

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

STREAM: Fish Creek (MS-290)
BASIN: Millicoma River
SURVEY TYPE: Pre-Tx
DATE: February 23, 2005
SURVEY CREW: Jennifer Schmitt, Neil Jensen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.0 km²
USGS MAPS: Elk Peak
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Fish Creek habitat survey extended 563 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.9 (range: 1.6-9.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.7 percent. Cascades (49%) and scour pools (22%) dominated stream habitat. Gravel (60%) dominated stream substrate. Wood volume was high at 36.6 m³/100m.

COMMENTS:

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

REACH 1

T23S-R10W-S05NW

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	3.9	VWI Range:	1.6 - 9

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 Channel	563	948	0
Secondary Channel	0	0	0
Off-Channel Units	15	12	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 1.6	Width: 3.5	6.1 (4 - 8.5)	5.7 (4.2 - 8.2)
Depth: 0.19	Height: 0.4	0.8 (0.6 - 0.9)	2.3 (1.1 - 4.7)

W:D ratio: 9.1
 Stream Flow Type: LF
 Average Unit Gradient: 4.7%
 Water temperature (°C): 5.5 - 5.5

Entrenchment (ACW:FPW ratio): 1.7
 Habitat Units/100m (total channel length): 9.2
 Habitat Units/100m (primary channel length): 9.4

Riparian, Bank, and Wood Summary

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

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):	212	37.7
Volume (m ³):	206	36.6
Key pieces (>=12m x 0.60m):	5	0.9

OREGON DEPT OF FISH AND WILDLIFE

FISH CREEK PRE-TX (3-MS, 290)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/23/2005

REACH 1		T23S-R10W-S05NW					REACH 1					
HABITAT DETAIL												
Habitat Type	Number	Total	Avg	Avg	Total	Large	Substrate					
	Units	Length	Width	Depth	Area		Boulders	Percent Wetted Area				
		(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	1	8	0.4	0.01	3	0	0	0	5	5	0	90
CASCADE/BOULDERS	16	305	1.5	0.09	470	0	3	3	71	13	8	2
POOL-BACKWATER	3	6	1.4	0.25	9	0	22	55	23	0	0	0
POOL-LATERAL SCOUR	8	52	2.5	0.36	127	0	10	24	57	5	2	3
POOL-PLUNGE	7	23	2.2	0.41	46	0	8	22	45	5	3	17
POOL-STRAIGHT SCOUR	4	27	1.3	0.34	35	0	11	34	32	3	3	18
RAPID/BOULDERS	4	65	1.8	0.06	125	0	2	0	83	14	1	0
RIFFLE	4	61	1.5	0.08	95	0	3	1	88	6	0	1
RIFFLE W/ POCKETS	1	23	1.7	0.10	39	0	3	5	87	5	0	0
STEP/BEDROCK	1	1	0.3	0.08	0	0	0	0	0	0	0	100
STEP/COBBLE	1	5	1.6	0.05	8	0	1	0	94	5	0	0
STEP/LOG	3	2	0.7	0.03	1	0	0	0	73	10	0	17
Total:	53	577	1.6	0.19	960	0	Avg: 6	13	60	8	3	9

HABITAT SUMMARY									
Habitat Group	Number	Total	Avg	Avg	Wetted Area		Large Boulders		
	Units	Length	Width	Depth	(m ²)	Percent	Number	(# / 100m ²)	
		(m)	(m)	(m)					
Dammed & BW Pools	3	6	1.4	0.25	9	0.94%	0	0.0	
Scour Pools	19	102	2.1	0.37	209	21.73%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	83	1.5	0.08	134	13.96%	0	0.0	
Rapids	4	65	1.8	0.06	125	13.06%	0	0.0	
Cascades	17	313	1.4	0.09	473	49.27%	0	0.0	
Step/Falls	5	8	0.8	0.04	10	1.05%	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:	22	38.1	39.1
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	8.7	8.9
Pool frequency (channel widths/pool):	7.5		
Residual pool depth (avg):	0.30		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **290** FISH CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
3	CB	00	27.4	CE/		
5	SL	00	32.6		H = .75	
7	LP	00	50.1		REDDS	
8	CB	00	67.3	/SS		
10	PP	00	77.6		REDD	
11	SL	00	77.85		H = .23	
14	LP	00	110.95	WL	ELK TRACKS	
16	LP	00	127.05	SS/	STEELHEAD SMOLT	
17	CB	00	137.55	WL, SS/	ELK TRACKS	
18	SP	00	143.35	SS/		
19	CB	00	161.15	SS/		
21	CB	00	194.45	DJ, /LI		
22	PP	00	196.15	WL	ELK TRACKS	
23	SL	00	196.65		H = .3	
24	CB	00	210.45	WL, SS/	ELK TRACKS	
25	LP	00	215.95		STEELHEAD SMOLT	
26	RP	00	238.65		STEELHEAD SMOLT	
28	CB	01	261.05	/TJ		
29	CR	11	261.05	WL	ELK TRACKS, WILDLIFE TRAIL	
30	SP	00	265.55	SS/	STEELHEAD SMOLT	
31	CB	00	277.05	CE/LA, DJ	ELK TRACKS	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **290** FISH CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
32	RI	00	291.85	SS/SS, LA/	CE, WL - ELK TRACKS	
33	LP	00	295.35	SS/LA		
34	CB	00	307.65	/LA, /LS	SS	
35	PP	00	309.85		BEDROCK = HARDPAN	
36	SR	00	310.35		H = 1.1, BEDROCK = HARDPAN	
37	RI	00	337.85	WL, SS/	REDDS, HERON, BEDRK = HARDPAN	
42	RB	00	407.55	SS/		
44	CB	00	431.15	WL, /LI	ELK TRACKS	
45	CB	00	466.15	LI/SS	REDDS	
46	LP	00	471.55	/LA		
47	CB	00	480.55	/LA		
48	SP	00	486.25	WL	WILDLIFE TRAIL, BEDRK = HARDPN	
50	CB	01	528.25		REDD	

