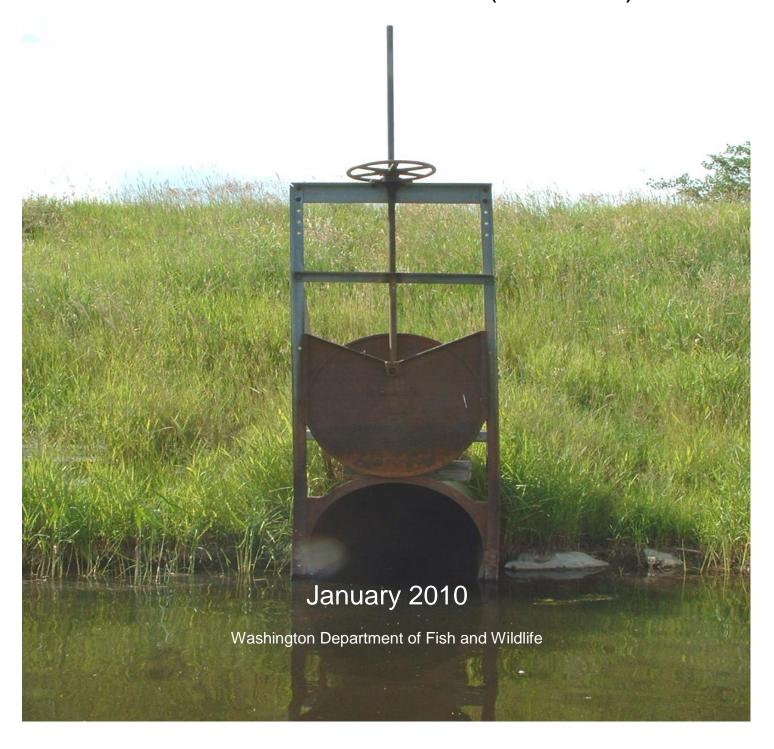
SCREENING ACTION PLAN for SURFACE WATER DIVERSIONS

Pend Oreille Watershed (WRIA 62)





Summary

In 2009, the Washington Department of Fish and Wildlife (WDFW) received a grant from Washington's Salmon Recovery Funding Board (SRFB) to inventory and assess surface water diversions in eight subbasins within Pend Oreille Water Resource Inventory Area (WRIA) 62.

Utilizing the protocols described in WDFW's Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual (2009), a two-person WDFW crew conducted the inventory between June and October 2009. The assessment focused on those portions of fish bearing streams within the target subbasins that occur on privately owned land. Landowners were contacted requesting permission to access. If permission was denied, the parcel was not surveyed. Less than 10 percent of landowners denied access.

Approximately 84 miles of Pend Oreille River shoreline and 74 miles of tributary streams were inventoried. A total of 207 features were assessed, including culverts, bridges, dams, natural barriers, diversions, and other obstructions to fish or flow. Of these features, 155 were surface water diversions. Most diversions assessed were screened to prevent debris from entering the diversion/pump. However, only two were found to meet Washington State screening requirements to protect fish. State law (Chapters 77.57.070 and 77.57.010 RCW) requires that all surface water diversions be screened to prevent fish from being drawn into the diversions where they are at risk for injury and mortality.

Findings from this project will allow WDFW and other local entities to work cooperatively with water users to achieve voluntary compliance with current state fish screening biological protection criteria.



Figure 1. Unscreened diversion on East Fork Smalle Creek (Site No. 1520106)

Table o	of Contents	
	Introduction	1
	Methods	3
	Results	3 3
	Screening Action Plan	32
	Literature Cited	32
Tables		
i abies	Table 1: Streams surveyed and features assessed	4
	Table 1: Streams surveyed and reatures assessed Table 2: Surface water diversions in Leclerc subbasin	7
	Table 3: Surface water diversions in Indian subbasin	9
	Table 4: Surface water diversions in Mill subbasin	12
	Table 5: Surface water diversions in Tacoma subbasin	14
	Table 6: Surface water diversions in Calispell subbasin	16
	Table 7: Surface water diversions in Skookum subbasin	19
	Table 8: Surface water diversions in other low priority or unranked subbasins	21
	Table 9: Surface water diversions along the Pend Oreille River	22
	Table 3. Surface water diversions along the Ferra Stelle River	
Figures		
· ·	Figure 1: Unscreened diversion on Calispell Creek (Site No. 1520106)	li
	Figure 2: Diversion screened to keep debris out, but not fish	_ 1
	Figure 3: Study area	2
	Figure 4: Cedar Subbasin, Lead Entity Priority HIGH #4	6
	Figure 5: Leclerc Subbasin, Lead Entity Priority HIGH #6	8
	Figure 6: Sullivan Subbasin, Lead Entity Priority HIGH #7	10
	Figure 7: Indian Subbasin, Lead Entity Priority HIGH #8	11
	Figure 8: Mill Subbasin, Lead Entity Priority HIGH #10	13
	Figure 9: Tacoma Subbasin, Lead Entity Priority MEDIUM #2	15
	Figure 10-1: Calispell Subbasin, Lead Entity Priority MEDIUM #3	17
	Figure 10-2: Calispell Subbasin, Lead Entity Priority MEDIUM #3	18
	Figure 11: Skookum Subbasin, Lead Entity Priority LOW	20
	Figure 12: Pend Oreille River – Newport to Marshall Creek	25
	Figure 13: Pend Oreille River – Marshall to Kent Creek	26
	Figure 14: Pend Oreille River – Kent Creek to Usk	27
	Figure 15: Pend Oreille River – Usk to Tacoma Creek	28
	Figure 16: Pend Oreille River – Tacoma Creek to Riverside	29
	Figure 17: Pend Oreille River – Blueslide Area	30
	Figure 18: Pend Oreille River – Blueslide to Tiger Slough	31
	Figure 19: Pend Oreille River – Tiger Slough to Ione	32
Append	dices	
Append	Appendix A: Diversion data by Site Identification Number	34
	Appendix D. WDIA wide Corporing Drievity	
	Appendix C: Screening Priority Index Model	90
	Appendix D: Screening Requirements for Water Diversions	— 92

Introduction

Surface water diversions are common instream features in agricultural and rural areas where water is used for irrigation and domestic purposes. Throughout Washington State, water is also diverted for hydropower, industrial, recreational, residential, municipal, and hatchery uses. State law (Chapter 77.57.070 RCW and Chapter 77.57.010 RCW) requires that all surface water diversions be screened to prevent fish from being drawn into the diversions where they are at risk for injury and mortality. Surface water diversions are often screened to keep debris out, but not to protect fish (Fig. 2).



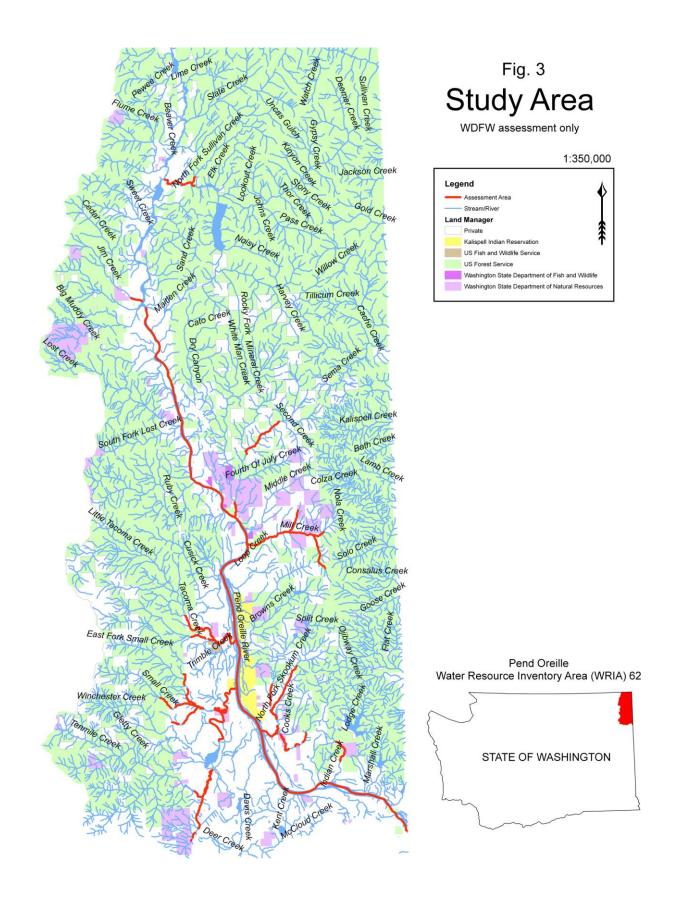
Additionally, many diversions are unscreened. Figure 2. Diversion screened to keep debris out, but not fish.

The Washington Department of Ecology (Ecology) Water Rights Tracking System lists 1,178 surface water certificates, claims, and permits for streams, reservoirs, and lakes in the Pend Oreille Water Resource Inventory Area (WRIA) 62 (Fig. 2). Each of these surface water diversions, plus other unlisted illegal diversions, has the potential to impact fish if not properly screened. In WRIA 62, inadequately screened diversions threaten survival of bull trout, a species listed as "threatened" under the Endangered Species Act, westslope cutthrout trout, a U.S. Fish and Wildlife Service "species of concern", and other native salmonids, by increasing the occurrence of entrainment of adults, juveniles, and fry out of the stream channel, lake, or reservoir.

Between 2001-2007 the Pend Oreille Conservation District (POCD) conducted fish passage barrier and surface water diversion inventories (Pend Oreille Barrier Inventory, SRFB No. 01-1306; Priest Basin Barrier Assessment, SRFB No. 04-1480), however not all WRIA 62 subbasins/streams were assessed. The POCD assessments focused on culvert barriers, identifying very few surface water diversions.

This project located and assessed surface water diversions in eight WRIA 62 subbasins (Mill, LeClerc, Calispell, Tacoma, Cedar, Indian, Skookum, and Sullivan) and portions of the Box Canyon Reservoir (Fig. 3) that were either not surveyed by the POCD or had known data gaps. Other instream structures, such as culverts, bridges, and waterfalls, encountered during the inventory were also assessed if not previously inventoried during the POCD 2001-07 barrier assessment work. This report provides a compilation of all diversion data from both assessments and a prioritization of screening actions for all known diversions in WRIA 62.

Findings from this project will allow Washington Department of Fish and Wildlife (WDFW) and other local entities to work cooperatively with water users to achieve voluntary compliance with current state and federal fish screening biological protection criteria. It is anticipated that the Pend Oreille Salmonid Recovery Team will use this data to update the Pend Oreille Lead Entity strategy (POSRT 2007) as well.



WDFW received funding for this project from Washington's Salmon Recovery Funding Board (SRFB; Project No. 08-1976), with in-kind support from the Pend Oreille Public Utility District No. 1 and WDFW Habitat Program.

Methods

This assessment focused on those portions of fish bearing streams within the target basins (Calispell, Cedar, Indian, Leclerc, Mill, Skookum, Sullivan, and Tacoma) that are on privately-owned property (Fig. 3). The survey area often extended beyond private to federal and state-owned land when it was determined that there could possibly be stream diversions present. Using Pend Oreille County parcel data, letters were sent to each landowner requesting permission to access. If permission was denied, the parcel was not surveyed. Owners of 395 parcels were contacted with 91% percent granting permission.

This assessment utilized the protocols described in WDFW's Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual (2009; http://wdfw.wa.gov/hab/engineer/fishbarr.htm). These methods have been widely used since the late 1990's throughout the state by WDFW, tribes, local governments, SRFB, regional fisheries enhancement groups, and others.

WDFW utilized a two-person crew to conduct the inventory from early June through mid-October 2009. Crew members were trained in assessment methodology by WDFW Technical Application Division staff. When requested, landowners were contacted regarding specific survey date and time for their property and several landowners accompanied the crew during the survey.

Results

Approximately 84 miles of Pend Oreille River shoreline and 73 miles of tributary streams were inventoried. A total of 207 features were assessed, including culverts, bridges, dams, natural barriers, diversions, and other obstructions to fish or flow. Of these features, 155 were either gravity or pump diversions (Table 1).

Most diversions assessed were screened to prevent debris from entering the diversion/pump (Fig. 2). However, only two were found to meet Washington State screening requirements to protect fish (Chapters 77.57.10; 77.57.040; 77.57.060; and, 77.57.070 RCW). These two screens were installed through a cooperative project between a landowner in the Leclerc subbasin and WDFW in 2007. Three other diversions, which were not assessed during this inventory, located in the Indian subbasin, have also recently been properly screened through a cooperative project between the landowners and the POCD. A summary of Washington's screening and design requirements for water diversions can be found in Appendix D.

A preliminary review by WDFW of Ecology's Water Rights Tracking System found water rights (certificates or claims) associated with approximately 23% of known diversions in WRIA 62. At this time, we are unable to verify if these are valid water rights.

Table 1: Streams surveyed and features assessed (WDFW assessment only)

Stream name	Miles	Total features	Diversions	Comments
	surveyed	assessed	assessed	
Calispell, mainstem	7	13	6	
Calispell, SF and NF	8	2	0	
Cedar	1	2	0	
Harvey	2	2	0	
Indian	2	1	0	
Leclerc, mainstem	1	3	2	
Leclerc, EB	4	6	3	
Leclerc, WB	NA	5	1	Road-based survey only
Mill (incl. Wanless, Nola)	11	7	1	
Pend Oreille River	84	109	109	Newport downstream to Ruby - both banks; Ruby downstream to lone bridge - right bank only
Skookum, mainstem	5	11	12	
Skookum, NF	4	3	1	
Skookum, SF	3	5	2	
Smalle (incl, EF, SF)	11	13	4	
Sullivan (incl. NF)	4	4	0	
Tacoma, mainstem	8	12	8	
Tacoma, SF	2	9	5	
Total tributary	73	98	45	
Total Pend Oreille River	84	109	109	
Assessment Total	157	207	154	

The Screening Priority Index (SPI) Model (WDFW 2009 – Appendix C) was used to develop the following prioritized lists of screening projects in WRIA 62. Design flow is the critical variable used to assess the relative impact (between diversions) on fish mortality/injury and to estimate project cost. Construction and operation/maintenance costs are directly proportional to design flow. The greater the flow, the higher likelihood fish will be entrained in the diversion. SPI numbers were calculated for most diversions documented during this assessment as well as those documented during the POCD assessments, when possible.

Granite Subbasin - Lead Entity Area Priority HIGH #1

The Granite subbasin was not surveyed as part of this assessment. The Washington portion of this subbasin is almost entirely National Forest System land. While this subbasin was part of the POCD Priest Basin Barrier Assessment, no diversions were found during the assessment. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Hughes Fork Subbasin - Lead Entity Area Priority HIGH #2

The Hughes Fork subbasin was not surveyed as part of this assessment. The Washington portion of this subbasin is almost entirely National Forest System land. While this subbasin was part of the POCD Priest Basin Barrier Assessment, no diversions were found during the asssessment. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Salmo Subbasin- Lead Entity Area Priority HIGH #3

The Salmo subbasin was not surveyed as part of this assessment or those conducted by the POCD. The Washington portion of this subbasin is entirely within designated Wilderness Area managed by the Colville National Forest. No diversions are known to exist in the subbasin. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Cedar Subbasin - Lead Entity Area Priority HIGH #4

Approximately one mile of stream was surveyed in the Cedar subbasin (Fig. 4). No surface water diversions are known to exist in this subbasin based on this assessment and previous work by the POCD. Access was denied to a small portion of Cedar Creek in Section 25 (T 38N, R 42E), so it is unknown if diversion is occurring in this area. Many of the private parcels associated with Cedar Creek are located within the city limits of the Town of Ione and are serviced by city water. There is also very little agricultural activity in the subbasin. These factors probably limit the amount of surface water diverted from Cedar Creek. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Slate Subbasin - Lead Entity Area Priority HIGH #5

The Slate subbasin was not surveyed as part of this assessment or those conducted by the POCD. The Washington portion of this subbasin is almost entirely National Forest System land. No diversions are known to exist in the subbasin. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Cedar Subbasin

Figure 4

Lead Entity Priority Area = HIGH #4

1:20,000 T38-0N R43-0E S2 T38-0N R43-0E S30 38-0N R42-0E S25 Exposure Creek T38-0N R43-0E S31 T38-0N R42-0E S36 T37-0N R43-0E S05 Legend Surface Water Diversion (w/ Site ID No.) Little Muddy Creek Assessment Area Stream/River - Road Legal Description Land Manager Private County Kalispell Indian Reservation US Fish and Wildlife Service US Forest Service T37-0N R43 Washington State Department of Fish and Wildlife T37-0N R42-0E S12 Washington State Department of Natural Resources

LeClerc Subbasin - Lead Entity Area Priority HIGH #6

Approximately five miles of stream was surveyed in the Leclerc subbasin (Fig. 5). Six surface water diversions were assessed by WDFW, two on Leclerc Creek, three on East Branch Leclerc Creek, and one of West Branch Leclerc Creek. There is little to no agricultural or residential development in the LeClerc subbasin. It appears that all diversions that have been identified are associated with lawn and garden use. In 2007, two active water diversions, one on West Branch LeClerc Creek and one on East Branch LeClerc Creek, were screened through a cooperative project between WDFW and a private landowner (funded by SRFB No. 07-1781). Bull trout and resident westslope cutthroat trout occur in the subbasin.

Table 2: Surface Water Diversions in the Leclerc Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520300	Leclerc, WB	Gravity	480	Done SRFB 07-1781	3.68
2	1520299	Leclerc, EB	Pump	160	Done SRFB 07-1781	3.33
3	1520025	Leclerc, EB	Pump	35	<1	2.51
3	1520026	Leclerc, EB	Pump	35	<1	2.51
4	1520033	Leclerc	Pump	25	<1	2.32
5	1520030	Leclerc	Pump	14	<1	2.01

Detailed information regarding each diversion can be found in Appendix A.

7

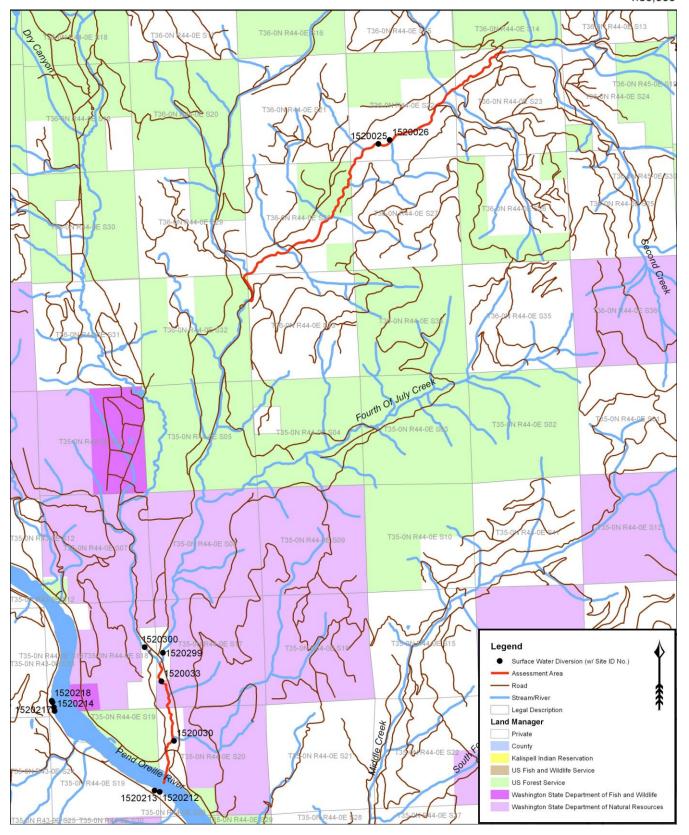
¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

LeClerc Subbasin

Figure 5

Lead Entity Priority Area = HIGH #6

1:50,000



Sullivan Subbasin - Lead Entity Area Priority HIGH #7

Approximately six miles of stream was surveyed in the Sullivan subbasin (Fig. 6). No surface water diversions are known to exist in this subbasin based on this assessment and previous work by the POCD. An unscreened/inadequately screened suction dredge was located downstream of the confluence with North Fork Sullivan Creek. The dredge was either abandoned or inactive at the time of survey. There is little to no agricultural activity in the Sullivan subbasin and most private property is located in the lower stream reaches where water is supplied by the Town of Metaline Falls. Private inholdings within the Colville National Forest upstream of Mill Pond Dam were not surveyed; there is the potential for additional unidentified water diversions in this location. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Indian Subbasin - Lead Entity Area Priority HIGH #8

Approximately two miles of stream were surveyed in the Indian subbasin (Fig. 7), but no surface water diversions were found by WDFW. Three diversions were identified previously in Indian Creek by the POCD, all of which have been screened to meet compliance regulations. All three projects were funded by the SRFB (No. 04-1373). Another diversion/dam is believed to be present in NE ¼ of Section 20 (T 32N, R 45E), however access to this private parcel was denied for both this and the POCD assessment. The Kalispel Tribe filed a compliant with WDFW regarding the diversion, but no action has been taken to date. Contact with the landowner and investigation of this diversion is a high priority. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Table 3: Surface Water Diversions in the Indian Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1		Investigate repo	rted diversior	n in NE ¼, Section	20, T 32 N, R 45E	
2	1290064	Indian	Gravity	263	Done SRFB 04-1373	3.17
3	1290063	Indian	Gravity	112.2	Done SRFB 04-1373	2.56
4	1290062	Indian	Gravity	44.88	Done SRFB 04-1373	2.04

Upper West Branch Priest River Subbasin - Lead Entity Area Priority HIGH #9

This subbasin was not surveyed as part of this assessment, but was included in the POCD's Priest Basin Barrier Assessment. No diversions were found. It is unknown if bull tout are currently present in the subbasin; westslope cutthroat trout are present.

