

**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 30, 2002
SURVEY CREW: Jennifer Ross, Sheri Fereri
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.5 km²
USGS MAPS: Beaver Creek
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Salmonberry Creek habitat survey extended 514 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 10.0. Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.2 percent. Scour pools (82%) and riffles (16%) dominated stream habitat. Gravel (47%) and sand (39%) dominated stream substrate. Wood volume was high at 51.7 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

T20S-R06W-S30SW

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	10.0	VWI Range:	10 - 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	514	1,089	1
Secondary	7	4	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.0	Width	4.4	8.5	9.9
Depth	0.27	Height	0.3	0.6	1.2
		W:D ratio	16.2	Entrenchment	2.0
Stream Flow Type:	LF	Water temp (C):		15.0 - 15.0	
Avg. Unit Gradient:	1.2%	Habitat Units/100m:		9.5	

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	5%	Reach avg: 100%
Undercut Banks:	17%	Range: 100 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	75	14.6
Volume (m ³):	265	51.7
Key pieces (>=10m x 0.60m):	32	6.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

SALMONBERRY CREEK POST-TX (U-99)

HABITAT INVENTORY

Report Date: 3/17/03

Survey Date:

7/30/02

REACH 1		T20S-R06W-S30SW					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-LATERAL SCOUR	26	314	3.0	0.47	897	0	19	46	33	2	0	0
PUDDLED UNIT	1	7	1.0	0.02	7	0	25	50	25	0	0	0
RIFFLE	14	178	0.9	0.05	173	0	7	29	64	1	0	0
STEP/COBBLE	8	22	0.7	0.03	16	0	1	30	69	0	0	0
Total:	49	521	2.0	0.27	1,092	0	Avg 13	39	47	1	0	0

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	0	0			0	0.00%	0	0.0	
Scour Pools	26	314	3.0	0.47	897	82.15%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	14	178	0.9	0.05	173	15.82%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	8	22	0.7	0.03	16	1.42%	0	0.0	
Dry	1	7	1.0	0.02	7	0.61%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	26	50.6
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	10	19.5
Pool frequency (channel widths/pool):	4.5	
Residual pool depth (avg):	0.43	

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	894
Total conifers/1000 ft	102
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	1.0	0.0	2.7	0.0	1.3	0.0	5.0
15-30cm	0.0	0.3	0.7	1.0	0.0	0.0	0.7	1.3
30-50cm	0.0	3.0	1.0	2.7	0.0	2.3	1.0	8.0
50-90cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	4.3	1.7	6.7	0.0	3.7	0.6	4.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	100		100		72	
Shrub cover	83		68		25	
Grass/forb cover	17		30		65	

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	67		67		33	
Low terrace	33		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		33	
Riprap	0		0		0	
Surface slope (%)	0		20		20	

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		
14	LF	1	HT	0	100	50	50	Conifer							
								Hardwood			5				
14	LF	2	HT	0	100	90	10	Conifer		2	3				
								Hardwood							
14	LF	3	HT	0	100	30	70	Conifer							
								Hardwood	1		1				
14	RT	1	LT	0	100	90	10	Conifer							
								Hardwood							
14	RT	2	HS	80	100	10	90	Conifer							
								Hardwood			1				
14	RT	3	HS	80	100	20	80	Conifer							
								Hardwood	1		3				
23	LF	1	LT	0	100	90	10	Conifer							
								Hardwood							
23	LF	2	HS	40	100	80	20	Conifer							
								Hardwood	1		1	1			
23	LF	3	RB	0	10	50	30	Conifer							
								Hardwood							
23	RT	1	HT	0	100	100	0	Conifer							
								Hardwood			2				
23	RT	2	HT	0	100	90	0	Conifer							
								Hardwood	4						
23	RT	3	HT	0	100	50	50	Conifer							
								Hardwood	2		1				
39	LF	1	HT	0	100	100	0	Conifer							
								Hardwood	2	1	2				
39	LF	2	HT	0	100	90	10	Conifer							
								Hardwood	3	1	3				
39	LF	3	RB	0	20	0	60	Conifer							
								Hardwood							
39	RT	1	HT	0	100	70	30	Conifer							
								Hardwood	1						
39	RT	2	HT	0	100	50	50	Conifer							
								Hardwood		2	3				
39	RT	3	HS	41	100	0	100	Conifer							
								Hardwood			2				

