

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

STREAM: Deer Creek (N120)
BASIN: Nehalem River
SURVEY TYPE: Reference
DATE: February 5, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 32.8 km²
USGS MAPS: Birkenfeld
ECOREGION: Coast Range Astoria Willapa

GENERAL DESCRIPTION:

The Deer Creek habitat survey extended 446 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.4 (range: 1.0-5.0). Land uses for the reach were young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 2.6 percent. Scour pools (61%) and riffles (26%) dominated stream habitat. Gravel (57%) and sand (20%) dominated stream substrate. Wood volume was high at 31.3 m³/100m.

COMMENTS:

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

The crew noted several landslides during the survey.

REACH

T5N-R5W-S14NW

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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.4	VWI Range:	1 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	446	1,320	0
Secondary	23	37	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 3.0	Width: 4.7	7.5 (3.5 - 10.6)	8.3 (8 - 8.5)
Depth: 0.49	Height: 0.5	1.0 (0.9 - 1.2)	1.2 (1.1 - 1.2)

W:D ratio: 9.6
Stream Flow Type: MF
Average Unit Gradient: 2.5%
Water temperature (°C): 5.5 - 5.5

Entrenchment (ACW:FPW ratio): 1.7
Habitat Units/100m (total channel length): 11.5
Habitat Units/100m (primary channel length): 12.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	C50

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):	112	25.1
Volume (m ³):	140	31.3
Key pieces (>=12m x 0.60m):	5	1.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

DEER CR REFERENCE (N120)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/5/2002

REACH	T5N-R5W-S14NW						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
CASCADE/BOULDERS	1	19	2.1	0.20	39	0	0	5	30	30	30	5
POOL-BACKWATER	2	9	2.9	0.30	25	0	25	60	15	0	0	0
POOL-DAMMED	2	23	4.0	0.60	91	0	13	45	43	0	0	0
POOL-LATERAL SCOUR	12	111	3.1	0.78	359	0	4	17	58	16	3	2
POOL-PLUNGE	7	46	4.4	0.91	205	0	4	21	59	10	3	4
POOL-STRAIGHT SCOUR	7	106	2.4	0.77	262	0	6	19	59	8	0	8
RIFFLE	11	118	2.0	0.16	253	0	2	12	69	14	1	3
RIFFLE W/ POCKETS	3	32	3.3	0.20	106	0	5	22	62	8	0	3
STEP/LOG	9	6	3.1	0.12	17	0	2	22	53	15	3	6
Total:	54	469	3.0	0.49	1,357	0	Avg: 4	20	57	12	2	4

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	4	32	3.4	0.45	117	8.60%	0	0.0	
Scour Pools	26	263	3.3	0.81	825	60.83%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	14	149	2.3	0.17	359	26.43%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	19	2.1	0.20	39	2.91%	0	0.0	
Step/Falls	9	6	3.1	0.12	17	1.24%	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:	30	64.0	67.3
Pools >=1m deep:	5	10.7	11.2
Complex pools (LWD pieces>=3):	13	27.7	29.2
Pool frequency (channel widths/pool):	3.4		
Residual pool depth (avg):	0.67		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 120 DEER CR REFERENCE (N120)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	6.8	WL	ELK TRAIL
10	SL	00	89.1		H = .8
15	SL	00	130.9		H = .8
17	SL	00	141.7		H = .3
19	SL	00	151.3		H = .25
25	LP	01	207.8	TJ/	
31	SL	00	232.9		H = .6
35	SL	00	264.9	LA/	H = .7
41	SL	00	308.6		H = .4
43	RI	00	338.2	/LI	
45	SL	00	342.3		H = .4
46	RI	00	353	/LA, /SS	
48	SL	00	362		H = 1.3
50	SP	00	401.7	/LS	
53	CB	01	445.7	SS/	