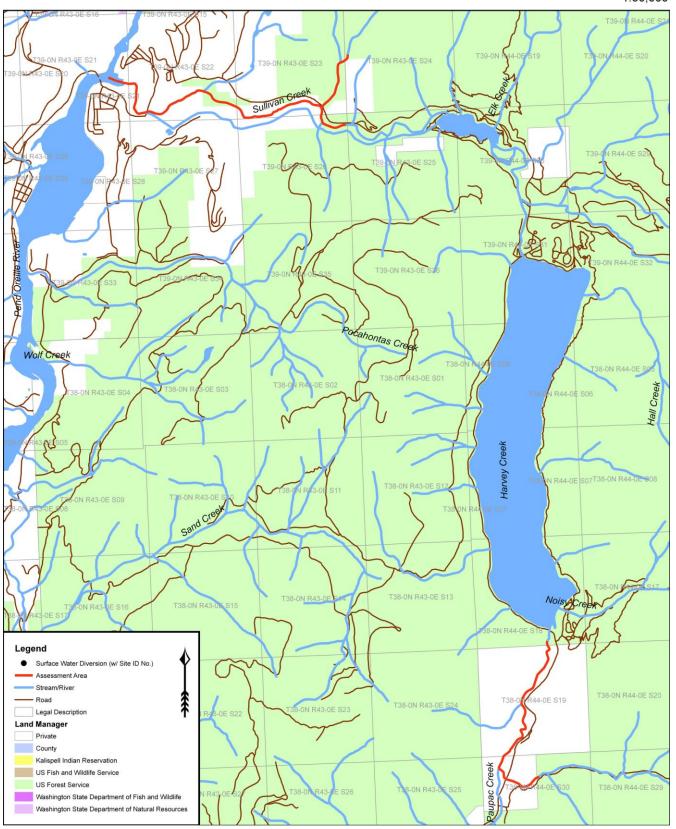
¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Sullivan Subbasin

Figure 6

Lead Entity Priority Area = HIGH #7

1:50,000

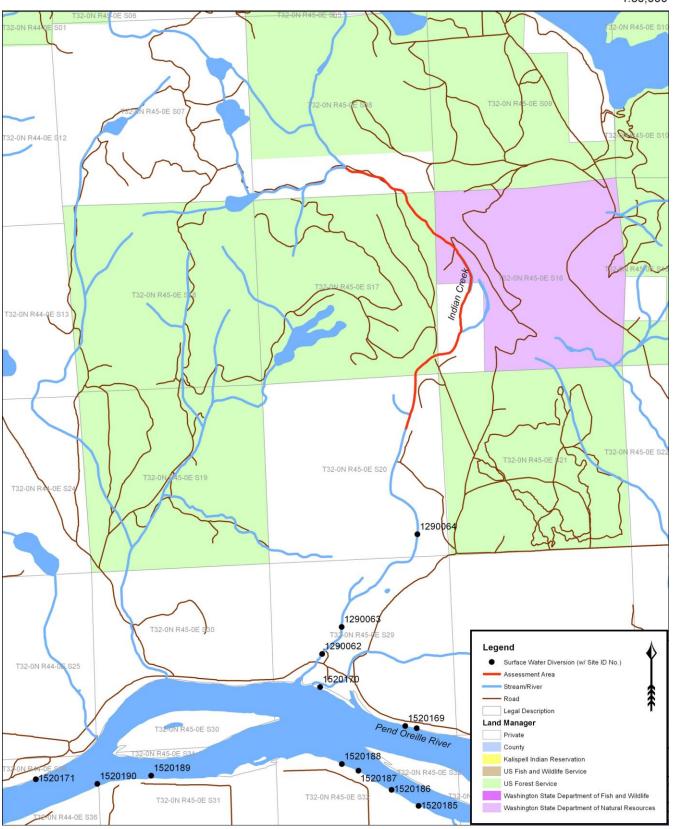


Indian Subbasin

Figure 7

Lead Entity Priority Area = HIGH #8

1:30,000



Mill Subbasin - Lead Entity Area Priority HIGH #10

Approximately 11 miles of stream were surveyed in the Mill subbasin (Fig. 8). Survey area was more extensive in this subbasin to cover gaps in fish passage barrier inventory data as well as to identify surface water diversions. One surface water diversion was assessed by WDFW on Mill Creek. Another possible diversion is located just downstream of Site No. 1520010. A rock/timber dam and conveyance material are present, but it does not appear that the diversion is active at this time. Most of the private ownership within the Mill subbasin is by large forest landowners such as Stimson Lumber Company and Idaho Forest Group (Riley). The exception is a few small parcels near the mouth of Mill Creek. Bull trout and resident westslope cutthroat trout occur in the subbasin.

Table 4: Surface Water Diversions in the Mill Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520010	Mill	Gravity	1071	Funded USFWS/POCD	4.51

Detailed information regarding the diversion can be found in Appendix A.

Kalispell Subbasin - Lead Entity Area Priority HIGH #11

The Kalispell subbasin was not surveyed as part of this assessment. The Washington portion of this subbasin is almost entirely National Forest System Land. While this subbasin was part of the POCD Priest Basin Barrier Assessment, no diversions were found to exist in the subbasin. It is unknown if bull tout are currently present in the subbasin; westslope cutthroat trout are present.

Cee Cee Ah Subbasin - Lead Entity Area Priority MEDIUM #1

This subbasin was not surveyed during this assessment or that done by the POCD. It is unlikely that diversions are present in this subbasin as ownership is either by the Kalispel Tribe, Forest Service, or large forest landowners (e.g., Stimson Lumber Co.). It is unknown if bull tout are currently present in the subbasin; westslope cutthroat trout are present.

12

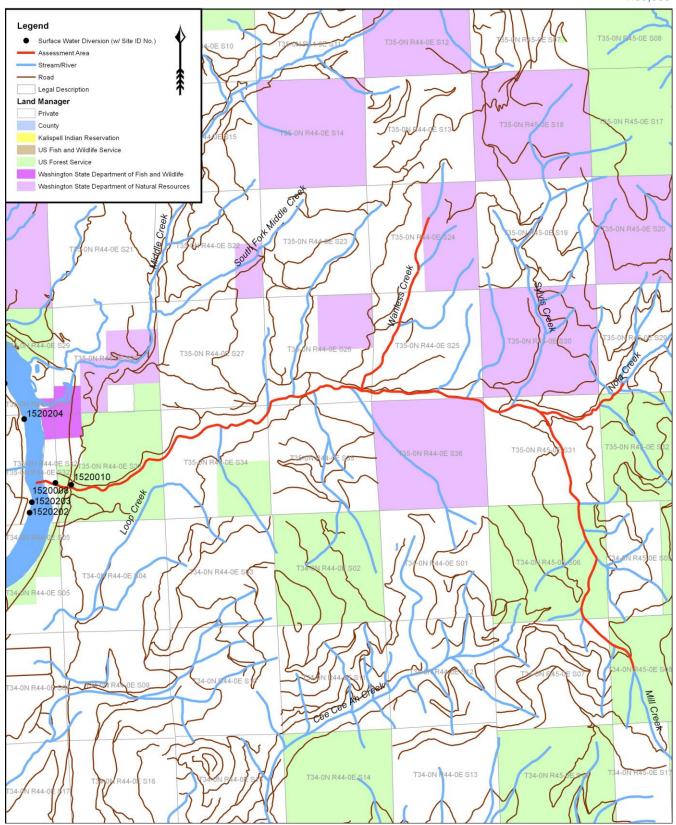
¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Mill Subbasin

Figure 8

Lead Entity Priority Area = HIGH #10

1:50,000



Tacoma Subbasin - Lead Entity Area Priority MEDIUM #2

Approximately 10 miles of stream were surveyed in the Tacoma subbasin (Fig. 9). Thirteen surface water diversions were assessed by WDFW, eight on Tacoma Creek and five on South Fork Tacoma Creek. There is considerable agricultural development in the lower reaches of Tacoma and South Fork Tacoma Creek. Several diversions have been identified. A diversion dam (associated with Site ID No. 1520054), located in Section 35 (T 34N, R 43E) on Tacoma Creek, was recently removed through a cooperative project between the Pend Oreille PUD and landowner. It is unknown if bull tout are currently present in the subbasin; westslope cutthroat trout are present.

Table 5: Surface Water Diversions in the Tacoma Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520070	Tacoma, SF	Gravity	460	>5	3.65
2	1520085	Tacoma, SF	Pump	35	<1	2.51
2	1520060	Tacoma	Pump	35	<1	2.51
2	1520062	Tacoma	Pump	35	<1	2.51
2	1520063	Tacoma	Pump	35	<1	2.51
2	1520066	Tacoma	Pump	35	<1	2.51
2	1520068	Tacoma	Pump	35	<1	2.51
3	1520071	Tacoma, SF	Pump	25	<1	2.32
3	1520073	Tacoma, SF	Pump	25	<1	2.32
4	1520083	Tacoma, SF	Pump	14	<1	2.01
4	1520067	Tacoma	Pump	14	<1	2.01
5	1520054	Tacoma	Pump	40	<1	1.98
6	1520059	Tacoma	Pump	10	<1	1.85

Detailed information regarding each diversion can be found in Appendix A.

_

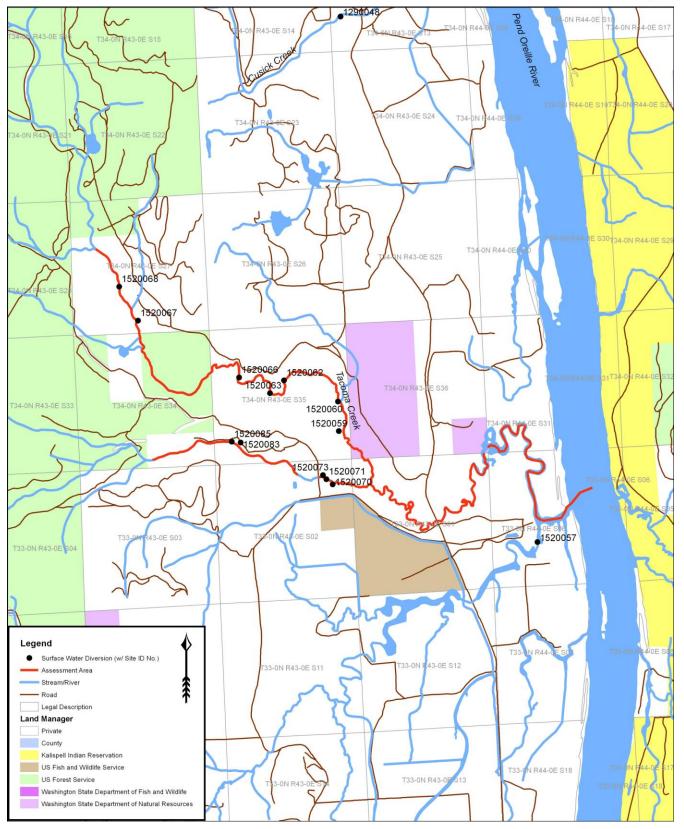
¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Tacoma Subbasin

Figure 9

Lead Entity Priority Area = MEDIUM #2

1:40,000



Calispell Subbasin - Lead Entity Area Priority MEDIUM #3

Approximately 26 miles of stream was surveyed in the Calispell subbasin (Fig. 10). Eleven surface water diversions were assessed by WDFW, seven on Calispell Creek, three on Smalle Creek, and one on East Fork Smalle Creek. Previous surveys by the POCD located two additional diversions, one in East Fork Smalle Creek and one Winchester Creek. Winchester Creek was not inventoried by WDFW. There is considerable agricultural development in the Calispell subbasin. Several large diversions have been identified that have the potential to impact fish. Bull trout are currently not present in the subbasin due to a fish passage barrier near the mouth of Calipsell Creek (i.e., Calispell Pumps – Pend Oreille PUD). Westslope cutthroat trout are known to be present in the subbasin.

Table 6: Surface Water Diversions in the Calispell Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520040 ²	Calispell	Gravity	2525	>5	3.77
2	1520045	Calispell	Gravity	2425	>5	3.74
3	1520042	Calispell	Gravity	2357	>5	3.71
4	1520047	Calispell	Gravity	1100	>5	3.07
5	1520114	Smalle	Gravity	310	>5	2.23
6	1520043	Calispell	Pump	65	1-5	1.80
6	1520106	Smalle, EF	Pump	40-65	1-5	1.80
7	1520044	Calispell	Pump	35	<1	1.70
8	1520127	Smalle	Pump	40	<1	1.48
Unk	1290136	Smalle, EF	Gravity	Unknown	>5	Unk
Unk	1290134	Winchester	Gravity	Unknown	>5	Unk
Unk	1520108	Smalle	Pump	Unknown	Unknown	Unk

Detailed information regarding each diversion can be found in Appendix A.

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

² This Site is a one-way (outflow) flapper gate; it is unknown if fish can be entrained during operation

Calispell Subbasin

Figure 10-1

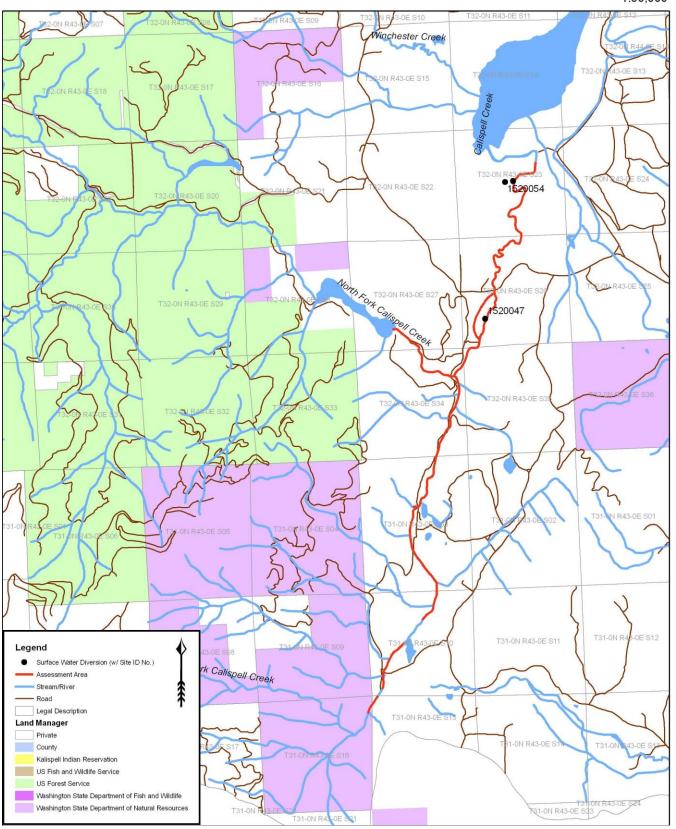
Lead Entity Priority Area = MEDIUM #3 1:50,000 T33-0N R4 Trimble Creek T33-0N R43-0 1520108/ | Small Creek 1520042 1520114 1290136 1520127 T33-0N R43-0E S34 N R43-0E S33 Calispell Creek outh Fork Small Creek 1520040 1290134 Legend Surface Water Diversion (w/ Site ID No.) Stream/River Legal Description Land Manager Private County Kalispell Indian Reservation US Fish and Wildlife Service US Forest Service 32-0N R43-0E S15 Washington State Department of Fish and Wildlife Washington State Department of Natural Resources

Calispell Subbasin

Figure 10-2

Lead Entity Priority Area = MEDIUM #3

1:50,000



Ruby Subbasin - Lead Entity Area Priority MEDIUM #4

The Ruby subbasin was not included in this assessment or those done by the POCD. There is very little private property in the subbasin. The likelihood of diversions being present is low, however the area should be assessed in the future to confirm this assumption. It is unknown if bull tout occur in the subbasin; westslope cutthroat trout are present.

Skookum Subbasin - Lead Entity Area Priority LOW

Approximately 12 miles of stream were surveyed in the Skookum subbasin (Fig. 11). Thirteen surface water diversions were assessed by WDFW, ten on Skookum Creek, one on North Fork Skookum Creek, and two on South Fork Skookum Creek. Previous surveys by the POCD located three additional diversions on Skookum Creek. WDFW re-evaluated Site No. 1290083 and collected more detailed information on the diversion (Appendix A). There is substantial agricultural and rural development in the Skookum subbasin. Several diversions, including dams, ditches, and pumps have been identified. Several diversions were also assessed in Skookum Slough (see Table 9). Bull trout are currently not present in the subbasin; westslope cutthroat trout are present.

Table 7: Surface Water Diversions in the Skookum Subbasin

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520278	Skookum	Gravity	750	>5	2.79
2	1290053	Skookum	Pump	160	<1	2.49
3	1290083	Skookum	Gravity	437	>5	2.43
4	1520285	Skookum	Pump	65	1-5	1.80
5	1520266	Skookum	Pump	40	<1	1.76
5	1520275	Skookum, NF	Pump	40	<1	1.76
6	1520140	Skookum	Pump	35	<1	1.70
6	1520273	Skookum	Pump	35	<1	1.70
7	1520269	Skookum	Pump	25	<1	1.57
7	1520145	Skookum, SF	Pump	25	<1	1.57
8	1520286	Skookum	Gravity	49	>5	1.41
9	1520142	Skookum	Pump	14	<1	1.36
9	1520274	Skookum	Pump	14	<1	1.36
Unk	1520147	Skookum, SF	Gravity	Unknown	>5	Unk
Unk	1290068	Skookum	Pump	Unknown	Unknown	Unk
Unk	1520282	Skookum	Gravity	Unknown	>5	Unk

Detailed information regarding each diversion can be found in Appendix A.

19

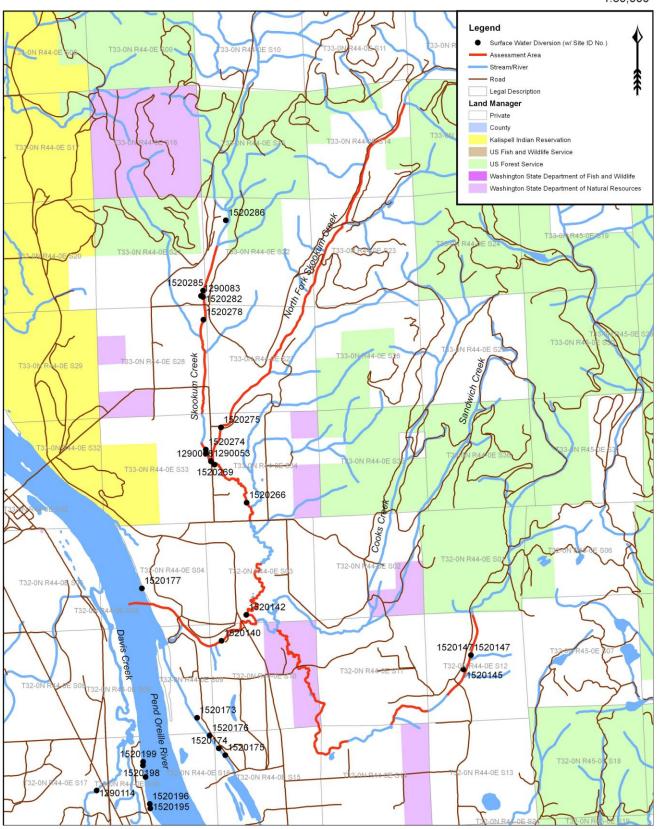
¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Skookum Subbasin

Lead Entity Priority Area = LOW

Figure 11

1:50,000



Other Subbasins - Lead Entity Area Priority LOW or UNRANKED

The following is a list of other diversions which were identified by the POCD. This list is not prioritized. All sites are located in low priority or unranked subbasins and maps and detailed reports are not provided. This information can be requested from WDFW.

Table 8: Surface Water Diversions in other subbasins

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
Unk	1290115	Davis	Pump	160	<1	2.10
Unk	1290104	Kent	Gravity	40	Unknown	1.34
Unk	1290048	Cusick	Gravity	0.33	>5	0.40
Unk	1290088	Bracket	Pump	Unknown	Unknown	Unk
Unk	1290114	Davis	Gravity	Unknown	Unknown	Unk
Unk	1290116	Davis	Pump	Unknown	Unknown	Unk
Unk	1290117	Davis	Pump	Unknown	Unknown	Unk
Unk	1290096	Kent	Gravity	Unknown	Unknown	Unk
Unk	1290100	Kent	Pump	Unknown	Unknown	Unk
Unk	1290106	Kent, tributary	Pump	Unknown	Unknown	Unk

21

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Pend Oreille River, mainstem - Lead Entity Area Priority UNRANKED

Approximately 84 miles of the Pend Oreille River mainstem was surveyed. Survey area included both banks of the river from Newport to Ruby and the right bank only from Ruby to the lone bridge (Figs. 12-19). The entire river was not inventoried due to time and equipment constraints. One-hundred and nine surface water diversions were assessed, with the largest concentration in the Blueside area. There is substantial residential development along the shoreline of the Pend Oreille River. The Pend Oreille River is used by bull trout as a migration corridor to spawning habitat in tributaries. Westslope cutthroat trout are found in the Pend Oreille River, but at very low densities.

