

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

STREAM: Boulder Creek (S-72)
BASIN: Euchre Creek
SURVEY TYPE: Post-Tx
DATE: July 17, 2007
SURVEY CREW: Drew Harper, Scott Kuhn
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 5.9 km²
USGS MAPS: Brushy Bald Mountain
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Boulder Creek habitat survey extended 659 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 9.1 (range: 4.5-20.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.1 percent. Riffles (58%), scour pools (23%) and rapids (18%) dominated stream habitat. Gravel (39%) and cobble (38%) dominated stream substrate. Wood volume was high at 32.4 m³/100m.

COMMENTS:

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

No riparian transects were completed for this survey.

REACH 1

T35S-R14W-S10NE

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	9.1	VWI Range:	4.5 - 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 Channel	659	1,688	0
Secondary Channel	6	7	0
Off-Channel Units	19	18	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 2.6	Width: 4.5	6.6 (4.6 - 8.7)	9.1 (5.8 - 13.2)
Depth: 0.24	Height: 0.5	1.0 (0.74 - 1.2)	1.7 (1.3 - 2.5)

W:D ratio: 8.8
 Stream Flow Type: LF
 Average Unit Gradient: 3.1%
 Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.5
 Habitat Units/100m (total channel length): 6.9
 Habitat Units/100m (primary channel length): 7.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	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:	2%	Reach avg: 83%
Undercut Banks:	2%	Range: 64 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	184	27.9
Volume (m ³):	213	32.4
Key pieces (>=12m x 0.60m):	2	0.3

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

7/17/2007

REACH 1		T35S-R14W-S10NE					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
GLIDE	1	10	2.2	0.15	22	0	5	23	36	32	5	0
POOL-LATERAL SCOUR	14	121	3.0	0.52	367	3	8	22	40	30	0	0
POOL-PLUNGE	1	4	5.6	0.45	21	0	9	26	43	22	0	0
RAPID/BOULDERS	9	134	2.3	0.10	311	10	0	15	34	46	5	0
RIFFLE	20	386	2.4	0.11	941	6	1	13	40	43	3	0
RIFFLE W/ POCKETS	1	25	1.8	0.15	45	0	5	10	40	45	0	0
STEP/LOG	1	2	2.6	0.02	4	0	9	27	45	18	0	0
Total:	47	683	2.6	0.24	1,712	19	Avg: 4	17	39	38	2	0

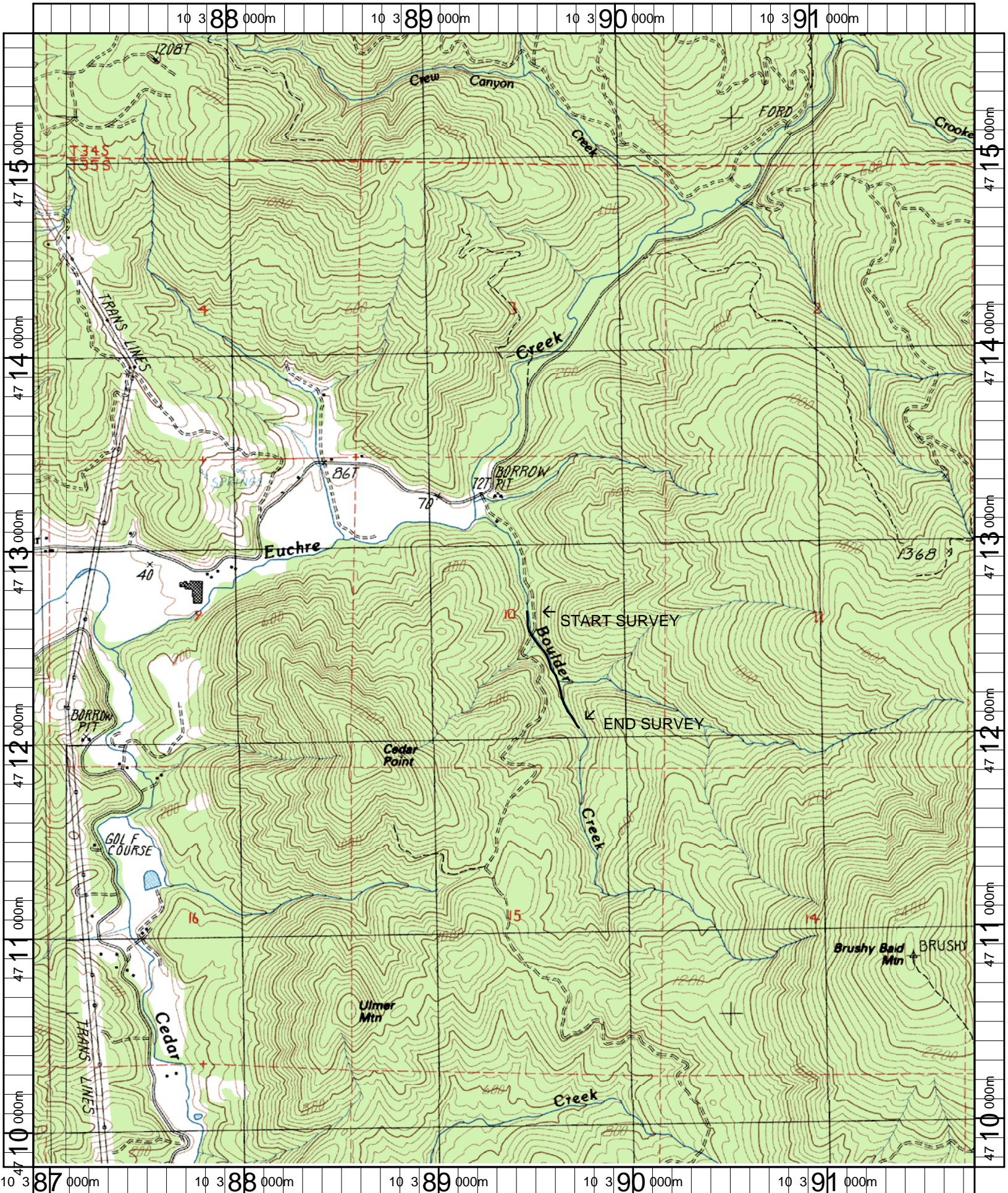
HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	15	125	3.2	0.51	388	22.69%	3	0.8	
Glides	1	10	2.2	0.15	22	1.30%	0	0.0	
Riffles	21	411	2.3	0.11	986	57.57%	6	0.6	
Rapids	9	134	2.3	0.10	311	18.19%	10	3.2	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	2	2.6	0.02	4	0.26%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	15	22.0	22.8
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	9	13.2	13.7
Pool frequency (channel widths/pool):	10.1		
Residual pool depth (avg):	0.40		

COMMENT SUMMARY

MONITORING AREA: 5-SC SITE ID: 72 STREAM: BOULDER CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
28	RI	00	22.2		COULDNT GET UNIT # TO START AT 1. U28=U1, U29=U2, ETC. TEMP=13C
36	RI	00	120.2	BC	BOULER CR. RD
58	LP	01	457.5	DJ	DEBRIS JAM APPEARS TO CAUSE CHANNEL DIVERSION.
66	RI	11	529.1	TJ1/	TEMP=14C
68	SL	00	534.6		PIC 100-0039
69	RP	00	559.6		TROUT FRY PRESENT
74	RB	11	653.4	/TJ 2	TEMP=14C
75	LP	00	658.5		U75=U47



Name: BRUSHY BALD MT
 Date: 4/26/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0389381 E 4712712 N
 Caption: BOULDER CREEK RESTORATION SITE - EUCHRE CREEK BASIN