

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

STREAM: Little Rock Creek (MC-44)  
BASIN: Siletz River  
SURVEY TYPE: Post-Tx  
DATE: February 6, 2001  
SURVEY CREW: Eric Brown, Joe Zuccarello  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 4.4 km<sup>2</sup>  
USGS MAPS: Nortons, Summit  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Little Rock Creek habitat survey extended 527 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 5.0 (range: 3.0 – 9.0). Land use for the reach was light grazing and second growth (15-30 cm dbh) trees. The average unit gradient was 1.7 percent. Riffles (37%) and scour pools (23%) dominated stream habitat. Gravel (52%) and bedrock (21%) dominated stream substrate. Wood volume was low at 19.9 m<sup>3</sup>/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

T10S-R8W-S14SE

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

Valley Width Index avg: 5.0 range: 3.0-9.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	100
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	527	2,410	0
Secondary	11	7	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.4	Width	6.2	15.5	9.9
Depth	0.37	Height	0.5	1.0	1.0
		W:D ratio	12.0	Entrenchment	2.5

Stream Flow Type: MF Water Temp: 6.5-6.5°C  
 Avg. Unit Gradient: 1.7% Habitat Units/100m: 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LG	ST
Riparian Vegetation:	G	S

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 ( $\geq 3m \times 0.15m$ )	55	10.4
Volume (m <sup>3</sup> )	105	19.9
Key pieces ( $\geq 10m \times 0.6m$ )	8	1.5

HABITAT UNIT SUMMARY

REACH 1

T10S-R8W-S14SE

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	Cbbl	Bldr	Bdrk
GLIDE	5	96	4.3	0.33	412	0	7	9	45	12	2	25
POOL-BEAVER DAM	2	61	6.4	1.05	404	0	3	23	45	25	0	5
POOL-LATERAL SCOUR	12	131	4.0	0.57	544	0	8	10	44	10	1	28
RAPID/BEDROCK	1	20	6.0	0.10	120	0	0	5	10	0	0	85
RAPID/BOULDERS	1	7	3.9	0.15	29	0	0	5	65	25	5	0
RIFFLE	13	222	3.9	0.18	902	0	2	8	69	10	1	10
STEP/BEAVER DAM	2	1	7.9	0.04	6	0	15	25	30	0	0	30
<b>Total:</b>	<b>36</b>	<b>538</b>	<b>4.4</b>	<b>0.37</b>	<b>2,416</b>	<b>0</b>	<b>Avg: 5</b>	<b>10</b>	<b>52</b>	<b>11</b>	<b>1</b>	<b>21</b>

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m <sup>2</sup> )	Percent	Large Boulders Number	#/100m <sup>2</sup>
Dammed & BW Pools	2	61	6.4	1.05	404	16.71	0	0.0
Scour Pools	12	131	4.0	0.57	544	22.53	0	0.0
Glides	5	96	4.3	0.33	412	17.05	0	0.0
Riffles	13	222	3.9	0.18	902	37.33	0	0.0
Rapids	2	27	5.0	0.13	149	6.15	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	1	7.9	0.04	6	0.24	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

