

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

STREAM: Klotchie Creek (N119)
BASIN: Necanicum River
SURVEY TYPE: Post-Tx
DATE: January 30, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 13.0 km²
USGS MAPS: Necanicum Junction
ECOREGION: Coast Range Astoria Willapa

GENERAL DESCRIPTION:

The Klotchie Creek habitat survey extended 470 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 12.2 (range: 6 – 15). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.2 percent. Scour pools (48%) and riffles (22%) dominated stream habitat. Gravel (33%) and cobble (31%) dominated stream substrate. Wood volume was low at 17.8 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

T5N-R10W-S13NW

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	12.2	VWI Range:	6 - 15

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	470	3,772	0
Secondary	286	660	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 6.7	Width: 11.0	20.4 (13.9 - 33.6)	17.5 (14.4 - 19.7)
Depth: 0.52	Height: 0.7	1.3 (1.2 - 1.5)	1.4 (1.3 - 1.6)

W:D ratio: 16.6
Stream Flow Type: MF
Average Unit Gradient: 2.2%
Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.9
Habitat Units/100m (total channel length): 6.1
Habitat Units/100m (primary channel length): 9.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	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):	128	27.2
Volume (m ³):	84	17.8
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

KLOOTCHIE CR POST-TX (N119)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

1/30/2002

REACH		T5N-R10W-S13NW					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
CULVERT CROSSING	1	19	3.4	0.40	63	0	0	20	45	30	5	0
POOL-ALCOVE	2	34	10.4	0.40	366	0	30	50	8	8	5	0
POOL-LATERAL SCOUR	8	135	7.6	0.94	1,156	0	8	19	37	31	6	0
POOL-PLUNGE	5	51	7.9	0.86	459	0	0	6	42	42	10	0
POOL-STRAIGHT SCOUR	4	64	7.7	0.90	491	0	1	8	41	41	9	0
PUDDLED UNIT	2	125	0.7	0.25	89	0	25	28	13	8	3	25
RAPID/BOULDERS	8	141	5.8	0.29	792	0	4	6	34	43	12	1
RIFFLE	9	180	5.0	0.27	971	0	5	15	34	32	7	8
STEP/BOULDERS	3	3	10.8	0.33	28	0	0	3	5	15	77	0
STEP/COBBLE	2	4	0.9	0.05	4	0	0	10	10	10	3	68
STEP/LOG	2	1	11.8	0.40	12	0	3	10	68	18	3	0
Total:	46	755	6.7	0.52	4,431	0	Avg: 6	13	33	31	12	6

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	34	10.4	0.40	366	8.26%	0	0.0
Scour Pools	17	251	7.7	0.91	2,106	47.52%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	9	180	5.0	0.27	971	21.90%	0	0.0
Rapids	8	141	5.8	0.29	792	17.88%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	7	8	8.2	0.27	44	1.00%	0	0.0
Dry	2	125	0.7	0.25	89	2.02%	0	0.0
Culverts	1	19	3.4	0.40	63	1.42%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	19	25.2	40.4
Pools >=1m deep:	7	9.3	14.9
Complex pools (LWD pieces>=3):	11	14.6	23.4
Pool frequency (channel widths/pool):	3.6		
Residual pool depth (avg):	0.60		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 119 KLOOTCHIE CR POST-TX (N119)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
4	SL	01	28.2		H = .5
6	SP	01	68.5	SS/	
7	RB	01	81.8	HS	LOGS
9	AL	10	91.7	HS, /SS	ARTIFICIAL ALCOVE?
10	SB	01	92.8	HS	H = .5, BOULDER WEIR
12	PP	01	128.8	HS	LOGS
13	SB	01	129.9	HS	H = .3, BOULDER WEIR
14	RI	01	151.4	HS	LOGS
16	PP	01	173.5	HS, /TJ	LOGS
18	SL	01	174		H = .5
25	SC	02	209.9		H = .7
27	SC	12	209.9		H = .4
29	PD	02	209.9	SS/, SS/	
31	CC	00	228.4	CC	2.1 x 3.3
32	RI	00	247.4		CT
34	SP	00	278	HS	LOGS
35	LP	00	296.4		STEELHEAD
36	RB	00	317.1		BOBCAT TRACKS
38	RB	00	366.5	HS	LOGS
41	LP	00	414.1	/LA	
43	PP	01	451.3	HS	LOGS

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 119 KLOOTCHIE CR POST-TX (N119)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
44	AL	10	451.3	/SS, HS	CONSTRUCTED ALCOVE
45	SB	00	451.8		H = .65