

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

STREAM: Buck Creek (L73)
BASIN: Clatskanie River
SURVEY TYPE: Post-Tx
DATE: February 11, 2002
SURVEY CREW: Rachel Werner, Sean Allen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 5.7 km²
USGS MAPS: Delena
ECOREGION: Coast Range Astoria Willapa

GENERAL DESCRIPTION:

The Buck Creek habitat survey extended 418 meters. The channel was constrained by hillslopes in an open V-shaped valley floor. The average valley width index was 1.7 (range: 1.1 – 2.0). Land uses for the reach were second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 4.2 percent. Dammed and backwater pools (55%) and riffles (24%) dominated stream habitat. Bedrock (31%) and gravel (24%) dominated stream substrate. Wood volume was low at 17.8 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

The crew noted several habitat structures as well as evidence of beaver activity during the survey.

REACH

T6N-R3W-S14NW

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	0%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	100%	Wide Floodplain	0%
Valley Width Index	1.7	VWI Range:	1.1 - 2

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	418	2,189	0
Secondary	57	240	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 4.8	Width: 10.2	16.9 (6.5 - 23.5)	(-)
Depth: 0.35	Height: 0.5	1.0 (1 - 1)	(-)

W:D ratio: 20.4
 Stream Flow Type: MF
 Average Unit Gradient: 4.2%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.7
 Habitat Units/100m (total channel length): 9.0
 Habitat Units/100m (primary channel length): 10.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	YT
Riparian Vegetation:	D15	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):	102	24.4
Volume (m ³):	75	17.8
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

BUCK CREEK POST-TX (L-73)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/11/2002

REACH		T6N-R3W-S14NW					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	
POOL-BACKWATER	1	5	1.6	0.60	8	0	30	70	0	0	0	0	
POOL-BEAVER DAM	2	42	10.3	0.90	416	0	15	43	30	13	0	0	
POOL-DAMMED	6	92	8.7	0.68	901	0	14	20	25	16	4	21	
POOL-PLUNGE	4	22	3.0	0.83	71	0	4	6	27	21	11	31	
POOL-STRAIGHT SCOUR	1	14	7.4	0.50	100	0	10	20	60	0	0	10	
RAPID/BEDROCK	1	25	3.5	0.20	88	0	0	0	10	10	0	80	
RAPID/BOULDERS	5	90	1.8	0.22	168	0	1	5	27	35	16	16	
RIFFLE	8	142	3.0	0.17	421	0	3	8	43	26	3	17	
RIFFLE W/ POCKETS	2	30	4.3	0.20	163	0	20	33	5	0	3	40	
STEP/BEAVER DAM	1	2	2.8	0.30	4	0	5	5	10	20	25	35	
STEP/BEDROCK	7	11	5.4	0.11	77	0	2	4	12	7	6	70	
STEP/LOG	5	2	5.8	0.13	13	0	10	14	14	17	12	33	
Total:	43	476	4.8	0.35	2,430	0	Avg: 7	13	24	17	7	31	

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	9	139	8.2	0.72	1,325	54.54%	0	0.0	
Scour Pools	5	36	3.8	0.76	171	7.04%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	172	3.3	0.18	584	24.05%	0	0.0	
Rapids	6	115	2.1	0.22	255	10.50%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	13	15	5.3	0.13	94	3.87%	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:	14	29.4	33.5
Pools >=1m deep:	2	4.2	4.8
Complex pools (LWD pieces>=3):	5	10.5	12.0
Pool frequency (channel widths/pool):	3.3		
Residual pool depth (avg):	0.62		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 73 BUCK CREEK POST-TX (L-73)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	BP	00	18	BV, SS/	
2	RB	01	34.1	BV	
3	SL	01	34.5	BV	H = .4
4	PP	01	37.3	BV	
5	SD	01	38.9	BV	H = .6
6	BP	01	62.4	BV	
7	RI	02	62.4	BV	
8	SR	02	62.4		H = .5
10	RI	00	83.6	/SS	
11	RB	00	114.1	SS/	
13	SL	00	132.9		H = .5
14	DP	00	141	BV	
15	SL	00	141.6	BV	
16	DP	00	152.3	HS	H = .4
18	RB	01	177.5	BV	
19	DP	02	177.5	HS	
20	SR	02	177.5		H = .5
21	DP	00	202.5	HS, BV	
22	SL	00	202.9	HS, BV	H = .5
25	PP	00	243.1	HS	
26	SR	00	243.6		H = .4

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 73 BUCK CREEK POST-TX (L-73)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
27	RP	01	264.3	HS	
29	RI	00	281.1	HS	
30	SP	00	294.6	HS	
31	SL	00	295		H = .35
32	RI	00	296.9	/SS, HS	
34	SR	00	302.6		H = .6
35	DP	00	311.1	HS	
37	SR	00	326.9	/SS	H = .4
38	RI	00	358.2	HS	
39	SR	00	360.2		H = .5
42	RR	00	397.5	SS/	
43	RI	00	418.3	SS/	