

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

STREAM: Beerman Creek (NC-6)
BASIN: Necanicum River
SURVEY TYPE: Post-Tx
DATE: February 6, 2001
SURVEY CREW: Todd Boswell, Sean Allen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.6 km²
USGS MAPS: Tillamook Head
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Beerman Creek habitat survey extended 529 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 6.2 (range: 5.5 – 7.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.2 percent. Riffles (75%) and scour pools (17%) dominated stream habitat. Gravel (36%), sand (29%) and cobble (29%) dominated stream substrate. Wood volume was high at 39.9 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH SUMMARY

REACH 1

T6N-R10W-S34NE

REACH 1

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 avg: 6.2 range: 5.5-7.0

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	529	3,197	0
Secondary	68	90	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.4	Width	8.8	18.9	17.1
Depth	0.44	Height	0.6	1.3	1.4
		W:D ratio	13.9	Entrenchment	2.2

Stream Flow Type: HF Water Temp: 7.0-7.0°C
 Avg. Unit Gradient: 1.2% Habitat Units/100m: 5.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C30	

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	101	19.1
Volume (m ³)	211	39.9
Key pieces (≥10m x 0.6m)	21	4.0

HABITAT UNIT SUMMARY

REACH 1

T6N-R10W-S34NE

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	Cbbl	Bldr	Bdrk
POOL-BACKWATER	1	4	2.1	0.30	7	0	10	50	40	0	0	0
POOL-DAMMED	1	27	6.0	0.70	163	0	5	30	20	45	0	0
POOL-LATERAL SCOUR	8	85	5.8	0.75	492	0	3	29	38	27	3	0
POOL-PLUNGE	2	9	7.3	0.85	75	0	3	25	35	30	8	0
PUDDLED CHANNEL	1	25	1.6	0.40	39	0	30	60	10	0	0	0
RAPID/BOULDERS	1	15	1.6	0.10	24	0	5	45	20	30	0	0
RIFFLE	16	432	5.4	0.27	2,480	0	0	24	37	32	7	0
STEP/LOG	2	1	7.5	0.30	7	0	0	33	40	28	0	0
Total:	32	597	5.4	0.44	3,287	0	Avg: 3	29	36	29	4	0

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	2	31	4.1	0.50	171	5.19	0	0.0
Scour Pools	10	93	6.1	0.77	566	17.22	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	16	432	5.4	0.27	2,480	75.45	0	0.0
Rapids	1	15	1.6	0.10	24	0.73	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	1	7.5	0.30	7	0.22	0	0.0
Dry	1	25	1.6	0.40	39	1.19	0	0.0

POOL SUMMARY

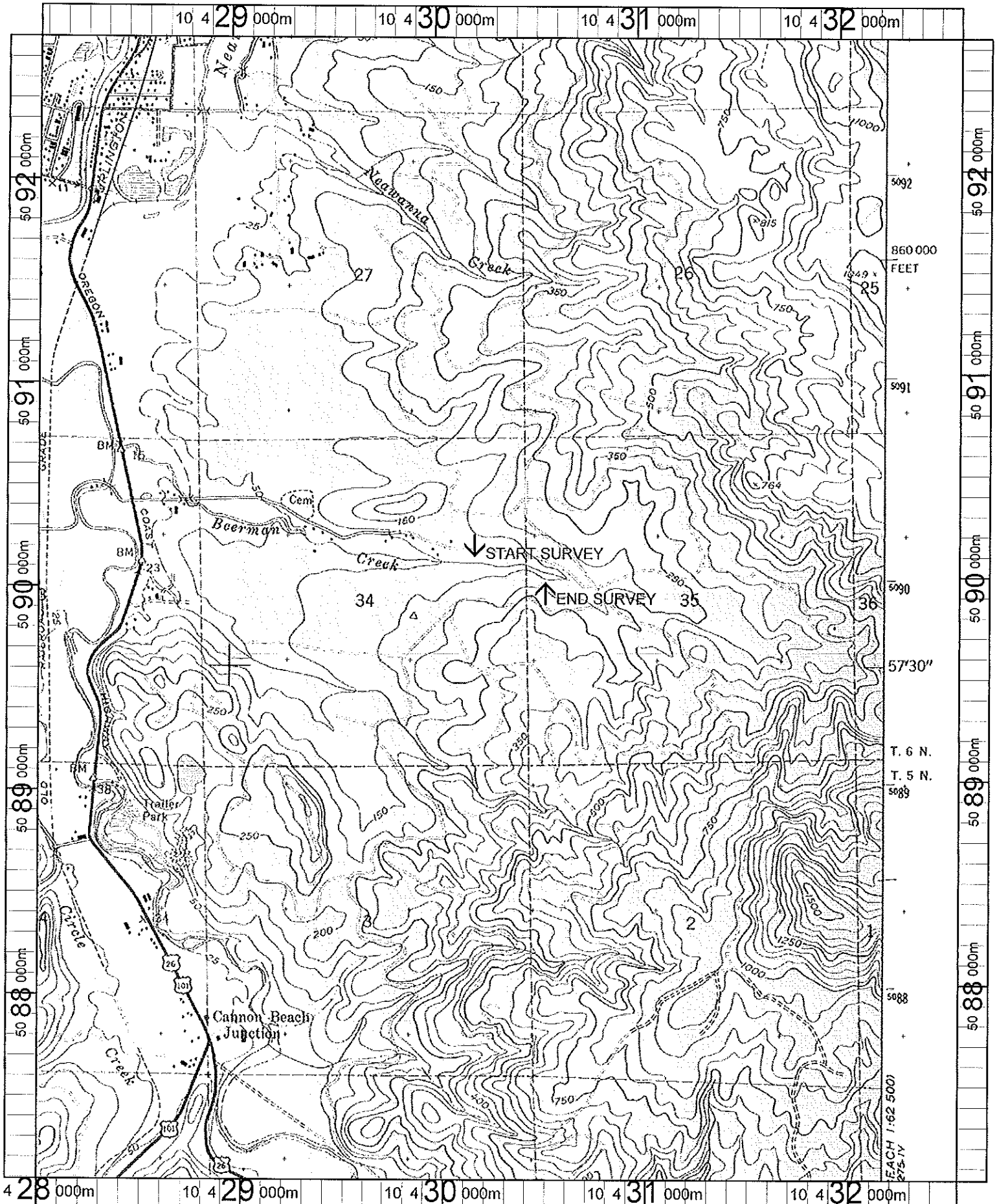
All Pools	<u>Total</u>	<u>#/Km</u>
	12	20.1
Pools ≥1m deep:	2	3.4
Complex pools (LWD pieces ≥3):	6	10.1
Pool Frequency (channel widths/pool):	5.6	
Residual pool depth (avg)	0.52m	

STREAM SUMMARY

BEERMAN CREEK POST-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area					Total Large Boulder	
					S/O	Sand	Grvl	Cbbl	Bldr		Bdrk
32	597	5.4	0.44	3,287	3	29	36	29	4	0	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	566	17.2
Backwater Pools	171	5.2
Glide	0	0.0
Riffle	2,480	75.4
Rapid	24	0.7
Cascade	0	0.0
Step	7	0.2
Dry	39	1.2



Name: TILLAMOOK HEAD
 Date: 10/3/101
 Scale: 1 inch equals 2000 feet

Location: 10 430201 E 5089853 N
 Caption: BEERMAN CREEK RESTORATION SITE -
 NECANICUM BASIN