

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

STREAM: Lower North Fork Rock Creek (N102)
BASIN: Nehalem River
SURVEY TYPE: Reference
DATE: February 12, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 17.9 km²
USGS MAPS: Sunset Spring
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Lower North Fork Rock Creek habitat survey extended 331 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 2.8 (range: 1.1 – 5.0). Land uses for the reach were young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.3 percent. Riffles (47%) and scour pools (38%) dominated stream habitat. Gravel (44%) and cobble (25%) dominated stream substrate. Wood volume was low at 16.0 m³/100m.

COMMENTS:

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

REACH

T4N-R6W-S17SE

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	2.8	VWI Range:	1.1 - 5

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	331	3,169	0
Secondary	179	797	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 7.8	Width: 19.9	34.8 (26.8 - 40.3)	35.8 (28 - 41)
Depth: 0.46	Height: 0.7	1.4 (1.4 - 1.4)	1.6 (1.5 - 1.8)

W:D ratio: 28.4
Stream Flow Type: MF
Average Unit Gradient: 4.3%
Water temperature (°C): 4.5 - 4.5

Entrenchment (ACW:FPW ratio): 2.0
Habitat Units/100m (total channel length): 5.3
Habitat Units/100m (primary channel length): 8.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	

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):	86	26.0
Volume (m ³):	53	16.0
Key pieces (>=12m x 0.60m):	1	0.3

OREGON DEPARTMENT OF FISH AND WILDLIFE

NF ROCK LOWER REFERENC (N-102)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/12/2002

REACH	T4N-R6W-S17SE							REACH				
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
POOL-BACKWATER	1	3	3.4	0.50	10	0	30	70	0	0	0	0
POOL-LATERAL SCOUR	9	147	6.8	0.74	1,034	0	3	9	52	24	7	4
POOL-STRAIGHT SCOUR	2	47	11.1	0.70	493	0	0	10	40	30	10	10
RAPID/BEDROCK	1	32	6.9	0.40	223	0	0	10	25	30	10	25
RAPID/BOULDERS	2	47	6.5	0.38	318	0	0	5	25	35	25	10
RIFFLE	11	233	8.1	0.24	1,883	0	2	7	48	25	9	9
STEP/LOG	1	0	15.5	0.10	6	0	5	25	40	20	10	0
Total:	27	510	7.8	0.46	3,966	0	Avg: 3	11	44	25	9	8

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	1	3	3.4	0.50	10	0.25%	0	0.0
Scour Pools	11	194	7.6	0.74	1,527	38.49%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	11	233	8.1	0.24	1,883	47.47%	0	0.0
Rapids	3	79	6.6	0.38	541	13.63%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	0	15.5	0.10	6	0.16%	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:	12	23.5	36.2
Pools >=1m deep:	1	2.0	3.0
Complex pools (LWD pieces>=3):	5	9.8	15.1
Pool frequency (channel widths/pool):	2.1		
Residual pool depth (avg):	0.54		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 102 NF ROCK LOWER REFERENC (N-102)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	29		T = 4.5
15	SL	00	207.3		H = .35
17	RI	01	250.9	SS/	
22	LP	00	272.2	DJ	