

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

STREAM: Brush Creek Site A (SC-190)
BASIN: Pacific Ocean
SURVEY TYPE: Post-Tx
DATE: March 6, 2005
SURVEY CREW: Neil Jensen, Jennifer Schmitt
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 27.5 km²
USGS MAPS: Port Orford
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Brush Creek habitat survey extended 537 meters. The channel was constrained by high terraces and land use in a broad valley floor. The average valley width index was 4.3 (range: 1.0-10.0). Land use for the reach was state park and large (30-50 cm dbh) trees. The average unit gradient was 1.1 percent. Riffles (68%) and scour pools (29%) dominated stream habitat. Gravel (75%) and sand (17%) dominated stream substrate. Wood volume was low at 12.2 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.

REACH 1

T33S-R15W-S26SE

REACH 1

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	4.3	VWI Range:	1 - 10

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	0%		
Landuse	100%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	537	3,834	0
Secondary Channel	0	0	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 7.0	Width: 12.8	30.6 (7.2 - 89.7)	23.4 (22.9 - 23.9)
Depth: 0.60	Height: 0.6	1.2 (1.14 - 1.36)	1.3 (1.24 - 1.36)

W:D ratio: 21.3

Entrenchment (ACW:FPW ratio): 2.9

Stream Flow Type: MF

Habitat Units/100m (total channel length): 4.1

Average Unit Gradient: 1.1%

Habitat Units/100m (primary channel length): 4.1

Water temperature (°C): 8.0 - 8.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	LT
Riparian Vegetation:	D15	D3

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):	122	22.7
Volume (m ³):	66	12.2
Key pieces (>=12m x 0.60m):	2	0.4

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/6/2005

REACH 1		T33S-R15W-S26SE					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
POOL-LATERAL SCOUR	5	117	7.3	1.34	896	0	14	35	45	6	0	0
POOL-STRAIGHT SCOUR	1	27	7.3	1.80	197	0	25	50	25	0	0	0
RAPID/BOULDERS	1	24	5.3	0.45	126	0	1	10	69	20	0	0
RIFFLE	15	370	7.1	0.29	2,616	0	0	9	88	2	1	0
Total:	22	537	7.0	0.60	3,834	0	Avg: 5	17	75	3	1	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	0	0			0	0.00%	0	0.0	
Scour Pools	6	144	7.3	1.42	1,093	28.50%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	15	370	7.1	0.29	2,616	68.22%	0	0.0	
Rapids	1	24	5.3	0.45	126	3.28%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	0	0			0	0.00%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	6	11.2	11.2
Pools >=1m deep:	6	11.2	11.2
Complex pools (LWD pieces>=3):	4	7.4	7.4
Pool frequency (channel widths/pool):	7.0		
Residual pool depth (avg):	1.06		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 5-SC SITE ID: 190 BRUSH CREEK SITE A POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	17.2	HS, DJ	LAMPREY, REDDS, LOGS, STLHD	
2	RI	00	36.3	HS	LOGS STEELHEAD ADULT	
3	SP	00	63.3		REDDS	
4	LP	00	84.2		REDDS	
5	LP	00	101.6	BV	REDDS	
6	RB	00	125.3	BV, HS, DJ	ADULT STEELHEAD	
8	RI	00	179.5		REDDS	
9	RI	00	206		REDDS	
10	RI	00	234.1		REDDS	
11	RI	00	250.4		REDDS	
12	RI	00	277.4		REDD	
13	RI	00	308.5		REDDS	
14	RI	00	334.5		REDDS	
15	RI	00	363.5	BC, /CE	HWY 101, REDDS	
16	RI	00	379.1		REDDS	
17	LP	00	428		REDDS	
18	RI	00	456		REDDS	
19	RI	00	471.7		REDDS	
20	LP	00	483.9	DJ, BV		
21	RI	00	510.7		REDDS	
22	RI	00	537	/CE	REDDS	



Name: PORT ORFORD
 Date: 6/14/2004
 Scale: 1 inch equals 2000 feet

Location: 10 383624 E 4726671 N
 Caption: BRUSH CREEK SITE A RESTORATION SITE - OCEAN BASIN