

ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT

STREAM: Swanson Creek (S-148)
BASIN: Floras Lake
SURVEY TYPE: Post-Tx
DATE: August 6, 2003
SURVEY CREW: Lisa Biggs, Chelsey Girt
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.4 km²
USGS MAPS: Langlois, Sixes
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Swanson Creek habitat survey extended 737 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.8 (range: 1.0-20.0). Land use for the reach was large (30-50 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 4.2 percent. Dry channel units (69%) and scour pools (15%) dominated stream habitat. Gravel (44%), cobble (25%) and sand (22%) dominated stream substrate. Wood volume was low at 16.0 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

The crew noted several habitat structures during the survey.

OREGON DEPARTMENT OF FISH AND WILDLIFE

SWANSON CREEK POST-TX (SC-148)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

8/6/03

REACH 1

T31S-R15W-S22NW

REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (#>0.5m)	Substrate					
							Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	15	0.4	0.01	6	0	5	9	73	14	0	0
CULVERT CROSSING	1	41	2.0	0.25	81	2	10	5	35	45	5	0
DRY CHANNEL	8	193	2.9	0.00	562	1	2	13	61	24	1	0
DRY UNIT	5	129	2.4	0.00	303	1	2	17	46	34	2	0
POOL-BACKWATER	3	10	1.6	0.28	15	0	9	44	34	13	0	0
POOL-LATERAL SCOUR	13	86	1.8	0.34	157	0	11	33	37	19	0	0
POOL-STRAIGHT SCOUR	4	23	2.1	0.21	47	1	7	31	22	20	0	20
PUDDLED UNIT	5	101	0.9	0.12	88	0	5	15	47	30	3	0
RIFFLE	6	83	0.7	0.02	56	3	7	24	38	31	1	0
RIFFLE W/ POCKETS	4	84	0.9	0.04	71	0	7	11	52	30	0	0
STEP/BEDROCK	1	1	1.3	0.00	1	0	43	17	9	30	0	0
STEP/COBBLE	5	9	0.4	0.02	4	0	2	15	49	34	0	0
STEP/LOG	1	0	0.2	0.01	0	0	0	22	67	11	0	0
Total:	57	773	1.6	0.13	1,391	8	Avg 7	22	44	25	1	1

HABITAT SUMMARY

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Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m ²)	Percent	Number	(# / 100m ²)
Dammed & BW Pools	3	10	1.6	0.28	15	1.09%	0	0.0
Scour Pools	17	109	1.9	0.31	204	14.66%	1	0.5
Glides	0	0			0	0.00%	0	0.0
Riffles	10	167	0.8	0.03	127	9.14%	3	2.4
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	15	0.4	0.01	6	0.44%	0	0.0
Step/Falls	7	9	0.5	0.01	5	0.33%	0	0.0
Dry	18	423	2.2	0.03	953	68.50%	2	0.2
Culverts	1	41	2.0	0.25	81	5.84%	2	2.5

POOL SUMMARY

	Total	# / Km
All Pools:	20	25.9
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	2	2.6
Pool frequency (channel widths/pool):	13.5	
Residual pool depth (avg):	0.29	

STREAM SUMMARY

SWANSON CREEK POST-TX (SC-148)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
57	773	1.6	0.13	1,391	7	22	44	25	1	1	8

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	15	1.09%
Scour Pools	204	14.66%
Glides	0	0.00%
Riffles	127	9.14%
Rapids	0	0.00%
Cascades	6	0.44%
Step/Falls	5	0.33%
Dry	953	68.50%
Culverts	81	5.84%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	1300
Total conifers/1000 ft	630
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	7.3	0.7	3.0	4.3	7.3	5.0	17.7
15-30cm	0.3	2.0	1.7	0.7	1.0	0.3	3.0	3.0
30-50cm	0.3	0.0	0.7	0.0	0.7	0.0	1.7	0.0
50-90cm	0.0	0.3	0.7	0.0	0.0	0.3	0.7	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.7	9.7	3.7	3.7	6.0	8.0	3.4	7.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	59		61		63	
Shrub cover	29		28		18	
Grass/forb cover	62		59		53	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		67		83	
High terrace	50		33		17	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	8		9		8	

