

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

STREAM: Charlie Creek (N-332)
BASIN: Necanicum River
SURVEY TYPE: Pre-Tx
DATE: January 31, 2007
SURVEY CREW: Scott Sebring, Jason Hatfield
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 1.8 km²
USGS MAPS: Necanicum Junction
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Charlie Creek habitat survey extended 701 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 19.3 (range: 15.0-20.0). Land use for the reach was rural residential and second growth (15-30 cm dbh) trees. The average unit gradient was 1.1 percent. Riffles (56%) and scour pools (34%) dominated stream habitat. Gravel (83%) dominated stream substrate. Wood volume was low at 7.2 m³/100m.

COMMENTS:

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

REACH 1

T05N-R09W-S23NW

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 19.3		VWI Range: 15 - 20	

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 Channel	701	1,400	0
Secondary Channel	0	0	0
Off-Channel Units	1	1	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 2.1	Width: 3.9	7.2 (4.5 - 15)	15.0 (8.8 - 28)
Depth: 0.33	Height: 0.4	0.9 (0.74 - 1.1)	1.8 (1.3 - 2.5)

W:D ratio: 9.2
 Stream Flow Type: MF
 Average Unit Gradient: 1.1%
 Water temperature (°C): 4.0 - 4.0
 Entrenchment (ACW:FPW ratio): 1.8
 Habitat Units/100m (total channel length): 7.1
 Habitat Units/100m (primary channel length): 7.1

Riparian, Bank, and Wood Summary

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

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):	42	6.0
Volume (m ³):	51	7.2
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPT OF FISH AND WILDLIFE

CHARLIE CREEK PRE-TX (1-NC, 332)

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

1/31/2007

REACH 1		T05N-R09W-S23NW					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
CULVERT CROSSING	1	26	2.7	0.05	69	0	0	5	85	5	5	0
POOL-BACKWATER	1	1	2.0	0.30	1	0	5	5	90	0	0	0
POOL-LATERAL SCOUR	21	203	2.3	0.58	453	0	5	13	79	2	0	2
POOL-PLUNGE	1	5	4.5	0.90	23	0	10	10	80	0	0	0
RAPID/BOULDERS	2	27	2.0	0.18	54	0	0	5	73	23	0	0
RIFFLE	18	428	1.9	0.12	781	0	1	6	86	6	0	0
STEP/COBBLE	4	11	1.7	0.10	20	0	0	5	95	0	0	0
STEP/LOG	2	1	2.3	0.05	2	0	5	8	88	0	0	0
Total:	50	701	2.1	0.33	1,401	0	Avg: 3	9	83	4	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	1	1	2.0	0.30	1	0.07%	0	0.0	
Scour Pools	22	208	2.4	0.59	475	33.90%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	18	428	1.9	0.12	781	55.69%	0	0.0	
Rapids	2	27	2.0	0.18	54	3.82%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	6	12	1.9	0.08	23	1.61%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	26	2.7	0.05	69	4.91%	0	0.0	

