

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

STREAM: Bummer Creek (MC-9)
BASIN: Alsea River
SURVEY TYPE: Post-Tx
DATE: August 5, 2004
SURVEY CREW: Erin Richmond, Jeff Snyder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 34.6 km²
USGS MAPS: Prairie Peak
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Bummer Creek habitat survey extended 461 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 12.6 (range: 10.0-18.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 3.1 percent. Rapids (63%) dominated stream habitat. Boulders (38%) and cobble (34%) dominated stream substrate. Wood volume was high at 37.8 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.

REACH 1

T14S-R08W-S25SE

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	12.6	VWI Range:	10 - 18

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	461	2,360	0
Secondary	10	11	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.7	Width: 6.8	8.1 (6.2 - 11.6)	9.9 (7.4 - 13)
Depth: 0.34	Height: 0.4	0.8 (0.7 - 0.9)	1.3 (1 - 1.7)

W:D ratio: 17.2

Stream Flow Type: LF

Average Unit Gradient: 3.1%

Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.2

Habitat Units/100m (total channel length): 6.4

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

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 82%
Undercut Banks:	5%	Range: 61 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	145	31.5
Volume (m ³):	174	37.8
Key pieces (>=12m x 0.60m):	9	2.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

BUMMER CREEK POST-TX (MC-9)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

8/5/2004

REACH 1

T14S-R08W-S25SE

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	12	4.0	0.20	46	65	0	0	20	40	40	0
POOL-LATERAL SCOUR	7	72	5.0	0.56	365	74	7	19	19	23	11	21
RAPID/BOULDERS	14	274	5.3	0.30	1,495	1,227	0	3	8	34	53	2
RIFFLE	5	63	2.8	0.24	173	154	0	6	20	42	32	0
RIFFLE W/ POCKETS	3	50	5.3	0.23	291	260	0	3	10	43	43	0
Total:	30	471	4.7	0.34	2,371	1,780	Avg: 2	7	13	34	38	6

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	7	72	5.0	0.56	365	15.40%	74	20.3
Glides	0	0			0	0.00%	0	0.0
Riffles	8	113	3.7	0.24	464	19.58%	414	89.2
Rapids	14	274	5.3	0.30	1,495	63.07%	1,227	82.1
Cascades	1	12	4.0	0.20	46	1.96%	65	140.1
Step/Falls	0	0			0	0.00%	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
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	7	14.9	15.2
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	3	6.4	6.5
Pool frequency (channel widths/pool):	9.9		
Residual pool depth (avg):	0.46		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

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

Total hardwoods/1000	1341
Total conifers/1000 ft	41
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	41

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	0.0	2.7	0.0	1.7	0.0	0.0	0.0	4.3
15-30cm	0.0	4.7	0.0	3.3	0.0	0.7	0.0	8.7
30-50cm	0.0	4.0	0.0	4.0	0.0	1.0	0.0	9.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.7	0.0	0.7	0.0
Total/100m2	0.0	11.3	0.0	9.0	0.7	1.7	0.2	7.3

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	88		83		40	
Shrub cover	53		50		48	
Grass/forb cover	17		22		30	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		17		17	
High terrace	100		83		67	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		17	
Riprap	0		0		0	
Surface slope (%)	20		14		12	