Summary of Riparian Zone (0-30m) for all reaches 3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	1300
Total conifers/1000 ft	630
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3 <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	5.0	17.7
15-30cm	3.0	3.0
30-50cm	1.7	0.0
50-90cm	0.7	0.7
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
23	LF	2	HS	0	85	10	85	Conifer	1	1	1			
								Hardwood	1					
23	LF	3	HS	20	85	25	70	Conifer	4	2				
								Hardwood						
23	RT	1	LT	0	55	15	85	Conifer						
								Hardwood						
23	RT	2	HT	0	85	20	75	Conifer	1	1	1			
								Hardwood						
23	RT	3	HS	10	85	35	55	Conifer		1	1			
								Hardwood		1				
23	LF	1	HT	0	65	60	40	Conifer						
								Hardwood	1	2				
35	RT	1	HS	40	75	45	55	Conifer		1	1			CASCARA, HUCKLEBERRY ALDER REPROD
								Hardwood	9	1				
35	LF	3	HS	0	0	0	75	Conifer						
								Hardwood						REPROD
35	LF	2	HS	5	0	0	75	Conifer						
								Hardwood						
35	RT	2	HS	40	75	65	35	Conifer		2		2		INDIAN PLUM
								Hardwood	3					
35	RT	3	HS	0	65	10	90	Conifer	9		1			
								Hardwood						
35	LF	1	HS	10	15	15	60	Conifer						VINE MAPLE
								Hardwood	2					
45	LF	1	HT	0	50	0	90	Conifer						REPROD, ELDER, ALDER
								Hardwood	1			1		
45	LF	2	HT	0	50	5	60	Conifer						CASCARA, ALDER
								Hardwood	2	1				
45	LF	3	HT	0	95	10	10	Conifer						ELDERBERRY, INDIAN PLUM, CASCARA
								Hardwood	20					
45	RT	1	HT	0	95	40	40	Conifer						ELDERBERRY, ALDER
								Hardwood	9	3				
45	RT	2	HS	10	70	70	25	Conifer		1				WELL HOUSE IN ZONE 2, ALDER
								Hardwood	3	1				
45	RT	3	HS	15	45	25	20	Conifer						5M OF GRAVEL PARKING
								Hardwood	2			1		

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **5-SC** SITE ID: **148** **SWANSON CREEK POST-TX (SC-148)**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	CC	00	40.6	CC	PHOTO 110- REACH 1 PH	2M X 2M SOLID METAL W/ B
2	RI	01	66.4	TJ/ HS RR		RR- NETTING, SALMONID FR
3	CB	11	66.4		NO BOULDERS T= 13 DE	TRIG 10% H2O 13 DEG C @ 1
4	SP	00	73		ACW=3.2	SALMONID FRY
6	LP	00	82.6		UNITS 6, 7 SEPERATED	SALMONID FRY, COHO
7	SP	00	88.5	WL		DEER, COHO
8	RI	01	104.2	TJ/		RUFFLED BANANA SLUG
9	RI	11	104.2		ACW=1.1	TRIB, COHO
10	BW	10	104.2			COHO
11	SP	00	110.2			COHO, SALMONID FRY
14	LP	00	120.9	WL		SALMONID FRY, DEER
16	LP	00	130.9			SALMONID FRY
19	SL	00	137.4		H=0.3M	H=.3
21	LP	00	171.9	WL SS/		DEER, SALMONID FRY, COH
22	RP	00	182.9			SALMONID FRY
23	LP	00	193.2	WL	RIP 1 PHOTO 111= R BAN	COHO, SALMONID FRY, DEE
24	RP	00	218.2			SALMONID FRY
27	LP	00	232.3			SALMONID FRY
28	RP	00	258.6			SALMONID FRY
29	LP	00	267.9			SALMONID FRY
31	LP	00	275.7		TEMP=12 DEG C 11:40	SALMONID FRY, RSN

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **5-SC** SITE ID: **148** **SWANSON CREEK POST-TX (SC-148)**

