

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

STREAM: North Fork Wolf Creek (NC-95)
BASIN: Nehalem River
SURVEY TYPE: Pre-Tx
DATE: February 22, 2001
SURVEY CREW: Todd Boswell, Sean Allen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 20.7 km²
USGS MAPS: Clear Creek
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The North Fork Wolf Creek habitat survey extended 678 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 2.4 (range: 1.5 – 3.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.0 percent. Riffles (70%) and scour pools (26%) dominated stream habitat. Gravel (35%) and sand (31%) dominated stream substrate. Wood volume was low at 12.3 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 SUMMARY

REACH 1

T4N-R5W-S31SW

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 avg: 2.4 range: 1.5-3.0

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	678	5,473	0
Secondary	66	208	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	6.8	Width	10.3	21.4	15.1
Depth	0.43	Height	0.7	1.4	1.3
		W:D ratio	14.4	Entrenchment	2.1

Stream Flow Type: HF Water Temp: 5.0-5.0°C
 Avg. Unit Gradient: 1.0% Habitat Units/100m: 3.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	ST
Riparian Vegetation:	C50	M30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	85	12.5
Volume (m ³)	84	12.3
Key pieces (≥10m x 0.6m)	6	0.9

HABITAT UNIT SUMMARY

REACH 1 T4N-R5W-S31SW 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	Cbbl	Bldr	Bdrk
POOL-BACKWATER	7	56	3.2	0.43	200	0	9	62	11	2	1	14
POOL-LATERAL SCOUR	6	163	9.1	0.87	1,474	0	5	37	31	5	2	20
RAPID/BOULDERS	1	10	0.8	0.10	8	0	0	10	60	30	0	0
RIFFLE	14	515	7.9	0.27	3,999	0	0	14	48	10	0	28
Total:	28	744	6.8	0.43	5,681	0	Avg: 3	31	35	8	1	22

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	7	56	3.2	0.43	200	3.52	0	0.0
Scour Pools	6	163	9.1	0.87	1,474	25.95	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	14	515	7.9	0.27	3,999	70.40	0	0.0
Rapids	1	10	0.8	0.10	8	0.14	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	0	0	-	-	0	0.00	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

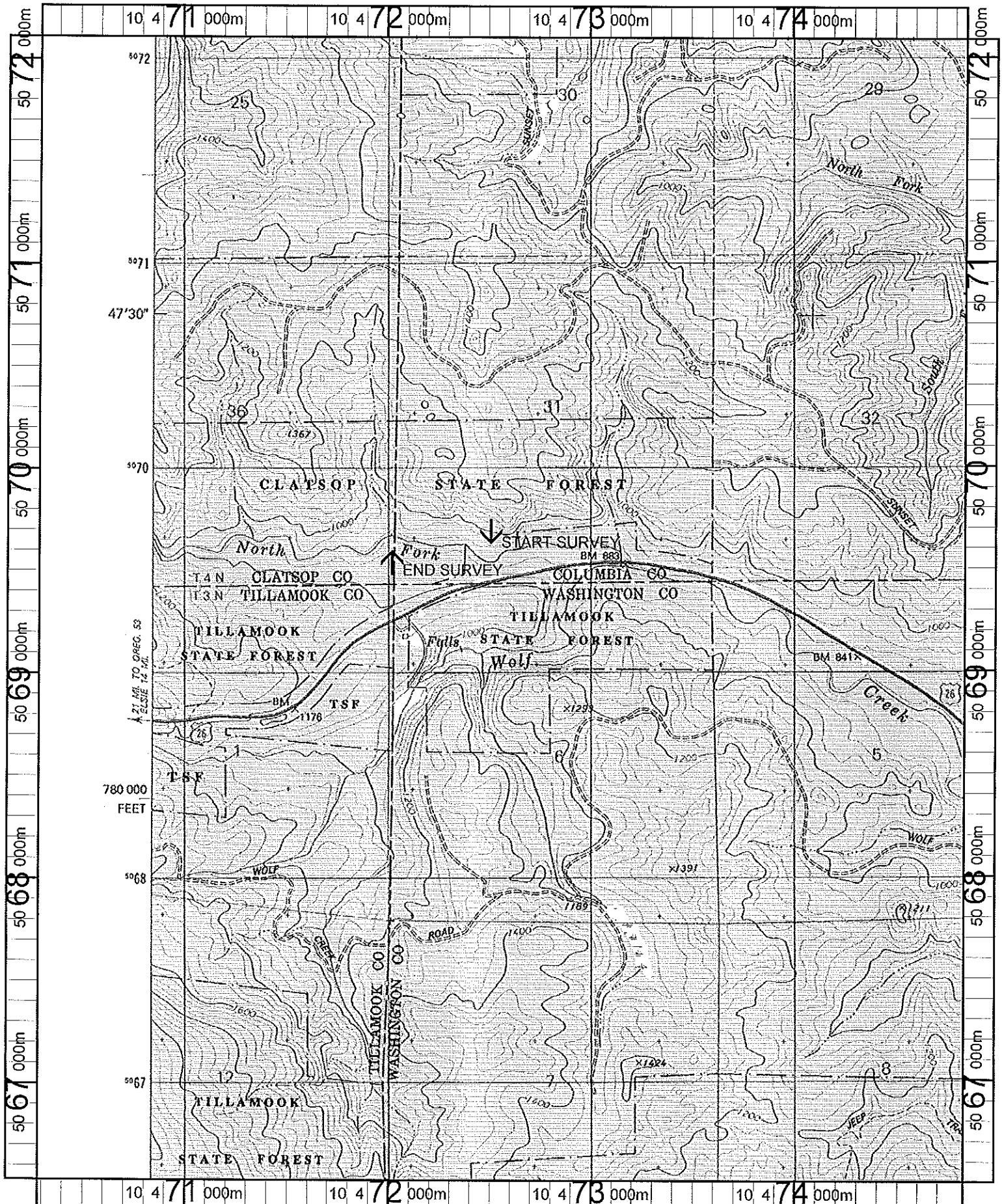
All Pools	<u>Total</u>	<u>#/Km</u>
	13	17.5
Pools ≥1m deep:	2	2.7
Complex pools (LWD pieces ≥3):	5	6.7
Pool Frequency (channel widths/pool):	5.5	
Residual pool depth (avg)	0.64m	

STREAM SUMMARY

NORTH FORK WOLF CREEK PRE-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
28	744	6.8	0.43	5,681	3	31	35	8	1	22	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,474	25.9
Backwater Pools	200	3.5
Glide	0	0.0
Riffle	3,999	70.4
Rapid	8	0.1
Cascade	0	0.0
Step	0	0.0
Dry	0	0.0



Name: CLEAR CREEK
 Date: 5/29/101
 Scale: 1 inch equals 2000 feet

Location: 10 472469 E 5069289 N
 Caption: NF WOLF CREEK RESTORATION SITE - NEHALEM BASIN