

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

STREAM: Salmon Creek (MS-235)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: July 13, 2004
SURVEY CREW: Greg Ryder, Justin Gerding
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 57.5 km²
USGS MAPS: China Flat
ECOREGION: California Coast Range Extension

GENERAL DESCRIPTION:

The Salmon Creek habitat survey extended 853 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.8 (range: 2.0-8.0). Land use for the reach was rural residential and large (30-50 cm dbh) trees. The average unit gradient was 1.1 percent. Riffles (46%) and scour pools (38%) dominated stream habitat. Cobble (45%) and gravel (25%) dominated stream substrate. Wood volume was very low at 0.9 m³/100m.

COMMENTS:

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

REACH 1

T31S-R12W-S24NW

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	5.8	VWI Range:	2 - 8

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 (m2)</u>	<u>Dry Units</u>
Primary	853	5,364	0
Secondary	76	209	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 5.8	Width: 15.3	31.0 (23.1 - 38.3)	33.5 (25 - 41)
Depth: 0.41	Height: 0.8	1.5 (1.3 - 2)	3.0 (2.2 - 3.5)

W:D ratio: 20.7

Stream Flow Type: LF

Average Unit Gradient: 1.1%

Water temperature (°C): 17.0 - 17.0

Entrenchment (ACW:FPW ratio): 2.1

Habitat Units/100m (total channel length): 3.1

Habitat Units/100m (primary channel length): 3.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	RR	LT
Riparian Vegetation:	D15	C30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 59%
Undercut Banks:	1%	Range: 44 - 83

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	16	1.9
Volume (m ³):	7	0.9
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

SALMON CREEK PRE-TX (MS-235)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/13/2004

REACH 1

T31S-R12W-S24NW

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
DRY UNIT	2	21	5.1	0.00	106	0	0	3	13	80	5	0
GLIDE	4	96	6.1	0.21	590	20	0	6	52	34	5	4
POOL-BACKWATER	1	15	2.0	0.70	30	0	20	35	15	15	0	15
POOL-LATERAL SCOUR	9	313	6.6	0.91	2,098	54	1	15	26	33	7	19
RAPID/BOULDERS	1	28	5.5	0.15	154	23	0	5	20	60	15	0
RIFFLE	11	450	5.6	0.19	2,545	62	0	8	21	51	10	10
STEP/COBBLE	1	8	6.2	0.05	50	2	0	0	10	85	5	0
Total:	29	930	5.8	0.41	5,573	161	Avg: 1	10	25	45	8	11

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	15	2.0	0.70	30	0.53%	0	0.0
Scour Pools	9	313	6.6	0.91	2,098	37.64%	54	2.6
Glides	4	96	6.1	0.21	590	10.59%	20	3.4
Riffles	11	450	5.6	0.19	2,545	45.66%	62	2.4
Rapids	1	28	5.5	0.15	154	2.76%	23	14.9
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	8	6.2	0.05	50	0.90%	2	4.0
Dry	2	21	5.1	0.00	106	1.91%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	10	10.8	11.7
Pools >=1m deep:	2	2.2	2.3
Complex pools (LWD pieces>=3):	1	1.1	1.2
Pool frequency (channel widths/pool):	6.1		
Residual pool depth (avg):	0.72		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	691
Total conifers/1000 ft	183
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	<u>0-10 meters</u>		<u>10 - 20 meters</u>		<u>20 - 30 meters</u>		<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>	<u>Conifer</u>	<u>Hardwood</u>	<u>Conifer</u>	<u>Hardwood</u>	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	2.7	2.3	1.3	0.0	0.7	2.3	4.7
15-30cm	0.0	1.3	0.0	2.0	0.3	0.3	0.3	3.7
30-50cm	0.0	0.7	0.0	0.7	0.0	1.7	0.0	3.0
50-90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	4.7	2.3	4.0	0.7	2.7	1.0	3.8

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	<u>0-10 meters</u>		<u>10 - 20 meters</u>		<u>20 - 30 meters</u>	
	(%)		(%)		(%)	
Canopy closure	37		63		83	
Shrub cover	25		47		48	
Grass/forb cover	45		48		37	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	<u>0-10 meters</u>		<u>10 - 20 meters</u>		<u>20 - 30 meters</u>	
	(%)		(%)		(%)	
Hillslope	50		50		50	
High terrace	0		0		33	
Low terrace	50		50		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 (%)	66		58		48	

