

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

STREAM: Wolf Creek Tributary (MC-206)  
BASIN: Yaquina River  
SURVEY TYPE: Post-Tx  
DATE: January 29, 2004  
SURVEY CREW: April Waters, Jim Andrews  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 1.6 km<sup>2</sup>  
USGS MAPS: Harlan  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Wolf Creek Tributary habitat survey extended 519 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 5.2 (range: 2.5-8.1). Land use for the reach was second growth (15-30 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 2.0 percent. Riffles (85%) dominated stream habitat. Gravel (42%), fines (27%) and sand (25%) dominated stream substrate. Wood volume was moderate at 21.0 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.

**OREGON DEPARTMENT OF FISH AND WILDLIFE WOLF CREEK TRIBUTARY POST-TX (MC-206)**  
**HABITAT INVENTORY** Report Date: 6/16/2004 Survey Date: 1/29/2004

**REACH 1**

**T11S-R08W-S30SW**

**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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.2	VWI Range:	2.5 - 8.1

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	519	1,423	0
Secondary	68	73	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 2.5	Width: 5.3	19.6 ( 5.2 - 29.6 )	5.6 ( 5.6 - 5.6 )
Depth: 0.42	Height: 0.7	1.4 ( 1.3 - 1.6 )	1.6 ( 1.55 - 1.55 )

W:D ratio: 7.5 Entrenchment (ACW:FPW ratio): 3.9  
 Stream Flow Type: MF Water temp (°C): 8.5 - 8.5  
 Avg. Unit Gradient: 2.0% Habitat Units/100m: 6.5

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	MT
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):	107	20.6
Volume (m <sup>3</sup> ):	109	21.0
Key pieces (>=10m x 0.60m):	8	1.5

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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/BOULDERS	1	17	3.6	0.35	61	0	20	35	40	5	0	0
CULVERT CROSSING	1	21	2.1	0.25	45	0	15	20	60	5	0	0
DRY UNIT	1	8	1.0	0.05	8	0	60	35	5	0	0	0
POOL-LATERAL SCOUR	3	20	3.0	0.72	59	0	23	30	37	8	0	2
POOL-PLUNGE	3	18	2.8	0.75	50	0	27	17	51	3	0	2
PUDDLED UNIT	1	11	0.4	0.05	4	0	70	25	5	0	0	0
RIFFLE	23	488	2.6	0.43	1,264	0	27	25	46	2	0	0
STEP/BOULDERS	1	2	0.4	0.03	1	0	5	0	5	0	0	90
STEP/LOG	4	1	2.4	0.25	3	0	25	30	42	3	0	0
<b>Total:</b>	<b>38</b>	<b>587</b>	<b>2.5</b>	<b>0.42</b>	<b>1,496</b>	<b>0</b>	<b>Avg: 27</b>	<b>25</b>	<b>42</b>	<b>3</b>	<b>0</b>	<b>3</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	6	38	2.9	0.73	109	7.28%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	23	488	2.6	0.43	1,264	84.53%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	17	3.6	0.35	61	4.09%	0	0.0
Step/Falls	5	3	2.0	0.21	4	0.28%	0	0.0
Dry	2	19	0.7	0.05	12	0.83%	0	0.0
Culverts	1	21	2.1	0.25	45	2.99%	0	0.0

**POOL SUMMARY**

	<u>Total</u>	<u># / Km</u>	
All Pools:	6	10.2	68
Pools >=1m deep:	0	0.0	
Complex pools (LWD pieces>=3):	0	0.0	
Pool frequency (channel widths/pool):	18.5		
Residual pool depth (avg):	0.43		

**STREAM SUMMARY**

**WOLF CREEK TRIBUTARY POST-TX (MC-206)**

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
38	587	2.5	0.42	1,496	27	25	42	3	0	3	

