

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

STREAM: Foley Creek (NC-226)
BASIN: Nehalem River
SURVEY TYPE: Post-Tx
DATE: February 17, 2005
SURVEY CREW: Brian Bangs, Sheila Davis
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 44.1 km²
USGS MAPS: Nehalem
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Foley Creek habitat survey extended 828 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 12.6 (range: 10.0-20.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 2.0 percent. Scour pools (44%) and riffles (38%) dominated stream habitat. Gravel (61%) dominated stream substrate. Wood volume was moderate at 24.6 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

T02N-R10W-S23SW

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	12.6	VWI Range:	10 - 20

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 Channel	828	2,698	0
Secondary Channel	51	84	1
Off-Channel Units	73	127	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 2.9	Width: 6.0	12.6 (7.7 - 18.5)	20.7 (9.2 - 36)
Depth: 0.35	Height: 0.4	0.8 (0.7 - 0.9)	1.3 (0.95 - 1.5)

W:D ratio: 14.3
 Stream Flow Type: LF
 Average Unit Gradient: 2.0%
 Water temperature (°C): 4.0 - 4.0

Entrenchment (ACW:FPW ratio): 2.1
 Habitat Units/100m (total channel length): 10.6
 Habitat Units/100m (primary channel length): 12.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	M15

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):	151	18.2
Volume (m ³):	204	24.6
Key pieces (>=12m x 0.60m):	5	0.6

OREGON DEPT OF FISH AND WILDLIFE

FOLEY CREEK POST-TX (1-NC, 226)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/17/2005

REACH 1		T02N-R10W-S23SW					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
CULVERT CROSSING	1	10	1.6	0.15	16	0	0	10	60	30	0	0
POOL-BACKWATER	10	29	1.4	0.16	41	0	25	26	41	9	0	0
POOL-LATERAL SCOUR	40	395	3.1	0.64	1,283	0	9	27	56	7	1	0
PUDDLED UNIT	1	12	1.0	0.05	12	0	10	10	50	30	0	0
RAPID/BOULDERS	11	134	3.2	0.13	428	0	0	8	67	24	1	0
RIFFLE	28	292	2.8	0.16	826	0	2	12	73	11	1	0
RIFFLE W/ POCKETS	5	70	3.8	0.25	269	0	6	13	66	14	1	0
STEP/COBBLE	3	8	3.6	0.12	30	0	0	5	62	28	2	3
STEP/LOG	2	1	2.8	0.08	2	0	0	20	73	8	0	0
Total:	101	951	2.9	0.35	2,909	0	Avg: 7	19	61	12	1	0

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	10	29	1.4	0.16	41	1.41%	0	0.0	
Scour Pools	40	395	3.1	0.64	1,283	44.12%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	33	362	2.9	0.17	1,095	37.66%	0	0.0	
Rapids	11	134	3.2	0.13	428	14.72%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	5	9	3.3	0.10	32	1.11%	0	0.0	
Dry	1	12	1.0	0.05	12	0.40%	0	0.0	
Culverts	1	10	1.6	0.15	16	0.57%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	50	52.6	60.4
Pools >=1m deep:	1	1.1	1.2
Complex pools (LWD pieces>=3):	10	10.5	12.1
Pool frequency (channel widths/pool):	3.2		
Residual pool depth (avg):	0.48		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 1-NC SITE ID: 226 FOLEY CREEK POST-TX

