.9	0	0.4	1,512	1,130
991685	SR 506	2.77	Unnamed to Stillwater Cr	26.0429A	0	Yes	8.16	2.2	RND	PCC	1.07	1.07	29.6	0.19	3.51	462	161
991685	SR 506	2.77	Unnamed to Stillwater Cr	26.0429A	0	Yes	8.16	1.2	RND	PCC	1.07	1.07	31.5	0.3	2.98	462	161
992287	SR 506	2.98	Unnamed to Stillwater Cr	26	0	Yes		1.1	RND	PCC	0.75	0.75	22.5	0	2.75		
992290	SR 506	5.41	Unnamed to Stillwater Cr	26	67	Yes		1.1	RND	PCC	1.22	1.22	31	0	0.51		
991432	SR 506	7.68	Unnamed to Cowlitz R	26	0	Yes	11.26	1.1	RND	OTH	0.78	0.78	33.4	0.16	8.26	570	434
994954	SR 508	0.53	Allen Cr	23.0883	67	Yes		1.1	RND	PCC	0.91	0.91	25	0	1		
994955	SR 508	0.64	Unnamed to Allen Cr	23	67	Yes		1.1	RND	PCC	0.61	0.61	22.9	0	0.6		
994958	SR 508	1.66	Unnamed to Unnamed	23	67	Yes		1.1	RND	PCC	0.76	0.76	16.4	0	2.6		
994959	SR 508	1.85	Unnamed to Unnamed	23	0	Yes		1.1	RND	PCC	0.91	0.91	25	0.17	1.4		

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991755	SR 508	3.5	Unnamed to SF Newaukum R	23	67	Yes		1.1	BOX	CPC	1.65	0.91	10.5	0	1.1		
992277	SR 508	4.26	Unnamed to SF Newaukum R	23	33	Yes		1.1	RND	PCC	0.91	0.91	12.4	0.21	1.28		
994966	SR 508	4.7	Unnamed to SF Newaukum R	23	33	Yes		1.1	RND	OTH	0.46	0.46	18.1	0	2.7		
991756	SR 508	5.1	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	CST	1.22	1.22	18.8	0	0.58		
991292	SR 508	5.46	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	PCC	0.46	0.46	11.5	0	0.35		
994967	SR 508	5.75	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	PCC	0.46	0.46	14.7	0	1.2		
991293	SR 508	6.78	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	PCC	0.91	0.91	13.3	0	0.7		
994969	SR 508	8.88	Unnamed to SF Newaukum R	23	67	Yes		1.2	RND	PCC	0.61	0.61	14.5	0	0.5		
994969	SR 508	8.88	Unnamed to SF Newaukum R	23	67	Yes		2.2	RND	PCC	0.61	0.61	15.2	0	0.3		
994971	SR 508	11.27	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	CST	0.61	0.61	16.3	0	0		
991288	SR 508	11.55	Unnamed to SF Newaukum R	23	67	Yes		1.1	RND	PCC	1.22	1.22	15.1	0	0.5		
991289	SR 508	12.66	Unnamed to SF Newaukum R	23	33	Yes		1.1	RND	PCC	0.91	0.91	20	0	1.5		
991290	SR 508	15.1	Unnamed to Kearney Cr	23	67	Yes		1.1	RND	PCC	0.91	0.91	15.2	0	1.1		
994976	SR 508	15.42	Unnamed to Kearney Cr trib	23	33	Yes		1.1	RND	PCC	0.61	0.61	15.5	0	5.2		
991296	SR 508	15.85	Unnamed to Kearney Cr	23	67	Yes		1.1	RND	PCC	0.91	0.91	15.5	0.12	4		
994979	SR 508	16.5	Unnamed to Stowell Cr trib	23	67	Yes		1.1	RND	PCC	0.76	0.76	14.1	0	1.3		
994981	SR 508	16.99	Unnamed to Stowell Cr	23	67	Yes		1.1	RND	PCC	0.61	0.61	12.6	0	1.9		
991291	SR 508	17.06	Unnamed to Stowell Cr	23	67	Yes		1.1	RND	PCC	1.22	1.22	14.7	0	2		
994463	SR 508	17.55	Stowell Cr	23.0916	67	Yes		1.1	RND	PCC	0.91	0.91	15.1	0	2.8		
992540	SR 508	18.32	Unnamed to Mill Cr	26	33	Yes	9.78	1.1	RND	PCC	0.73	0.73	13.1	0.15	3.5	1,545	1,008
992541	SR 508	18.95	Unnamed to Tilton R	26.0560x	67	Yes	1.67	1.1	RND	CPC	0.6	0.6	16.5	0	0.05	937	294
991433	SR 508	20.37	Shermans Cr	26.0564	0	Yes	3.24	1.1	RND	PCC	0.91	0.91	14.6	1.25	4.5	1,827	1,365
992550	SR 508	22.5	Unnamed to Tilton R	26.0566	0	No		1.1	RND	CST	1.8	1.8	55.9	0.44	15	38	
992551	SR 508	23	Unnamed to Unnamed	26.0567x	0	No		1.1	RND	PCC	0.9	0.9	10.2	1.4	0.12	24	
992552	SR 508	23.16	Unnamed to Tilton R	26.0560x	0	No		1.1	RND	PCC	0.6	0.6	20.4	0.95	0.12	35	
992553	SR 508	23.45	Unnamed to Tilton R	26.0560x	0	No		1.1	RND	PCC	0.62	0.62	19.7	0.85	0.14	80	
992555	SR 508	23.89	Unnamed to Tilton R	26.0560x	33	Yes	4.7	1.1	BOX	CPC	1.68	1.82	24.6	0.55	7.11	1,552	2,644
992557	SR 508	23.99	Unnamed to Tilton R	26.0560x	0	No		1.1	RND	PCC	0.9	0.9	15.1	0	0.04	80	
992573	SR 508	30.01	Unnamed to Tilton R	26	0	No		1.1	RND	PCC	1.08	1.08	13.6	2.5	0.09	86	
991435	SR 508	31.8	Unnamed to Tilton R	26	0	Yes	10.6	1.1	RND	PCC	1.07	1.07	19.5	0.98	2	1,427	1,378
990774	SR 6	0.75	Case Pond	24	0	No	0	1.1	RND	CAL	0.75	0.75	19.3	4	5.2	0	0
991355	SR 6	2.96	Unnamed to Willapa R	24	67	Yes	6.39	1.1	RND	PCC	0.75	0.75	17.3	0	1.7	201	236
990802	SR 6	4.82	Unnamed to Willapa R	24	33	No		1.1	RND	PCC	1.05	1.05	17.4	0.04	1.73	50	

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990805	SR 6	5.37	Unnamed to Willapa R	24	0	Yes	25.91	1.1	ELL	PCC	1.02	0.84	48	0	1.1	3,511	6,814
990813	SR 6	8.32	Unnamed to Willapa R	24	67	Yes	11.33	1.1	RND	PCC	0.9	0.9	23.9	0	1.75	1,556	729
990816	SR 6	9.83	Unnamed to Willapa R trib	24	33	Yes	12.84	1.1	RND	PCC	0.6	0.6	15.7	0	1.28	1,350	1,149
990817	SR 6	9.92	Unnamed to Willapa R	24	67	Yes	4.09	1.1	RND	PCC	0.75	0.75	13.5	0	1.85	1,595	406
990782	SR 6	11.69	Unnamed to Willapa R	24	0	No		1.1	RND	PCC	0.6	0.6	39.1	0	5.3	136	
990790	SR 6	17.36	Unnamed to Fern Cr	24	33	Yes	8.27	1.1	BOX	CPC	1.08	1.28	16.6	0	0.18	250	194
990797	SR 6	19.96	Unnamed to Fern Cr	24	0	No		1.1	RND	PCC	0.6	0.6	38.2	0	3.43	52	
992424	SR 6	21.27	Unnamed to Fern Cr	24	0	Yes	8.08	1.1	RND	PCC	0.62	0.62	84	0.03	2.9	893	141
990736	SR 6	22.94	Unnamed to Salmon Cr	23	33	Yes		1.1	RND	PCC	0.61	0.61	21.1	0	2.4		
990737	SR 6	23.49	Unnamed to Rock Cr	23	67	Yes		1.1	RND	PCC	0.61	0.61	27.6	0	5.5		
991654	SR 6	24.3	Unnamed to Rock Cr	23	0	No		1.1	RND	PCC	0.76	0.76	21.6	0	7.3	110	
990141	SR 6	24.63	Unnamed to Rock Cr	23	33	No		1.1	RND	PCC	0.61	0.61	27.3	0	3.4	146	
990738	SR 6	25.24	Unnamed to Rock Cr	23	33	Yes		1.1	RND	PCC	0.61	0.61	16.1	0	3.9		
990740	SR 6	26.36	Unnamed to Rock Cr	23	33	Yes		1.1	RND	PCC	0.61	0.61	32.6	0	4.9		
990473	SR 6	27.49	Water Mill Cr	23.1156	67	Yes		1.1	BOX	CPC	1.22	1.22	27.3	0	0.4	200	
990741	SR 6	29	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.61	0.61	20.2	0	1.8	246	
990244	SR 6	30.87	Unnamed to Chehalis R	23	33	Yes		1.1	RND	PCC	0.61	0.61	14.1	0	2.7		
990745	SR 6	31	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.91	0.91	17	0	1		
990744	SR 6	31.05	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.91	0.91	14.2	0	-0.14		
990749	SR 6	32	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.61	0.61	22.8	0	1.2		
990751	SR 6	33.56	Unnamed to Chehalis R trib	23	67	Yes		2.2	RND	PCC	0.61	0.61	14.6	0	1.5		
990751	SR 6	33.56	Unnamed to Chehalis R trib	23	67	Yes		1.2	RND	CAL	0.91	0.91	15.2	0	1.2		
990753	SR 6	34	Unnamed to Chehalis R	23	33	Yes	1.64	1.1	RND	PCC	0.61	0.61	12.5	0	2.6	938	135
990756	SR 6	35.08	Unnamed to Chehalis R	23	0	Yes		1.1	RND	CAL	0.61	0.61	19.8	0.58	1		
991542	SR 6	35.18	Unnamed to Chehalis R	23.1098	0	No		1.1	RND	PCC	0.76	0.76	24.9	0.47	7.2		
990757	SR 6	35.42	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.61	0.61	15.9	0	1		
990758	SR 6	35.85	Unnamed to Chehalis R	23	0	Yes		1.1	RND	PCC	0.91	0.91	26.7	0	8.3		
990423	SR 6	36.74	Unnamed to Hope Cr	23	0	Yes		1.1	RND	CST	0.46	0.46	20.2	0.13	2.4		
990534	SR 6	40.53	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.61	0.61	15.3	0.16	0.4		
990760	SR 6	41.22	Davis Cr	23.0180	33	Yes		1.1	BOX	PCC	1.83	1.83	26.5	0	1.2		
990761	SR 6	41.7	Unnamed to Chehalis R	23	67	Yes		1.1	RND	PCC	0.61	0.61	14	0	1		
990764	SR 6	42.38	Unnamed to SF Chehalis R trib	23	67	No		1.1	BOX	CPC	1.07	0.91	20.4	0	0.5	189	
991221	SR 6	43.61	Unnamed to Chehalis R	23	0	Yes		1.1	OTH	CST	0.76	0.76	45.5	1	8.8		

