

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: July 5, 2005
SURVEY CREW: Lanoah Babcock, Tory Fitchett
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 16.8 km²
USGS MAPS: Toledo South
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Wright Creek habitat survey extended 498 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.2 (range: 1.5-8.0). Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 0.8 percent. Scour pools (51%) and riffles (49%) comprised stream habitat. Gravel (59%) and sand (27%) dominated stream substrate. Wood volume was moderate at 23.7 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.

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.2	VWI Range:	1.5 - 8

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	498	2,060	0
Secondary Channel	0	0	0
Off-Channel Units	10	8	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 3.9	Width: 5.0	9.1 (6.2 - 17.6)	13.3 (7.9 - 19)
Depth: 0.42	Height: 0.5	0.9 (0.8 - 1.2)	1.3 (0.95 - 2.2)

W:D ratio: 11.3

Entrenchment (ACW:FPW ratio): 1.8

Stream Flow Type: MF

Habitat Units/100m (total channel length): 5.9

Average Unit Gradient: 0.8%

Habitat Units/100m (primary channel length): 6.0

Water temperature (°C): 13.0 - 13.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	
Riparian Vegetation:	D30	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	8%	Reach avg: 90%
Undercut Banks:	10%	Range: 44 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	74	14.9
Volume (m ³):	118	23.7
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: 4/26/2006

Survey Date:

7/5/2005

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 ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	10	0.8	0.10	8	0	0	5	45	50	0	0
POOL-LATERAL SCOUR	12	207	4.3	0.69	910	45	10	35	50	4	1	0
POOL-STRAIGHT SCOUR	2	27	4.6	0.78	138	0	10	35	50	3	3	0
RIFFLE	14	240	3.9	0.17	947	1	5	21	67	7	0	0
RIFFLE W/ POCKETS	1	25	2.6	0.20	65	0	5	15	80	0	0	0
Total:	30	508	3.9	0.42	2,068	46	Avg: 7	27	59	7	1	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	0	0			0	0.00%	0	0.0	
Scour Pools	14	234	4.3	0.70	1,048	50.69%	45	4.3	
Glides	0	0			0	0.00%	0	0.0	
Riffles	15	265	3.8	0.17	1,012	48.93%	1	0.1	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	10	0.8	0.10	8	0.39%	0	0.0	
Step/Falls	0	0			0	0.00%	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:	14	27.6	28.1
Pools >=1m deep:	2	3.9	4.0
Complex pools (LWD pieces>=3):	8	15.7	16.1
Pool frequency (channel widths/pool):	7.2		
Residual pool depth (avg):	0.58		

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

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

**Survey Date 7/5/2005
Report Date: 4/26/2006**

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	1016
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

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	0.0	0.7	0.0	1.7	0.3	5.3	0.3
15-30cm	0.0	0.7	0.0	0.7	0.3	2.3	0.3	3.7
30-50cm	0.0	0.7	0.0	2.0	0.7	0.3	0.7	3.0
50-90cm	0.0	1.3	0.0	1.0	0.0	0.0	0.0	2.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	3.3	0.0	5.3	1.3	8.0	0.4	5.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Canopy closure	78	67	66		
Shrub cover	15	32	38			
Grass/forb cover	85	46	54			

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Hillslope	17	50	83		
High terrace	50	17	17			
Low terrace	0	0	0			
Floodplain	33	0	0			
Wetland/meadow	0	0	0			
Stream channel	0	0	0			
Roadbed/Railroad	0	33	0			
Riprap	0	0	0			
Surface slope (%)	14	27	50			

