

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

STREAM: Bewley Creek (N111)
BASIN: Tillamook River
SURVEY TYPE: Post-Tx
DATE: February 14, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 15.5 km²
USGS MAPS: Tillamook, Netarts
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Bewley Creek habitat survey extended 757 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.6 (range: 4.0-6.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.9 percent. Scour pools (72%) and riffles (16%) dominated stream habitat. Gravel (28%) and cobble (21%) dominated stream substrate. Wood volume was low at 8.0 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

T2S-R10W-S23NE

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	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	4.6	VWI Range:	4 - 6

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	757	4,669	0
Secondary	103	342	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.7	Width: 7.6	16.7 (11.4 - 25.6)	18.2 (13 - 27)
Depth: 0.58	Height: 0.7	1.3 (1.2 - 1.4)	1.5 (1.3 - 1.8)

W:D ratio: 11.7

Entrenchment (ACW:FPW ratio): 2.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 5.7

Average Unit Gradient: 0.9%

Habitat Units/100m (primary channel length): 6.5

Water temperature (°C): 5.5 - 5.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	C50

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):	65	8.6
Volume (m ³):	61	8.0
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

BEWLEY CR POST-TX (N111)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/14/2002

REACH		T2S-R10W-S23NE					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-ALCOVE	1	18	4.5	1.00	81	0	30	70	0	0	0	0
POOL-BACKWATER	2	16	6.0	0.65	94	0	20	50	20	0	10	0
POOL-DAMMED	2	21	7.0	0.80	146	0	3	13	28	18	13	28
POOL-ISOLATED	1	4	1.5	0.30	5	0	30	70	0	0	0	0
POOL-LATERAL SCOUR	17	404	6.5	0.78	2,616	0	3	19	30	19	11	17
POOL-PLUNGE	3	40	5.6	0.77	236	0	2	13	27	28	25	5
POOL-STRAIGHT SCOUR	7	128	5.8	0.71	774	0	2	12	22	15	5	44
RAPID/BOULDERS	2	34	6.5	0.23	227	0	0	5	23	50	23	0
RIFFLE	10	156	4.8	0.25	723	0	0	5	41	30	9	16
RIFFLE W/ POCKETS	1	36	2.5	0.20	90	0	5	15	45	30	5	0
STEP/BOULDERS	2	3	6.0	0.25	19	0	0	0	15	15	70	0
STEP/LOG	1	1	1.9	0.10	1	0	10	20	20	10	20	20
Total:	49	860	5.7	0.58	5,011	0	Avg: 4	16	28	21	13	17

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	6	58	5.3	0.70	326	6.51%	0	0.0
Scour Pools	27	572	6.2	0.76	3,625	72.33%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	11	192	4.6	0.24	813	16.22%	0	0.0
Rapids	2	34	6.5	0.23	227	4.53%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	4	4.6	0.20	20	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			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	33	38.4	43.6
Pools >=1m deep:	6	7.0	7.9
Complex pools (LWD pieces>=3):	5	5.8	6.6
Pool frequency (channel widths/pool):	3.4		
Residual pool depth (avg):	0.57		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 111 BEWLEY CR POST-TX (N111)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
10	SL	01	150		H = .3
16	LP	00	297.9	DJ, HS	LOGS
20	SP	00	392.8	SS/	
25	LP	01	481.3	HS	LOGS
26	AL	10	481.3	HS	
28	SB	00	493.7	HS	BOULDER WEIR
29	DP	01	502.5	HS	LOGS
30	BW	10	502.5	HS	
31	LP	00	521.6	HS	BOULDERS
36	LP	00	593.2	BV, HS	LOGS
39	LP	00	641.3	HS	ROCK
43	SP	00	687.4	HS	LOGS
45	SB	00	700.2	HS	H = .6, BOULDER WEIR
48	RI	01	756.8	SS/	
49	BW	10	756.8	HS	LOGS