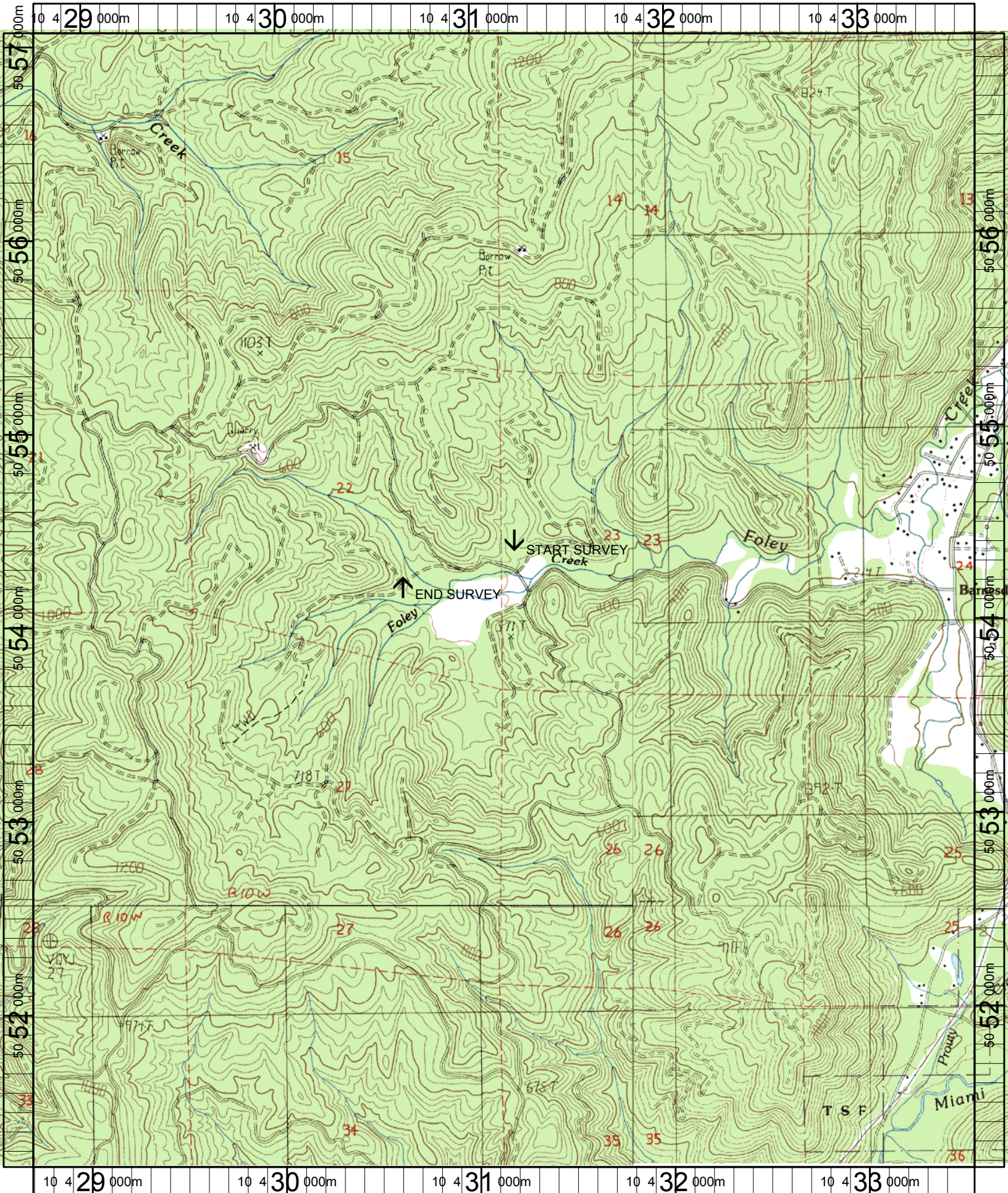
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	RI	01	17.8	BC	CT MT D30 G TH ST	
3	LP	00	33	CS		
12	LP	00	95.5	HS		
13	RI	00	111.9	/SS		
16	SL	00	145.2		H=0.2	
21	RP	00	196.3	HS		
22	LP	00	207.8	HS	CT MT D30 M15 ST LT	
34	RI	02	273.8	/SS		
36	LP	02	273.8		SCULPIN, FRY	
38	RP	00	294.9	HS		
41	LP	00	326.1	HS		
42	RI	00	335	/SS		
49	LP	00	409.7	DJ	CT MT C50 D15 ST LT	
68	LP	00	557.8		FRY	
71	LP	00	594.7	DJ		
73	RI	01	600.6		CA MT D30 G LT ST	
85	RB	00	706.8	HS		
86	LP	00	722.4	HS	SCULPIN	
88	LP	00	733.8	HS		
94	LP	00	771.6	HS		
95	RB	00	783.6	HS		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 1-NC SITE ID: 226 FOLEY CREEK POST-TX

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
98	RB	00	802.3	HS		
99	RI	00	807.1	CS		
100	CC	00	817.4	CC, HS	CULVERT H=1.65M, W=2.25	
101	RB	00	827.6	CS	CA MT D30 M15 LT ST	



Name: NEHALEM
 Date: 6/14/2004
 Scale: 1 inch equals 2000 feet

Location: 10 431144 E 5054123 N
 Caption: FOLEY CREEK RESTORATION SITE - NEHALEM BASIN