

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

STREAM: Rasler Creek (MS-55)  
BASIN: Coquille River  
SURVEY TYPE: Pre-Tx  
DATE: July 19, 2000  
SURVEY CREW: Scott Groth, Cassie Mellon  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 4.4 km<sup>2</sup>  
USGS MAPS: Rasler Creek  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Rasler Creek habitat survey extended 432 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 8.5 (range: 4.0 – 20.0). Land use for the reach was mature (50-90 cm dbh) trees and light grazing. The average unit gradient was 2.5 percent. Rapids (46%) and scour pools (30%) dominated stream habitat. Cobble (37%) and gravel (36%) dominated stream substrate. Wood volume was low at 12.2 m<sup>3</sup>/100m.

**COMMENTS:**

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

REACH 1

T30S-R11W-S23

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 avg: 8.5 range: 4.0-20.0

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	432	810	0
Secondary	8	5	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.0	Width	4.6	6.9	8.1
Depth	0.23	Height	0.5	1.0	1.4
		W:D ratio	8.8	Entrenchment	1.5

Stream Flow Type: MF Water Temp: 13.8-13.8°C  
 Avg. Unit Gradient: 2.5% Habitat Units/100m: 8.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	LG
Riparian Vegetation:	C30	M30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	20%	Reach avg: 96%
Undercut Banks	13%	Range: 72-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	19	4.4
Volume (m <sup>3</sup> )	53	12.2
Key pieces (≥10m x 0.6m)	4	0.9

HABITAT UNIT SUMMARY

REACH 1 T30S-R11W-S23 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	Eldr	Bdrk
CULVERT CROSSING	1	15	1.2	0.10	18	10	9	18	18	9	46	0
POOL-LATERAL SCOUR	9	77	2.5	0.50	186	0	14	24	33	29	0	0
POOL-PLUNGE	2	8	4.0	0.60	34	4	20	30	25	15	10	0
POOL-STRAIGHT SCOUR	1	8	3.5	0.90	28	0	10	20	50	20	0	0
RAPID/BEDROCK	1	10	1.1	0.05	11	0	0	5	10	19	0	67
RAPID/BOULDERS	14	216	1.6	0.06	361	13	1	10	37	50	2	0
RIFFLE	7	105	1.7	0.09	176	0	4	11	43	42	0	0
STEP/STRUCTURE	1	1	0.2	0.10	0	2	0	40	40	0	20	0
<b>Total:</b>	<b>36</b>	<b>440</b>	<b>2.0</b>	<b>0.23</b>	<b>814</b>	<b>29</b>	<b>Avg: 6</b>	<b>16</b>	<b>36</b>	<b>37</b>	<b>3</b>	<b>2</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	0	0	-	-	0	0.00	0	0.0
Scour Pools	12	93	2.9	0.55	248	30.43	4	1.6
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	7	105	1.7	0.09	176	21.66	0	0.0
Rapids	15	226	1.6	0.06	372	45.68	13	3.5
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	1	1	0.2	0.10	0	0.01	2	2,000.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

	<u>Total</u>	<u>#/Km</u>
All Pools	12	27.3
Pools >1m deep:	0	0.0
Complex pools (LWD pieces ≥ 3):	1	2.3
Pool Frequency (channel widths/pool):	8.0	
Residual pool depth (avg)	0.49m	

STREAM SUMMARY

RASLER CREEK (PRE-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	440	2.0	0.23	814	6	16	36	37	3	2	29

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Scour Pool	248	30.4
Backwater Pools	0	0.0
Glide	0	0.0
Riffle	176	21.7
Rapid	372	45.7
Cascade	0	0.0
Step	0	**.*
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	894
Total conifers/1000 ft	203
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

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	1.7	0.7	0.3	3.3	0.0	3.7	2.0	7.7
15-30cm	0.0	3.7	0.7	1.3	0.3	0.3	1.0	5.3
30-50cm	0.0	1.0	0.0	0.3	0.0	0.0	0.0	1.3
50-90cm	0.0	0.3	0.3	0.0	0.0	0.0	0.3	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m <sup>2</sup>	1.7	5.7	1.3	5.0	0.3	4.0	1.1	4.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	71		58		43	
Shrub cover	56		60		48	
Grass/forb cover	12		24		42	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	33		50		83
High terrace	33		33		17	
Low terrace	33		17		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	41		42		40	

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

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

Total hardwoods/1000 ft	894
Total conifers/1000 ft	203
Total conifers >20" dbh/1000 ft	20

Average number of trees in a 5-meter wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	2.0	7.7
15-30cm	1.0	5.3
30-50cm	0.0	1.3
50-90cm	0.3	0.3
>90cm	0.0	0.0

