

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

STREAM: Klotchie Creek (N118)  
BASIN: Necanicum River  
SURVEY TYPE: Reference  
DATE: January 30, 2002  
SURVEY CREW: Sean Allen, Rachel Werner  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 13.0 km<sup>2</sup>  
USGS MAPS: Necanicum Junction  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Klotchie Creek habitat survey extended 523 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 18.0 (range: 10.0-40.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.0 percent. Rapids (38%) and scour pools (36%) dominated stream habitat. Gravel (35%) and cobble (30%) dominated stream substrate. Wood volume was low at 11.1 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted two habitat structures during the survey.

REACH

**T5N-R10W-S13SE**

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	18.0	VWI Range:	10 - 40

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	523	3,792	0
Secondary	158	271	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 5.9	Width: 11.1	21.0 ( 13.8 - 34 )	19.7 ( 18 - 21.7 )
Depth: 0.51	Height: 0.7	1.3 ( 1.1 - 1.5 )	1.5 ( 1.4 - 1.6 )

W:D ratio: 17.3  
Stream Flow Type: MF  
Average Unit Gradient: 2.0%  
Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.9  
Habitat Units/100m (total channel length): 5.1  
Habitat Units/100m (primary channel length): 6.7

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C15	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):	66	12.6
Volume (m <sup>3</sup> ):	58	11.1
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

KLOOTCHIE CR REFERENCE (N118)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

1/30/2002

REACH		T5N-R10W-S13SE					REACH					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
DRY UNIT	1	13	5.0	0.00	65	0	0	18	32	23	27	0
POOL-ALCOVE	1	9	2.3	0.70	21	0	10	20	20	45	5	0
POOL-LATERAL SCOUR	9	140	4.7	0.83	716	0	9	21	35	21	10	4
POOL-STRAIGHT SCOUR	5	90	7.9	0.85	734	0	2	15	37	31	13	2
PUDDLED UNIT	1	42	1.4	0.20	58	0	20	30	45	5	0	0
RAPID/BOULDERS	9	229	7.0	0.34	1,556	0	0	4	29	40	27	0
RIFFLE	8	158	5.2	0.23	905	0	6	16	39	29	11	0
STEP/LOG	1	1	10.5	0.50	7	0	0	5	45	50	0	0
<b>Total:</b>	<b>35</b>	<b>681</b>	<b>5.9</b>	<b>0.51</b>	<b>4,062</b>	<b>0</b>	<b>Avg: 5</b>	<b>14</b>	<b>35</b>	<b>30</b>	<b>15</b>	<b>1</b>

HABITAT SUMMARY								
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	1	9	2.3	0.70	21	0.53%	0	0.0
Scour Pools	14	230	5.9	0.84	1,450	35.69%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	8	158	5.2	0.23	905	22.27%	0	0.0
Rapids	9	229	7.0	0.34	1,556	38.31%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	1	10.5	0.50	7	0.18%	0	0.0
Dry	2	55	3.2	0.10	123	3.02%	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:	15	22.0	28.7
Pools >=1m deep:	6	8.8	11.5
Complex pools (LWD pieces>=3):	2	2.9	3.8
Pool frequency (channel widths/pool):	4.1		
Residual pool depth (avg):	0.51		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC      SITE ID: 118      KLOOTCHIE CR REFERENCE (N118)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	32.1		TWO REDDS
4	SL	00	72		H = .5
6	RI	01	110.2		REDD
13	RI	11	156.7	/TJ	
25	RI	02	360.8	SS/	
34	RB	01	523.2	HS	LOGS
35	AL	10	523.2	HS	