

Final 1998 Section 303(d) List - WRIA 30

Water Name	BLOCKHOUSE CREEK		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes
Action Needed	Other Control		
New Segment ID #	ID95ML	Old Segment ID #	WA-30-1023
Stream Route #	2.386	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	15E	Grid Latitude	
Section	17	Grid Longitude	
Basis for Consideration of Listing	<p>Washington Dept. of Ecology, 1990.;Beecher, 1989.;SASSI, 1993 , Spring Chinook and Coho Stocks are depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk of extinction.; The stream meets all the Water Quality Program Policy criteria for inadequate instream flow and has been added to the list. The Little Klickitat spring Chinook and Coho stocks are listed as depressed (SASSI, 1994). The WDFW wrote a 1991 memo stating that the Falls at RM 6.1 are likely passable by steelhead. This Creek is upstream of those Falls and has its own 56-foot waterfall about 0.1 mile upstream from its mouth. So a small part of the Creek is considered accessible to anadromous fish, but most of the Creek is used by rainbow trout. The 1990 Little Klickitat River IFIM Report provides the hydrology, fish population information, and IFIM fish habitat flows needed by the fish at RM 2.5. The actual instream flows available for the fish are far below what is needed for them all year.</p>		
Remarks			

Water Name	BLOODGOOD CREEK		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed <input type="checkbox"/> Other Control
New Segment ID #	XU61DO	Old Segment ID #	WA-30-1025
Stream Route #	0.014	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	16E	Grid Latitude	
Section	17	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Ecology, 1990.;SASSI, 1993 , Spring Chinook and Coho Stocks are depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk of extinction.; The stream meets all the Water Quality Program Policy criteria for inadequate instream flow and has been added to the list. The Little Klickitat spring Chinook and Coho stocks are listed as depressed (SASSI, 1994). The WDFW wrote a 1991 memo stating that the Falls at RM 6.1 are likely passable by steelhead. This Creek is upstream of those Falls. So the Creek is considered accessible to anadromous fish, but most of the Creek is used by rainbow trout. The 1990 Little Klickitat River IFIM Report provides the hydrology, fish population information, and IFIM fish habitat flows needed by the fish at RM 0.5. The actual instream flows available for the fish are far below what is needed for them all year.		
Remarks			

Water Name	BOWMAN CREEK		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed <input type="checkbox"/> Other Control
New Segment ID #	TN94DB	Old Segment ID #	WA-30-1021
Stream Route #	3.68	Water Resource Inventory Area	30
Township	05N	Waterbody Grid #	
Range	14E	Grid Latitude	
Section	35	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Ecology, 1990.;U.S. Bureau of Reclamation, 1990.;Beecher, 1990.;SASSI, 1993 , Spring Chinook and Coho Stocks are Depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk Of extinction.; The stream meets all the Water Quality Program Policy criteria for inadequate instream flow and should be added to the 303d list. The Little Klickitat spring Chinook and Coho stocks are listed as depressed (SASSI, 1994). This is one of only two tributaries to the Little Klickitat River where anadromous fish (steelhead, Chinook, and Coho) have been found. The 1990 Little Klickitat River IFIM Report provides the hydrology, fish population information, and IFIM fish habitat flows needed by the fish at RM 3.5. The actual instream flows available for the fish are far below what is needed for them from June through December.		
Remarks			

Water Name BUTLER CREEK

Parameter Temperature **Mediu** Water

Place on 1998 List? Yes **Listed in 1996** Yes **Action Needed** TMDL

New Segment ID # YU86SG **Old Segment ID #** WA-30-1029

Stream Route # 0 **Water Resource Inventory Area** 30

Township 05N **Waterbody Grid #**

Range 17E **Grid Latitude**

Section 17 **Grid Longitude**

Basis for Consideration of Listing Mathews, 1992. , multiple excursions beyond the criterion at two sites (BU1 and BU2) on the segment in the summers of 1990 and 1991.

