

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

STREAM: Bear Creek (MC-382)  
BASIN: Siuslaw River  
SURVEY TYPE: Pre-Tx  
DATE: 4/2/2008  
SURVEY CREW: Sharon Tippery, Matt Weeber  
REPORT PREPARED BY: Sharon Tippery  
BASIN AREA: 12.8 km<sup>2</sup>  
USGS MAPS: Windy Peak  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Bear Creek habitat survey extended 3,984 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 8.1 (range: 1-20). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 0.6 percent. Scour pools (59%) and riffles (31%) dominated stream habitat. Gravel (54%), sand (15%) and bedrock (11%) dominated stream substrate. Wood volume was 4.3m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted four old habitat structures and one debris jam in the downstream section of the survey.

Beaver activity, juvenile Coho, trout, one redd, sculpin, rough-skinned newts, a herd of elk, ducks, and a bear were observed during the survey.

**OREGON DEPARTMENT OF FISH AND WILDLIFE  
HABITAT INVENTORY**

**BEAR CREEK  
GCG: 2-MC SITE ID: 382**

**Survey Date: 4/2/2008**

**Report Date: 5/8/2008**

**T16S-R08W-S30SW**

**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	8.1	VWI Range:	1 - 20

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	3,984	16,490	0
Secondary	211	462	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 17	<u>First Terrace</u> n = 16
Width: 4.1	Width: 5.6	9.7 ( 7 - 15 )	14.8 ( 7.7 - 30.8 )
Depth: 0.55	Height: 0.5	1.0 ( 0.6 - 1.6 )	1.3 ( 0.9 - 1.8 )

W:D ratio: 12.3

Stream Flow Type: MF

Average Unit Gradient: 0.6%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.8

Habitat Units/100m (total channel length): 5.0

Habitat Units/100m (primary channel length): 5.3

**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):	215	5.4
Volume (m <sup>3</sup> ):	170	4.3
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

BEAR CREEK

HABITAT INVENTORY

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T16S-R08W-S30SW

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	5	35	0.7	0.07	25	0	1	17	68	12	2	0
DRY UNIT	2	16	2.8	0.00	43	0	8	28	65	0	0	0
POOL-BACKWATER	11	69	2.3	0.48	160	0	41	41	16	2	0	0
POOL-DAMMED	6	121	4.5	0.97	549	0	8	27	50	10	3	2
POOL-ISOLATED	4	24	2.0	0.33	47	0	70	30	0	0	0	0
POOL-LATERAL SCOUR	91	2,423	3.9	0.84	8,776	0	6	17	61	9	2	5
POOL-PLUNGE	9	63	6.4	0.92	389	0	7	20	61	10	1	1
POOL-STRAIGHT SCOUR	7	165	5.6	0.64	961	0	12	20	14	3	1	50
RAPID/BEDROCK	1	50	4.0	0.15	200	0	5	5	5	5	5	75
RAPID/BOULDERS	2	20	2.2	0.18	44	0	0	8	53	17	22	0
RIFFLE	46	1,125	4.2	0.21	5,315	0	3	5	62	7	2	22
RIFFLE W/ POCKETS	1	12	5.5	0.60	66	0	5	5	80	10	0	0
STEP/BEDROCK	4	10	5.8	0.16	51	0	0	0	0	0	0	100
STEP/BOULDERS	1	10	4.8	0.30	46	0	0	0	20	30	50	0
STEP/COBBLE	9	37	5.1	0.15	194	0	0	1	81	17	1	0
STEP/LOG	9	10	4.3	0.11	42	0	17	22	42	16	3	0
STEP/STRUCTURE	3	6	6.8	0.14	46	0	2	23	43	0	0	32
<b>Total:</b>	211	4,195	4.1	0.55	16,953	0	<b>Avg:</b> 9	15	54	8	2	11

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	21	214	2.9	0.59	757	4.46%	0	0.0
Scour Pools	107	2,651	4.2	0.84	10,125	59.72%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	47	1,137	4.2	0.22	5,381	31.74%	0	0.0
Rapids	3	70	2.8	0.17	244	1.44%	0	0.0
Cascades	5	35	0.7	0.07	25	0.15%	0	0.0
Step/Falls	26	71	5.1	0.14	379	2.23%	0	0.0
Dry	2	16	2.8	0.00	43	0.25%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