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991544	SR 6	46.39	Unnamed to Chehalis R	23.0949	67	Yes	19.76	1.1	RND	SPS	2.06	2.06	42.2	0	0.3	12,739	25,156
991757	SR 6	46.5	Unnamed to Chehalis R	23.0949	67	Yes		1.1	RND	SPS	2.52	2.52	67.9	0	0.5		
990825	SR 7	2.73	Unnamed to Tilton R	26	33	Yes		1.1	RND	PCC	0.61	0.61	16.6	0	-0.9		
990826	SR 7	3.36	Unnamed to Tilton R	26	0	Yes	11.95	1.1	RND	PCC	0.9	0.9	17.5	0.55	1.25	995	1,433
990831	SR 7	5.5	Unnamed to Tilton R	26	0	Yes	15.13	2.2	BOX	CPC	1.52	1.52	32.4	0.12	3.8	784	1,736
990831	SR 7	5.5	Unnamed to Tilton R	26	0	Yes	15.13	1.2	BOX	CPC	1.52	1.52	32.3	0.12	3.6	784	1,736
990832	SR 7	5.64	Unnamed to Tilton R	26	0	No		1.1	BOX	CPC	1.24	1.24	19	0	6.5	10	
990833	SR 7	6.91	Unnamed to Tilton R	26	0	Yes	3.12	1.1	BOX	CPC	1.22	1.22	41.7	0	8	1,055	1,229
990836	SR 7	7.36	Unnamed to Tilton R	26	0	No		1.1	BOX	CPC	1.83	1.22	27.3	0	0.6	58	
990840	SR 7	8.18	Unnamed to Tilton R	26	67	Yes		1.1	RND	PCC	0.76	0.76	12.9	0.25	1.3		
990841	SR 7	8.89	Tilton R	26	0	Yes	4.41	1.1	BOX	CPC	1.54	0.93	18.2	0.55	0.7	2,296	4,894
990690	SR 7	9.85	Unnamed to Roundtop Cr	11	0	Yes		1.1	RND	PCC	0.91	0.91	34.8	0.76	1		
990657	SR 7	10.25	Unnamed to Summit Cr	11	0	Yes		1.1	BOX	CPC	1.22	1.22	19.8	0.4	11		
990691	SR 7	10.48	Unnamed to Round Top Cr	11	33	Yes		1.2	BOX	PCC	0.91	0.91	14.9	0	6.2		
990691	SR 7	10.48	Unnamed to Round Top Cr	11	33	Yes		2.2	RND	PCC	0.76	0.76	16.7	0	3.1		
990658	SR 7	10.81	Unnamed to Roundtop Cr	11	0	Yes		1.1	BOX	CPC	1.22	1.22	30.5	0.67	5		
990661	SR 7	11.1	Unnamed to Roundtop Cr	11	67	Yes		1.1	RND	PCC	0.61	0.61	16.8	0.18	1.7		
990662	SR 7	11.2	Unnamed to Roundtop Cr	11	33	Yes		1.1	BOX	CPC	0.91	0.91	10.7	0.49	4		
990084	SR 7	11.56	Coal Cr	11.0168	67	Yes	8.86	1.1	BOX	PCC	1.52	0.91	12.2	0.27	3	1,101	1,394
990669	SR 7	12.74	Unnamed to Roundtop Cr	11	67	Yes		1.1	BOX	PCC	1.52	0.91	12	0	1.24		
990670	SR 7	12.8	Unnamed to Roundtop Cr	11	33	Yes		1.1	RND	PCC	0.76	0.76	10.7	0.3	3		
990671	SR 7	12.9	Unnamed to Roundtop Cr	11	67	No		1.1	RND	PCC	0.76	0.76	11.5	0	1.1	50	
990672	SR 7	14.72	Unnamed to East Cr	11	0	Yes	0	1.1	RND	PCC	0.61	0.61	15.4	0	-3.2		
997602	SR 7	14.81	Unnamed to East Cr	11	67	Yes		1.1	RND	PCC	0.46	0.46	13.8	0	0.94		
990674	SR 7	15.92	Unnamed to East Cr	11	67	Yes		1.1	BOX	CPC	1.22	1.22	17.9	0	1.9		
991388	US 101	1	Unnamed to Columbia R	24.0047	0	Yes	15.23	1.1	RND	PCC	0.91	0.91	22.1	0.3	1.8	2,384	2,965
991359	US 101	1.3	Unnamed to Columbia R	24.0045	0	Yes	13	1.1	RND	PCC	0.61	0.61	27.1	0.61	1.22	934	1,317
992817	US 101	1.62	Unnamed to Columbia R	24.0044	0	Yes	4.86	1.1	RND	PCC	0.91	0.91	0.9			220	17
991358	US 101	2	Unnamed to Columbia R	24.0042	0	Yes	15.33	1.1	RND	PCC	0.61	0.61	16.6	0.61	1.82	1,370	1,756
992818	US 101	2.29	Unnamed to Columbia R	24.0042	0	Yes	12.32	1.1	RND	PCC	0.91	0.91	19.5		0.12	1,020	1,034
991390	US 101	2.58	Unnamed to Columbia R	24.0041	0	Yes	17.99	1.1	RND	PCC	0.61	0.61	16.9	0.1	-0.5	352	4,487
992820	US 101	3.15	Unnamed to Columbia R	24	33	Yes		1.1	RND	PCC	0.61	0.61	18.3	0.2	2.5		
992821	US 101	3.3	Unnamed to Columbia R	24	0	Yes	21.23	1.1	RND	PCC	0.61	0.61	20.5	0.18	1.17	1,400	19,968

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992823	US 101	7.11	Chinook R	24.0007A	33	Yes		1.3	BOX	CPC	2.4	2.55	25	0	0.17		
992823	US 101	7.11	Chinook R	24.0007A	33	Yes		3.3	BOX	CPC	2.4	2.55	25	0	0.17		
992823	US 101	7.11	Chinook R	24.0007A	33	Yes		2.3	BOX	CPC	2.4	2.55	25	0	0.17		
991308	US 101	21.27	Unnamed to Willapa Bay	24.0679	67	Yes	18.82	2.2	RND	PCC	0.91	0.91	19.2	0	1.5	3,666	4,561
991308	US 101	21.27	Unnamed to Willapa Bay	24.0679	67	Yes	18.82	1.2	RND	PCC	0.91	0.91	19.4	0	2.4	3,666	4,561
991386	US 101	21.4	Unnamed to Willapa Bay	24.0680	33	Yes	10.28	1.1	RND	PCC	0.91	0.91	23	0	2	207	376
992836	US 101	22.12	Unnamed to Willapa Bay	24	67	No		1.1	RND	PCC	0.6	0.6	16.9	0	3.3	133	
992838	US 101	23.31	Unnamed to Willapa Bay	24.0676	33	Yes	10.01	1.1	RND	PCC	0.9	0.9	23.6	0.01	4	204	417
992298	US 101	46.12	Unnamed to Willapa Bay	24	0	Yes	7.45	1.1	RND	PCC	0.92	0.92	62	0	3.32	418	280
990176	US 101	46.96	Hansen Cr	24.0403	33	Yes	3.67	1.1	BOX	PCC	1.83	1.83	31.2	0.4	0.67	1,006	1,824
982340	US 101	52.11	Unnamed to Unnamed	24	0	Yes	14.32	1.1	RND	PVC	0.91	0.91	39	0	0.3	437	1,031
990053	US 101	61.15	Butte Cr	24.0060	33	Yes	20.66	1.1	BOX	PCC	2.95	1.83	18.6	0.41	1.12	2,800	9,946
990054	US 101	61.17	Unnamed to Butte Cr	24	33	Yes		1.1	RND	PCC	0.91	0.91	25.1	0	1.47		
991517	US 101	61.26	Unnamed to Butte Cr	24	0	Yes	10.24	1.1	RND	PCC	0.61	0.61	22.2	0.4	1.12	879	544
991320	US 101	64.36	Unnamed to Smith Cr	24	33	Yes	6.23	1.1	BOX	CPC	0.95	0.91	18	0.28	0.01	1,104	863
991323	US 101	65.71	Unnamed to Elkhorn Cr	24	67	Yes	12.35	1.1	BOX	PCC	0.95	0.91	19.5	0.32	0.37	1,875	1,962
991426	US 12	72.45	Unnamed to Lacamas Cr	26.0474	33	Yes	12.03	1.1	BOX	PCC	0.92	0.92	22	0	2	2,870	1,867
992084	US 12	90.71	Unnamed to Riffe Lk	26	0	No		1.1	SQSH	SPS	1.65	1.05	0.9			5	
992085	US 12	91.25	Unnamed to Riffe Lk	26	0	Yes	2.01	1.1	SQSH	SPS	1.9	1.45	31.3	0.2	5.3		212
992087	US 12	92.09	Unnamed to Riffe Lk	26	0	No		1.1	ELL	SPS	1.35	1.7	0.9	0.34	0.17	5	
992090	US 12	93.14	Unnamed to Unnamed	26	0	No		1.1	ELL	SPS	1.55	1.9	127.5	0.36	0.15	5	
992092	US 12	93.8	Unnamed to Unnamed	26	0	Yes	1.89	1.1	RND	CST	1.28	1.28	59	0.48	1.8	498	165
992096	US 12	94.15	Highland Cr	26.0590	0	Yes	7.26	1.1	ELL	SPS	1.68	2	65.6	1.42		332	688
990190	US 12	95.75	Highland Cr	26.0590	67	Yes	16.12	1.2	ELL	SPS	2.38	2.58	28.9	0.35	0.4	5,980	12,122
990190	US 12	95.75	Highland Cr	26.0590	67	Yes	16.12	2.2	ELL	SPS	2.38	2.58	27.2	0.3	0.4	5,980	12,122
992099	US 12	95.98	Unnamed to Highland Cr	26	67	Yes	5.21	1.1	ELL	CST	1.12	1.32	37.3	0.18	1.9	2,922	1,038
993141	US 12	101.9	Unnamed to Unnamed to	26	0	No		1.1	RND	PCC	0.46	0.46	38.5	0	4.65	20	
992113	US 12	103.43	Unnamed to Riffe Lk	26	0	Yes	3.01	1.1	RND	CST	0.9	0.9	93.3	0	3	1,057	1,015
990944	US 12	103.98	Steffen Cr	26.0652	67	Yes	8.63	1.1	SQSH	SPS	3.52	2.39	24.5	0	3	3,102	2,248
990401	US 12	109.27	Stiltner Cr	26.0654	33	Yes	3.09	1.1	BOX	CPC	1.83	0.95	18.7	0.5	1	2,066	1,701
992150	US 12	112.08	Unnamed to Kiona Cr	26	0	Yes	1.61	1.1	RND	PCC	1.05	1.05	44.1	0	5	656	87
992151	US 12	112.95	Oliver Cr	26.1025	67	Yes	2.85	1.1	ARCH	CPC	5.89	3.02	31.2	0	0	916	2,583
990338	US 12	113.73	Peters Cr	26.1023	0	No		1.1	BOX	CPC	3.05	2.44	45.1	0.91	4	30	