Remarks

Water Name COLUMBIA RIVER

Parameter Temperature **Mediu** Water

Place on 1998 List? Yes **Listed in 1996** No **Action Needed** TMDL

New Segment ID # NN57SG **Old Segment ID #** WA-CR-1020

Stream Route # **Water Resource Inventory Area** 30

Township **Waterbody Grid #** 45121G1B3

Range **Grid Latitude** 45.615

Section **Grid Longitude** 121.135

Basis for Consideration of Listing Tanner, et al. 1996. , 33 excursions beyond the criterion out of 135 samples (24%) at the Dalles Dam Forebay in 1996.;

Remarks

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45120H6B9
Range		Grid Latitude	45.715
Section		Grid Longitude	120.695
Basis for Consideration of Listing	U.S. Army Corp of Engineers, 1991. , numerous excursions beyond the criterion at station 3757 (below John Day Dam)		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45121G1B3
Range		Grid Latitude	45.615
Section		Grid Longitude	121.135
Basis for Consideration of Listing	U.S. Army Corp of Engineers, 1991. , numerous excursions beyond the criterion at station 3700 (below The Dalles Dam).		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input checked="" type="checkbox"/> Yes	Listed in 1996	<input checked="" type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45121G1B3
Range		Grid Latitude	45.615
Section		Grid Longitude	121.135
Basis for Consideration of Listing	31 excursions beyond the criterion at the U.S. Army Corp Of Engineers North Pacific Division station TDA in 1993.; 7 excursions beyond the criterion at the U.S. Army Corp of Engineers North Pacific Division station TDA in 1994 during times without approved short term modifications to the standards.;		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> No Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45120H7A2
Range		Grid Latitude	45.705
Section		Grid Longitude	120.725
Basis for Consideration of Listing	Tanner, et al. 1996. , 34 excursions beyond the criterion set with the short term modifications to the standards out of 117 samples (29%) near Cliffs, WA in 1996.;		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> No Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45121G1B3
Range		Grid Latitude	45.615
Section		Grid Longitude	121.135
Basis for Consideration of Listing	Tanner, et al. 1996. , 51 excursions beyond the criterion set with the short term modifications to the standards out of 145 samples (35%) at the Dalles Dam Forebay in 1996.;		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed None
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45121G1A8
Range		Grid Latitude	45.605
Section		Grid Longitude	121.185
Basis for Consideration of Listing	Tanner, et al. 1996. , 1 excursions beyond the criterion set with the short term modifications to the standards out of 97 samples (1%) at The Dalles, OR in 1996.;		
Remarks	A single excursion beyond the criterion does not meet the Water Quality Program policy for listing.		

Water Name	COLUMBIA RIVER		
Parameter	Dioxin	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed <input type="checkbox"/> None
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1020
Stream Route #		Water Resource Inventory Area	30
Township		Waterbody Grid #	45121G1A8
Range		Grid Latitude	45.605
Section		Grid Longitude	121.185
Basis for Consideration of Listing	EPA National Bioaccumulation Survey , excursions beyond the criterion in white sturgeon near the Dalles (OR).		
Remarks	EPA established a TMDL for the Columbia River Basin on 2/25/91. U.S. District Court upheld the TMDL on 8/10/93.		

Water Name	LITTLE KLICKITAT RIVER		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input checked="" type="checkbox"/> Yes	Listed in 1996	<input checked="" type="checkbox"/> Yes Action Needed <input type="checkbox"/> TMDL
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	0	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	14E	Grid Latitude	
Section	09	Grid Longitude	
Basis for Consideration of Listing	<p>1 excursion beyond the criterion out of 12 samples (8%) at Ecology ambient monitoring station 30C070 (RM 0.2) between 9/91 and 9/96.;</p> <p>Yakama Indian Nation data (submitted by Carroll Palmer on 10/31/97) show numerous excursions beyond the criterion between 6/90 and 7/90.</p> <p>Yakama Indian Nation data (submitted by Carroll Palmer on 2/28/96) show 36 excursions beyond the criterion in 1990.</p>		
Remarks			

Water Name	LITTLE KLICKITAT RIVER		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed Other Control
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	0	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	14E	Grid Latitude	
Section	09	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Ecology, 1990;U.S. Bureau of Reclamation, 1990.;Beecher, 1991. , waterfall at RM 6.1 is passable to anadromous fish; SASSI, 1993 , Spring Chinook and Coho Stocks are depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk of extinction.; The river meets all the Water Quality Program Policy criteria for inadequate instream flow and has been added to the list. The spring Chinook and Coho stocks are listed as depressed (SASSI,1994). The 1990 Little Klickitat River IFIM Report provides the hydrology for this segment at RM 0.4 (USGS gage 14112500), fish population information, and IFIM fish habitat flows needed by the fish. The actual instream flows available for the fish are far below what is needed for them from May through December. Essentially all the water in the Little Klickitat River is diverted at the town of Goldendale.		
Remarks			

Water Name	LITTLE KLICKITAT RIVER		
Parameter	pH	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed None
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	0	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	14E	Grid Latitude	
Section	09	Grid Longitude	
Basis for Consideration of Listing	1 excursion beyond the criterion out of 12 samples (8%) at Ecology ambient monitoring station 30C070 (RM 0.2) between 9/91 and 9/96..;		
Remarks	A single excursion beyond the criterion does not meet the Water Quality Program Policy for listing.		

