

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

STREAM: Lost Creek (U-246)  
BASIN: Umpqua River  
SURVEY TYPE: Pre-Tx  
DATE: March 15, 2004  
SURVEY CREW: Michael Scheu, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 20.7 km<sup>2</sup>  
USGS MAPS: Tyee  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Lost Creek habitat survey extended 2,347 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.5 (range: 3.0-8.0). Land use for the reach was second growth (15-30 cm dbh) trees and rural residential. The average unit gradient was 1.8 percent. Rapids (49%) and scour pools (30%) dominated stream habitat. Bedrock (57%) and cobble (20%) dominated stream substrate. Wood volume was very low at 5.7 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted beaver activity during the survey.

REACH 1

T24S-R07W-S21NE

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	4.5	VWI Range:	3 - 8

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	2,347	12,853	0
Secondary	102	189	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 10	<u>First Terrace</u> n = 10
Width: 4.9	Width: 9.2	13.4 ( 8.2 - 22.5 )	16.9 ( 9.8 - 27.5 )
Depth: 0.40	Height: 0.5	1.0 ( 0.8 - 1.2 )	2.1 ( 1.5 - 3.5 )

W:D ratio: 18.6  
Stream Flow Type: LF  
Average Unit Gradient: 1.8%  
Water temperature (°C): 11.0 - 11.0

Entrenchment (ACW:FPW ratio): 1.5  
Habitat Units/100m (total channel length): 5.1  
Habitat Units/100m (primary channel length): 5.3

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	RR
Riparian Vegetation:	D15	C50

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):	124	5.3
Volume (m <sup>3</sup> ):	134	5.7
Key pieces (>=12m x 0.60m):	5	0.2

**OREGON DEPARTMENT OF FISH AND WILDLIFE**

**LOST CREEK PRE-TX (U-246)**

**HABITAT INVENTORY**

Report Date: 6/16/2004

Survey Date:

3/15/2004

<b>REACH 1</b>		<b>T24S-R07W-S21NE</b>					<b>REACH 1</b>					
<b>HABITAT DETAIL</b>												
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/BEDROCK	1	23	6.5	0.10	148	0	0	0	0	0	0	100
CASCADE/BOULDERS	4	25	2.8	0.18	99	0	5	15	23	36	21	0
DRY UNIT	1	18	2.0	0.00	35	0	0	0	40	60	0	0
POOL-BACKWATER	3	19	2.8	0.40	56	0	3	19	9	4	2	64
POOL-DAMMED	1	10	5.1	0.70	53	0	5	20	10	50	15	0
POOL-ISOLATED	2	27	1.7	0.23	48	0	3	0	3	0	0	95
POOL-LATERAL SCOUR	43	725	4.6	0.62	3,541	0	1	9	16	15	3	56
POOL-PLUNGE	8	56	6.2	0.59	329	0	0	3	5	2	1	89
POOL-STRAIGHT SCOUR	1	17	4.1	0.40	71	0	0	5	30	65	0	0
RAPID/BEDROCK	16	577	6.7	0.16	3,968	0	0	0	4	5	0	90
RAPID/BOULDERS	18	530	4.3	0.21	2,477	0	0	2	23	44	3	28
RIFFLE	16	359	4.9	0.21	1,875	0	0	2	18	22	1	56
STEP/BEDROCK	6	33	6.0	0.18	201	0	0	0	0	8	0	92
STEP/COBBLE	4	29	4.5	0.98	141	0	0	1	30	52	1	15
<b>Total:</b>	124	2,449	4.9	0.40	13,043	0	<b>Avg:</b> 1	5	15	20	3	57

<b>HABITAT SUMMARY</b>								
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	6	57	2.8	0.39	157	1.20%	0	0.0
Scour Pools	52	799	4.8	0.61	3,941	30.22%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	16	359	4.9	0.21	1,875	14.38%	0	0.0
Rapids	34	1,107	5.4	0.18	6,445	49.41%	0	0.0
Cascades	5	48	3.5	0.16	247	1.90%	0	0.0
Step/Falls	10	62	5.4	0.50	343	2.63%	0	0.0
Dry	1	18	2.0	0.00	35	0.27%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