Table 9: Surface Water Diversions along the Pend Oreille River

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520195	Pend Oreille	Pump	180	<1	1.11
2	1520167	Pend Oreille	Pump	90	1-5	0.93
3	1520169	Pend Oreille	Pump	65	1-5	0.86
3	1520200	Pend Oreille	Pump	65	1-5	0.86
3	1520210	Pend Oreille	Pump	65	1-5	0.86
4	1520155	Pend Oreille	Pump	40	<1	0.84
4	1520156	Pend Oreille	Pump	40	<1	0.84
4	1520158	Pend Oreille	Pump	40	<1	0.84
4	1520159	Pend Oreille	Pump	40	<1	0.84
4	1520160	Pend Oreille	Pump	40	<1	0.84
4	1520163	Pend Oreille	Pump	40	<1	0.84
4	1520166	Pend Oreille	Pump	40	<1	0.84
4	1520171	Pend Oreille	Pump	40	<1	0.84
4	1520177	Pend Oreille	Pump	40	<1	0.84
4	1520178	Pend Oreille	Pump	40	<1	0.84
4	1520179	Pend Oreille	Pump	40	<1	0.84
4	1520180	Pend Oreille	Pump	40	<1	0.84
4	1520182	Pend Oreille	Pump	40	<1	0.84
4	1520186	Pend Oreille	Pump	40	<1	0.84
4	1520188	Pend Oreille	Pump	40	<1	0.84
4	1520191	Pend Oreille	Pump	40	<1	0.84
4	1520192	Pend Oreille	Pump	40	<1	0.84
4	1520194	Pend Oreille	Pump	40	<1	0.84
4	1520196	Pend Oreille	Pump	40	<1	0.84
4	1520198	Pend Oreille	Pump	40	<1	0.84
4	1520199	Pend Oreille	Pump	40	<1	0.84
4	1520208	Pend Oreille	Pump	40	<1	0.84
4	1520209	Pend Oreille	Pump	40	<1	0.84
4	1520214	Pend Oreille	Pump	40	<1	0.84
4	1520220	Pend Oreille	Pump	40	<1	0.84

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

-

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
4	1520221	Pend Oreille	Pump	40	<1	0.84
4	1520222	Pend Oreille	Pump	40	<1	0.84
4	1520223	Pend Oreille	Pump	40	<1	0.84
4	1520225	Pend Oreille	Pump	40	<1	0.84
4	1520231	Pend Oreille	Pump	40	<1	0.84
4	1520234	Pend Oreille	Pump	40	<1	0.84
4	1520237	Pend Oreille	Pump	40	<1	0.84
4	1520238	Pend Oreille	Pump	40	<1	0.84
4	1520239	Pend Oreille	Pump	40	<1	0.84
4	1520247	Pend Oreille	Pump	40	<1	0.84
4	1520248	Pend Oreille	Pump	40	<1	0.84
4	1520250	Pend Oreille	Pump	40	<1	0.84
4	1520251	Pend Oreille	Pump	40	<1	0.84
4	1520252	Pend Oreille	Pump	40	<1	0.84
4	1520253	Pend Oreille	Pump	40	<1	0.84
4	1520254	Pend Oreille	Pump	40	<1	0.84
4	1520255	Pend Oreille	Pump	40	<1	0.84
4	1520257	Pend Oreille	Pump	40	<1	0.84
4	1520263	Pend Oreille	Pump	40	<1	0.84
4	1520264	Pend Oreille	Pump	40	<1	0.84
4	1520265	Pend Oreille	Pump	40	<1	0.84
4	1520173	Skookum Sl	Pump	40	<1	0.84
4	1520174	Skookum Sl	Pump	40	<1	0.84
4	1520175	Skookum Sl	Pump	40	<1	0.84
4	1520176	Skookum Sl	Pump	40	<1	0.84
5	1520172	Skookum Sl	Pump	35	<1	0.81
5	1520157	Pend Oreille	Pump	35	<1	0.81
5	1520161	Pend Oreille	Pump	35	<1	0.81
5	1520162	Pend Oreille	Pump	35	<1	0.81
5	1520164	Pend Oreille	Pump	35	<1	0.81
5	1520165	Pend Oreille	Pump	35	<1	0.81
5	1520181	Pend Oreille	Pump	35	<1	0.81
5	1520187	Pend Oreille	Pump	35	<1	0.81
5	1520189	Pend Oreille	Pump	35	<1	0.81
5	1520190	Pend Oreille	Pump	35	<1	0.81
5	1520193	Pend Oreille	Pump	35	<1	0.81
5	1520197	Pend Oreille	Pump	35	<1	0.81
5	1520202	Pend Oreille	Pump	35	<1	0.81
5	1520204	Pend Oreille	Pump	35	<1	0.81
5	1520205	Pend Oreille	Pump	35	<1	0.81
5	1520206	Pend Oreille	Pump	35	<1	0.81
5	1520207	Pend Oreille	Pump	35	<1	0.81
5	1520217	Pend Oreille	Pump	35	<1	0.81

_

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

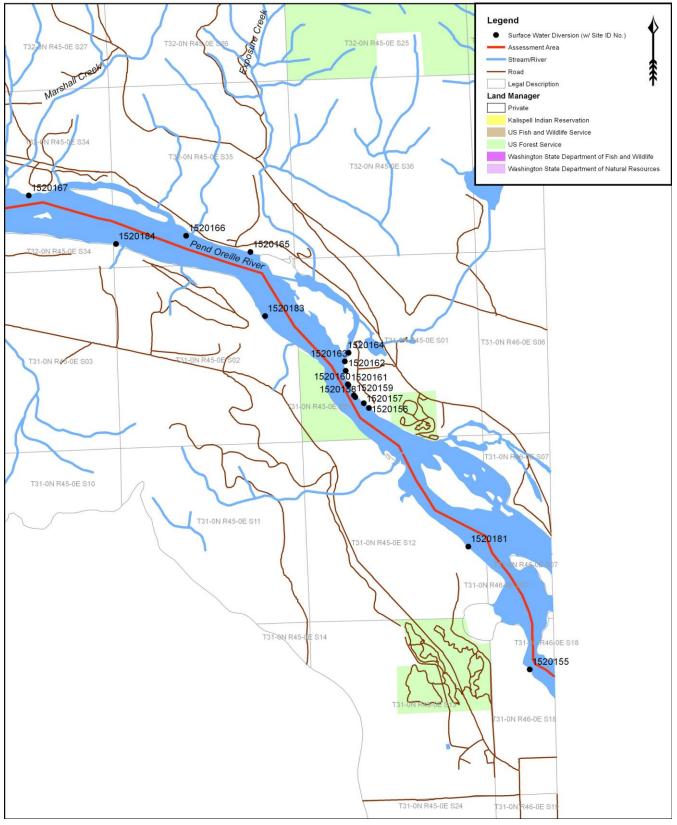
Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
5	1520229	Pend Oreille	Pump	35	<1	0.81
5	1520233	Pend Oreille	Pump	35	<1	0.81
5	1520235	Pend Oreille	Pump	35	<1	0.81
5	1520236	Pend Oreille	Pump	35	<1	0.81
5	1520241	Pend Oreille	Pump	35	<1	0.81
5	1520242	Pend Oreille	Pump	35	<1	0.81
5	1520259	Pend Oreille	Pump	35	<1	0.81
5	1520260	Pend Oreille	Pump	35	<1	0.81
6	1520168	Pend Oreille	Pump	25	<1	0.75
6	1520201	Pend Oreille	Pump	25	<1	0.75
6	1520203	Pend Oreille	Pump	25	<1	0.75
6	1520211	Pend Oreille	Pump	25	<1	0.75
6	1520212	Pend Oreille	Pump	25	<1	0.75
6	1520215	Pend Oreille	Pump	25	<1	0.75
6	1520216	Pend Oreille	Pump	25	<1	0.75
6	1520218	Pend Oreille	Pump	25	<1	0.75
6	1520219	Pend Oreille	Pump	25	<1	0.75
6	1520227	Pend Oreille	Pump	25	<1	0.75
6	1520230	Pend Oreille	Pump	25	<1	0.75
6	1520240	Pend Oreille	Pump	25	<1	0.75
6	1520243	Pend Oreille	Pump	25	<1	0.75
6	1520244	Pend Oreille	Pump	25	<1	0.75
6	1520246	Pend Oreille	Pump	25	<1	0.75
6	1520249	Pend Oreille	Pump	25	<1	0.75
6	1520256	Pend Oreille	Pump	25	<1	0.75
6	1520261	Pend Oreille	Pump	25	<1	0.75
6	1520262	Pend Oreille	Pump	25	<1	0.75
7	1520183	Pend Oreille	Pump	14	<1	0.65
7	1520184	Pend Oreille	Pump	14	<1	0.65
7	1520228	Pend Oreille	Pump	14	<1	0.65
7	1520245	Pend Oreille	Pump	14	<1	0.65
Unk	1520170	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520185	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520213	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520232	Pend Oreille	Pump	Unknown	Unknown	Unk

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Pend Oreille River - Newport to Marshall Crk

Lead Entity Priority Area = UNRANKED

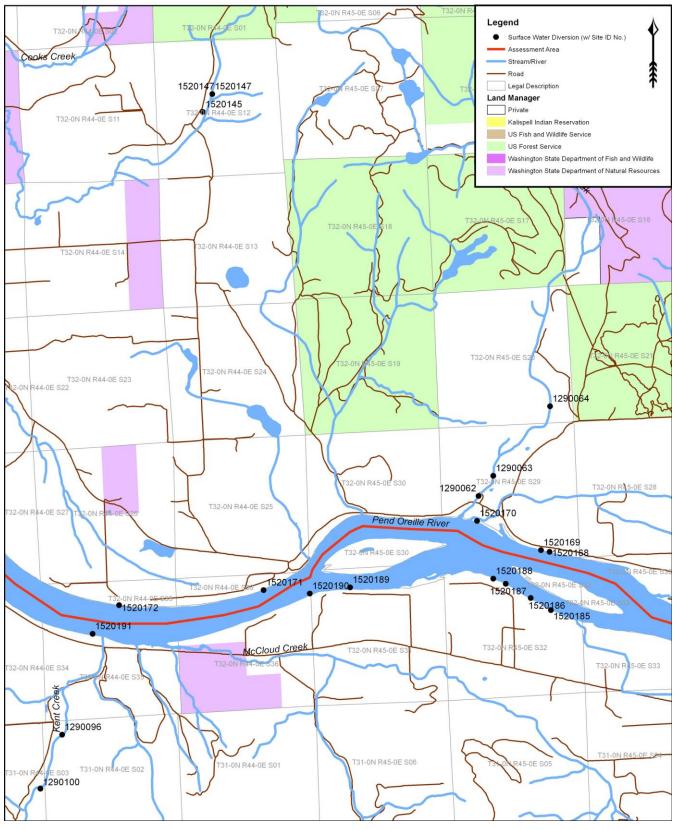




Pend Oreille River - Marshall Crk to Kent Crk

Lead Entity Priority Area = UNRANKED

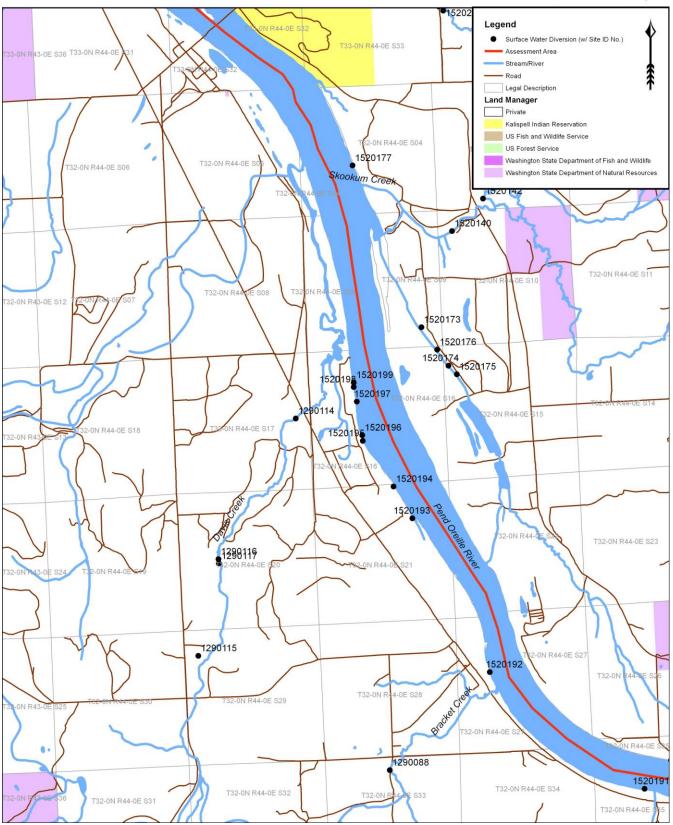
Figure 13 1:40,000



Pend Oreille River - Kent Crk to Usk

Lead Entity Priority Area = UNRANKED

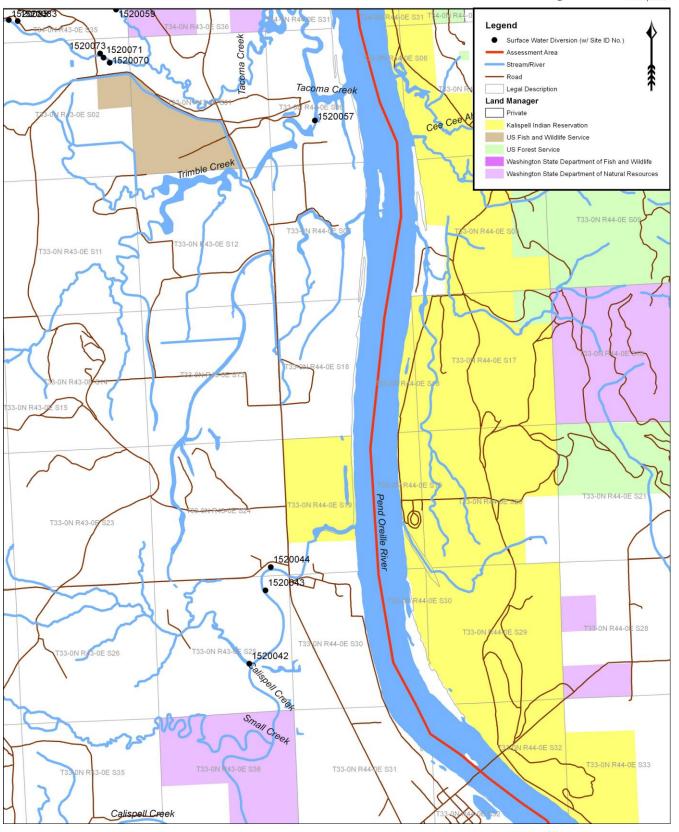
Figure 14 _{1:40,000}



Pend Oreille River - Usk to Tacoma Crk

Lead Entity Priority Area = UNRANKED

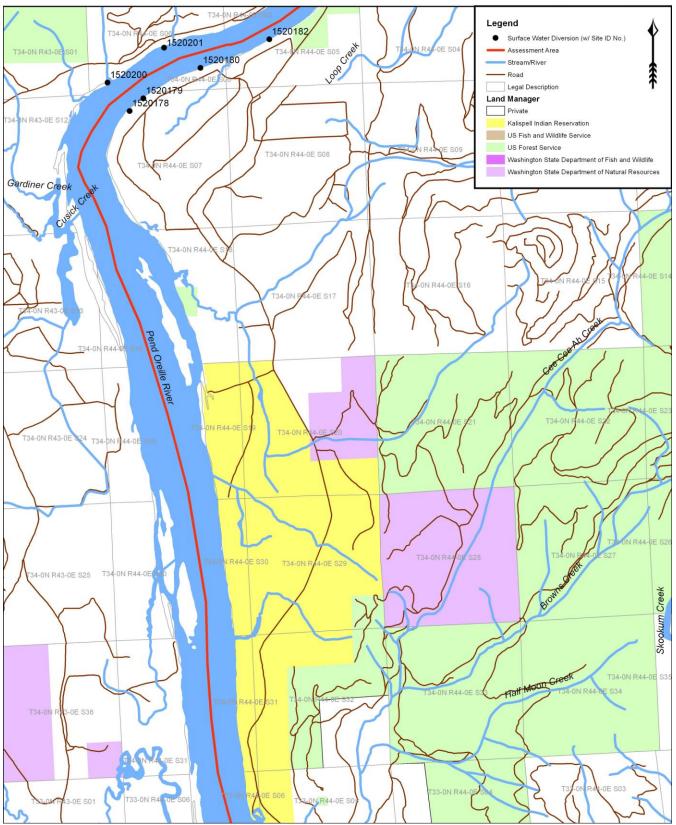
Figure 15 _{1:40,000}



Pend Oreille River - Tacoma Crk to Riverside

Lead Entity Priority Area = UNRANKED

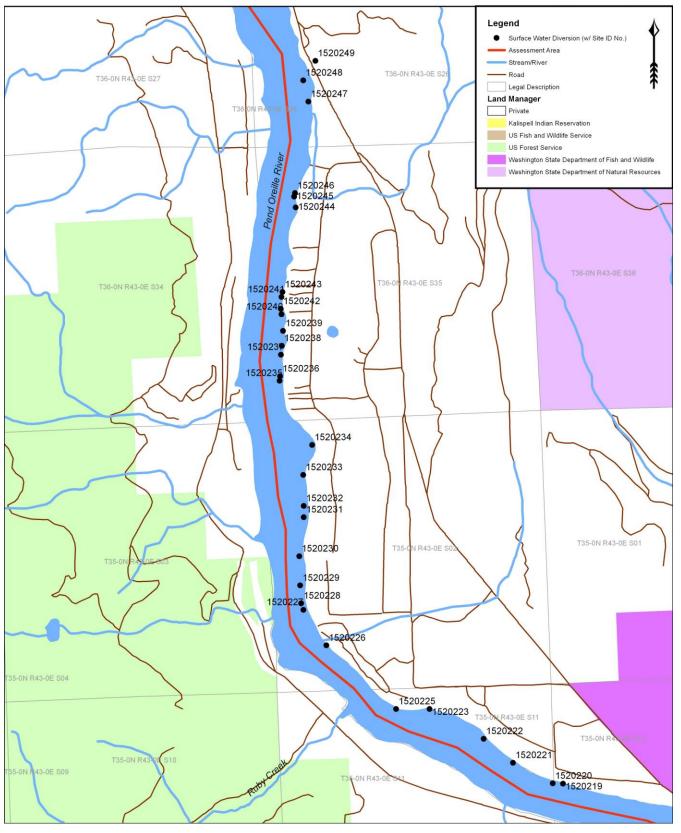
Figure 16 _{1:40,000}



Pend Oreille River - Blueside Area

Lead Entity Priority Area = UNRANKED

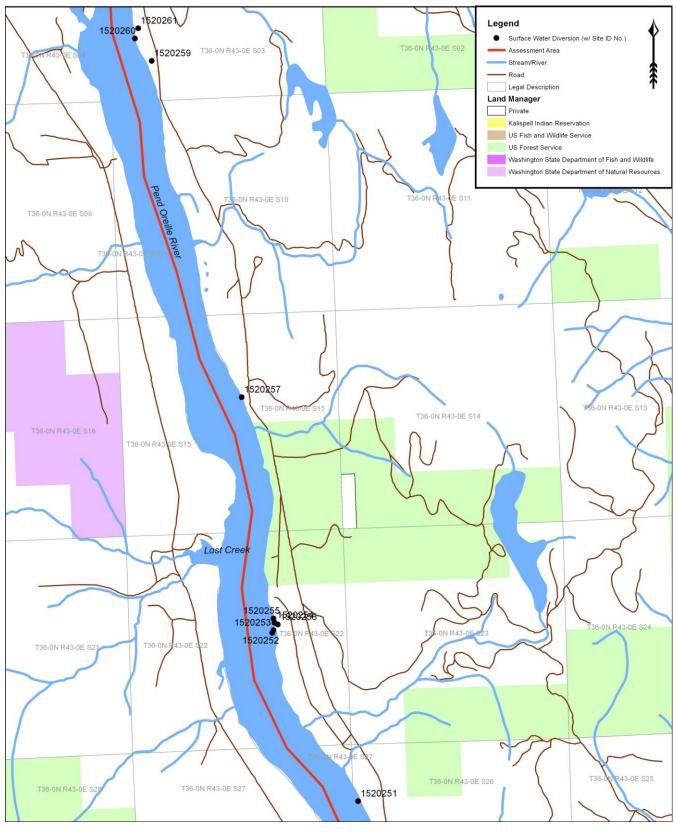
Figure 17 _{1:20,000}



Pend Oreille River - Blueside to Tiger Slough

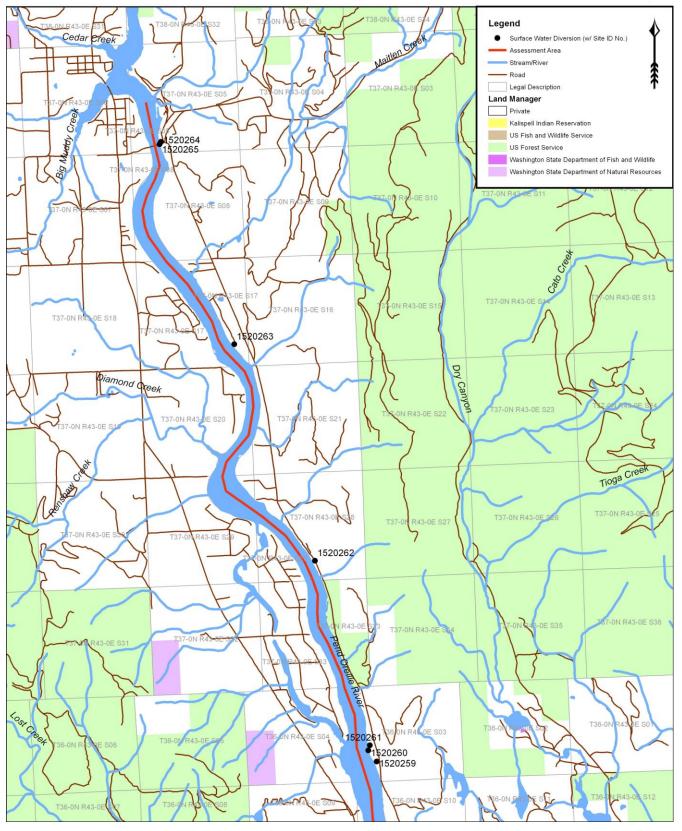
Lead Entity Priority Area = UNRANKED

Figure 18 _{1:25,000}



Pend Oreille River - Tiger Slough to Ione Lead Entity Priority Area = UNRANKED Figure 1

Figure 19 _{1:50,000}



Screening Action Plan

Washington State law (Chapter 77.57.070 RCW and Chapter 77.57.010 RCW) requires that all surface water diversions be screened to prevent fish from being drawn into the diversions where they are at risk for injury and mortality. To achieve compliance with state screening regulations, several steps must be taken in addition to identifying and prioritizing potential screening projects:

- 1. Identify landowners who are interested in voluntarily screening their diversion(s)
- 2. Determine which of these landowners have water rights (claim, certificate, or permit) associated with their diversion. Each diversion screening project will require a Hydraulic Project Approval (HPA) issued by WDFW. WDFW can not grant a HPA for a project that does not have a valid associated water right, claim, or certificate. WDFW will need confirmation of the water right from the Washington Department of Ecology (Ecology) prior to issuing the HPA.
- 3. Work with the identified landowners and Department of Ecology to resolve any issues associated with water use, such as quantity, type and place of use, etc.
- 4. Identify funding for project design and construction
- 5. Apply for and receive permits (general this will just be a HPA)
- 6. Construction and screen installation
- 7. Develop screen maintenance plan with landowner that can be incorporated into a perpetual agriculture HPA which will allow for on-going maintenance of the screen.
- 8. Monitor compliance with screening regulations and maintenance agreements

Literature Cited

Washington Department of Fish and Wildlife (WDFW). 2009. Fish Passage and Surface Water Diversion Screening Assessment and Prioritization Manual. Washington Department of Fish and Wildlife. Olympia, Washington.