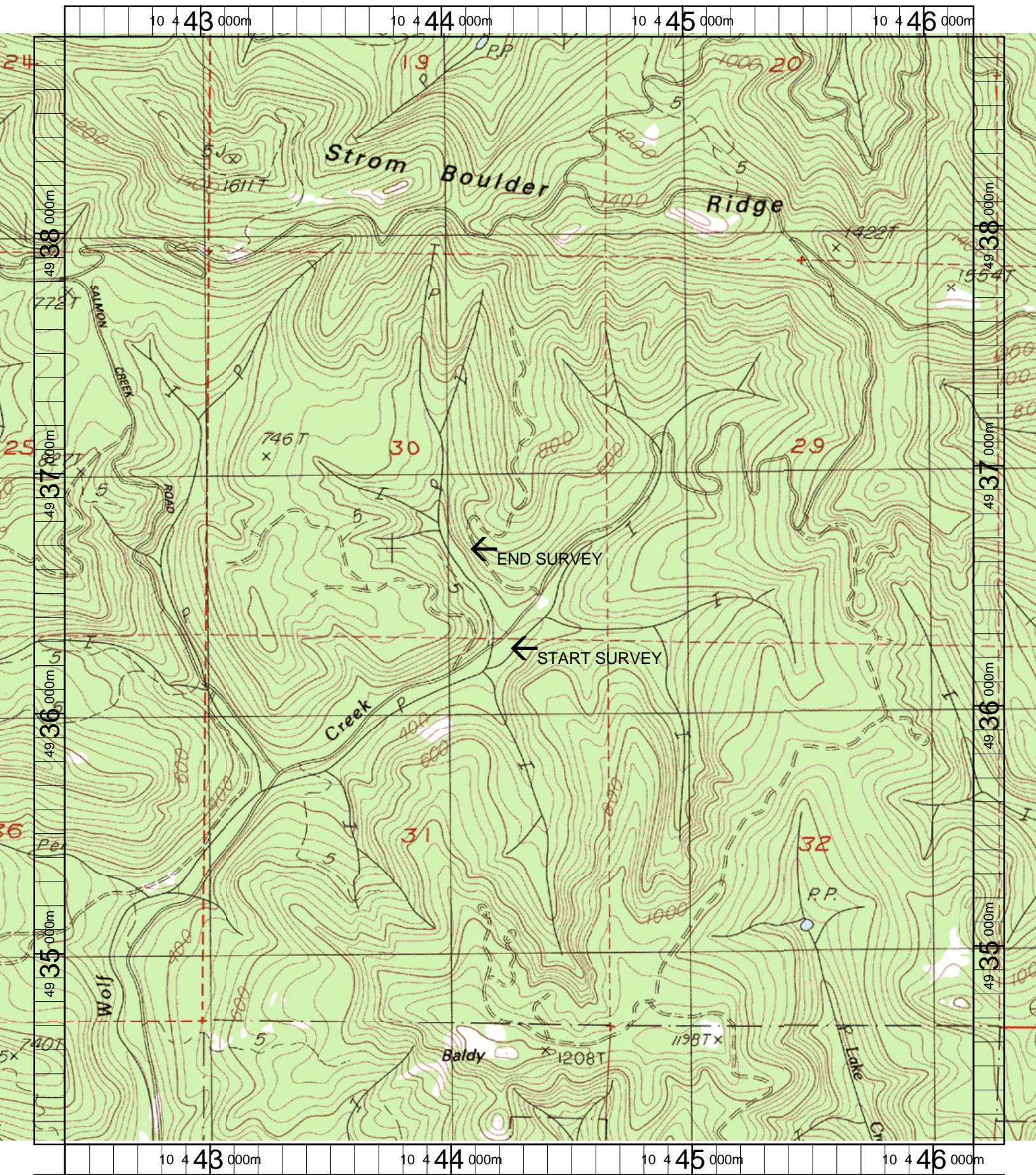
Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	109	7.28%
Glides	0	0.00%
Riffles	1,264	84.53%
Rapids	0	0.00%
Cascades	61	4.09%
Step/Falls	4	0.28%
Dry	12	0.83%
Culverts	45	2.99%

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC**      SITE ID: **206**      **WOLF CREEK TRIBUTARY POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	CC	00	21.3	CC	T=8.5/0830, NEW, GALVA	
3	RI	00	57.3		HARDPAN	
5	RI	00	116.4		.5M DEEP POCKET	
6	RI	00	139	HS	.7M DEEP POCKET	
8	RI	00	179.2	HS		
9	RI	00	209.7	HS		
13	RI	01	250.8	HS	.7M DEEP POCKET	
16	RI	01	264.9	HS		
17	RI	02	264.9	/SS		
18	PD	02	264.9	/SS		
19	SL	01	265.4	HS		
22	RI	00	302	HS		
23	RI	00	332		CARCASS	
24	CB	01	349	TJ/, HS	LOG INFLUENCED	
25	SB	11	349		T=8.1C, TRIB UNIT	
30	RI	01	434.5		CARCASS	
32	DU	02	434.5		UNDERGROUND FLOW	
33	RI	00	460.5	SS/		
36	PP	00	507.8		HARDPAN	
38	RI	00	519.1		T=8.5C	



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

Location: 10 444297 E 4936500 N  
 Caption: WOLF CREEK TRIBUTARY RESTORATION SITE -  
 YAQUINA BASIN