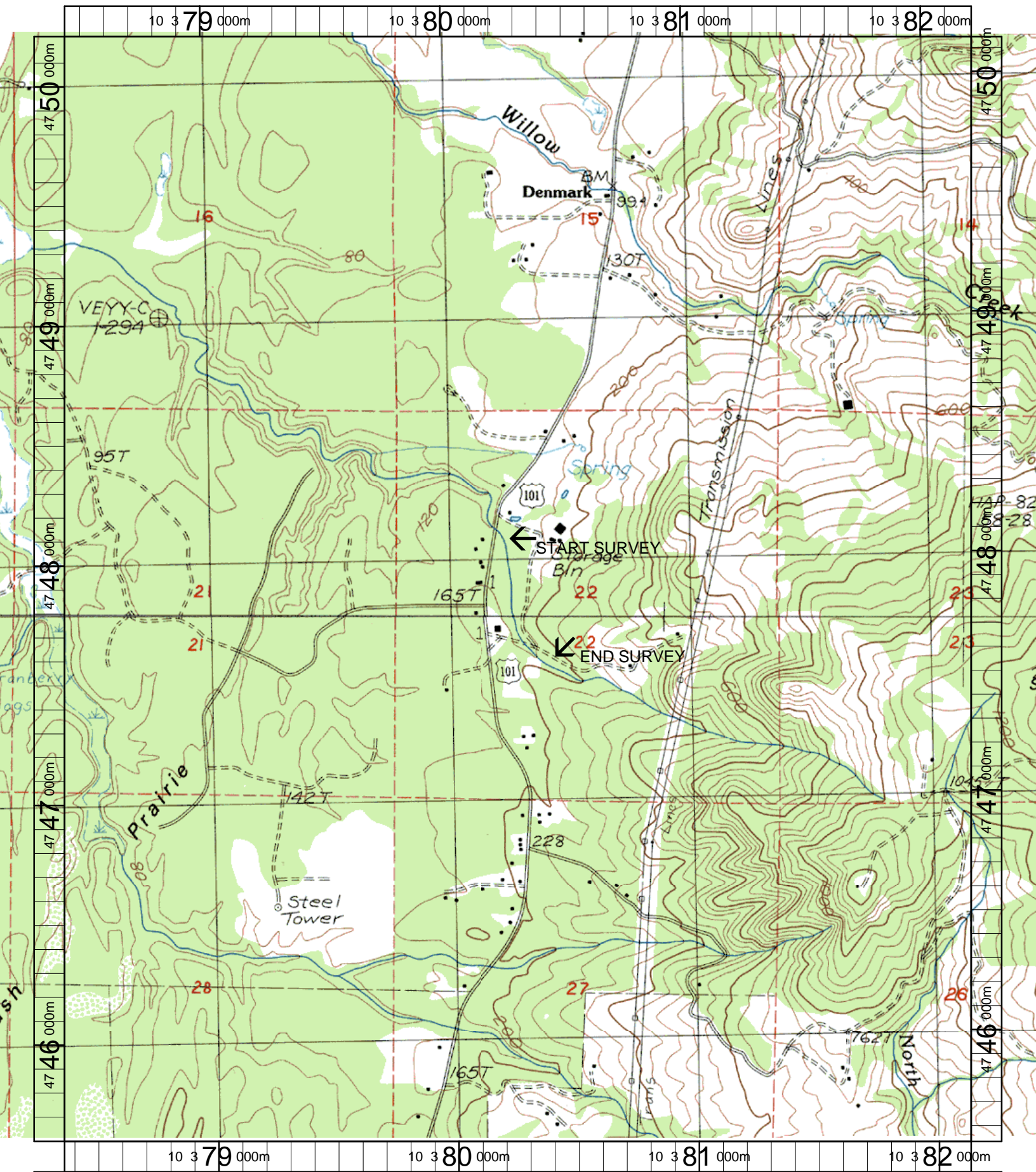
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
32	PD	00	300.7			SALMONID FRY
33	PD	00	325.7	WL		DEER, SALMONID FRY
34	DU	00	354.7	DJ, WL		NO H2O, DJ SMALL, DEER
35	SP	00	358.9		RIP 2 PHOTO 112= L BAN	SALMONID FRY
36	PD	00	383.9	WL, HS		DEER, SALMONID FRY, RAC
37	DU	00	408.9	WL		DEER
38	DU	00	433.9	HS		
39	LP	00	437.7	WL		DEER, COHO, SALMONID FR
40	DU	00	462.7	WL		DEER
41	DU	00	487.7	HS		
42	PD	00	499.7	HS		SALMONID FRY
43	LP	00	505.5	HS		SALMONID FRY
44	PD	00	519.2	HS, WL		SALMONID FRY, RACCOON,
45	RI	00	536.2		RIP 3 PHOTO 113 L BANK	
46	LP	00	540.9			SALMONID FRY
48	BW	10	542.9			SALMONID FRY
49	DC	00	567.9	HS		
51	DC	00	617.9	HS, WL		RED LEGGED FROG
53	DC	00	667.9	BC		BRIDGE DBI METAL OFF STR
54	DC	00	691.2	TJ/		
55	SR	00	691.8		H=1.3, HARDPAN	H=1.3 HARDPAN CLAY

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 5-SC SITE ID: 148 SWANSON CREEK POST-TX (SC-148)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
56	DC	00	716.8	BC	DAMAGED/ UNCHANNELI	



Name: LANGLOIS
 Date: 3/21/2003
 Scale: 1 inch equals 1666 feet

Location: 10 380280 E 4747875 N
 Caption: SWANSON CREEK RESTORATION SITE - FLORAS BASIN