

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

STREAM: Sams Creek (MC-334)  
BASIN: Siletz River  
SURVEY TYPE: Pre-Tx  
DATE: February 21, 2006  
SURVEY CREW: Scott Venables, Seth Ring  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 36.9 km<sup>3</sup>  
USGS MAPS: Eddyville  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Sams Creek habitat survey extended 711 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.8 (range: 5.0-10.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 0.3 percent. Scour pools (91%) dominated stream habitat. Bedrock (36%) and sand (20%) dominated stream substrate. Wood volume was low at 17.2 m<sup>3</sup>/100m.

**COMMENTS:**

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

REACH 1

T10S-R09W-S06SE

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	7.8	VWI Range:	5 - 10

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	711	8,094	0
Secondary Channel	0	0	0
Off-Channel Units	46	112	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 9.5	Width: 17.5	22.7 ( 17.8 - 32.8 )	29.0 ( 25.5 - 36.8 )
Depth: 0.67	Height: 0.9	1.9 ( 1.6 - 2.2 )	2.9 ( 1.9 - 3.7 )

W:D ratio: 18.4  
 Stream Flow Type: MF  
 Average Unit Gradient: 0.3%  
 Water temperature (°C): 4.5 - 4.5

Entrenchment (ACW:FPW ratio): 1.3  
 Habitat Units/100m (total channel length): 3.0  
 Habitat Units/100m (primary channel length): 3.2

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	YT
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):	78	11.0
Volume (m <sup>3</sup> ):	122	17.2
Key pieces (>=12m x 0.60m):	6	0.8

OREGON DEPT OF FISH AND WILDLIFE

SAMS CREEK PRE-TX (2-MC, 334)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

2/21/2006

REACH 1		T10S-R09W-S06SE					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
POOL-BACKWATER	2	31	3.2	0.40	101	0	69	14	2	5	2	7
POOL-LATERAL SCOUR	13	650	11.2	1.03	7,454	0	10	23	14	14	9	31
POOL-PLUNGE	1	3	1.0	0.05	3	0	0	10	45	0	15	30
RIFFLE	3	52	6.1	0.22	357	0	2	15	37	10	3	33
STEP/BEDROCK	4	20	11.7	0.09	290	0	0	23	3	3	0	73
<b>Total:</b>	<b>23</b>	<b>756</b>	<b>9.5</b>	<b>0.67</b>	<b>8,206</b>	<b>0</b>	<b>Avg: 12</b>	<b>20</b>	<b>15</b>	<b>10</b>	<b>7</b>	<b>36</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	2	31	3.2	0.40	101	1.23%	0	0.0	
Scour Pools	14	653	10.5	0.96	7,457	90.88%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	3	52	6.1	0.22	357	4.35%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	20	11.7	0.09	290	3.54%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

