

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

STREAM: Weatherley Creek (UMP-150)  
BASIN: Umpqua River  
SURVEY TYPE: Post-Tx  
DATE: March 6, 2008  
SURVEY CREW: Kyle Brachter, Bobby Gomez  
REPORT PREPARED BY: Sharon Tippery  
BASIN AREA: 24.7 km<sup>2</sup>  
USGS MAPS: Devils Graveyard  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Weatherley Creek habitat survey extended 532 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.7 (range: 1-2.5). Land use for the reach was timber harvest and second growth timber (15-30cm dbh). The average unit gradient was 2.2 percent. Rapids (49%) and scour pools (43%) dominated stream habitat. Bedrock (48%), boulder (18%) and gravel (14%) dominated stream substrate. Wood volume was 12.2m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures and debris jams during the survey.

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

**WEATHERLEY CREEK  
GCG: 4-UMP SITE ID: 150**

**Survey Date: 3/6/2008**

**Report Date: 5/8/2008**

**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	1.7	VWI Range:	1 - 2.5

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	532	4,378	0
Secondary	53	144	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 7.3	Width: 11.3	14.6 ( 11.3 - 18.6 )	23.7 ( 23.7 - 23.7 )
Depth: 0.41	Height: 0.6	1.1 ( 1.1 - 1.2 )	2.1 ( 2.1 - 2.1 )

W:D ratio: 19.7

Stream Flow Type: MF

Average Unit Gradient: 2.2%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.3

Habitat Units/100m (total channel length): 6.7

Habitat Units/100m (primary channel length): 7.3

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	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):	92	17.3
Volume (m <sup>3</sup> ):	65	12.2
Key pieces (>=12m x 0.60m):	0	0.0

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**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/BEDROCK	1	8	0.7	0.05	6	0	0	0	18	0	0	82
POOL-LATERAL SCOUR	19	256	7.2	0.66	1,914	0	0	10	15	10	15	49
POOL-STRAIGHT SCOUR	1	12	5.0	0.50	59	0	0	14	9	18	14	45
RAPID/BEDROCK	8	208	7.1	0.17	1,602	0	0	4	9	12	12	63
RAPID/BOULDERS	4	73	8.7	0.18	658	0	0	10	28	21	31	10
STEP/BEDROCK	3	10	6.0	0.09	63	0	0	0	2	0	3	95
STEP/BOULDERS	3	18	11.0	0.20	220	0	0	5	13	24	55	3
<b>Total:</b>	<b>39</b>	<b>585</b>	<b>7.3</b>	<b>0.41</b>	<b>4,522</b>	<b>0</b>	<b>Avg: 0</b>	<b>7</b>	<b>14</b>	<b>12</b>	<b>18</b>	<b>48</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	20	268	7.1	0.66	1,973	43.63%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	0	0			0	0.00%	0	0.0
Rapids	12	281	7.6	0.17	2,260	49.98%	0	0.0
Cascades	1	8	0.7	0.05	6	0.12%	0	0.0
Step/Falls	6	27	8.5	0.15	284	6.27%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

