

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

STREAM: Wolf Creek (MC-108)
BASIN: Yaquina River
SURVEY TYPE: Post-Tx
DATE: January 26, 2004
SURVEY CREW: April Waters, Jim Andrews, Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 15.0 km²
USGS MAPS: Harlan
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Wolf Creek habitat survey extended 494 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 10.5 (range: 8.0-16.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 0.7 percent. Riffles (50%) and scour pools (38%) dominated stream habitat. Sand (49%) and gravel (28%) dominated stream substrate. Wood volume was moderate at 26.3 m³/100m.

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

T11S-R08W-S31NW

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	10.5	VWI Range:	8 - 16

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	494	2,806	0
Secondary	85	181	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 5.3	Width: 7.3	17.6 (12.5 - 20.3)	20.9 (13.5 - 24.3)
Depth: 0.49	Height: 0.8	1.6 (1.4 - 1.8)	2.2 (1.5 - 2.7)

W:D ratio: 9.3
Stream Flow Type: MF
Avg. Unit Gradient: 0.7%

Entrenchment (ACW:FPW ratio): 2.6
Water temp (°C): 9.0 - 9.0
Habitat Units/100m: 6.2

Riparian, Bank, and Wood Summary

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

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</u>
All pieces (>=3m x 0.15m):	163	33.0
Volume (m ³):	130	26.3
Key pieces (>=10m x 0.60m):	5	1.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

WOLF CREEK POST-TX (MC-108)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

1/26/2004

REACH 1

T11S-R08W-S31NW

REACH 1

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/BOULDERS	2	14	2.6	0.05	40	0	6	17	78	0	0	0
CULVERT CROSSING	1	14	3.9	0.60	55	0	5	55	40	0	0	0
POOL-ALCOVE	1	27	3.7	0.30	98	0	84	11	5	0	0	0
POOL-LATERAL SCOUR	11	195	5.6	0.76	1,088	0	8	59	13	0	1	19
POOL-PLUNGE	2	10	5.6	0.73	56	0	4	22	63	0	0	13
RIFFLE	12	293	4.9	0.35	1,480	0	7	38	39	0	0	16
STEP/LOG	2	11	5.8	0.38	56	0	8	90	3	0	0	0
STEP/STRUCTURE	5	16	6.9	0.37	114	0	12	66	13	0	0	9
Total:	36	580	5.3	0.49	2,987	0	Avg: 10	49	28	0	0	13

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	1	27	3.7	0.30	98	3.29%	0	0.0
Scour Pools	13	205	5.6	0.75	1,144	38.29%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	12	293	4.9	0.35	1,480	49.55%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	2	14	2.6	0.05	40	1.33%	0	0.0
Step/Falls	7	27	6.6	0.37	170	5.68%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	1	14	3.9	0.60	55	1.85%	0	0.0

POOL SUMMARY

	Total	# / Km	
All Pools:	14	24.2	85
Pools >=1m deep:	1	1.7	
Complex pools (LWD pieces>=3):	4	6.9	
Pool frequency (channel widths/pool):	5.7		
Residual pool depth (avg):	0.35		

STREAM SUMMARY

WOLF CREEK POST-TX (MC-108)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
36	580	5.3	0.49	2,987	10	49	28	0	0	13	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	98	3.29%
Scour Pools	1,144	38.29%
Glides	0	0.00%
Riffles	1,480	49.55%
Rapids	0	0.00%
Cascades	40	1.33%
Step/Falls	170	5.68%
Dry	0	0.00%
Culverts	55	1.85%

