

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

STREAM: Buck Creek (MC-218)  
BASIN: Alsea River  
SURVEY TYPE: Post-Tx  
DATE: February 4, 2003  
SURVEY CREW: Jim Andrews, April Waters  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 31.9 km<sup>2</sup>  
USGS MAPS: Cannibal Mtn.  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Buck Creek habitat survey extended 554 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.7 (range: 2.7-15.7). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.6 percent. Riffles (50%) and scour pools (36%) dominated stream habitat. Cobble (29%) and gravel (25%) dominated stream substrate. Wood volume was very high at 93.3 m<sup>3</sup>/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

T15S-R10W-S15SW

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	7.7	VWI Range:	2.7 - 15.7

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	554	3,895	0
Secondary	117	301	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 6.0	Width: 9.4	23.8 ( 12.3 - 37.2 )	30.8 ( 18.2 - 47 )
Depth: 0.52	Height: 0.7	1.5 ( 1.3 - 1.7 )	1.9 ( 1.7 - 2.5 )

W:D ratio: 12.7

Stream Flow Type: MF

Average Unit Gradient: 1.6%

Water temperature (°C): 8.5 - 8.5

Entrenchment (ACW:FPW ratio): 2.7

Habitat Units/100m (total channel length): 5.4

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

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D30	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):	180	32.5
Volume (m <sup>3</sup> ):	516	93.3
Key pieces (>=12m x 0.60m):	25	4.5

OREGON DEPARTMENT OF FISH AND WILDLIFE

BUCK CREEK POST-TX (MC-218)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/4/2004

REACH 1

T15S-R10W-S15SW

REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	4	0.7	0.05	3	0	43	33	5	19	0	0
POOL-LATERAL SCOUR	10	197	6.4	0.96	1,327	0	7	24	22	23	6	19
POOL-PLUNGE	1	9	8.0	0.30	73	0	0	5	45	30	15	5
POOL-STRAIGHT SCOUR	1	19	5.0	0.90	96	0	6	28	22	28	11	6
RAPID/BOULDERS	4	85	6.2	0.41	528	0	13	8	16	49	9	6
RIFFLE	14	317	5.7	0.37	1,927	0	1	7	31	32	7	21
RIFFLE W/ POCKETS	1	30	6.0	0.40	182	0	0	5	11	42	21	21
STEP/BEDROCK	1	0	1.6	0.10	1	0	0	5	5	0	5	86
STEP/COBBLE	2	5	6.5	0.18	23	0	0	7	32	21	5	35
STEP/LOG	1	3	12.0	0.25	36	0	0	38	38	25	0	0
<b>Total:</b>	<b>36</b>	<b>670</b>	<b>6.0</b>	<b>0.52</b>	<b>4,196</b>	<b>0</b>	<b>Avg: 5</b>	<b>14</b>	<b>25</b>	<b>29</b>	<b>7</b>	<b>19</b>

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	0	0			0	0.00%	0	0.0
Scour Pools	12	225	6.5	0.90	1,496	35.65%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	15	347	5.7	0.37	2,110	50.27%	0	0.0
Rapids	4	85	6.2	0.41	528	12.59%	0	0.0
Cascades	1	4	0.7	0.05	3	0.07%	0	0.0
Step/Falls	4	8	6.7	0.18	60	1.42%	0	0.0
Dry	0	0			0	0.00%	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:	12	17.9	21.7
Pools >=1m deep:	3	4.5	5.4
Complex pools (LWD pieces>=3):	5	7.5	9.0
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.60		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

**MONITORING AREA: 2-MC      SITE ID: 218      BUCK CREEK POST-TX (MC-218)**

<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	10.8			START T=7.5C
2	RB	01	31.8	WL; HS		RIGHT CHANNEL; WL=DE
3	LP	01	45.6	BV		RIGHT CHANNEL
4	RI	01	72.6			RIGHT CHANNEL
5	SC	02	72.6			LEFT CHANNEL
6	LP	02	72.6			LEFT CHANNEL
7	RI	02	72.6			LEFT CHANNEL
8	RI	02	72.6	TJ/		OFF LEFT CHANNEL
9	RI	11	72.6			ACW=1.4M; T=8C; 5 % OF
10	LP	00	108	SS/		LIVE FISH ADULT
11	RI	00	137.3	HS		
12	RI	00	160.8			6M WETTED WIDTH
13	LP	00	186	WL		
14	PP	00	195.1			2M LONG PTC
15	SC	00	195.7	WL		H=0.25M
16	RI	01	215.7	TJ/		
17	CB	11	215.7			T=8.5C; ACW=0.95; 2% O
18	RI	00	243.7	HS		
20	SL	00	272.1	DJ; SS/		DJ CAUSING STEP
21	LP	00	295.3	3Msq. SG		2 CARCASSES-COHO?
22	RI	00	323	BV		METRC@STARTUNIT; AC