<b>POOL SUMMARY</b>			
	<u>Total</u>	<u>Total of all Channel Lengths</u> # / Km	<u>Primary Channel Length</u> # / Km
All Pools:	58	23.7	24.7
Pools >=1m deep:	4	1.6	1.7
Complex pools (LWD pieces>=3):	3	1.2	1.3
Pool frequency (channel widths/pool):	4.6		
Residual pool depth (avg):	0.40		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **4-UMP**    SITE ID: **246**    LOST CREEK PRE-TX (U-246)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	10.8	BV		
2	LP	00	25.9	BV	SPAWN GROUND=4Msq	
4	LP	00	48.4	CS/CS	BC-TYEE RD; CS=CONCR	
6	RI	00	97.1		REDD; SG=4Msq	
9	LP	00	181	CE/	SG=4Msq; RIP RAP	
10	RB	01	225.3		SG=8Msq; REDD	
12	PP	00	229.3		SG=6Msq; REDD	
13	RR	00	260.9	WL	TRAIL	
15	LP	01	299.2		SG=12Msq; 1 REDD	
16	BW	10	299.2	WL	STRUCTURE 7 PINK FLA	
17	RR	00	363	WL	STH CARCASS-PRED; ST	
18	LP	00	378.7	/LS		
19	RR	00	408.1	WL /CE /CS	STH; COON TRACKS; RIP	
20	RI	00	422.7	BV		
21	LP	00	440.5	WL	COON TRACKS	
22	RR	00	454.7		STH	
23	LP	00	468.9		TROUT	
24	RR	01	500.9	RF TJ/-	FLAG-SITE #4-3 LOGS	
25	RB	11	500.9		T=9C; ACW=2M	
26	LP	00	516.2	BV	SITE #5-4 LOGS; 2 STH	
27	RR	00	543.5		OR PLAN START SITE 274	

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
29	BW	10	564.6	SS/		
30	RR	00	603.6	SS/ WL	SITE #6-2 LOGS; 6 BLDRS	
31	LP	00	629.2	BV		
36	RR	00	751.6	BV	SITE #8	
37	LP	00	785.1	BV	SG=6Msq	
38	SC	00	795.7	SS/ BV	1 REDD	
39	LP	00	825.4	WL SS/ BV	SG=6Msq; REDD	
40	RI	00	839.1	/LS		
41	LP	00	852.2	SS/	SITE #9-3 LOGS	
42	RI	00	884.6	BV		
44	SR	00	906.8		AQINV FLAG	
45	RR	00	990.3	WL=TRAIL	SITE#10-3 LOGS;SITE#11-	
47	RI	00	1017.3		SITE #12	
48	LP	00	1049.9	BV WL	SG=5Msq; 2 REDDS	
51	LP	00	1081.5	WL /SS	COON TRACKS	
53	LP	00	1125.4	SS/SS BV		
54	LP	00	1152.4	SS/ WL	TRACKS	
55	RB	00	1171.2	/SS WL	SITE #1-3 LOGS; GREEN	
59	LP	00	1200.5		1 REDD	
61	RR	00	1247.8		SITE #15-2 LOGS; 5 BLDR	
74	CB	00	1450.4	DJ-/CE /CE		