Comment Summary

Oregon Plan Monitoring Sites 2002

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

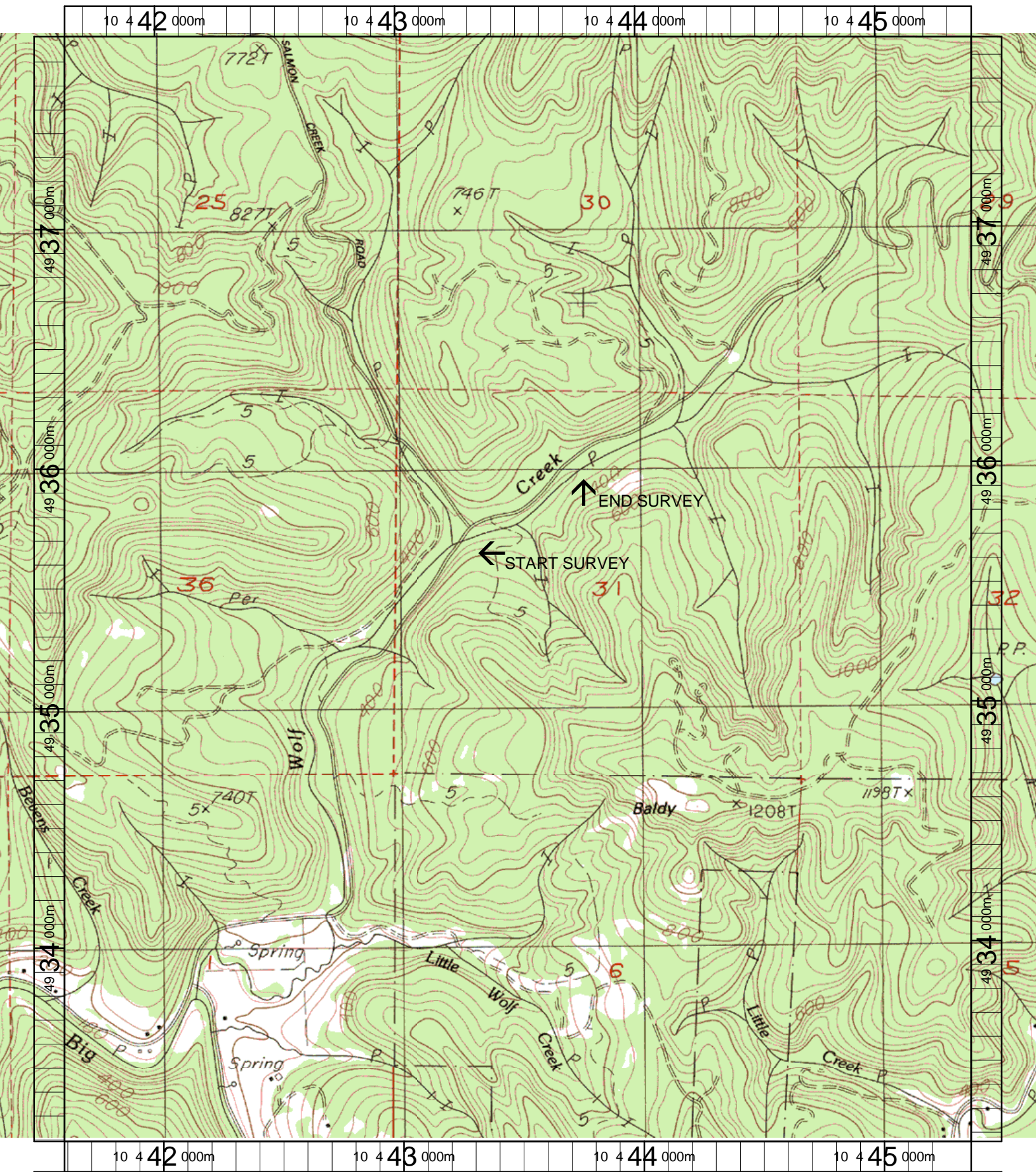
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	CC	00	22.8	CC	1.6*3.9 CULVERT GALVA	
4	RI	01	73.1	BV		
5	AL	10	73.1	WL	NEWT	
7	RI	00	100.5	BV, HS		
8	LP	00	115	BV	HS FROM U7 CONT.	
9	LP	00	129.7	BV		
10	RI	01	165.2	/TJ		
11	CB	11	165.2		ACW=.9M, T=9C	
12	SS	00	168.1	HS, DJ	H=.35M	
13	LP	00	182.8		COHO CARCASS	
15	SS	00	202.8	HS	H=.25M	
16	LP	00	234.1	WL	ELK TRACKS	
17	LP	01	254.6	TJ/		
18	RI	11	254.6		ACW=1.3M, T=9C	
19	SS	00	259.6	HS,DJ	H=.3M, /HAB SIGN, CABL	
21	PP	01	274.2	/TJ	ACW=2.1M, T=8.5C	
23	SL	00	274.6		H=.1M	
24	LP	00	298.1	BV		
25	SS	00	301.6	HS, DJ	H=.2M	
26	LP	00	323.1		HS+DJ CONT FROM U25	
27	LP	00	340.1	BV		

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	NOTE ESTIMATOR	NOTE NUMERATOR
28	SL	00	350.4	DJ		
30	RI	01	392.9	/TJ		
31	CB	11	392.9		T=9C, ACW=2.5M	
33	LP	00	445.4		COHO CARCASS	
34	PP	00	450.8		SG=4M	
35	SS	00	453.8	BV,HS,DJ	H=.3M, COHO CARCASS	
36	RI	00	494.2	BV	LIVE BEAVER, EOS, T=9C	



Name: HARLAN
 Date: 5/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 443489 E 4935487 N
 Caption: WOLF CREEK RETORATION SITE - YAQUINA BASIN