

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

STREAM: Long Prairie Creek (MC-46)
BASIN: Siletz River
SURVEY TYPE: Pre-Tx
DATE: June 29, 2000
SURVEY CREW: Lisa Krentz, LaNoah Babcock
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 13.4 km²
USGS MAPS: Eddyville
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Long Prairie Creek habitat survey extended 492 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.0 (range: 2.0 – 10.0). Land use for the reach was timber harvest and young (3-15 cm dbh) trees. The average unit gradient was 0.4 percent. Slackwater (59%) and scour pools (33%) dominated stream habitat. Gravel (33%), cobble (29%) and sand (26%) dominated stream substrate. Wood volume was low at 7.9 m³/100m.

COMMENTS:

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

REACH 1

T10S-R9W-S17NE

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	0	Multiple Terraces	100
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 7.0 range: 2.0-10.0

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	492	3,630	0
Secondary	10	10	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u>	<u>First Terrace</u>
Width 6.6	Width 8.5	13.0	9.0
Depth 0.59	Height 0.6	1.2	1.2
	W:D ratio 14.3	Entrenchment 1.6	

Stream Flow Type: MF Water Temp: 15.0-15.0°C
 Avg. Unit Gradient: 0.4% Habitat Units/100m: 6.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	YT
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	2%	Reach avg: 72%
Undercut Banks	11%	Range: 36-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	43	8.7
Volume (m ³)	39	7.9
Key pieces (≥10m x 0.6m)	0	0.0

HABITAT UNIT SUMMARY

REACH 1 T10S-R9W-S17NE 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	Cbbl	Bldr	Bdrk
POOL-BEAVER DAM	9	196	7.9	0.78	1,560	0	11	24	37	25	1	1
POOL-DAMMED	3	67	8.4	0.92	588	0	13	50	30	7	0	0
POOL-LATERAL SCOUR	8	168	7.5	0.64	1,216	3	17	33	37	13	0	0
RAPID/BOULDERS	1	9	1.0	0.10	9	0	0	25	15	60	0	0
RIFFLE	4	44	4.2	0.33	163	10	2	8	35	52	4	0
RIFFLE W/ POCKETS	2	16	6.0	0.60	90	0	15	33	33	20	0	0
STEP/BEAVER DAM	2	2	6.1	0.01	14	0	0	13	28	60	0	0
STEP/COBBLE	1	1	1.0	0.10	1	0	0	0	0	100	0	0
Total:	30	502	6.6	0.59	3,640	13	Avg:11	26	33	29	1	0

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	12	263	8.0	0.82	2,148	59.01	0	0.0
Scour Pools	8	168	7.5	0.64	1,216	33.40	3	0.2
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	6	59	4.8	0.42	252	6.92	10	4.0
Rapids	1	9	1.0	0.10	9	0.25	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	3	3	4.4	0.04	15	0.41	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

	Total	#/Km
All Pools	20	39.8
Pools \geq 1m deep:	5	10.0
Complex pools (LWD pieces \geq 3):	7	13.9
Pool Frequency (channel widths/pool):	3.0	
Residual pool depth (avg)	0.50m	

STREAM SUMMARY

LONG PRAIRIE CR. LOW (PRE-TX)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
30	502	6.6	0.59	3,640	11	26	33	29	1	0	13

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,216	33.4
Backwater Pools	2,148	59.0
Glide	0	0.0
Riffle	252	6.9
Rapid	9	0.3
Cascade	0	0.0
Step	15	0.4
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	163
Total conifers/1000 ft	41
Total conifers >20" dbh/1000 ft	41
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	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
15-30cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
30-50cm	0.0	0.3	0.0	0.7	0.0	0.0	0.0	1.0
50-90cm	0.0	0.7	0.0	0.3	0.7	0.0	0.7	1.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.0	1.0	0.0	1.7	0.7	0.0	0.2	0.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	50		62		58	
Shrub cover	65		77		48	
Grass/forb cover	35		23		22	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	0		67		33
High terrace	0		0		0	
Low terrace	100		33		33	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		33	
Riprap	0		0		0	
Surface slope (%)	0		16		8	

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	163
Total conifers/1000 ft	41
Total conifers >20" dbh/1000 ft	41

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	0.0	0.3
15-30cm	0.0	0.3
30-50cm	0.0	1.0
50-90cm	0.7	1.0
>90cm	0.0	0.0

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	
8	LF	1	LT	0.0	100	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	VERY DENSE TALL SHR
8	LF	2	LT	0.0	100	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	BEAVER TRAILS
8	LF	3	LT	0.0	100	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
8	RT	1	LT	0.0	0	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
8	RT	2	HS	37.0	20	60	40	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
8	RT	3	HS	15.0	0	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	LF	1	LT	0.0	100	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	ESTIMATED
20	LF	2	HS	15.0	100	70	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	LF	3	RB	0.0	80	0	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	RT	1	LT	0.0	30	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	RT	2	HS	35.0	50	60	40	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	RT	3	HS	35.0	100	40	60	Conifer	0	0	0	2	0	
								Hardwood	0	0	0	0	0	
24	LF	1	LT	0.0	70	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	2	0	ALDER
24	LF	2	HS	10.0	100	80	20	Conifer	0	0	0	0	0	
								Hardwood	1	1	2	1	0	ALDER, BIG LEAF MAP
24	LF	3	RB	0.0	70	10	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	ROAD
24	RT	1	LT	0.0	0	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	SALMONBERRIES
24	RT	2	LT	0.0	0	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
24	RT	3	LT	0.0	0	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	

