

**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: June 29, 2006
SURVEY CREW: Sharon Crowley, Jeff Snyder, Brian Bangs
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 36.9 km²
USGS MAPS: Eddyville
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Sams Creek habitat survey extended 578 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 6.4 (range: 5.0-9.0). 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 (68%) dominated stream habitat. Bedrock (40%) and sand (25%) dominated stream substrate. Wood volume was very low at 4.0 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-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	6.4	VWI Range:	5 - 9

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	578	5,700	0
Secondary Channel	0	0	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: 9.7	Width: 14.2	14.9 (12.9 - 16.9)	16.6 (14.8 - 18.5)
Depth: 0.48	Height: 0.4	0.7 (0.7 - 0.8)	1.3 (1.05 - 1.7)

W:D ratio: 38.7
 Stream Flow Type: MF
 Average Unit Gradient: 0.6%
 Water temperature (°C): 15.0 - 15.0

Entrenchment (ACW:FPW ratio): 1.0
 Habitat Units/100m (total channel length): 3.3
 Habitat Units/100m (primary channel length): 3.3

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:	17%	Reach avg: 91%
Undercut Banks:	7%	Range: 83 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	17	2.9
Volume (m ³):	23	4.0
Key pieces (>=12m x 0.60m):	2	0.3

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

6/29/2006

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 ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
POOL-BEAVER DAM	1	117	7.8	0.83	914	0	15	65	10	5	0	5
POOL-LATERAL SCOUR	8	372	10.3	0.81	3,895	12	4	34	8	12	6	38
RAPID/BEDROCK	1	25	9.7	0.06	238	0	0	5	10	0	0	85
RIFFLE	2	29	10.8	0.19	314	3	0	19	46	25	10	0
STEP/BEAVER DAM	1	1	2.8	0.10	4	0	20	70	10	0	0	0
STEP/BEDROCK	4	27	10.1	0.10	277	7	0	3	4	6	4	84
STEP/COBBLE	2	6	9.7	0.41	60	8	0	8	33	23	18	20
Total:	19	578	9.7	0.48	5,700	30	Avg: 3	25	14	12	6	40

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	1	117	7.8	0.83	914	16.04%	0	0.0	
Scour Pools	8	372	10.3	0.81	3,895	68.32%	12	0.3	
Glides	0	0			0	0.00%	0	0.0	
Riffles	2	29	10.8	0.19	314	5.50%	3	1.0	
Rapids	1	25	9.7	0.06	238	4.17%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	7	35	8.9	0.19	340	5.97%	15	4.4	
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:	9	15.6	15.6
Pools >=1m deep:	2	3.5	3.5
Complex pools (LWD pieces>=3):	2	3.5	3.5
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.73		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

SAMS CREEK PRE-TX
GCG: 2-MC SITE ID: 334

Survey Date 6/29/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	1300
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	0
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	0.7	3.0	0.0	3.3	0.0	2.7	0.7	9.0
15-30cm	0.0	0.0	0.0	1.0	0.0	1.0	0.0	2.0
30-50cm	0.3	2.0	0.0	2.3	0.0	2.7	0.3	7.0
50-90cm	0.0	1.3	0.0	1.3	0.0	0.7	0.0	3.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	6.3	0.0	8.0	0.0	7.0	0.3	7.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	73		83		77	
Shrub cover	23		19		22	
Grass/forb cover	72		74		63	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		33		17	
High terrace	83		67		67	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		17	
Riprap	0		0		0	
Surface slope (%)	32		20		13	

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	1300
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	0
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	0.7	9.0
15-30cm	0.0	2.0
30-50cm	0.3	7.0
50-90cm	0.0	3.3
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

