

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

STREAM: Bum Creek (U-251)
BASIN: Smith River
SURVEY TYPE: Pre-Tx
DATE: January 28, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.6 km²
USGS MAPS: Gunter
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Bum Creek habitat survey extended 1,106 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 6.0 (range: 4.0-8.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.6 percent. Rapids (45%) and scour pools (27%) dominated stream habitat. Bedrock (47%) and gravel (23%) dominated stream substrate. Wood volume was low at 9.0 m³/100m.

COMMENTS:

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

The crew noted beaver activity during the survey.

REACH 1

T20S-R08W-S13SW

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	6.0	VWI Range:	4 - 8

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	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	1,106	6,284	0
Secondary	39	96	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.7	Width: 9.8	16.4 (10.7 - 22.3)	22.3 (14.3 - 33)
Depth: 0.56	Height: 0.6	1.2 (1 - 1.3)	1.9 (1.6 - 3)

W:D ratio: 17.0
Stream Flow Type: MF
Average Unit Gradient: 1.6%
Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.7
Habitat Units/100m (total channel length): 3.8
Habitat Units/100m (primary channel length): 3.9

Riparian, Bank, and Wood Summary

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

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):	111	10.0
Volume (m ³):	100	9.0
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

BUM CREEK PRE-TX (U-251)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

1/28/2004

REACH 1

T20S-R08W-S13SW

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
CASCADE/BOULDERS	1	11	5.8	0.70	64	0	0	0	0	0	20	80
DRY UNIT	1	10	3.0	0.00	30	0	30	40	30	0	0	0
POOL-ALCOVE	1	20	2.5	0.70	50	0	40	60	0	0	0	0
POOL-DAMMED	2	44	9.5	0.95	414	0	13	58	25	3	3	0
POOL-LATERAL SCOUR	16	295	6.0	0.75	1,695	0	0	7	26	16	7	44
RAPID/BEDROCK	9	313	5.8	0.58	1,745	0	0	1	2	9	3	86
RAPID/BOULDERS	5	191	5.2	0.28	1,120	0	0	12	14	23	13	38
RIFFLE	7	259	4.5	0.30	1,241	0	0	4	57	10	0	29
STEP/LOG	1	2	10.8	0.05	22	0	0	0	0	0	0	100
Total:	43	1,145	5.7	0.56	6,380	0	Avg: 2	10	23	12	5	47

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	3	64	7.1	0.87	464	7.27%	0	0.0
Scour Pools	16	295	6.0	0.75	1,695	26.56%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	7	259	4.5	0.30	1,241	19.46%	0	0.0
Rapids	14	504	5.6	0.47	2,865	44.90%	0	0.0
Cascades	1	11	5.8	0.70	64	1.00%	0	0.0
Step/Falls	1	2	10.8	0.05	22	0.34%	0	0.0
Dry	1	10	3.0	0.00	30	0.47%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	19	16.6	17.2
Pools >=1m deep:	3	2.6	2.7
Complex pools (LWD pieces>=3):	4	3.5	3.6
Pool frequency (channel widths/pool):	6.1		
Residual pool depth (avg):	0.52		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **4-UMP** SITE ID: **251** **BUM CREEK PRE-TX (U-251)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RR	00	35.4		T=8.5C; BLUE/WHITE BU	
4	RI	00	112.9		PINK BUM #2- 8-10 BLDR	
6	LP	00	148.4		PINK BUM #3- 3-4 ALDER	
7	RR	01	202.1		BUM #4-6 LOGS/JAMS	
9	LP	00	212.4	CS/	SG=4	
10	RI	00	256.4	SG=16		
11	LP	00	293.4	/SS		
12	RR	01	362.4	/SS	BLUE LINE BUM #5- 5 LO	
13	RB	11	362.4		T=8C; ACW=4M	
14	LP	00	393.9		BUM #7- 5 LOGS	
17	RR	00	484.1		BUM #7- UPSTREAM DEF	
19	RB	00	542.3		BUM #9-4 LOGS; BUM #6-	
21	RB	00	610.8		BUM #10-BLDR DEFL UP	
22	LP	00	633.6		BUM #10-6 DEFL DOWNS	
23	RB	00	681.6		BUM#7-3-4 LOGJAM; BUM	
26	SL	00	744.5		H=1.3M	
27	DP	00	759.8		SG=8	
28	LP	00	778.1	BV/SS		
29	CB	00	789.1	HS; BV		
31	AL	10	818.1	BV		
32	LP	00	833.4	BV		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP SITE ID: 251 BUM CREEK PRE-TX (U-251)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
33	RI	00	845.9	BV		
34	LP	00	861.8	BV		
35	RI	00	881.6	BV		
36	LP	00	897.6	BV		
38	LP	00	933.8		SG=4	
39	RI	00	1020.4		SG=6	
41	RR	00	1058.4		SG=4	
42	LP	00	1070.4	HS	5 ROCK WEIRS	



Name: GUNTER
 Date: 1/5/2004
 Scale: 1 inch equals 2000 feet

Location: 10 452370 E 4852153 N
 Caption: BUM CREEK RESTORATION SITE - SMITH BASIN