

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

STREAM: Paradise Creek Site 2 (UMP-352)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: March 6, 2007
SURVEY CREW: Jason Hatfield, Ryan Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 30 km²
USGS MAPS: Elkton
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Paradise Creek Site 2 habitat survey extended 1,430 meters. The channel was alternately constrained by hillslope and terrace in a broad valley floor. The average valley width index was 6.8 (range: 2.5-10). Land use for the reach was young timber (3-15 cm dbh) and second growth timber (15-30 cm dbh). The average unit gradient was 1.9 percent. Riffles (46%), rapids (32%) and scour pools (14%) dominated stream habitat. Bedrock (45%) and gravel (21%) dominated stream substrate. Wood volume was low at 13.2 m³/100m.

COMMENTS:

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

REACH 1

T22S-R08W-S02NE

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	6.8	VWI Range:	2.5 - 10

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 Channel	1,430	14,228	0
Secondary Channel	0	0	0
Off-Channel Units	42	129	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 9.3	Width: 11.9	15.5 (12.7 - 19.5)	18.4 (13.7 - 21.8)
Depth: 0.55	Height: 0.9	1.8 (1.8 - 2)	5.5 (2.3 - 19.9)

W:D ratio: 12.9

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: MF

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

Average Unit Gradient: 1.9%

Habitat Units/100m (primary channel length): 3.2

Water temperature (°C): 9.0 - 9.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	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):	188	13.1
Volume (m ³):	189	13.2
Key pieces (>=12m x 0.60m):	3	0.2

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

3/6/2007

REACH 1		T22S-R08W-S02NE					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
CASCADE/BOULDERS	1	17	6.7	0.25	114	0	0	15	55	20	10	0
POOL-BACKWATER	2	24	3.8	0.55	91	0	55	38	5	0	3	0
POOL-DAMMED	1	83	8.5	1.20	701	0	10	80	10	0	0	0
POOL-ISOLATED	1	3	8.5	0.35	26	0	40	10	50	0	0	0
POOL-LATERAL SCOUR	9	183	11.0	1.08	1,990	0	4	17	19	9	3	47
RAPID/BEDROCK	12	444	10.4	0.44	4,584	0	0	9	15	13	3	61
RAPID/BOULDERS	1	10	1.0	0.10	10	0	5	20	75	0	0	0
RIFFLE	15	674	9.8	0.43	6,618	0	0	9	21	11	5	52
STEP/BOULDERS	2	15	4.5	0.23	89	0	0	8	5	18	30	40
STEP/COBBLE	1	10	1.4	0.10	14	0	0	10	60	30	0	0
STEP/LOG	1	10	12.0	0.30	120	0	5	10	29	19	10	29
Total:	46	1,472	9.3	0.55	14,356	0	Avg: 5	14	21	11	5	45

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	4	110	6.1	0.66	818	5.70%	0	0.0	
Scour Pools	9	183	11.0	1.08	1,990	13.86%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	15	674	9.8	0.43	6,618	46.10%	0	0.0	
Rapids	13	454	9.7	0.42	4,594	32.00%	0	0.0	
Cascades	1	17	6.7	0.25	114	0.79%	0	0.0	
Step/Falls	4	35	5.6	0.21	223	1.55%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	13	8.8	9.1
Pools >=1m deep:	7	4.8	4.9
Complex pools (LWD pieces>=3):	4	2.7	2.8
Pool frequency (channel widths/pool):	9.6		
Residual pool depth (avg):	0.69		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 4-UMP SITE ID: 352 PARADISE CREEK SITE 2 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	RI	00	48		TEMP=8.5
15	RR	01	531.8	TJ/	
16	SB	11	531.8		ACW=0.6, TEMP=10.0
17	LP	00	552.3		SUBSTRATE EST LOW VIS IN POOL
18	RR	01	584.6	TJ/	
19	RB	11	584.6		ACW=2.5, TEMP=10.0
21	RR	01	618.1	SS/	
38	CB	00	1174.8		ACW=10.5, TEMP=10.0
43	RI	01	1368.5	/TJ	
44	SC	00	1378.5		ACW=2.3, TEMP=9.0