Appendix IVA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
992227	US 12	114.96	Miller Cr	26.1028	33	Yes	11.67	1.1	ARCH	CPC	5.75	1.35	24.4	0	0.1	325	789
992282	US 12	124.97	Burton Cr	26.1106	0	Yes	20.38	1.1	SQSH	SPS	2.95	2	27.6	0.85	1.52	2,509	5,091
991880	US 12	137.73	Unnamed to Cowlitz R	26	0	No		1.1	RND	CST	0.9	0.9	38.5	0.2	4.7	89	
991743	US 12	149.98	Unnamed to Millridge Cr	26	33	Yes	3.83	1.1	BOX	CPC	2.45	1.85	34.8	0.04	0.8	2,028	4,015
998490	US 12	159.29	Andy Cr	38	67	Yes		1.1	RND	CST	0.91	0.91	17.5	0	2.9		
990845	US 97	12.9	Unnamed to L Klickitat R	30	33	Yes		1.1	RND	SPS	2.74	2.74	69	0.48	1.25		
990846	US 97	13.39	Unnamed to L Klickitat R	30	67	No		1.1	BOX	PCC	1.83	1.83	34.1		1.96	35	
990848	US 97	18.4	Jenkins Cr	30.0128	33	Yes		1.1	BOX	CPC	2.45	1.83	35.2	0.36	2.36		
990850	US 97	21.16	W Prong L Klickitat R	30.0135	67	Yes	13.53	1.1	BOX	CPC	3.05	3.05	54.5	0.06	1.29	10,387	17,750
990052	US 97	21.35	Butler Cr	30.0140	67	Yes	8.39	1.1	RND	SPS	3.2	3.2	35.6	0.21	2	16,149	20,008
990851	US 97	23.99	Dry Cr	30.0147	33	Yes		1.1	BOX	CPC	3.07	1.83	25.6	0	3.45		
990853	US 97	25.41	E Prong L Klickitat R	30.0139	0	Yes	4.91	1.1	BOX	CPC	1.85	1.23	28.4	0.5	4.95	8,100	7,207
990854	US 97	25.59	Idlewild Canyon Cr	30.0152	33	Yes	4.12	1.1	BOX	CPC	1.23	0.94	20.5	0	5.72	5,543	5,370
991955	US 97	27.97	SF Shinando Cr	37.1104	0	Yes	5.47	1.1	ELL	SPS	1.52	1.83	108.8	1.93	4	516	664
990857	US 97	30.1	Shinando Cr	37.1103	0	Yes	11.76	1.1	BOX	CPC	1.52	1.83	76.2	0.4	3.5	13,354	14,910

<sup>1</sup>SR signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

<sup>2</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Codes Used for Culvert Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber  
 MRY - masonry  
 OTH - other  
 PVC - plastic

Appendix IVB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
27.0305 1.00	SR 503 ROW	50.27	Ross Cr	27.0305	33	6/22/2007	Discontinued	BC	MNR	The fishway needs to be replaced. The culvert is undersized and poorly aligned w/a serious outfall problem. The baffles are completely deteriorated and no longer work. The steel plate at the outlet creates an excessive drop.
994532	SR 503	33.28	Unnamed to Brooks Cr	27.0432	33	12/15/2003	Discontinued	BC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990753	SR 6	34	Unnamed to Chehalis R	23	33	4/5/2006	Discontinued	SBC	MNR	The rock control does not sufficiently backwater the culvert. The culvert should be replaced.
990171	SR 6	8.9	Green Cr	24.0341	100	3/4/2008	Triennial	SBC	MNFP	Remove debris from culvert inlet.
990036	SR 409	3.85	Birnie Cr	25.0281	100	3/4/2008	Annual	BC; WP	MNFP	Remove large tree limb from fishway pool.

**Fishway Type:**

- BF** - baffled flume
- BC** - baffled culvert
- SBC** - streambed control
- WP** - weir pool
- PC** - pool-chute
- CC** - concrete control

**Condition:**

- MNR** - requires replacement
- MNFP** - requires maintenance for fish passage

Appendix IVC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	MP	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
991753	I-5	3.07	Burnt Bridge Cr	28.0143	21.33	67,438	EngRequested	Pending							Scope	
994588	I-5	25.85	Mill Cr to Columbia R	27.0144	14.93	5,744	Done	Done	Retrofit	1,805,000					Const/Yes	
991665	I-5	27.8	Schoolhouse Cr to Columbia R	27.0139	15.66	4,845	Pending	Done	Replacement	10,553,183					Scope	
991436	I-5	29.25	Unnamed to Columbia R	27.0137	18.12	12,633	EngRequested								Scope	
992602	I-5	53.07	Unnamed to Cowlitz R	26	18.36	3,587	Pending	Done/01	Replacement	800,000					Scope	
990152	I-5	58.63	Foster Cr to Cowlitz R	26.0475	20.55	4,772	Done	Done	Retrofit	363,808			27-Jun-06	28-Dec-06	Const/T10	2012
994553	I-5 NB	25.92	Mill Cr to Columbia R	27.0144	14.96	2,894	Done	Done	Retrofit	103,000					Const/Yes	
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	17.54	5,576	Done	Pending	Replacement	651,000					Const/T10	2010
999074	SR 14	9.13	Fisher Cr to Columbia R	28.0148	18.06	4,793	EngRequested	Pending							Scope	
990177	SR 14	36.05	Hardy Cr to Hardy Sl	28.0303A	8.95	4,366	Pending								Scope	
990341	SR 14	140.8	Pine Cr to Columbia R	31.0354	34.25	490,830	Pending	Pending	Replacement	703,000					Const/T10	2012
991346	SR 4	6.97	Unnamed to Salmon Cr	24.0622	17.63	646	Pending	Done	Replacement	431,619					Scope	
990371	SR 4	13.7	Seal Cr to Grays River	25.0104	28.5	13,546	Pending	Done	Replacement	589,805	Bridge	757,224			Scope	
991398	SR 4	26.25	Unnamed to WF Skamokawa Cr	25	11.93	1,167	Pending								Scope	
991377	SR 401	5.56	Unnamed to SF Naselle R	24.0584A	17.32	1,303	Pending	Done	Replacement	543,000					Scope	
994565	SR 401	5.56	Unnamed to Unnamed	24	15.99	414	Pending	Pending							Scope	
994567	ROW	5.5	SF Naselle R to Naselle R	24.0584	15.75	1,511	Pending	Done	Ch Bypass	123,000					Scope	
994566	SR 401	5.5	Unnamed to SF Naselle R	24	15.12	721	Pending	Done	Removal	24,000					Scope	
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	18.88	3,706	Done/01	Done	Replacement	1,674,000			18-Oct-06	27-Dec-06	Const/T10	2010
991656	SR 503	15.84	Rock Cr to Lewis R	27.0222	27.45	32,937	Done	Done	Replacement	1,338,346			18-Oct-06	27-Dec-06	Const/T10	2012
990073	SR 503	25.36	Chelatchie Cr to Cedar Cr	27.0373	16.8	4,186	Done	Done	Replacement	655,508		217,000	18-Oct-06	27-Dec-06	Const/T10	2012
994531	SR 503	33.04	Brooks Cr to Lewis R	27.0431	15.28	4,603	Done	Done	Replacement	1,366,464			18-Oct-06	27-Dec-06	Const/T10	2012
994532	SR 503	33.28	Unnamed to Brooks Cr	27.0432	4.18	1,365	Pending								Scope	
27.0305	1.00 SR 503	50.27	Ross Cr to NF Lewis R	27.0305	13.28	1,798	Pending								Scope	
990774	SR 6	0.75	Case Pond to Ellis Sl	24	0	0	Done	Done/00	Replacement	423,000					Const/No	
990805	SR 6	5.37	Unnamed to Willapa R	24	25.91	6,814	Done 06/01	Done/00	Replacement	960,000			27-Jun-06	28-Dec-06	Const/T10	2010
990753	SR 6	34	Unnamed to Chehalis R	23	1.64	135	Pending								Scope	
990831	SR 7	5.5	Unnamed to Tilton R	26	15.13	1,736	Done 06/01	Done/04	Bridge	2,424,723	Replacement	400,000	18-Jun-07	18-Jun-07	Const/T10	2012
991388	US 101	1	Unnamed to Columbia R	24.0047	15.23	2,965	Done	Pending							Const/T10	2012
991358	US 101	2	Unnamed to Columbia R	24.0042	15.33	1,756	Pending	Pending							Scope	
991390	US 101	2.58	Unnamed to Columbia R	24.0041	17.99	4,487	Pending	Pending							Const/T10	2012
992821	US 101	3.3	Unnamed to Columbia R	24	21.23	19,968	Hold	Hold							Const/Oth	2010
991308	US 101	21.27	Unnamed to Willapa Bay	24.0679	18.82	4,561	EngRequested	Done/07	Replacement	9,999,900					Const/Yes	
982340	US 101	52.11	Unnamed to Unnamed	24	14.32	1,031	Pending								Scope	
990053	US 101	61.15	Butte Cr to Smith Cr	24.0060	20.66	9,946	Pending	Pending	Replacement	500,150			6-Sep-06	2-Nov-06	Const/T10	2010

Appendix IVC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	MP	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
990190	US 12	95.75	Highland Cr to Tilton R	26.0590	16.12	12,122	Done/01	Done	Replacement	748,326	Retrofit	260,878	18-Jun-07	18-Jun-07	Const/T10	2014
992282	US 12	125	Burton Cr to Cowlitz R	26.1106	20.38	5,091	Pending								Scope	
990850	US 97	21.16	W Prong L Klickitat R	30.0135	13.53	17,750	Pending								Scope	
990857	US 97	30.1	Shinando Cr to Satus Cr	37.1103	11.76	14,910	Done/01	Done	Replacement	1,925,000					Const/T10	2016

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

Appendix IVD. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	17.54	F	Sched	146,000	505,000				
990053	US 101	61.15	Butte Cr	24.0060	20.66	NF	Future		500,150				
990805	SR 6	5.37	Unnamed to Willapa R	24	25.91	NF	Future		960,000				
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	18.88	NF	Future		1,674,000				
994531	SR 503	33.04	Brooks Cr	27.0431	15.28	F	Future			1,366,464			
990073	SR 503	25.36	Chelatchie Cr	27.0373	16.8	NF	Future			655,508			
990152	I-5	58.63	Foster Cr	26.0475	20.55	NF	Future			363,808			
991656	SR 503	15.84	Rock Cr	27.0222	27.45	NF	Future			1,338,346			
991388	US 101	1	Unnamed to Columbia R	24.0047	15.23	NF	Future			382,000			
990831	SR 7	5.5	Unnamed to Tilton R	26	15.13	NF	Future			2,424,723			
991390	US 101	2.58	Unnamed to Columbia R	24.0041	17.99	NF	Future			404,000			
990341	SR 14	140.8	Pine Cr	31.0354	34.25	NF	Future			703,000			
990190	US 12	95.75	Highland Cr	26.0590	16.12	NF	Future				748,326		
990857	US 97	30.1	Shinando Cr	37.1103	11.76	NF	Future					1,925,000	
Region's Total \$:								<b>146,000</b>	<b>3,639,150</b>	<b>3,785,150</b>	<b>748,326</b>	<b>1,925,000</b>	

Appendix IVE.Dedicated Project Evaluations - Adult Spawner Surveys.

