

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

STREAM: Brush Creek Site B (SC-191)  
BASIN: Pacific Ocean  
SURVEY TYPE: Post-Tx  
DATE: March 6, 2005  
SURVEY CREW: Jennifer Schmitt, Neil Jensen  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 27.5 km<sup>2</sup>  
USGS MAPS: Port Orford  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Brush Creek habitat survey extended 501 meters. The channel was constrained by high terraces and land use in a broad valley floor. The average valley width index was 3.3 (range: 1.3-7.0). Land use for the reach was state park and large (30-50 cm dbh) trees. The average unit gradient was 1.5 percent. Riffles (44%) and scour pools (37%) dominated stream habitat. Gravel (52%) and sand (29%) dominated stream substrate. Wood volume was high at 31.7 m<sup>3</sup>/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)

<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	3.3	VWI Range:	1.3 - 7

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	501	3,153	0
Secondary Channel	92	261	0
Off-Channel Units	42	84	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 4.7	Width: 10.8	24.0 ( 14.3 - 31.5 )	26.2 ( 21.2 - 31.1 )
Depth: 0.41	Height: 0.6	1.1 ( 1.1 - 1.22 )	1.3 ( 1.2 - 1.42 )

W:D ratio: 19.1

Entrenchment (ACW:FPW ratio): 2.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 5.4

Average Unit Gradient: 1.5%

Habitat Units/100m (primary channel length): 6.8

Water temperature (°C): 10.0 - 10.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	LT
Riparian Vegetation:	D30	G

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):	184	36.7
Volume (m <sup>3</sup> ):	159	31.7
Key pieces (>=12m x 0.60m):	8	1.6

OREGON DEPT OF FISH AND WILDLIFE

BRUSH CREEK SITE B POST-TX (5-SC, 191)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/6/2005

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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	28	6.2	0.45	174	0	0	15	70	10	5	0
POOL-BACKWATER	1	6	1.7	0.85	10	0	80	15	0	5	0	0
POOL-DAMMED	2	16	3.0	0.33	52	0	13	70	10	8	0	0
POOL-ISOLATED	1	10	2.3	0.40	22	0	55	45	0	0	0	0
POOL-LATERAL SCOUR	8	185	6.0	0.81	1,294	0	28	36	28	3	5	0
RAPID/BOULDERS	5	105	3.6	0.17	407	0	0	15	75	10	0	0
RIFFLE	9	184	4.9	0.21	1,005	0	2	18	77	3	1	0
RIFFLE W/ POCKETS	5	94	5.5	0.46	521	0	2	21	76	0	1	0
STEP/COBBLE	1	4	1.7	0.10	7	0	10	80	5	5	0	0
STEP/LOG	1	4	2.0	0.10	7	0	5	65	10	20	0	0
<b>Total:</b>	<b>34</b>	<b>635</b>	<b>4.7</b>	<b>0.41</b>	<b>3,499</b>	<b>0</b>	<b>Avg: 13</b>	<b>29</b>	<b>52</b>	<b>5</b>	<b>2</b>	<b>0</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	4	31	2.5	0.48	84	2.39%	0	0.0	
Scour Pools	8	185	6.0	0.81	1,294	37.00%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	14	278	5.2	0.30	1,526	43.62%	0	0.0	
Rapids	5	105	3.6	0.17	407	11.63%	0	0.0	
Cascades	1	28	6.2	0.45	174	4.96%	0	0.0	
Step/Falls	2	8	1.9	0.10	14	0.40%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	12	18.9	23.9
Pools >=1m deep:	2	3.1	4.0
Complex pools (LWD pieces>=3):	7	11.0	14.0
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.48		

# Comment Summary

## Restoration Monitoring Sites 2005

**MONITORING AREA: 5-SC      SITE ID: 191      BRUSH CREEK SITE B POST-TX**

<b>UNIT#</b>	<b>TYPE</b>	<b>CHAN</b>	<b>DIST. (m)</b>	<b>COMMENTS</b>	<b>NOTE ESTIMATOR</b>	<b>NOTE NUMERATOR</b>
1	RI	00	19.1		REDD	
2	LP	01	33.5	TJ/		
3	RB	11	33.5		ACW = 5.5	
5	LP	00	81.3	CE/	SALMON CARCASS, REDD	
6	LP	00	105.2	BC	HWY 101, SALMON CARCASS	
7	RP	00	130.2	DJ	SALMON CARCASS	
9	RP	00	166.3	HS	LOGS	
10	RP	00	178.1	BC	FOOT BRIDGE	
11	RI	00	203.1		REDDS	
12	RI	01	232.2	HS, DJ	REDDS, LOGS	
13	IP	10	232.2	WL	ROUGH SKIN NEWT	
14	LP	00	261.1	HS	LOGS, REDDS, STEELHEAD	
15	RI	00	275.2	HS	REDDS, LOGS	
16	LP	00	328.4	HS	REDDS, LOGS	
17	RI	00	353.4	HS, SS/	COHO CARCASS, CUTTHROAT	
18	RI	01	378.4	BC	FOOT BRIDGE, REDDS	
19	BW	10	378.4		REDDS	
20	RI	00	403.4	HS, DJ	LOGS	
21	RP	00	424.2	HS	LOGS, REDDS, SALMON CARCASS	
22	RB	01	448.6	HS	LOGS, REDDS, SALMON CARCASS	
23	CB	01	476.6	HS, DJ	LOGS, JAM IS 6 x 20 x 4	

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: 5-SC      SITE ID: 191      BRUSH CREEK SITE B POST-TX

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
24	RB	01	501.2	HS	LOGS, REDDS	
32	LP	03	501.2	WL	RSN	
33	LP	03	501.2	CE/, WL	RSN	



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