

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

STREAM: Klookchie Creek (N-310)
BASIN: Necanicum River
SURVEY TYPE: Post-Tx
DATE: March 22, 2006
SURVEY CREW: Brian Cannon, Jon Nott
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 13.0 km³
USGS MAPS: Necanicum Junction
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Klookchie Creek habitat survey extended 439 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 2.6 (range: 1.4-4.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 5.7 percent. Rapids (61%) dominated stream habitat. Gravel (41%) and sand (20%) dominated stream substrate. Wood volume was moderate at 29.7 m³/100m.

COMMENTS:

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

REACH 1

T05N-R09W-S07SW

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	100%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.6	VWI Range:	1.4 - 4

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m ²)	Dry Units
Primary Channel	439	921	0
Secondary Channel	9	8	0
Off-Channel Units	11	15	0

Channel Dimensions (m)

Wetted	Active	Floodprone	n =	First Terrace	n =
Width: 2.4	Width: 4.4	13.6	(7 - 27)	(-)	
Depth: 0.20	Height: 0.5	1.0	(0.8 - 1.1)	(-)	

W:D ratio: 9.4 Entrenchment (ACW:FPW ratio): 3.4
 Stream Flow Type: MF Habitat Units/100m (total channel length): 6.5
 Average Unit Gradient: 5.7% Habitat Units/100m (primary channel length): 6.8
 Water temperature (°C): 9.0 - 9.0

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	ST	YT
Riparian Vegetation:	M30	G

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	96	21.9
Volume (m ³):	130	29.7
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

KLOOTCHIE CREEK POST-TX (1-NC, 310)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

3/22/2006

REACH 1		T05N-R09W-S07SW					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	4	96	1.5	0.14	155	0	6	21	51	19	3	0
POOL-BACKWATER	2	5	2.5	0.18	11	0	25	55	10	0	0	10
POOL-LATERAL SCOUR	2	10	2.2	0.45	22	0	5	17	56	21	0	0
POOL-PLUNGE	1	3	3.2	0.50	8	0	5	15	20	10	20	30
RAPID/BOULDERS	10	276	2.0	0.21	576	0	3	16	42	27	10	2
RIFFLE	5	62	2.6	0.15	150	0	5	17	58	19	0	1
STEP/BEDROCK	1	3	2.5	0.05	7	0	0	0	0	0	0	100
STEP/COBBLE	1	0	4.0	0.50	1	0	2	10	49	25	15	0
STEP/LOG	4	4	3.6	0.10	15	0	33	25	30	5	0	8
Total:	30	459	2.4	0.20	945	0	Avg: 9	20	41	18	5	7

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	5	2.5	0.18	11	1.11%	0	0.0	
Scour Pools	3	12	2.5	0.47	30	3.16%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	62	2.6	0.15	150	15.90%	0	0.0	
Rapids	10	276	2.0	0.21	576	61.02%	0	0.0	
Cascades	4	96	1.5	0.14	155	16.38%	0	0.0	
Step/Falls	6	7	3.5	0.16	23	2.42%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

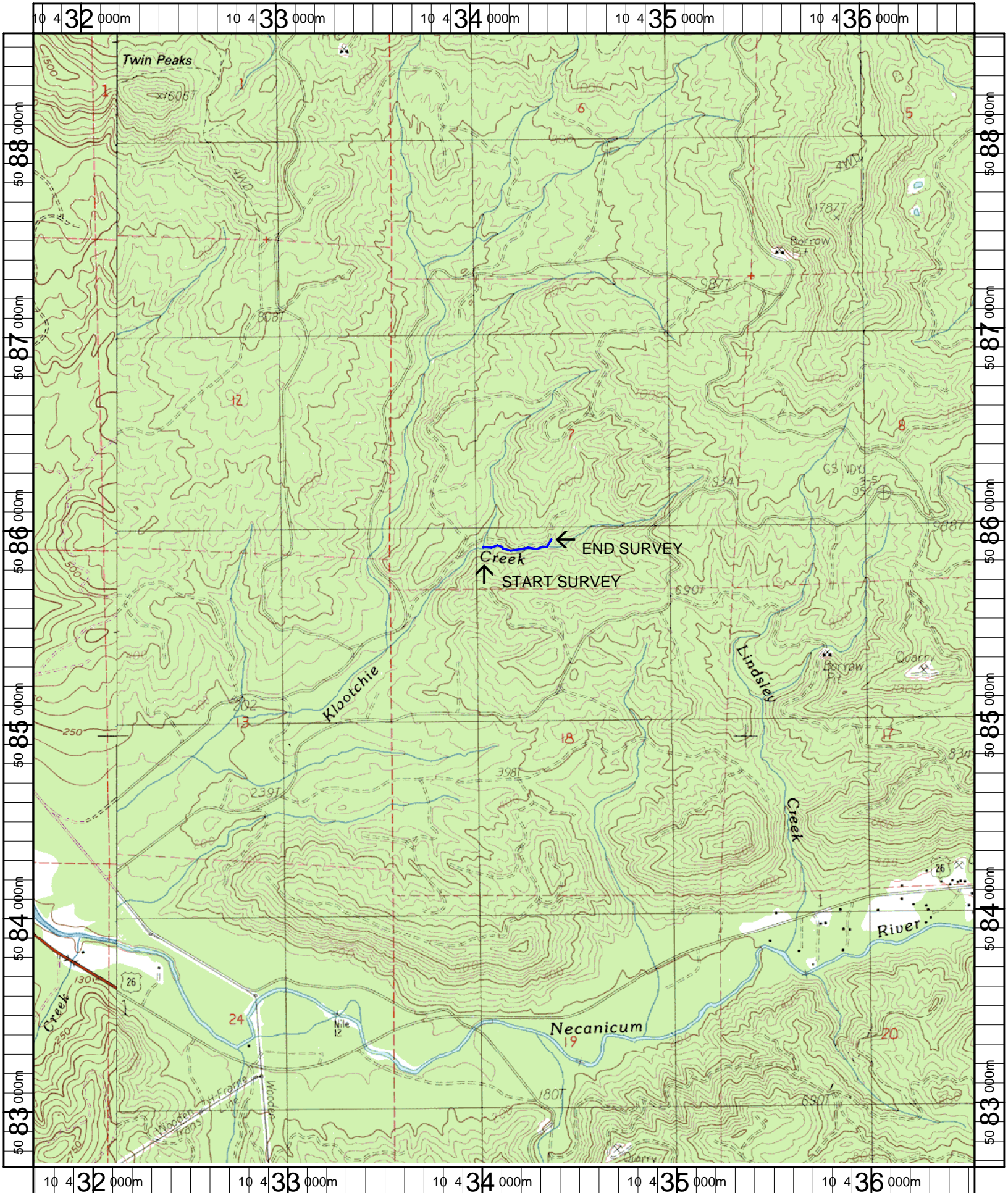
POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	5	10.9	11.4
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	20.9		
Residual pool depth (avg):	0.28		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 310 KLOOTCHIE CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	11.6		T = 9.0 AT 9AM	
6	SC	00	67.6		H = 0.3	
9	SL	00	122.8		H = 1.0	
11	SL	00	130.1		H = 1.0	
14	SL	00	154.5		H = 0.4	
20	SL	00	271.6		H = 0.55	
24	SR	00	298.9		H = 1.4	
26	RI	01	319.3	TJ/TJ		
28	RB	00	359.3		START SURVEY UP LEFT TRIB	



Name: NECANICUM JUNCTION (OR)
 Date: 2/15/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0434141 E 5085618 N
 Caption: KLOOTCHIE CREEK RESTORATION SITE - NECANICUM BASIN