

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

STREAM: Long Prairie Creek (MC-335)  
BASIN: Siletz River  
SURVEY TYPE: Post-Tx  
DATE: August 22, 2007  
SURVEY CREW: Josh Togstad, Kim Jones  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 16.8 km<sup>2</sup>  
USGS MAPS: Eddyville  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Long Prairie Creek habitat survey extended 547 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 12.8 (range: 6.0-20.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 0.6 percent. Scour pools (71%) dominated stream habitat. Sand (35%), gravel (26%) and bedrock (23%) dominated stream substrate. Wood volume was low at 16.2 m<sup>3</sup>/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-S08SE

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	12.8	VWI Range:	6 - 20

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	547	3,332	0
Secondary Channel	29	83	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.5	Width: 8.8	10.2 ( 7.1 - 12.4 )	13.9 ( 11.9 - 18.4 )
Depth: 0.41	Height: 0.4	0.8 ( 0.7 - 1 )	1.5 ( 1.25 - 1.9 )

W:D ratio: 23.4

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: MF

Habitat Units/100m (total channel length): 4.9

Average Unit Gradient: 0.6%

Habitat Units/100m (primary channel length): 5.1

Water temperature (°C): 14.0 - 14.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	YT
Riparian Vegetation:	D30	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	14%	Reach avg: 78%
Undercut Banks:	15%	Range: 44 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	45	8.2
Volume (m <sup>3</sup> ):	88	16.2
Key pieces (>=12m x 0.60m):	8	1.5

OREGON DEPT OF FISH AND WILDLIFE

LONG PRAIRIE CREEK POST-TX (2-MC, 335)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

8/22/2007

REACH 1		T10S-R09W-S08SE					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	Cbl	Bldr	Bdrk
GLIDE	3	76	6.2	0.25	450	8	7	40	17	5	3	28
POOL-LATERAL SCOUR	13	332	6.7	0.65	2,245	7	16	50	14	7	0	13
POOL-STRAIGHT SCOUR	1	23	7.5	0.65	169	0	15	30	10	10	0	35
RAPID/BEDROCK	1	18	6.2	0.15	113	0	5	10	0	5	0	80
RIFFLE	6	108	3.4	0.16	357	2	0	23	58	8	1	11
STEP/BEDROCK	2	11	3.9	0.07	42	0	3	3	0	0	0	95
STEP/COBBLE	2	8	3.8	0.10	39	0	0	13	65	15	0	8
<b>Total:</b>	<b>28</b>	<b>576</b>	<b>5.5</b>	<b>0.41</b>	<b>3,415</b>	<b>17</b>	<b>Avg: 9</b>	<b>35</b>	<b>26</b>	<b>7</b>	<b>1</b>	<b>23</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	14	355	6.8	0.65	2,414	70.70%	7	0.3	
Glides	3	76	6.2	0.25	450	13.18%	8	1.8	
Riffles	6	108	3.4	0.16	357	10.44%	2	0.6	
Rapids	1	18	6.2	0.15	113	3.32%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	19	3.8	0.09	80	2.36%	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:	14	24.3	25.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	8.7	9.1
Pool frequency (channel widths/pool):	4.7		
Residual pool depth (avg):	0.52		

OREGON DEPARTMENT OF FISH AND WILDLIFE  
HABITAT INVENTORY

LONG PRAIRIE CREEK POST-TX  
GCG: 2-MC SITE ID: 335

Survey Date 8/22/2007  
Report Date: 11/7/2007

RIPARIAN ZONE  
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	488
Total conifers/1000 ft	224
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	0.0	0.7	0.0	1.7	0.0	0.7	0.0	3.0
15-30cm	0.0	0.3	0.7	0.7	0.7	0.0	1.3	1.0
30-50cm	0.0	2.0	1.0	1.3	1.0	0.0	2.0	3.3
50-90cm	0.0	0.3	0.0	0.3	0.3	0.0	0.3	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	3.3	1.7	4.0	2.0	0.7	1.2	2.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	72		75		75	
Shrub cover	14		10		22	
Grass/forb cover	84		90		75	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		33		33	
High terrace	83		50		67	
Low terrace	0		0		0	
Floodplain	17		17		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	0		6		9	

**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	488
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

**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	0.0	3.0
15-30cm	1.3	1.0
30-50cm	2.0	3.3
50-90cm	0.3	0.7
>90cm	0.0	0.0