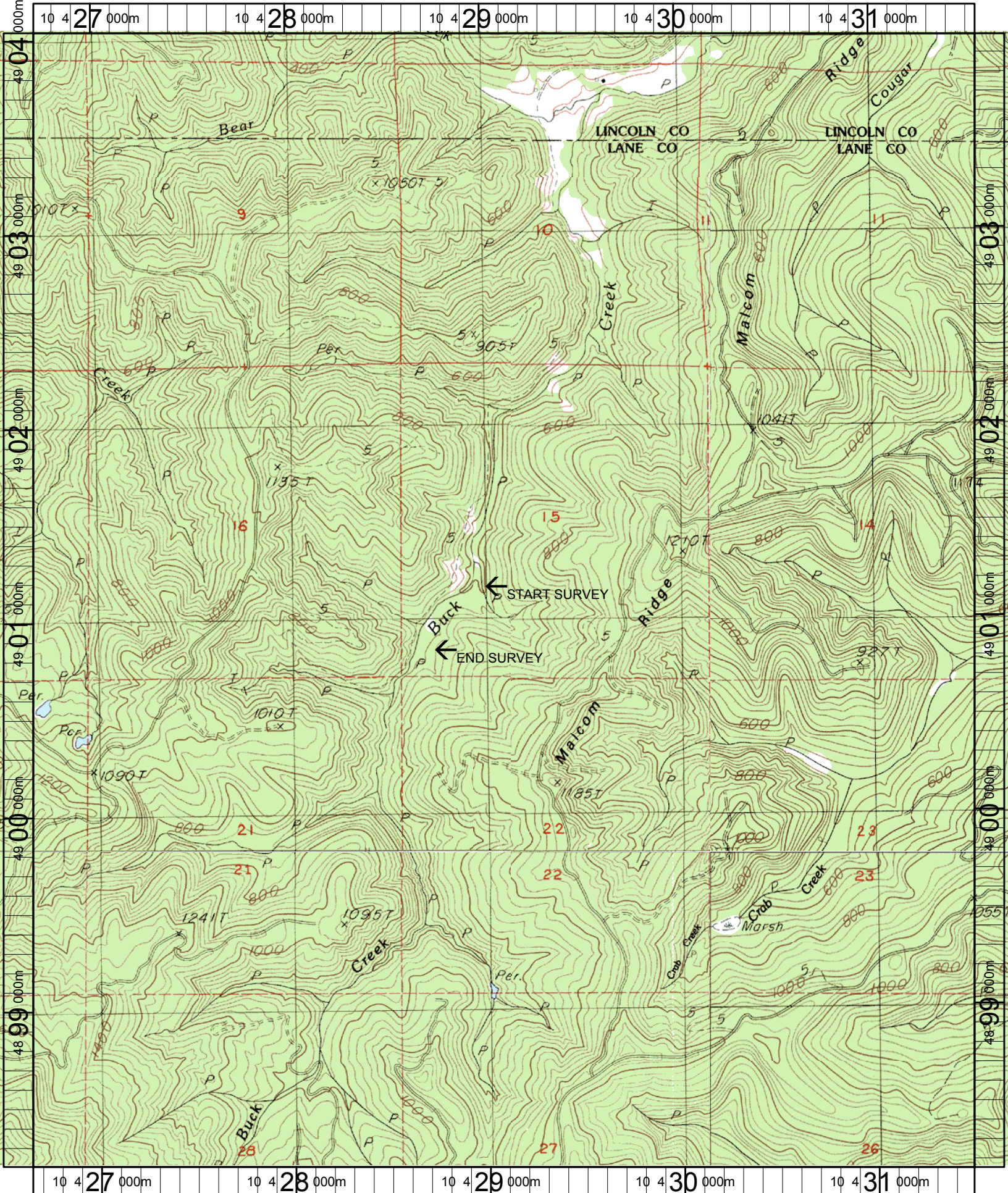
# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC**      SITE ID: **218**      **BUCK CREEK POST-TX (MC-218)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
23	RI	01	341.2	WL		RIGHT CHANNEL
24	RB	02	341.2			LEFT CHANNEL
25	RB	00	357.4	WL		
26	LP	00	392.6	2Msq SG		
27	RP	00	423	BV; RC		METRIC@STARTUNIT; W
28	SP	00	442.2			7-8 DEEP POCKETS
29	RB	01	471.4	HS; /TJ BV		0.9M DEEP; 2x1MPOCKET
30	SR	11	471.4	WL		TRIB 20% FLOW OF BUC
31	LP	00	494.7			CARCASS
35	RI	02	545.1	/TJ		TRIB UNIT FOR U35; ACW
36	LP	00	553.5	WL		END T=8.5C; 3M PTC





Name: CANNIBAL MT  
Date: 7/22/2004  
Scale: 1 inch equals 2000 feet

Location: 10 429094 E 4901102 N  
Caption: BUCK CREEK RESTORATION SITE - ALSEA BASIN