

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

STREAM: Salmonberry Creek (U-99)  
BASIN: Smith River  
SURVEY TYPE: Post-Tx  
DATE: July 7, 2003  
SURVEY CREW: Alex Higgins, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 4.5 km<sup>2</sup>  
USGS MAPS: Beaver Creek  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Salmonberry Creek habitat survey extended 517 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.2 (range: 3.0-12.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.4 percent. Scour pools (49%) and riffles (49%) dominated stream habitat. Gravel (50%) and sand (40%) dominated stream substrate. Wood volume was high at 37.1 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

T20S-R07W-S25SE

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 7.2		VWI Range: 3 - 12	

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m<sup>2</sup>)</u>	<u>Dry Units</u>
Primary	517	1,205	0
Secondary	5	6	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.5	Width	4.8	6.5	8.2
Depth	0.30	Height	0.5	1.0	1.3
		W:D ratio	10.4	Entrenchment	1.4

Stream Flow Type: LF                      Water temp (C): 13.0 - 13.0  
 Avg. Unit Gradient: 1.4%                      Habitat Units/100m: 8.4

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 94%
Undercut Banks:	20%	Range: 61 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	92	17.8
Volume (m <sup>3</sup> ):	192	37.1
Key pieces (>=10m x 0.60m):	19	3.7

OREGON DEPARTMENT OF FISH AND WILDLIFE

SALMONBERRY CREEK POST-TX (U-99)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/7/03

REACH 1

T20S-R07W-S25SE

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-DAMMED	1	5	1.7	0.40	8	0	10	70	20	0	0	0
POOL-LATERAL SCOUR	20	187	3.3	0.52	603	0	2	52	39	6	0	0
RIFFLE	10	137	1.4	0.07	221	0	2	24	64	11	0	0
RIFFLE W/ POCKETS	12	192	2.0	0.14	374	0	1	34	56	9	0	0
STEP/COBBLE	1	2	2.5	0.01	5	0	0	10	90	0	0	0
<b>Total:</b>	<b>44</b>	<b>522</b>	<b>2.5</b>	<b>0.30</b>	<b>1,211</b>	<b>0</b>	<b>Avg 2</b>	<b>40</b>	<b>50</b>	<b>8</b>	<b>0</b>	<b>0</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	1	5	1.7	0.40	8	0.63%	0	0.0
Scour Pools	20	187	3.3	0.52	603	49.82%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	22	329	1.8	0.11	595	49.14%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	2	2.5	0.01	5	0.41%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km
All Pools:	21	40.2
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	13	24.9
Pool frequency (channel widths/pool):	5.2	
Residual pool depth (avg):	0.48	

**STREAM SUMMARY**

**SALMONBERRY CREEK POST-TX (U-99)**

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate Percent Wetted Area						Large Boulders (>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
44	522	2.5	0.30	1,211	2	40	50	8	0	0	

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	8	0.63%
Scour Pools	603	49.82%
Glides	0	0.00%
Riffles	595	49.14%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	5	0.41%
Dry	0	0.00%
Culverts	0	0.00%

**RIPARIAN ZONE VEGETATION SUMMARY**

**REACH 1** **REACH 1**

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

Total hardwoods/1000	508
Total conifers/1000 ft	41
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	0.0	0.3	0.0	0.7	0.0	0.0	0.0	1.0
15-30cm	0.0	1.7	0.0	0.7	0.3	0.3	0.3	2.7
30-50cm	0.0	1.0	0.3	2.0	0.0	0.3	0.3	3.3
50-90cm	0.0	0.3	0.0	1.0	0.0	0.0	0.0	1.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	3.3	0.3	4.3	0.3	0.7	0.2	2.8

**Canopy closure and ground cover**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	66		58		63	
Shrub cover	69		49		47	
Grass/forb cover	15		27		29	

**Predominant landform in each zone**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		33		67	
High terrace	33		33		33	
Low terrace	50		17		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		17		0	
Riprap	0		0		0	
Surface slope (%)	3		11		21	