**RIPARIAN ZONE VEGETATION**

Reach 1

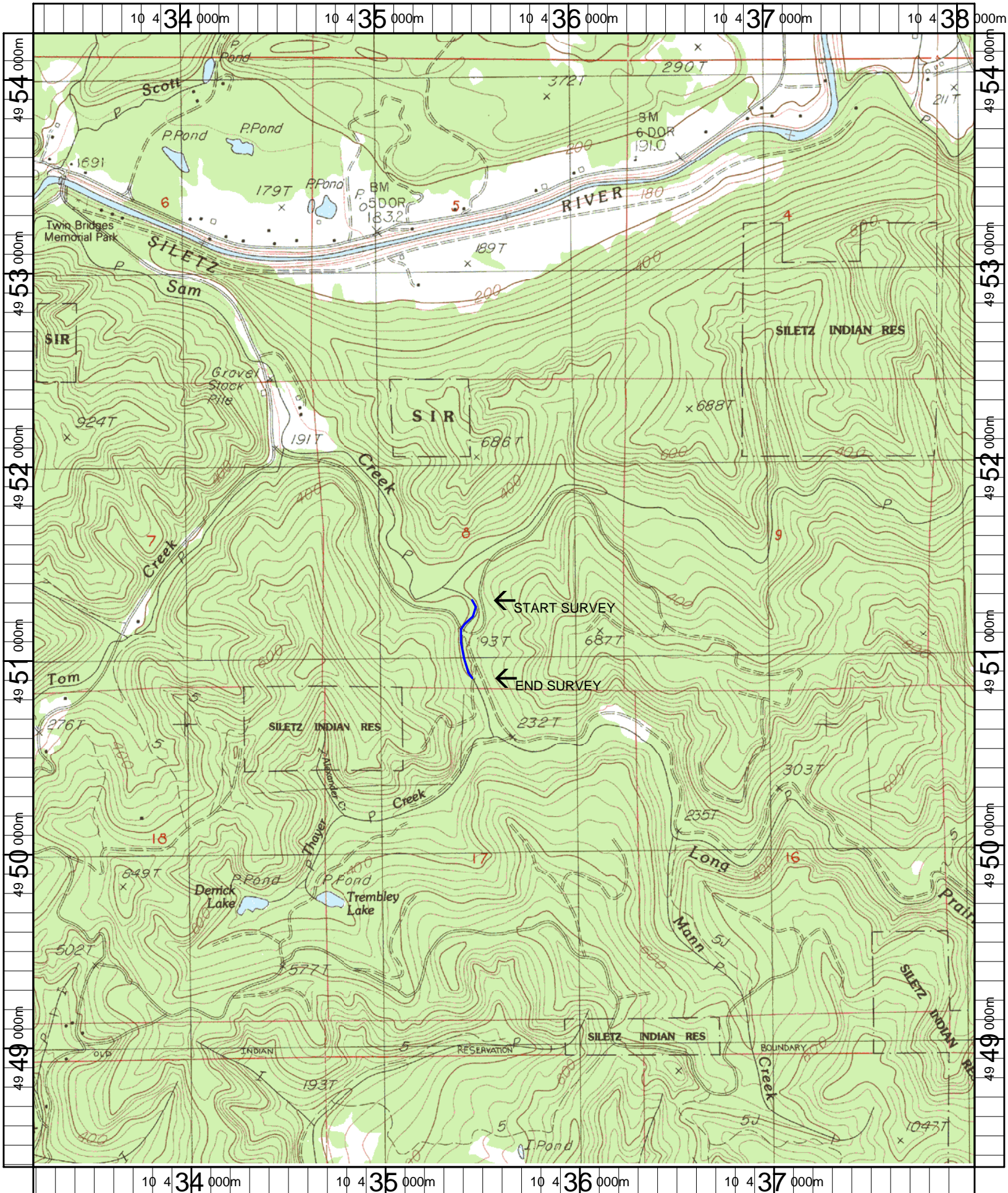
Reach 1

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	HT	0	80	10	90	Conifer							
								Hardwood							
9	LT	2	HS	7	90	0	100	Conifer			1				
								Hardwood	2						
9	LT	3	HS	10	80	10	80	Conifer		1	1			10 DIRT	
								Hardwood							
9	RT	1	HT	0	70	0	100	Conifer							
								Hardwood	1			1			
9	RT	2	HT	0	80	10	90	Conifer		1	2				
								Hardwood							
9	RT	3	HT	0	70	20	80	Conifer			1	1			
								Hardwood							
16	LT	1	FP	0	60	70	20	Conifer						10 DIRT	
								Hardwood	1					SKUNK	
16	LT	2	FP	0	60	25	75	Conifer						CABBAGE	
								Hardwood	3					SKUNK	
16	LT	3	HT	0	70	30	70	Conifer			1			CABBAGE	
								Hardwood	1					WETLAND	
16	RT	1	HT	0	80	0	100	Conifer							
								Hardwood		1	3				
16	RT	2	HS	30	80	25	75	Conifer							
								Hardwood		1	2				
16	RT	3	HS	45	85	60	30	Conifer						10 DIRT	
								Hardwood							
22	LT	1	HT	0	60	0	100	Conifer							
								Hardwood							
22	LT	2	HT	0	60	0	100	Conifer		1					
								Hardwood							
22	LT	3	HT	0	70	5	95	Conifer		1					
								Hardwood							
22	RT	1	HT	0	80	5	95	Conifer							
								Hardwood			3				
22	RT	2	HT	0	80	0	100	Conifer							
								Hardwood		1	2	1			
22	RT	3	HT	0	75	5	95	Conifer							
								Hardwood	1						

COMMENT SUMMARY

MONITORING AREA: 2-MC      SITE ID: 335      STREAM: LONG PRAIRIE CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	13.5		METRIC 1
4	LP	00	52.2	US	
6	LP	00	78.2	US, HS	
8	LP	00	121.6	US	
9	RI	00	146.9		METRIC 2
10	LP	00	165.5	HS, US	
13	LP	00	210.9	US	
14	LP	01	254.7	BC, CF, US	SAMS CREEK RD
15	LP	02	254.7	US	
16	RI	00	284.6		1.5 METER SPRUCE ON LEFT BANK
17	LP	00	340.2	US, CF	
18	RI	00	352.7	CF	
19	LP	00	389	US	OLD OVERFLOW CHANNELS NEXT TO HILLSLOPE
21	LP	00	396.5	HS	
22	RI	00	409.1		METRIC 4
23	SP	00	431.6	CF	
26	LP	00	496.6	HS, US	
28	GL	00	547.1		END SURVEY



Name: EDDYVILLE  
 Date: 5/9/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 435638 E 4951290 N  
 Caption: LONG PRAIRIE CREEK #335 RESTORATION SITE - SILETZ BASIN