SiteId	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	28-Dec-06	Coho	Downstream	Pre-project	0.31	13	1	0	12
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	28-Dec-06	Coho	Upstream	Pre-project	0.31	7	0	0	7
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	11-Jan-07	Coho	Downstream	Pre-project	0.3	7	3	0	9
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	11-Jan-07	Coho	Upstream	Pre-project	0.31	0	0	0	0
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	17-Jan-07	Coho	Downstream	Pre-project	0.31	5	7	0	15
990053	US 101	61.15	Butte Cr	24.0060	4.58	2010	1	Incomplete	17-Jan-07	Coho	Upstream	Pre-project	0.31	5	2	0	2
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	28-Dec-06	Chum	Downstream	Pre-project	0.14	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	28-Dec-06	Coho	Upstream	Pre-project	0.31	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	28-Dec-06	Chum	Upstream	Pre-project	0.31	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	28-Dec-06	Coho	Downstream	Pre-project	0.14	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	11-Jan-07	Coho	Upstream	Pre-project	0.31	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	11-Jan-07	Coho	Downstream	Pre-project	0.14	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	17-Jan-07	Coho	Downstream	Pre-project	0.14	0	0	0	0
990805	SR 6	5.37	Unnamed to Willapa R	24	0.14	2010	1	Incomplete	17-Jan-07	Coho	Upstream	Pre-project	0.31	0	0	0	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	31-Oct-01	Coho	Upstream	Pre-project	0.2	0	0	0	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	31-Oct-01	Coho	Downstream	Pre-project	0.1	3	0	3	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	9-Nov-01	Coho	Downstream	Pre-project	0.1	0	1	1	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	9-Nov-01	Coho	Upstream	Pre-project	0.2	0	0	0	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	21-Nov-01	Coho	Downstream	Pre-project	0.1	0	0	0	0
991657	SR 503	13.21	Unnamed to Rock Cr	27.0223	0.08	2010	1	Incomplete	21-Nov-01	Coho	Upstream	Pre-project	0.2	0	0	0	0
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	0.04	2010	1	Incomplete	19-Nov-03	Coho	Upstream	Pre-project	0.3	0	0	0	0
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	0.04	2010	1	Incomplete	19-Nov-03	Coho	Downstream	Pre-project	0.04	0	0	0	
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	0.04	2010	1	Incomplete	16-Dec-03	Coho	Upstream	Pre-project	0.3	0	0	0	
992234	SR 122	4.99	Unnamed to Mayfield Lk	26	0.04	2010	1	Incomplete	16-Dec-03	Coho	Downstream	Pre-project	0.4	1	0	0	

## APPENDIX V - SOUTH CENTRAL REGION

- A. Fish Passage Barriers Inventoried as of February 2008
- B. Fishways Needing Repairs or Maintenance for Fish Passage
- C. Dedicated Funding Scoping Progress Report
- D. Ten Year Plan

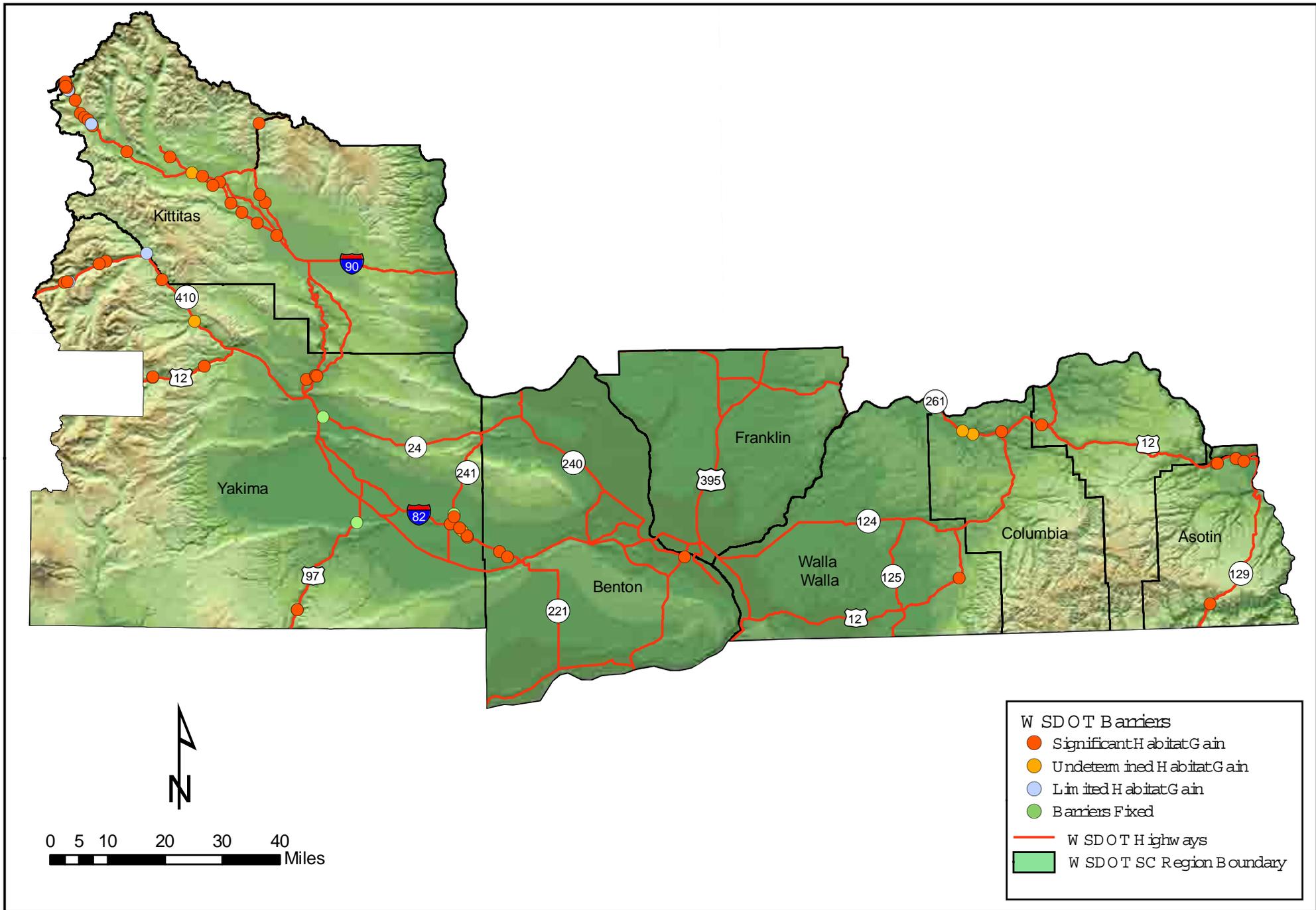


Figure 44 . South Central Region Fish Passage Barriers, February 2008 .

Appendix VA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
991457	I-82	26.26	Unnamed to Yakima R	39.0002A	Yes	33	10.77	1.1	RND	SPS	2.58	2.58	84.3	0.12	1.5	892	1,714
991073	I-82	68.32	Unnamed to Yakima R	37	Yes	67		1.1	RND	SPS	2.67	2.67	77.8	0	0.8		
990404	I-82	70.12	Unnamed to Yakima R	37	Yes	67		1.1	RND	SPS	4.27	4.27	87.4	0	1.05		
997805	I-82	70.9	Unnamed to Unnamed	37	Unk	33		1.1	RND	OTH	1.22	1.22	144.3	0			
991074	I-82	72.08	Unnamed to Yakima R	37	Yes	33		1.1	RND	CST	1.07	1.07	83.4	0	2.2		
997806	I-82	72.38	Unnamed to Unnamed	37	Yes	67		1.1	RND	CST	1.07	1.07	154.8	0	0.6		
997807	I-82	78.47	Unnamed to Unnamed	37	Yes	67		1.1	RND	CST	0.83	0.83	117.5	0.19	1.2		
997808	I-82	80.32	Unnamed to Yakima R	37	Yes	67		1.1	RND	CST	1.22	1.22	79.5	0	0.76		
999276	I-90	53.34	Unnamed to Unnamed	39	Yes	0		1.1	RND	PCC	0.91	0.91	64.3	0	5.6		
999279	I-90	54.03	Unnamed to Coal Cr	39	Yes	33		1.1	BOX	CPC	1.58	1.56	50.5	0	3.1		
999280	I-90	54.18	Coal Cr	39.1880	Yes	33		2.2	BOX	CPC	3.05	1.7	63.4	0.06	3		
999280	I-90	54.18	Coal Cr	39.1880	Yes	33		1.2	BOX	CPC	3.05	1.7	63.2	0.65	3.3		
992942	I-90	56.81	Rocky Run Cr	39.1867A	Yes	33		1.1	RND	CST	2.33	2.33	22.6	0.4	0.92	250	
999342	I-90	59.37	Resort Lk	39.1861	Yes	0		1.1	RND	SPS	2.3	2.3	67.1		2		
992948	I-90	60.58	Unnamed to Keechelus Lk	39	Yes	0	6.08	1.1	OTH	OTH	1.96	1.85	86.5	0	2	2,618	3,748
992950	I-90	61.34	Price Cr	39.1840	Yes	0	6.42	1.1	BOX	CPC	3.09	3.06	81.7	0.36	4.04	1,669	1,502
992954	I-90	62.3	Unnamed to Yakima R	39	No	0		1.1	BOX	CPC	1.84	1.84	23.7	0	3.08	91	
992953	I-90	62.3	Unnamed to Yakima R	39	No	33		1.1	RND	PCC	1.81	1.81	26.6	0	3.07	91	
992955	I-90	62.71	Swamp Cr	39.1836	Yes	33	17.22	2.2	BOX	CPC	2.45	1.84	67.7	0.15	1.2	1,671	9,624
992955	I-90	62.71	Swamp Cr	39.1836	Yes	33	17.22	1.2	BOX	CPC	2.45	1.84	67.7	0.13	1.2	1,671	9,624
990378	I-90	70.9	Silver Cr	39.1713	Yes	67	19.29	1.2	BOX	PCC	2.88	1.84	91.5	0.57	1.4	3,849	6,186
990378	I-90	70.9	Silver Cr	39.1713	Yes	67	19.29	2.2	BOX	PCC	2.83	1.85	89.8	0.27	1.87	3,849	6,186
995453	I-90	84.16	Unnamed to Yakima R	39	Unk	33		1.1	RND	CST	0.61	0.61	68.4	0	0.46		
995465	I-90	88.42	Thorton Cr	39.1418	Yes	0		1.1	RND	CST	0.91	0.91	141.2	0	10.3		
991464	I-90	93.35	Morrison Canyon Cr	39.1230	Yes	33	3.95	1.1	RND	SPS	1.22	1.22	79.2	0	1	4,032	4,507
999303	I-90	99.39	Unnamed to Yakima R	39	Yes	0		1.1	RND	PCC	1.22	1.22	65.4	0	3.3		
991081	I-90	103.5	Unnamed to independent	39	Yes	67		1.1	RND	CST	0.61	0.61	79.6		1		
999283	I-90 EB Ext 54	52.92	Unnamed to Coal Cr	39	Yes	33		1.2	BOX	CPC	3.05	3.35	90.4	0.76	3.7		
999283	I-90 EB Ext 54	52.92	Unnamed to Coal Cr	39	Yes	33		2.2	BOX	CPC	3.05	3.35	90.4	0.76	3.8		
999281	I-90 EB Ext 53	51.33	Coal Cr	39.1880	Yes	33		1.1	RND	CST	1.22	1.22	0.9	0	1.1		
995459	I-90 Ext 84 WB	83.89	Unnamed to Unnamed	39	Yes	67		1.1	RND	PCC	1.9	1.9	53.4	0.15	0.6		
998721	I-90 WB	95.98	Unnamed to Taneum Cr	39	Yes	33		1.1	RND	PCC	1.52	1.52	44	0	1.1		
998735	SR 10	89.26	Unnamed to Teanaway R	39	Yes	33		1.1	RND	PCC	0.61	0.61	23	0	0.8		

