

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

STREAM: Long Prairie Creek (MC-222)
BASIN: Siletz River
SURVEY TYPE: Post-Tx
DATE: February 8, 2005
SURVEY CREW: Sheila Davis, Brian Bangs
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 2,410 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.9 (range: 2.0-8.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.0 percent. Scour pools (43%) and riffles (32%) dominated stream habitat. Gravel (28%) and sand (24%) dominated stream substrate. Wood volume was moderate at 23.6 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

T10S-R09W-S16NE

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	4.9	VWI Range:	2 - 8

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	2,410	11,014	0
Secondary Channel	93	219	1
Off-Channel Units	210	268	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 4.0	Width: 6.7	22.5 (8.8 - 44)	12.4 (9.4 - 15.3)
Depth: 0.44	Height: 0.6	1.2 (0.8 - 2)	1.7 (1.6 - 1.7)

W:D ratio: 12.9
 Stream Flow Type: MF
 Average Unit Gradient: 1.0%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 3.9
 Habitat Units/100m (total channel length): 6.0
 Habitat Units/100m (primary channel length): 6.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	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):	370	15.4
Volume (m ³):	570	23.6
Key pieces (>=12m x 0.60m):	40	1.7

OREGON DEPT OF FISH AND WILDLIFE

LONG PRAIRIE CREEK POST-TX (2-MC, 222)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/8/2005

REACH 1		T10S-R09W-S16NE					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
GLIDE	8	145	4.9	0.32	734	0	14	14	11	7	5	49
POOL-BACKWATER	14	81	1.8	0.30	153	0	45	35	8	7	2	3
POOL-BEAVER DAM	1	46	3.8	0.80	176	0	20	25	15	25	10	5
POOL-DAMMED	1	16	5.6	0.50	88	0	15	30	25	20	0	10
POOL-ISOLATED	3	16	1.3	0.25	19	0	65	33	0	0	0	2
POOL-LATERAL SCOUR	57	998	4.8	0.77	4,834	0	15	37	24	9	5	10
POOL-PLUNGE	2	14	7.4	0.73	123	0	10	38	18	18	13	5
PUDDLED UNIT	1	25	0.8	0.10	20	0	0	5	80	15	0	0
RAPID/BEDROCK	10	277	5.3	0.14	1,433	0	3	7	4	5	3	77
RAPID/BOULDERS	7	90	2.0	0.15	227	0	4	4	29	30	23	9
RIFFLE	56	1,004	3.6	0.28	3,683	0	8	14	46	20	4	9
STEP/BEDROCK	1	1	8.7	0.05	5	0	0	0	0	0	0	100
STEP/LOG	3	1	4.7	0.07	7	0	33	26	15	7	20	0
Total:	164	2,713	4.0	0.44	11,501	0	Avg: 15	24	28	13	5	15

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	19	159	2.0	0.33	436	3.79%	0	0.0	
Scour Pools	59	1,012	4.9	0.77	4,958	43.11%	0	0.0	
Glides	8	145	4.9	0.32	734	6.38%	0	0.0	
Riffles	56	1,004	3.6	0.28	3,683	32.03%	0	0.0	
Rapids	17	367	3.9	0.14	1,659	14.43%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	2	5.7	0.06	11	0.10%	0	0.0	
Dry	1	25	0.8	0.10	20	0.17%	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:	78	28.8	32.4
Pools >=1m deep:	8	2.9	3.3
Complex pools (LWD pieces>=3):	22	8.1	9.1
Pool frequency (channel widths/pool):	5.2		
Residual pool depth (avg):	0.50		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **222** LONG PRAIRIE CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	9.8		US WF G D30 SG	
2	LP	00	24.5	HS		
4	LP	00	87	HS		
5	LP	00	97.4	HS, SS/	COHO CARCASS	
7	LP	00	136.7	HS BV	ADULT TROUT, JUVIES	
9	RI	01	161.5	/TJ		
12	RI	00	203.8	HS		
13	LP	01	218.4	/TJ		
17	LP	00	275.9		JV TROUT	
19	LP	00	315.2		JV TROUT	
20	RI	01	331.5		JV TROUT	
21	BW	10	331.5		BV	
23	LP	00	369.7	SS/	HS	
28	RI	01	457.2	BV		
32	SL	00	481.4		H=0.15	
33	RI	01	493.3		DRY CULVERT, SS SIGN	
35	LP	00	505.6	HS		
38	LP	02	540.7	/TJ		
42	RI	00	581.8		US WF F D30 ST LT	
45	LP	00	624.7	DJ	FRY	
47	LP	01	672	/TJ DJ HS		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **222** LONG PRAIRIE CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
50	LP	00	692.4	BV		
51	RI	00	705	CS		
52	LP	01	716.8	DJ		
55	LP	01	732.4	HS		
57	LP	00	746.6	BV		
58	LP	01	755.7	HS DJ /TJ		
60	BW	10	755.7	BV		
65	RI	00	811.1	BV		
66	LP	00	822.8	BV	COHO CARCASS	
70	LP	00	853.8		FRY	
72	RI	00	897.2	/SS		
76	LP	00	931.9	DJ		
79	RI	00	995.9	HS		
80	LP	00	1023.8	SS/		
83	RI	00	1069.3	DJ		
85	RI	01	1093	HS TJ/ DJ		
91	RI	00	1185.3	BV	CT MT D30 S LT ST	
92	LP	00	1209.1	HS		
99	RI	01	1340.8	/TJ		
108	GL	00	1441.6	CS	UNDER BRIDGE	
110	BW	10	1451		FRY PRESENT	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **222** **LONG PRAIRIE CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
111	LP	00	1467		JUVIES PRESENT	
114	RR	00	1524.1	HS		
125	RB	00	1719.7	CS, BC	UNDER BRIDGE	
129	SL	00	1747.8	DJ, LI	H=0.15	
130	LP	00	1762.2	BV, LA		
131	RR	01	1796.3	/TJ, HS	CH MV D15 S ST	
133	LP	00	1811.4	BV		
139	RR	00	1937.4	BV, HS		
140	RI	01	1954.3	/TJ		
143	RR	01	2005.7	HS		
145	LP	00	2022.1	LA, BV	FRY PRESENT	
150	SR	00	2197.95		H=0.35	
154	BP	00	2289.25	BV, CS	JUVIES PRESENT	
155	LP	01	2307.55	BV	ADULT COHO FEMALE	
160	LP	00	2377.45	HS, SS/		
161	SL	00	2378		H=0.35	
164	RB	11	2410		CT MT D30 D15 LT ST	

