

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

STREAM: North Fork Eagle Creek (L-157)
BASIN: Clackamas River
SURVEY TYPE: Post-Tx
DATE: March 2, 2004
SURVEY CREW: Jim Andrews, April Waters
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 73.6 km²
USGS MAPS: Estacada
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The North Fork Eagle Creek habitat survey extended 566 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.0 (range: 1.5-8.3). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.5 percent. Scour pools (40%) and riffles (32%) dominated stream habitat. Cobble (41%) and gravel (28%) dominated stream substrate. Wood volume was moderate at 23.1 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

T03S-R04E-S11SE

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	5.0	VWI Range:	1.5 - 8.3

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	566	6,521	0
Secondary	54	137	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 9.2	Width: 14.6	22.7 (19.1 - 27)	27.3 (21 - 31)
Depth: 0.71	Height: 0.5	1.1 (1 - 1.3)	2.6 (1.9 - 3.4)

W:D ratio: 27.3
Stream Flow Type: MF
Avg. Unit Gradient: 1.5%

Entrenchment (ACW:FPW ratio): 1.6
Water temp (°C): 6.5 - 6.5
Habitat Units/100m: 4.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	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):	87	15.4
Volume (m ³):	131	23.1
Key pieces (>=10m x 0.60m):	12	2.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

NF EAGLE CREEK POST-TX (L-157)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/2/2004

REACH 1

T03S-R04E-S11SE

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
CASCADE/BOULDERS	2	12	2.3	0.04	23	0	0	0	25	30	45	0
DRY UNIT	1	4	1.0	0.00	4	0	19	29	48	5	0	0
POOL-ALCOVE	1	26	3.8	1.10	99	0	30	60	10	0	0	0
POOL-ISOLATED	1	4	1.6	0.60	6	0	35	65	0	0	0	0
POOL-LATERAL SCOUR	7	219	11.2	1.37	2,647	0	0	3	34	41	14	7
RAPID/BOULDERS	6	152	11.2	0.61	1,665	0	0	0	18	55	27	0
RIFFLE	6	116	10.1	0.42	1,317	0	0	0	35	43	9	13
RIFFLE W/ POCKETS	4	81	10.3	0.64	834	0	0	1	28	47	21	3
STEP/COBBLE	1	7	9.0	0.60	63	0	0	0	19	48	33	0
Total:	29	620	9.2	0.71	6,658	0	Avg: 3	6	28	41	18	5

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	2	30	2.7	0.85	105	1.58%	0	0.0
Scour Pools	7	219	11.2	1.37	2,647	39.76%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	10	197	10.2	0.51	2,151	32.31%	0	0.0
Rapids	6	152	11.2	0.61	1,665	25.00%	0	0.0
Cascades	2	12	2.3	0.04	23	0.34%	0	0.0
Step/Falls	1	7	9.0	0.60	63	0.95%	0	0.0
Dry	1	4	1.0	0.00	4	0.06%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km	
All Pools:	9	14.5	54
Pools >=1m deep:	8	12.9	
Complex pools (LWD pieces>=3):	5	8.1	
Pool frequency (channel widths/pool):	4.7		
Residual pool depth (avg):	0.87		

STREAM SUMMARY

NF EAGLE CREEK POST-TX (L-157)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
29	620	9.2	0.71	6,658	3	6	28	41	18	5	