Water Name	LITTLE KLICKITAT RIVER		
Parameter	Dissolved Oxygen	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed <input type="checkbox"/> None
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	20.662	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	16E	Grid Latitude	
Section	19	Grid Longitude	
Basis for Consideration of Listing	Heffner, 1986, no receiving water data was collected. Goldendale WWTP outfall entered at RM 14.1; Joy, 1986, no excursions beyond the criterion was measure in this study. Reference was cited in previous list decision matrices in error.		
Remarks	TMDL based on dilution requirement for Goldendale wastewater discharge submitted 8/25/92. EPA approved the TMDL on 4/8/93.		

Water Name	LITTLE KLICKITAT RIVER		
Parameter	Chlorine	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed <input type="checkbox"/> None
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	20.662	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	16E	Grid Latitude	
Section	19	Grid Longitude	
Basis for Consideration of Listing	Heffner, 1986, no receiving water data was collected. Goldendale WWTP outfall entered at RM 14.1; Joy, 1986, no chlorine was measured in this study. Reference was cited in previous list decision matrices in error.		
Remarks	TMDL based on dilution requirement for Goldendale wastewater discharge submitted 8/25/92. EPA approved the TMDL on 4/8/93.		

Water Name	LITTLE KLICKITAT RIVER		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed Other Control
New Segment ID #	AY21LB	Old Segment ID #	WA-30-1020
Stream Route #	13.643	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	15E	Grid Latitude	
Section	28	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Ecology, 1990;U.S. Bureau of Reclamation, 1990.;Beecher, 1991. , waterfall at RM 6.1 is passable to anadromous fish; SASSI, 1993 , Spring Chinook and Coho Stocks are depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk of extinction.; The river meets all the Water Quality Program Policy criteria for inadequate instream flow and has been added to the list. The spring Chinook and Coho stocks are listed as depressed (SASSI,1994). The 1990 Little Klickitat River IFIM Report provides the hydrology for this segment at RM 9.6, fish population information, and IFIM fish habitat flows needed by the fish. The actual instream flows available for the fish are far below what is needed for them from May through December. Essentially all the water in the Little Klickitat River is diverted at the town of Goldendale.		
Remarks			

Water Name	LITTLE KLICKITAT RIVER, EAST PRONG		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	AG85MX	Old Segment ID #	WA-30-1028
Stream Route #	0	Water Resource Inventory Area	30
Township	05N	Waterbody Grid #	
Range	17E	Grid Latitude	
Section	16	Grid Longitude	
Basis for Consideration of Listing	Mathews, 1992. , multiple excursions beyond the criterion in the summers of 1990 and 1991.;		
Remarks			

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name	LITTLE KLICKITAT RIVER, EAST PRONG		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	PW77VQ	Old Segment ID #	WA-30-1028
Stream Route #	5.01	Water Resource Inventory Area	30
Township	05N	Waterbody Grid #	
Range	17E	Grid Latitude	
Section	03	Grid Longitude	
Basis for Consideration of Listing	Yakama Indian Nation data (submitted by Carroll Palmer on 2/28/96) show 26 excursions beyond the criterion at station EP5 in1995.		
Remarks			

Water Name	LITTLE KLICKITAT RIVER, EAST PRONG		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	PW77VQ	Old Segment ID #	WA-30-1028
Stream Route #	4.187	Water Resource Inventory Area	30
Township	05N	Waterbody Grid #	
Range	17E	Grid Latitude	
Section	09	Grid Longitude	
Basis for Consideration of Listing	Yakama Indian Nation data (submitted by Carroll Palmer on 2/28/96) show 49 excursions beyond the criterion at station EP3 in1995.		
Remarks			

