

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

STREAM: Wright Creek (MC-179)  
BASIN: Yaquina River  
SURVEY TYPE: Post-Tx  
DATE: January 24, 2005  
SURVEY CREW: Brian Bangs, Sheila Davis  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 16.8 km<sup>2</sup>  
USGS MAPS: Toledo South  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Wright Creek habitat survey extended 484 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 6.1 (range: 1.5-10.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.8 percent. Scour pools (49%) and riffles (48%) dominated stream habitat. Gravel (54%) and sand (34%) dominated stream substrate. Wood volume was moderate at 26.8 m<sup>3</sup>/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 1

T12S-R10W-S06NW

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	6.1	VWI Range:	1.5 - 10

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	484	2,406	0
Secondary Channel	31	72	0
Off-Channel Units	15	15	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 4.3	Width: 6.7	14.7 ( 7.6 - 18 )	21.8 ( 19.7 - 23.7 )
Depth: 0.49	Height: 0.6	1.3 ( 1 - 1.7 )	1.7 ( 1.4 - 1.9 )

W:D ratio: 11.3

Entrenchment (ACW:FPW ratio): 2.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 6.6

Average Unit Gradient: 0.8%

Habitat Units/100m (primary channel length): 7.2

Water temperature (°C): 9.0 - 9.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	G

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):	89	18.4
Volume (m <sup>3</sup> ):	130	26.8
Key pieces (>=12m x 0.60m):	9	1.9

OREGON DEPT OF FISH AND WILDLIFE

WRIGHT CREEK POST-TX (2-MC, 179)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

1/24/2005

REACH 1		T12S-R10W-S06NW					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	12	0.7	0.03	8	0	0	40	50	10	0	0
POOL-BACKWATER	1	3	2.1	0.35	7	0	45	45	10	0	0	0
POOL-DAMMED	1	9	2.6	1.20	22	0	10	70	20	0	0	0
POOL-LATERAL SCOUR	16	262	4.4	0.75	1,231	0	12	46	39	3	1	0
RIFFLE	15	238	4.8	0.22	1,200	0	3	20	73	3	0	1
STEP/COBBLE	1	7	3.7	0.25	24	0	0	10	80	10	0	0
<b>Total:</b>	<b>35</b>	<b>530</b>	<b>4.3</b>	<b>0.49</b>	<b>2,492</b>	<b>0</b>	<b>Avg: 8</b>	<b>34</b>	<b>54</b>	<b>3</b>	<b>1</b>	<b>0</b>

HABITAT SUMMARY								
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	2	12	2.4	0.78	29	1.17%	0	0.0
Scour Pools	16	262	4.4	0.75	1,231	49.40%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	15	238	4.8	0.22	1,200	48.14%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	12	0.7	0.03	8	0.33%	0	0.0
Step/Falls	1	7	3.7	0.25	24	0.97%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

