

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

STREAM: Brush Creek Site B (S-191)
BASIN: Pacific Ocean
SURVEY TYPE: Post-Tx
DATE: February 25, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
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 498 meters. The channel was constrained by terraces and land use in a broad valley floor. The average valley width index was 6.1 (range: 1.2-12.5). Land use for the reach was state park and large (30-50 cm dbh) trees. The average unit gradient was 1.1 percent. Riffles (44%) and scour pools (42%) dominated stream habitat. Gravel (52%) and sand (34%) dominated stream substrate. Wood volume was moderate at 22.8 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-S25SE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	6.1	VWI Range:	1.2 - 12.5

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	498	3,594	0
Secondary	80	305	0

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 5	First Terrace <i>n</i> = 4
Width: 6.6	Width: 10.8	23.8 (13.8 - 32)	29.5 (20 - 34.5)
Depth: 0.58	Height: 0.7	1.4 (1.2 - 2)	2.0 (1.3 - 2.5)

W:D ratio: 16.1	Entrenchment (ACW:FPW ratio): 2.4
Stream Flow Type: MF	Water temp (°C): 10.0 - 10.0
Avg. Unit Gradient: 1.1%	Habitat Units/100m: 5.9

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	GN	LT
Riparian Vegetation:	D15	S

Bank Condition and Shade

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

Large Wood Debris

	Total	Total / 100m
All pieces (>=3m x 0.15m):	101	20.3
Volume (m ³):	113	22.8
Key pieces (>=10m x 0.60m):	7	1.4

OREGON DEPARTMENT OF FISH AND WILDLIFE

BRUSH CREEK SITE B POST-TX (S-191)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/25/2004

REACH 1

T33S-R15W-S25SE

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-BACKWATER	1	10	2.0	0.35	20	0	30	70	0	0	0	0
POOL-DAMMED	1	7	3.3	0.50	23	0	0	100	0	0	0	0
POOL-LATERAL SCOUR	13	227	7.1	0.93	1,581	0	0	33	49	17	0	0
POOL-PLUNGE	1	9	7.0	1.00	63	0	0	50	40	10	0	0
RAPID/BOULDERS	3	68	6.7	0.33	439	0	0	13	73	13	0	0
RIFFLE	12	246	7.0	0.33	1,700	0	0	28	62	11	0	0
STEP/COBBLE	2	6	4.1	0.18	33	0	0	45	45	10	0	0
STEP/LOG	1	5	8.0	0.40	39	0	0	50	40	10	0	0
Total:	34	578	6.6	0.58	3,899	0	Avg: 1	34	52	13	0	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	17	2.7	0.43	43	1.11%	0	0.0
Scour Pools	14	236	7.1	0.94	1,644	42.17%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	12	246	7.0	0.33	1,700	43.61%	0	0.0
Rapids	3	68	6.7	0.33	439	11.25%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	11	5.4	0.25	73	1.86%	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>	<u># / Km</u>	
All Pools:	16	27.7	80
Pools >=1m deep:	7	12.1	
Complex pools (LWD pieces>=3):	4	6.9	
Pool frequency (channel widths/pool):	3.3		
Residual pool depth (avg):	0.56		

STREAM SUMMARY

BRUSH CREEK SITE B POST-TX (S-191)

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	
34	578	6.6	0.58	3,899	1	34	52	13	0	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	43	1.11%
Scour Pools	1,644	42.17%
Glides	0	0.00%
Riffles	1,700	43.61%
Rapids	439	11.25%
Cascades	0	0.00%
Step/Falls	73	1.86%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 5-SC SITE ID: 191 BRUSH CREEK SITE B POST-TX (S-1)

<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	LP	00	16	BV	T=10C	
3	RB	11	35		T=10C, ACW=6M	
6	LP	00	76.9	CE/		
8	LP	00	105.6		HWY 101 BRIDGE	
9	LP	00	131.6	BV		
11	LP	00	168.6	BC	FT BRIDGE	
14	BW	10	218.6	HS		
15	LP	00	246.6	HS	3 LOGS, SALMON CARCA	
16	RI	00	269.6	HS	4 LOGS	
19	RI	00	333.1	HS	2 LOGS	
20	RI	00	358.1	BC, HS		
21	RI	00	379.1	HS	9 LOGS	
23	RI	00	400.1	HS	LOG, 2 BLDRS	
24	LP	00	410.8	HS		
25	RI	01	438.8	HS	LOGS	
26	PP	01	447.8		2 SALMON CARCASSES	
27	SL	01	452.7	HS	2 LOGS	
29	LP	01	483.7	CE/		
31	SC	02	483.7		H=0.3M	
34	RI	00	497.5		EOS	



Name: PORT ORFORD
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 383745 E 4726307 N
 Caption: BRUSH CREEK SITE B RESTORATION SITE - OCEAN BASIN