Water Name	LITTLE KLICKITAT RIVER, WEST PRONG		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	XU61EK	Old Segment ID #	WA-30-1027
Stream Route #	1.537	Water Resource Inventory Area	30
Township	05N	Waterbody Grid #	
Range	17E	Grid Latitude	
Section	18	Grid Longitude	
Basis for Consideration of Listing	Mathews, 1992. , multiple excursions beyond the criterion in the summers of 1990 and 1991.		
Remarks			

Water Name	MILL CREEK		
Parameter	Instream Flow	Mediu	Habitat
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed Other Control
New Segment ID #	FF43IZ	Old Segment ID #	WA-30-1022
Stream Route #	5.44	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	15E	Grid Latitude	
Section	05	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Ecology, 1990.;U.S. Bureau of Reclamation, 1990.;Beecher, 1989.;SASSI, 1993 , Spring Chinook and Coho Stocks are depressed.; Nehlson, et al 1991. , Winter Steelhead are at a high risk of extinction.; The stream meets all the Water Quality Program Policy criteria for inadequate instream flow and has been added to the list. The Little Klickitat spring Chinook and Coho stocks are listed as depressed (SASSI, 1994). This is one of only two tributaries to the Little Klickitat River where anadromous fish (steelhead, Chinook, and Coho) have been found. The 1990 Little Klickitat River IFIM Report provides the hydrology, fish population information, and IFIM fish habitat flows needed by the fish at RM 3.9. The actual instream flows available for the fish are far below what is needed for them all year.		
Remarks			

Water Name	SWALE CREEK		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	XN32HN	Old Segment ID #	WA-30-1018
Stream Route #	5.226	Water Resource Inventory Area	30
Township	04N	Waterbody Grid #	
Range	14E	Grid Latitude	
Section	19	Grid Longitude	
Basis for Consideration of Listing	Yakama Indian Nation data (submitted by Carroll Palmer on 10/31/97) show numerous excursions beyond the criterion between 6/90 and 7/90.; Yakama Indian Nation data (submitted by Carroll Palmer on 2/28/96) show 37 excursions beyond the criterion in 1990.		
Remarks			

Water Name SWALE CREEK

Parameter Instream Flow **Mediu** Habitat

Place on 1998 List? Yes **Listed in 1996** Yes **Action Needed** Other Control

New Segment ID # XN32HN **Old Segment ID #** WA-30-1018

Stream Route # 0.033 **Water Resource Inventory Area** 30

Township 04N **Waterbody Grid #**

Range 14E **Grid Latitude**

Section 19 **Grid Longitude**

Basis for Consideration of Listing

The stream meets all the Water Quality Program Policy criteria of inadequate instream flow and has been added to the list. Hydrology by USGS has 3 measurements with zero and 1.4 cfs in September, and 0.4 cfs in August. The Yakama Indian Nation reported (submittal by Carroll Palmer on 2/28/96) that many times in July and August in 1990-1994 the Creek was dry from its mouth up to RM 3.5. They also noted Chinook and steelhead juveniles in the creek in winter/spring and several irrigation withdrawals above RM 3.6. Ecology attempted to conduct an IFIM study on Swale Creek in 1987 and didn't find enough water near its mouth to do a study, but at the same time found the stream to be full of water miles upstream of the irrigation diversions. In 1987, Ecology measured at the mouth of Swale Creek about 0.5 cfs in April, and 0.1 cfs to zero cfs in May, June, July, and September. In a stream survey by Carl Dugger for the Dept. of Wildlife on May 16, 1985, he found Swale Creek to be less than one cfs and noted that the was surveying one of the few pools which remained wet during summer. In the Klickitat Subbasin Plan (1990) it notes that lower Swale Creek was surveyed in 1988 and seven steelhead redds were counted. The Plan also notes that "low summer flows... are the norm in the Little Klickitat and Swale drainage's, at least partly because of irrigation withdrawals." A review of Ecology's files for the Swale Creek Watershed area (by Kevin Brown on 2/9/98) show 106 water rights documents from surface waters sources, such as Swale Creek, unnamed creeks, springs and ponds. In addition, there are 162 ground water rights, many of which likely have hydraulic continuity with the stream flow.

An Ecology report, 'A REVIEW OF THE WATER RESOURCES OF THE KLICKITAT BASIN, WRIA 30' by Ted Mix, July, 1976, (Office Report No. 52) found a total of 3.00 cfs of surface water rights for Swale Creek. The spring Chinook and Coho stocks are listed as depressed (SASSI, 1993).

Remarks