

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

STREAM: Kenusky Creek (N122)
BASIN: Nehalem River
SURVEY TYPE: Reference
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 250 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 5.6 (range: 4.5 - 7.0). Land use for the reach was young (3-15 cm dbh) trees. The average unit gradient was 1.5 percent. Scour pools (57%), rapids (19%) and riffles (19%) dominated stream habitat. Gravel (36%) and bedrock (28%) dominated stream substrate. Wood volume was moderate at 19.9 m³/100m.

COMMENTS:

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

The crew noted two debris jams 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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.6	VWI Range:	4.5 - 7

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
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	250	1,132	0
Secondary	29	40	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.1	Width: 7.0	16.5 (6.5 - 30.1)	18.6 (7 - 31)
Depth: 0.41	Height: 0.5	1.0 (1 - 1.1)	1.2 (1.05 - 1.3)

W:D ratio: 13.6

Stream Flow Type: MF

Average Unit Gradient: 1.5%

Water temperature (°C): 5.5 - 5.5

Entrenchment (ACW:FPW ratio): 2.3

Habitat Units/100m (total channel length): 6.5

Habitat Units/100m (primary channel length): 7.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	
Riparian Vegetation:	S	D50

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):	75	30.0
Volume (m ³):	50	19.9
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

KENUSKY CR REFERENCE (N122)

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-DAMMED	1	13	4.8	0.80	60	0	10	35	15	5	5	30	
POOL-LATERAL SCOUR	5	124	4.0	0.64	528	0	7	20	40	9	2	22	
POOL-PLUNGE	2	25	5.1	0.60	121	0	8	13	53	18	5	5	
POOL-STRAIGHT SCOUR	1	7	2.1	0.20	14	0	5	10	15	5	0	65	
RAPID/BEDROCK	2	49	4.5	0.25	224	0	0	3	8	5	8	78	
RIFFLE	5	62	3.9	0.20	221	0	2	6	46	21	3	22	
STEP/LOG	2	1	4.1	0.20	4	0	12	20	32	12	15	10	
Total:	18	279	4.1	0.41	1,171	0	Avg: 6	14	36	13	5	28	

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	1	13	4.8	0.80	60	5.12%	0	0.0	
Scour Pools	8	155	4.0	0.58	663	56.59%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	62	3.9	0.20	221	18.84%	0	0.0	
Rapids	2	49	4.5	0.25	224	19.10%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	2	1	4.1	0.20	4	0.35%	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:	9	32.3	35.9
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	17.9	20.0
Pool frequency (channel widths/pool):	4.4		
Residual pool depth (avg):	0.47		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 122 KENUSKY CR REFERENCE (N122)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	19.3		T = 5.5
3	SL	00	36.5	DJ	H = .8
8	SL	00	118.3		H = .5
15	RI	01	250.4	DJ	