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**POOL SUMMARY**

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	128	30.5	32.1
Pools >=1m deep:	31	7.4	7.8
Complex pools (LWD pieces>=3):	24	5.7	6.0
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.64		

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**COMMENT SUMMARY**

MONITORING AREA: 2-MC      SITE ID: 382      STREAM: BEAR CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
4	SS	00	66.7	HS	BOULDERS AND LOGS
5	DP	00	81.7	WL	ELK HERD ON RIGHT TERRACE
7	LP	00	120.9		SCULPIN
10	SS	00	140.9	HS	HABITAT LOG
12	RI	00	198.5	RF	
23	RI	00	562.5	SS/	
24	RI	00	635.5	SS/	
25	RI	00	717.5	RF	
27	LP	01	771.8	/TJ	SOUTH FORK BEAR CREEK
28	RI	11	771.8		ACW=5.6M
32	LP	00	828.3	SS/	
35	SS	00	864.3	HS	LOGS
36	DP	00	918.3	HS, DJ, WL	JUVENILE COHO
37	SL	00	922.3		STEP OVER ROOTS
42	BW	10	989.9	AM	ROUGH-SKINNED NEWT
44	LP	00	1063.9	SS/, /SS	
69	RI	01	1542.1	TJ/, BV	CHEWS
70	CB	11	1542.1	CE	ACW=2M
74	LP	00	1586.9		TROUT
76	LP	00	1607.9	WL	DUCKS
78	BW	10	1637.9		COHO FRY
79	LP	00	1675.9		COHO FRY

