

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

STREAM: Big Creek (U126)
BASIN: Smith River
SURVEY TYPE: Pre-Tx
DATE: February 12, 2002
SURVEY CREW: Russ Macal, Loren Stucker
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 25.6 km²
USGS MAPS: Twin Sisters
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Big Creek habitat survey extended 516 meters. The channel was constrained by hillslopes in an open V-shaped valley. The average valley width index was 2.0 (range: 1.1 – 3.0). Land uses for the reach were second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 0.7 percent. Riffles (62%) and scour pools (35%) dominated stream habitat. Bedrock (63%) and boulders (11%) dominated stream substrate. Wood volume was low at 2.7 m³/100m.

COMMENTS:

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

REACH

T21S-R8W-S4SW

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	2.0	VWI Range:	1.1 - 3

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	516	4,234	0
Secondary	12	10	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 8.1	Width: 9.5	12.3 (11.7 - 13.4)	14.2 (13.3 - 15)
Depth: 0.48	Height: 0.7	1.3 (1.2 - 1.6)	3.1 (2.6 - 3.5)

W:D ratio: 14.8
 Stream Flow Type: MF
 Average Unit Gradient: 0.7%
 Water temperature (°C): 5.5 - 5.5

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 4.9
 Habitat Units/100m (primary channel length): 5.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	D15

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):	12	2.3
Volume (m ³):	14	2.7
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

BIG CREEK PRE-TX (U-126)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/12/2002

REACH		T21S-R8W-S4SW					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
CASCADE/BOULDERS	1	12	0.8	0.05	10	0	0	0	5	30	45	20
POOL-LATERAL SCOUR	6	120	7.4	0.81	818	0	0	8	9	12	16	55
POOL-PLUNGE	1	10	11.0	0.80	106	0	0	4	17	29	25	25
POOL-STRAIGHT SCOUR	3	62	8.8	0.82	542	0	0	10	7	3	8	72
RAPID/BEDROCK	1	12	6.5	0.25	77	0	0	0	5	5	5	85
RIFFLE	13	306	8.6	0.32	2,627	0	0	7	11	9	6	67
STEP/BEDROCK	1	7	9.5	0.10	65	0	0	2	2	3	3	90
Total:	26	528	8.1	0.48	4,244	0	Avg: 0	7	9	10	11	63

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	10	191	8.2	0.81	1,465	34.53%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	13	306	8.6	0.32	2,627	61.91%	0	0.0
Rapids	1	12	6.5	0.25	77	1.81%	0	0.0
Cascades	1	12	0.8	0.05	10	0.23%	0	0.0
Step/Falls	1	7	9.5	0.10	65	1.52%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	10	19.0	19.4
Pools >=1m deep:	1	1.9	1.9
Complex pools (LWD pieces>=3):	1	1.9	1.9
Pool frequency (channel widths/pool):	5.6		
Residual pool depth (avg):	0.56		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP SITE ID: 126 BIG CREEK PRE-TX (U-126)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	25		BEGIN AT MOUTH, RB ON RIGHT
5	RI	00	127.3	SS/	<5% FLOW
8	LP	01	179.8	/tj	
13	RI	00	274.2		MORE WHITE WATER
14	SP	00	298.4		SG = 1 SQ M
18	LP	00	364.4		SG = 1 SQ M
21	LP	00	410.7	CE	VWI DUE TO WIDE BEND IN STREAM
26	SP	00	515.7		END SIGN LEFT