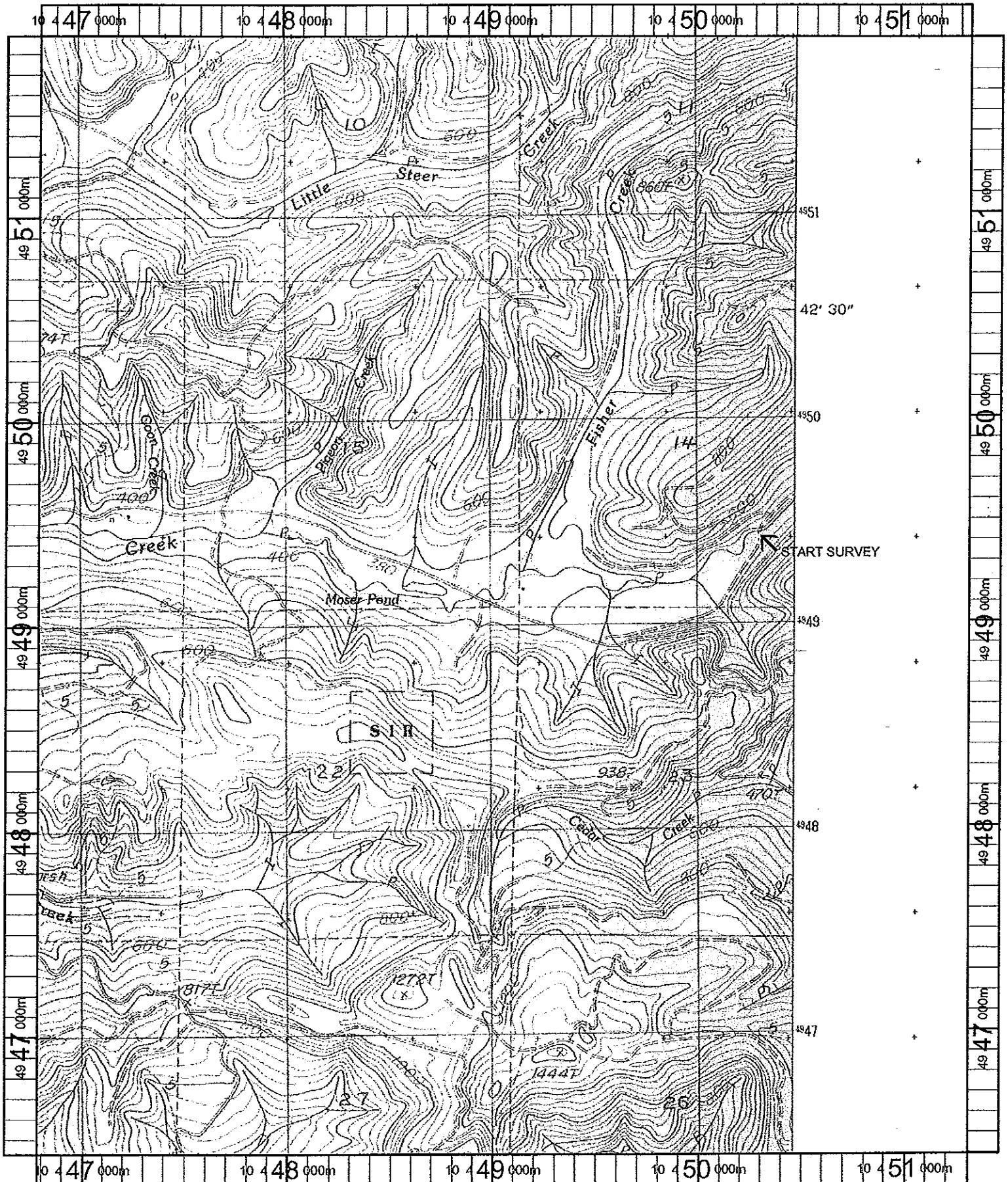
All Pools	<u>Total</u>	<u>#/Km</u>
	14	26.0
Pools ≥1m deep:	1	1.9
Complex pools (LWD pieces ≥3):	4	7.4
Pool Frequency (channel widths/pool):	6.2	
Residual pool depth (avg)	0.38m	

