

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

STREAM: South Fork Bear Creek (MC-383)  
BASIN: Siuslaw River  
SURVEY TYPE: Pre-Tx  
DATE: March 27, 2008  
SURVEY CREW: Ryan Emig, Matt Weeber  
REPORT PREPARED BY: Sharon Tippery  
BASIN AREA: 6.0 km<sup>2</sup>  
USGS MAPS: Windy Peak  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The South Fork Bear Creek habitat survey extended 1,206 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9 (range: 4-12). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 1.4 percent. Riffles (49%) and scour pools (42%) dominated stream habitat. Gravel (47%) and sand (27%) dominated stream substrate. Wood volume was 12.6m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures and debris jams during the survey.

A steelhead redd and a rough-skinned newt were observed during the survey.

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

**SOUTH FORK BEAR CREEK  
GCG: 2-MC SITE ID: 383**

**Survey Date: 3/27/2008**

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

**T16S-R08W-S30SE**

**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	9.0	VWI Range:	4 - 12

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	1,206	6,057	0
Secondary	142	292	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.5	Width: 5.4	7.7 ( 6.5 - 10.5 )	10.7 ( 8 - 14 )
Depth: 0.58	Height: 0.4	0.7 ( 0.7 - 0.8 )	1.4 ( 1.1 - 2.2 )

W:D ratio: 15.1

Stream Flow Type: MF

Average Unit Gradient: 1.4%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 5.9

Habitat Units/100m (primary channel length): 6.6

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D30	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):	132	10.9
Volume (m <sup>3</sup> ):	152	12.6
Key pieces (>=12m x 0.60m):	0	0.0

**OREGON DEPARTMENT OF FISH AND WILDLIFE**

**SOUTH FORK BEAR CREEK**

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**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
POOL-BACKWATER	8	68	2.9	0.55	180	0	33	48	13	2	5	0
POOL-DAMMED	2	36	7.0	0.83	262	0	10	55	33	2	0	0
POOL-ISOLATED	3	15	1.2	0.37	18	0	58	41	2	0	0	0
POOL-LATERAL SCOUR	27	428	5.1	0.85	2,313	0	7	35	46	10	1	2
POOL-PLUNGE	1	18	5.5	0.60	99	0	0	14	48	5	0	33
POOL-STRAIGHT SCOUR	5	51	5.4	0.92	275	0	7	41	40	10	2	0
RIFFLE	24	519	4.2	0.31	2,290	0	5	8	61	21	2	4
RIFFLE W/ POCKETS	7	204	4.2	0.43	872	0	1	7	76	16	1	0
STEP/COBBLE	1	8	4.5	0.20	34	0	0	5	80	15	0	0
STEP/LOG	1	1	6.2	0.15	5	0	10	40	40	10	0	0
STEP/STRUCTURE	1	0	9.5	0.05	3	0	14	67	19	0	0	0
<b>Total:</b>	<b>80</b>	<b>1,348</b>	<b>4.5</b>	<b>0.58</b>	<b>6,350</b>	<b>0</b>	<b>Avg: 10</b>	<b>27</b>	<b>47</b>	<b>12</b>	<b>2</b>	<b>2</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	13	119	3.1	0.55	460	7.24%	0	0.0
Scour Pools	33	497	5.2	0.85	2,687	42.31%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	31	723	4.2	0.34	3,162	49.79%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	9	6.7	0.13	42	0.65%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