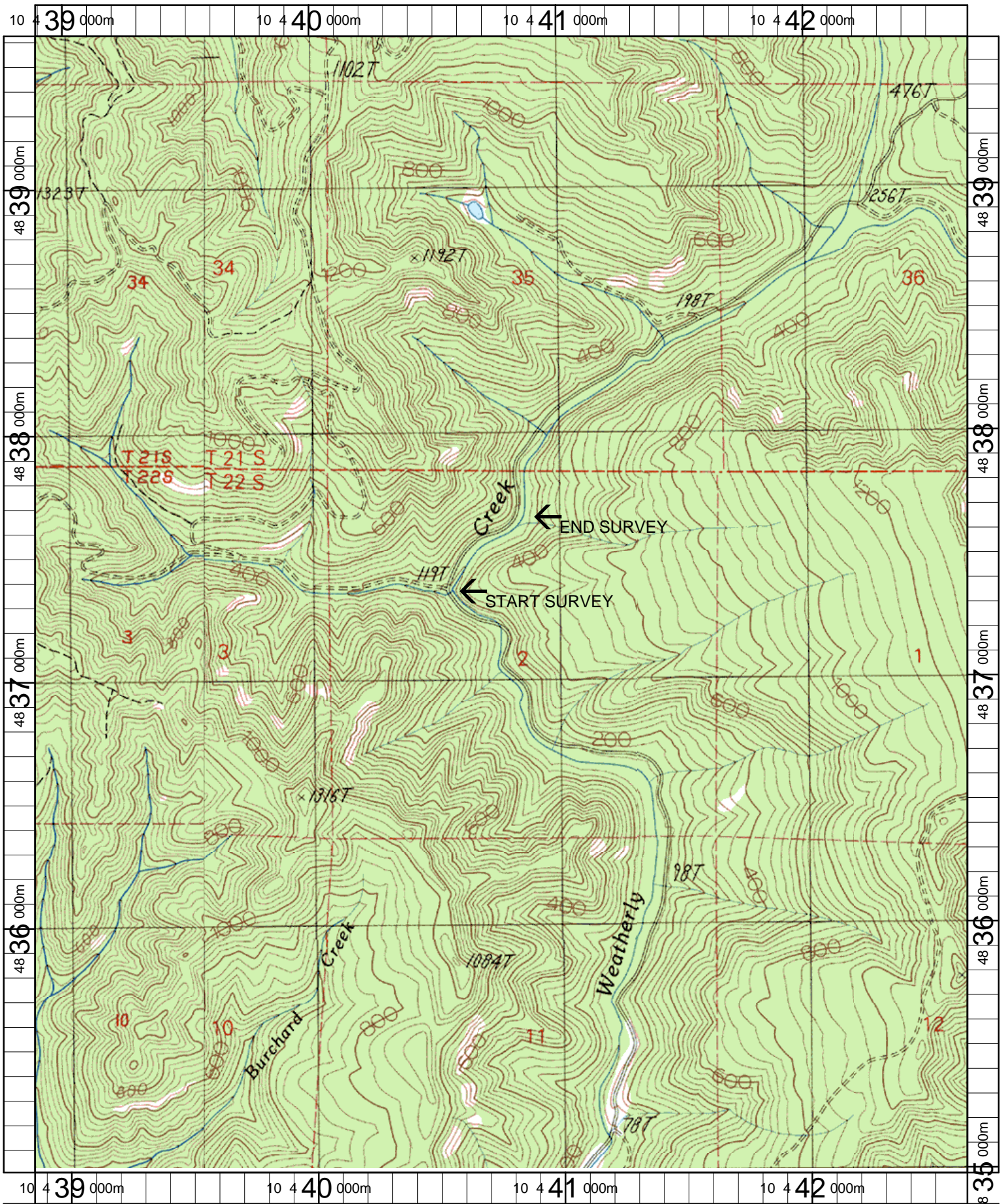
**POOL SUMMARY**

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	20	34.2	37.6
Pools >=1m deep:	1	1.7	1.9
Complex pools (LWD pieces>=3):	4	6.8	7.5
Pool frequency (channel widths/pool):	2.6		
Residual pool depth (avg):	0.47		

COMMENT SUMMARY

MONITORING AREA: 4-UMP      SITE ID: 150      STREAM: WEATHERLEY CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RR	00	17.3	CS/CS,BC	FORM:CH,MV. VEG:D15,S. USE:ST,TH.
6	LP	00	113.9	HS	LARGE WOOD
8	LP	00	157.4	HS,DJ	LARGE WOOD
11	RB	00	214.5		FORM:CA,CT. VEG:D15,S. USE:SR,TH
17	LP	01	260.2	DJ	
22	RB	00	300.2		FORM:CH,MV. VEG:D15,S. USE:TH.
27	LP	01	383.2	DJ	
28	LP	00	398.2	DJ,HS	LARGE WOOD
33	RR	00	426.4		FORM:CH,MV. VEG:D15,S. USE:TH.
35	RR	01	469.2	/TJ	
36	CR	11	469.2		TEMPERATURE=7C ACW=1M
39	LP	00	532.1	HS	FORM:CH,MV. VEG:D15,S. USE:TH,ST.



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