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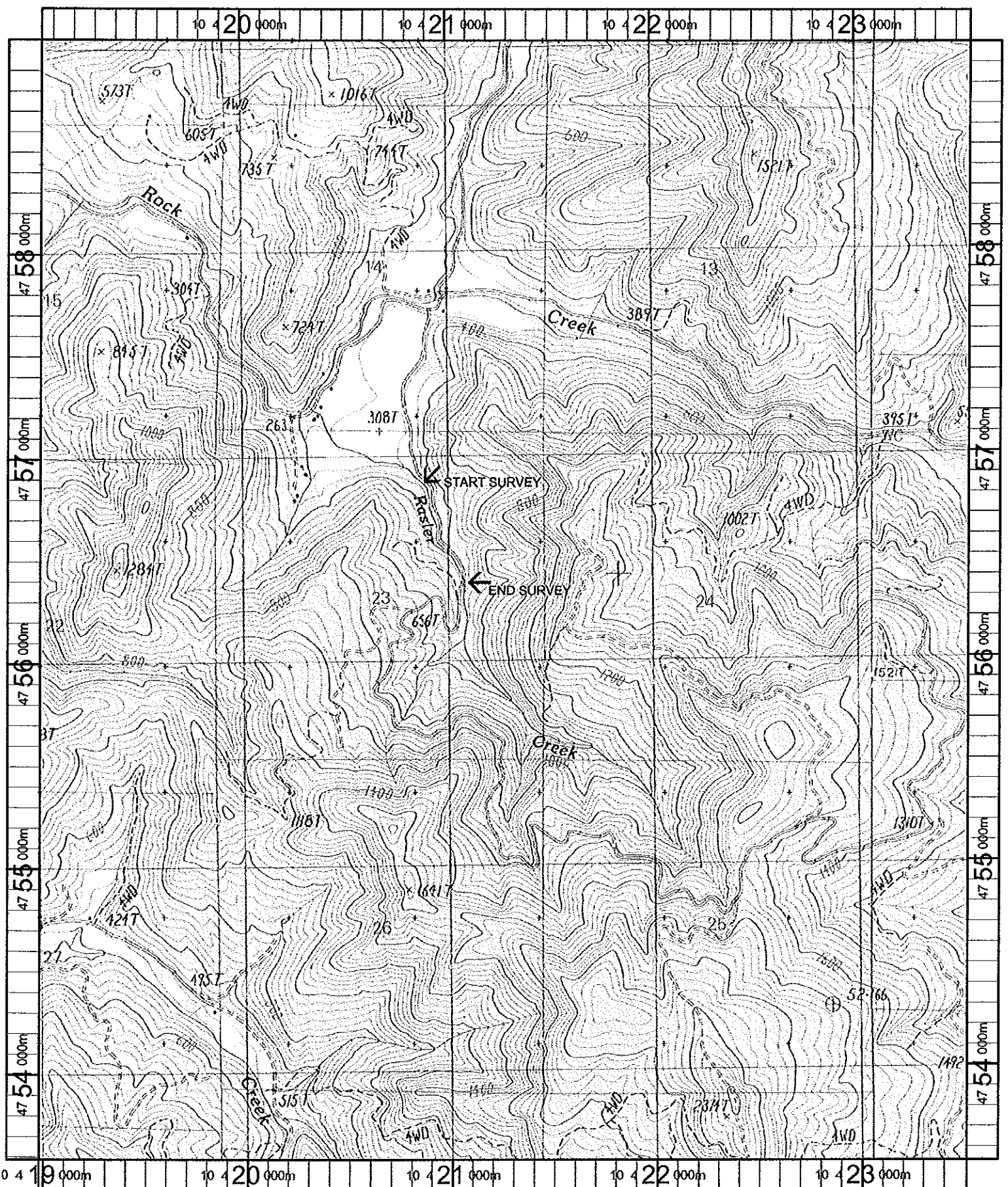
RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
4	LF	1	LT	15.0	80	10	10	Conifer	3	0	0	0	0	
								Hardwood	0	0	0	0	0	COW DUNG
4	LF	2	LT	50.0	60	90	10	Conifer	1	2	0	0	0	
								Hardwood	0	0	0	0	0	
4	LF	3	HS	30.0	5	50	0	Conifer	0	0	0	0	0	
								Hardwood	1	0	0	0	0	ROAD
4	RT	1	HS	70.0	95	60	10	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
4	RT	2	HS	50.0	80	80	10	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	0	0	
4	RT	3	HS	30.0	80	80	20	Conifer	0	0	0	0	0	
								Hardwood	4	0	0	0	0	
16	LF	1	HS	45.0	45	90	10	Conifer	1	0	0	0	0	
								Hardwood	1	2	1	0	0	
16	LF	2	HS	45.0	35	80	0	Conifer	0	0	0	0	0	
								Hardwood	7	0	0	0	0	ROAD BED
16	LF	3	HS	45.0	5	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
16	RT	1	LT	10.0	90	60	10	Conifer	0	0	0	0	0	
								Hardwood	1	2	1	0	0	
16	RT	2	HS	60.0	75	80	10	Conifer	0	0	0	1	0	
								Hardwood	0	0	0	0	0	
16	RT	3	HS	50.0	80	80	10	Conifer	0	0	0	0	0	
								Hardwood	5	1	0	0	0	
25	LF	1	HT	85.0	30	90	10	Conifer	1	0	0	0	0	
								Hardwood	0	2	0	0	0	ROADBED
25	LF	2	HT	25.0	0	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
25	LF	3	HT	30.0	0	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
25	RT	1	HT	20.0	85	25	20	Conifer	0	0	0	0	0	
								Hardwood	0	4	1	1	0	DIRT, LEAVES
25	RT	2	HT	20.0	95	30	15	Conifer	0	0	0	0	0	
								Hardwood	0	4	1	0	0	
25	RT	3	HS	55.0	90	80	20	Conifer	0	1	0	0	0	
								Hardwood	1	0	0	0	0	



Name: RASLER CREEK  
 Date: 11/7/100  
 Scale: 1 Inch equals 2000 feet

Location: 10 421174 E 4756278 N  
 Caption: RASLER CREEK RESTORATION SITE - COQUILLE BASIN