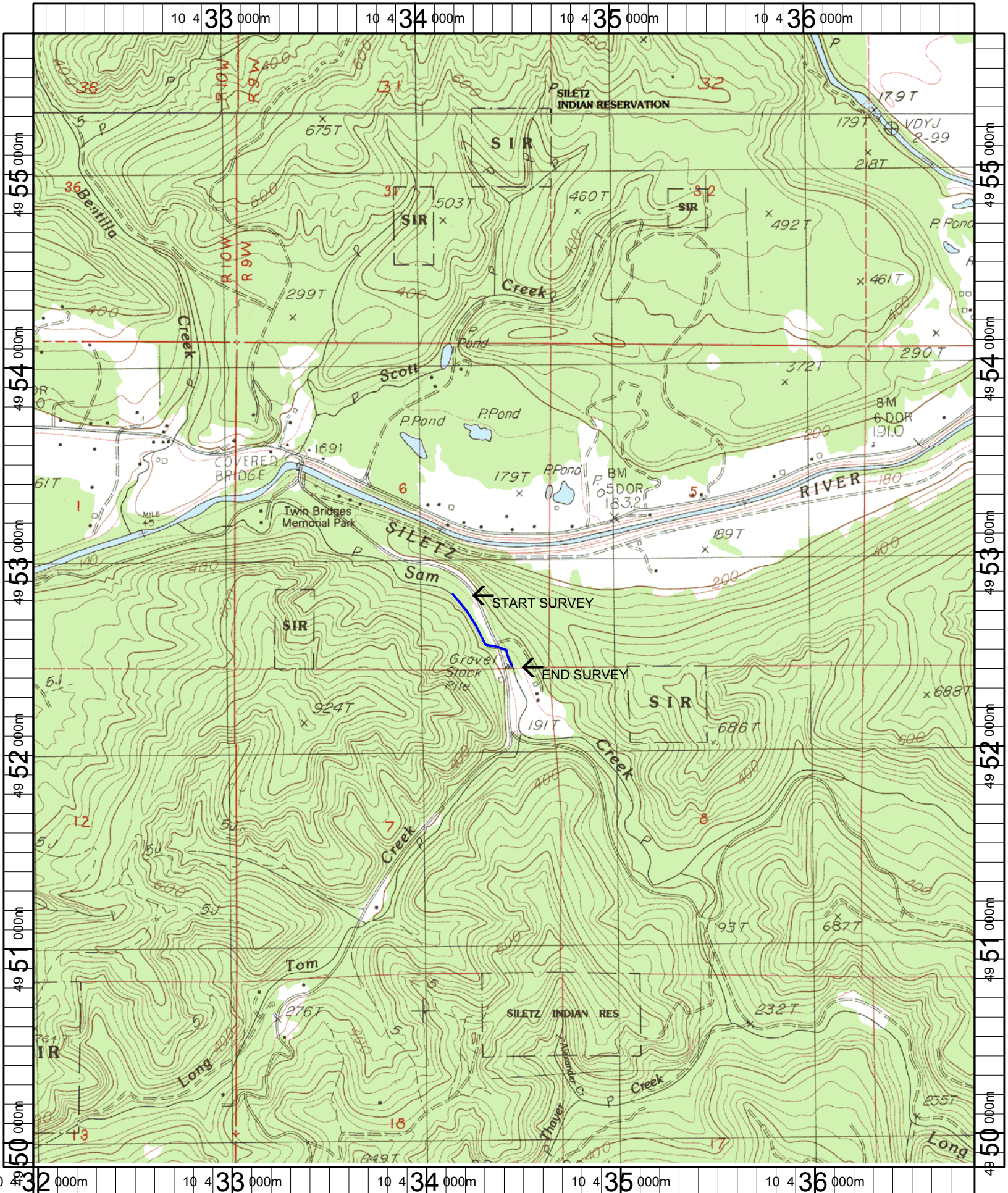
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	16	21.2	22.5
Pools >=1m deep:	8	10.6	11.3
Complex pools (LWD pieces>=3):	8	10.6	11.3
Pool frequency (channel widths/pool):	2.7		
Residual pool depth (avg):	0.73		

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC**      SITE ID: **334**      **SAMS CREEK PRE-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	42.4		T = 4.5 C AT 0930	
2	LP	01	96.4	/SS	CT-MT, D30, C50, ST	
3	BW	10	96.4		LIVE BEAVER	
7	LP	01	281.2	SS/, /TJ	CT-MT, D30, S, ST,	
8	RI	11	281.2		ACW = 1.1 M, T = 5.5 C	
9	RI	00	293.1		CT-MT, D30, S, YT, MT	
12	LP	00	364.7		CT-MT, D30, S, YT, MT	
15	SR	00	396.4		H = .3 M	
17	LP	01	464.8	/TJ		
18	PP	11	464.8		ACW = 1.3 M, T = 5.5 C	
19	SR	11	464.8		H = 2.3 M	
20	SR	00	473		CT-MT, D30, C50, YT, ST	
21	LP	00	520.7	/SS		
22	LP	00	633	BC		
23	LP	00	710.7	/SS	CT-MT, D30, S, ST	



Name: EDDYVILLE  
 Date: 1/19/2006  
 Scale: 1 inch equals 2000 feet

Location: 10 434427 E 4952777 N  
 Caption: SAMS CREEK RESTORATION SITE - SILETZ BASIN