

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: July 17, 2003
SURVEY CREW: Lanoah Babcock, Brock Jonasson
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 31.9 km²
USGS MAPS: Cannibal Mtn.
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Buck Creek habitat survey extended 514 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.6 (range: 4.5-7.5). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.7 percent. Scour pools (43%) and rapids (38%) dominated stream habitat. Bedrock (36%) and cobble (25%) dominated stream substrate. Wood volume was very high at 51.2 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

OREGON DEPARTMENT OF FISH AND WILDLIFE

BUCK CREEK POST-TX (MC-218)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/17/03

REACH 1		T15S-R10W-S15NW					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	
POOL-LATERAL SCOUR	9	176	5.7	0.63	1,030	27	2	10	14	19	16	39	
POOL-PLUNGE	1	11	5.4	0.55	59	0	0	10	10	30	10	40	
POOL-STRAIGHT SCOUR	1	16	5.3	0.40	85	3	0	10	10	50	10	20	
RAPID/BEDROCK	6	126	4.3	0.18	571	14	0	6	6	14	24	50	
RAPID/BOULDERS	6	131	3.5	0.13	462	17	0	9	14	41	19	17	
RIFFLE	6	132	4.4	0.13	516	16	3	9	13	39	27	8	
STEP/BEDROCK	3	5	3.8	0.05	11	0	0	0	0	0	0	100	
Total:	32	597	4.6	0.29	2,734	77	Avg 1	8	11	25	18	36	

HABITAT SUMMARY										83
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	11	203	5.6	0.60	1,174	42.94%	30	2.6		
Glides	0	0			0	0.00%	0	0.0		
Riffles	6	132	4.4	0.13	516	18.86%	16	3.1		
Rapids	12	257	3.9	0.15	1,033	37.79%	31	3.0		
Cascades	0	0			0	0.00%	0	0.0		
Step/Falls	3	5	3.8	0.05	11	0.41%	0	0.0		
Dry	0	0			0	0.00%	0	0.0		
Culverts	0	0			0	0.00%	0	0.0		

POOL SUMMARY		
	Total	# / Km
All Pools:	11	18.4
Pools >=1m deep:	1	1.7
Complex pools (LWD pieces>=3):	2	3.4
Pool frequency (channel widths/pool):	5.7	
Residual pool depth (avg):	0.51	

STREAM SUMMARY

BUCK CREEK POST-TX (MC-218)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
32	597	4.6	0.29	2,734	1	8	11	25	18	36	77

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	1,174	42.94%
Glides	0	0.00%
Riffles	516	18.86%
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Cascades	0	0.00%
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Dry	0	0.00%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	1158
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.3	2.0	0.0	3.3	0.0	4.0	0.3	9.3
15-30cm	0.0	3.0	0.0	0.7	0.0	1.7	0.0	5.3
30-50cm	0.0	2.0	0.3	1.3	0.0	0.7	0.3	4.0
50-90cm	0.7	0.3	0.0	0.0	0.0	0.0	0.7	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	7.3	0.3	5.3	0.0	6.3	0.4	6.3

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	88		65		60	
Shrub cover	39		53		55	
Grass/forb cover	53		38		35	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		33		50	
High terrace	50		67		50	
Low terrace	0		0		0	
Floodplain	17		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	11		14		16	

Summary of Riparian Zone (0-30m) for all reaches 3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	1158
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3 <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	9.3
15-30cm	0.0	5.3
30-50cm	0.3	4.0
50-90cm	0.7	0.3
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
8	RT	1	HT	0	95	5	90	Conifer							
								Hardwood			1	1			
8	RT	2	HT	1	0	0	100	Conifer							
								Hardwood							
8	LF	2	HT	0	70	70	10	Conifer							
								Hardwood							
8	LF	1	FP	3	95	5	90	Conifer	1				1		
								Hardwood		1					
8	RT	3	HS	3	0	0	100	Conifer							
								Hardwood							
8	LF	3	HT	0	50	70	10	Conifer							
								Hardwood			2				
16	RT	2	HS	40	90	70	20	Conifer							
								Hardwood	2						
16	RT	3	HS	45	70	80	10	Conifer							
								Hardwood	5	1					
16	RT	1	HS	35	90	60	30	Conifer							
								Hardwood	6	3					
16	LF	3	HT	0	90	10	80	Conifer							
								Hardwood			2	2			
16	LF	2	HT	0	90	5	80	Conifer				1			
								Hardwood			2				
16	LF	1	HT	0	90	5	90	Conifer					1		
								Hardwood			1				
25	LF	2	HT	0	70	80	10	Conifer							
								Hardwood	3	2	2				
25	LF	3	HT	0	60	80	5	Conifer							
								Hardwood	2						
25	RT	1	HS	30	90	90	5	Conifer							
								Hardwood		1	2				
25	RT	2	HS	40	70	90	5	Conifer							
								Hardwood	5						
25	RT	3	HS	45	90	90	5	Conifer							
								Hardwood	5						
25	LF	1	HT	0	70	70	10	Conifer							
								Hardwood		4	2				

