

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

STREAM: Rasler Creek (MS-55)
BASIN: Middle Fork Coquille River
SURVEY TYPE: Post-Tx
DATE: February 5, 2007
SURVEY CREW: Matthew Strickland, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.4 km²
USGS MAPS: Rasler Creek
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Rasler Creek habitat survey extended 388 meters. The channel was alternately constrained by hillslope and terrace in a broad valley floor. The average valley width index was 3.9 (range: 2.5-4.5). Land use for the reach was young timber (3-15 cm dbh) and second growth timber (15-30 cm dbh). The average unit gradient was 2.0 percent. Riffles (41%) and scour pools (38%) dominated stream habitat. Cobble (42%) and gravel (34%) dominated stream substrate. Wood volume was moderate at 25.1 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.

Stream Rasler Creek (MS-55)

Basin Coquille River

Treatment

	ODFW Benchmark		Pre	Post	Post		
Habitat Variable	Desirable	Undesirable	2/28/00	2/21/00	2/5/07		
% Pool Area	>35%	<10%	27.4	19.9	38.2		
Number of Pools			13	11	19		
Deep Pools/km (>1.0 m)			7.9	0.0	0.0		
% Off-Channel			1.2	1.2	3.4		
LWD – Pieces/100m	>20	<10	10.9	19.9	22.2		
LWD – Volume/100m	>30	<20	6.6	42.8	25.1		
LWD – Key Pieces/100m	>3	<1	0.0	1.6	0.0		
Large Wood Jams/km			2.8	25.8			
% Riffle Fines	<10	>20	3	22	2		
% Riffle Gravel	>35	<15	26	31	30		
% Bedrock			6	0	0		

Bold is noticeable change

Comments: Pool area is increased since treatment as is the number of pools. Deep pools are decreased, but that may be due variable stream flows between survey years. Off channel habitat has increased. Large wood pieces are slightly higher while large wood volume and key pieces are lower, suggesting that larger pieces are leaving the reach and being replaced by smaller pieces. Substrate is unchanged.

REACH 1

T30S-R11W-S23NE

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	3.9	VWI Range:	2.5 - 4.5

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 Channel	388	854	0
Secondary Channel	14	16	0
Off-Channel Units	26	14	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 2.2	Width: 5.8	6.7 (4.5 - 8.5)	8.7 (5.6 - 10.4)
Depth: 0.28	Height: 0.3	0.7 (0.5 - 0.8)	1.4 (1.3 - 1.65)

W:D ratio: 18.2

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: MF

Habitat Units/100m (total channel length): 9.6

Average Unit Gradient: 2.0%

Habitat Units/100m (primary channel length): 10.6

Water temperature (°C): 7.0 - 7.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	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):	86	22.2
Volume (m ³):	98	25.1
Key pieces (>=12m x 0.60m):	0	0.0

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

2/5/2007

REACH 1		T30S-R11W-S23NE					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	Cbl	Bldr	Bdrk
GLIDE	1	11	3.0	0.20	33	0	0	10	50	25	15	0
POOL-LATERAL SCOUR	19	130	2.6	0.47	338	0	2	14	37	34	13	0
RAPID/BOULDERS	4	73	1.7	0.13	124	0	0	4	29	52	15	0
RIFFLE	13	200	1.7	0.12	360	0	0	2	30	49	18	1
STEP/COBBLE	4	14	2.0	0.10	30	0	0	1	28	55	16	0
Total:	41	428	2.2	0.28	884	0	Avg: 1	8	34	42	15	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	19	130	2.6	0.47	338	38.18%	0	0.0	
Glides	1	11	3.0	0.20	33	3.77%	0	0.0	
Riffles	13	200	1.7	0.12	360	40.66%	0	0.0	
Rapids	4	73	1.7	0.13	124	14.01%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	14	2.0	0.10	30	3.38%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