STREAM SUMMARY

LITTLE ROCK CREEK POST-TX

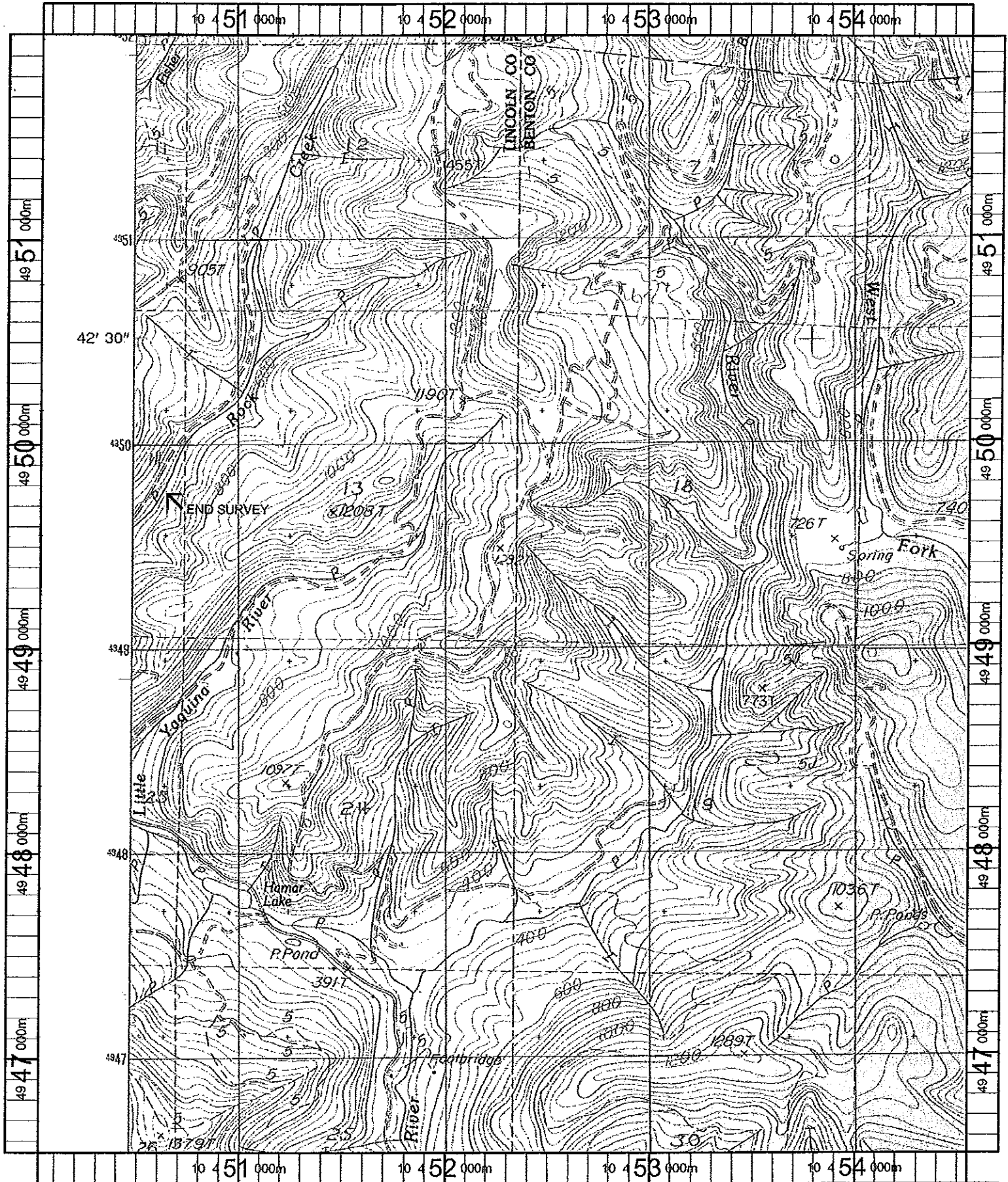
Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
36	538	4.4	0.37	2,416	5	10	52	11	1	21	0

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Scour Pool	544	22.5
Backwater Pools	404	16.7
Glide	412	17.1
Riffle	902	37.3
Rapid	149	6.1
Cascade	0	0.0
Step	6	0.2
Dry	0	0.0



Name: NORTONS  
 Date: 11/8/100  
 Scale: 1 inch equals 2000 feet

Location: 10 448964 E 4949127 N  
 Caption: LITTLE ROCK CREEK RESTORATION SITE - SILETZ BASIN



Name: SUMMIT  
 Date: 11/8/100  
 Scale: 1 Inch equals 2000 feet

Location: 10 452201 E 4949244 N  
 Caption: LITTLE ROCK CREEK RESTORATION SITE - SILETZ BASIN