

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

STREAM: Lost Creek (W-229)
BASIN: Molalla River
SURVEY TYPE: Post-Tx
DATE: February 1, 2005
SURVEY CREW: Brian Bangs, Sheila Davis
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 18.5 km²
USGS MAPS: Rooster Rock
ECOREGION: Cascades Western Central

GENERAL DESCRIPTION:

The Lost Creek habitat survey extended 876 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.8 (range: 1.3-2.3). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.3 percent. Rapids (49%) and cascades (21%) dominated stream habitat. Boulders (63%) dominated stream substrate. Wood volume was very high at 53.4 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 1

T07S-R04E-S01SW

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	1.8	VWI Range:	1.3 - 2.3

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 Channel	876	6,149	0
Secondary Channel	155	656	1
Off-Channel Units	45	82	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 6.4	Width: 14.1	23.6 (17.7 - 30.8)	(-)
Depth: 0.54	Height: 0.7	1.5 (1.1 - 2)	(-)

W:D ratio: 20.3
 Stream Flow Type: LF
 Average Unit Gradient: 4.3%
 Water temperature (°C): 2.0 - 2.0

Entrenchment (ACW:FPW ratio): 1.7
 Habitat Units/100m (total channel length): 6.0
 Habitat Units/100m (primary channel length): 7.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	ST
Riparian Vegetation:	M30	D15

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):	388	44.3
Volume (m ³):	468	53.4
Key pieces (>=12m x 0.60m):	11	1.3

OREGON DEPT OF FISH AND WILDLIFE

LOST CREEK POST-TX (8-W, 229)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/1/2005

REACH 1		T07S-R04E-S01SW					REACH 1					
HABITAT DETAIL												
Habitat Type	Number	Total	Avg	Avg	Total	Large	Substrate					
	Units	Length	Width	Depth	Area	Boulders	Percent Wetted Area					
		(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	3	34	6.7	0.40	230	0	0	3	2	2	28	65
CASCADE/BOULDERS	10	179	6.9	0.38	1,226	0	0	4	4	5	85	2
POOL-BACKWATER	2	12	4.5	0.48	44	0	38	50	8	3	3	0
POOL-DAMMED	1	14	9.2	0.80	124	0	0	45	5	5	45	0
POOL-LATERAL SCOUR	1	7	7.4	0.70	54	0	0	30	10	5	55	0
POOL-PLUNGE	14	119	6.9	1.08	836	0	0	16	9	11	56	9
PUDDLED UNIT	1	51	4.1	0.00	209	0	0	0	0	100	0	0
RAPID/BEDROCK	1	40	4.8	0.35	191	0	0	5	5	5	25	60
RAPID/BOULDERS	17	469	6.9	0.43	3,214	0	0	8	6	9	76	0
RIFFLE	10	126	5.6	0.41	663	0	9	6	10	16	54	5
STEP/BOULDERS	4	27	4.2	0.24	93	0	1	0	3	1	95	0
STEP/STRUCTURE	1	0	6.8	0.10	3	0	100	0	0	0	0	0
Total:	65	1,076	6.4	0.54	6,886	0	Avg: 4	10	7	10	63	7

HABITAT SUMMARY									
Habitat Group	Number	Total	Avg	Avg	Wetted Area		Large Boulders		
	Units	Length	Width	Depth	(m ²)	Percent	Number	(# / 100m ²)	
		(m)	(m)	(m)					
Dammed & BW Pools	3	25	6.0	0.58	168	2.44%	0	0.0	
Scour Pools	15	126	6.9	1.06	890	12.93%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	126	5.6	0.41	663	9.62%	0	0.0	
Rapids	18	509	6.7	0.43	3,404	49.43%	0	0.0	
Cascades	13	213	6.8	0.38	1,456	21.14%	0	0.0	
Step/Falls	5	27	4.7	0.21	96	1.40%	0	0.0	
Dry	1	51	4.1	0.00	209	3.04%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

