

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

STREAM: Swanson Creek (S148)
BASIN: Floras Lake
SURVEY TYPE: Pre-Tx
DATE: March 14, 2002
SURVEY CREW: Sara Meguffy, Sarah Schuster
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 708 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.8 (range: 2.8 – 7.5). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.7 percent. Riffles (69%) and scour pools (24%) dominated stream habitat. Gravel (39%) and sand (24%) dominated stream substrate. Wood volume was low at 2.7 m³/100m.

COMMENTS:

There was one potential barrier to upstream fish migration in the surveyed length, noted as a completely buried culvert at the upper end of the survey.

The crew noted several debris jams during the survey.

REACH

T31S-R15W-S22NW

REACH

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	4.8	VWI Range:	2.8 - 7.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	708	1,688	0
Secondary	66	86	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 2.2	Width: 4.3	14.2 (5.8 - 28)	10.2 (10.1 - 10.2)
Depth: 0.38	Height: 0.7	1.3 (1.2 - 1.4)	1.6 (1.45 - 1.8)

W:D ratio: 6.6
Stream Flow Type: MF
Average Unit Gradient: 2.7%
Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 3.3
Habitat Units/100m (total channel length): 8.8
Habitat Units/100m (primary channel length): 9.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	M30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	59	8.3
Volume (m ³):	19	2.7
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

SWANSON CREEK PRE-TX (S-148)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

3/14/2002

REACH		T31S-R15W-S22NW						REACH					
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	
CULVERT CROSSING	2	11	1.5	0.48	16	0	34	24	26	11	5	0	
POOL-BACKWATER	2	8	1.5	0.45	14	0	33	38	25	5	0	0	
POOL-LATERAL SCOUR	17	121	2.5	0.61	322	0	11	29	40	17	3	0	
POOL-PLUNGE	6	27	3.0	0.73	81	0	9	29	39	19	3	0	
POOL-STRAIGHT SCOUR	1	5	4.1	1.10	21	0	10	60	20	10	0	0	
RAPID/BOULDERS	3	47	2.0	0.14	98	0	13	17	37	27	7	0	
RIFFLE	32	553	2.2	0.22	1,221	0	9	18	41	28	5	0	
STEP/LOG	5	2	1.4	0.17	3	0	16	25	35	20	4	0	
Total:	68	773	2.2	0.38	1,773	0	Avg: 12	24	39	22	4	0	

HABITAT SUMMARY								
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	2	8	1.5	0.45	14	0.78%	0	0.0
Scour Pools	24	153	2.7	0.66	423	23.83%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	32	553	2.2	0.22	1,221	68.82%	0	0.0
Rapids	3	47	2.0	0.14	98	5.53%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	5	2	1.4	0.17	3	0.14%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	2	11	1.5	0.48	16	0.89%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	26	33.6	36.7
Pools >=1m deep:	1	1.3	1.4
Complex pools (LWD pieces>=3):	3	3.9	4.2
Pool frequency (channel widths/pool):	6.9		
Residual pool depth (avg):	0.51		

Comment Summary

Oregon Plan Monitoring Sites 2002

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	9.5	CS/CS, /CE	
3	RI	01	38	FC, /CE	TJ/
5	LP	01	53.1	TJ/	SG = 4 SQ M
8	RI	00	85.6	WL	SALMON CARCASS, SG = 2 SQ M
10	PP	01	105.8	SS/	
11	SL	01	106.3		H = .35
12	RI	01	127.6		3 CARCASSES
14	LP	01	139.7	DJ, TJ/	
15	RI	11	139.7		SG = 2 SQ M
17	LP	00	162.5		SG = 2 SQ M
25	RI	00	278.5		SG = 2 SQ M
28	SL	00	296.9	DJ	H = .5
30	RI	00	324.6	DJ	
32	SL	00	329.4		H = .3
33	LP	01	333.9	/SS	
35	RI	00	355.8	DJ	
38	LP	00	373.1		SG = 2 SQ M
48	RI	00	513.2		SITE 8
50	RI	00	543.9		SG = 2 SQ M
54	RB	00	589.3	DJ	
55	LP	00	593.6		CARCASS, SG = 2 SQ M

Comment Summary

Oregon Plan Monitoring Sites 2002

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
67	CC	00	687.9	PA	GALVANIZED