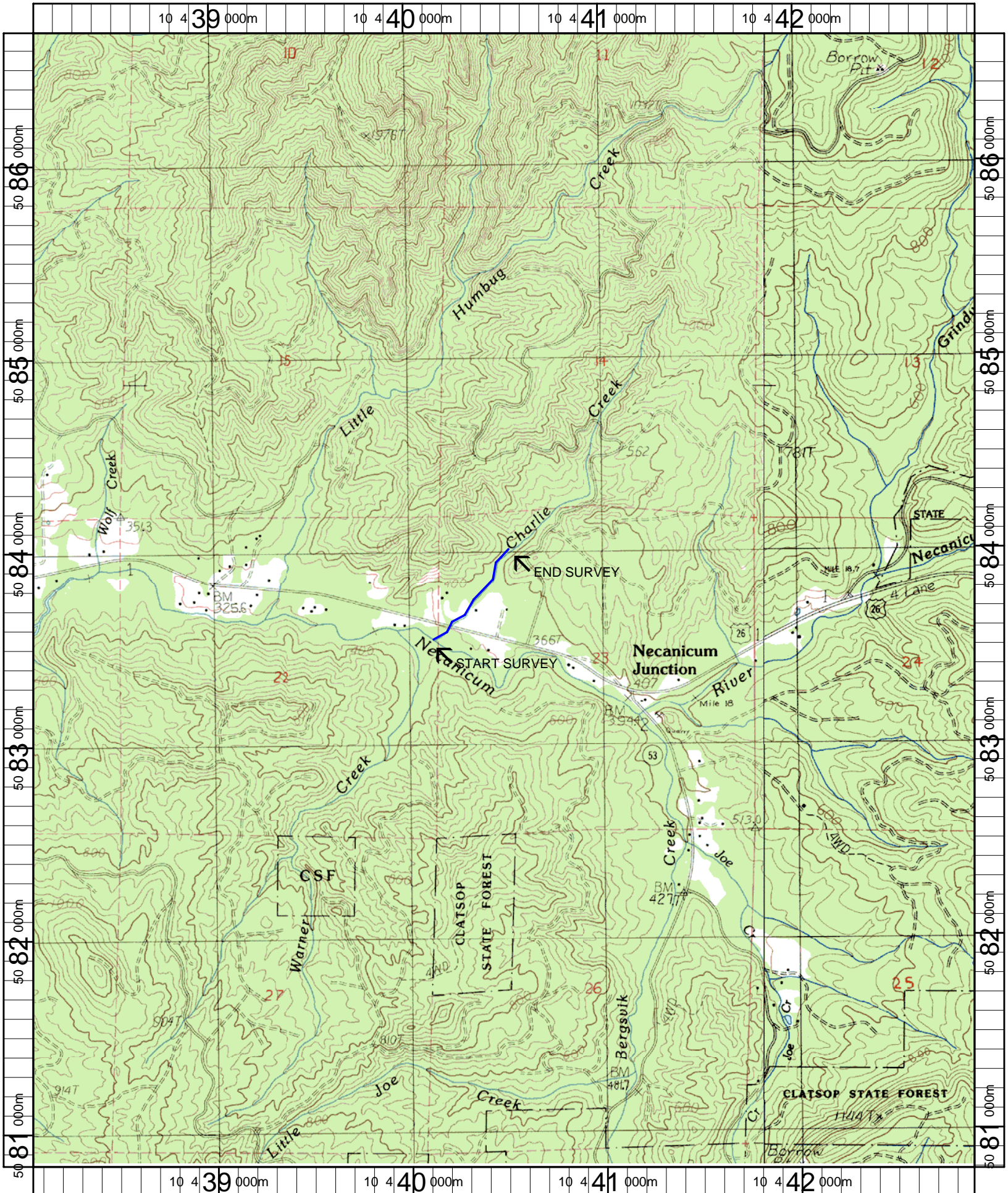
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	23	32.8	32.8
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	2	2.9	2.9
Pool frequency (channel widths/pool):	7.8		
Residual pool depth (avg):	0.48		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 332 CHARLIE CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	RI	01	33.2	SS/ SS/	TEMP 4 ROAD DOWN TO CR
4	RI	00	72.1	WL	SCULPIN
7	LP	00	99.2	WL	ELK CROSSING
13	LP	00	165.6	DJ	
20	CC	00	254.1	CC	NO DROP OPEN BOTTOM
21	RI	00	303.1	BC	
26	SC	00	384.3		BLACK BERRIES OVER CR
40	LP	00	539	WL	STEELHEAD AD CLIPED
44	LP	00	610.5		SALMON CARCASS



Name: NECANICUM JUNCTION
 Date: 5/9/2007
 Scale: 1 inch equals 2000 feet

Location: 10 440493 E 5083741 N
 Caption: CHARLIE CREEK RESTORATION SITE - NECANICUM BASIN