Appendix VA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
995878	SR 129	5.78	Rattlesnake Cr	35.2314	Yes	0		1.1	RND	CST	2.13	2.13	19.5	0.18	3.75		
997942	SR 240 EB	41.15	Unnamed to Columbia R	31	Yes	0		1.1	BOX	CPC	2.12	1.89	84.7	7	3.7		
990439	SR 241	8.8	Unnamed to Sulphur Cr	37	Yes	0		1.1	RND	PCC	1.22	1.22	40.9	0.82	0.93		
990324	SR 261	0.2	Pataha Cr	35.0123	Yes	0		1.1	ARCH	CST	6.29	5.35	30	0.2	4.1		
990995	SR 261	5.5	Unnamed to Tucannon R	35	Unk	67		2.2	BOX	PCC	2.56	1.83	17.4	0	0.34		
990995	SR 261	5.5	Unnamed to Tucannon R	35	Unk	67		1.2	BOX	PCC	2.56	1.83	17.1	0	0.3		
990996	SR 261	7.4	Unnamed to Tucannon R	35	Unk	67		1.1	RND	CST	0.91	0.91	16.4	0	1.34		
998605	SR 410	75.3	Unnamed to American R	38	Yes	0		1.1	RND	PCC	0.61	0.61	23.8	1.2	10.34		
991018	SR 410	76.1	Unnamed to American R	38	Yes	33		1.1	RND	PCC	0.61	0.61	26.2	0	3.12		
998606	SR 410	76.45	Unnamed to American R	38	No	0		1.1	RND	CST	0.61	0.61	26.6	0.3	1.8	110	
990409	SR 410	82.8	Wash Cr	38	Yes	67	5.41	1.1	RND	CST	3.05	3.05	34.1		2.5	222	506
998614	SR 410	84.02	Unnamed to American R	38	Yes	0		1.1	RND	CST	0.91	0.91	17	2.05	4.8		
990003	SR 410	91.6	Unnamed to Naches R	38	No	67		1.1	RND	PCC	0.46	0.46	18	0	2.4	100	
998887	SR 410	97.88	Gold Cr	38.0801	Yes	33		1.1	BOX	CPC	1.8	1.3	29.9	0	3.5		
998880	SR 410	107.55	Unnamed to Naches R	38	Unk	0		1.1	BOX	CPC	1.22	1.22	0.9				
991456	SR 821	0.38	Unnamed to Yakima R	39.0002A	Yes	33	8.84	1.1	RND	SPS	3.05	3.05	50	0.12	2	892	1,714
998742	SR 823	3.74	Unnamed to Taylor Ditch	39	Yes	67		1.1	RND	CST	1.52	1.52	85.8	0.47	1.4		
999335	SR 903	7.09	No 3 Canyon	39.1436	Yes	0		1.1	RND	CST	1.3	1.3	26.1	0	2.4		
998724	SR 906	0.66	Unnamed to Coal Cr	39	Yes	33		1.1	RND	PCC	0.91	0.91	26.8	0.1	3.4		
998729	SR 906	1.43	Unnamed to Coal Cr	39	Yes	0		1.1	RND	PCC	1.52	1.52	23.9	0.45	5.6		
998731	SR 906	1.77	Unnamed to Coal Cr	39	Yes	0		1.1	BOX	CPC	2.5	2.5	22.9	0	5.2		
998733	SR 906	2.35	Unnamed to Coal Cr	39	No	67		1.1	RND	CPC	1.33	1.33	31.2	0	1	56	
990183	US 12	168.3	Hause Cr	38	Yes	0	7.16	1.1	BOX	PCC	1.22	1.22	15.2	0.12	5	950	1,299
992140	US 12	168.56	Pine Cr	38	Yes	33	1.62	1.1	RND	PCC	0.84	0.84	17.7	0	2.14		89
992148	US 12	178.89	Bear Canyon Cr	38.0208	Yes	0		1.2	BOX	PCC	1.22	1.22	16.8	0.55	2.5		
992148	US 12	178.89	Bear Canyon Cr	38.0208	Yes	0		2.2	BOX	PCC	1.22	1.22	16.8	0.55	2.5		
990293	US 12	348.5	Mud Cr	32.0956	Yes	33	5.78	1.1	RND	CST	2.6	2.6	49.9	0.37	1.44	5,963	2,210
991746	US 12	390.59	Pataha Cr	35	Yes	33		1.1	ARCH	CPC	18.9	5.34	7.3	0.29	1.3		
990955	US 12	426.1	Unnamed to Snake R	35	Yes	67		1.1	RND	CST	0.76	0.76	31.5	0	1.2		
990442	US 12	426.28	Unnamed to Snake R	35	Yes	67		1.1	RND	CST	0.76	0.76	33.7	0	1.7		
990564	US 12	430.01	Unnamed to Snake R	35	Yes	67		1.2	RND	CST	1.52	1.52	21.7		0.09		
990564	US 12	430.01	Unnamed to Snake R	35	Yes	67		2.2	RND	CST	1.52	1.52	0.9				
990565	US 12	431.36	Unnamed to Snake R	35	Yes	67		1.1	RND	CST	0.76	0.76	31.6	0	2.3		

Appendix VA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
990189	US 97	37.14	Highbridge Springs	37	Yes	0	6.13	1.1	BOX	CPC	2.44	2.44	29		3	1,127	1,488
990129	US 97	143.25	Dry Cr	39.1049	Yes	67		2.2	BOX	CPC	1.53	1.22	25.5	0.15	0.78		
990129	US 97	143.25	Dry Cr	39.1049	Yes	67		1.2	BOX	CPC	1.53	1.22	25.5	0.15	0.78		
990130	US 97	144.89	Dry Cr	39.1049	Yes	0		2.2	SQSH	CST	1.45	0.91	27.1	0.49	0.96		
990130	US 97	144.89	Dry Cr	39.1049	Yes	0		1.2	SQSH	CST	1.45	0.91	27.1	0.49	0.55		
998755	US 97	158.16	Hovey Cr	39.1162	Yes	33		1.1	RND	CST	1.45	1.45	33.9	0.06	3		

<sup>1</sup>SR signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

<sup>2</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Codes Used for Culvert Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber  
 MRY - masonry  
 OTH - other  
 PVC - plastic

Appendix VB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
990189	US 97	37.14	Highbridge Springs	37	0	1/21/2004	Discontinued	BC; SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990048	SR 129	0.9	Buford Cr	35.2309	67	4/1/2008	Discontinued	BC; SP	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990409	SR 410	82.8	Wash Cr	38	67	6/7/2004	Discontinued	BC; SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.

**Fishway Type:**

- BF** - baffled flume
- BC** - baffled culvert
- SBC** - streambed control
- WP** - weir pool
- PC** - pool-chute
- CC** - concrete control

**Condition:**

- MNR** - requires replacement
- MNFP** - requires maintenance for fish passage

Appendix VC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	MP	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
990378	I-90	70.9	Silver Cr to Yakima R	39.1713	19.29	6,186	EngRequested	Done	Retrofit	120,000			24-Sep-03	20-Nov-03	Const/T10	2010
990409	SR 410	82.8	Wash Cr to American R	38	5.41	506	Pending								Scope	
990189	US 97	37.14	Highbridge Springs to Satus Cr	37	6.13	1,488	Pending								Scope	

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

Appendix VD. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
990378	I-90	70.9	Silver Cr	39.1713	19.29	NF	Future		120,000				

Region's **Total \$:**

**120,000**

## APPENDIX VI - EASTERN REGION

- A. Fish Passage Barriers Inventoried as of February 2008
- B. Fishways Needing Repairs or Maintenance for Fish Passage
- C. Dedicated Funding Scoping Progress Report
- D. Ten Year Plan

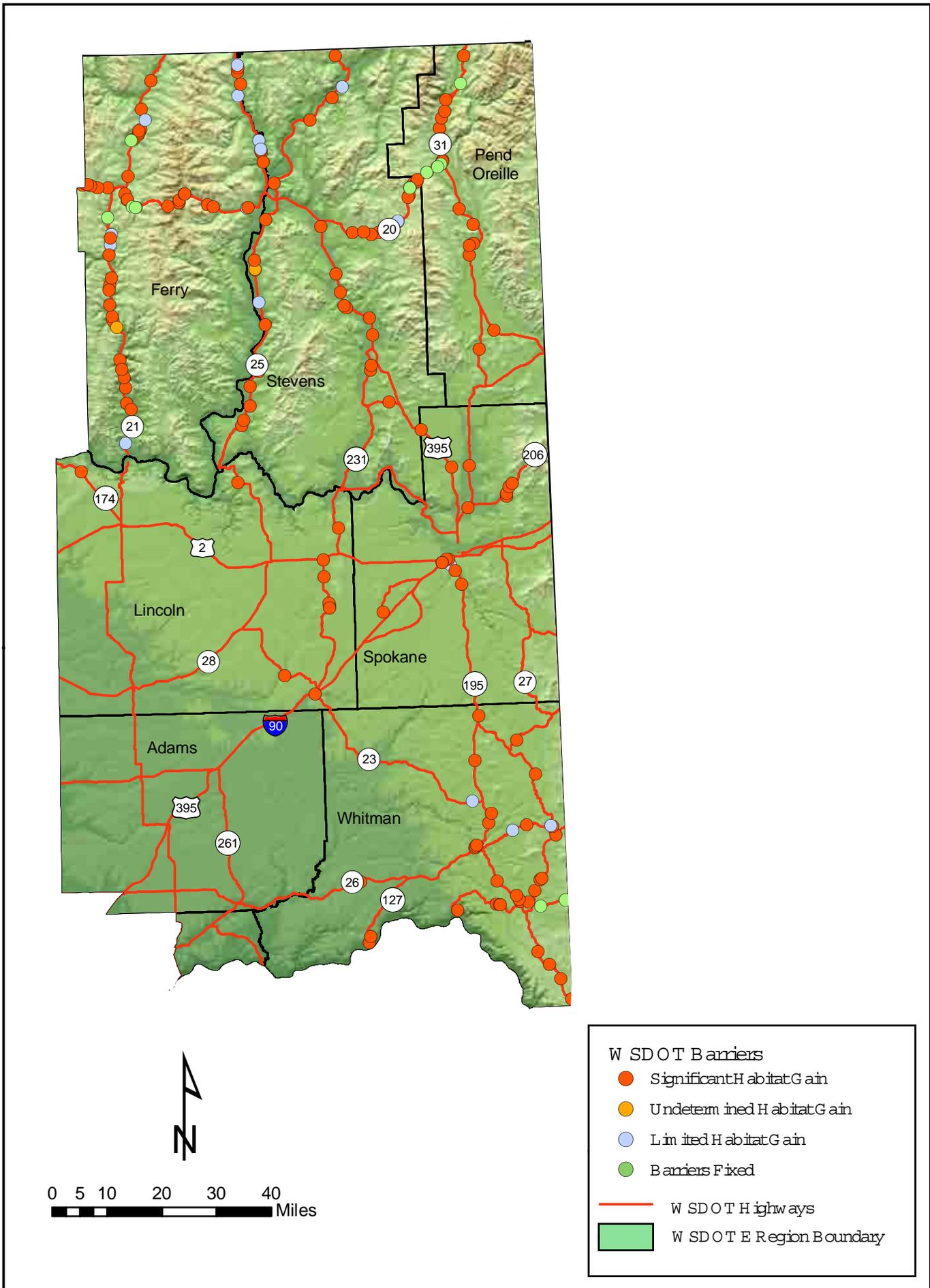


Figure 45. Eastern Region Fish Passage Barriers, February 2008.

