

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

STREAM: Farmer Creek (NC-30)  
BASIN: Nestucca River  
SURVEY TYPE: Pre-Tx  
DATE: February 28, 2000  
SURVEY CREW: Andrew Gross, Joe Zuccarello  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 6.6 km<sup>2</sup>  
USGS MAPS: Sand Lake  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Farmer Creek habitat survey extended 449 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 10.0. Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.2 percent. Riffles (55%) and rapids (25%) dominated stream habitat. Gravel (43%) and sand (29%) dominated stream substrate. Wood volume was very low at 3.4 m<sup>3</sup>/100m.

**COMMENTS:**

There were no potential barriers to upstream fish migration in the surveyed length.

REACH 1

T4S-R10W-3NE

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 10.0		VWI Range: 10 - 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	449	1,724	0
Secondary	32	127	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.1	Width	4.4	6.2	7.2
Depth	0.33	Height	0.3	0.6	0.9
		W:D ratio	12.4	Entrenchment	1.5

Stream Flow Type: MF                      Water temp (C): 8.5 - 8.5  
 Avg. Unit Gradient: 2.2%                      Habitat Units/100m: 5.8

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	ST
Riparian Vegetation:	M15	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</u>
All pieces (>=3m x 0.15m):	34	7.6
Volume (m <sup>3</sup> ):	15	3.4
Key pieces (>=10m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

FARMER CREEK PRE-TX (NC-30)

HABITAT INVENTORY

Report Date: 11/12/03

Survey Date:

2/28/00

REACH 1

T4S-R10W-3NE

REACH 1

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-ALCOVE	1	2	2.3	0.40	3
POOL-BACKWATER	1	8	2.5	0.20	19	0	0	60	20	0	0	20
POOL-LATERAL SCOUR	5	41	5.7	0.64	238	0	3	33	36	9	0	20
POOL-PLUNGE	1	4	4.1	0.50	14	0	0	50	25	20	5	0
POOL-STRAIGHT SCOUR	1	7	2.5	0.90	18	0	0	60	20	0	0	20
RAPID/BOULDERS	6	174	2.9	0.20	461	0	1	16	45	31	7	1
RIFFLE	8	235	4.4	0.23	1,022	0	1	20	53	19	1	7
STEP/COBBLE	2	11	7.0	0.20	73	0	0	23	63	15	0	0
STEP/LOG	1	1	1.3	0.10	1	0	5	53	42	0	0	0
<b>Total:</b>	<b>26</b>	<b>481</b>	<b>4.1</b>	<b>0.33</b>	<b>1,851</b>	<b>0</b>	<b>Avg 2</b>	<b>29</b>	<b>43</b>	<b>17</b>	<b>2</b>	<b>8</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	2	9	2.4	0.30	23	1.23%	0	0.0
Scour Pools	7	51	5.0	0.66	271	14.63%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	8	235	4.4	0.23	1,022	55.23%	0	0.0
Rapids	6	174	2.9	0.20	461	24.90%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	11	5.1	0.17	74	4.01%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km
All Pools:	9	20.1
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	2	4.5
Pool frequency (channel widths/pool):	12.0	
Residual pool depth (avg):	0.41	

**STREAM SUMMARY**

**FARMER CREEK PRE-TX (NC-30)**

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	
26	481	4.1	0.33	1,851	2	29	43	17	2	8	

