

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

STREAM: Wolf Creek (MC108)  
BASIN: Yaquina River  
SURVEY TYPE: Post-Tx  
DATE: January 28, 2002  
SURVEY CREW: Loren Stucker, Russ Macal  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 15.0 km<sup>2</sup>  
USGS MAPS: Harlan  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Wolf Creek habitat survey extended 484 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9.6 (range: 8.0-10.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.2 percent. Riffles (63%) and rapids (18%) dominated stream habitat. Sand (37%) and gravel (30%) dominated stream substrate. Wood volume was high at 26.3 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 as well as evidence of beaver activity during the survey.

REACH

T11S-R9W-S36SE

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	9.6	VWI Range:	8 - 10

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	484	2,787	0
Secondary	20	12	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.3	Width: 7.0	9.1 ( 7.1 - 10.7 )	12.4 ( 7.6 - 16 )
Depth: 0.52	Height: 0.7	1.3 ( 1 - 1.6 )	1.7 ( 1.2 - 2.6 )

W:D ratio: 10.8  
Stream Flow Type: MF  
Average Unit Gradient: 1.2%  
Water temperature (°C): 6.5 - 6.5

Entrenchment (ACW:FPW ratio): 1.3  
Habitat Units/100m (total channel length): 4.4  
Habitat Units/100m (primary channel length): 4.5

**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):	105	21.7
Volume (m <sup>3</sup> ):	127	26.3
Key pieces (>=12m x 0.60m):	7	1.4

OREGON DEPARTMENT OF FISH AND WILDLIFE

WOLF CREEK POST-TX (MC-108)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

1/28/2002

REACH	T11S-R9W-S36SE							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	
CULVERT CROSSING	1	14	3.8	0.50	54	0	5	45	50	0	0	0	
POOL-DAMMED	1	35	6.2	1.20	219	0	10	65	5	5	0	15	
POOL-LATERAL SCOUR	2	26	5.4	0.85	139	0	12	34	26	7	0	21	
POOL-PLUNGE	2	16	5.7	0.90	90	0	2	27	39	25	0	7	
RAPID/BEDROCK	2	69	5.8	0.38	382	0	3	18	13	8	0	60	
RAPID/BOULDERS	2	26	3.9	0.28	119	0	0	40	38	18	0	5	
RIFFLE	8	254	5.0	0.43	1,411	0	4	34	35	6	1	19	
RIFFLE W/ POCKETS	2	58	6.2	0.50	350	0	3	50	30	8	0	10	
STEP/LOG	2	6	6.2	0.20	34	0	3	50	20	15	0	13	
<b>Total:</b>		22	504	5.3	2,799	0	<b>Avg:</b> 4	37	30	10	0	18	

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	35	6.2	1.20	219	7.84%	0	0.0
Scour Pools	4	42	5.6	0.88	229	8.19%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	10	312	5.2	0.45	1,761	62.91%	0	0.0
Rapids	4	95	4.8	0.33	501	17.90%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	2	6	6.2	0.20	34	1.22%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	1	14	3.8	0.50	54	1.94%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	5	9.9	10.3
Pools >=1m deep:	1	2.0	2.1
Complex pools (LWD pieces>=3):	3	5.9	6.2
Pool frequency (channel widths/pool):	14.4		
Residual pool depth (avg):	0.69		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC**      SITE ID: **108**      **WOLF CREEK POST-TX (MC-108)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	8.2		T = 6.5
2	CC	00	22.5	CC	GALVANIZED OVAL, NO STEP
3	RI	00	68.7	SS/	POND ON TERRACE
4	LP	00	87.6		26" STEELHEAD
5	RP	00	113.2	/SS, HS	REFUGES BEHIND LOGS
7	RI	01	164.1	/TJ, HS	
8	RB	11	164.1		TRIB FLOW = 5%
9	RI	00	194.5	BV	
10	PP	00	200.5	HS	
11	SL	00	201.6		H = .3
12	DP	00	237		FLOW OVER LOGS
13	RB	00	253	SS/	DEAD STEELHEAD
14	RI	01	291.5	/TJ	
15	RI	11	291.5		TRIB FLOW = 5%
16	RP	00	323.7	HS	POCKETS BEHIND WOOD
17	PP	00	333.6		REDDS
18	SL	00	338.1		H = .45
19	RI	00	388.1	/SS	DEAD FISH
21	LP	00	442.8	HS	
22	RR	00	484.3		END SIGN ON LEFT