

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

STREAM: Weatherly Creek (U-150)  
BASIN: Umpqua River  
SURVEY TYPE: Post-Tx  
DATE: February 9, 2004  
SURVEY CREW: Michael Scheu, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 34.4 km<sup>2</sup>  
USGS MAPS: Devils Graveyard  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Weatherly Creek habitat survey extended 513 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.1 (range: 1.1-3.1). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.7 percent. Scour pools (42%) and rapids (36%) dominated stream habitat. Bedrock (54%) dominated stream substrate. Wood volume was moderate at 24.7 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures during the survey.

REACH 1

T22S-R09W-S02NW

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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.1	VWI Range:	1.1 - 3.1

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	513	4,681	0
Secondary	67	123	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 7.6	Width: 12.5	17.4 ( 14.7 - 21.5 )	21.9 ( 18.7 - 25.5 )
Depth: 0.56	Height: 0.7	1.3 ( 1 - 1.5 )	2.0 ( 1.8 - 2.2 )

W:D ratio: 19.0  
Stream Flow Type: MF  
Average Unit Gradient: 1.7%  
Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.4  
Habitat Units/100m (total channel length): 6.2  
Habitat Units/100m (primary channel length): 7.0

**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):	137	26.7
Volume (m <sup>3</sup> ):	127	24.7
Key pieces (>=12m x 0.60m):	5	1.0

**OREGON DEPARTMENT OF FISH AND WILDLIFE**

**WEATHERLEY CREEK POST-TX (U-150)**

**HABITAT INVENTORY**

Report Date: 6/16/2004

Survey Date:

2/9/2004

**REACH 1**

**T22S-R09W-S02NW**

**REACH 1**

**HABITAT DETAIL**

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	6	0.8	0.10	5	0	0	0	50	0	0	50
POOL-LATERAL SCOUR	14	229	8.1	0.81	2,006	0	4	24	6	3	13	50
PUDDLED UNIT	1	11	2.2	0.13	24	0	0	80	20	0	0	0
RAPID/BEDROCK	6	117	7.4	0.43	899	0	0	0	0	3	13	84
RAPID/BOULDERS	5	91	7.8	0.50	827	0	0	0	10	27	31	32
RIFFLE	5	102	7.2	0.35	825	0	2	18	3	3	15	59
STEP/BEDROCK	2	17	9.3	0.35	139	0	0	0	5	0	0	95
STEP/BOULDERS	1	7	11.2	0.50	75	0	0	0	0	10	80	10
STEP/STRUCTURE	1	1	8.4	0.50	5	0	0	25	17	8	0	50
<b>Total:</b>	<b>36</b>	<b>580</b>	<b>7.6</b>	<b>0.56</b>	<b>4,804</b>	<b>0</b>	<b>Avg: 2</b>	<b>15</b>	<b>7</b>	<b>6</b>	<b>16</b>	<b>54</b>

**HABITAT SUMMARY**

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	0	0			0	0.00%	0	0.0
Scour Pools	14	229	8.1	0.81	2,006	41.76%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	5	102	7.2	0.35	825	17.17%	0	0.0
Rapids	11	208	7.6	0.46	1,725	35.92%	0	0.0
Cascades	1	6	0.8	0.10	5	0.10%	0	0.0
Step/Falls	4	24	9.5	0.43	219	4.55%	0	0.0
Dry	1	11	2.2	0.13	24	0.50%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

**POOL SUMMARY**

	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	14	24.1	27.3
Pools >=1m deep:	3	5.2	5.8
Complex pools (LWD pieces>=3):	4	6.9	7.8
Pool frequency (channel widths/pool):	3.3		
Residual pool depth (avg):	0.46		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **4-UMP**    SITE ID: **150**    WEATHERLEY CREEK POST-TX (U-1)