Pend Oreille Salmonid Recovery Team (POSRT). 2007. Strategy for protection and improvement of native salmonids in the Pend Oreille Water Resource Inventory Area (WRIA) 62.

APPENDIX A Diversion Data by Site ID No.

Site ID: 12	290053				
Latitude: 48	3.31769	Stream:	Skookum Cr	WRIA:	62.0786
Longitude: -1	17.23936	Trib To:	Pend Oreille R	Fish Use Po	tential: Yes
Data Source					
Organization:	Wash	nington Depar	tment of Fish and	Wildlife	
Field Crew:	Baker,G	iarringer	Review Dat	te: 10/13/2009	
Diversion					
Type:	Pump	Headgate	e: No	Access By:	Foot
Screened:	No	Diversion	Dam: No	Point of Diversion:	RB
				Location:	Lagoon
Flow					
Intake Pipe C	Outside Diamet	ter (in): 4.0	(Pump Only)	Water Right ID No:	
Diversion Ch	annel Area (so	ft): -9	(Gravity Only)	Power Meter No:	
Flow (gpm):		160		SPI Total:	2.25
Flow Derivati	on:	Calculate	d		
Diversion Co	mments				
Open PVC pi	ipe on bottom	of beaver por	nd. Appears conne	ected to pump house.	
Screen					
Screen Type	e:		1 1		
Screen Mate					440
Mesh Size (i					
Diameter (ft)					
Height (ft):					
Length (ft):				Z-sky	
Area (sq ft):			1		10
Condition:				The Marie Control	
	NDFW Criteria).			
		ŋ	J		
Screen Com	ments		(Pinner)	AND	
Recheck					

Site ID: 1290068				
Latitude: 48.31765		Skookum Cr	WRIA:	62.0786
Longitude: -117.23936	Trib To:	Pend Oreille R	Fish Use Po	tential: Yes
Data Source				
Organization: P	end Oreille (Conservation Distri	ct	
Field Crew: Albrecht;Bruni	nga;Zupich	Review Date	e: 06/14/2004	
Diversion				
Type: Pump	Headgate	Unknown	Access By:	Vehicle
Screened: No	Diversion	Dam: No	Point of Diversion:	LB
			Location:	River Bank
Flow				
Intake Pipe Outside Diamete	r (in): -99.	99 (Pump Only)	Water Right ID No:	
Diversion Channel Area (sq f	ft): -9	(Gravity Only)	Power Meter No:	
Flow (gpm):	-999.99		SPI Total:	
Flow Derivation:				
Diversion Comments				
In creek runs into pumphous	e; pump not	t evaluated.		
Screen				
Screen Type:				
Screen Material:				
Mesh Size (in):				
		Male Jak		
Diameter (ft):			1	ALL STATES
Height (ft):				
Length (ft):	<u> </u>			
Area (sq ft):	<u> </u>			
Condition:		Man San San San San San San San San San S		
Compliant (WDFW Criteria)	:			
Screen Comments				
Recheck				

Site ID: 1290083				
Latitude: 48.3398	Stream: S	Skookum Cr	WRIA:	62.0786
Longitude: -117.23996	Trib To: P	end Oreille R	Fish Use	Potential: Yes
Data Source				
Organization: P	end Oreille Co	onservation Distric	et	
Field Crew: Albrecht,Brun	inga;Zupich	Review Date	2: 06/14/2004	
Diversion				
Type: Gravity	Headgate:	Yes	Access By:	Foot
Screened: No	Diversion D	Dam: Yes	Point of Diversion	n: RB
			Location:	River Bank
Flow				
Intake Pipe Outside Diamete	er (in): -99.99	(Pump Only)	Water Right ID No:	
Diversion Channel Area (sq	ft): -99.	g (Gravity Only)	Power Meter No:	
Flow (gpm):	-999.99		SPI Total:	
Flow Derivation:				
Diversion Comments				
Very old diversion ditch, star Best Chance Rd. It appears measurements taken on ditc	to cross unde	er Best Chance R		
Screen				
Screen Type:				
Screen Material:				
Mesh Size (in):	$\overline{}$			
Diameter (ft):		意相应。这些	S TO THE STATE OF	***
Height (ft):			PER STATE OF STREET	
Length (ft):		400		
Area (sq ft):				
Condition:		EU ST		
Compliant (WDFW Criteria)				
Screen Comments				
Recheck				

				<u> </u>	
Site ID: 1	1290134				
Latitude: 4	18.3077	Stream:	Winchester Cr	WRIA:	62.0666
Longitude: -	117.39031	Trib To:	Calispell Cr	Fish Use Pote	ential: Yes
Data Source	2				
Organization	n:	Pend Oreille C	onservation Distri	ct	
Field Crew:	Helli	e;Zupich	Review Dat	e: 08/19/2003	
Diversion					
Type:	Gravity	Headgate:	No	Access By:	Foot
Screened:	Unknown	Diversion I	Dam: No	Point of Diversion:	LB
				Location:	River Bank
Flow					
Intake Pipe	Outside Diam	eter (in): -99.9	9 (Pump Only)	Water Right ID No:	
Diversion C	hannel Area (sq ft): -99	.g (Gravity Only)	Power Meter No:	
Flow (gpm):		-999.99		SPI Total:	
Flow Deriva	tion:				
Diversion C	omments				
Screen					
Screen Typ	e:		7		
Screen Ma	terial:				
Mesh Size	(in):				
Diameter (f	t):			lo Image Available	
Height (ft):			1	to image Available	
Length (ft):					
Area (sq ft)	:				
Condition:					
Compliant	(WDFW Crite	ria):			
Screen Con	-	·	_		
Jorean John					
Recheck				7	
				_	

Site ID: 12	290136				
Latitude: 48		Stream:	SF Smalle Cr	WRIA:	62.0631
Longitude: -1	17.35666	Trib To:	Smalle Cr	Fish Use F	otential: ıknown
Data Source					
Organization	:	Pend Oreille (Conservation Dist	rict	
Field Crew:	Hellie	e;Zupich	Review Da	ite: 08/19/2003	
Diversion					
Type:	Gravity	Headgate	: No	Access By:	Foot
Screened:	Unknown	Diversion	Dam: No	Point of Diversion	n: RB
				Location:	River Bank
Flow					
Intake Pipe C	Outside Diam	eter (in): -99.9	(Pump Only)	Water Right ID No:	
Diversion Ch	annel Area (sq ft): -9	g.g (Gravity Only)	Power Meter No:	
Flow (gpm):		-999.99		SPI Total:	
Flow Derivati	ion:				
Diversion Co	mments				
Screen					
Screen Type	e:		\sqcap		
Screen Mate	erial:				
Mesh Size (i	in):				
Diameter (ft) :			No Image Available	
Height (ft):				rto imago / tranabio	
Length (ft):			i		
Area (sq ft):			i		
Condition:			i		
Compliant (\	WDFW Criter	ria):	i		
Screen Com	ments		_		
Recheck					
_					

Site ID: 1520010				
Latitude: 48.48916	Stream:	Mill Cr	WRIA:	62
Longitude: -117.25909	Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Data Source				
Organization: W	ashington Depar	tment of Fish and	Wildlife	
Field Crew: Bake	r;Thueringer	Review Dat	te: 06/16/2009	
Diversion				
Type: Gravity	Headgate	e: No	Access By: Fo	ot
Screened: No	Diversion	Dam: No	Point of Diversion: RE	В
			Location:	
Flow				
Intake Pipe Outside Dia	meter (in): -99.5	99 (Pump Only)	Water Right ID No:	
Diversion Channel Area	(sq ft):	3.1 (Gravity Only)	Power Meter No:	
Flow (gpm):	1071		SPI Total:	4.51
Flow Derivation:	Calculated	d		
Diversion Comments				
partially naturally damm	ed to divert wate	r.		
Screen		44		200
Screen Type:				
Screen Material:				
Mesh Size (in):				
Diameter (ft):				
Height (ft):		V		
Length (ft):		46-		
Area (sq ft):				
Condition:				
Compliant (WDFW Crit	eria):			718
Screen Comments	non hall	BOOKS AND THE		IF-ATTE
Recheck			7	

Site ID: 1520025				
Latitude: 48.60191	Stream:	EB LeClerc Cr	WRIA:	62
Longitude: -117.23434	Trib To:	LeClerc Cr	Fish Use Potenti	al: Yes
Data Source				
Organization: Wa	shington Depart	tment of Fish and Wil	ldlife	
Field Crew: Baker	Thueringer	Review Date:	06/23/2009	
Diversion				
Type: Pump	Headgate	: No	Access By:	Vehicle
Screened: Yes	Diversion	Dam: No	Point of Diversion:	RB
			Location: Ri	ver Bank
Flow				
Intake Pipe Outside Dian	neter (in): 1.5	0 (Pump Only) V	Water Right ID No:	1
Diversion Channel Area	(sq ft): -9	9.9 (Gravity Only) F	Power Meter No:	\neg
		Service processor 2		
Flow (apm):	35		SPI Total:	2.51
Flow (gpm): Flow Derivation:	Calculated		SPI Total:	2.51
Flow Derivation:			SPI Total:	2.51
Flow Derivation:			SPI Total:	2.51
Flow Derivation: Diversion Comments			SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used			SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type:	Calculated		SPI Total:	2.51]
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type:	Calculated		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material:	Cone		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in):	Cone Slotted PVC 0.75		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Cone Slotted PVC 0.75 -99.99		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Cone Slotted PVC 0.75 -99.99 0.01		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Cone Slotted PVC 0.75 -99.99 0.01 0.08		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Cone Slotted PVC 0.75 -99.99 0.01 0.08 -999.99 OK		SPI Total:	2.51
Flow Derivation: Diversion Comments 0.5 HP pump used Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Cone Slotted PVC 0.75 -99.99 0.01 0.08 -999.99 OK eria): No			2.51

Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thueringer Review Date: 06/23/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Power Meter No: SPI Total: 2.51 Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.09 Area (sq ft): -990.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments Screen Comments	Latitude: 48.60237	Stream:	EB LeClerc Cr	WRIA:	62
Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thueringer Review Date: 06/23/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Power Meter No: SPI Total: 2.51 Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Diversion Comments submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.09 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Longitude: -117.23203	Trib To:	LeClerc Cr	Fish Use Potential:	Yes
Field Crew: Baker, Thueringer Review Date: 06/23/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: RB Location: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Flow Openivation: Calculated Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Data Source				
Diversion Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Power Meter No: SPI Total: 2.51 Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Organization: W	ashington Depart	ment of Fish and W	ildlife	
Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Flow (gpm): 35 SPI Total: 2.51 Diversion Comments submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Field Crew: Baker	;Thueringer	Review Date:	06/23/2009	
Screened: Yes Diversion Dam: No Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Flow (gpm): 35 SPI Total: 2.51 Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Diversion				
Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Type: Pump	Headgate	No	Access By: Fo	ot
Intake Pipe Outside Diameter (in): 1.50 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 2.51 Plow (gpm): 35 SPI Total: 2.51 Diversion Comments submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Screened: Yes	Diversion	Dam: No	Point of Diversion: R	В
Intake Pipe Outside Diameter (in): Diversion Channel Area (sq ft): Flow (gpm): Soreen Soreen Material: Soreen Material: Diameter (ft): Diameter (ft):				Location: River	Bank
Diversion Channel Area (sq ft):99.9 (Gravity Only) Power Meter No:	Flow				
Flow (gpm): 35 SPI Total: 2.51 Flow Derivation: Calculated Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	ntake Pipe Outside Diar	meter (in): 1.50	(Pump Only)	Water Right ID No:	
Flow Derivation: Calculated Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Diversion Channel Area	(sq ft): -9	g.g (Gravity Only)	Power Meter No:	7
Diversion Comments Submersible deep well pump- 0.5 HP Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Flow (gpm):	35		SPI Total:	2.51
Screen Screen Type: Cylinder Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Flow Derivation:	Calculated			
Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Diversion Comments				
Screen Material: Slotted PVC Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.08 Length (ft): 0.04 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	submersible deep well p	ump- 0.5 HP	No. 1/2 of last		A Park
Mesh Size (in): Diameter (ft): -99.99 Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): No O.25 -99.99 Condition: OK Compliant (WDFW Criteria): No	submersible deep well p				
Diameter (ft):	submersible deep well p Screen Screen Type:	Cylinder	No. of the last		
Height (ft): Length (ft): O.04 Area (sq ft): Condition: Compliant (WDFW Criteria): No Screen Comments	Screen Type: Screen Material:	Cylinder Slotted PVC			
Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): No Correen Comments	submersible deep well p Screen Screen Type: Screen Material: Mesh Size (in):	Cylinder Slotted PVC 0.25			
Area (sq ft): Condition: Compliant (WDFW Criteria): No Correen Comments	Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Cylinder Slotted PVC 0.25 -99.99			
Condition: OK Compliant (WDFW Criteria): No Green Comments	Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Cylinder Slotted PVC 0.25 -99.99 0.08			
Compliant (WDFW Criteria): No	Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Cylinder Slotted PVC 0.25 -99.99 0.08			
Screen Comments	Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Cylinder Slotted PVC 0.25 -99.99 0.08 0.04			
	Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Cylinder Slotted PVC 0.25 -99.99 0.08 0.04 -999.99			
Mesh size too large to meet compliance requirements.	Screen Type: Screen Material: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Cylinder Slotted PVC 0.25 -99.99 0.08 0.04 -999.99 OK			
	Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Crit	Cylinder Slotted PVC 0.25 -99.99 0.08 0.04 -999.99 OK eria): No			

Site ID: 1520030				
Latitude: 48.5232	7 Stream:	LeClerc Cr	WRIA:	62
Longitude: -117.28	038 Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Data Source				
Organization:	Washington Depar	tment of Fish and Wil	ldlife	
Field Crew: E	Baker,Thueringer	Review Date:	06/24/2009	
Diversion				
Type: Pur	mp Headgate	e: No	Access By: Fo	oot
Screened: Ye	s Diversion	Dam: No	Point of Diversion: L	В
			Location: River	Bank
Flow				
Intake Pipe Outside	Diameter (in): 1.0	(Pump Only) V	Vater Right ID No:	
Diversion Channel	Area (sq ft): -9	99.9 (Gravity Only) F	Power Meter No:	
	The same of the sa		V. O. S. S. W. S.	
Flow (gpm):	14	9	SPI Total:	2.01
Flow Derivation: Diversion Commer 5-gallon bucket with	Calculate nts h wire mesh screen c	d	GPI Total: are ∼1" diameter. Inside bucke	
is 1" black tube wit	Calculate	d		
Flow Derivation: Diversion Commer 5-gallon bucket wit is 1" black tube with	Calculate nts n wire mesh screen on n wire mesh as well.	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type:	Calculate nts n wire mesh screen c n wire mesh as well. Cylinder	d		
Flow Derivation: Diversion Commer 5-gallon bucket wit is 1" black tube wit Screen Screen Type: Screen Material:	Calculate nts h wire mesh screen of h wire mesh as well. Cylinder Wire Mesh	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in):	Calculate nts n wire mesh screen of n wire mesh as well. Cylinder Wire Mesh 0.06	d		
Flow Derivation: Diversion Commer 5-gallon bucket wit is 1" black tube wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Calculate nts h wire mesh screen of h wire mesh as well. Cylinder Wire Mesh	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in):	Calculate nts n wire mesh screen on wire mesh as well. Cylinder Wire Mesh 0.06 0.40	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Calculate nts h wire mesh screen of h wire mesh as well. Cylinder Wire Mesh 0.06 0.40 0.95	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Calculate In wire mesh screen of his wire mesh as well. Cylinder Wire Mesh 0.06 0.40 0.95 -99.99	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Calculate nts n wire mesh screen of wire mesh as well. Cylinder Wire Mesh 0.06 0.40 0.95 -99.99 -999.99 OK	d		
Flow Derivation: Diversion Commer 5-gallon bucket with is 1" black tube with Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Calculate In wire mesh screen of his wire mesh as well. Cylinder Wire Mesh 0.06 0.40 0.95 -99.99 -999.99 OK	d		

Laterala: 40 5343	Stream: LeC	loro Cr	WRIA:	62
Latitude: 48.5313				
Longitude: -117.28243	Trib To: Pen	d Oreille R	Fish Use Po	otential: Yes
Data Source				
Organization: Was	hington Departmen	t of Fish and V	Wildlife	
Field Crew: Baker;T	hueringer	Review Date	2: 06/24/2009	
Diversion				
Type: Pump	Headgate:	No	Access By:	Foot
Screened: Unknown	Diversion Dan	n: No	Point of Diversion:	LB
			Location:	River Bank
Flow				
Intake Pipe Outside Diame	ter (in): 1.25 (Pump Only)	Water Right ID No:	
Diversion Channel Area (se	q ft): -99.9	Gravity Only)	Power Meter No:	
Flow (gpm):	25		SPI Total:	2.32
Flow Derivation:	Calculated			
psuedo trash rack made o weighted down by rocks. D				
weighted down by rocks. D Intake pipe submerged wit	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type:	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material:	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type:	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material:	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in):	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	oid not feel any ope	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	lid not feel any ope h large rocks piled	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Compliant (WDFW Criteria	lid not feel any ope h large rocks piled	ning or hole w	here wire frame connec	
weighted down by rocks. D Intake pipe submerged wit Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	lid not feel any ope h large rocks piled	ning or hole w	here wire frame connec	

Latitude: 48.30973	Stream: Calispell Cr	WRIA: 62
Longitude: -117.33416	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Wash	hington Department of Fish and Wi	ldlife
Field Crew: Baker,Th	hueringer Review Date:	07/08/2009
Diversion		
Type: Gravity	Headgate: Yes	Access By: Vehicle
Screened: No	Diversion Dam: No	Point of Diversion: RB
		Location:
Flow		30.0
Intake Pipe Outside Diame	ter (in): 37.01 (Pump Only) V	Vater Right ID No:
Diversion Channel Area (so		Power Meter No:
Flow (gpm):	2525	SPI Total: 3.77
Flow Derivation:	Calculated	
Steel flap headgate is in 'cl fish are diverted out of stre	osed' position. Diversion pipe dian am when headgate is open. Opera	neter is 37 inches. It is unknown if ation is outlfow only.
fish are diverted out of stre		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type:		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type:		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in):		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):		
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	am when headgate is open. Open	
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	am when headgate is open. Open	
Steel flap headgate is in 'cl fish are diverted out of stre Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria	am when headgate is open. Open	

01/13/2010 Page 1 of 1

Site ID: 1520042		
Latitude: 48.32913	Stream: Calispell Cr	WRIA: 62
Longitude: -117.3114	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Wa	shington Department of Fish and Wildl	ife
Field Crew: Baker,	Thueringer Review Date: 0	7/08/2009
Diversion		
Type: Gravity	Headgate: Yes	Access By: Vehicle
Screened: No	Diversion Dam: No	Point of Diversion: LB
		Location:
Flow		
Intake Pipe Outside Diam	eter (in): 35.83 (Pump Only) Wa	ater Right ID No:
Diversion Channel Area (sq ft): 7 (Gravity Only) Po	wer Meter No: 40265091
Flow (gpm):	2357 SP	1 Total: 3.71
Flow Derivation:	Calculated	
Diversion Comments		
Headgate is up. Local la	ndowner commented to WDFW that th	is system is no longer in use.
Screen		
Screen Type:		
Screen Material:		
Mesh Size (in):	an is	
Diameter (ft):		
Height (ft):		
Length (ft):		
	The state of the s	
Area (sq ft):	107 L 2 104 PM	70 FOR
Area (sq π): Condition:		A Property of the Control of the Con
	ria):	
Condition:	ria):	12.0