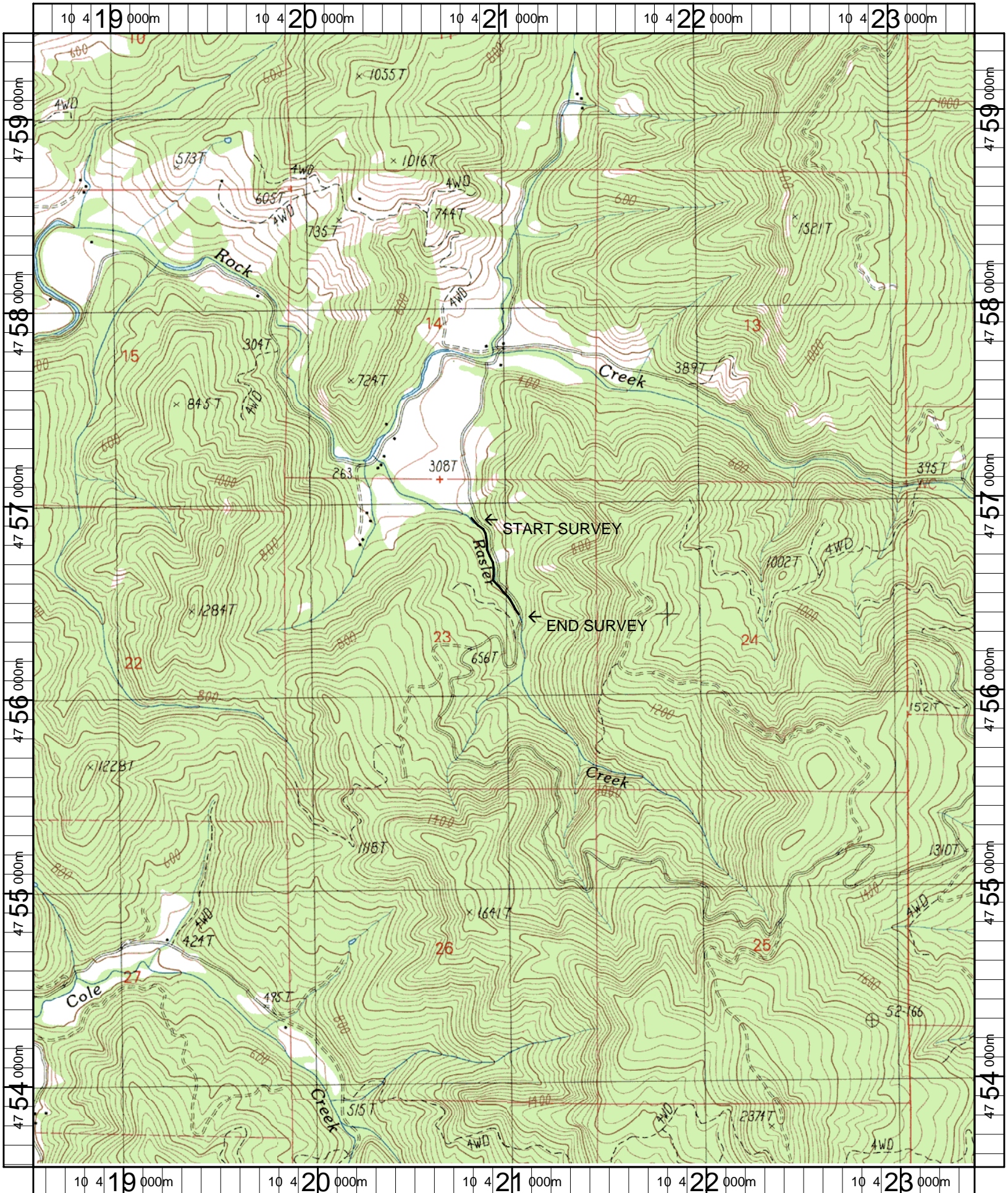
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	19	44.4	49.0
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	8	18.7	20.6
Pool frequency (channel widths/pool):	3.9		
Residual pool depth (avg):	0.37		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 3-MS SITE ID: 55 RASLER CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
5	LP	00	48.4	/SS	
13	LP	00	115	CE/	DRY SIDE CULVERT
19	RB	11	179.4		ACW=0.8, TEMP.=8.5
34	LP	00	312.8	/SS	
38	RI	11	348.3		ACW=1.8
41	LP	00	388	CE	CE DIA =1.5 METAL, RASLER



Name: RASLER CREEK
 Date: 4/26/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0420991 E 4756489 N
 Caption: RASLER CREEK RESTORATION SITE - COQUILLE BASIN