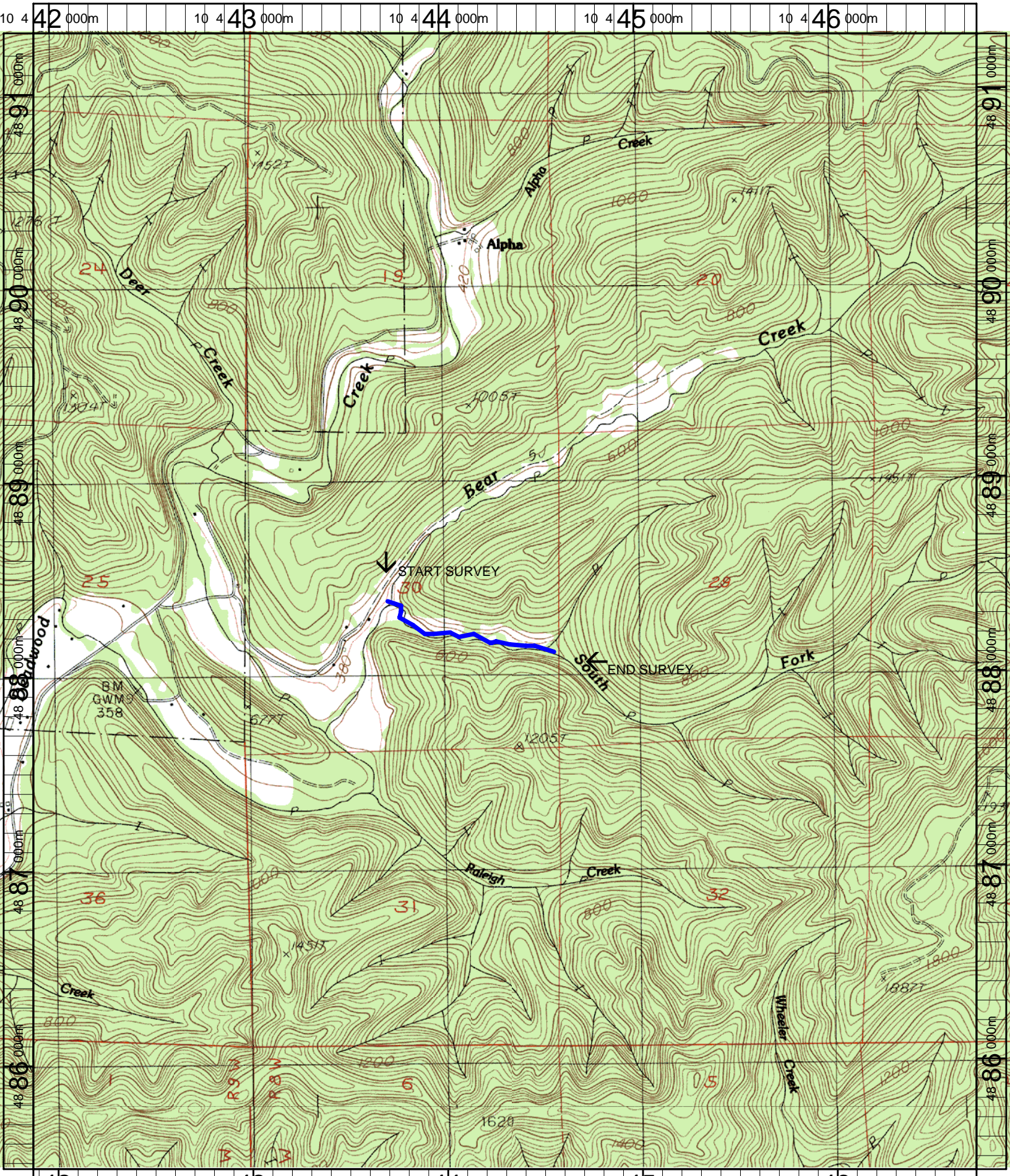
**POOL SUMMARY**

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	46	34.1	38.1
Pools >=1m deep:	10	7.4	8.3
Complex pools (LWD pieces>=3):	14	10.4	11.6
Pool frequency (channel widths/pool):	5.4		
Residual pool depth (avg):	0.57		

COMMENT SUMMARY

MONITORING AREA: 2-MC      SITE ID: 383      STREAM: SOUTH FORK BEAR CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	01	46	HS	TEMP=5.5C
2	BW	10	46	HS	
12	DP	01	119.1	SS/	
20	SP	00	234.1	DJ, HS	
21	RP	00	267.1		TEMP=6C
22	SP	00	277.1	HS	
30	LP	00	428.1	HS	
33	RP	01	537.6		ACTIVE EROSION OF LEFT BANK - REPROD CONIFERS IN STREAM AS A RESULT.
35	IP	10	537.6	AM	ROUGH-SKINNED NEWT
37	SS	00	555.9	HS	PLACED LOGS ON TOP OF EACH OTHER ACROSS WIDTH OF CREEK.
39	LP	00	599.4	HS, DJ	
45	BW	10	671.4	HS	
47	LP	00	706.4	/SS	
51	RI	00	766.9		TEMP=6.5C
52	LP	01	786.4	/SS	
57	LP	00	828.9	DJ, HS	
58	RP	01	860.9	DJ	
62	LP	00	951.4	/SS	
64	LP	00	991.9		STEELHEAD REDD
70	LP	00	1078.4	DJ	
75	RI	11	1125.9		ACW=1.5M
80	RI	00	1206.4	SS/	TEMP=6C



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

Location: 10 444311 E 4888377 N  
 Caption: SOUTH FORK BEAR CREEK RESTORATION SITE - SIUSLAW BASIN