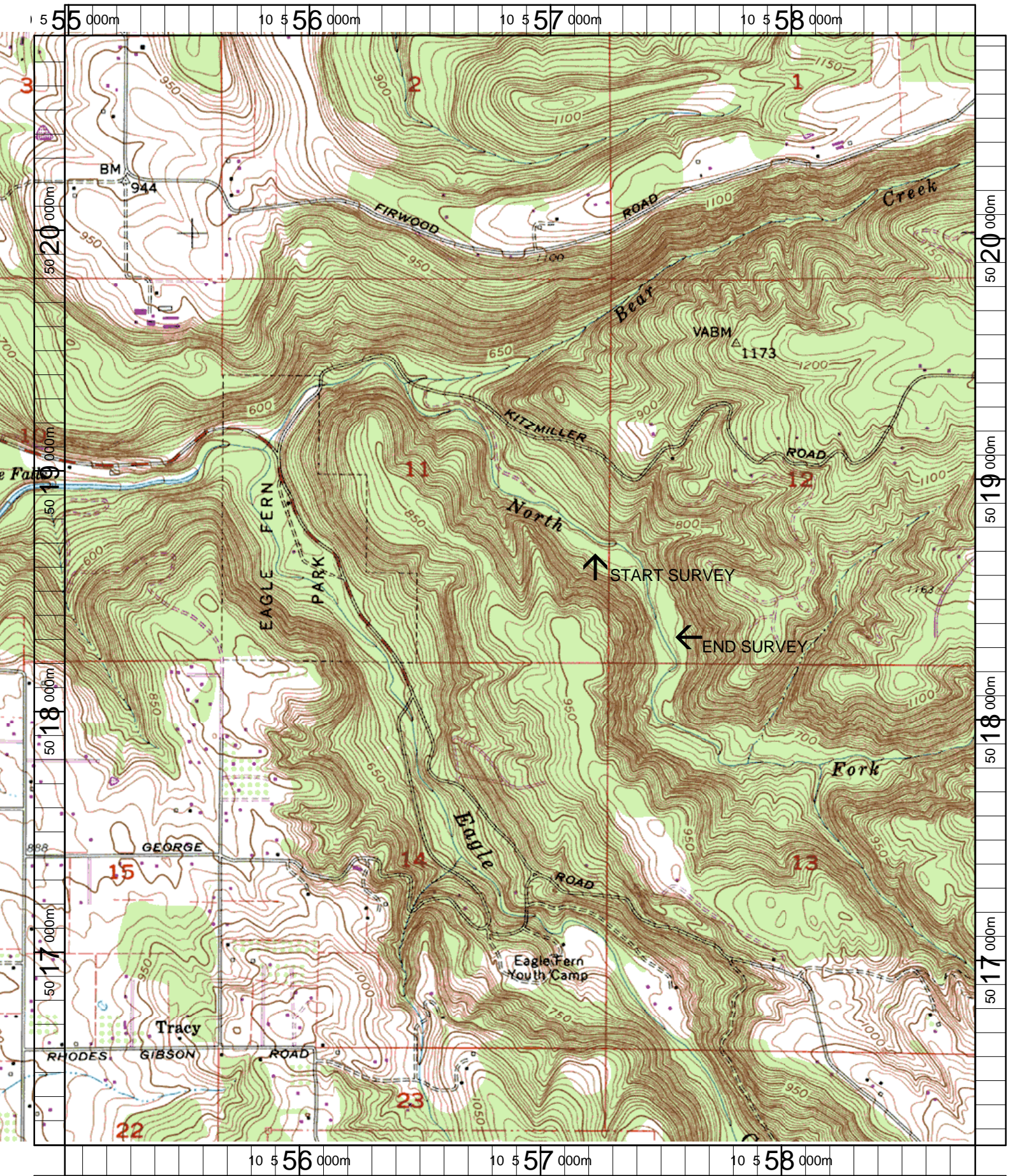
Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	105	1.58%
Scour Pools	2,647	39.76%
Glides	0	0.00%
Riffles	2,151	32.31%
Rapids	1,665	25.00%
Cascades	23	0.34%
Step/Falls	63	0.95%
Dry	4	0.06%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 157 NF EAGLE CREEK POST-TX (L-157)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	01	27.1	/SS		
2	AL	10	27.1		CONNECTS VIA 6M OF RI	
4	LP	00	58.1	DJ, HS	2 HS LOGS-CABLED	
5	SC	00	65.1		H=.35M	
6	RP	01	89.1	TJ/		
7	CB	11	89.1		ACW=1.2M, SPLITS INTO	
8	RB	00	114.1	WL, BV	DIPPER	
11	RB	01	188.4	TJ/		
12	CB	11	188.4		T=7.5C, ACW=3.6M	
14	LP	00	230.4	BV		
16	LP	01	276.4	DJ, HS	FORMS 02 CHNL	
27	RB	00	519.9	BV		
28	RI	00	555.9	HS, DJ	HS LOGS	
29	RI	00	566.4		EOS, T=6.5C/1230	



Name: ESTACADA
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 556890 E 5018524 N
 Caption: NORTH FORK EAGLE CREEK RESTORATION SITE -
 CLACKAMAS BASIN