

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

STREAM: Necanicum River (NC-370)
BASIN: Necanicum River
SURVEY TYPE: Pre-Tx
DATE: March 6, 2007
SURVEY CREW: Jeff O'Leary, Sheri Etchemendy
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4 km²
USGS MAPS: Saddle Mountain
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Necanicum River habitat survey extended 975 meters. The channel was alternately constrained by hillslope and multiple terraces in a broad valley floor. The average valley width index was 6.5 (range: 2.5-12). Land use for the reach was young timber (3-15 cm dbh) and second growth timber (15-30 cm dbh). The average unit gradient was 2.2 percent. Rapids (72%) and scour pools (17%) dominated stream habitat. Cobble (51%) and gravel (32%) dominated stream substrate. Wood volume was very low at 5.4 m³/100m.

COMMENTS:

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

Coho fry and unidentified salmonid fry were observed during the survey.

REACH 1

T05N-R08W-S18SW

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	6.5	VWI Range:	2.5 - 12

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	975	5,611	0
Secondary Channel	30	51	0
Off-Channel Units	78	120	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.7	Width: 10.2	19.4 (9 - 31)	20.6 (10 - 31.5)
Depth: 0.46	Height: 0.5	1.0 (1 - 1.1)	1.1 (1.1 - 1.2)

W:D ratio: 20.0

Entrenchment (ACW:FPW ratio): 1.9

Stream Flow Type: MF

Habitat Units/100m (total channel length): 4.9

Average Unit Gradient: 2.2%

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

Water temperature (°C): 7.0 - 7.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	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):	77	7.9
Volume (m ³):	53	5.4
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPT OF FISH AND WILDLIFE

NECANICUM RIVER PRE-TX (1-NC, 370)

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

3/6/2007

REACH 1		T05N-R08W-S18SW					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
CASCADE/BEDROCK	1	10	0.9	0.05	9	0	0	0	0	0	0	100
POOL-BACKWATER	6	37	1.9	0.63	67	0	22	11	24	42	0	2
POOL-LATERAL SCOUR	15	184	4.5	0.79	837	0	0	7	48	40	3	2
POOL-PLUNGE	2	18	8.0	1.40	139	0	0	2	41	49	7	0
RAPID/BOULDERS	23	714	5.6	0.20	4,146	0	1	3	23	62	11	0
RIFFLE	4	119	3.6	0.15	578	0	1	6	35	52	6	0
STEP/LOG	2	1	5.1	0.20	5	0	10	5	25	60	0	0
Total:	53	1,083	4.7	0.46	5,782	0	Avg: 3	5	32	51	7	3

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	6	37	1.9	0.63	67	1.16%	0	0.0	
Scour Pools	17	202	4.9	0.86	977	16.89%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	4	119	3.6	0.15	578	10.00%	0	0.0	
Rapids	23	714	5.6	0.20	4,146	71.70%	0	0.0	
Cascades	1	10	0.9	0.05	9	0.16%	0	0.0	
Step/Falls	2	1	5.1	0.20	5	0.09%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