RIPARIAN ZONE VEGETATION

Reach 1

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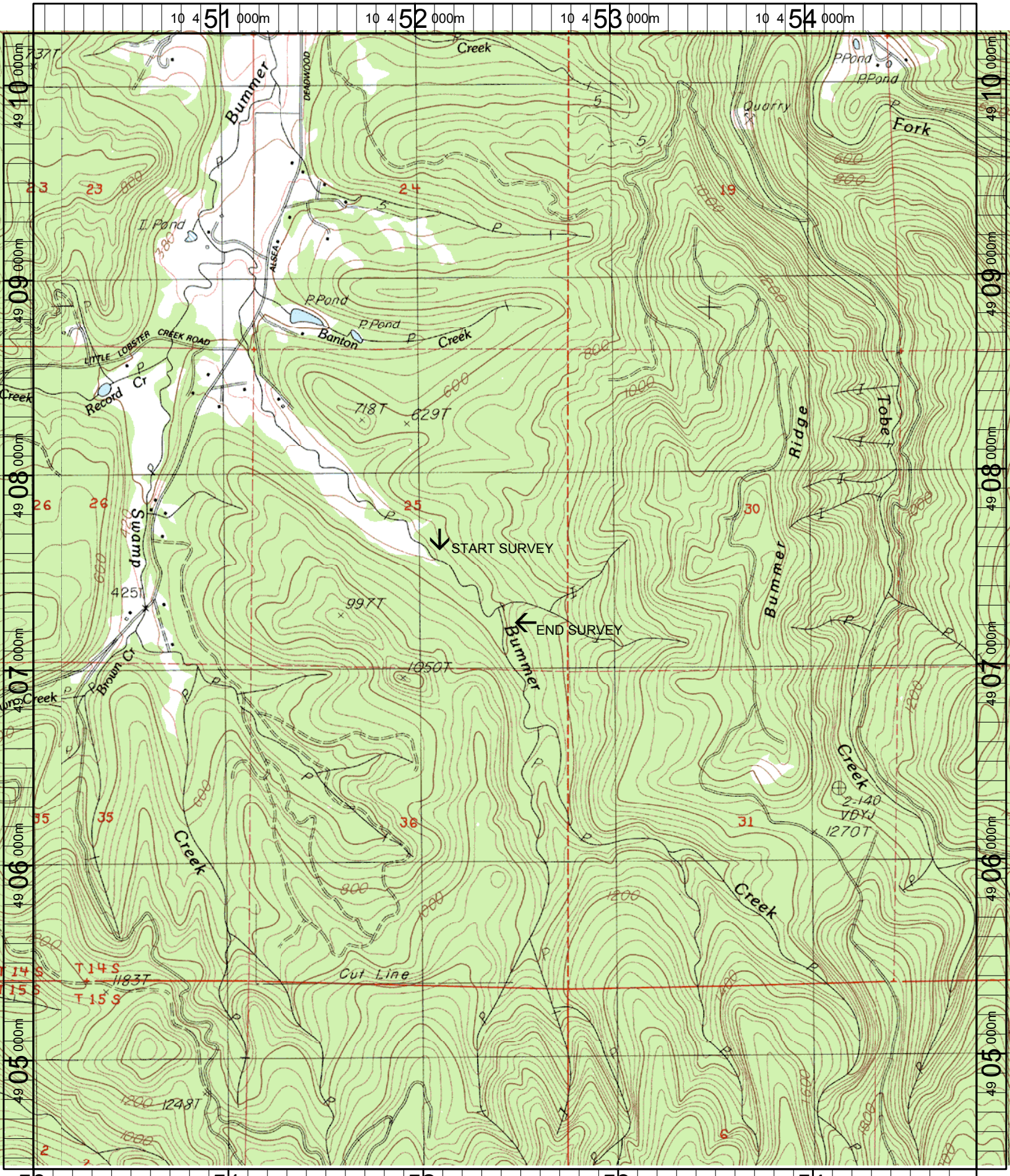
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LF	1	HT	24	90	40	20	Conifer							
								Hardwood		5	3				
10	LF	2	HT	13	60	50	40	Conifer							
								Hardwood	1	1	2				
10	LF	3	HT	14	0	70	30	Conifer							
								Hardwood							
10	RT	1	HT	21	80	60	20	Conifer							
								Hardwood	5	3					
10	RT	2	HT	16	80	40	20	Conifer							
								Hardwood		5					
10	RT	3	HT	18	40	60	20	Conifer							
								Hardwood		2	1				
18	LF	2	HS	28	90	60	20	Conifer							
								Hardwood	4						
18	RT	2	HT	14	90	80	10	Conifer							
								Hardwood			4				
18	RT	3	HT	14	90	70	10	Conifer							
								Hardwood				1			
18	LF	1	HT	30	90	60	20	Conifer							
								Hardwood		1	2				
18	RT	1	HT	14	90	80	10	Conifer							
								Hardwood							
18	LF	3	RB	5	0	10	80	Conifer							TREEFARM ROAD
								Hardwood							
26	RT	3	HS	15	20	80	10	Conifer							TREE FARM
								Hardwood			1				
26	RT	2	HT	3	90	30	20	Conifer							
								Hardwood		3	5				
26	RT	1	HT	16	90	40	10	Conifer							
								Hardwood	3	5	1				
26	LF	3	HT	3	90	0	30	Conifer						2	
								Hardwood							
26	LF	2	HT	7	90	40	20	Conifer							
								Hardwood		1	1				
26	LF	1	HT	13	90	40	20	Conifer							
								Hardwood			6				

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **9** **BUMMER CREEK POST-TX (MC-9)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	6		T=13 DEG C AT 8:30	TEMP 13 DEG C AT 8:27
7	LP	00	86.6	HS, DJ		KINGFISHER
8	RB	00	111.6			PHOTO 0113
9	RB	00	136.6		RIP 1, MET	M/R 1 AT 133M
11	LP	00	157.1	HS		
12	RB	00	178.3	HS		
13	LP	00	190	DJ	COHO	FISH
14	RB	00	202.6	DJ		FISH
16	RI	00	224.7			COT
17	RB	00	252.6	HS		
18	RI	00	262.8		RIP 3, MET	M/R 2 AT 255
21	RB	00	304.8	WL		GAME TRAIL
22	RB	00	329.8			PHOTO 0114
23	RB	01	354.8	TJ/	TJ/	TEMP=13 DEG C
24	RI	11	354.8		T=13 DEG C AT 12:00 AC	
26	RP	00	404.8		RIP 3, MET	M/R AT 395M
28	RI	00	433.1	HS		
30	RI	00	460.5	/SS	CRAYFISH	END SURVEY AT 460M



Name: PRAIRIE PEAK
 Date: 6/14/2004
 Scale: 1 inch equals 2000 feet

Location: 10 452436 E 4907337 N
 Caption: BUMMER CREEK RESTORATION SITE - ALSEA BASIN