

**ODFW AQUATIC INVENTORY PROJECT
RESTORATION MONITORING
STREAM HABITAT REPORT**

STREAM: KENUSKY CREEK
 GCG: 1-NC
 SITE ID: 394
 BASIN: NEHALEM
 TREATMENT DATE: 2008
 SURVEY DATE: 4/20/2009
 SURVEY CREW: Ryan Jacobsen / Miles Johnson
 USGS MAPS: BACONA, BAKER POINT
 ECOREGION: Willapa Hills
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T04N-R04W-S01NE

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Second growth timber (15-30 cm dbh)

Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh

Primary channel length (meters) and area (m²): 1,570 : 8,404

Secondary channel length (meters) and area (m²): 38 : 105

VWI average: 10.1 VWI Range: 4 - 20 Average Gradient: 0.3%

Pieces LWD per 100m: 11.5 Wood Volume (m³) per 100m: 13.0

Percent pools: 84% Complex pools (LWD pieces>=3): 21 Pools >=1m deep: 29

<u>Percent substrate (avg):</u>	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	19	38	41	0	0	1
Pool units	21	46	32	0	0	1
Fast water units	4	19	73	1	0	3

SURVEY COMMENTS:

The Kenusky Creek survey is a post-treatment, restoration site. The crew noted beaver activity throughout the survey reach. There were no potential barriers to upstream fish migration observed within the survey reach.

Survey Date: 4/20/2009

Report Date: 2/16/2010

T04N-R04W-S01NE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	10.1	VWI Range:	4 - 20

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m ²)	Dry Units
Primary	1,570	8,404	0
Secondary	38	105	0

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 7	First Terrace <i>n</i> = 7
Width: 5.1	Width: 4.5	7.1 (6.3 - 8)	9.4 (8 - 12.5)
Depth: 0.74	Height: 0.4	0.9 (0.7 - 1.1)	2.0 (1.5 - 3)

W:D ratio: 10.4

Stream Flow Type: MF

Average Unit Gradient: 0.3%

Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.7

Habitat Units/100m (total channel length): 5.3

Habitat Units/100m (primary channel length): 5.4

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	ST	LT
Riparian Vegetation:	D30	S

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):	180	11.5
Volume (m ³):	205	13.0
Key pieces (>=12m x 0.60m):	5	0.3

OREGON DEPT OF FISH AND WILDLIFE

KENUSKY CREEK

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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
POOL-DAMMED	1	9	3.6	0.50	32	0	10	35	35	0	0	20
POOL-ISOLATED	3	18	4.3	0.70	86	0	70	30	0	0	0	0
POOL-LATERAL SCOUR	56	1,242	5.5	0.98	7,139	0	21	46	32	0	0	1
RAPID/BOULDERS	1	12	1.3	0.05	16	0	0	10	70	0	0	20
RIFFLE	13	270	3.4	0.23	925	0	4	19	75	1	0	2
RIFFLE W/ POCKETS	1	27	5.6	0.50	151	0	10	30	60	0	0	0
STEP/COBBLE	5	24	4.4	0.24	105	0	3	13	83	1	0	0
STEP/LOG	5	7	6.9	0.13	55	0	21	41	38	0	0	0
Total:	85	1,608	5.1	0.74	8,509	0	Avg: 19	38	41	0	0	1

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	4	27	4.1	0.65	118	1.39%	0	0.0
Scour Pools	56	1,242	5.5	0.98	7,139	83.90%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	14	297	3.5	0.25	1,076	12.65%	0	0.0
Rapids	1	12	1.3	0.05	16	0.18%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	10	31	5.6	0.19	159	1.87%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

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REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	60	37.3	38.2
Pools >=1m deep:	29	18.0	18.5
Complex pools (LWD pieces>=3):	21	13.1	13.4
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.72		