Appendix VIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
998248	I-90	244.49	Unnamed to Negro Cr	34	0	Yes		1.2	BOX	CPC	3.05	3.65	107.3	1.1	1.66		
998248	I-90	244.49	Unnamed to Negro Cr	34	0	Yes		2.2	BOX	CPC	3.05	3.65	107.1	1.1	1.84		
997545	I-90	279.09	Garden Springs Cr	56.0005	0	Yes		1.1	BOX	CPC	1.22	0.91	102.4	0	2.54		
997546	I-90 Ext 277	278	Garden Springs Cr	56.0005	33	Yes		1.1	RND	CST	0.91	0.91	27.6	0	2.6		
997547	I-90 Ext 277	278	Garden Springs Cr	56.0005	33	Yes		1.1	RND	PCC	0.46	0.46	17.3	0.06	1.85		
999174	SR 127	11.22	Unnamed to Snake R	35	67	Yes		1.1	BOX	CPC	2.45	1.87	16.1	0	1.7		
999176	SR 127	12.38	Unnamed to Snake R	35	33	Yes		1.1	BOX	CPC	2.58	1.83	26.4	0.1	4.8		
999269	SR 174	28.87	Unnamed to Lk Roosevelt	53	0	Yes		1.1	BOX	CPC	2.44	2.24	58.5	0.55	4		
995375	SR 194	1.34	Little Almota Cr	35	0	Yes	11.81	1.1	RND	CST	2.77	2.77	44	1.14	3.9	2,470	3,208
998375	SR 194	15.08	Wilbur Cr	34.0285	0	Yes		1.1	SQSH	CST	2.55	1.69	22.8	0.55	2.7		
998376	SR 194	15.75	Wilbur Cr	34.0285	67	Yes		1.1	SQSH	CST	2.15	1.62	24.7	0.1	1.94		
998377	SR 194	15.86	Unnamed to Wilbur Cr	34	0	Yes		1.1	SQSH	CST	1.22	0.89	18.5	0.78	4.26	1,190	
997857	SR 20	281.93	Patchen Cr	59	67	Yes		1.1	RND	CST	0.91	0.91	41.3		1.43		
997858	SR 20	282.37	Unnamed to L Pend Oreille R	59.0389	0	Yes		1.1	RND	CST	0.91	0.91	31.5	0.39	1.8		
999351	SR 20	297.48	Granite Cr	52.0368	0	Yes		2.2	RND	CST	0.95	0.95	19.9	0.27	0.55		
999351	SR 20	297.48	Granite Cr	52.0368	0	Yes		1.2	RND	CST	0.95	0.95	21.2	0.25	0.7		
999352	SR 20	297.75	Granite Cr	52.0368	33	Yes		1.1	BOX	CPC	2.44	1.22	17.4	0	2.9		
999353	SR 20	298.49	Granite Cr	52.0368	0	Yes		1.1	BOX	CPC	2.44	1.22	47.8	0	2.17		
999354	SR 20	299.79	NF Granite Cr	52.0372	0	Yes		1.1	BOX	CPC	1.22	1	21.4	0	3.09		
999356	SR 20	301.7	Unnamed to Granite Cr	52	0	Yes		1.1	BOX	CPC	1.3	1.3	0.9	2			
990310	SR 20	306.73	O' Brien Cr	52.0239	67	Yes		1.1	BOX	PCC	2.44	1.22	11.2	0	2.5		
990311	SR 20	307.72	O' Brien Cr	52.0239	0	Yes		1.1	BOX	PCC	2.44	1.22	11.6	0	3.44		
992119	SR 20	307.8	O' Brien Cr	52.0239	33	Yes		1.1	BOX	CPC	2.44	1.22	11.2	0	1.88		
999373	SR 20	317.28	Unnamed to NF O'Brien Cr	52.0410	0	Yes		1.1	RND	CST	0.99	0.99	26.8	0	4.67		
998865	SR 20	320.9	Unnamed to Unnamed	58	0	Yes		1.1	RND	CST	0.46	0.46	36	0.13	15		
998866	SR 20	320.97	Pass Cr	58.0472	0	Yes		1.1	RND	PCC	0.76	0.76	73.4	0	27		
998867	SR 20	321.5	Pass Cr	58.0472	0	Yes		1.1	RND	PCC	0.61	0.61	32.3	0.1	16		
998869	SR 20	323.74	Sherman Cr	58.0428	0	Yes		1.1	BOX	CPC	1.87	1.87	43.8	0.26	5.4		
998870	SR 20	323.87	NF Sherman Cr	58.0073	0	Yes		1.1	BOX	CPC	1.55	1.55	47.2	0.13	5.8	200	
998791	SR 20	328.69	Milk Cr	58.0464	33	Yes		1.1	RND	PCC	0.61	0.61	24.8	0.4	0.9	120	
998794	SR 20	330.04	Hart Cr	58.0462	0	Yes		1.2	RND	PCC	0.61	0.61	16.7	0.27	2.6		
998794	SR 20	330.04	Hart Cr	58.0462	0	Yes		2.2	RND	CST	0.61	0.61	16.1	0.27	2.2		

Appendix VIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
998802	SR 20	336.54	Unnamed to Sherman Cr	58	33	No	3.48	1.1	RND	PCC	0.46	0.46	24.3	0.07	6.6	196	1,302
998803	SR 20	336.89	Trout Cr	58.0434	0	Yes	7.65	2.2	RND	CST	0.91	0.91	18.2	0.83	0.38	4,013	10,142
998803	SR 20	336.89	Trout Cr	58.0434	0	Yes	7.65	1.2	RND	CST	0.91	0.91	18.2	0.83	0.16	4,013	10,142
992122	SR 20	361.49	Unnamed to Keogh Lk	59	67	Yes		1.1	RND	CST	0.61	0.61	32.5	0	2.92		
990303	SR 20	363.69	Narcisse Cr	59.0252	0	Yes		2.2	RND	CST	0.77	0.77	16.1	0.23	1.8		
990303	SR 20	363.69	Narcisse Cr	59.0252	0	Yes		1.2	RND	PCC	0.96	0.96	15.8	0	1.58		
997836	SR 20	365.6	Unnamed to Starvation Lk	59.0301	0	Yes		1.1	OTH	OTH	0.61	0.61	35.7	0.15	5.5		
990398	SR 20	367.77	Unnamed to Starvation Lk	59.0301	33	Yes		1.1	RND	CST	2.14	2.14	40	0	1.5		
997839	SR 20	371.38	Gap Cr	59.0330	0	Yes		1.1	RND	CST	0.91	0.91	22.4	0	2		
997841	SR 20	372.71	Unnamed to L Pend Oreille R	59.0332	0	Yes		1.1	RND	CST	0.91	0.91	26.3	0.27	2		
997842	SR 20	372.76	Unnamed to L Pend Oreille R	59	33	No		1.1	RND	CST	0.91	0.91	24.9	0.25	2.97	89	
990195	SR 20	378.29	Hosmer Cr	59.0364	67	Yes		1.2	RND	CST	0.91	0.91	31.1	0	1.8		
990195	SR 20	378.29	Hosmer Cr	59.0364	67	Yes		2.2	RND	CST	0.91	0.91	30.9	0	1.8		
990174	SR 20	378.74	Handle Cr	59.0370	67	Yes		3.3	SQSH	CST	1.07	0.7	26.8		1.9		
990174	SR 20	378.74	Handle Cr	59.0370	67	Yes		2.3	SQSH	CST	1.07	0.7	26.7		2.5		
990174	SR 20	378.74	Handle Cr	59.0370	67	Yes		1.3	SQSH	CST	1.07	0.7	27		2.4		
990881	SR 20	380.1	Unnamed to Lk Thomas	59	33	Yes		1.1	SQSH	CST	1.45	0.95	25.9	0	4.17		
997856	SR 20	381.34	Deer Cr	59.0383	33	Yes		1.1	ELL	CST	1.4	1.57	47.4		0.82		
990250	SR 20	384.95	Lost Cr	62.0322	67	Yes		1.1	SQSH	CST	2.04	1.53	28.1	0	2		
990350	SR 20	388.13	Renshaw Cr	62.0310	33	No		2.2	RND	CST	0.9	0.9	22.3	0	3.9	116	
990350	SR 20	388.13	Renshaw Cr	62.0310	33	No		1.2	RND	CST	0.9	0.9	22.1	0	3.9	116	
990351	SR 20	389.5	Renshaw Cr	62.0310	0	Yes		1.1	SQSH	CST	1.92	1.4	23.7		2		
997877	SR 20	399.16	Unnamed to Pend Oreille R	62	0	Yes		1.1	RND	PCC	0.61	0.61	26.2	0	6.2		
990353	SR 20	403.6	Reynolds Cr	62.0408	0	Yes	2.65	1.1	RND	PCC	0.76	0.76	43.5	0.27	3.01	713	510
997880	SR 20	408.69	Unnamed to Pend Oreille R	62.0522	0	Yes		1.1	RND	CST	0.76	0.76	27.2	0	11		
990165	SR 20	409.58	Gardiner Cr	62.0525	67	Yes		1.2	RND	PCC	0.76	0.76	13.4	0	3.8		
990165	SR 20	409.58	Gardiner Cr	62.0525	67	Yes		2.2	RND	PCC	0.76	0.76	14.2	0	3.4		
990101	SR 20	411.4	Cusick Cr	62.0524	33	Yes		2.2	RND	PCC	0.76	0.76	18.8	0.03	1.8		
990101	SR 20	411.4	Cusick Cr	62.0524	33	Yes		1.2	RND	PCC	0.76	0.76	19	0.02	2		
997871	SR 20	426.24	Bracket Cr	62.0815	67	Yes		1.1	RND	CST	1.52	1.52	62.1	0	1.7		
998654	SR 206	7.11	Unnamed to Deadman Cr	55.0092	67	Yes		1.1	BOX	CPC	1.52	1.22	10.1	0	2.08		
998655	SR 206	7.5	Unnamed to Deadman Cr	55.0102	67	Yes		1.1	RND	CST	0.91	0.91	19.8	0	2.1		

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Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
998657	SR 206	9	Unnamed to Deadman Cr	55.0109	0	Yes		1.1	RND	CST	0.91	0.91	17.2	0.4			
998659	SR 206	9.89	Unnamed to Deadman Cr	55.0112	33	Yes		1.1	SQSH	CST	1.95	1.51	13.2	0	3.34		
998581	SR 21	9.02	Unnamed to Sanpoil R	52	0	No				Dike under SR 21							
990280	SR 21	115.6	Meadow Cr	52.0031	0	Yes		1.1	BOX	PCC	1.83	1.83	46.9	6.1	5.5		
990204	SR 21	117.05	Jack Cr	52.0046	0	Yes	3.13	1.1	BOX	PCC	1.52	1.52	17.8	1.5	2.3	673	792
990140	SR 21	120.18	Empire Cr	52.0058	0	Yes	3.78	1.1	BOX	PCC	1.22	0.91	27.4	1.25	2.5	1,635	1,701
990242	SR 21	122.05	Lime Cr	52.0066	0	Yes	3.38	1.1	BOX	CPC	1.22	1.22	23.8	0.29	5	927	1,244
990056	SR 21	123.64	Cache Cr	52.0068	33	Yes		1.1	BOX	PCC	0.91	1.22	10.4	0.3	0.7		
990275	SR 21	125.38	McAllister Cr	52.0082	0	Yes		1.1	RND	PCC	1.07	1.07	14.8	0	4.8		
990095	SR 21	132.7	Cub Cr	52.0123	67	Unk		1.1	RND	PCC	0.91	0.91	13.5	0	1.48		
990362	SR 21	133.6	South Nanamkin Cr	52.0125	33	Yes		1.2	SQSH	CST	1.83	1.14	14.8	0.55	1.01		
990362	SR 21	133.6	South Nanamkin Cr	52.0125	33	Yes		2.2	RND	OTH	0.46	0.46	14.8	0.9	0.5		
990296	SR 21	134.33	N Nanamkin Cr	52.0136	67	Yes	8.86	3.3	SQSH	CST	1.75	1.22	15.4	0	-0.65	10,665	51,759
990296	SR 21	134.33	N Nanamkin Cr	52.0136	67	Yes	8.86	2.3	BOX	PCC	1.83	1.22	15	0	0.93	10,665	51,759
990296	SR 21	134.33	N Nanamkin Cr	52.0136	67	Yes	8.86	1.3	RND	CST	0.76	0.76	15	0	0.53	10,665	51,759
990026	SR 21	136.61	Bear Cr	52.0148	33	Yes	3.61	1.1	BOX	CPC	1.83	1.83	17	0.17	4.83	911	1,732
990013	SR 21	139.36	Anderson Cr	52.0171	0	Yes	3.58	1.1	BOX	CPC	2.44	1.22	15.1	0.8	2.12	760	1,411
999362	SR 21	140.28	Unnamed to Sanpoil R	52.0174	67	Yes		1.1	BOX	CPC	2.44	1.22	13.4		1.27		
990306	SR 21	142.09	Nineteenmile Cr	52.0177	0	Yes		1.1	BOX	CPC	2.44	1.22	13.9	0.15	7.38		
990569	SR 21	146.76	Rattlesnake Gulch	52.0313	0	Yes	2.26	1.1	BOX	PCC	1.22	1.22	13.4		5.31	599	562
999367	SR 21	149.59	Unnamed to Sanpoil R	52	67	No		1.1	RND	PCC	0.61	0.61	10.1	0	1.39	104	
990428	SR 21	150.93	Tenmile Cr	52.0323	67	Yes		1.1	RND	PCC	0.61	0.61	10.1		-0.29		
990408	SR 21	151.52	Sunset Cr	52	33	No		1.1	RND	OTH	0.61	0.61	12.6	0	4.8	87	
998580	SR 21	165.4	Curlew Cr	52.0288	33	Yes		1.1	SQSH	CST	1.7	1.2	18.6	0	2.4		
990096	SR 21	172.85	Curlew Cr	60.0288	67	Yes		2.4	RND	OTH	0.76	0.76	11.6		2.5		
990096	SR 21	172.85	Curlew Cr	60.0288	67	Yes		1.4	RND	OTH	0.76	0.76	11.3		3.6		
990096	SR 21	172.85	Curlew Cr	60.0288	67	Yes		3.4	RND	CST	0.91	0.91	10.1		1.9		
990096	SR 21	172.85	Curlew Cr	60.0288	67	Yes		4.4	RND	CST	0.91	0.91	10		2.2		
990097	SR 21	173.93	Curlew Cr	60.0288	67	Yes		1.1	RND	CST	1.52	1.52	17.3	0	1.21		
990098	SR 21	174.35	Curlew Cr	60.0288	33	Yes		1.1	RND	CST	1.83	1.83	13.7	0	0.87		
990099	SR 21	174.65	Curlew Cr	60.0288	67	Yes		1.1	RND	CST	1.83	1.83	16	0.25	1.25		
990399	SR 21	175.2	St Peter's Cr	60	0	Yes	3.31	1.1	RND	CST	1.07	1.07	21.3	0.55	3	1,100	997

