

**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: Post-Tx
DATE: March 5, 2008
SURVEY CREW: Kyle Brachter, Bobby Gomez
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 30.0 km²
USGS MAPS: Elkton
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Paradise Creek Site 2 habitat survey extended 1,438 meters. The channel was alternately constrained by terrace and hillslope in a broad valley floor. The average valley width index was 8.8 (range: 6-20). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 1.3 percent. Scour pools (50%) and rapids (35%) dominated stream habitat. Bedrock (35%) and gravel (34%) dominated stream substrate. Wood volume was 13.5m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

Juvenile salmonids, adult steelhead, several redds, cutthroat trout, rough-skinned newts, and a downy woodpecker were observed during the survey.

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**PARADISE CREEK SITE 2
GCG: 4-UMP SITE ID: 352**

Survey Date: 3/5/2008

Report Date: 5/8/2008

T22S-R08W-S03SE

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	8.8	VWI Range:	6 - 20

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	1,438	12,077	0
Secondary	22	49	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 8.0	Width: 11.9	13.9 (11 - 17.4)	17.7 (13.2 - 21.2)
Depth: 0.41	Height: 0.5	0.9 (0.8 - 1.1)	2.0 (1.3 - 3.5)

W:D ratio: 26.4

Stream Flow Type: MF

Average Unit Gradient: 1.3%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.2

Habitat Units/100m (total channel length): 4.6

Habitat Units/100m (primary channel length): 4.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	M15	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):	205	14.3
Volume (m ³):	194	13.5
Key pieces (>=12m x 0.60m):	5	0.3

OREGON DEPARTMENT OF FISH AND WILDLIFE

PARADISE CREEK SITE 2

HABITAT INVENTORY

GCG: 4-UMP SITE ID: 352

Survey Date: 3/5/2008

Report Date: 5/8/2008

T22S-R08W-S03SE

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	7	0.5	0.05	4	0	0	0	50	50	0	0
GLIDE	2	45	8.6	0.23	377	0	0	3	33	8	8	50
POOL-ISOLATED	1	7	3.0	0.20	21	0	0	90	10	0	0	0
POOL-LATERAL SCOUR	27	561	8.7	0.67	4,990	0	0	20	31	12	8	28
POOL-STRAIGHT SCOUR	6	127	8.7	0.58	1,120	0	0	4	34	8	5	49
RAPID/BEDROCK	12	386	8.9	0.20	3,303	0	0	6	15	5	6	68
RAPID/BOULDERS	9	151	5.7	0.15	972	0	0	4	58	19	11	9
RIFFLE	7	163	6.9	0.21	1,200	0	0	10	48	16	9	17
STEP/BEDROCK	2	13	11.0	0.13	140	0	0	0	20	5	5	70
Total:	67	1,460	8.0	0.41	12,126	0	Avg: 0	13	34	12	8	35

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	7	3.0	0.20	21	0.17%	0	0.0
Scour Pools	33	689	8.7	0.65	6,109	50.38%	0	0.0
Glides	2	45	8.6	0.23	377	3.11%	0	0.0
Riffles	7	163	6.9	0.21	1,200	9.90%	0	0.0
Rapids	21	537	7.5	0.18	4,276	35.26%	0	0.0
Cascades	1	7	0.5	0.05	4	0.03%	0	0.0
Step/Falls	2	13	11.0	0.13	140	1.15%	0	0.0
Dry	0	0			0	0.00%	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:	34	23.3	23.6
Pools >=1m deep:	2	1.4	1.4
Complex pools (LWD pieces>=3):	9	6.2	6.3
Pool frequency (channel widths/pool):	3.6		
Residual pool depth (avg):	0.46		

