

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

STREAM: Weatherly Creek (U150)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: January 30, 2002
SURVEY CREW: Sara Meguffy, Sarah Schuster
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 34.4 km²
USGS MAPS: Devils Graveyard
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Weatherly Creek habitat survey extended 513 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 2.6 (range: 1.2 – 4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Riffles (51%) and scour pools (30%) dominated stream habitat. Bedrock (29%) and sand (24%) dominated stream substrate. Wood volume was low at 9.6 m³/100m.

COMMENTS:

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

The crew noted several debris jams during the survey.

REACH

T22S-R9W-S2SE

REACH

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.6	VWI Range:	1.2 - 4

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	513	4,548	0
Secondary	73	374	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 8.4	Width: 12.2	16.4 (12.9 - 19.2)	16.3 (13.1 - 19.7)
Depth: 0.56	Height: 0.7	1.4 (1.2 - 1.6)	3.1 (1.6 - 4.4)

W:D ratio: 17.9

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 5.1

Average Unit Gradient: 1.3%

Habitat Units/100m (primary channel length): 5.9

Water temperature (°C): 6.5 - 6.5

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:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	63	12.3
Volume (m ³):	49	9.6
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

WEATHERLY CREEK PRE-TX (U-150)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

1/30/2002

REACH		T22S-R9W-S2SE					REACH					
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/BEDROCK	1	10	12.0	0.25	120	0	5	10	10	10	0	65
CASCADE/BOULDERS	1	10	1.3	0.20	13	0	15	25	25	10	25	0
POOL-LATERAL SCOUR	8	152	8.3	1.10	1,239	0	6	28	11	9	14	31
POOL-PLUNGE	1	7	9.5	1.20	67	0	5	20	10	5	10	50
POOL-STRAIGHT SCOUR	1	17	10.3	0.82	170	0	5	20	10	5	10	50
PUDDLED UNIT	1	13	2.0	0.00	27	0	30	60	10	0	0	0
RAPID/BEDROCK	3	74	9.0	0.28	704	0	5	8	7	8	10	62
RIFFLE	12	297	8.5	0.36	2,519	0	9	28	17	11	19	16
STEP/BEDROCK	1	4	10.2	0.15	41	0	5	5	0	0	0	90
STEP/BOULDERS	1	2	10.1	0.10	22	0	5	10	10	10	67	0
Total:	30	585	8.4	0.56	4,922	0	Avg: 8	24	13	9	16	29

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	10	175	8.7	1.08	1,476	29.99%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	12	297	8.5	0.36	2,519	51.18%	0	0.0
Rapids	3	74	9.0	0.28	704	14.30%	0	0.0
Cascades	2	20	6.7	0.23	133	2.70%	0	0.0
Step/Falls	2	6	10.2	0.13	63	1.28%	0	0.0
Dry	1	13	2.0	0.00	27	0.54%	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:	10	17.1	19.5
Pools >=1m deep:	7	12.0	13.7
Complex pools (LWD pieces>=3):	3	5.1	5.9
Pool frequency (channel widths/pool):	4.8		
Residual pool depth (avg):	0.81		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP SITE ID: 150 WEATHERLY CREEK PRE-TX (U-150)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RR	00	14.8	BC, CS/CS	
3	LP	00	74	CS/	
5	RI	00	117.6		FLAG: SITE #1
6	RI	00	151.3		SITE #2
11	RI	01	266.2	DJ	4 SQ M SPAWNING GRAVEL
12	RI	02	266.2	DJ	
13	PD	03	266.2		GOOD OFF-CHANNEL HABITAT
14	LP	00	287.2		WOODY DEBRIS IN CHANNEL
15	SB	00	289.4		H = .35
19	RI	01	353.8		SITE #3
20	PP	01	360.9		H = .4
21	SR	01	364.9		H = .4
22	LP	01	384.9	DJ	
23	LP	01	401.9	DJ	
25	RI	00	424.4		SITE #4
27	LP	01	460.1	/TJ, CE/	
29	RR	00	496.3		SITE #5
30	SP	00	512.8		END SIGN ON RIGHT