01/13/2010 Page 1 of 1

Site ID: 1520043		
Latitude: 48.3369	Stream: Calispell Cr	WRIA: 62
Longitude: -117.30832	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: V	ashington Department of Fish and Wil	dlife
Field Crew: Bake	r;Thueringer Review Date:	07/08/2009
Diversion		
Type: Pump	Headgate: No	Access By: Vehicle
Screened: Yes	Diversion Dam: No	Point of Diversion: RB
		Location: River Bank
Flow		70
Intake Pipe Outside Dia	rmeter (in): 2.40 (Pump Only) V	/ater Right ID No:
Diversion Channel Area	(sq ft):99.9 (Gravity Only) P	ower Meter No:
Flow (gpm):	65 S	PI Total: 1.80
Flow Derivation:	Calculated	
54 13 549V 59		
Diversion Comments	Land to the State of the State	
needs maintenance. No pipe and intake pipe is though is contains noth	ot satisfactory. 5 HP pump. Chicken wir inside a checken wire of 1" mesh crate ing. A dead fish is in the intake crate.	
needs maintenance. No pipe and intake pipe is	inside a checken wire of 1" mesh crate	
needs maintenance. No pipe and intake pipe is though is contains noth	inside a checken wire of 1" mesh crate	
needs maintenance. No pipe and intake pipe is though is contains noth Screen	inside a checken wire of 1" mesh crate, ing. A dead fish is in the intake crate. Box Wire Mesh	
needs maintenance. No pipe and intake pipe is though is contains nother screen Screen Type:	inside a checken wire of 1" mesh crate, ing. A dead fish is in the intake crate.	
needs maintenance. No pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material:	inside a checken wire of 1" mesh crateing. A dead fish is in the intake crate. Box Wire Mesh	
needs maintenance. No pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material: Mesh Size (in):	inside a checken wire of 1" mesh crateing. A dead fish is in the intake crate. Box Wire Mesh	
needs maintenance. No pipe and intake pipe is though is contains nother though is contains nother though is contains nother though is contains not though is contains not though is contained. Screen Type: Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Box Wire Mesh 2 -99.99	
needs maintenance. Ni pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Box Wire Mesh 2 -99.99	
needs maintenance. No pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Box Wire Mesh 2 -99.99 -99.99	
needs maintenance. No pipe and intake pipe is though is contains nothen Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Box Wire Mesh 2 -99.99 -99.99 -999.99	
needs maintenance. No pipe and intake pipe is though is contains nother though is contained by the second material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Critical Compliant)	Box Wire Mesh 2 -99.99 -99.99 -999.99	
needs maintenance. Ni pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Box Wire Mesh 2 -99.99 -99.99 -999.99	
needs maintenance. No pipe and intake pipe is though is contains nother though is contained by the second material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Critical Compliant)	Box Wire Mesh 2 -99.99 -99.99 -999.99	
needs maintenance. Ni pipe and intake pipe is though is contains noth Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Cri	Box Wire Mesh 2 -99.99 -99.99 -999.99	

Site ID: 1520044				
Latitude: 48.33936	Stream:	Calispell Cr	WRIA:	62
Longitude: -117.30733	Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Data Source				
Organization: Wa	shington Depar	rtment of Fish and Wil	dlife	
Field Crew: Baker	Thueringer	Review Date:	07/08/2009	
Diversion				
Type: Pump	Headgate	e: No	Access By: Fo	ot
Screened: Yes	Diversion	Dam: No	Point of Diversion:	В
			Location: Offs	hore
Flow				
Intake Pipe Outside Dian	neter (in): 1.5	(Pump Only) V	Vater Right ID No:	
Diversion Channel Area	(sq ft): -6	99.9 (Gravity Only) F	ower Meter No:	_
Flow (gpm):	35	=	SPI Total:	4.70
I IOW (MPIII).			erroa.	1./0
Flow Derivation:	Calculate		PET TOTAL	1.70
Flow Derivation: Diversion Comments condition of screem is of	Calculate		PET TOTAL	1.70
Flow Derivation: Diversion Comments condition of screem is of	Calculate		PETITOLIS.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type:	Calculate		PETITOLIS.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type:	Calculate		PETITOLAL.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per	Calculate Cylinder forated Plate		PETITOLAL.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per Mesh Size (in):	Calculate Cylinder Forated Plate 0.94		PT TOTAL	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft):	Calculate Cylinder forated Plate 0.94 -99.99		PET TOTAL.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Calculate Cylinder forated Plate 0.94 -99.99 0.02		PATION.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Calculate Cylinder forated Plate 0.94 -99.99 0.02 0.10		PT TOTAL	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Cylinder forated Plate 0.94 -99.99 0.02 0.10 0.22 OK		PETITOLAL.	1.70
Flow Derivation: Diversion Comments condition of screem is of Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Cylinder forated Plate 0.94 -99.99 0.02 0.10 0.22 OK		PT TOTAL	1.70

Site ID: 1520045			
Latitude: 48.25953	Stream:	Calispell Cr	WRIA:
Longitude: -117.33736	Trib To:	Pend Oreille R	Fish Use Potential:
Data Source			
Organization: W	ashington Depart	tment of Fish and Wile	dlife
Field Crew: Baker	Thueringer	Review Date:	07/13/2009
Diversion			
Type: Gravity	Headgate	No	Access By: Foot
Screened: No	Diversion	Dam: No	Point of Diversion: LB
			Location: River Bar
Flow			
Intake Pipe Outside Diar	meter (in): -99.9	99 (Pump Only) W	later Right ID No:
Diversion Channel Area	(sq ft):	7.2 (Gravity Only) P	ower Meter No:
Flow (gpm):	2425	s	PI Total: 3.1
Flow Derivation:	Calculated		
Diversion Comments			
Not sure if this is a diver	sion. Need to re	visit and follow to sou	rce.
Screen			
Screen Type:			
Screen Material:			
Mesh Size (in):			
	3	The second second	STATE OF THE PERSON NAMED IN
Diameter (ft):		4	
Diameter (ft):		A CHEST	No. of the local Party of the lo
Height (ft):			
Height (ft): Length (ft):			
Height (ft): Length (ft): Area (sq ft):			
Height (ft): Length (ft):	eria):		
Height (ft): Length (ft): Area (sq ft): Condition:	eria):		

Latitude: 48.24129 Longitude: -117.34404 Data Source Organization: Washi Field Crew: Baker;The	Stream: Calispell Cr Trib To: Pend Oreille R Ington Department of Fish and Wilk	WRIA: 62 Fish Use Potential: Yes
Organization: Washi Field Crew: Baker;The	ngton Department of Fish and Wile	
Organization: Washi Field Crew: Baker;Th		llifa
Field Crew: Baker;Th		life
	Devices Date (Anne
Diversion	deringer Review Date: 1	07/14/2009
Type: Gravity	Headgate: No	Access By: Foot
Screened: No	Diversion Dam: No	Point of Diversion: LB
		Location: River Bank
Flow		
Intake Pipe Outside Diamete	er (in): 12.60 (Pump Only) W	/ater Right ID No:
Diversion Channel Area (sq	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	ower Meter No:
Flow (gpm):		PI Total: 3.07
Flow Derivation:	Calculated	
is .12 m above water surfac		board. Erosion in bank. Intake pipe
Screen		A STATE OF THE STATE OF
Screen Type:		(1) 12 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Screen Material:		78 - 18 18 Sept 14 / 18
Mesh Size (in):	Magazini and Maria	
Diameter (ft):		
Height (ft):		
Length (ft):		
Area (sq ft):		
Condition:		
Compliant (WDFW Criteria)):	The second second
Screen Comments		

Longitude: -117.33901 Trib To: Pend Oreille R Fish Use Potential: Y Data Source Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thuering Review Date: 07/29/2009 Diversion Type: Pump Headgate: No Access By: Foot Soreened: No Diversion Dam: No Point of Diversion: LB Location: River Banl Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3" bolts to keep debris out. Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Length (ft): Condition: Compliant (WDFW Criteria): Screen Comments	Site ID: 1520054		
Data Source Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thuering Review Date: 07/29/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: LB Location: River Banl Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.9 Flow Opiversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Length (ft): Condition: Compliant (WDFW Criteria): Screen Comments Screen Comments Screen Comments Screen Comments Screen Comments Compliant (WDFW Criteria): Compl	Latitude: 48.25942	Stream: Tacoma Cr	WRIA: 62
Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thuering Review Date: 07/29/2009 Diversion Type: Pump Headgate: No Access By: Foot Screened: No Diversion Dam: No Point of Diversion: LB Location: River Bani Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen 3" bolts to keep debris out. Screen Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Length (ft): Condition: Compliant (WDFW Criteria): Screen Comments Compliant (WDFW Criteria): Screen Comments	Longitude: -117.33901	Trib To: Pend Oreille R	Fish Use Potential: Yes
Field Crew: Baker;Thuering Review Date: 07/29/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: LB Location: River Banl Location: River Banl Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Condition: Compliant (WDFW Criteria): Screen Comments Compliant (WDFW Criteria): Screen Comments	Data Source		
Diversion Type: Pump Headgate: No Access By: Foot Screened: No Diversion Dam: No Point of Diversion: LB Location: River Bani Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): 99.9 (Gravlty Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3" bolts to keep debris out. Screen Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Diameter (ft): Group Interval (WDFW Criteria): Green Comments Compliant (WDFW Criteria): Green Comments	Organization: Was	shington Department of Fish and	Wildlife
Type: Pump Headgate: No Access By: Foot Screened: No Diversion Dam: No Point of Diversion: LB Location: River Bank Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): 99.9 (Gravity Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3" bolts to keep debris out. Screen Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Height (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): Screen Comments Green Comments	Field Crew: Baker;	Thuering Review Dat	te: 07/29/2009
Screened: No Diversion Dam: No Point of Diversion: LB River Bani Flow Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but r screen. 3* bolts to keep debris out. Screen Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Height (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): Green Comments Green Comments	Diversion		
Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.99 Plow (gpm): 40 SPI Total: 1.99 Plow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): Screen Comments	Type: Pump	Headgate: No	Access By: Foot
Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): Green Comments Coreen Comments	Screened: No	Diversion Dam: No	Point of Diversion: LB
Intake Pipe Outside Diameter (in): 2.00 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.9 Flow Derivation: Calculated SPI Total: 1.9 Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Length (ft): Condition: Compliant (WDFW Criteria): Screen Comments			Location: River Bank
Diversion Channel Area (sq ft):99.9 (Gravity Only) Power Meter No:	Flow		<u> </u>
Diversion Channel Area (sq ft):99.9 (Gravity Only) Power Meter No:	Intake Pipe Outside Diam	eter (in): 2.00 (Pump Only)	Water Right ID No:
Flow (gpm): 40 SPI Total: 1.9 Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Height (ft): Condition: Compliant (WDFW Criteria): Gereen Comments			
Flow Derivation: Calculated Diversion Comments There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Compliant (WDFW Criteria): Screen Comments		The second secon	SPI Total: 1.98
There is an inactive diversion dam located just upstream of diversion. Spring/valve set-up, but rescreen. 3" bolts to keep debris out. Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Condition: Compliant (WDFW Criteria):		Calculated	
Screen Type:	screen. 3" bolts to keep o		f diversion. Spring/valve set-up, but no
Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria):			
Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria):	Screen Type:		
Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria):	Screen Material:		
Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria):	Mesh Size (in):		
Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria):	Diameter (ft):		
Area (sq ft): Condition: Compliant (WDFW Criteria):	Height (ft):		
Condition: Compliant (WDFW Criteria): Coreen Comments	Length (ft):		
Compliant (WDFW Criteria):	Area (sq ft):		
Screen Comments	Condition:		
	Compliant (WDFW Criter	ia):	S.74
	Screen Comments		
	Recheck		-0.0

Longitude: -117.32851 Trib To: Pend Oreille R Fish Use Potential: Y. Data Source Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thueringer Review Date: 07/30/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.88 Flow Derivation: Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments		•			
Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thueringer Review Date: 07/30/2009 Diversion Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 10 SPI Total: 1.88 Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.29 Height (ft): 0.29 Length (ft): -99.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Latitude: 48.3995	8 Stream:	Tacoma Cr	WRIA:	62
Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Thueringer Review Date: 07/30/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Screened: Yes Diversion Dam: No Point of Diversion: RB Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: Flow (gpm): 10 SPI Total: 1.85 Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.29 Length (ft): 0.29 Length (ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Longitude: -117.328	351 Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Field Crew: Baker, Thueringer Review Date: 07/30/2009 Diversion Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -90.9 (Gravity Only) Power Meter No: SPI Total: 1.85 Flow Derivation: Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Oata Source				
Diversion Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.85 (Pump Only) SPI Total: 1.85 (Pump Only) Power Meter No: SPI Total: 1.85 (Pump Only) Po	Organization:	Washington Depar	tment of Fish and W	ildlife	
Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.85 (Pump Only) SPI Total: 1.85 (Pump Only) Power Meter No: SPI Total: 1.85 (Pump Only) SPI Total: 1.85 (Pump Only) Power Meter No: SPI Total: 1.	Field Crew: E	Baker;Thueringer	Review Date:	07/30/2009	
Screened: Yes Diversion Dam: No Point of Diversion: RB Location: Offshore Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.85 (Pump	Diversion				
Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.85 (Pump Only) Power Meter No: SPI Tota	Type: Pur	mp Headgate	e: No	Access By: Fo	ot
Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -89.9 (Gravity Only) Power Meter No: Flow (gpm): 10 SPI Total: 1.85 Flow Derivation: Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Screened: Ye	s Diversion	Dam: No	Point of Diversion: RE	3
Intake Pipe Outside Diameter (in): Diversion Channel Area (sq ft): Flow (gpm): To ther Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Screen Material: Plastic Mesh Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Length (ft): Other Plastic Mesh Area (sq ft): Oversion Comments Oversion Compliant (IVDFW Criteria): No Oversion Comments O				Location: Offsh	ore
Diversion Channel Area (sq ft):	Flow			70.0	
Flow (gpm): 10 SPI Total: 1.85 Flow Derivation: Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Intake Pipe Outside	Diameter (in): 1.2	5 (Pump Only)	Water Right ID No:	
Flow Derivation: Other Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Diversion Channel	Area (sq ft):	99.9 (Gravity Only)	Power Meter No:	
Diversion Comments Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Flow (gpm):	10		SPI Total:	1.85
Two footbridges (one old and underneath new) w/ submersible pump (10 gpm, 3/4 hp) hanging from new bridge with metal chains. Screen Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Flow Derivation:	Other	-		
Screen Type: Cylinder Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No				re ben't (12 Shirt 2 11h) rang	
Screen Material: Plastic Mesh Mesh Size (in): 0.125 Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Bernen		A LAND TO SERVICE	A STATE OF THE STA	MINISTER OF STREET
Mesh Size (in): Diameter (ft): 0.17 Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): No Screen Comments	700000000				Fig.
Diameter (ft): 0.17 Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Screen Type:				
Height (ft): 0.29 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No Screen Comments	Screen Type:	Plastic Mesh			
Length (ft): Area (sq ft): Condition: Compliant (WDFW Criteria): No Screen Comments	Screen Type: [Screen Material: [Plastic Mesh			
Area (sq ft): Condition: Compliant (WDFW Criteria): No Screen Comments	Screen Type: [Screen Material: [Mesh Size (in):	Plastic Mesh 0.125			
Condition: OK Compliant (WDFW Criteria): No Screen Comments	Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Plastic Mesh 0.125 0.17			
Compliant (WDFW Criteria): No	Screen Type: [Screen Material: [Mesh Size (in): Diameter (ft): Height (ft):	Plastic Mesh 0.125 0.17 0.29			
Screen Comments	Screen Type: [Screen Material: [Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Plastic Mesh 0.125 0.17 0.29 -99.99			
	Screen Type: [Screen Material: [Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Plastic Mesh 0.125 0.17 0.29 -99.99			
	Screen Type: [Screen Material: [Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Plastic Mesh 0.125 0.17 0.29 -99.99 -999.99 OK			
Mesh size is too big to meet compliance specs.	Screen Type: [Screen Material: [Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW	Plastic Mesh 0.125 0.17 0.29 -99.99 -999.99 OK / Criteria): No			

Site ID: 152006	0			
Latitude: 48.4027	6 Stream:	Tacoma Cr	WRIA:	62
Longitude: -117.32	845 Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Data Source				
Organization:	Washington Depar	tment of Fish and Wild	life	
Field Crew:	Baker,Thueringer	Review Date: 0	07/30/2009	
Diversion				
Type: Pu	mp Headgate	e: No	Access By: Fe	oot
Screened: Ye	es Diversion	Dam: No	Point of Diversion:	RB
			Location: River	Bank
Flow			70	
Intake Pipe Outside	Diameter (in): 1.5	(Pump Only) W	ater Right ID No:	
Diversion Channel			ower Meter No:	\neg
	TOTAL CONTRACTOR OF THE PARTY O			
Flow (gpm):	35	SF	PI Total:	2.51
Flow (gpm): Flow Derivation: Diversion Comme	Calculate		Pl Total:	2.51
Flow Derivation:	Calculate		PI Total:	2.51
Flow Derivation:	Calculate		Pl Total:	2.51
Flow Derivation: Diversion Comment Screen	Calculate		Pl Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type:	Calculate nts Cylinder		PI Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material:	Calculate nts Cylinder Perforated Plate		PI Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material: Mesh Size (in):	Calculate nts Cylinder Perforated Plate 0.0825		PI Total:	2.51
Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Calculate Cylinder Perforated Plate 0.0625 -99.99		PI Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Calculate nts Cylinder Perforated Plate 0.0625 -99.99 0.25		Pl Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Calculate Cylinder Perforated Plate 0.0625 -99.99 0.25 0.17		Pl Total:	2.51
Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Calculate Cylinder Perforated Plate 0.0625 -99.99 0.25 0.17 -999.99 OK		PI Total:	2.51
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Calculate Cylinder Perforated Plate 0.0825 -99.99 0.25 0.17 -999.99 OK V Criteria): No		PI Total:	2.51

WRIA: 62 Fish Use Potential: Yes 2009 ess By: Foot
2009
500 B 100 S
500 B 100 S
500 B 100 S
ess By: Foot
ess By: Foot
nt of Diversion: LB
ation: River Bank
Right ID No:
Meter No:
al: 2.51
A STATE OF
1-1

Site ID: 1520	0063				
Latitude: 48.4	0392952	Stream:	Tacoma Cr	WRIA:	62
Longitude: -117	.33930982	Trib To:	Pend Oreille R	Fish Use Po	otential: Yes
Data Source					
Organization:	Washi	ngton Depart	ment of Fish and V	Wildlife	
Field Crew:	Baker,Th	ueringer	Review Date	e: 08/03/2009	
Diversion					
Type:	Pump	Headgate	No	Access By:	Foot
Screened:	Yes	Diversion	Dam: No	Point of Diversion:	RB
				Location:	River Bank
Flow					
Intake Pipe Out	side Diamete	er (in): 1.50	(Pump Only)	Water Right ID No:	
Diversion Chan			g.g (Gravity Only)	Power Meter No:	
Flow (gpm):	VO. DE INCOLOR DE LA COLOR DE	35		SPI Total:	2.51
32 (10 (10 (10 (10 (10 (10 (10 (10 (10 (10				4 CO CO SERVICE CONTROL CONTRO	
Flow Derivation Diversion Com	500	Calculated			
Diversion Com	500	Calculated	Manage and		
Diversion Com	500	Calculated			A COM
Screen Type:	ments	Calculated			
Screen Type: Screen Materia	ments	Calculated			
Screen Type:	ments	Calculated			
Screen Type: Screen Materia	ments	Calculated			
Screen Screen Type: Screen Materia Mesh Size (in):	ments	Calculated			
Screen Screen Type: Screen Materia Mesh Size (in): Diameter (ft):	ments	Calculated			
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft):	ments	Calculated			
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	ments	Calculated			
Screen Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	ments				
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	ments DFW Criteria				

atitude: 48.40574261 Stream: Tacoma Cr WE Ingitude: -117.34417182 Trib To: Pend Oreille R Fish Ita Source Irganization: Washington Department of Fish and Wildlife Ield Crew: Baker, Thueringer Review Date: 08/03/2009 Iversion Iversion Iversion Iversion Diversion Dam: No Point of D Iocation: Itake Pipe Outside Diameter (in): 1.88 (Pump Only) Iversion Channel Area (sq ft): -99.9 (Gravity Only) Iversion Channel Area (sq ft): SPI Total: Iversion Comments Iversi	A: 62 Use Potential: Yes
rganization: Washington Department of Fish and Wildlife eld Crew: Baker;Thueringer Review Date: 08/03/2009 version type: Pump Headgate: No Access By Ricreened: No Diversion Dam: No Point of Diversion: No Point of Diversion Channel Area (sq ft): 99.9 (Gravity Only) version Channel Area (sq ft): 99.9 (Gravity Only) ow (gpm): 35 SPI Total: ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen creen Type: Green Material: Green Mater	Use Potential: Yes
rganization: Washington Department of Fish and Wildlife eld Crew: Baker,Thueringer Review Date: 08/03/2009 version ype: Pump Headgate: No Access By Greened: No Diversion Dam: No Point of Diversion: No Power Meter It Issae (Fump Only) Water Right If Issae (Fump Only) Power Meter It Issae (Fump Only)	
eld Crew: Baker; Thueringer Review Date: 08/03/2009 version type: Pump Headgate: No Access By Greened: No Diversion Dam: No Point of D Location: ow take Pipe Outside Diameter (in): 1.88 (Pump Only) Water Right III Power Meter II Power (Gravity Only) Power Meter II Pow (gpm): 35 SPI Total: ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand Green Type: Green Material: Green Mate	
version ype: Pump Headgate: No Access By Point of D Location: ow take Pipe Outside Diameter (in): 1.88 (Pump Only) Water Right III Powersion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter II Seleght (ft): -99.9 (Gravity Only) Power Met	
loreened: No Diversion Dam: No Point of D Location: No Diversion Dam: No Point of D Location: No Diversion Dam: No Point of D Location: No Description: 1.88 (Pump Only) Water Right II Power Meter I September 1.85 (Gravity Only) Power Meter I September 2.85 (Gravity Only) Power Meter I September 3.85 (Gravity Only) Power 3.85 (Gravity Only) Power 3.85 (Gravity Only) Pow	
Diversion Dam: No Point of D Location: No Diversion Dam: No Point of D Location: No Diversion Dam: No Point of D Location: No Location: No Diversion Country No Define I See Total: No Define I See Total: No Define I See Total: No Diversion Country No Define I See Total: No Diversion Country No Define I See Total: No Diversion Country No Define I See Total: No Diversion Dam: No Define I See Total: No Define I See Total: No Diversion Dam: No Define I See Total: No Define I See Total: No Diversion Dam: No Define I See Total: No Define I	
Location: ow take Pipe Outside Diameter (in): 1.88 (Pump Only) Water Right II iversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter II ow (gpm): 35 SPI Total: ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen creen Material: Seleght (ft):	ORV
take Pipe Outside Diameter (in): 1.88 (Pump Only) Water Right II iversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter I ow (gpm): 35 SPI Total: ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen icreen Type: creen Material: Seleght (ft): Seleght	version: LB
take Pipe Outside Diameter (in): take Pipe Outside Diameter (in): tiversion Channel Area (sq ft): ow (gpm): ow Derivation: Calculated SPI Total: SPI Total:	River Bank
iversion Channel Area (sq ft):	
ow (gpm): 35 SPI Total: ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen Type: creen Material: desh Size (in): planeter (ft): despth (ft):	No:
ow Derivation: Calculated version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen Type: creen Material: desh Size (in): claimeter (ft): deight (ft):	o:
version Comments pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen Type: creen Material: desh Size (in): chameter (ft): deight (ft):	2.51
pen end PVC pipe put in stream when water is needed. Pumped by hand creen creen creen Type: creen Material: Mesh Size (in): Diameter (ft): leight (ft):	
creen creen Type: creen Material: lesh Size (in): cliameter (ft): leight (ft): ength (ft):	Not a second in the
icreen Type:	. Not currently in use.
desh Size (in): Diameter (ft): leight (ft): ength (ft):	
Mesh Size (in): Diameter (ft): Desight (ft):	
Diameter (ft):	
leight (ft):	
ength (ft):	
	Mary State
rea (sq ft):	
	THE PARTY OF
condition:	
compliant (WDFW Criteria):	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P
reen Comments	

Site ID: 1520067				
Latitude: 48.41225375	Stream: Tacoma	Cr	WRIA:	62
Longitude: -117.36003784	Trib To: Pend Or	eille R	Fish Use Potentia	t: Yes
Data Source				
Organization: Was	hington Department of F	ish and Wildlife		
Field Crew: Baker,T	hueringer Re	view Date: 08/03/	2009	
Diversion				
Type: Pump	Headgate:	No Acc	ess By:	Foot
Screened: Unknown	Diversion Dam:	No Poir	nt of Diversion:	LB
		Loc	ation: Rive	er Bank
Flow				
Intake Pipe Outside Diame	eter (in): 1.00 (Pump	Only) Water F	Right ID No:	
Diversion Channel Area (s	q ft):99.9 (Gravit	y Only) Power I	Meter No:	
Flow (gpm):	14	SPI Tot	al:	2.01
Flow Derivation:	Calculated			
Diversion Comments Couldn't find end of pipe in	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type:	n water. Black hose com	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type:	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	n water. Black hose con	ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):		ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Criter		ning out of stream	bank into creek.	
Couldn't find end of pipe in Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:		ning out of stream	bank into creek.	