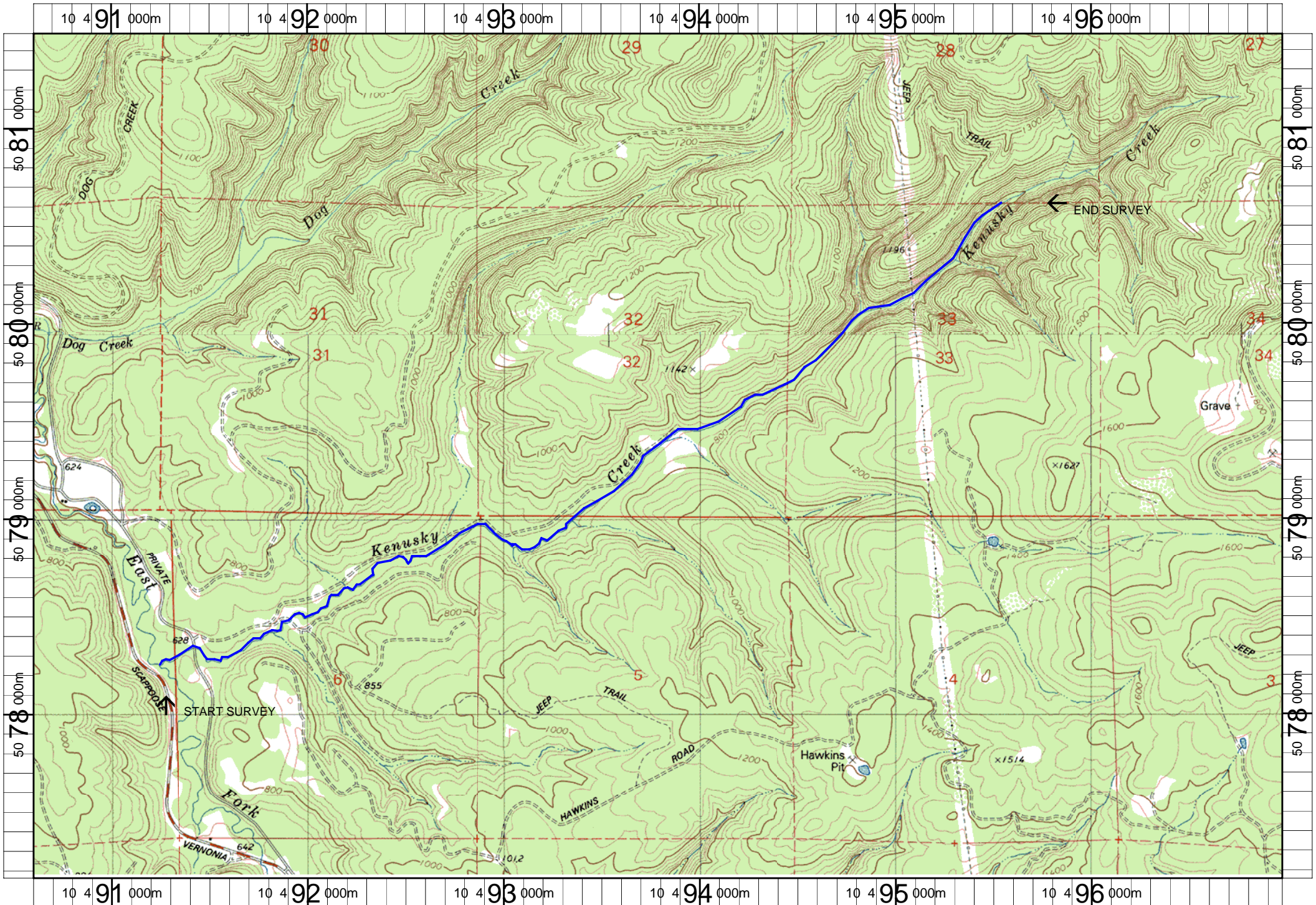
OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 4/20/2009

COMMENT SUMMARY

MONITORING AREA: 1-NC SITE ID: 394 STREAM: KENUSKY CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	19	LP	00	297.4	BC,CC/	
1	24	LP	00	414.4	BV	FRESH CHEWED STICK
1	31	LP	00	504.5	BV	TRACKS
1	32	RI	00	525.5	/SS	
1	45	LP	00	796.6	BV	STICKS
1	50	LP	01	914.6	/TJ	
1	51	RB	11	914.6		ACW=2.1M, T=13C
1	52	RI	00	924.6		T=11C
1	53	LP	00	952.6	BV	STICKS
1	62	LP	00	1074.8	BC,CS/CS	
1	76	LP	00	1353.6	BV	STICKS
1	81	LP	00	1484.6	BV	OLD DAM
1	83	LP	01	1538.4	TJ/	
1	84	RI	11	1538.4		HARDPAN, ACW=0.8M, T=9C



Name: BAKER POINT
 Date: 1/2/2008
 Scale: 1 inch equals 2000 feet

Location: 10 0493788 E 5079321 N NAD 27
 Caption: KENUSKY CREEK RESTORATION SITE - NEHALEM BASIN

Kenusky Creek (NC-394) 2009 Winter Habitat Survey Photographs



Unit 1 - A upstream view of the Kenusky Creek survey start.



Unit 18 - Upstream view with bridge crossing in background.



Unit 45 - Downstream view of old beaver complex.



Unit 45 - Upstream view of old beaver complex.



Unit 51 - Small tributary confluence.



Unit 85 - Upstream view of stream habitat and riparian.