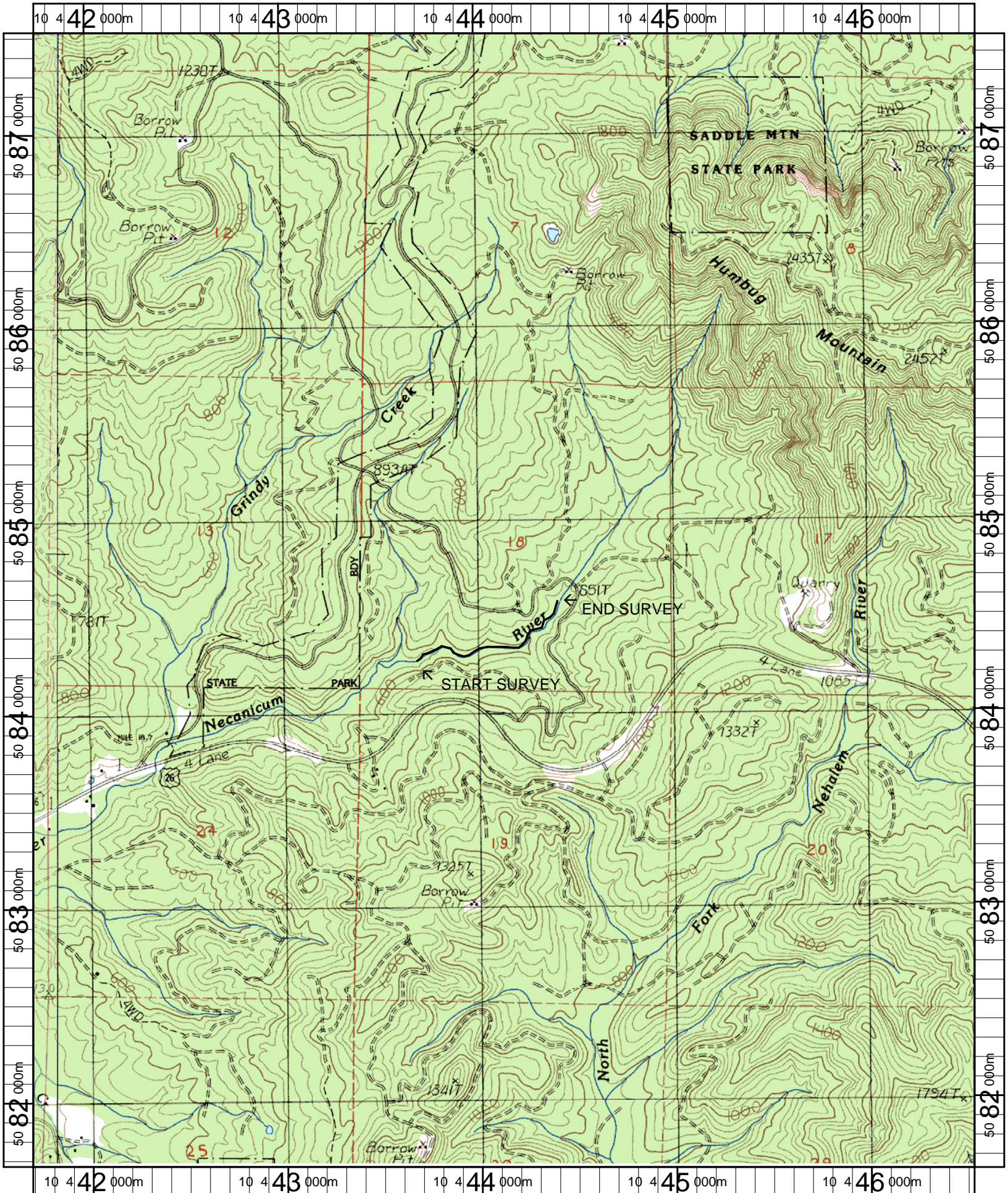
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	23	21.2	23.6
Pools >=1m deep:	5	4.6	5.1
Complex pools (LWD pieces>=3):	5	4.6	5.1
Pool frequency (channel widths/pool):	4.6		
Residual pool depth (avg):	0.60		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 370 NECANICUM RIVER PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
4	RB	01	91.3	/SS	
5	BW	10	91.3		UNKNOWN FRY
7	RB	01	155	TJ	
8	RB	11	155		ACW=1.5, T=8.0°C
13	RB	01	222.9	/SS	
14	BW	10	222.9		UNKNOWN FRY
15	RI	00	264.9		LOTS OF ORANGE FLAGGING AROUND
17	RB	01	325.9	TJ	SALMON SPAWNING SIGN 20 M UP
19	RI	11	325.9		ACW=1.5, T=7.5°C
21	RB	00	388.4	SS/	COHO FRY
24	RB	01	515.9	/SS	
30	RB	00	569.6	SS/	
32	RI	01	632.6	/TJ	TWO TRIBS BOTH ON THE RIGHT.
33	CR	11	632.6		ACW=1.1
34	RB	11	632.6		ACW=2.3, T=8°C
37	LP	00	678.8	SS/	
40	RB	01	740.7	SS/	
54	RB	01	975	SS/TJ	START POINT IS 128 METERS



Name: SADDLE MT
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0444134 E 5084580 N
 Caption: UPPER NECANICUM RIVER RESTORATION SITE - NECANICUM BASIN