

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

STREAM: North Fork Wolf Creek (N95)  
BASIN: Nehalem River  
SURVEY TYPE: Post-Tx  
DATE: February 12, 2002  
SURVEY CREW: Sean Allen, Rachel Werner  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 20.7 km<sup>2</sup>  
USGS MAPS: Clear Creek  
ECOREGION: Coast Range Volcanic

**GENERAL DESCRIPTION:**

The North Fork Wolf Creek habitat survey extended 623 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 2.1 (range: 1.5 – 3.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.8 percent. Scour pools (77%) and riffles (15%) dominated stream habitat. Bedrock (37%) and gravel (35%) dominated stream substrate. Wood volume was low at 16.8 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

T4N-R5W-S31SW

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	2.1	VWI Range:	1.5 - 3

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	623	5,880	0
Secondary	5	2	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 9.0	Width: 11.8	19.9 ( 13.8 - 29.3 )	17.3 ( 14 - 20 )
Depth: 0.73	Height: 0.7	1.3 ( 1.3 - 1.3 )	1.5 ( 1.4 - 1.6 )

W:D ratio: 18.1  
Stream Flow Type: MF  
Average Unit Gradient: 0.8%  
Water temperature (°C): 5.0 - 5.0

Entrenchment (ACW:FPW ratio): 1.8  
Habitat Units/100m (total channel length): 3.8  
Habitat Units/100m (primary channel length): 3.9

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D30	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 primary channel</u>
All pieces (>=3m x 0.15m):	131	21.0
Volume (m <sup>3</sup> ):	105	16.8
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

NF WOLF CREEK POST-TX (N-95)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/12/2002

REACH		T4N-R5W-S31SW					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-DAMMED	2	52	9.9	0.90	468	0	3	10	23	25	5	35
POOL-LATERAL SCOUR	11	423	10.1	1.07	4,287	0	6	11	37	11	3	32
POOL-PLUNGE	1	8	9.6	1.10	81	0	0	10	40	0	0	50
POOL-STRAIGHT SCOUR	1	19	8.4	0.70	163	0	5	10	25	0	0	60
RIFFLE	4	120	7.4	0.33	871	0	0	10	61	8	1	20
STEP/BEDROCK	1	5	0.5	0.10	2	0	0	10	10	0	0	80
STEP/LOG	4	1	9.1	0.19	10	0	8	13	17	8	8	48
<b>Total:</b>	24	628	9.0	0.73	5,882	0	<b>Avg:</b> 4	11	35	10	3	37

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	2	52	9.9	0.90	468	7.96%	0	0.0	
Scour Pools	13	450	9.9	1.05	4,530	77.02%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	4	120	7.4	0.33	871	14.81%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	5	6	7.3	0.17	13	0.22%	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:	15	23.9	24.1
Pools >=1m deep:	8	12.7	12.8
Complex pools (LWD pieces>=3):	10	15.9	16.0
Pool frequency (channel widths/pool):	3.6		
Residual pool depth (avg):	0.78		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 95 NF WOLF CREEK POST-TX (N-95)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	SL	00	0.3		H = .6, T = 5
2	DP	00	20.1	HS	
3	LP	00	47.3	HS	
4	SL	00	47.6		H = .5
5	LP	00	78.1		DAMMED
10	LP	00	233.4	HS	
12	LP	00	337.4	HS	
13	LP	00	365.4	HS	
14	SL	00	365.6		H = .3
15	DP	00	397.4	HS	
16	RI	00	429.3	BV	
17	SP	01	448.7	HS, TJ/	
18	SR	11	448.7		H = 1.0
20	SL	00	457.4		H = .5
24	LP	00	623.3	HS	