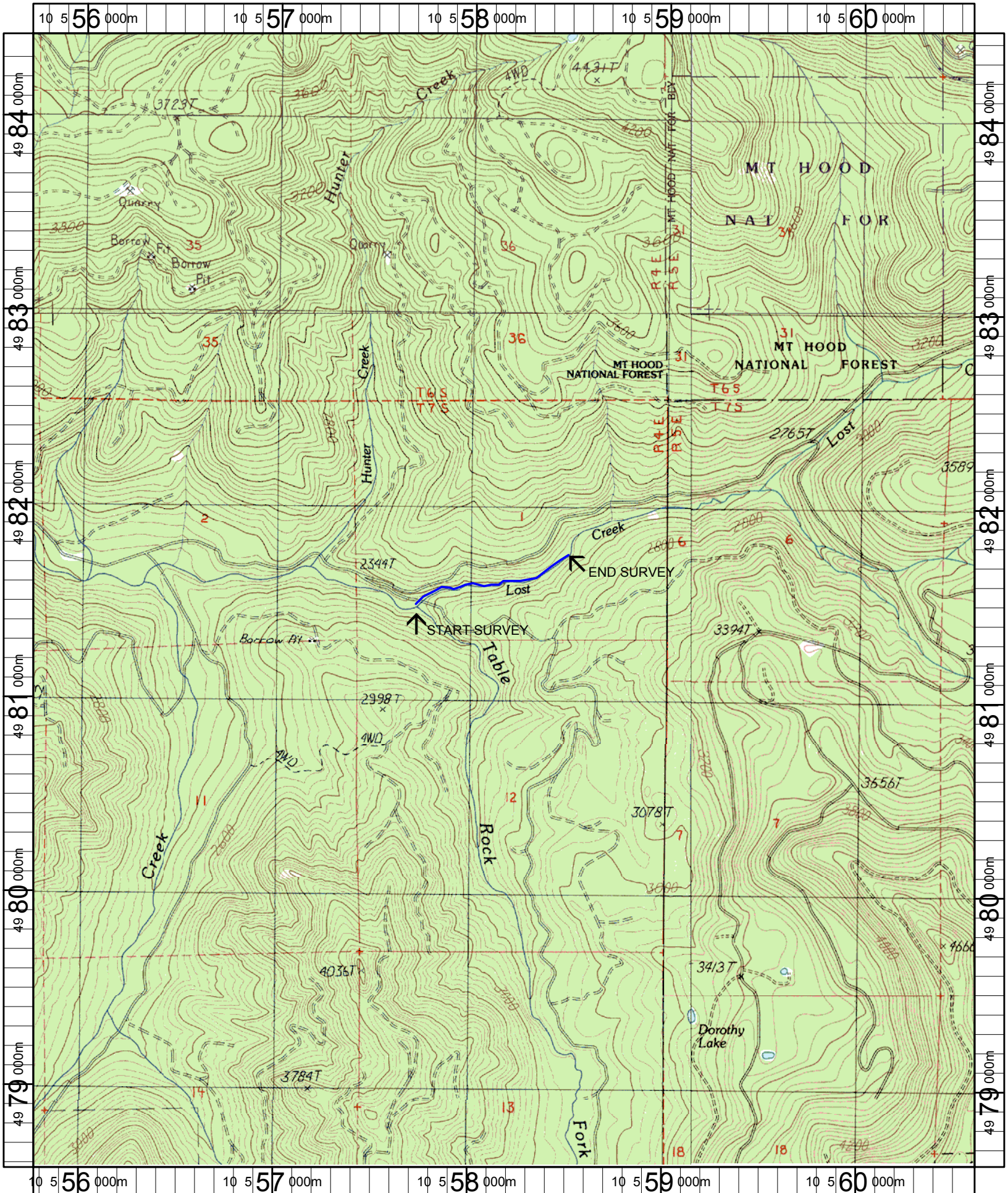
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	18	16.7	20.6
Pools >=1m deep:	8	7.4	9.1
Complex pools (LWD pieces>=3):	9	8.4	10.3
Pool frequency (channel widths/pool):	4.2		
Residual pool depth (avg):	0.63		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 8-W SITE ID: 229 LOST CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	39.2		JCH MV D15 G ST	
17	CB	00	178.4		CH SV M15 M30 ST	
21	CB	01	210.7	TJ/		
31	CB	00	319.7		SS/	
36	PP	00	407.3	HS		
37	CB	00	425.5	HS		
38	RB	00	464		CH MV M30 M15 LT ST	
39	RI	00	485.3	HS		
40	RB	00	515	HS		
41	SS	00	515.4		H = 0.35M	
42	DP	01	528.9	SS/		
48	RB	00	638.8		CH MV M30 D15 LT ST	
50	RB	01	680.5	HS		
51	CB	11	680.5	/TJ		
58	CB	01	784.8	TJ/		
63	CB	01	875.8		CH MV M30 D15 LT ST	



Name: ROOSTER ROCK
 Date: 6/9/2005
 Scale: 1 inch equals 2000 feet

Location: 10 558165 E 4981518 N
 Caption: LOST CREEK RESTORATION SITE - MOLALLA BASIN