Comment Summary

Oregon Plan Monitoring Sites 2002

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

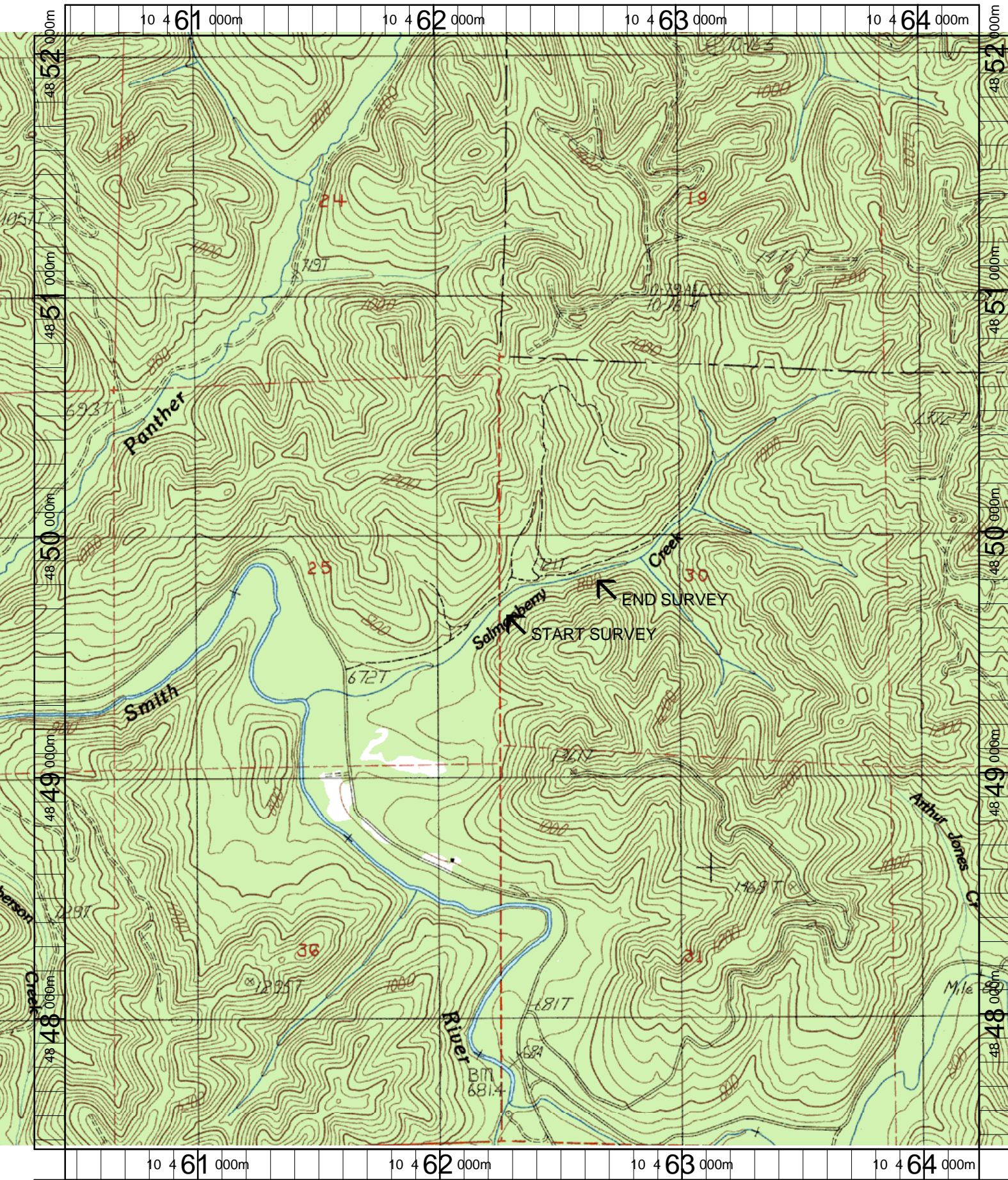
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	12		SALMONIDS ENTIRE SUR	
2	LP	00	24	HS		
3	RI	00	31.3		DEER TRACKS	
6	LP	00	57.7	HS		
8	LP	00	81.6	HS		
10	LP	00	108.3		SITE STRUCTURE #4	
11	LP	00	118	HS		
14	RI	01	152.7	TJ/	RIPARIAN #1	
18	LP	00	198.4	HS	WEYCO PT #1 STAKE	COHO FRY
20	LP	00	215.6	BV		
21	LP	00	232	HS	WEYCO #2	
22	LP	00	249.4	HS		
23	SC	00	253		RIPARIAN #2	
25	LP	00	272.9	SS/, HS	SS/	MAJOR CURVE TO RIGHT
29	LP	00	308.9	SS/, HS		
32	SC	00	322.6		DEER TRACKS	
35	LP	00	354.5		PHOTO PT #19, FLAG	
37	LP	00	382.9	BV, HS		
38	PD	00	389.6		WEYCO PT #7 STAKE	
39	RI	00	402.1		RIPARIAN #3	
44	LP	00	452.4	HS	WEYCO PT #8 STAKE	DEPTH AROUND LOGS

Comment Summary

Oregon Plan Monitoring Sites 2002

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>
47	RI	00	501.7	HS		
48	LP	00	510.6			T = 15
49	SC	00	513.6		DEER TRACKS	END SURVEY



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