

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

STREAM: Kenusky Creek (N123)
BASIN: Nehalem River
SURVEY TYPE: Post-Tx
DATE: February 4, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 19.5 km²
USGS MAPS: Bacona
ECOREGION: Coast Range Astoria Willapa

GENERAL DESCRIPTION:

The Kenusky Creek habitat survey extended 732 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 5.2 (range: 2.5 - 10.0). Land use for the reach was young (3-15 cm dbh) trees. The average unit gradient was 1.5 percent. Scour pools (58%) and dammed pools (22%) dominated stream habitat. Gravel (27%), bedrock (25%) and cobble (23%) dominated stream substrate. Wood volume was low at 12.4 m³/100m.

COMMENTS:

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

The crew noted several habitat structures as well as evidence of beaver activity during the survey.

REACH

T4N-R3W-S5NW

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.2	VWI Range:	2.5 - 10

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	732	4,226	0
Secondary	76	207	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.4	Width: 7.7	13.3 (7.8 - 23.1)	14.3 (8 - 24)
Depth: 0.50	Height: 0.5	1.0 (0.9 - 1.2)	1.1 (1 - 1.3)

W:D ratio: 16.2

Entrenchment (ACW:FPW ratio): 1.7

Stream Flow Type: MF

Habitat Units/100m (total channel length): 6.7

Average Unit Gradient: 1.1%

Habitat Units/100m (primary channel length): 7.4

Water temperature (°C): 5.0 - 5.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	
Riparian Vegetation:	S	D3

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):	162	22.1
Volume (m ³):	91	12.4
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

KENUSKY CR POST-TX (N123)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/4/2002

REACH	T4N-R3W-S5NW							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	
POOL-BACKWATER	2	9	4.6	0.30	42	0	25	35	28	5	3	5	
POOL-DAMMED	4	98	9.4	1.08	912	0	15	18	21	13	4	30	
POOL-LATERAL SCOUR	23	403	5.4	0.69	2,171	0	5	10	27	20	5	32	
POOL-PLUNGE	2	21	6.6	0.60	144	0	5	10	18	13	5	50	
POOL-STRAIGHT SCOUR	2	42	6.4	0.55	269	0	7	12	15	24	5	36	
RAPID/BOULDERS	4	41	4.4	0.21	178	0	1	5	35	44	16	0	
RIFFLE	10	168	3.7	0.20	602	0	4	13	36	32	3	12	
RIFFLE W/ POCKETS	1	22	4.3	0.20	95	0	0	5	30	40	5	20	
STEP/COBBLE	1	3	2.5	0.10	8	0	0	0	20	55	25	0	
STEP/LOG	5	2	6.9	0.18	13	0	10	16	22	11	4	36	
Total:	54	808	5.4	0.50	4,434	0	Avg: 7	12	27	23	6	25	

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	6	107	7.8	0.82	954	21.52%	0	0.0	
Scour Pools	27	466	5.5	0.67	2,584	58.28%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	11	190	3.7	0.20	696	15.71%	0	0.0	
Rapids	4	41	4.4	0.21	178	4.02%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	6	5	6.2	0.17	21	0.47%	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:	33	40.8	45.1
Pools >=1m deep:	5	6.2	6.8
Complex pools (LWD pieces>=3):	13	16.1	17.8
Pool frequency (channel widths/pool):	3.2		
Residual pool depth (avg):	0.54		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 123 KENUSKY CR POST-TX (N123)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	14.7		T = 5, TRIB CONFLUENCE
2	LP	00	25.6	HS	LOGS, TAGGED 1B
5	LP	00	75.6	HS, BV	LOGS
8	PP	00	122.6	HS	LOGS
9	SL	00	122.9		H = .7
10	DP	00	138.1	HS	LOGS
15	RI	01	233.6	HS	TAGGED 5A
20	LP	00	272.2	HS	LOGS
27	SL	00	367.1		H = .6
28	DP	00	392	HS	LOGS
32	RB	01	430.3	HS	LOGS
34	LP	00	446.6	HS	LOGS
40	SL	01	524.8	HS	H = .7, LOGS
45	LP	00	627.6	HS	LOGS
46	SL	00	628.1	HS, DJ	LOGS
47	DP	01	666.8	SS/	
48	SL	01	667.1	HS	H = .8, LOGS
50	DP	00	686.2	HS	LOGS
52	SP	01	721.5	/TJ	
53	SC	11	721.5		H = .4