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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	508
Total conifers/1000 ft	41
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	0.0	1.0
15-30cm	0.3	2.7
30-50cm	0.3	3.3
50-90cm	0.0	1.3
>90cm	0.0	0.0

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**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		
13	LF	1	LT	0	30	100	0	Conifer							
								Hardwood							
13	RT	3	HS	40	70	0	40	Conifer		1					
								Hardwood							
13	RT	2	HS	35	75	5	50	Conifer				1			
								Hardwood	2	1		4			
13	RT	1	LT	0	65	80	10	Conifer							
								Hardwood		2					
13	LF	2	LT	0	60	80	10	Conifer							
								Hardwood		1					
13	LF	3	HS	23	65	20	60	Conifer							
								Hardwood		1	1				
20	LF	1	LT	0	80	55	20	Conifer							
								Hardwood		1	1				
20	LF	2	RB	0	0	10	30	Conifer							50% ROADBED GRAVEL
								Hardwood			1	1			
20	LF	3	HS	25	10	90	0	Conifer							
								Hardwood							
20	RT	1	HT	0	75	80	20	Conifer							
								Hardwood			2	1			
20	RT	2	HT	0	75	70	10	Conifer							
								Hardwood			1	1			
20	RT	3	HT	0	85	80	10	Conifer							
								Hardwood							
31	RT	2	HS	30	60	50	50	Conifer							
								Hardwood							
31	LF	1	HT	0	75	60	20	Conifer							
								Hardwood	1	1					
31	LF	2	HT	0	75	80	10	Conifer							
								Hardwood					1		
31	LF	3	HT	0	75	70	25	Conifer							
								Hardwood							
31	RT	1	HS	15	70	40	20	Conifer							
								Hardwood		1					
31	RT	3	HS	35	75	20	40	Conifer							
								Hardwood							

# Comment Summary

## Oregon Plan Monitoring Sites 2003

MONITORING AREA: **4-UMP**    SITE ID: **99**    **SALMONBERRY CREEK POST-TX (U-**

<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	LP	00	10.1		T= 13	
2	LP	00	22.1	HS		
3	RI	00	30.8	HS		
5	RP	00	55.9	HS		
6	DP	00	60.4	HS		
8	LP	00	82.2	HS		
10	LP	00	115.4	HS		
12	RI	01	150.6	TJ/		NOT ON TOPO
13	RI	11	150.6		ACW=1.6 T=12	
15	RI	00	183.4		STRUCTURE SITE #5-PIN	
16	LP	00	200.7	HS	YELLOW-PHOTO POINT #	
18	LP	00	228.7	HS		
20	LP	00	242.4	HS		
22	LP	00	268.2	HS	ORANGE-SNRKLPPOOL5;P	
24	LP	00	278.4		YELLOW/WHITE POOL 6	
26	LP	00	305.3	SS/ HS		
28	RP	00	351.2		YELLOW-PHOTO POINT 1	
31	LP	00	375.2	HS	PHOTOPOINT 20; WEYCO	
32	RP	00	394.7	HS	WEYCO POINT #7	
34	RI	00	420.6		PHOTO POINT #22	
35	LP	00	432.4		PHOTO POINT #23	