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

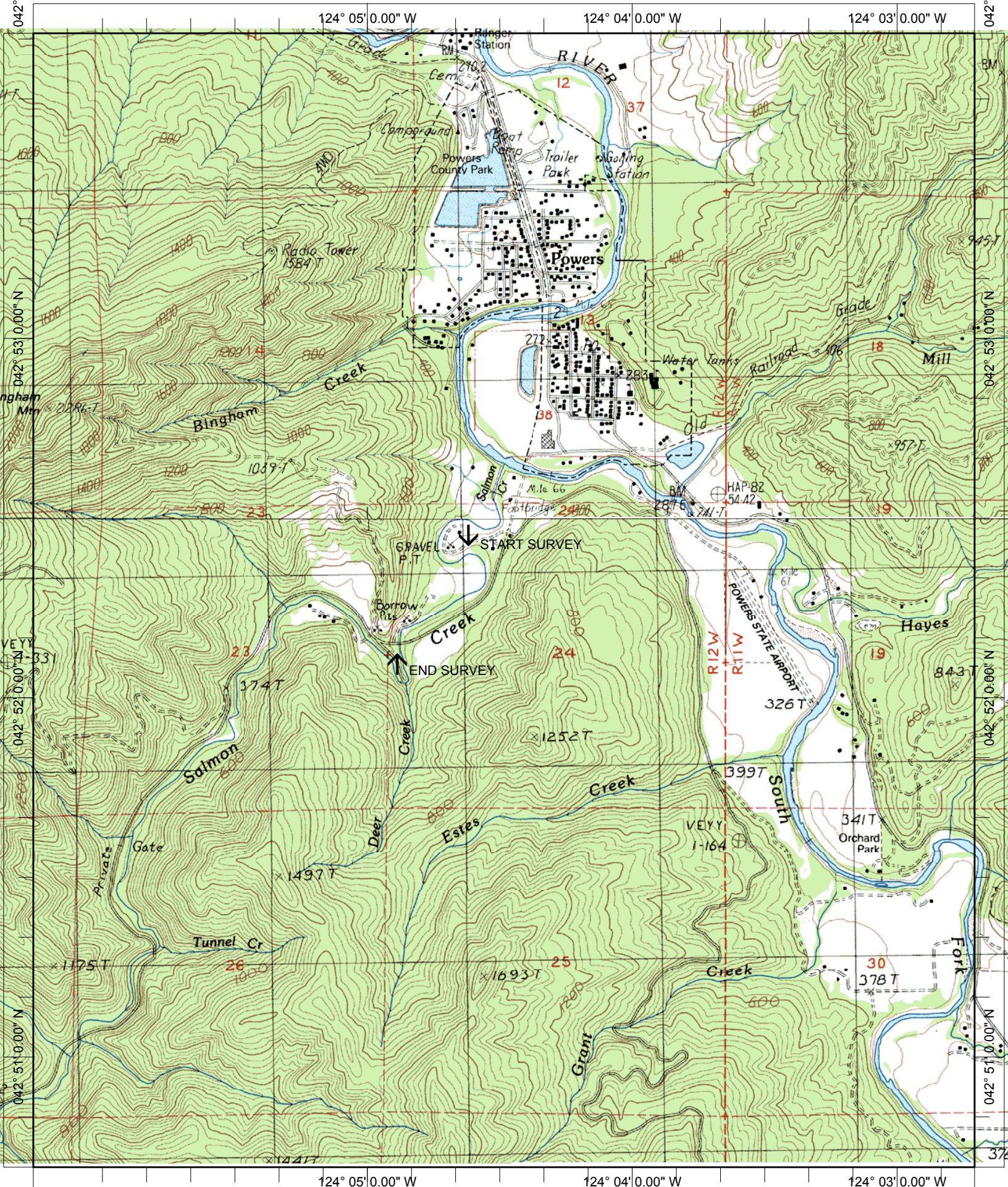
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	RT	2	LT	5	90	90									
							Conifer								
							Hardwood		3	2					
10	RT	1	LT	90	90	10									
							Conifer								
							Hardwood	1	2	1					
10	RT	3	HT	35	60	20	60								
							Conifer								
							Hardwood	2		2					
10	LF	1	HS	150	0	0	0								
							Conifer								
							Hardwood								
10	LF	2	HS	120	90	50									EST DUE TO CLIFF
							Conifer	7							
							Hardwood								
10	LF	3	RB	0											EST
							Conifer								
							Hardwood								
17	LF	2	HS	65	0	60	40								
							Conifer								
							Hardwood								
17	LF	3	HS	65	85	60					1				
							Conifer								
							Hardwood		1	2					
17	RT	1	LT	0	20	20									
							Conifer								
							Hardwood								
17	RT	2	LT	5	100	60	10								
							Conifer								
							Hardwood				1				
17	RT	3	HT	15	100	80	10								
							Conifer								
							Hardwood								
17	LF	1	HS	65	0	90	10								
							Conifer								
							Hardwood								
23	LF	3	HS	120	90	60									
							Conifer								
							Hardwood								
23	RT	3	HS	55	80	20	40						1		CEDAR
							Conifer								
							Hardwood				1				
23	RT	1	LT	0	90	20	80								
							Conifer								
							Hardwood	7	2						
23	LF	2	HS	150	10	0	60								
							Conifer								
							Hardwood								
23	LF	1	HS	90	20	10	90								
							Conifer								
							Hardwood				1				
23	RT	2	LT	0	90	20	80								ALDER
							Conifer								
							Hardwood	4	2						

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **235** **SALMON CREEK PRE-TX (MS-235)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SC	00	8.1		PHOTO AT 9:30 0017	T=17 DEG
2	LP	00	48.1	WL		RSN
4	LP	01	131.4	BV		
9	LP	02	199.5		TROUT FRY	
10	DU	02	199.5			T=19 DEG C AT 11:40
11	GL	00	228.9		T=19 DEG C AT 11:40	
12	LP	00	278.9		COHO FRY	
17	LP	00	396.5	BV		OLD CHEWED STUMP
23	RI	00	626		HILLSLOPES CONSTRAIN	
24	RI	00	670.6		DACE	
25	LP	00	692.8	BV	CUTTHROAT	
27	LP	00	779	SD	COHO FRY	4IN LINE WITH PUMP IRRG.
28	RI	00	826.9			COHO, TROUT FRY, DACE
29	LP	00	853.3		22 DEG C AT 14:30	T=22 DEG C AT 14:30



Name: CHINA FLAT
 Date: 8/4/2004
 Scale: 1 inch equals 2000 feet

Location: 042° 52' 16.2" N 124° 04' 29.1" W
 Caption: SALMON CREEK RESTORATION SITE - SF COQUILLE BASIN