Latitude: 48.41597725	Stream: Tacoma Cr	WRIA: 62
Longitude: -117.3628374	18 Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Wa	ashington Department of Fish and	Wildlife
Field Crew: Baker	Thueringer Review Da	ate: 08/03/2009
Diversion		
Type: Pump	Headgate: No	Access By: Foot
Screened: Yes	Diversion Dam: No	Point of Diversion: LB
		Location: River Bank
Flow		
Intake Pipe Outside Dian	neter (in): 1.62 (Pump Only)	Water Right ID No:
Diversion Channel Area	(sq ft): -99.9 (Gravity Only)	Power Meter No:
Flow (gpm):	35	SPI Total: 2.51
Flow Derivation:	Calculated	
Diversion Comments		
Diversion Comments		
Diversion Comments Screen Screen Type:	Cone	
Screen Screen Type:	Cone rforated Plate	
Screen Screen Type:		
Screen Type: Screen Material: Per	rforated Plate	
Screen Screen Type: Screen Material: Per Mesh Size (in):	rforated Plate 0.125	
Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft):	0.125 -99.99	
Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft):	o.125 -99.99 0.25	
Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	0.125 -99.99 0.25 0.16	
Screen Screen Type: Screen Material: Per Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	0.125 -99.99 0.25 0.16 -999.99 OK	
Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	0.125 -99.99 0.25 0.16 -999.99 OK	

Latitude: 48.39392153 Longitude: -117.3298508		SF Tacoma Cr Tacoma Cr	WRIA: 62 Fish Use Potential: Yes
and the second	4 1110 10.	Tacoma Cr	rish Ose Fotential. Tes
Data Source			
		tment of Fish and Wild	
Field Crew: Baker,	Thueringer	Review Date: 0	08/05/2009
Diversion			
Type: Gravity	Headgate	e: No	Access By: Foot
Screened: Yes	Diversion	Dam: No	Point of Diversion: RB
			Location: River Bank
Flow			10
Intake Pipe Outside Diam	eter (in): 8.5	(Pump Only) W	ater Right ID No:
Diversion Channel Area (ower Meter No:
Flow (gpm):	460	Secretary State of the State of	PI Total: 3.65
Flow Derivation:	Calculate	d	-
Diversion Comments			
Diversion Comments Screen			
	Other		
Screen	Other Other		
Screen Screen Type:			
Screen Type: Screen Material:	Other		
Screen Screen Type: Screen Material: Mesh Size (in):	Other 0.125		
Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Other 0.125 0.85		
Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Other 0.125 0.85 1.87		
Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	0.125 0.85 1.87 -99.99		
Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	0.125 0.85 1.87 -99.99 MN		
Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Crite	0.125 0.85 1.87 -99.99 MN		
Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDFW Crite	0.125 0.85 1.67 -99.99 -999.99 MN	above water surface.	A secondary 1" screen present as

Site ID: 1520071	
Latitude: 48.39449778 Stream: SF Taco	ma Cr WRIA: 62
Longitude: -117.33081643 Trib To: Tacoma	Cr Fish Use Potential: Yes
Data Source	
Organization: Washington Department of F	Fish and Wildlife
Field Crew: Baker,Thueringer Re	view Date: 08/04/2009
Diversion	
Type: Pump Headgate:	No Access By: Foot
Screened: Yes Diversion Dam:	No Point of Diversion: RB
	Location: River Bank
Flow	
Intake Pipe Outside Diameter (in): 1.25 (Pump	Only) Water Right ID No:
TO BE SOME THE PROPERTY OF THE	y Only) Power Meter No:
Flow (gpm): 25	SPI Total: 2.32
Flow (gpm): 25 Flow Derivation: Calculated Diversion Comments	SPI Total: 2.32
Flow Derivation: Calculated	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other Mesh Size (in): 0.25	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other Mesh Size (in): 0.25 Diameter (ft): 1.30	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other Mesh Size (in): 0.25 Diameter (ft): 1.30 Height (ft): -99.99	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other Mesh Size (in): 0.25 Diameter (ft): 1.30 Height (ft): -99.99 Length (ft): 1.80	SPITotal: 2.32
Flow Derivation: Calculated Diversion Comments Screen Screen Type: Cylinder Screen Material: Other Mesh Size (in): 0.25 Diameter (ft): 1.30 Height (ft): -99.99 Length (ft): 1.60 Area (sq ft): -999.99	SPITotal: 2.32
Calculated	SPITotal: 2.32

Site ID: 1520073		
Latitude: 48.39494538 Stream: 5	SF Tacoma Cr	WRIA: 62
Longitude: -117.33133846 Trib To: 1	Tacoma Cr	Fish Use Potential: Yes
Data Source		
Organization: Washington Departr	nent of Fish and W	ildlife
Field Crew: Baker;Thueringer	Review Date:	08/04/2009
Diversion		
Type: Pump Headgate:	No	Access By: Foot
Screened: Yes Diversion I	Dam: No	Point of Diversion: LB
		Location: River Bank
Flow		
Intake Pipe Outside Diameter (in): 1.25	(Pump Only)	Water Right ID No:
Diversion Channel Area (sq ft): -99	g (Gravity Only)	Power Meter No:
Flow (gpm): 25		SPI Total: 2.32
Flow Derivation: Calculated		
Screen	300	
Screen Type: Cone		4-4-1
Screen Material: Perforated Plate		三 元 天 中 一
Mesh Size (in): 0.0125		
Diameter (ft): 0.12	No.	
Height (ft): -99.99		
Length (ft): 0.23	2.4	
Area (sq ft): -999.99	55.0	Will San Street
Condition: OK		- 100 PM
Compliant (WDFW Criteria): No		
Screen Comments	5)	
Recheck		

	0083				
Latitude: 48.3	9877859	Stream:	SF Tacoma Cr	WRIA:	62
Longitude: -117.	.34434181	Trib To:	Tacoma Cr	Fish Use Pote	ential: Yes
Data Source					
Organization:	Washi	ngton Depart	ment of Fish and W	ildlife	
Field Crew:	Garringer;T	hueringer	Review Date:	08/06/2009	
Diversion					
Type:	Pump	Headgate:	No	Access By:	Vehicle
Screened: U	nknown	Diversion	Dam: No	Point of Diversion:	LB
				Location:	River Bank
Flow					
Intake Pipe Outs	side Diamete	er (in): 1.00	(Pump Only)	Water Right ID No:	
Diversion Chann	nel Area (sq	ft): -98	g.g (Gravity Only)	Power Meter No:	
Flow (gpm):		14		SPI Total:	2.01
Flow Derivation:	Ī	Calculated			
Diversion Com	ments				
		, big rock ove	r it.		
Couldn't access	ena or pipe				
Couldn't access Screen	end or pipe	1		her tak	2 5 57
Screen	end or pipe				
Screen Type: Screen Materia	at [
Screen Type: Screen Materia Mesh Size (in):	at [
Screen Type: Screen Materia Mesh Size (in): Diameter (ft):	at [
Screen Type: Screen Materia Mesh Size (in):	at [
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft):	at [
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	at [
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	il:				
Screen Type: Screen Materia Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	DFW Criteria				

Latitude: 48.3989137 Stream: SF Tacoma Cr Longitude: -117.34575877 Trib To: Tacoma Cr	WRIA: 62
.ongitude: -117.34575877 Trib To: Tacoma Cr	
	Fish Use Potential: Yes
Data Source	
Organization: Washington Department of Fish and Wild	dlife
Field Crew: Garriner;Thueringer Review Date: 0	08/06/2009
Diversion	
Type: Pump Headgate: No	Access By: Foot
Screened: Yes Diversion Dam: No	Point of Diversion: RB
	Location: River Bank
Flow	
Intake Pipe Outside Diameter (in): 1.50 (Pump Only) W	/ater Right ID No:
Diversion Channel Area (sq ft): -99.9 (Gravity Only) Po	ower Meter No:
	PI Total: 2.51
Flow Derivation: Calculated	
Diversion Comments	
1/2 hp pump	
Screen	
Screen Type: Cone	
Screen Material: Perforated Plate	
Mesh Size (in): 0.0825	
Diameter (ft): 0.19	
Height (ft): 0.27	为一种人
Length (ft): -99.99	- C
Area (sq ft): -999.99	THE RESERVE OF THE RE
Condition: OK	
Compliant (WDFW Criteria): No	
Green Comments	

Site ID: 1520106 Latitude: 48.33789244 Longitude: -117.3682861			WRIA: Fish Use Po	62 otential: Yes
Data Source	THE TO. SHIAI	ie Ci	Tisii ose i c	Acrida. 163
Organization: W	ashington Department	of Fish and Wild	life	
Field Crew: Baker	;Thueringer	Review Date: 0	8/19/2009	
Diversion	2000-000-000-00-0	51 5 100 K S 100 100 100 100 100 100 100 100 100 1		
Type: Pump Screened: No	Headgate: Diversion Dam:	No No	Access By: Point of Diversion: Location:	Foot LB River Bank
Flow				3.70
Intake Pipe Outside Diar Diversion Channel Area Flow (gpm): Flow Derivation:		Gravity Only) Po	ater Right ID No: wer Meter No:	55124378 1.80
Diversion Comments Pump was sucking hard Diversion active.	. Large wooden box w	vith pump equiper	ment. Pump was ru	inning.
Screen				10000000000000000000000000000000000000
Screen Type: Screen Material:		100		
Mesh Size (in):			WILL BE	
Diameter (ft):				
Height (ft):				有有
Length (ft):				1
Area (sq ft):				4
Condition:				
Compliant (WDFW Crit	eria):			
Screen Comments				
304				
Recheck				

Site ID: 1520108		
Latitude: 48.32784455	Stream: Smalle Cr	WRIA: 62
Longitude: -117.35765562	Trib To: Calispell Cr	Fish Use Potential: Yes
Data Source		
Organization: Washir	ngton Department of Fish and \	Wildlife
Field Crew: Baker,Thu	eringer Review Date	e: 08/24/2009
Diversion		
Type: Pump	Headgate: No	Access By: Foot
Screened: No	Diversion Dam: No	Point of Diversion: RB
		Location: River Bank
Flow		100
Intake Pipe Outside Diamete	r (in): -99.99 (Pump Only)	Water Right ID No:
Diversion Channel Area (sq f	t): _gg_g (Gravity Only)	Power Meter No:
Flow (gpm):	-999.99	SPI Total:
Flow Derivation:		AND A STANDARD CONTRACT OF THE STANDARD CONTRA
spicket. There is no structur		old wooden box with power supply and
7-10-00-00-00-00-00-00-00-00-00-00-00-00-		
Screen Type:		1
Screen Material:		THE PARTY OF THE P
Mesh Size (in):	THE RESERVE	
Diameter (ft):		The state of the s
Height (ft):		NEXT STANK
Length (ft):		/
Area (sq ft):		人里的现在分别
Condition:		三人员为 1000 1000 1000 1000 1000 1000 1000 10
Compliant (WDFW Criteria):		VARIATE TO PROVIDE
Screen Comments	Silling and Alberta	THE RESIDENCE OF THE PERSON WHILE IN
170 1100 1		2
Recheck		1
(A)		

	ounace Water I	JIVEI SIOII ASSE.	sament report
Site ID: 1520114	E Char	Smalle Cr	WRIA:
Latitude: 48.326253			
Longitude: -117.3931	415 Inb Io: (Calispell Cr	Fish Use Potential: Ye
Data Source			
Organization:	Washington Departr		
Field Crew: Ba	ker;Thueringer	Review Da	ate: 08/25/2009
Diversion			
Type: Gravit	y Headgate:	No	Access By: Foot
Screened: Yes	Diversion I	Dam: Yes	Point of Diversion: RB
			Location: River Bank
Flow			
Intake Pipe Outside D	Diameter (in): 13.00	(Pump Only)	Water Right ID No:
Diversion Channel Ar		2 (Gravity Only)	Power Meter No:
Flow (gpm):	310		SPI Total: 2.23
Flow Derivation:	Calculated	=	
Diversion Comments	•		
Screen	50	A SECOND	
Screen Type:	Box		
Screen Material:	Wire Mesh		
Mesh Size (in):	0.5		
Diameter (ft):	-99. 9 9		
Height (ft):	1.80		
Length (ft):	1.70		The same of the sa
Area (sq ft):	-999.99	CERT	
Condition:	OK		
Compliant (WDFW 0	Criteria): No		Risk Park Street
Screen Comments		20/20	
Recheck			

Site ID: 1520127					
Latitude: 48.3221			Smalle Cr	WRIA:	62
Longitude: -117.352	206313	Trib To: Sm	nalle Cr	Fish Use	Potential: Yes
Data Source					
Organization:	Washingto	n Departme	ent of Fish and	Wildlife	
Field Crew:	Baker, Garrin	ger	Review Dat	te: 08/27/2009	
Diversion					
Type: Pur	mp H	leadgate:	No	Access By:	Foot
Screened: Ye	25 [Diversion Da	m: No	Point of Diversi	on: LB
				Location:	River Bank
Flow					
Intake Pipe Outside	e Diameter (in	1): 2.00	(Pump Only)	Water Right ID No:	
Diversion Channel	Area (sq ft):	-99.9	(Gravity Only)	Power Meter No:	
Flow (gpm):		40	8	SPI Total:	1.48
Flow Derivation:	C	alculated			
Screen				The Samuel Samuel	IN LENSALINA
Screen Type:	<u> </u>			The state of	4-3-6
	5				
Screen Material:					
Mesh Size (in):					
Diameter (ft):	F				
Height (ft):	F			1	Table 1
Length (ft):	Ŀ				
Area (sq ft):	Ļ				
Condition:	L			1997 / 1997	The same of
Compliant (WDFW	/ Criteria):				对于
Screen Comments	į.	35			
Recheck					

Site ID: 152	.0140				
Latitude: 48.	29360808	Stream:	Skookum Cr	WRIA:	62
Longitude: -11	7.23870929	Trib To: I	Pend Oreille R	Fish Use Potential:	Yes
Data Source					
Organization:	Wash	ngton Departr	ment of Fish and Wil	dlife	
Field Crew:	Baker;G	arringer	Review Date:	09/22/2009	
Diversion					
Type:	Pump	Headgate:	No	Access By: Foo	ot
Screened:	Yes	Diversion I	Dam: No	Point of Diversion: LB	
				Location: River E	Bank
Flow					
Intake Pipe Ou	tside Diamet	er (in): 1.50	(Pump Only) W	Vater Right ID No:	
Diversion Char	nnel Area (sa	0 1)99	(Gravity Only) P	ower Meter No:	ヿ
	mici ruca (sq	11.	.8 (5.5)		
Flow (gpm):	mer Area (sq	35			1.70
Flow (gpm): Flow Derivation Diversion Com	n:				1.70
Flow Derivation	n:	35			1.70
Flow Derivation	n: nments	35			1.70
Flow Derivation Diversion Com Screen	n: nments	35 Calculated			1.70
Flow Derivation Diversion Com Screen Screen Type:	n: C)	35 Calculated			1.70
Flow Derivation Diversion Com Screen Screen Type: Screen Materi	n: C)	35 Calculated			1.70
Flow Derivation Diversion Com Screen Screen Type: Screen Materi Mesh Size (in)	n: C)	35 Calculated dinder e Mesh 0.0625			1.70
Flow Derivation Diversion Com Screen Screen Type: Screen Materi Mesh Size (in) Diameter (ft):	n: C)	35 Calculated finder e Mesh 0.0625 0.16			1.70
Flow Derivation Diversion Com Screen Screen Type: Screen Materi Mesh Size (in) Diameter (ft): Height (ft):	n: C)	35 Calculated dinder e Mesh 0.0625 0.16 -99.99			1.70
Screen Type: Screen Materi Mesh Size (in) Diameter (ft): Height (ft):	n: C)	35 Calculated dinder e Mesh 0.0625 0.16 -99.99 0.03			1.70
Screen Type: Screen Materi Mesh Size (in) Diameter (ft): Height (ft): Length (ft): Area (sq ft):	n: Cylai: Wir	35 Calculated dinder e Mesh 0.0625 0.16 -99.99 0.03 -999.99 OK			1.70
Flow Derivation Screen Screen Type: Screen Materi Mesh Size (in) Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	n: Cy al: Wir	35 Calculated dinder e Mesh 0.0625 0.16 -99.99 0.03 -999.99 OK			1.70

Site ID: 1520142			
Latitude: 48.29695	5188 Stream:	Skookum Cr	WRIA: 62
Longitude: -117.233	54504 Trib To:	Pend Oreille R	Fish Use Potential: Yes
Data Source			
Organization:	Washington Depa	rtment of Fish and Wild	dlife
Field Crew: E	Baker;Garringer	Review Date: (09/23/2009
Diversion			
Type: Pun Screened: Ye		PAN	Access By: Foot Point of Diversion: RB Location: River Bank
Flow			
Diversion Channel A	Area (sq ft):	99.9 (Gravity Only) Po	ower Meter No:
Flow (gpm): Flow Derivation: Diversion Commen	Calculate		PI Total: 1.36
Flow Derivation:	Calculate		PI Total: 1.38
Flow Derivation: Diversion Commen	Calculate		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type:	Calculate		PI Total: 1.38
Flow Derivation: Diversion Commen	Calculate		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material:	Calculate ofs Other Profile Bar		PI Total: 1.36
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material: Mesh Size (in):	Other Profile Bar 0.375		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Other Profile Bar 0.375 -99.99		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Other Profile Bar 0.375 -99.99 0.15		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Other Profile Bar 0.375 -99.99 0.15 -99.99		PI Total: 1.38
Flow Derivation: Diversion Commen Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Other Profile Bar 0.375 -99.99 0.15 -99.99 OK		PI Total: 1.38
Flow Derivation: Diversion Comment Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Other Profile Bar 0.375 -99.99 0.15 -99.99 OK		PI Total: 1.38

Latitude: 48.28843921 Stream: SF Skookum Cr Longitude: -117.19052274 Trib To: Skookum Cr Data Source Organization: Washington Department of Fish and Field Crew: Baker, Garringer Review Date Diversion Type: Pump Headgate: No Screened: Unknown Diversion Dam: No	Fish Use Potential: Yes
Oata Source Organization: Washington Department of Fish and Field Crew: Baker, Garringer Review Department Diversion Type: Pump Headgate: No	d Wildlife ate: 09/29/2009
Organization: Washington Department of Fish and Field Crew: Baker;Garringer Review Department of Fish and Diversion Type: Pump Headgate: No	ate: 09/29/2009
Field Crew: Baker, Garringer Review Do Diversion Type: Pump Headgate: No	ate: 09/29/2009
Diversion Type: Pump Headgate: No	
Type: Pump Headgate: No	Access By: Foot
	Access By: Foot
Screened: Unknown Diversion Dam: No	
	Point of Diversion: LB
	Location: River Bank
Flow	
Intake Pipe Outside Diameter (in): 1.62 (Pump Only)	Water Right ID No:
Diversion Channel Area (sq ft): -99.9 (Gravity Only)	Power Meter No:
Flow (gpm): 25	SPI Total: 1.57
Flow Derivation: Calculated	
Diversion Comments	
Pipe buried in creek. Opening buried. Comes out of ban it was like that when they bought the place. Landowner s	
into creek.	
Screen	
Screen Type:	
Screen Material:	THE RESERVE TO SERVE THE PARTY OF THE PARTY
Mesh Size (in):	
Diameter (ft):	
Height (ft):	
Length (ft):	
Area (sq ft):	
Condition:	
Compliant (WDFW Criteria):	
Screen Comments	
Recheck	