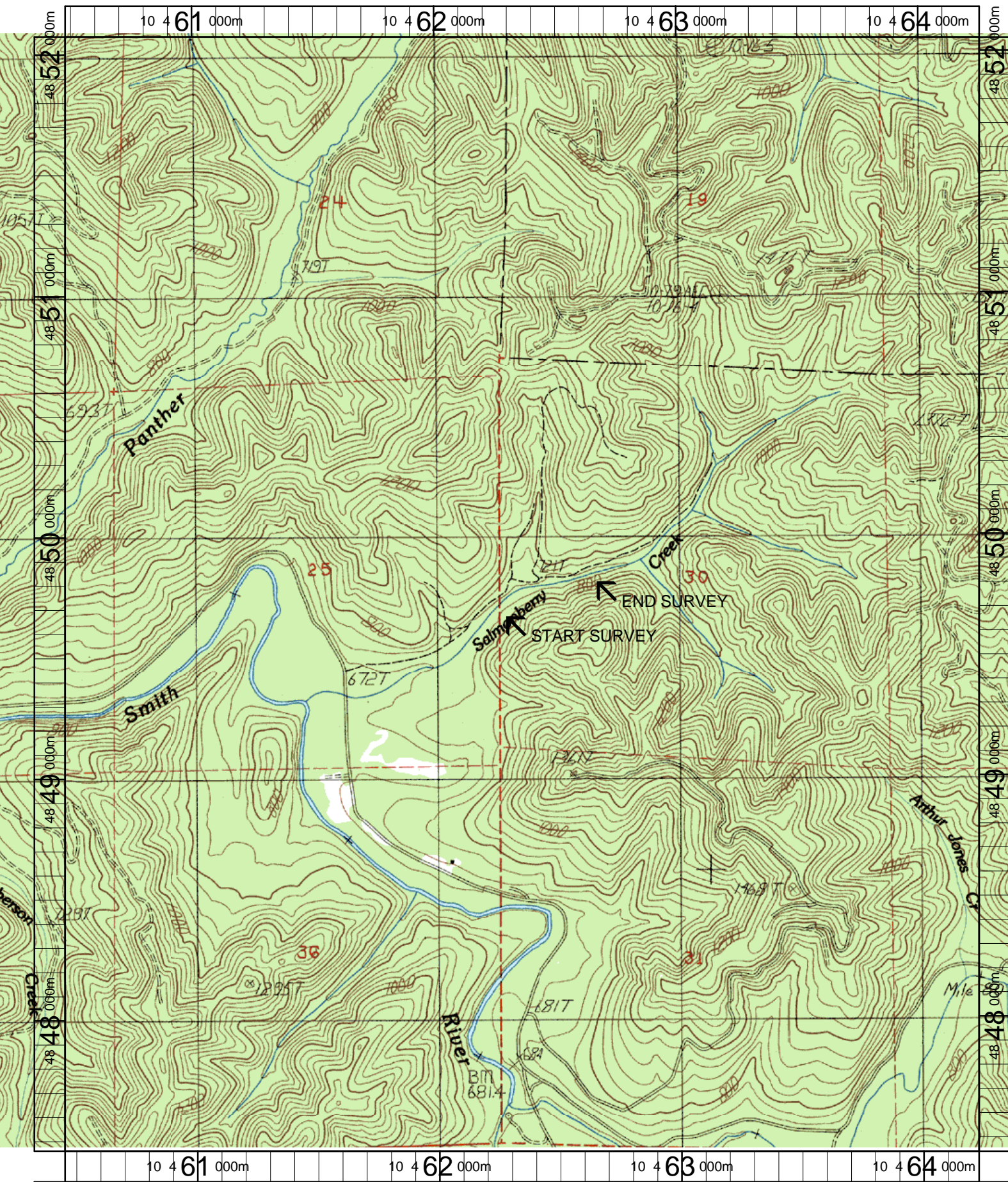


# Comment Summary

## Oregon Plan Monitoring Sites 2003

MONITORING AREA: 4-UMP SITE ID: 99 SALMONBERRY CREEK POST-TX (U-

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
36	RP	00	438.6		STRUCTURE SITE #12	
37	LP	00	444.4	HS		
38	RI	00	461.3		WEYCO POINT #8	
41	LP	00	491.5	HS		
44	RP	00	517		PHOTO POINT #26	END



Name: BEAVER CREEK  
 Date: 3/21/2003  
 Scale: 1 inch equals 1666 feet

Location: 10 462348 E 4849761 N  
 Caption: SALMONBERRY CREEK RESTORATION SITE - SMITH BASIN