

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

STREAM: Beerman Creek (NC-6)
BASIN: Necanicum River
SURVEY TYPE: Pre-Tx
DATE: June 22, 2000
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 447 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 8.0. Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.5 percent. Riffles (82%) and scour pools (16%) dominated stream habitat. Cobble (57%) and gravel (20%) dominated stream substrate. Wood volume was low at 4.0 m³/100m.

COMMENTS:

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

REACH 1

T6N-R10W-34NE

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: 8.0 range: 8.0-8.0

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	447	2,387	0
Secondary	18	19	0

Channel Dimensions (m)

	<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>		<u>First Terrace</u>
Width	5.1	Width	6.6		11.6		10.5
Depth	0.35	Height	0.5		1.0		1.3
		W:D ratio	13.3	Entrenchment	1.7		

Stream Flow Type: MF Water Temp: 10.0-10.0°C
 Avg. Unit Gradient: 1.5% Habitat Units/100m: 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C30	D30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	32%	Reach avg: 98%
Undercut Banks	14%	Range: 86-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	20	4.5
Volume (m ³)	18	4.0
Key pieces (≥10m x 0.6m)	0	0.0

REACH 1

T6N-R10W-34NE

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-LATERAL SCOUR	7	69	4.9	0.67	333	0	4	15	21	54	6	0
POOL-PLUNGE	1	7	9.4	1.30	62	0	10	30	30	30	0	0
RAPID/BOULDERS	1	6	1.5	0.05	9	0	5	15	30	40	10	0
RIFFLE	17	376	5.0	0.26	1,964	0	2	12	18	58	9	1
STEP/COBBLE	3	7	4.9	0.12	32	0	2	10	15	70	3	0
STEP/LOG	2	1	6.2	0.13	5	0	0	15	30	55	0	0
Total:	31	465	5.1	0.35	2,406	0	Avg: 3	13	20	57	7	1

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	0	0	-	-	0	0.00	0	0.0
Scour Pools	8	76	5.4	0.75	395	16.43	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	17	376	5.0	0.26	1,964	81.63	0	0.0
Rapids	1	6	1.5	0.05	9	0.37	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	5	7	5.4	0.12	38	1.56	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	8	17.2
Pools ≥1m deep:	2	4.3
Complex pools (LWD pieces ≥3):	0	0.0
Pool Frequency (channel widths/pool):	8.8	
Residual pool depth (avg)	0.55m	

STREAM SUMMARY

BEERMAN CREEK

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	
31	465	5.1	0.35	2,406	3	13	20	57	7	1	0

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	395	16.4
Backwater Pools	0	0.0
Glide	0	0.0
Riffle	1,964	81.6
Rapid	9	0.4
Cascade	0	0.0
Step	38	1.6
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) (3 transects)

Total hardwoods/1000 ft	203
Total conifers/1000 ft	1,585
Total conifers >20" dbh/1000 ft	244
Total conifers >35" dbh/1000 ft	20

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	1.7	1.0	2.7	0.0	1.3	0.0	5.7	1.0
15-30cm	2.0	2.0	1.0	0.0	2.3	0.0	5.3	2.0
30-50cm	1.3	0.3	4.0	0.0	5.7	0.0	11.0	0.3
50-90cm	0.7	0.0	1.3	0.0	1.7	0.0	3.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Total/100m ²	5.7	3.3	9.0	0.0	11.3	0.0	8.7	1.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	82		88		91	
Shrub cover	3		2		1	
Grass/forb cover	80		51		36	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	17		33		33
High terrace	83		67		67	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	11		5		2	

Summary of Riparian Zone (0-30m) for all reaches (3 transects)

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

Total hardwoods/1000 ft	203
Total conifers/1000 ft	1,585
Total conifers >20" dbh/1000 ft	244

Average number of trees in a 5-meter wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	5.7	1.0
15-30cm	5.3	2.0
30-50cm	11.0	0.3
50-90cm	3.7	0.0
>90cm	0.3	0.0

