

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

STREAM: Brush Creek Site A (S-190)
BASIN: Pacific Ocean
SURVEY TYPE: Post-Tx
DATE: June 28, 2004
SURVEY CREW: Greg Ryder, Justin Gerding
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 657 meters. The channel was constrained by terraces and land use in a broad valley floor. The average valley width index was 4.5 (range: 1.5-9.0). Land use for the reach was state park and large (30-50 cm dbh) trees. The average unit gradient was 1.2 percent. Scour pools (44%), glides (24%) and riffles (20%) dominated stream habitat. Gravel (66%) dominated stream substrate. Wood volume was low at 5.8 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-S26SW

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	4.5	VWI Range:	1.5 - 9

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 (m ²)	Dry Units
Primary	657	5,133	0
Secondary	69	509	2

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 6	First Terrace <i>n</i> = 6
Width: 7.7	Width: 13.6	28.9 (10.8 - 70)	31.1 (13.8 - 71)
Depth: 0.49	Height: 0.7	1.4 (1.3 - 1.5)	2.3 (1.8 - 3.5)

W:D ratio: 19.2

Entrenchment (ACW:FPW ratio): 2.5

Stream Flow Type: LF

Habitat Units/100m (total channel length): 3.9

Average Unit Gradient: 1.2%

Habitat Units/100m (primary channel length): 4.3

Water temperature (°C): 14.0 - 14.0

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:	4%	Reach avg: 76%
Undercut Banks:	19%	Range: 25 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	42	6.4
Volume (m ³):	38	5.8
Key pieces (>=12m x 0.60m):	4	0.6

OREGON DEPARTMENT OF FISH AND WILDLIFE

BRUSH CREEK SITE A POST-TX (S-190)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

6/28/2004

REACH 1

T33S-R15W-S26SW

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
DRY CHANNEL	1	22	5.1	0.00	111	0	0	20	50	20	10	0
DRY UNIT	1	32	11.1	0.00	352	0	0	16	71	11	1	0
GLIDE	4	143	9.4	0.26	1,330	2	1	21	71	4	3	0
POOL-LATERAL SCOUR	11	318	7.4	0.94	2,463	28	6	25	56	6	5	2
RIFFLE	8	189	6.6	0.23	1,153	5	0	11	76	11	2	0
STEP/COBBLE	3	22	9.4	0.15	232	0	3	15	73	8	0	0
Total:	28	725	7.7	0.49	5,641	35	Avg: 3	19	66	8	3	1

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	11	318	7.4	0.94	2,463	43.66%	28	1.1
Glides	4	143	9.4	0.26	1,330	23.57%	2	0.2
Riffles	8	189	6.6	0.23	1,153	20.44%	5	0.4
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	22	9.4	0.15	232	4.12%	0	0.0
Dry	2	54	8.1	0.00	463	8.21%	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:	11	15.2	16.8
Pools >=1m deep:	5	6.9	7.6
Complex pools (LWD pieces>=3):	5	6.9	7.6
Pool frequency (channel widths/pool):	4.8		
Residual pool depth (avg):	0.75		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	467
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	0
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	0.0	0.0	0.0	0.0	1.0	0.0	1.0
15-30cm	0.0	3.7	0.0	0.0	1.0	0.3	1.0	4.0
30-50cm	0.0	1.7	0.0	0.0	0.3	0.3	0.3	2.0
50-90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	6.0	0.0	0.0	1.3	1.7	0.4	2.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	78		13		25	
Shrub cover	29		2		7	
Grass/forb cover	53		33		27	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	50		0		33	
High terrace	0		33		33	
Low terrace	50		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		67		33	
Riprap	0		0		0	
Surface slope (%)	28		0		25	

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		
17	LF	1	LT	10	50	50	50	Conifer							WITHIN CAMP GROVE
								Hardwood				1			
17	LF	2	HT	0	0	0	60	Conifer							
								Hardwood							
17	LF	3	HT	0	0	0	50	Conifer							50% ASPHALT
								Hardwood							
17	RT	1	HS	50	60	60	40	Conifer							
								Hardwood		2					
17	RT	2	RB	0	0	0	0	Conifer							100% PAVEMENT HWY 101
								Hardwood							
17	RT	3	HS	90	20	30	30	Conifer							
								Hardwood							
21	RT	1	LT	15	90	5	95	Conifer							
								Hardwood		1	4				
21	RT	2	RB	0	0	0	20	Conifer							
								Hardwood							
21	LF	3	HT	0	15	0	10	Conifer							
								Hardwood							
21	LF	1	LT	15	100	30	40	Conifer							
								Hardwood		1	1	1			
21	LF	2	HT	0	25	0	100	Conifer							
								Hardwood							
21	RT	3	RB	0	15	0	30	Conifer							
								Hardwood							
24	LF	2	RB	0	50	10	10	Conifer							CAMPGROUN D RB
								Hardwood							
24	LF	1	HS	25	70	10	50	Conifer							
								Hardwood		3					
24	LF	3	HS	60	100	10	40	Conifer			3	1			
								Hardwood	3	1	1				
24	RT	1	HS	55	100	20	40	Conifer							
								Hardwood		4					
24	RT	2	RB	0	0	0	10	Conifer							
								Hardwood							
24	RT	3	RB	0	0	0	0	Conifer							GRAVEL PARKING LOT
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 5-SC SITE ID: 190 BRUSH CREEK SITE A 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	01	31.8	BC, CS	T=14 DEG C AT 9:57	10T 0381679 4726864
2	DU	02	31.8	CS/CS		
3	SC	00	43.5	LI/		
4	LP	01	114.3		LAST 10M HAS 90PERCE	CUTT, TROUT FRY
6	LP	03	114.3			02 FRY
8	LP	00	135.5	HS	UNIT 8 IS START SITE A	START OF ESTABLISHED SU
9	RI	00	155.2	HS		SITE 2
10	LP	00	196.1	HS		SITE 3
14	LP	00	247.3	HS, DJ		SITE 4
19	LP	00	359.5			LAMPREY REDD
20	RI	00	396.5			OLD STEELHEAD REDD
21	GL	00	446.5			OLD STEELHEAD REDD
23	GL	00	513.7	BC		LAMPREY REDD (OLD FOOT
24	GL	00	534.5	CS		
25	LP	00	571.2	CS/CS		
26	RI	00	592.2	CS/		
27	LP	00	612.3	CS/		
28	RI	00	656.6	CS/	T=14 DEG C AT 15:40	END ON LEFT BANK ALDER



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