Site ID: 1520147		
Latitude: 48.29030058	Stream: SF Skookum Cr	WRIA: 62
Longitude: -117.18891266	6 Trib To: Skookum Cr	Fish Use Potential: Yes
Data Source		
Organization: Wa	shington Department of Fish and W	/ildlife
Field Crew: Baker,	Garringer Review Date	09/29/2009
Diversion		
Type: Gravity	Headgate: No	Access By: Foot
Screened: Unknown	Diversion Dam: Yes	Point of Diversion: RB
		Location:
Flow		
Intake Pipe Outside Diam	eter (in): -99.99 (Pump Only)	Water Right ID No:
Diversion Channel Area (sq ft): _99.9 (Gravity Only)	Power Meter No:
Flow (gpm):	-999.99	SPI Total:
Flow (gpm): Flow Derivation:	-999.99	SPI Total:
Flow Derivation: Diversion Comments	-999.99 owner denied permission while crew	
Flow Derivation: Diversion Comments		
Flow Derivation: Diversion Comments Unable to measure; lando		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type:		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material:		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type:		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in):		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):		
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	owner denied permission while crew	
Flow Derivation: Diversion Comments Unable to measure; lando Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	owner denied permission while crew	

Site ID: 15202	266				
Latitude: 48.31	192916	Stream:	Skookum Cr	WRIA:	62
Longitude: -117.2	2325387	Trib To:	Pend Oreille R	Fish Use Potential:	Yes
Data Source					
Organization:	Washir	ngton Depar	tment of Fish and	Wildlife	
Field Crew:	Baker,Ga	rringer	Review Da	te: 10/13/2009	
Diversion					
Type: F	ump	Headgate	e: No	Access By: Fo	ot
Screened:	Yes	Diversion	Dam: No	Point of Diversion: RE	3
				Location: River	Bank
Flow					
Intake Pipe Outsi	ide Diamete	r (in): 1.7	(Pump Only)	Water Right ID No:	
Diversion Chann	el Area (sq f	t): -{	99.9 (Gravity Only)	Power Meter No:	
Flow (gpm):		40		SPI Total:	1.76
Flow Derivation:	Ī	Calculate	d		
Diversion Comm	ients				
Screen				AND THE RESERVE	TO THE
Screen Type:	С	one			
Screen Material:	Perfora	ited Plate			
Mesh Size (in):		0.125			
Diameter (ft):		0.15	1000000		
Height (ft):		-99.99			
Length (ft):		0.25			
Area (sq ft):		-999.99			
Condition:					
Compliant (WDF	-W Criteria):	No			
Screen Commen	its				
Possible old pum	p house on	site, but co	llapsed in creek. F	ipe still in water.	
Recheck					

		39			
Organization: Washington Department of Fish and Wildlife Field Crew: Baker; Garringer Review Date: 10/13/2009 Diversion Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): 0.25 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Latitude: 48.317	20574 St	ream: Skookum Cr	WRIA:	62
Organization: Washington Department of Fish and Wildlife Field Crew: Baker;Garringer Review Date: 10/13/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.57 Flow Openization: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Longitude: -117.23	867493 Tr	ib To: Pend Oreille F	R Fish Use Potential:	Yes
Field Crew: Baker;Garringer Review Date: 10/13/2009 Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): -99.99 Area (sq ft): -99.99 Compliant (WDFW Criteria): No	Oata Source				
Diversion Type: Pump Headgate: No Access By: Foot Point of Diversion: RB Location: RB Location: RB Location: RB Location: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Organization:	Washington	Department of Fish a	and Wildlife	
Type: Pump Headgate: No Access By: Foot Screened: Yes Diversion Dam: No Point of Diversion: RB River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Diversion Channel Area (sq ft): -99.9 (Gravity Only) Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.25 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Field Crew:	Baker;Garringe	er Review I	Date: 10/13/2009	
Screened: Yes Diversion Dam: No Point of Diversion: RB Location: River Bank Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Diversion				
Flow Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Type: Pu	ımp He	adgate: No	Access By: Foot	
Intake Pipe Outside Diameter (in): 1.25 (Pump Only) Water Right ID No: Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No: SPI Total: 1.57 Flow (gpm): 25 SPI Total: 1.57 Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Screened: Y	es Div	version Dam: No	Point of Diversion: RB	
Intake Pipe Outside Diameter (in): Diversion Channel Area (sq ft): Flow (gpm): Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): Diameter (ft): -99.99 Height (ft): Length (ft): Area (sq ft): Compliant (WDFW Criteria): No Water Right ID No: Power Meter No: SPI Total: 1.57 Value pump Some Material: Power Meter No: SPI Total: 1.57 Diameter No: SPI Total: 1.57 Diameter No: SPI Total: 1.57 1.57 Diameter No: 1.57 SPI Total: 1.57 1.57 1.57 Interval SPI Total: 1.57 Interval SPI Total: 1.57 Interval SPI Total: 1.57 Interval SPI Total: Interval SP				Location: River Ba	ink
Diversion Channel Area (sq ft):	Flow				
Flow (gpm):	Intake Pipe Outsid	le Diameter (in):	1.25 (Pump Only)	Water Right ID No:	7
Flow Derivation: Calculated Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Diversion Channel	Area (sq ft):	_99.9 (Gravity Only)) Power Meter No:	
Diversion Comments Black tubing soming off grassy bank; blue pump Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Flow (gpm):)	25	SPI Total: 1.	.57
Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Condition: OK Compliant (WDFW Criteria): No	Flow Derivation:	Cal	culated		
Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Black tubing somi	10-71	nk; blue pump	SERBOUTES TINT	
Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): -99.99 Height (ft): 0.25 Length (ft): -99.99 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	Screen Type:	Cone			
Mesh Size (in): Diameter (ft): -99.99 Height (ft): -99.99 Length (ft): -99.99 Area (sq ft): Condition: OK Compliant (WDFW Criteria): No		Perforated F	late		
Diameter (ft):					
Length (ft):	Mesh Size (in):	0		《新闻》的《大学》,《新闻》的《大学》,《《大学》,《大学》,《大学》	
Area (sq ft): Condition: Compliant (WDFW Criteria): No) <u> </u>			
Condition: OK Compliant (WDFW Criteria): No	Diameter (ft):	-6	99.99	Sor Cal	
Compliant (WDFW Criteria): No	Diameter (ft): Height (ft):	-6	99.99 0.25		
	Diameter (ft): Height (ft): Length (ft):	-6	99.99 0.25 99.99		
Screen Comments	Diameter (ft): Height (ft): Length (ft): Area (sq ft):	-6 -9	09.99 0.25 09.99 99.99		
100 pt 10	Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	-6 -9	99.99 0.25 99.99 99.99		
	Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition: Compliant (WDF)	-E (-9 W Criteria):	99.99 0.25 99.99 99.99		

Site ID: 1520273			
Latitude: 48.31876335	5 Stream:	Skookum Cr	WRIA: 62
Longitude: -117.240298	08 Trib To:	Pend Oreille R	Fish Use Potential: Yes
Data Source			
Organization: W	ashington Depart	ment of Fish and	Wildlife
Field Crew: Bake	er;Garringer	Review Da	te: 10/13/2009
Diversion			
Type: Pump Screened: Yes	Headgate Diversion	fear according	Access By: Foot Point of Diversion: RB Location: River Bank
Flow			
Intake Pipe Outside Dia Diversion Channel Area Flow (gpm): Flow Derivation:		g.g (Gravity Only)	Water Right ID No: Power Meter No: SPI Total: 1.70
Diversion Comments There is a pump house	on site. There ar	e tears in the scr	een.
Screen			
Screen Type:	Cylinder	196	\ A
Screen Material:	Wire Mesh		
Mesh Size (in):	0.016	三 发生	
Diameter (ft):	0.38		
Height (ft):	-99.99	37	
Length (ft):	1.80	和地 意	
Area (sq ft):	-999.99	A TO	
Condition:	MN	Section 1	
Compliant (WDFW Crit	teria): No	Mr. S	
Screen Comments			
Recheck			

Site ID: 1520274				
Latitude: 48.3192	5319 Stre	am: Skookum Cr	WRIA:	62
Longitude: -117.24	1284 Trib	To: Pend Oreille R	Fish Use Potential:	Yes
Data Source				
Organization:	Washington D	epartment of Fish and	d Wildlife	
Field Crew:	Baker;Garringer	Review Da	ate: 10/13/2009	
Diversion				
Type: Pur	np Head	dgate: No	Access By: Foot	
Screened: Ye	s Dive	rsion Dam: No	Point of Diversion: LB	
			Location: River Bar	nk
Flow				
Intake Pipe Outside	Diameter (in):	1.00 (Pump Only)	Water Right ID No:	7
Diversion Channel		and a life matter for the	Power Meter No:	╡
Diversion Channel.	Area (sq ft):	_gg_g (Gravity Only)	Fower Meter No.	- 1
	Notice of the second	_gg_g (Gravity Only)		36
Flow (gpm): Flow Derivation: Diversion Commer	1 Calcu	Season programs		36
Flow (gpm): Flow Derivation:	1 Calcu	4		36
Flow (gpm): Flow Derivation: Diversion Commen	1 Calcu	4		36
Flow (gpm): Flow Derivation: Diversion Commer Screen	Calcu	4 Ulated		36
Flow (gpm): Flow Derivation: Diversion Comment Screen Screen Type:	Calcu	ulated ate		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material:	Calcu	ulated stee		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in):	Cylinder Perforated Pla	ulated ate 25		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Cylinder Perforated Pla 0.1 0.1	ate 25 15 21		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Cylinder Perforated Pla 0.1 0.2 -99	ate 25 15 21		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Cylinder Perforated Pla 0.1 0.2 -99	44 Julated stee 25 15 21 99 9.99		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Calculates Cylinder Perforated Pla 0.1 0.2 -999 -9999	ate 25 15 21		36
Flow (gpm): Flow Derivation: Diversion Commer Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Calculates Cylinder Perforated Pla 0.1 0.2 -999 -9999	ate 25 15 21		36

Site ID: 1520275	
Latitude: 48.32212592 Stream: NF Skookum Cr WRIA:	62
Longitude: -117.23704549 Trib To: Skookum Cr Fish Use Potential:	Yes
Data Source	
Organization: Washington Department of Fish and Wildlife	
Field Crew: Baker;Garringer Review Date: 10/14/2009	
Diversion	
Type: Pump Headgate: No Access By: Foot	
Screened: Yes Diversion Dam: No Point of Diversion: RB	
Location: River Ba	ink
Flow	
Intake Pipe Outside Diameter (in): 1.75 (Pump Only) Water Right ID No:	
Diversion Channel Area (sq ft): -99.9 (Gravity Only) Power Meter No:	
Flow (gpm): 40 SPI Total: 1	.76
Flow Derivation: Calculated	
Diversion Comments	
Diversion Comments Blue fexi-tube wth black stripes.	
Blue fexi-tube wth black stripes.	
Blue fexi-tube wth black stripes. Screen	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone Screen Material: Perforated Plate	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 No Image Available	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 Height (ft): -99.99 No Image Available	
Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 Height (ft): -99.99 Length (ft): 0.25	
Blue fexi-tube wth black stripes. Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 Height (ft): -99.99 Length (ft): 0.25 Area (sq ft): -999.99	
Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 Height (ft): -99.99 Length (ft): 0.25 Area (sq ft): -999.99 Condition: OK	
Screen Screen Type: Cone Screen Material: Perforated Plate Mesh Size (in): 0.125 Diameter (ft): 0.16 Height (ft): -99.99 Length (ft): 0.25 Area (sq ft): -999.99 Condition: OK Compliant (WDFW Criteria): No	

Site ID: 1520278		
Latitude: 48.33663658	Stream: Skookum Cr	WRIA: 62
Longitude: -117.23968235	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Washi	ngton Department of Fish and	Wildlife
Field Crew: Baker;Ga	rringer Review Da	ite: 10/15/2009
Diversion		
Type: Gravity	Headgate: No	Access By: Foot
Screened: No	Diversion Dam: Yes	Point of Diversion: RB
		Location: River Bank
Flow		
Intake Pipe Outside Diamete	er (in): 9.00 (Pump Only)	Water Right ID No:
Diversion Channel Area (sq	ft): _99.9 (Gravity Only)	Power Meter No: 7C324LA5AA
Flow (gpm):	750	SPI Total: 2.79
Flow Derivation:	Calculated	
	nel splits w/ 1/2 of flow going i and 1/2 to 9.5 in "fish bypass"	into diversion channel on RB (with 1/2 of
<u> </u>		
Screen Type:		
Screen Material:		
Mesh Size (in):		
Diameter (ft):		
Height (ft):		
Length (ft):		
Area (sq ft):		
Condition:		
Compliant (WDFW Criteria)		
Screen Comments		
Recheck		
REPORT OF THE PROPERTY OF THE		<u> </u>

Site ID: 1520282		
Latitude: 48.3396539	Stream: Skookum Cr	WRIA: 62
Longitude: -117.23959451	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Wash	ington Department of Fish and Wil	dlife
Field Crew: Baker;G	arringer Review Date:	10/19/2009
Diversion		
Type: Gravity	Headgate: No	Access By: Foot
Screened: Unknown	Diversion Dam: No	Point of Diversion: LB
		Location: River Bank
Flow		
Intake Pipe Outside Diamet	er (in): -99.99 (Pump Only) V	Vater Right ID No:
Diversion Channel Area (sq	ft): _99.9 (Gravity Only) P	ower Meter No:
Flow (gpm):	-999.99	PI Total:
i ion (Spin).	-	it i Total.
Flow Derivation:		ri i otal.
Flow Derivation:		n i i i i i
Flow Derivation: Diversion Comments	all pond. Diversion is underground	
Flow Derivation: Diversion Comments		
Flow Derivation: Diversion Comments Intake unknown; filling a sm		
Flow Derivation: Diversion Comments Intake unknown; filling a sm		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material:		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in):		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material:		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):		
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	nall pond. Diversion is underground	
Flow Derivation: Diversion Comments Intake unknown; filling a sm Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	nall pond. Diversion is underground	

Site ID: 152	.0200		
Latitude: 48.	34051254	Stream: Skookum Cr	WRIA: 62
Longitude: -11	7.23952879	Trib To: Pend Oreille	R Fish Use Potential: Yes
Oata Source			
Organization:	Washi	ngton Department of Fish a	and Wildlife
Field Crew:	Baker;Ga	arringer Review	Date: 10/19/2009
Diversion			
Type:	Pump	Headgate:	Access By: Foot
Screened:	Yes	Diversion Dam:	Point of Diversion: RB
			Location: River Bank
Flow			
Intake Pipe O	utside Diamete	er (in): 2.50 (Pump Only)	Water Right ID No:
Diversion Cha	nnel Area (sa	ft): _99.9 (Gravity Only	Power Meter No:
			I OWEI MELEI ING.
Flow (gpm):	[65	SPI Total: 1.80
Flow (gpm): Flow Derivatio Diversion Con	n: [Section of the sectio	
Flow Derivatio	n: [65	
Flow Derivatio	n: [65	
Flow Derivation Diversion Con Screen	n: [65 Calculated	
Flow Derivation Diversion Cor Screen Screen Type:	n: [nments	65 Calculated	
Flow Derivation Diversion Con Screen Screen Type: Screen Mater	n: [nments	65 Calculated Cone ed PVC	
Flow Derivation Oiversion Con Screen Screen Type: Screen Mater Mesh Size (in	n: [nments	Cone ed PVC 0.875	SPI Total: 1.80
Flow Derivation Diversion Con Screen Screen Type: Screen Mater Mesh Size (in Diameter (ft):	n: [nments	65 Calculated Cone ed PVC 0.875 0.16	SPI Total: 1.80
Flow Derivation Screen Screen Type: Screen Mater Mesh Size (in Diameter (ft): Height (ft):	n: [nments	65 Calculated Cone ed PVC 0.875 0.16 -99.99	SPI Total: 1.80
Flow Derivation Diversion Con Screen Screen Type: Screen Mater Mesh Size (in Diameter (ft): Height (ft): Length (ft):	n: [nments	65 Calculated Cone ed PVC 0.875 0.16 -99.99 0.16	SPI Total: 1.80
Flow Derivation Screen Screen Type: Screen Mater Mesh Size (in Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	n: [nments	65 Calculated Cone ed PVC 0.875 0.16 -99.99 0.16 -999.99 OK	SPI Total: 1.80
Flow Derivation Screen Screen Type: Screen Mater Mesh Size (in Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	n: [nments Cial: Slott	65 Calculated Cone ed PVC 0.875 0.16 -99.99 0.16 -999.99 OK	SPI Total: 1.80

Latitude: 48.34978678	Stream: Skookum Cr	WRIA: 62
Longitude: -117.23439001	Trib To: Pend Oreille R	Fish Use Potential: Yes
Data Source		
Organization: Wash	hington Department of Fish and V	Vildlife
Field Crew: Baker,G	Barringer Review Date	2: 10/19/2009
Diversion		
Type: Gravity	Headgate: Yes	Access By: Foot
Screened: No	Diversion Dam: Yes	Point of Diversion: RB
		Location: River Bank
Flow		
Intake Pipe Outside Diame	ter (in): -99.99 (Pump Only)	Water Right ID No:
Diversion Channel Area (so	q ft): 0.1 (Gravity Only)	Power Meter No:
Flow (gpm):	49	SPI Total: 1.41
Flow Derivation:	Calculated	
Diversion Comments		
Sandbags, rocks, and boar	rds; ditch diversion	
Screen	10 × 10 × 10	MINER ON SERVICE
		的现在分词 A.
Screen Type:	1	
Screen Type: Screen Material:		
Screen Material:		NE ALIE
Screen Material: Mesh Size (in):		
Screen Material: Mesh Size (in): Diameter (ft):		人人
Screen Material: Mesh Size (in): Diameter (ft): Height (ft):		
Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):		
Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):		
Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	a):	
Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	a):	

Site ID: 1520299		
Latitude: 48.53509	Stream: EB Leclerc Cr	WRIA: 62
Longitude: -117.281898	Trib To: Leclerc Cr	Fish Use Potential: Yes
Data Source		
Organization: Wa	shington Department of Fish and	d Wildlife
Field Crew:	Dotts Review Da	ate: 06/30/2007
Diversion		
Type: Pump	Headgate: No	Access By: Vehicle
Screened: Yes	Diversion Dam: No	Point of Diversion: RB
		Location: River Bank
Flow		
Intake Pipe Outside Diam	eter (in): -99.99 (Pump Only)	Water Right ID No:
Diversion Channel Area (sq ft): _99.9 (Gravity Only)	Power Meter No:
		2000 Bar 1800 Bar 180
Flow (gpm):	160	SPI Total: 3.33
Flow (gpm): Flow Derivation:	160 Water Right	SPI Total: 3.33
		SPI Total: 3.33
Flow Derivation:		SPI Total: 3.33
Flow Derivation:	Water Right	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen	Water Right	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type:	Water Right 007; funded by SRFB grant. Cylinder	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Peri	Water Right 007; funded by SRFB grant.	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Peri	Water Right 007; funded by SRFB grant. Cylinder forated Plate	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Peri	Water Right 007; funded by SRFB grant. Cylinder forated Plate 0.0938	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Perf Mesh Size (in): Diameter (ft):	Water Right 007; funded by SRFB grant. Cylinder forated Plate 0.0938 -99.99	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Perf Mesh Size (in): Diameter (ft): Height (ft):	Water Right 007; funded by SRFB grant. Cylinder forated Plate 0.0938 -99.99 -99.99	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Water Right 007; funded by SRFB grant. Cylinder forated Plate 0.0938 -99.99 -99.99	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 26 Screen Screen Type: Screen Material: Perf Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Water Right D07; funded by SRFB grant. Cylinder forated Plate 0.0938 -99.99 -99.99 -99.99 OK	SPI Total: 3.33
Flow Derivation: Diversion Comments Screen was installed in 20 Screen Type: Screen Material: Perf Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Water Right D07; funded by SRFB grant. Cylinder forated Plate 0.0938 -99.99 -99.99 -99.99 OK	SPI Total: 3.33

	0		
Latitude: 48.5359		WB Leclerc Cr	WRIA: 62
Longitude: -117.28552 Trib To: L		Leclerc Cr	Fish Use Potential: Yes
Data Source			
Organization:	Washington Depar	rtment of Fish and Wil	dlife
Field Crew:	Dotts	Review Date:	06/30/2007
Diversion			
Type: Gra	vity Headgate	e: Yes	Access By: Vehicle
Screened: Ye	es Diversion	Dam: Yes	Point of Diversion: LB
			Location: River Bank
Flow			
ntake Pipe Outside	e Diameter (in): -99.	.99 (Pump Only) V	Vater Right ID No:
Diversion Channel	Area (sq ft):	1.4 (Gravity Only) P	ower Meter No:
	The con-order party of	Section of the property of the	
riow (gpm):	480	s	PI Total: 3.68
Flow Derivation:	Water Rig		PI Total: 3.68
Flow (gpm): Flow Derivation: Diversion Comment Diversion screened Screen	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Comme	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Comme Diversion screened Screen Screen Type:	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen Screen Type: Screen Material:	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft):	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commercial Diversion screened Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft):	Water Rig Ints I with SRFB grant in 2 1 Track Flat Perforated Plate 0.0938 -99.99	ht	PI Total: 3.68
Flow Derivation: Diversion Commercial Diversion screened Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft):	Water Rig Ints I with SRFB grant in 2 1 Track Flat Perforated Plate 0.0938 -99.99 -99.99	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen Screen Type: Screen Material: Mesh Size (in):	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft):	Water Rig	ht	PI Total: 3.68
Flow Derivation: Diversion Commer Diversion screened Screen Screen Type: Screen Material: Mesh Size (in): Diameter (ft): Height (ft): Length (ft): Area (sq ft): Condition:	Water Rig	ht	PI Total: 3.68