COMMENT SUMMARY

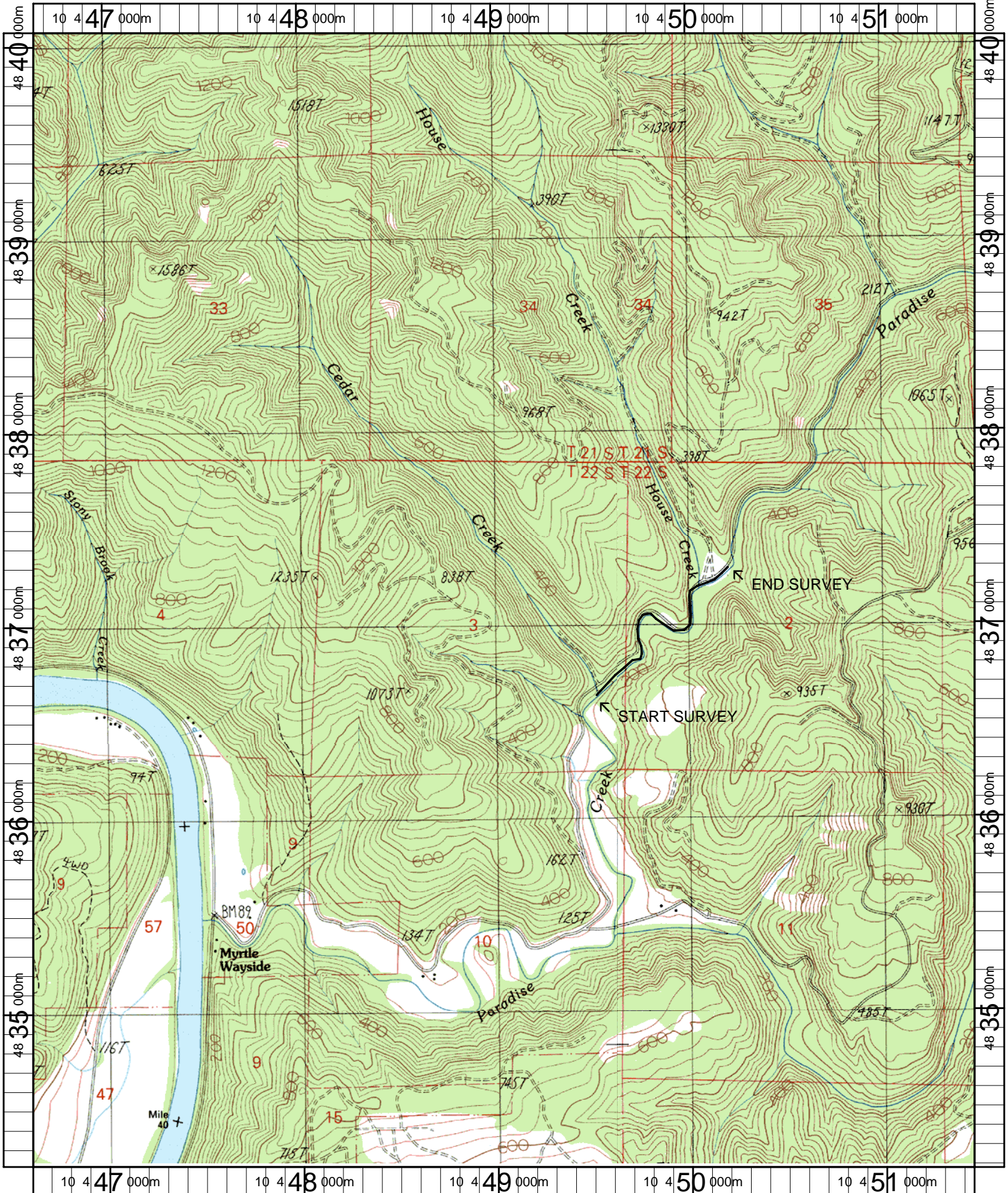
MONITORING AREA: 4-UMP SITE ID: 352 STREAM: PARADISE CREEK SITE 2

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RR	00	50		FORM:CA,CT. VEG:M15. USE:ST,YT.
6	GL	00	178.7		REDD. ADULT STEELHEAD
8	SP	00	229.6		REDD
9	RI	00	246.9		FORM:CA,CT. VEG:M30,S. USE:ST,YT.
15	LP	00	357.9		JUVENILE SALMONIDS
19	LP	00	459	HS	LOGS
24	RI	00	537		FORM:CA,CT. VEG:D15,S. USE:ST,YT.
25	LP	00	552.5	CE/	
26	LP	00	580.5	CS/	
27	LP	01	630.5	HS,TJ,DJ	DOWNY WOODPECKER. LARGE WOOD
28	RB	11	630.5		TEMPERATURE=6C ACW=1M RUBY-CROWNED KINGLET
30	LP	00	671.4		REDD
31	RR	00	726.4	HS,DJ	LARGE WOOD
32	LP	00	747.4	HS,DJ	LARGEWOOD
35	LP	00	809.5	HS,DJ	LARGE WOOD
38	RR	00	880.3	HS	LARGE WOOD. FORM:CA,CT. VEG:M15,S. USE:ST,YT.
41	LP	00	929.3	HS,DJ,AM	ROUGH-SKINNED NEWT, CUTTHROAT, JUVENILE SALMONIDS
43	SP	00	959.2	/SS	
45	RB	00	995.8		REDD
46	SP	00	1011.3		CUTTHROAT
49	RB	00	1053.2	HS,DJ	
50	LP	00	1068.7	HS	BOULDERS

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
51	RI	00	1103.7	CS/	
52	LP	00	1117.4	CS/	
53	LP	00	1138.4	CS/	
54	RR	01	1179.4	TJ/, HS,DJ	LARGE WOOD
55	RB	11	1179.4		ACW=5.4M TEMPERATURE=6C
56	LP	00	1192.2	HS	JUVENILE SALMONIDS, LARGE WOOD
57	RB	00	1209.2	HS,DJ	FORM:CA,CT. VEG:M15,S. USE:ST,YT.
62	LP	00	1292.8	HS	JUVENILE SALMONIDS, LARGE WOOD
64	RB	01	1387.8	/TJ	
65	CB	00	1394.8		TEMPERATURE=6.5C ACW=0.8M
66	LP	00	1407.8		JUVENILE SALMONID AND TROUT PARTY
67	RR	00	1437.8	HS,DJ	FORM:CA,CT. VEG:C30,S. USE:ST,YT.



Name: ELKTON (OR)
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0449048 E 4837127 N
 Caption: PARADISE CREEK SITE 2 RESTORATION SITE - UMPQUA BASIN