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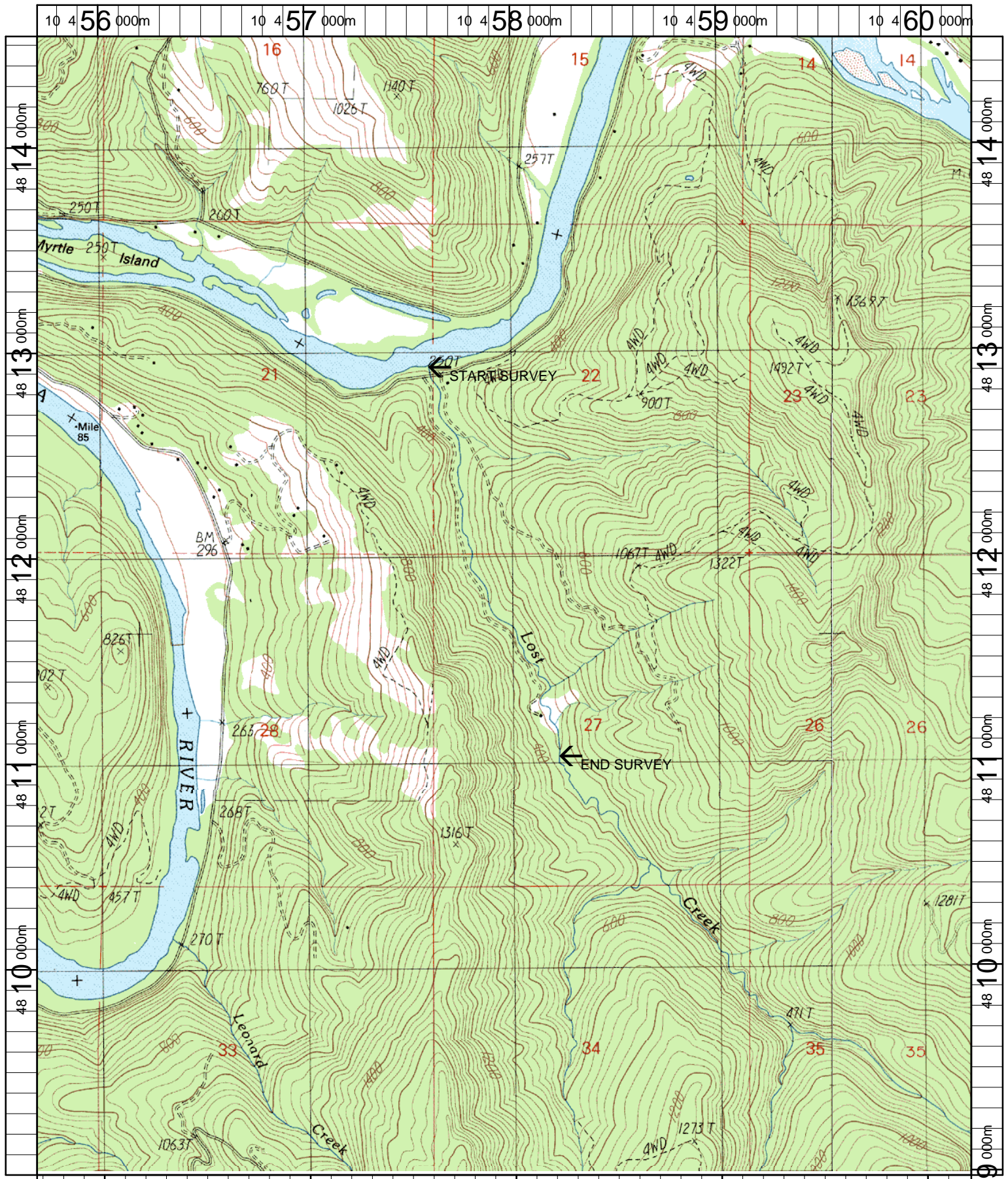
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
75	DP	00	1460.8	/CS		
76	RI	00	1477.2	BV		
77	LP	00	1499.9		END OF OR PLAN 274	
80	RR	00	1589.5	SS/ WL	SPAWNING SIGN; GAME	
81	LP	00	1613.6	BV	OLD REDD	
86	SC	00	1662.8	FC	START VALANCE PROP	
89	LP	00	1705.3		SITE #14-3LOGS	
90	RI	00	1743.3	BV /CS		
91	RB	00	1771.3	BV /CS	BOULDERS	
93	RB	00	1817.6	BV		
94	LP	00	1837.2		SITE #16-3 LOGS	
98	RI	00	1906	BV	SITE #17	
99	LP	00	1923.7	RF		
100	RB	00	2005.9	BV	SITE #18-2 LOGS	
101	PP	00	2011.1	BV		
102	RB	01	2045.1	SS/- RF	SITE #19-2 LOGS	
104	LP	00	2071.5		FRY & TROUT	
106	LP	00	2090.6	-/CS		
107	SC	00	2094.6	/CS	FISH	
108	LP	00	2099	-/CS		
116	RR	00	2206	RF		

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<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
117	RI	01	2255	BV		
118	CB	11	2255		T=11C; ACW=1.5M	
121	LP	00	2304.5	WL	TRACKS	
123	LP	00	2340.2		REDD	



Name: TYEE  
 Date: 1/5/2004  
 Scale: 1 inch equals 2000 feet

Location: 10 457957 E 4811758 N  
 Caption: LOST CREEK RESTORATION SITE - UMPQUA BASIN