

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

STREAM: Sams Creek (MC-334)  
BASIN: Siletz River  
SURVEY TYPE: Post-Tx  
DATE: January 17, 2007  
SURVEY CREW: Scott Sebring, Jason Hatfield, Paul Jacobsen  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 35.2 km<sup>2</sup>  
USGS MAPS: Eddyville  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Sams Creek habitat survey extended 552 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.6 (range: 2.5-8). Land use for the reach was second growth timber (15-30 cm dbh). The average unit gradient was 0.6 percent. Scour pools (63%) and riffles (33%) dominated stream habitat. Bedrock (36%) and gravel (25%) dominated stream substrate. Wood volume was moderate at 23.6 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.  
Minimal beaver activity was noted in the survey. 1 debris jam was recorded.

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	4.6	VWI Range:	2.5 - 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	552	6,895	0
Secondary Channel	0	0	0
Off-Channel Units	18	13	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 10.8	Width: 14.6	27.0 ( 19 - 41 )	27.0 ( 24 - 33 )
Depth: 0.73	Height: 1.0	1.9 ( 1.8 - 2 )	2.2 ( 1.9 - 2.6 )

W:D ratio: 15.2                      Entrenchment (ACW:FPW ratio): 1.8  
 Stream Flow Type: MF              Habitat Units/100m (total channel length): 3.3  
 Average Unit Gradient: 0.6%      Habitat Units/100m (primary channel length): 3.4  
 Water temperature (°C): 6.0 - 6.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
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):	62	11.2
Volume (m <sup>3</sup> ):	130	23.6
Key pieces (>=12m x 0.60m):	11	2.0

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

1/17/2007

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
CASCADE/BOULDERS	1	10	0.5	0.05	5	0	0	5	90	5	0	0
POOL-LATERAL SCOUR	8	356	12.0	1.29	4,372	0	4	14	20	22	5	35
RAPID/BOULDERS	1	7	1.0	0.05	7	0	5	45	50	0	0	0
RIFFLE	7	182	13.1	0.44	2,313	0	1	9	16	21	5	49
STEP/BEDROCK	1	1	1.0	0.05	1	0	0	20	30	0	0	50
STEP/COBBLE	1	14	15.0	0.35	210	0	0	30	30	30	0	10
<b>Total:</b>	<b>19</b>	<b>570</b>	<b>10.8</b>	<b>0.73</b>	<b>6,908</b>	<b>0</b>	<b>Avg: 2</b>	<b>14</b>	<b>25</b>	<b>19</b>	<b>4</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	0	0			0	0.00%	0	0.0	
Scour Pools	8	356	12.0	1.29	4,372	63.29%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	7	182	13.1	0.44	2,313	33.48%	0	0.0	
Rapids	1	7	1.0	0.05	7	0.10%	0	0.0	
Cascades	1	10	0.5	0.05	5	0.07%	0	0.0	
Step/Falls	2	15	8.0	0.20	211	3.05%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

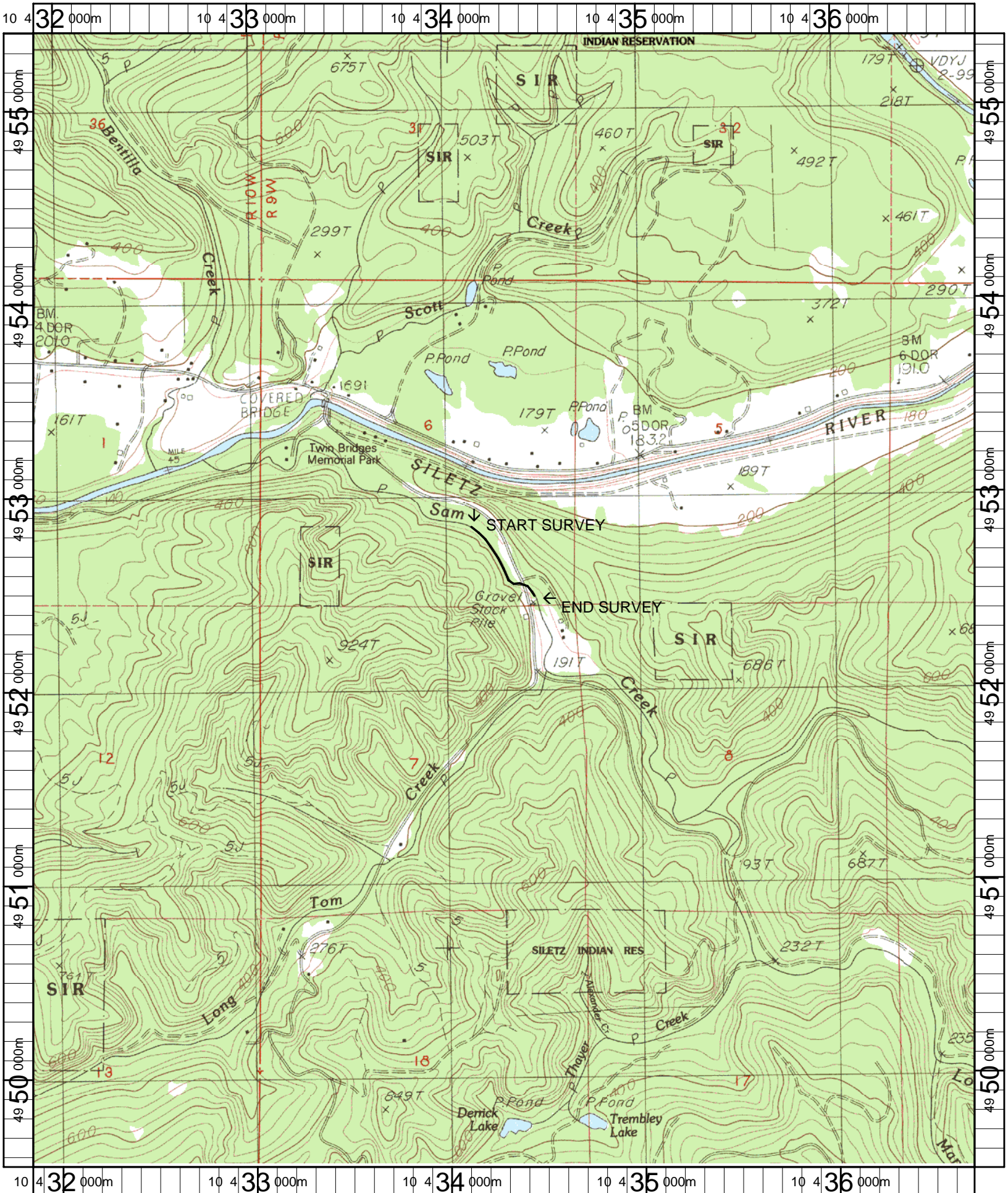
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	8	14.0	14.5
Pools >=1m deep:	8	14.0	14.5
Complex pools (LWD pieces>=3):	4	7.0	7.2
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.78		

# Comment Summary

## Restoration Monitoring Sites 2007

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	LP	01	110	/TJ, SS/	
2	CB	11	110		ACW =0.8
4	LP	00	182	BV	
7	LP	00	225	HS	
9	SR	11	256	/TJ	
11	LP	00	277	HS	
14	LP	00	334	SS	
17	LP	00	449	SS, BC	
18	RI	00	487	HS, DJ	
19	LP	00	525	BV, HS	



Name: EDDYVILLE  
 Date: 4/25/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 0434296 E 4952454 N  
 Caption: SAMS CREEK RESTORATION SITE - SILETZ BASIN