**COMMENT SUMMARY**

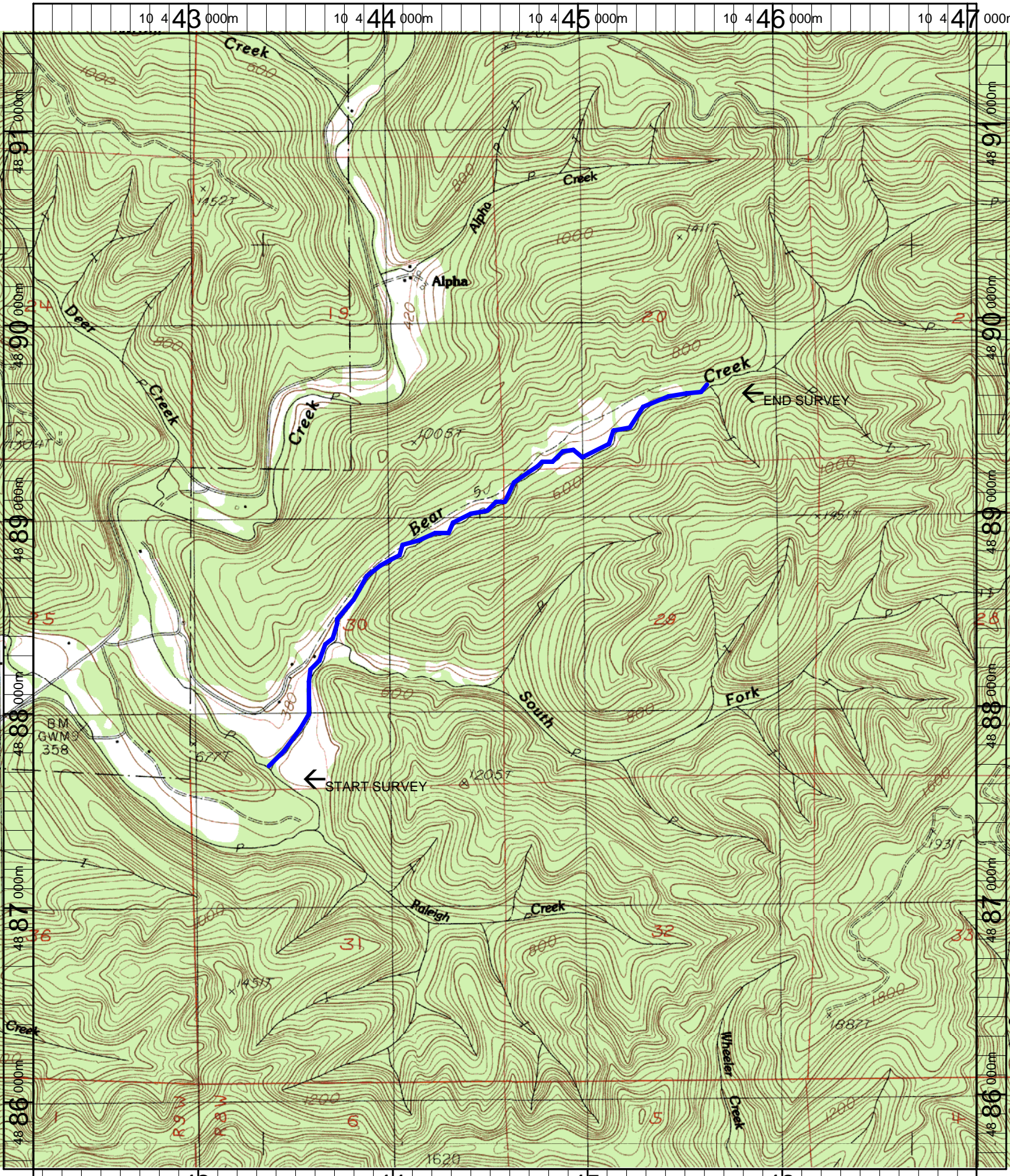
MONITORING AREA: 2-MC      SITE ID: 382      STREAM: BEAR CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
82	BW	10	1721		COHO FRY
83	LP	00	1740	BV	FRESH CHEWS
84	PP	00	1753	BV	
87	LP	00	1842	BV	FRESH CHEWING
94	LP	01	1947.2	/SS, /TJ	
96	BW	10	1947.2	AM	BW OFF OF TRIB
97	LP	00	1993.2		COHO FRY
100	LP	00	2073.2		VERY SINUOUS
102	BW	10	2084.2		DEAD CRAYFISH
103	LP	00	2093.2	AM	ROUGH-SKINNED NEWT
105	LP	00	2132.7		OLD REDD AT TAILOUT
107	LP	00	2184.7		HARDPAN
108	RI	01	2199.7	TJ/	
109	RB	11	2199.7		ACW=0.9M
110	LP	00	2229.7		BEAR SCAT AND PRINTS
111	LP	01	2241.2	/SS	
112	IP	10	2241.2	AM	ROUGH-SKINNED NEWT
116	LP	00	2339.2	/SS	
123	LP	02	2478.2	SS/	
125	LP	02	2478.2	SS/, AM	ROUGH-SKINNED NEWT
137	LP	00	2646.3	/SS	
139	LP	01	2717	TJ/	

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
140	BW	10	2717	AM	ROUGH-SKINNED NEWT
141	CB	11	2717		ACW=0.5M
143	IP	10	2762	AM	ROUGH-SKINNED NEWTS MATING
145	BW	10	2772	AM	ROUGH-SKINNED NEWT
146	LP	00	2822		JUVENILE COHO, 100-120MM
147	LP	00	2862		BANK EROSION
152	LP	01	2972.9	/TJ	
153	CB	11	2972.9		1.5M FALLS IN
162	LP	00	3115.7		COHO JUVENILES
166	PP	00	3210.1		JUVENILE COHO
168	DP	01	3217.8	TJ/	HARDPAN
169	CB	11	3217.8		ACW=1M
177	LP	00	3502.3	SS/	
190	IP	10	3650.6	AM	ROUGH-SKINNED NEWTS AND EGG MASSES
194	LP	00	3702.7		SMALL TROUT
205	RI	00	3875.4		PASSED START OF OR PLAN SURVEY
207	RI	00	3955.4	SS/ X2	
210	LP	01	3977.7	/TJ	
211	CB	00	3983.7		ACW=1.5M



Name: WINDY PEAK  
 Date: 12/11/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 444596 E 4888563 N  
 Caption: BEAR CREEK RESTORATION SURVEY - SIUSLAW BASIN