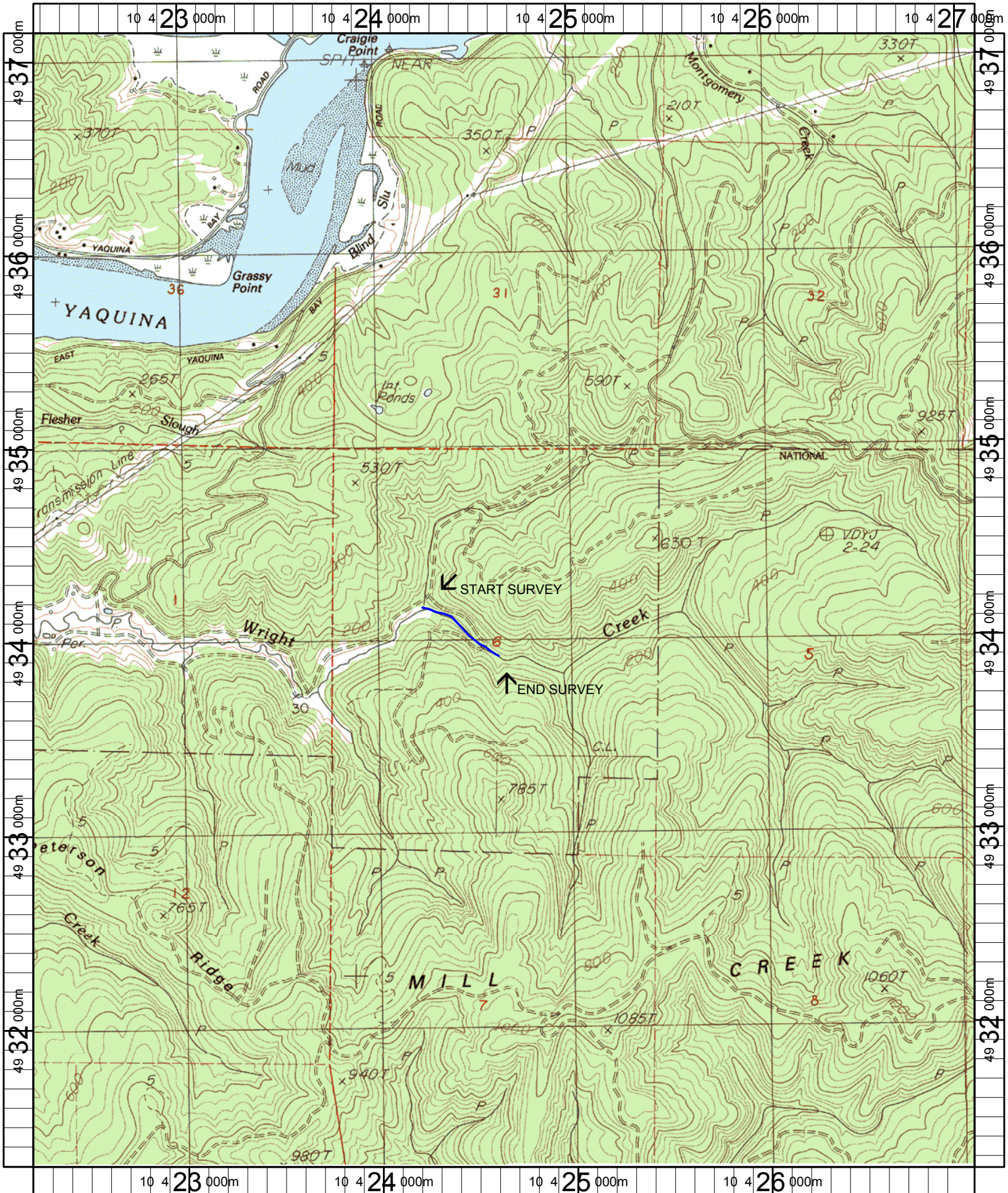
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	18	34.0	37.2
Pools >=1m deep:	4	7.6	8.3
Complex pools (LWD pieces>=3):	7	13.2	14.5
Pool frequency (channel widths/pool):	4.4		
Residual pool depth (avg):	0.50		

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC**      SITE ID: **179**      **WRIGHT CREEK POST-TX**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	DP	00	8.6	DJ	US MT ST M15 S	
5	LP	00	58.8	HS		
6	LP	00	75.6	/SS		
8	LP	00	126.5	HS	US MT ST D30 G	
9	RI	00	152.3	SS/		
14	LP	00	229.8	HS		
16	LP	00	266.1		1 ADULT COHO	
20	LP	00	323.7	HS		
28	RI	01	383.7		CT CT ST D15 G	
29	LP	00	394.9	BC, CS		
31	LP	00	432	/SS		
34	RI	01	483.8		CH MV ST D15 S	



Name: TOLEDO SOUTH  
 Date: 6/13/2005  
 Scale: 1 inch equals 2000 feet

Location: 10 424651 E 4934196 N  
 Caption: WRIGHT CREEK RESTORATION SITE - YAQUINA BASIN