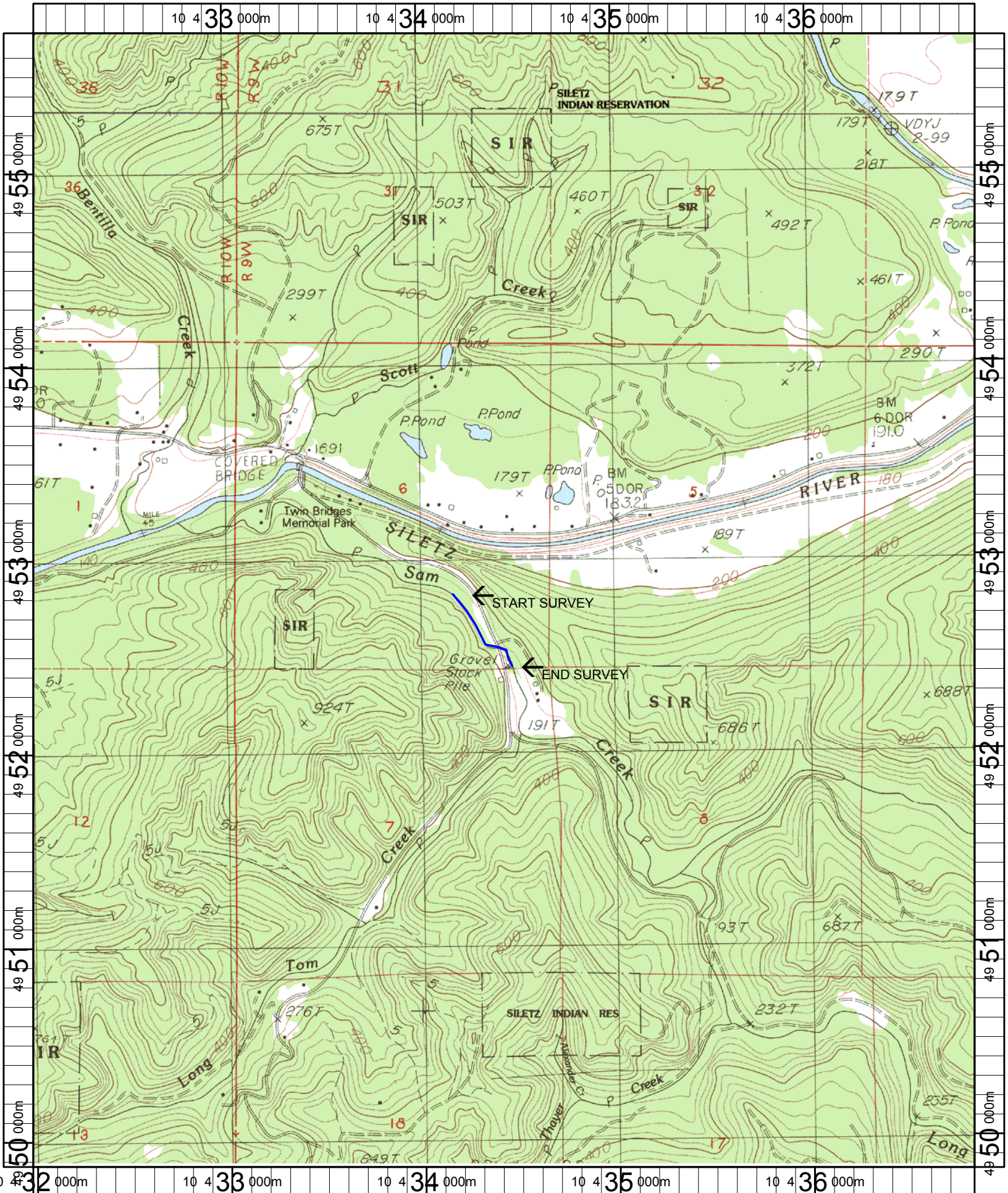
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
3	LF	1	HT	42	70	40	60	Conifer	2						3D-0434241-4952763
								Hardwood			2				
3	RT	2	HT	10	85	10	90	Conifer							
								Hardwood	3	1	1	1			
3	RT	1	HT	13	70	10	90	Conifer							
								Hardwood	4		1	1			
3	RT	3	HT	12	85	15	85	Conifer							
								Hardwood	2		1	1			
3	LF	3	HT	0	80	5	95	Conifer							
								Hardwood	1	2	2				
3	LF	2	HT	0	75	10	90	Conifer							
								Hardwood	3						
11	RT	3	HS	60	80	30	50	Conifer							20% DUFF
								Hardwood	1		1				
11	LF	1	HT	0	60	35	60	Conifer							3D-0434295-4925602
								Hardwood	5			1			
11	LF	2	HT	0	80	40	45	Conifer							NO AMPHIBIANS
								Hardwood	4	1	1				
11	LF	3	HT	5	70	20	70	Conifer							
								Hardwood	1		4	1			
11	RT	2	HS	70	85	25	60	Conifer							15% DUFF
								Hardwood				2			
11	RT	1	HS	92	80	35	45	Conifer			1				20% DUFF
								Hardwood			1				
15	RT	3	HT	0	60	40	60	Conifer							
								Hardwood	2						
15	LF	1	HT	19	80	5	90	Conifer							3D-0434449-4952550
								Hardwood			2	2			
15	LF	2	HS	40	90	10	80	Conifer							BIG SKUNK CABBAGE
								Hardwood			2	1			
15	LF	3	RB	0	85	20	20	Conifer							60% OPEN ROAD
								Hardwood	1	1					
15	RT	1	HT	23	80	15	85	Conifer							
								Hardwood							
15	RT	2	HT	0	80	20	80	Conifer							
								Hardwood		1	3				

Comment Summary

Restoration Monitoring Sites 2006

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

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	SD	00	1.4	BD	H=0.25M	START SIGN ON /BIG MAP
2	BP	00	118.6	BV	JUVENILE FISH, CRAWDAD	
4	LP	00	194.1	BV, WL		RACCOON TRACKS
6	LP	00	236.8		JUVENILE FISH, CRAWDAD	
8	LP	00	272.1			2 LONG METAL PIPES
9	SR	00	280.3	/SS		CRAWDADS
10	LP	00	310.8		/SS	
11	SR	00	322.3		CA-MT, D30, S	
12	LP	00	368.7	BV		ORANGE FLAG/
13	SR	00	370.5		LOTS OF FISH	
14	LP	00	488.1	BV, BC		/BV TRAILS, SAMS CK RD,
15	LP	00	509.7			/ORANGE FLAG, COHO, T
16	LP	00	545.1		RED-LEGGED FROG	
17	RI	00	563.1			LARGE METAL/
18	SC	00	566.7		SCULPIN, COHO	
19	RI	00	577.7			OLD END SIGN /ALDER, T



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