

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 31, 2007
SURVEY CREW: Brian Bangs, Paul Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 7 km²
USGS MAPS: Toledo South
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Wright Creek habitat survey extended 502 meters. The channel was unconstrained with multiple terraces in a broad valley floor. The average valley width index was 4.5 (range: 2.5-8). Land use for the reach was second growth timber (15-30cm dbh). The average unit gradient was 0.9 percent. Scour pools (51%) and riffles (42%) dominated stream habitat. Gravel (52%) and sand (36%) dominated stream substrate. Wood volume was moderate at 27.2 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.

Beaver activity was noted throughout 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	4.5	VWI Range:	2.5 - 8

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	502	2,322	0
Secondary Channel	0	0	0
Off-Channel Units	66	81	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 4.0	Width: 10.1	30.4 (11.4 - 43.6)	12.9 (12.9 - 12.9)
Depth: 0.56	Height: 0.6	1.2 (1 - 1.4)	2.4 (2.4 - 2.4)

W:D ratio: 16.8
 Stream Flow Type: LF
 Average Unit Gradient: 0.9%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 3.1
 Habitat Units/100m (total channel length): 6.3
 Habitat Units/100m (primary channel length): 7.2

Riparian, Bank, and Wood Summary

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

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):	129	25.7
Volume (m ³):	137	27.2
Key pieces (>=12m x 0.60m):	10	2.0

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

1/31/2007

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 ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	3	19	1.8	0.20	32	0	3	37	50	10	0	0
POOL-BACKWATER	2	18	2.3	0.23	39	0	20	50	30	0	0	0
POOL-ISOLATED	1	9	2.4	0.35	20	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	15	259	4.6	1.06	1,219	0	9	53	35	2	1	0
RIFFLE	12	237	4.1	0.17	982	0	6	19	74	0	0	1
RIFFLE W/ POCKETS	1	8	3.8	0.40	32	0	5	14	81	0	0	0
STEP/COBBLE	2	18	4.5	0.20	79	0	8	15	78	0	0	0
Total:	36	568	4.0	0.56	2,403	0	Avg: 10	36	52	2	0	0

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	3	27	2.3	0.27	60	2.48%	0	0.0	
Scour Pools	15	259	4.6	1.06	1,219	50.74%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	13	245	4.0	0.19	1,013	42.15%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	3	19	1.8	0.20	32	1.32%	0	0.0	
Step/Falls	2	18	4.5	0.20	79	3.30%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

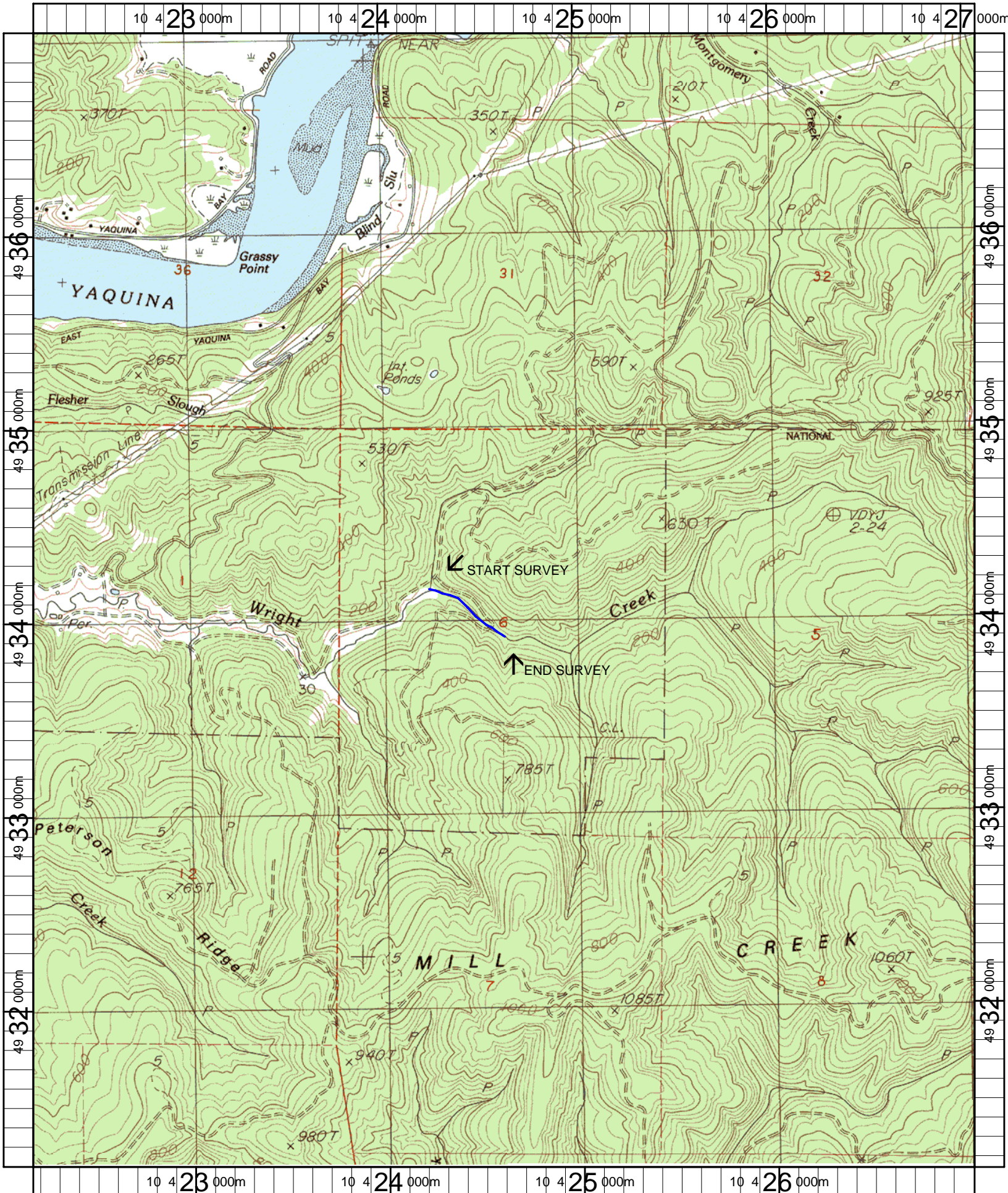
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	18	31.7	35.8
Pools >=1m deep:	11	19.4	21.9
Complex pools (LWD pieces>=3):	12	21.1	23.9
Pool frequency (channel widths/pool):	3.1		
Residual pool depth (avg):	0.84		

Comment Summary

Restoration Monitoring Sites 2007

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
2	CB	00	12.4	BV	
3	LP	00	28.1	BV	
4	RI	00	50.1	WL	
5	LP	00	62.5	BV, HS	
6	SC	00	71.2	/SS	
9	LP	00	118.6	HS	
11	LP	00	146.5	BV	
13	RI	01	164.2	TJ/	
18	LP	00	244.9	HS	
24	LP	00	343	HS	
28	LP	00	420.9	BC, CS/CS	
29	RI	00	433.9	/SS	
30	LP	01	447.2	/SS, /TJ	
32	RI	01	471.1	/SSx2	
35	RI	01	502.3	/TJ	



Name: TOLEDO SOUTH
 Date: 5/9/2007
 Scale: 1 inch equals 2000 feet

Location: 10 424617 E 4934097 N
 Caption: WRIGHT CREEK RESTORATION SITE - YAQUINA BASIN