APPENDIX B

WRIA-wide Screening Priority

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
1	1520010	Mill	Gravity	1071	Funded USFWS/POCD	4.51
2	1520040	Calispell	Gravity	2525	>5	3.77
3	1520045	Calispell	Gravity	2425	>5	3.74
4	1520042	Calispell	Gravity	2357	>5	3.71
5	1520300	Leclerc, WB	Gravity	480	Done SRFB 07-1781	3.68
6	1520070	Tacoma, SF	Gravity	460	>5	3.65
7	1520299	Leclerc, EB	Pump	160	Done SRFB 07-1781	3.33
8	1290064	Indian	Gravity	263	Done SRFB 04-1373	3.17
9	1520047	Calispell	Gravity	1100	>5	3.07
10	1520278	Skookum	Gravity	750	>5	2.79
11	1290063	Indian	Gravity	112.2	Done SRFB 04-1373	2.56
12	1520060	Tacoma	Pump	35	<1	2.51
12	1520085	Tacoma, SF	Pump	35	<1	2.51
12	1520025	Leclerc, EB	Pump	35	<1	2.51
12	1520026	Leclerc, EB	Pump	35	<1	2.51
12	1520062	Tacoma	Pump	35	<1	2.51
12	1520063	Tacoma	Pump	35	<1	2.51
12	1520066	Tacoma	Pump	35	<1	2.51
12	1520068	Tacoma	Pump	35	<1	2.51
13	1290053	Skookum	Pump	160	<1	2.49
14	1520283	Skookum	Gravity	437	>5	2.43
15	1520071	Tacoma, SF	Pump	25	<1	2.32
15	1520073	Tacoma, SF	Pump	25	<1	2.32
15	1520033	Leclerc	Pump	25	<1	2.32
15	1520114	Smalle	Gravity	310	>5	2.23
16	1290115	Davis	Pump	160	<1	2.10
17	1290062	Indian	Gravity	44.88	Done SRFB 04-1373	2.04
18	1520030	Leclerc	Pump	14	<1	2.01
18	1520083	Tacoma, SF	Pump	14	<1	2.01
18	1520067	Tacoma	Pump	14	<1	2.01
19	1520054	Tacoma	Pump	40	<1	1.98
20	1520059	Tacoma	Pump	10	<1	1.85
21	1520285	Skookum	Pump	65	1-5	1.80

 $^{\rm 1}$ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
21	1520106	Smalle, EF	Pump	40-65	1-5	1.80
21	1520043	Calispell	Pump	65	1-5	1.80
22	1520266	Skookum	Pump	40	<1	1.76
22	1520275	Skookum, NF	Pump	40	<1	1.76
23	1520273	Skookum	Pump	35	<1	1.70
23	1520044	Calispell	Pump	35	<1	1.70
23	1520140	Skookum	Pump	35	<1	1.70
24	1520269	Skookum	Pump	25	<1	1.57
24	1520145	Skookum, SF	Pump	25	<1	1.57
25	1520127	Smalle	Pump	40	<1	1.48
26	1520286	Skookum	Gravity	49	>5	1.41
27	1520142	Skookum	Pump	14	<1	1.36
27	1520274	Skookum	Pump	14	<1	1.36
28	1290104	Kent	Gravity	40	Unknown	1.34
29	1520195	Pend Oreille	Pump	180	<1	1.11
30	1520167	Pend Oreille	Pump	90	1-5	0.93
31	1520169	Pend Oreille	Pump	65	1-5	0.86
31	1520200	Pend Oreille	Pump	65	1-5	0.86
31	1520210	Pend Oreille	Pump	65	1-5	0.86
32	1520155	Pend Oreille	Pump	40	<1	0.84
32	1520156	Pend Oreille	Pump	40	<1	0.84
32	1520158	Pend Oreille	Pump	40	<1	0.84
32	1520159	Pend Oreille	Pump	40	<1	0.84
32	1520160	Pend Oreille	Pump	40	<1	0.84
32	1520163	Pend Oreille	Pump	40	<1	0.84
32	1520166	Pend Oreille	Pump	40	<1	0.84
32	1520171	Pend Oreille	Pump	40	<1	0.84
32	1520177	Pend Oreille	Pump	40	<1	0.84
32	1520178	Pend Oreille	Pump	40	<1	0.84
32	1520179	Pend Oreille	Pump	40	<1	0.84
32	1520180	Pend Oreille	Pump	40	<1	0.84
32	1520182	Pend Oreille	Pump	40	<1	0.84
32	1520186	Pend Oreille	Pump	40	<1	0.84
32	1520188	Pend Oreille	Pump	40	<1	0.84
32	1520191	Pend Oreille	Pump	40	<1	0.84
32	1520192	Pend Oreille	Pump	40	<1	0.84
32	1520194	Pend Oreille	Pump	40	<1	0.84
32	1520196	Pend Oreille	Pump	40	<1	0.84
32	1520198	Pend Oreille	Pump	40	<1	0.84
32	1520199	Pend Oreille	Pump	40	<1	0.84
32	1520208	Pend Oreille	Pump	40	<1	0.84
32	1520209	Pend Oreille	Pump	40	<1	0.84
32	1520214	Pend Oreille	Pump	40	<1	0.84

-

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
32	1520220	Pend Oreille	Pump	40	<1	0.84
32	1520221	Pend Oreille	Pump	40	<1	0.84
32	1520222	Pend Oreille	Pump	40	<1	0.84
32	1520223	Pend Oreille	Pump	40	<1	0.84
32	1520225	Pend Oreille	Pump	40	<1	0.84
32	1520231	Pend Oreille	Pump	40	<1	0.84
32	1520234	Pend Oreille	Pump	40	<1	0.84
32	1520237	Pend Oreille	Pump	40	<1	0.84
32	1520238	Pend Oreille	Pump	40	<1	0.84
32	1520239	Pend Oreille	Pump	40	<1	0.84
32	1520247	Pend Oreille	Pump	40	<1	0.84
32	1520248	Pend Oreille	Pump	40	<1	0.84
32	1520250	Pend Oreille	Pump	40	<1	0.84
32	1520251	Pend Oreille	Pump	40	<1	0.84
32	1520252	Pend Oreille	Pump	40	<1	0.84
32	1520253	Pend Oreille	Pump	40	<1	0.84
32	1520254	Pend Oreille	Pump	40	<1	0.84
32	1520255	Pend Oreille	Pump	40	<1	0.84
32	1520257	Pend Oreille	Pump	40	<1	0.84
32	1520263	Pend Oreille	Pump	40	<1	0.84
32	1520264	Pend Oreille	Pump	40	<1	0.84
32	1520265	Pend Oreille	Pump	40	<1	0.84
32	1520173	Skookum Sl	Pump	40	<1	0.84
32	1520174	Skookum Sl	Pump	40	<1	0.84
32	1520175	Skookum Sl	Pump	40	<1	0.84
32	1520176	Skookum Sl	Pump	40	<1	0.84
33	1520157	Pend Oreille	Pump	35	<1	0.81
33	1520161	Pend Oreille	Pump	35	<1	0.81
33	1520162	Pend Oreille	Pump	35	<1	0.81
33	1520164	Pend Oreille	Pump	35	<1	0.81
33	1520165	Pend Oreille	Pump	35	<1	0.81
33	1520181	Pend Oreille	Pump	35	<1	0.81
33	1520187	Pend Oreille	Pump	35	<1	0.81
33	1520189	Pend Oreille	Pump	35	<1	0.81
33	1520190	Pend Oreille	Pump	35	<1	0.81
33	1520193	Pend Oreille	Pump	35	<1	0.81
33	1520197	Pend Oreille	Pump	35	<1	0.81
33	1520202	Pend Oreille	Pump	35	<1	0.81
33	1520204	Pend Oreille	Pump	35	<1	0.81
33	1520205	Pend Oreille	Pump	35	<1	0.81
33	1520206	Pend Oreille	Pump	35	<1	0.81
33	1520207	Pend Oreille	Pump	35	<1	0.81
33	1520217	Pend Oreille	Pump	35	<1	0.81

-

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

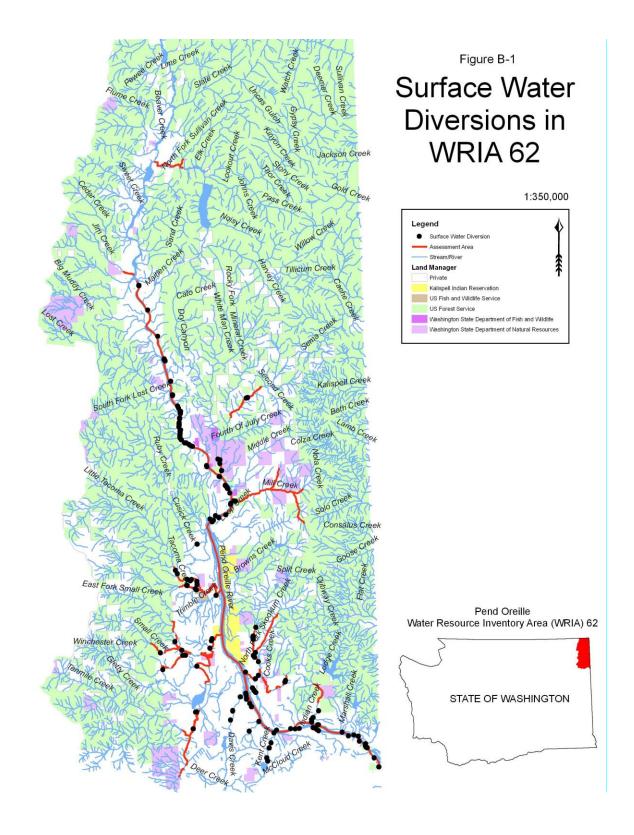
Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
33	1520229	Pend Oreille	Pump	35	<1	0.81
33	1520233	Pend Oreille	Pump	35	<1	0.81
33	1520235	Pend Oreille	Pump	35	<1	0.81
33	1520236	Pend Oreille	Pump	35	<1	0.81
33	1520241	Pend Oreille	Pump	35	<1	0.81
33	1520242	Pend Oreille	Pump	35	<1	0.81
33	1520259	Pend Oreille	Pump	35	<1	0.81
33	1520260	Pend Oreille	Pump	35	<1	0.81
33	1520172	Skookum Sl	Pump	35	<1	0.81
34	1520168	Pend Oreille	Pump	25	<1	0.75
34	1520201	Pend Oreille	Pump	25	<1	0.75
34	1520203	Pend Oreille	Pump	25	<1	0.75
34	1520211	Pend Oreille	Pump	25	<1	0.75
34	1520212	Pend Oreille	Pump	25	<1	0.75
34	1520215	Pend Oreille	Pump	25	<1	0.75
34	1520216	Pend Oreille	Pump	25	<1	0.75
34	1520218	Pend Oreille	Pump	25	<1	0.75
34	1520219	Pend Oreille	Pump	25	<1	0.75
34	1520227	Pend Oreille	Pump	25	<1	0.75
34	1520230	Pend Oreille	Pump	25	<1	0.75
34	1520240	Pend Oreille	Pump	25	<1	0.75
34	1520243	Pend Oreille	Pump	25	<1	0.75
34	1520244	Pend Oreille	Pump	25	<1	0.75
34	1520246	Pend Oreille	Pump	25	<1	0.75
34	1520249	Pend Oreille	Pump	25	<1	0.75
34	1520256	Pend Oreille	Pump	25	<1	0.75
34	1520261	Pend Oreille	Pump	25	<1	0.75
34	1520262	Pend Oreille	Pump	25	<1	0.75
35	1520183	Pend Oreille	Pump	14	<1	0.65
35	1520184	Pend Oreille	Pump	14	<1	0.65
35	1520228	Pend Oreille	Pump	14	<1	0.65
35	1520245	Pend Oreille	Pump	14	<1	0.65
36	1290048	Cusick	Gravity	0.33	>5	0.40
Unk	1520282	Skookum	Gravity	Unknown	>5	Unk
Unk	1520147	Skookum, SF	Gravity	Unknown	>5	Unk
Unk	1520108	Smalle	Pump	Unknown	Unknown	Unk
Unk	1520057	Trimble	Pump	Unknown	>5	Unk
Unk	1290088	Bracket	Pump	Unknown	Unknown	Unk
Unk	1290114	Davis	Gravity	Unknown	Unknown	Unk
Unk	1290116	Davis	Pump	Unknown	Unknown	Unk
Unk	1290117	Davis	Pump	Unknown	Unknown	Unk
Unk	1290096	Kent	Gravity	Unknown	Unknown	Unk
Unk	1290100	Kent	Pump	Unknown	Unknown	Unk

-

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD

Priority	Site ID ¹	Stream	Diversion Type	Estimated flow (gpm)	Estimated cost (\$ thousand)	SPI
Unk	1290106	Kent, tributary	Pump	Unknown	Unknown	Unk
Unk	1520170	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520185	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520213	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1520232	Pend Oreille	Pump	Unknown	Unknown	Unk
Unk	1290068	Skookum	Pump	Unknown	Unknown	Unk
Unk	1290083	Skookum	Gravity	Unknown	Unknown	Unk
Unk	1290136	Smalle, EF	Gravity	Unknown	>5	Unk
Unk	1290134	Winchester	Gravity	Unknown	>5	Unk

¹ Site ID 152XXXX were assessed by WDFW; Site ID 129XXXX were assessed by POCD



APPENDIX C

Screening Priority Index Model

Adapted from WDFW 2009

The SPI for each unscreened or ineffectively screened diversion was calculated as follows:

SPI _{all species} =
$$\sum_{x} \sqrt{(QP) \times MDC}$$

Where:

SPI = Screening Priority Index

- Relative project benefit considering cost
- The SPI is the sum (all species) of individual SPI values, one of which is calculated for each species present in the stream (e.g., SPI bull trout is added to SPI resident trout to obtain SPI all species).

Q = Flow in gallons per minute (gpm)

- Flow through the diversion is used as a surrogate for the number of adult equivalent salmonids potentially killed by an unscreened diversion
- For this assessment flow was generally determined in one of two ways:
 - For pump diversions, estimated based on pipe diameter per WDFW 2009:

Pipe size (inches)	Estimated flow (gpm)		
1	14		
1.25	25		
1.5	35		
2	40		
2.5	65		
3	90		
4	160		
5	180		
6	280		
8	460		
10	750		
12	1100		
12	1100		

 For gravity diversions, flow was estimated by multiplying channel area of diversion by an average velocity of 0.75 ft/sec (which is based on velocities measured statewide by WDFW crews in a number of diversion channels).
 The result, in ft³/sec, was multiplied by 499 to obtain gpm.

P = Annual adult equivalent production potential per m²

- Estimated number of adult salmonids that can potentially be produced by each m² of habitat annually. Used as a surrogate for the probability of an individual fish of a given species encountering a diversion.
- The values (adults/m²) are species specific: bull trout = 0.0007, resident trout = 0.04

M = Mobility Modifier

- Gives greater weight to projects that increase productivity of species that are highly mobile
- For WRIA 62, a mobility modifier of "2" was used for bull trout when it was known that fluvial or adfluvial life histories were likely to use a given stream.
 For streams where only resident trout are known to occur, a mobility modifier of "1" was used. The following mobility modifiers were used for the following streams and their tributaries:

Calispell Creek = 1
Cedar Creek = 2
Harvey Creek = 1
Indian Creek = 2
LeClerc Creek = 2
Mill Creek = 2
Pend Oreille River = 2
Skookum Creek = 1
Sullivan Creek = 2
Tacoma Creek = 2

D = Species Condition Modifier

• Gives greater weight to less healthy species as estimated by best available information. A species condition modifier of "3" was used for bull trout, which is listed a threatened under ESA; a "2" for streams where westslope cutthroat trout are present; and, a "1" where only non-native brook trout are present.

C = Cost modifier

- Representation of projected cost of project; gives greater weight to less costly projects
 - 3 = incremental funds needed < \$1,000</p>
 - o 2 = incremental funds needed between \$1,000 and \$5,000
 - 1 = incremental funds needed > \$5,000

APPENDIX D

Screening Requirements for Water Diversions

Washington State Laws RCW 77.57.10 and 77.57.040 require that ALL diversions from waters of the state be screened to protect fish.

These laws and the following design criteria are essential for the protection of fish at surface water diversions. Fish drawn into hydropower, irrigation, water supply, and other diversions are usually lost from the fish resources of the state of Washington.

The following criteria are based on the philosophy of physically excluding fish from being entrained in water diverted without becoming impinged on the diversion screen. The approach velocity and screen mesh opening criteria are based upon the swimming stamina of emergent size fry in low water temperature conditions. It is recognized that there may be locations at which design for these conditions may not be warranted. Unless conclusive data from studies acceptable to Washington Department of Fish and Wildlife indicate otherwise, it is assumed that these extreme conditions exist at some time of the year at all screen sites.

Additional criteria may be required for unique situations, large facilities or intakes within marine waters.

I. Screen Location and Orientation

- a. <u>Fish screens in rivers and streams</u> shall be constructed within the flowing stream at the point of diversion and parallel to the stream flow. The screen face shall be continuous with the adjacent bankline. A smooth transition between the screen and backline shall be provided to prevent eddies in front, upstream and downstream of the screen. Where it can be thoroughly demonstrated that flow characteristics or site conditions make construction or operation of fish screens at the diversion entrance impractical, the screen(s) may be installed in the canal downstream of the diversion.
- b. <u>Diversion intakes in lakes and reservoirs</u> shall be located offshore in deep water to minimize the exposure of juvenile fish to the screen. Salmon and trout fry generally inhabit shallow water areas near shore.
- c. <u>Screens constructed in canals and ditches</u> shall be located as close as practical to the diversion. They shall be oriented so the angle between the face of the screen and the approaching flow is no more than 45°. All screens constructed downstream of the diversion shall be provided with an efficient bypass system.

II. Approach Velocity

a. The approach velocity is defined as the component of the local water velocity vector <u>perpendicular</u> to the face of the screen. Juvenile fish must be able to swim at a speed equal or greater than the approach velocity for an extended length of time to avoid impingement on the screen. The following approach velocity criteria

- are maximum velocities that shall not be exceeded anywhere on the face of the screen. A maximum approach velocity of 0.4 feet per second (ft/sec) is allowed.
- b. The approach velocity is calculated based on the gross screen area not the net open area of the screen mesh.
- c. The intake structure and/or fish screen shall be designed to assure that the diverted flow is uniformly distributed through the screen so the maximum approach velocity is not exceeded.

III. Minimum Screen Area

The minimum required screen area is determined by dividing the maximum diverted flow by the maximum allowable approach velocity. To find the screen area in ft^2 , divide the diverted flow in cubic feet per second (450 gpm = 1.0 cfs) by the approach velocity (0.4 ft/sec):

	Diverted flow (cfs)
Minimum screen area = -	
	Approach velocity (ft/sec)

The minimum required screen area must be submerged during lowest stream flows and may not include any area that is blocked by screen guides or structural members.

Diversions less than or equal to 180 gpm (0.4 cfs) require a minimum submerged screen area of 1.0 ft², which is the smallest practical screening device.

IV. Sweeping Velocity

The sweeping velocity is defined as the component of the water velocity vector parallel to and immediately upstream of the screen surface. The sweeping velocity shall equal or exceed the maximum allowable approach velocity. The sweeping velocity requirement is satisfied by a combination of proper orientation (angle of screen 45° to the approaching flow) of the screen relative to the approaching flow and adequate bypass flow.

V. Screen Mesh Size, Shape, and Type of Material

Screen openings may be round, square, rectangular, or any combination thereof, provided structural integrity and cleaning operations are not impaired.

Screen mesh criteria is based on the assumption that steelhead and/or resident trout fry are ubiquitous in the State of Washington and will be present at all diversion sites.

Following are the maximum screen openings allowable for emergent salmonid fry. The maximum opening applies to the entire screen structure including the screen mesh, guides, and seals. The profile bar criteria is applied to the narrow dimension of the rectangular slots or mesh.

Woven Wire Mesh	Profile Bar	Perforated Plate
0.087 inch	1.75 mm	0.094 inch
(6-14 mesh)	(0.069 inch)	(3/32 inch)

The allowable woven wire mesh openings is the greatest open space distance between mesh wires. An example allowable mesh specifications is provided; there are other standard

allowable openings available. The mesh specification gives that number of mesh openings per lineal inch followed by the gauge of the wires. For example, 6-14 mesh has six mesh openings per inch of screen. It is constructed with 6, 14-gauge (0.080 inch diameter) wires per inch.

The profile bar openings are the maximum allowable space between bars. The allowable perforated plate openings are the diameter of circular perforations. Perforated slots are treated as profile bars.

Screens may be constructed of any durable material; woven, welded, or perforated. The screen material must be resistant to corrosion and ultraviolet damage.

For longevity and durability, minimum wire diameter for woven mesh shall be 0.060 inch (18 gauge) on fixed panel screens, where they are not subjected to impact of debris. Minimum wire diameter for woven mesh shall be 0.080 inch (14 gauge) for rotary drum screens, traveling belt screens, and in areas where there is a potential for damage from floating debris or cleaning operations.

VI. Bypass

All screens constructed downstream of the diversion shall be provided with an efficient bypass system to rapidly collect juvenile fish and safely transport them back to the stream. The downstream end of the screen shall terminate at the entrance to the by pass system. It is the water diversion owner's responsibility to obtain necessary water rights to operate the fish bypass; failure to do so may be considered failure to meet state screening law requirements.

VII. Cleaning

Fish screens shall be cleaned as frequently as necessary to prevent obstruction of flow and violation of the approach velocity criterion. Automatic cleaning devices will be required on large screen facilities.

Additional detailed information is available explaining the background and justification of these criteria and showing standard detail of flow distributors, acceptable bypass designs, and screen areas required for various flow by contacting the Washington Department of Fish and Wildlife.