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990100	SR 21	177.09	Aeneas Cr	60.0300	67	No		1.1	RND	CST	0.84	0.84	20.7	0	2.65	166	
998817	SR 21	179.17	Tonasket Cr	60.0291	33	Yes		1.1	RND	CST	0.61	0.61	22.2	0	9.09		
998822	SR 21	185.18	Little Goosmus Cr	60.0263	33	Yes		1.1	RND	PCC	0.61	0.61	11.8	0.75	3.65		
997863	SR 211	7.45	Deer Cr	62.0780	33	Yes		1.1	RND	PCC	0.76	0.76	32	0.14	1.3		
998536	SR 23	1.92	Unnamed to Pleasant Valley Cr	34	33	No		2.2	RND	PCC	0.76	0.76	12.6		2.39	130	
998536	SR 23	1.92	Unnamed to Pleasant Valley Cr	34	33	No		1.2	RND	PCC	0.76	0.76	12.6	0	2.06	130	
990372	SR 23	52.28	Sheep Cr	43.0852	0	Yes	3.99	1.1	BOX	CPC	3.05	2.45	45.5	0.02	3.73	1,510	3,277
991465	SR 231	18.38	Unnamed to Upper Crab Cr	43	67	Yes		1.2	RND	CST	1.52	1.52	18	0	1.05		
991465	SR 231	18.38	Unnamed to Upper Crab Cr	43	67	Yes		2.2	RND	CST	1.52	1.52	19	0	2.1		
998266	SR 231	18.75	Unnamed to Unk	43	33	Yes		1.2	RND	CST	1.52	1.52	17.1	0	2.3		
998266	SR 231	18.75	Unnamed to Unk	43	33	Yes		2.2	RND	CST	1.52	1.52	17.2	0	2.3		
998267	SR 231	19.25	Unnamed to Unk	43	67	Yes		1.2	RND	CST	1.37	1.37	15.6	0	1.34		
998267	SR 231	19.25	Unnamed to Unk	43	67	Yes		2.2	RND	CST	1.37	1.37	15.1	0	1.85		
991466	SR 231	24.69	Unnamed to Upper Crab Cr	43	67	Yes		1.2	RND	CST	1.83	1.83	18.1	0	0.55		
991466	SR 231	24.69	Unnamed to Upper Crab Cr	43	67	Yes		2.2	RND	CST	1.83	1.83	18.2	0	0.99		
998271	SR 231	27.82	Crab Cr	43	67	Yes		1.2	RND	CST	1.83	1.83	18.2	0	1.59		
998271	SR 231	27.82	Crab Cr	43	67	Yes		2.2	RND	CST	1.83	1.83	18.2	0	1.48		
991683	SR 231	36.09	Unnamed to Spring Cr	54	0	Yes		1.1	BOX	PCC	1.83	1.22	16.1	0.55	2.5		
997861	SR 231	70.06	Jump-off Joe Cr	59.0786	0	Yes		1.1	BOX	CPC	2.17	0.93	11.6	0.22	2.9		
997862	SR 231	70.96	Bulldog Cr	59.0781	67	Yes		1.1	RND	OTH	0.61	0.61	15.9	0	1.1		
998930	SR 25	17.84	Bockemuehl Canyon Cr	54	0	Yes		1.1	BOX	CPC	1.83	1.83	23.9	0.53	6		
991470	SR 25	33.62	Unnamed to O-Ra-Pak-En Cr	58.0127	0	Yes		1.1	RND	CST	0.91	0.91	36.6	0.4	2.5		
990315	SR 25	34.55	O-Ra-Pak-En Cr	58.0126	33	Yes		1.1	BOX	CPC	1.22	1.22	69.1	0	3.6		
990007	SR 25	37.73	Alder Cr	58.0134	0	Yes	6.61	1.1	BOX	CPC	1.52	1.83	20.4	0	6	9,235	17,620
990198	SR 25	42.33	Hunters Cr	58.0146	0	Yes	4.87	1.1	BOX	CPC	3.96	1.68	27.1	0.35	2.5	2,205	6,086
998854	SR 25	46.06	Harvey Cr	58.0200	33	Yes		1.1	BOX	CPC	1.55	1.83	58.5	0	2.7		
998856	SR 25	55.74	Deer Cr	58.0221	0	Yes		1.2	RND	PCC	0.46	0.46	12.6	0.33	4.75		
998856	SR 25	55.74	Deer Cr	58.0221	0	Yes		2.2	RND	PCC	0.61	0.61	12.7	0.29	5.45		
998857	SR 25	60.08	Unnamed to Lk Roosevelt	58	0	No		1.1	RND	CST	0.61	0.61	28	0.83	8.8	175	
998860	SR 25	66.01	Cheweka Cr	58.0361	0	Yes		1.1	BOX	CPC	1.22	1.22	32	1.05	3.4		
998861	SR 25	66.14	Unnamed to Cheweka Cr	58	33	Unk		1.1	RND	CST	0.61	0.61	23.8	0	5.9		
998862	SR 25	67.91	Quillisacut Cr	58.0387	33	Yes		1.1	RND	PCC	1.22	1.22	65.9	0	2.6		

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998864	SR 25	76.15	Hallam Cr	58.0424	67	Yes		1.1	RND	CST	0.46	0.46	14.1	0	2.1		
990343	SR 25	84.57	Pingston Cr	61.0007	33	Yes		1.1	BOX	CPC	1.22	1.22	40.6	0.18	3.4		
998843	SR 25	102.66	Unnamed to LK Roosevelt	61.0076	0	Yes		1.1	RND	CST	0.91	0.91	37.6		3.88		
990319	SR 25	108.94	Onion Cr	61.0098	67	Yes		1.1	BOX	CPC	2.45	1.85	30	0	2.1		
998844	SR 25	111.95	Fivemile Cr	61.0148	0	No		1.1	RND	PCC	0.76	0.76	66.4	0	13		
998847	SR 25	119.87	Boundary Cr	61.0163	0	Yes		1.1	RND	CST	1.52	1.52	42.7	0.45	4.5		
998352	SR 26	107.78	Willow Cr	34.0131	33	Yes		1.2	BOX	CPC	3.05	2.44	30.6	0.7	0.41		
998352	SR 26	107.78	Willow Cr	34.0131	33	Yes		2.2	BOX	CPC	3.05	2.44	31.9	0.7	0.21		
998365	SR 26	131.86	Unnamed to Palouse R	34	33	Yes		1.1	RND	PCC	0.76	0.76	46.9	0	3.69		
998366	SR 26	132.14	Unnamed to Palouse R	34	0	Yes		1.1	RND	PCC	1.07	1.07	61.9	0.4	4.1		
998367	SR 26	132.43	Unnamed to Palouse R	34	0	Yes		1.1	RND	OTH	0.91	0.91	61.9	0	4.97		
998417	SR 27	2.47	Unnamed to Missouri Flat Cr	34	67	Yes		1.1	RND	PCC	1.22	1.22	36.1	0	1.83		
998418	SR 27	4.69	Unnamed to Rose Cr	34	33	Yes		1.1	BOX	PCC	1.83	1.83	28.4	0	1.44		
998419	SR 27	5.12	Rose Cr	34.2269	33	Yes		2.2	BOX	PCC	2.59	1.22	23.5	0	2.9		
998419	SR 27	5.12	Rose Cr	34.2269	33	Yes		1.2	BOX	PCC	2.59	1.22	22.1	0	3.17		
998445	SR 27	14.86	Unnamed to Palouse R	34	33	Yes		1.1	OTH	OTH	1.53	1.53	160.9	0	2.31		
998449	SR 27	16.85	Duffield Cr	34.2856	33	Yes		1.1	BOX	CPC	3.05	1.83	61	0	4.6		
998450	SR 27	17.22	Unnamed to Palouse R	34	33	No		1.1	RND	OTH	0.91	0.91	49.7	0.16	2.05	100	
998521	SR 27	29.31	Unnamed to Kelly Cr	34	67	Yes		1.1	BOX	CPC	1.83	1.83	16.1	0	2.9		
998529	SR 27	39.33	Unnamed to Pine Cr	34	33	Yes		1.1	RND	CST	1.75	1.75	21	0	2.47		
998369	SR 270	0.06	Unnamed to Unnamed	34	33	Yes		1.1	RND	PCC	0.91	0.91	36.9	0.15	1.03	768	
998370	SR 270	1.5	Unnamed to SF Palouse R	34	67	Yes		1.1	BOX	PCC	1.22	1.27	65.8	0	1.1		
998403	SR 272	7.07	Unnamed to Clear Cr	34	0	No		1.2	RND	CST	0.76	0.76	11.4	0.6	2.11	136	
998403	SR 272	7.07	Unnamed to Clear Cr	34	0	No		2.2	RND	CST	0.76	0.76	11.3	0.6	2.74	136	
998405	SR 272	9.88	Brush Cr	34.2679	67	Yes		1.1	RND	CST	0.91	0.91	12.2	0	1.61		
997854	SR 292	2.96	Sheep Cr	59.0861	33	Yes		1.1	RND	PCC	1.22	1.22	61.6	0.36	1.05		
990352	SR 31	0.6	Renshaw Cr	62.0310	0	Yes		1.1	RND	CST	0.76	0.76	29.6	2.3	3.8		
997883	SR 31	0.85	Diamond Cr	62.0312	0	Yes		1.1	RND	CST	0.46	0.46	30.1	0.31	1.7		
990201	SR 31	3.75	Ione Millpond	62.0279	0	Yes	11.73	1.1	BOX	PCC	2.13	2.44	27.9	0	2.68	9,344	143,218
997885	SR 31	7.39	Unnamed to Pend Oreille R	62.0254	0	Yes		1.1	RND	CST	0.61	0.61	23.5	2.1	3.6		
998573	SR 31	9.4	Lost Cr	62.0248	0	Yes		1.1	RND	PCC	0.91	0.91	37.7	0.96	12.2		
990416	SR 31	10.7	Sweet Cr	62.0224	0	Yes	3.17	1.1	BOX	CPC	2.29	2.59	22.7	0.6	2.4	328	769