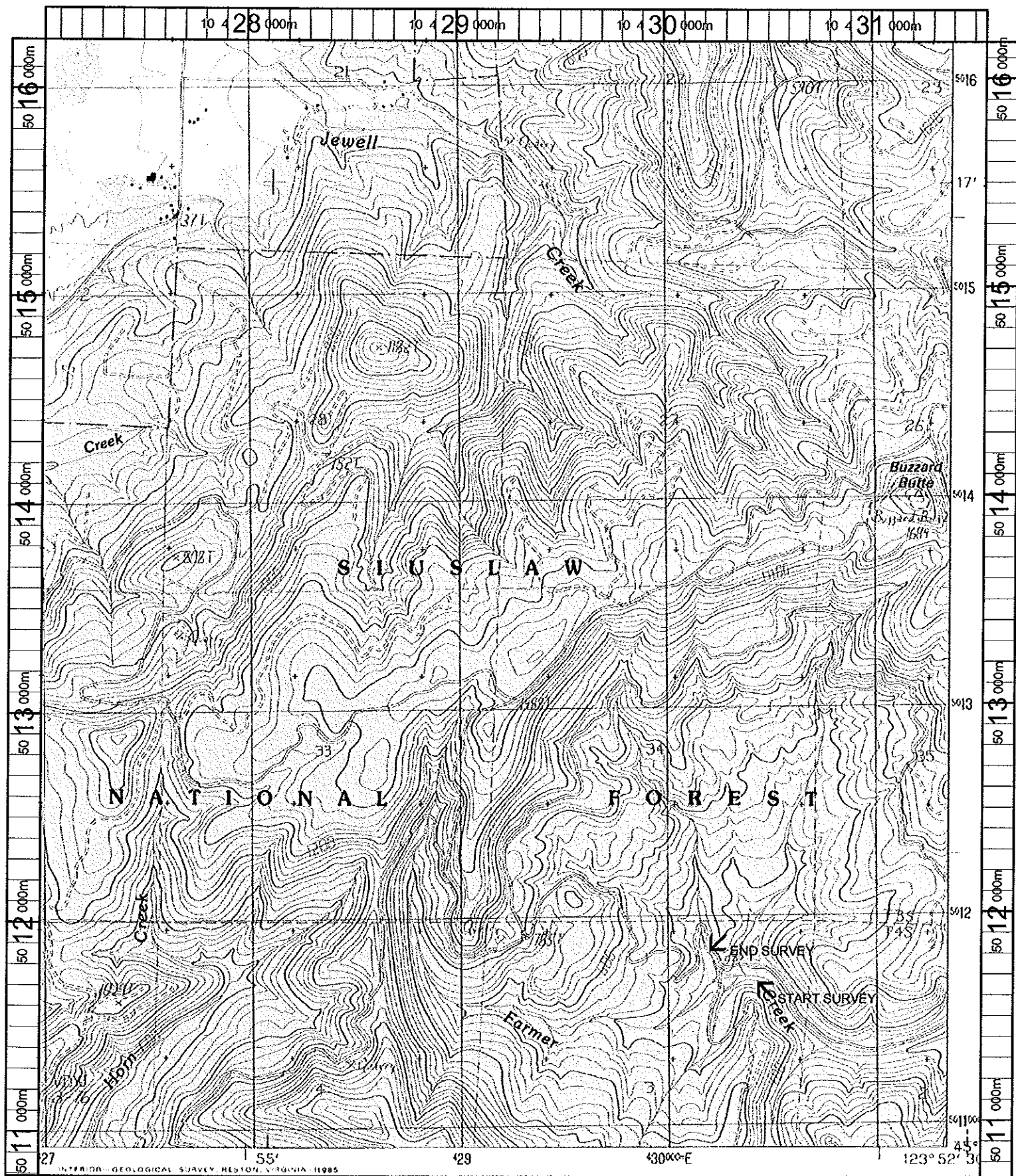
Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	23	1.23%
Scour Pools	271	14.63%
Glides	0	0.00%
Riffles	1,022	55.23%
Rapids	461	24.90%
Cascades	0	0.00%
Step/Falls	74	4.01%
Dry	0	0.00%
Culverts	0	0.00%

# Comment Summary

## Restoration Monitoring Sites 2003

MONITORING AREA: 1-NC    SITE ID: 30    FARMER CREEK PRE-TX (NC-30)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	61.5		VWI= 10+, START SURVE	
4	LP	00	81.8		2 STEELHEAD	
6	LP	00	104.1		REDD	
9	BW	10	117.3	/SS		
10	RI	01	164.8	/SS, /TJ	VWI= 10+, DID @ BEGINNI	
11	RB	11	164.8		T= 8.5° C	
12	AL	10	164.8	/SS		
15	RI	01	218.2	TJ/	FARMER CREEK	
17	RI	00	242.4		VWI=10+	
18	RB	00	274.5	BC	T= 8.5°C @ 11:45	
21	SL	00	304.2		H= 0.6 ROOTWAD	
22	RI	00	340.9		VWI= 10+	
24	RB	00	407.2	/LI		
25	LP	00	411.1		#11 FLAG	
26	RB	00	448.6	SS,/PIC#31	END SURVEY TAG ON LE	



Name: SAND LAKE  
 Date: 10/13/100  
 Scale: 1 inch equals 2000 feet

Location: 10 429160 E 5013464 N  
 Caption: FARMER CREEK RESTORATION SITE  
*Alaska basin*