

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

STREAM: Anthony Creek (W67)  
BASIN: MF Willamette River  
SURVEY TYPE: Post-Tx  
DATE: February 12, 2002  
SURVEY CREW: Charlie Stein, Peggy Kavanagh  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 18.9 km<sup>2</sup>  
USGS MAPS: Lowell  
ECOREGION: Willamette Valley Foothills

**GENERAL DESCRIPTION:**

The Anthony Creek habitat survey extended 654 meters. The channel was unconstrained in a broad valley. The average valley width index was 9.4 (range: 8 - 10). Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 2.4 percent. Rapids (66%) and scour pools (22%) dominated stream habitat. Bedrock (47%) and cobble (21%) dominated stream substrate. Wood volume was low at 9.2 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

T19S-R1W-S29SW

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	9.4	VWI Range:	8 - 10

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
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	654	4,343	0
Secondary	20	57	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 6.4	Width: 11.8	30.3 ( 17 - 50 )	24.7 ( 21 - 29 )
Depth: 0.43	Height: 0.7	1.4 ( 1.2 - 1.5 )	2.0 ( 1.8 - 2.3 )

W:D ratio: 17.4  
Stream Flow Type: HF  
Average Unit Gradient: 2.4%  
Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 2.6  
Habitat Units/100m (total channel length): 4.7  
Habitat Units/100m (primary channel length): 4.9

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	
Riparian Vegetation:	M3	D15

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):	62	9.5
Volume (m <sup>3</sup> ):	60	9.1
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

ANTHONY CREEK POST-TX (W-67)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/12/2002

REACH	T19S-R1W-S29SW							REACH				
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
POOL-ISOLATED	1	8	1.1	0.30	9	0	11	63	21	5	0	0
POOL-LATERAL SCOUR	7	98	5.9	0.78	577	0	1	12	27	24	4	31
POOL-STRAIGHT SCOUR	3	51	7.6	0.73	403	0	0	5	7	2	0	86
RAPID/BEDROCK	8	267	6.9	0.22	1,910	0	0	1	4	4	1	90
RAPID/BOULDERS	7	170	5.9	0.32	989	0	0	7	26	42	14	11
RIFFLE	3	61	5.9	0.37	357	0	0	10	21	23	5	41
STEP/BEDROCK	1	9	7.0	0.20	63	0	0	0	0	0	0	100
STEP/BOULDERS	1	8	7.3	0.30	58	0	0	5	19	57	19	0
STEP/COBBLE	1	4	10.0	0.25	35	0	0	5	40	40	5	10
<b>Total:</b>	<b>32</b>	<b>674</b>	<b>6.4</b>	<b>0.43</b>	<b>4,400</b>	<b>0</b>	<b>Avg: 0</b>	<b>8</b>	<b>18</b>	<b>21</b>	<b>5</b>	<b>47</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	1	8	1.1	0.30	9	0.20%	0	0.0
Scour Pools	10	148	6.4	0.77	979	22.26%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	3	61	5.9	0.37	357	8.11%	0	0.0
Rapids	15	437	6.5	0.27	2,898	65.88%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	21	8.1	0.25	156	3.55%	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:	11	16.3	16.8
Pools >=1m deep:	2	3.0	3.1
Complex pools (LWD pieces>=3):	3	4.5	4.6
Pool frequency (channel widths/pool):	5.2		
Residual pool depth (avg):	0.41		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **8-W**      SITE ID: **67**      **ANTHONY CREEK POST-TX (W-67)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RB	00	18		START SIGN ALDER RIGHT
4	LP	00	75	HS	SG = 6 SQ M, SITE #9
8	LP	00	167		SG = 3 SQ M
12	RB	00	203		LWD STACKED ON TERRACE
15	SP	00	257		SITE #6
20	RR	00	400.5	BC, CS/CS	NEW BRIDGE/BOULDERS
22	RR	00	441.5	HS	HS NOT COLLECTING GRAVEL
26	LP	01	515.5	HS, DJ	/TJ, SG = 2 SQ M
27	RR	11	515.5		35% OF FLOW
32	RR	00	654		SIGN ON CEDAR STUMP RIGHT