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997535	SR 31	12.98	Linton Cr	62.0214	0	Yes		1.1	RND	PCC	1.22	1.22	44.4	0.35	3.65		
997541	SR 31	24.34	Lime Cr	62.0014	33	Yes		1.1	RND	PCC	0.91	0.91	13.5	0	1.85		
998252	SR 902	1.2	Unnamed to Clear Lk	43	0	Yes		1.1	RND	CST	0.61	0.61	18.4	0.48	1.14		
998382	US 195	4.35	Spring Cr	34.0452	33	Yes		1.2	RND	CST	1.68	1.68	30.7	0	1.66		
998382	US 195	4.35	Spring Cr	34.0452	33	Yes		2.2	RND	CST	1.68	1.68	28	0.33	0.93		
998383	US 195	8.04	Unnamed to Union Flat Cr	34	67	Yes		1.1	RND	CST	1.37	1.37	36.1	0	2.17		
998388	US 195	11.91	Unnamed to Union Flat Cr	34	67	Yes		1.1	BOX	CPC	1.83	1.22	21.3	0	1.97		
998394	US 195	22.78	Unnamed to Unnamed	34	67	Yes		1.1	SQSH	CST	1.8	1.14	27	0	1.26		
998397	US 195	23.82	Unnamed to SF Palouse R	34	67	Yes		1.1	BOX	CPC	1.83	1.83	26.2	0	3.02		
998398	US 195	30.7	Unnamed to Spring Flat Cr	34	67	Yes		1.2	BOX	CPC	0.91	0.61	41.9	0	2.53		
998398	US 195	30.7	Unnamed to Spring Flat Cr	34	67	Yes		2.2	BOX	CPC	0.91	0.61	41.9	0	2.53		
998431	US 195	43.16	Unnamed to Dry Cr	34	67	Yes		1.1	BOX	CPC	1.83	1.22	22.8	0	1.49	483	
998436	US 195	45.02	Unnamed to Unnamed	34	0	Yes		1.1	RND	CST	0.91	0.91	16.3	0.54	6.1		
998457	US 195	55.73	Unnamed to Thorn Cr	34	33	Yes		1.2	BOX	CPC	1.83	1.83	55.2	0.26	0.1		
998457	US 195	55.73	Unnamed to Thorn Cr	34	33	Yes		2.2	BOX	CPC	1.83	1.83	55.5	0.26	0.08		
998461	US 195	64.06	Unnamed to Pine Cr	34	0	Yes		1.1	RND	SPS	1.83	1.83	124.4	0.13	3.25		
998465	US 195	70.59	Unnamed to Unnamed	34	33	Yes		1.2	RND	CST	1.45	1.45	56.6	0.05	1.9		
998465	US 195	70.59	Unnamed to Unnamed	34	33	Yes		2.2	RND	CST	1.45	1.45	56.8	0	2		
999277	US 195	90.57	Unnamed to Hangman Cr	56	33	Yes		1.2	RND	PCC	1.45	1.45	91.5	0	1.6		
999277	US 195	90.57	Unnamed to Hangman Cr	56	33	Yes		2.2	RND	PCC	1.45	1.45	92.5	0	1.5		
994273	US 195	93.39	Marshall Cr	56.0008	0	Yes	9.57	1.1	BOX	CPC	1.91	1.91	63.6	1.39	1.4	54,960	104,145
997532	US 195	94.9	Unnamed to Hangman Cr	56.0006	67	No		1.1	ELL	SPS	2.29	2.51	101.6	0	1.16	78	
997543	US 195	95.77	Garden Springs Cr	56.0005	33	Yes		2.2	RND	CST	0.91	0.91	76.2	0	7.5		
997543	US 195	95.77	Garden Springs Cr	56.0005	33	Yes		1.2	RND	CST	0.91	0.91	75.9	0	7.5		
998466	US 195 ROW	70.59	Unnamed to Unnamed	34	33	Yes		1.2	RND	CST	1.45	1.45	43.2	0.19	2.65		
998466	US 195 ROW	70.59	Unnamed to Unnamed	34	33	Yes		2.2	RND	CST	1.45	1.45	43.9	0.24	2.64		
998467	US 195 SB on-ramp	68.7	Unnamed to Unnamed	34	33	Yes		1.2	RND	CST	1.45	1.45	38	0	1.8		
998467	US 195 SB on-ramp	68.7	Unnamed to Unnamed	34	33	Yes		2.2	RND	CST	1.45	1.45	37.9	0	1.6		
995673	US 195 SPUR	0.05	Unnamed to Hatwai Cr	35	0	Yes		1.1	BOX	CPC	1.55	1.85	85.8	0.3	2.8		
997498	US 2	296.35	Deadman Cr	55.0051	33	Yes		1.1	BOX	CPC	2.44	2.44	58.7	0	0.48		
990113	US 2	304.4	Deer Cr	55.0380	33	Yes		1.1	BOX	PCC	2.13	2.74	0.9				
990125	US 395	174.95	Dragoon Cr	55.0163	33	Yes		2.2	BOX	CPC	3.05	3.66	43.1	0	-0.18		

Appendix VIA. WSDOT Fish Passage Barriers Inventoried as of February 2008.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	SR <sup>1</sup>	PI	Culv # <sup>2</sup>	Shape	Material	Span (m)	Rise (m)	Culvert Length (m)	WS Drop (m)	% Slope	Lineal Habitat Gain (m)	Rearing Area (m <sup>2</sup> )
990125	US 395	174.95	Dragoon Cr	55.0163	33	Yes		1.2	BOX	CPC	3.05	3.66	43.1	0	-0.18		
991001	US 395	183.72	Unnamed to Beaver Cr	55.0298	33	Yes		1.1	RND	PCC	1.22	1.22	29.9	0	1.9		
990157	US 395	204.79	Franzwa Cr	59.0687	33	Yes		1.1	RND	PCC	0.91	0.91	31	0	1.9		
991557	US 395	208.2	Paye Cr	59.0533	33	Yes		2.2	RND	CST	1.07	1.07	30.9	0.5	1.13		
991557	US 395	208.2	Paye Cr	59.0533	33	Yes		1.2	RND	CST	1.07	1.07	30.1	0.5	1.06		
997853	US 395	212.77	Unnamed to Colville R	59.0516	0	Yes		1.1	RND	CAL	0.46	0.46	45.4	0.96	3.68		
990573	US 395	212.8	Unnamed to Colville R	59	0	Yes	2.91	1.1	RND	PCC	0.76	0.76	50.3	0.79		1,155	1,848
990005	US 395	215.88	Addy Cr	59.0455	33	Yes		1.1	RND	CST	0.76	0.76	26.5	0	3.6		
990451	US 395	219.3	Twelvemile Cr	59.0403	0	Yes		1.1	BOX	OTH	0.61	0.61	57.9		3.59		
997848	US 395	228.65	Unnamed to Colville R	59.0209	0	Yes		1.1	SQSH	CST	1.72	1.27	49.1	0.82	3.61	353	
990106	US 395	247.77	Deadman Cr	60.0008	0	Yes	11.48	1.1	BOX	CPC	2.45	1.77	45.7	0.55	11	38,197	131,546
998826	US 395	249.66	Unnamed to Kettle R	60.0055	33	Yes		1.1	RND	PCC	0.61	0.61	14.7		7.4		
990267	US 395	249.98	Matsen Cr	60.0056	33	Yes	2.76	1.1	RND	PCC	1.22	1.22	30.5	0	5	1,450	2,518
990124	US 395	250.19	Doyle Cr	60.0060	0	No		1.1	RND	PCC	1.22	1.22	21.3	0	12	44	
998827	US 395	251.96	Hodgson Cr	60.0067	0	No		2.2	RND	OTH	0.76	0.76	55.5	1.2	36.5	71	
998827	US 395	251.96	Hodgson Cr	60.0067	0	No		1.2	RND	OTH	0.76	0.76	54.3	1.2	36.5	71	
998831	US 395	261.62	Unnamed to Kettle R	60.0185	0	No		1.1	RND	PCC	0.84	0.84	27	0	14.43	128	
998832	US 395	263.91	Jenny Cr	60.0210	33	Yes		1.1	RND	PCC	0.61	0.61	14.1	0.11	4.95		
998834	US 395	267.13	Kerry Cr	60.0216	33	Yes		1.1	BOX	CPC	1.84	1.23	35	0	5.71		
998835	US 395	267.68	Unnamed to Kettle R	60.0218	33	No		1.1	RND	PCC	0.76	0.76	26.6	0	4.96	99	
998833	US 395	271.13	Unnamed to Kettle R	60.0215	33	Yes		1.1	RND	PCC	0.46	0.46	15.8	0	7.14		

<sup>1</sup>The culvert # identifies individual culverts at multiple stream crossings. Format X.Y, where X specifies specific culvert number, and Y specifies total number of crossings. For example, in a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

<sup>2</sup>Signifies a significant reach, which is defined as a section of stream having at least 200 linear meters of potential habitat without a gradient or a natural point barrier.

**Codes Used for Culvert Shape**

ARCH - bottomless arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other

**Codes Used for Culvert Materials**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 SPA - structural plate aluminium  
 TMB - timber

Appendix VIB. WSDOT Fishways Needing Major Repair or Maintenance for Fish Passage.

Site Id	Road	Milepost	Stream and Tributary	WRIA	% Fish Pass	Inspection Date	Inspection Frequency	Fishway Type	Fishway Condition	Recommended Maintenance/ Repair
990113	US 2	304.4	Deer Cr	55.0380	33	1/22/2004	Discontinued	BC; SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.
990351	SR 20	389.5	Renshaw Cr	62.0310	0	1/22/2004	Discontinued	SBC	MNR	An engineering review is needed to determine correction option, e.g., new fishway or culvert replacement.

**Fishway Type:**

- BF** - baffled flume
- BC** - baffled culvert
- SBC** - streambed control
- WP** - weir pool
- PC** - pool-chute
- CC** - concrete control

**Condition:**

- MNR** - requires replacement
- MNFP** - requires maintenance for fish passage

Appendix VIC.WSDOT Dedicated Funding Project Scoping Progress Report.

Site Id	Road	MP	Stream and Tributary	WRIA	PI	Rearing Area (m <sup>2</sup> )	Biological Scoping Status	Engineering Scoping Status	Design Option 1	Cost Estimate 1	Design Option 2	Cost Estimate 2	On Site Meeting Date	WSDOT Approval Date	Project Scoping Status	Project Year
990106	US 395	247.77	Deadman Cr to Kettle R	60.0008	11.5	131,546	Done	Done/99	Replacement	1,002,000					Const/T10	2016

**Project Status:**

**Scope/ PS** - Project requires scoping work and a habitat physical survey

**Const/ Yes** - Biological Pre-scoping is complete and the project is recommended for placement on a Ten Year Plan and a subsequent construction

**Const/ T10** - Biological and Engineering scoping is done and project is placed on a Ten Year Plan

Appendix VID. Ten Year Plan

SiteId	Road	MP	Stream	WRIA	PI	Funding	Status	2007-2009	2009-2011	2011-2013	2013-2015	2015-2017	2017-2019
990106	US 395	247.77	Deadman Cr	60.0008	11.48	NF	Future					1,002,000	

Region's **Total \$:**

1,002,000