

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

STREAM: Bear Creek (MS-4)
BASIN: Coquille River
SURVEY TYPE: Post-Tx
DATE: February 9, 2001
SURVEY CREW: AndySolez, Peter Bower
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 10.2 km²
USGS MAPS: Bill Peak
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Bear Creek habitat survey extended 481 meters. The channel was constrained by hillslopes a moderate V-shaped valley. The average valley width index was 1.4 (range: 1.0 – 3.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 0.9 percent. Riffles (53%) and scour pools (39%) dominated stream habitat. Fines (46%) and gravel (42%) dominated stream substrate. Wood volume was high at 41.7 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 SUMMARY

REACH 1

T29S-R13W-S13SE

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	0
Moderate V-shape	100	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 1.4 range: 1.0-3.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	0	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	481	2,044	0
Secondary	15	28	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.2	Width	7.0	8.6	9.4
Depth	0.41	Height	0.5	1.1	1.6
		W:D ratio	13.0	Entrenchment	1.2

Stream Flow Type: MF Water Temp: 5.5-5.5°C
 Avg. Unit Gradient: 0.9% Habitat Units/100m: 6.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	C30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	180	37.4
Volume (m ³)	201	41.7
Key pieces ($\geq 10m \times 0.6m$)	17	3.5

HABITAT UNIT SUMMARY

REACH 1

T29S-R13W-S13SE

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	Cbbl	Bldr	Bdrk
GLIDE	1	20	6.3	0.25	126	0	60	0	30	10	0	0
POOL-BACKWATER	1	8	2.0	0.40	16	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	10	145	4.8	0.74	713	0	50	8	37	5	0	1
POOL-STRAIGHT SCOUR	1	16	5.7	0.80	88	0	80	10	10	0	0	0
RAPID/BOULDERS	1	14	2.8	0.20	38	0	40	0	60	0	0	0
RIFFLE	13	219	3.6	0.19	772	0	33	6	55	6	0	1
RIFFLE W/ POCKETS	3	76	4.5	0.25	319	0	60	5	32	3	0	0
Total:	30	496	4.2	0.41	2,072	0	Avg:46	6	42	5	0	1

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Number	Boulders #/100m ²
Dammed & BW Pools	1	8	2.0	0.40	16	0.77	0	0.0
Scour Pools	11	160	4.9	0.74	801	38.68	0	0.0
Glides	1	20	6.3	0.25	126	6.08	0	0.0
Riffles	16	295	3.8	0.20	1,091	52.64	0	0.0
Rapids	1	14	2.8	0.20	38	1.82	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	0	0	-	-	0	0.00	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

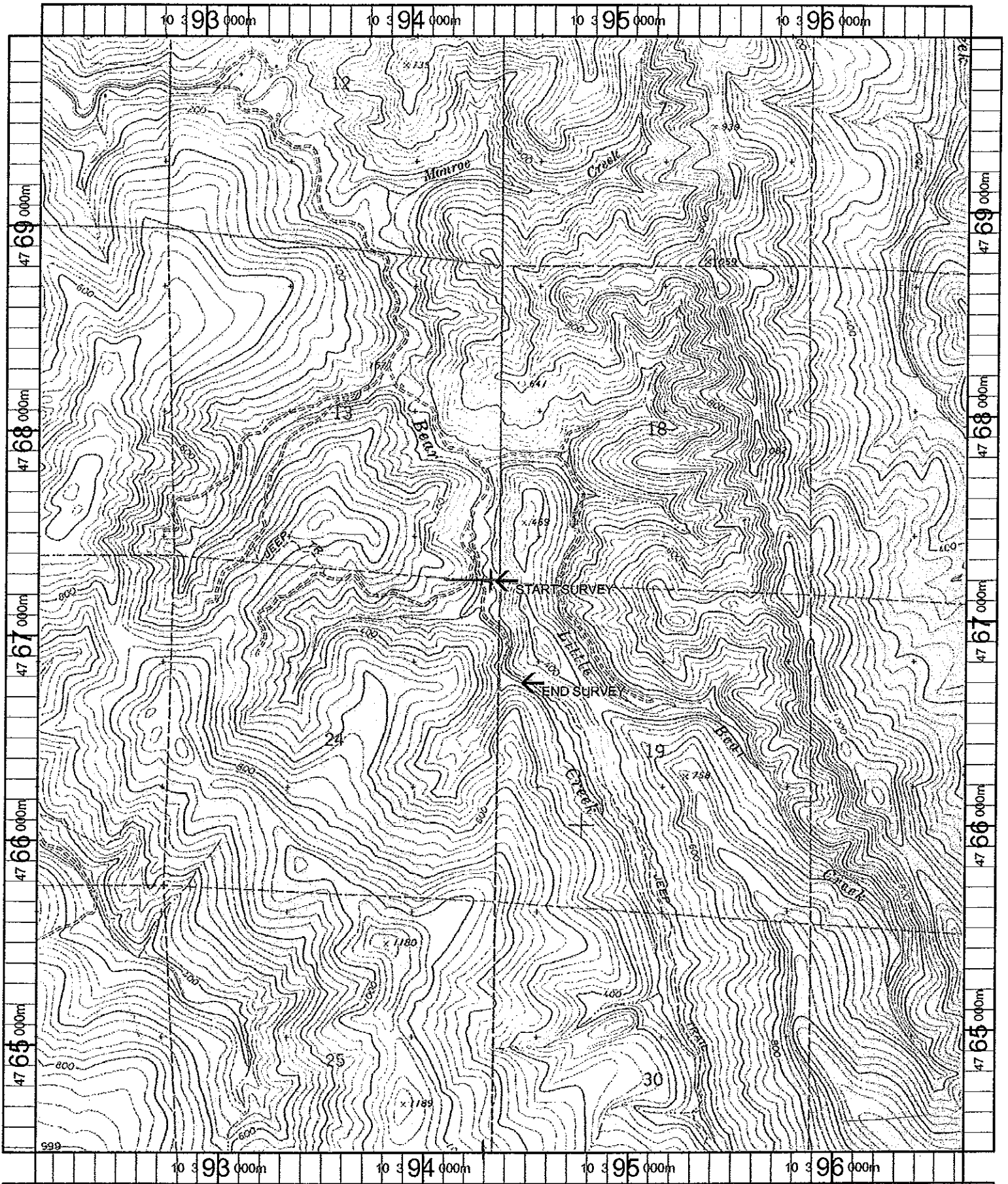
All Pools	<u>Total</u>	<u>#/Km</u>
	12	24.2
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	7	14.1
Pool Frequency (channel widths/pool):	5.9	
Residual pool depth (avg)	0.56m	

STREAM SUMMARY

BEAR CREEK POST-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area					Total Large Boulder	
					S/O	Sand	Grvl	Cbbl	Bldr		Bdrk
30	496	4.2	0.41	2,072	46	6	42	5	0	1	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	801	38.7
Backwater Pools	16	0.8
Glide	126	6.1
Riffle	1,091	52.6
Rapid	38	1.8
Cascade	0	0.0
Step	0	0.0
Dry	0	0.0



Name: BILL PEAK
 Date: 11/1/100
 Scale: 1 inch equals 2000 feet

Location: 10 394316 E 4767152 N
 Caption: BEAR CREEK RESTORATION SITE - COQUILLE BASIN