Comment Summary

Oregon Plan Monitoring Sites 2003

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

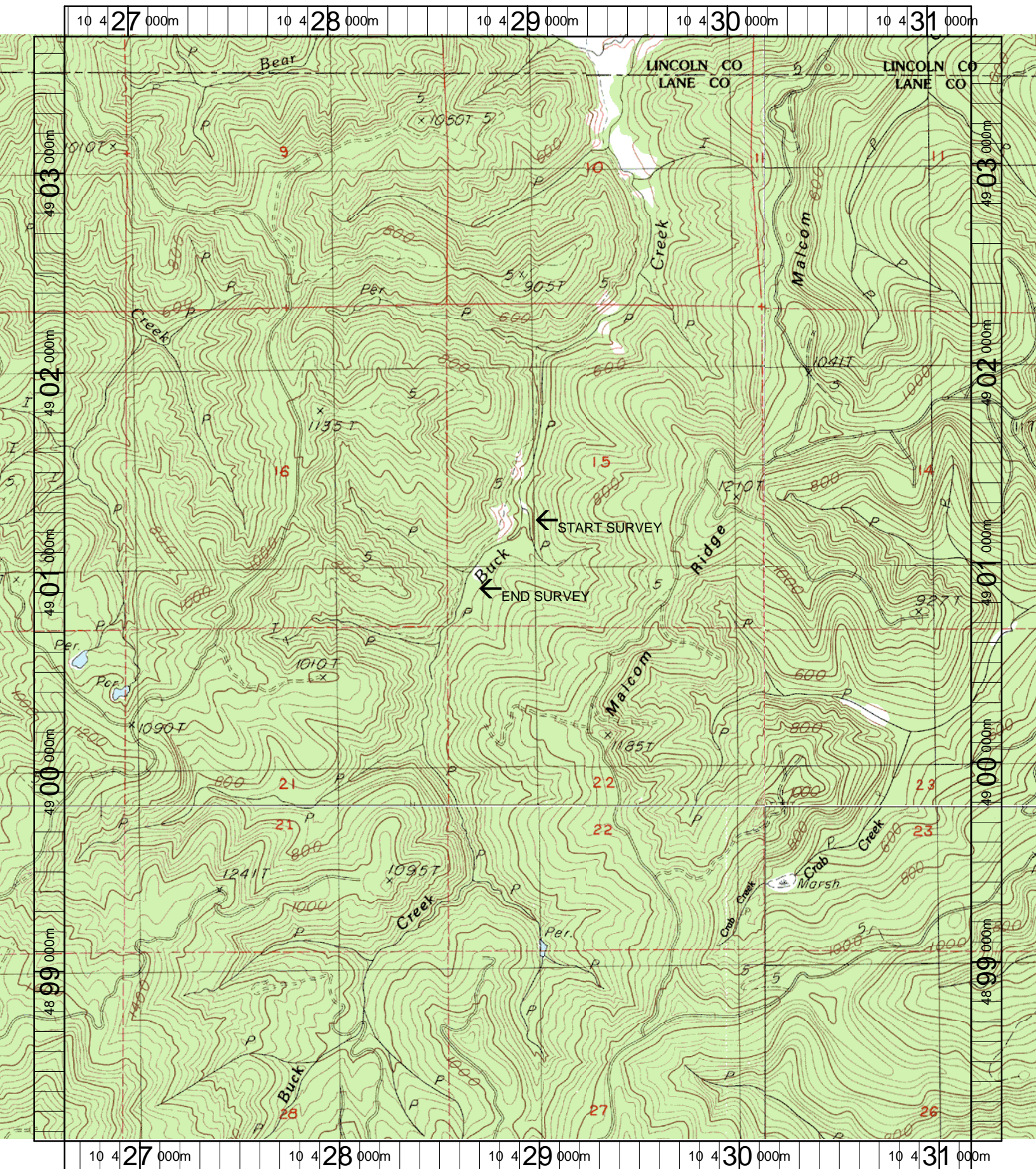
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	01	10.4		T= 13.5 DEG C @ 11:00 A	START 11:00
2	RB	01	35.7	HS		.4M POCKET
4	RI	02	70.7	WL		CF, FISH
5	RI	02	70.7	TJ/	TJ/	
7	LP	00	96	WL, SS/	FISH, SS/	FISH
8	RI	00	121	HS, BV	HAB STRUCTURES	
10	LP	00	165	WL, HS		FISH
12	SR	00	176.5		H=0.3	
14	RR	00	216.2	HS		
16	LP	00	243.2		RIP #2	
17	RB	00	254.3	HS		
19	RI	00	283.4	BV	FISH	
20	RR	00	301.7		MONKEY FLOWERS, FISH	.4, .6M POCKETS
21	RI	00	318	DJ	ORANGE FLAGGING N50	
22	RB	00	337.2	WL		KINGFISHER
23	LP	00	373.2	WL	LOTS O' FISH	CF
24	SR	00	374.7		H=0.2	
25	SP	00	390.7		RIP #3, FISH	
28	RB	01	451.1	HS, /SS,TJ	/SS, /TJ	
29	SR	11	451.1		H=3.0	
31	LP	00	478.1	WL	COHO- A LOT	COHO

Comment Summary

Oregon Plan Monitoring Sites 2003

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>
32	RR	00	513.7	/SS	/SS	.4M POCKET END



Name: CANNIBAL MT
 Date: 12/17/2003
 Scale: 1 inch equals 2000 feet

Location: 10 428917 E 4900897 N
 Caption: BUCK CREEK (#218) RESTORATION SITE - ALSEA BASIN