

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

STREAM: Rasler Creek (MS-55)
BASIN: Coquille River
SURVEY TYPE: Post-Tx
DATE: September 13, 2007
SURVEY CREW: Peter Cole, Lisa Biggs
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 404 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.2 (range: 1.0-8.0). Land use for the reach was second growth (15-30 cm dbh) trees and light grazing. The average unit gradient was 3.3 percent. Rapids (66%) and scour pools (33%) comprised stream habitat. Gravel (37%) and cobble (24%) dominated stream substrate. Wood volume was high at 44.7 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 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	3.2	VWI Range:	1 - 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 Channel	404	1,076	0
Secondary Channel	0	0	0
Off-Channel Units	8	14	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 2.9	Width: 5.0	6.4 (4.5 - 7.6)	7.6 (5.8 - 9.1)
Depth: 0.26	Height: 0.6	1.3 (1.2 - 1.3)	1.4 (1.4 - 1.5)

W:D ratio: 7.9
 Stream Flow Type: LF
 Average Unit Gradient: 3.3%
 Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 7.5
 Habitat Units/100m (primary channel length): 7.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LG
Riparian Vegetation:	M50	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	26%	Reach avg: 97%
Undercut Banks:	11%	Range: 67 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	84	20.8
Volume (m ³):	180	44.7
Key pieces (>=12m x 0.60m):	9	2.2

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

9/13/2007

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
POOL-BACKWATER	2	8	1.9	0.33	14	0	15	42	31	10	0	2
POOL-LATERAL SCOUR	13	96	3.5	0.45	340	49	9	27	38	18	9	0
POOL-STRAIGHT SCOUR	1	5	4.0	0.55	18	10	10	55	20	10	5	0
RAPID/BOULDERS	15	303	2.4	0.07	718	262	2	7	38	33	20	0
Total:	31	411	2.9	0.26	1,090	321	Avg: 6	19	37	24	13	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	2	8	1.9	0.33	14	1.31%	0	0.0	
Scour Pools	14	101	3.6	0.45	358	32.84%	59	16.5	
Glides	0	0			0	0.00%	0	0.0	
Riffles	0	0			0	0.00%	0	0.0	
Rapids	15	303	2.4	0.07	718	65.85%	262	36.5	
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	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	<u>Total of all Channel Lengths # / Km</u>	<u>Primary Channel Length # / Km</u>
All Pools:	16	38.9	39.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	8	19.5	19.8
Pool frequency (channel widths/pool):	5.2		
Residual pool depth (avg):	0.41		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

RASLER CREEK POST-TX
GCG: 3-MS SITE ID: 55

Survey Date 9/13/2007
Report Date: 11/7/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	1138
Total conifers/1000 ft	305
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	20

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.7	4.7	0.0	1.7	1.3	8.3	2.0	14.7
15-30cm	0.3	2.0	0.3	0.7	0.3	0.3	1.0	3.0
30-50cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
50-90cm	0.7	0.0	0.7	0.0	0.3	0.3	1.7	0.3
>90cm	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Total/100m2	2.0	7.3	1.0	2.3	2.0	9.0	1.7	6.2

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	85		62		82	
Shrub cover	50		21		29	
Grass/forb cover	41		50		51	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	67		50		100	
High terrace	33		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		50		0	
Riprap	0		0		0	
Surface slope (%)	38		28		50	

Summary of Riparian Zone (0-30m) for all reaches**3 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	1138
Total conifers/1000 ft	305
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	20

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	2.0	14.7
15-30cm	1.0	3.0
30-50cm	0.0	0.7
50-90cm	1.7	0.3
>90cm	0.3	0.0