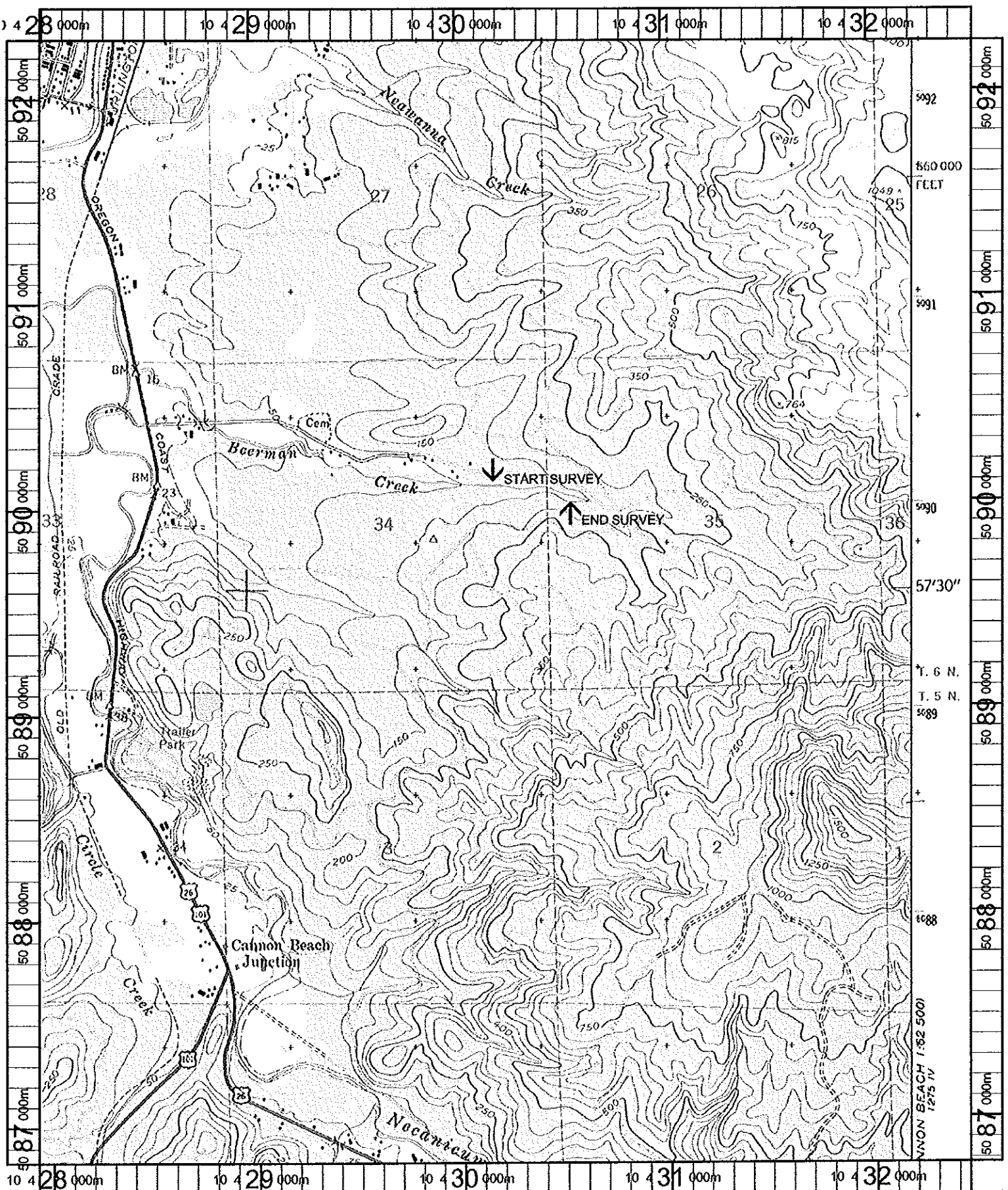
RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
7	LF	1	HT	1.0	95	0	100	Conifer	2	2	0	1	0	
								Hardwood	2	1	0	0	0	
7	LF	2	HT	0.0	95	10	20	Conifer	0	2	3	1	0	
								Hardwood	0	0	0	0	0	
7	LF	3	HT	1.0	95	5	35	Conifer	0	1	2	1	0	
								Hardwood	0	0	0	0	0	
7	RT	1	HS	35.0	95	0	20	Conifer	1	2	1	0	0	
								Hardwood	1	2	0	0	0	
7	RT	2	HS	3.0	95	0	5	Conifer	2	1	3	0	0	
								Hardwood	0	0	0	0	0	
7	RT	3	HS	0.0	95	0	5	Conifer	2	1	5	1	0	
								Hardwood	0	0	0	0	0	
14	LF	1	HT	1.0	70	10	90	Conifer	2	0	0	0	0	
								Hardwood	0	0	1	0	0	
14	LF	2	HT	2.0	80	0	80	Conifer	0	0	2	1	0	
								Hardwood	0	0	0	0	0	
14	LF	3	HT	0.0	80	0	70	Conifer	0	0	2	1	0	
								Hardwood	0	0	0	0	0	
14	RT	1	HT	12.0	70	0	100	Conifer	0	2	1	0	0	
								Hardwood	0	0	0	0	0	
14	RT	2	HS	15.0	70	0	60	Conifer	0	0	2	1	0	
								Hardwood	0	0	0	0	0	
14	RT	3	HS	2.0	90	0	35	Conifer	2	1	3	0	1	
								Hardwood	0	0	0	0	0	
21	LF	1	HT	10.0	80	0	80	Conifer	0	0	1	0	0	
								Hardwood	0	0	0	0	0	
21	LF	2	HT	6.0	90	0	40	Conifer	2	0	2	0	0	
								Hardwood	0	0	0	0	0	
21	LF	3	HT	7.0	90	0	20	Conifer	0	3	2	1	0	
								Hardwood	0	0	0	0	0	
21	RT	1	HT	5.0	80	10	90	Conifer	0	0	1	1	0	
								Hardwood	0	3	0	0	0	
21	RT	2	HT	1.0	95	0	100	Conifer	4	0	0	1	0	
								Hardwood	0	0	0	0	0	
21	RT	3	HT	0.0	95	0	50	Conifer	0	1	3	1	0	
								Hardwood	0	0	0	0	0	



<p>Name: TILLAMOOK HEAD Date: 10/23/100 Scale: 1 inch equals 2000 feet</p>	<p>Location: 10 430121 E 5089517 N Caption: BEERMEN CREEK RESTORATION SITE - NECANICUM BASIN</p>
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