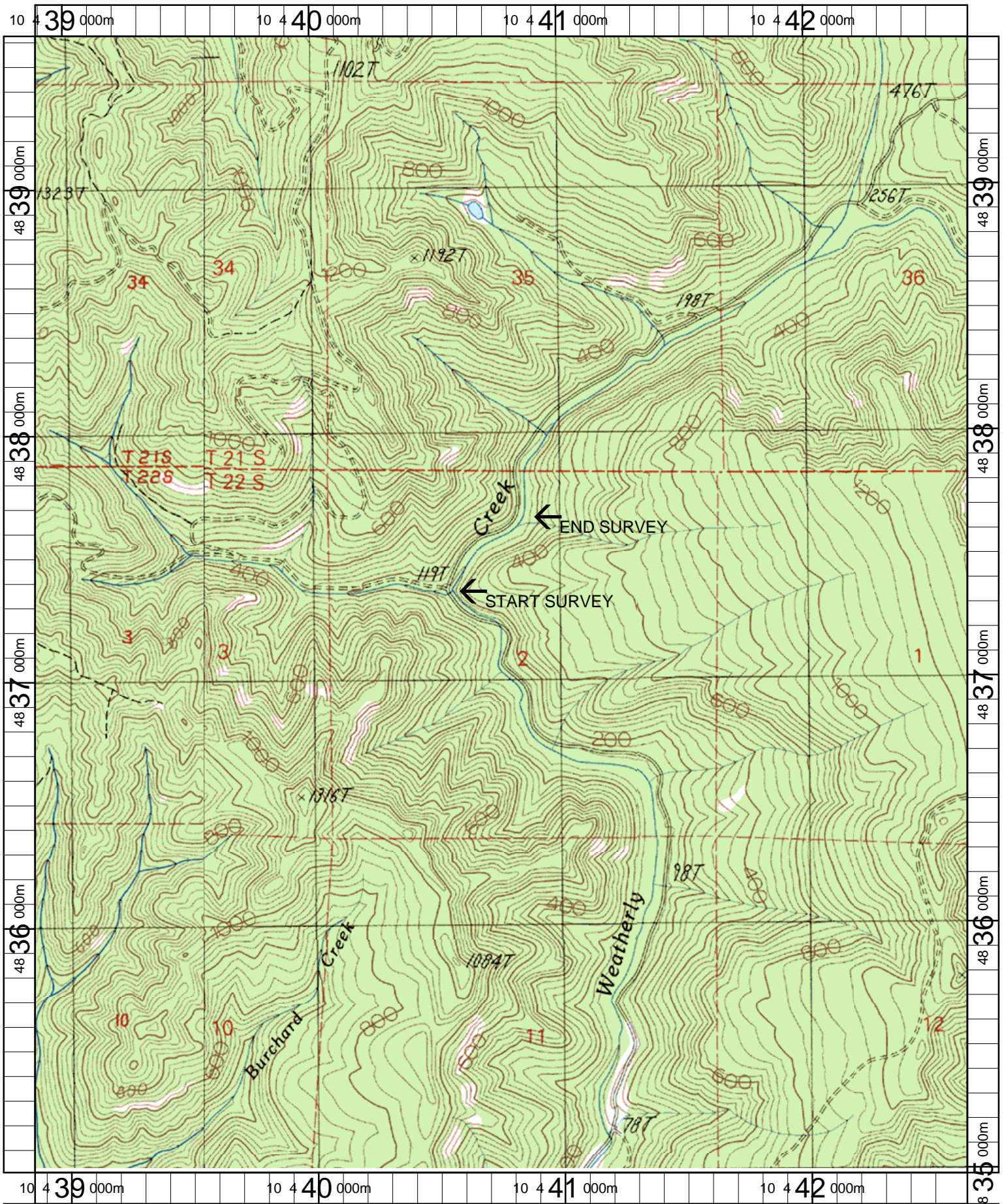
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RR	00	19.6	BC; CS/CS	T=8C WEATHERLEY CK R	
4	LP	00	72.8	CS/	SNORKEL POOL	
6	RI	00	110.9	HS	4 LOGS; 1 BOULDER	
7	SS	00	111.5		H=0.2	
8	LP	00	128.3	HS	STRUCT SITE 1; 8 BLDRS	
9	RR	00	153.8	SS/; HS	SS2;5LOGS;12 BLDRS; S	
10	LP	00	176.8	HS	2 LOGS	
11	RI	00	193.3	HS	SG=4;3BLDRS;SNORKEL	
13	LP	00	232.3		SNORKEL POOL 4	
14	RR	01	254.3		SG=4	
18	LP	00	274.5	LI/		
20	LP	00	293.9		SNORKEL POOL 6	
21	RB	00	320.9		SNORKEL POOL 7	
22	RR	00	336.9	HS	16 BLDRS	
24	SR	01	362.1		SNORKEL POOL 8; CO CA	
25	LP	01	389.6	HS	5 LOGS; 7 BLDRS	
31	LP	00	429.6		PHOTO POINT 2	
32	RI	00	451.7	/SS		
33	LP	01	462.1		NOT ON MAP	
34	CB	11	462.1		T=8C; ACW=1.0M	
35	RR	00	484.8	CE/; HS	5 BLDRS	

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP    SITE ID: 150    WEATHERLEY CREEK POST-TX (U-1)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
36	RI	00	513.4	HS	6 BLDRS; 3 LOGS	



Name: DEVILS GRAVEYARD  
 Date: 6/18/2003  
 Scale: 1 inch equals 1666 feet

Location: 10 440759 E 4837301 N  
 Caption: WEATHERLEY CREEK RESTORATION SITE - UMPQUA BASIN