RIPARIAN ZONE VEGETATION

Reach 1

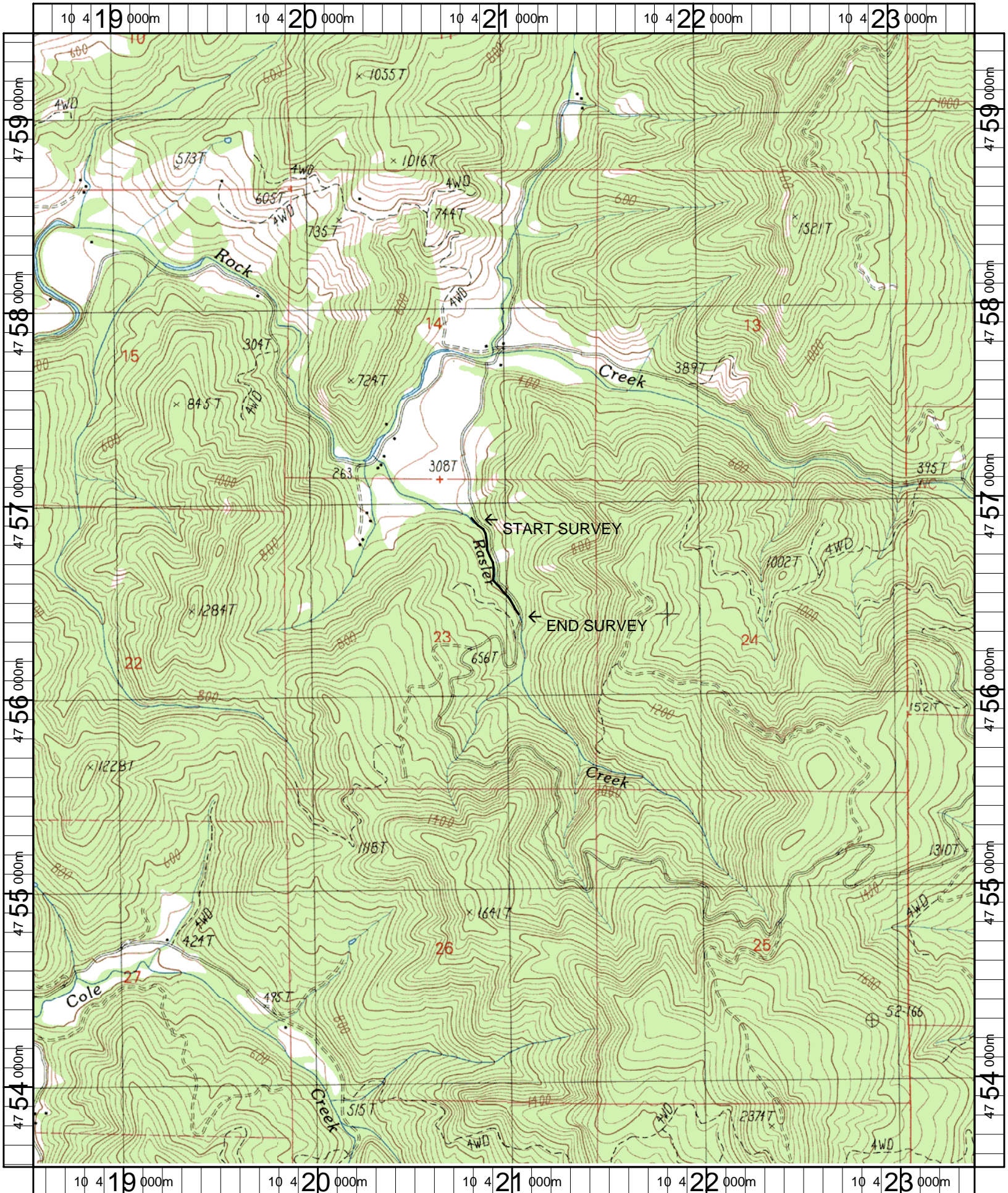
Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
9	LT	1	HS	80	95	40	30	Conifer							
								Hardwood	2						
9	LT	2	RB	0	80	20	20	Conifer							
								Hardwood							
9	LT	3	HS	90	95	30	20	Conifer					1		
								Hardwood	1	1		1			
9	RT	1	HS	20	75	25	70	Conifer					1	4M OF HT	
								Hardwood	8	1					
9	RT	2	HS	70	75	20	80	Conifer		1			1		
								Hardwood							
9	RT	3	HS	50	95	15	85	Conifer							
								Hardwood	12						
18	LT	1	HS	100	100	60	20	Conifer	2	1					
								Hardwood	1	2	1				
18	LT	2	RB	0	20	20	15	Conifer							
								Hardwood							
18	LT	3	HS	40	60	50	20	Conifer	2						
								Hardwood	4						
18	RT	1	HT	0	90	55	45	Conifer					1		
								Hardwood	1	1					
18	RT	2	HS	60	80	20	80	Conifer							
								Hardwood	2						
18	RT	3	HS	80	95	30	70	Conifer							
								Hardwood	5						
29	LT	1	HT	0	80	90	10	Conifer						4M OF HILLSLOPE	
								Hardwood	1	2	1				
29	LT	2	RB	0	20	35	15	Conifer							
								Hardwood	2	1					
29	LT	3	HS	40	50	30	30	Conifer	2	1					
								Hardwood	1						
29	RT	1	HS	25	70	30	70	Conifer						1	
								Hardwood	1						
29	RT	2	HS	40	95	10	90	Conifer					1		
								Hardwood	1	1					
29	RT	3	HS	0	95	20	80	Conifer							
								Hardwood	2						

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	4.6	AM, HS	AM=RSN. START JST BEFORE 1RST STRCTURE JST DWNSTRM OF SIGN. LOGS.
2	RB	00	29.6		CATTLE XING
3	RB	00	54.1	HS	HS(LWD)
6	LP	00	80.6	HS	HS(LWD)
7	RB	00	111.1		SALNOMIDS PRESENT
8	LP	00	121.6	HS	HS(LWD)
9	RB	00	146.6		RIP 1
10	RB	01	170.5		HORNETS IN LWD
12	LP	00	177.3	HS	HS(LWD)
18	LP	00	246.5	HS	HS(LWD) , RIP 2
20	LP	00	265.1	HS	HS(LWD)
21	RB	00	294.6	HS	HS(LWD) CONTINUED. CATTLE XING MULTIPLE TIMES
22	LP	00	301.8	HS	HS(LWD)
24	LP	00	312.7	HS	HS(LWD) CONTINUED
29	LP	00	376.7		10T0420933.4756633UTM, RIP 3
31	SP	00	403.6	CS	BOULDER RIPRAP. VERY VERY NICE CULVERT NEXT. END



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