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

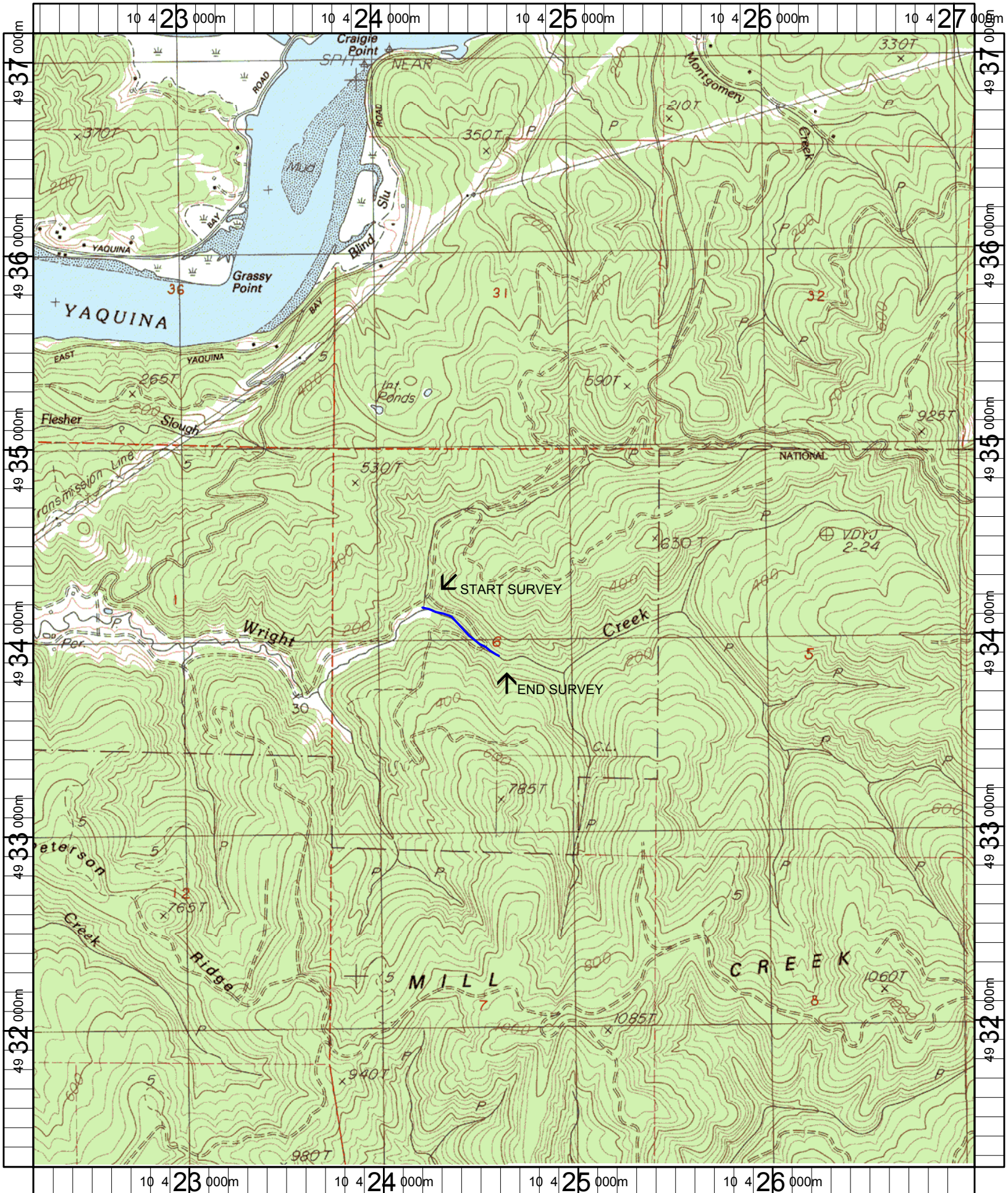
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	RT	1	FP	3	90	10	90	Conifer							
								Hardwood	1		1	1			
10	LF	3	HS	75	25	40	60	Conifer			1				
								Hardwood							
10	RT	3	HS	40	85	25	70	Conifer	1						
								Hardwood	8						
10	LF	2	RB	1	40	10	15	Conifer							
								Hardwood							
10	LF	1	HT	6	85	15	85	Conifer							10T 0424354/ UTM 4934120 2D
								Hardwood							
10	RT	2	HS	75	90	5	85	Conifer							
								Hardwood	1		3	2			
17	LF	1	HT	5	85	15	85	Conifer							10T 0424469/ UTM 4934008 2D
								Hardwood	1	1		1			
17	LF	2	RB	2	80	0	50	Conifer							
								Hardwood							
17	LF	3	HS	100	95	20	75	Conifer			1				
								Hardwood	1	2					
17	RT	1	FP	2	40	0	100	Conifer							
								Hardwood							
17	RT	2	HS	5	45	85	15	Conifer							
								Hardwood	2						
17	RT	3	HS	10	60	40	30	Conifer							
								Hardwood	5		1				
24	LF	2	HS	75	85	15	85	Conifer							
								Hardwood	1	1	2	1			
24	LF	3	HT	5	45	85	10	Conifer							
								Hardwood	2	5					
24	LF	2	HT	3	60	75	25	Conifer							
								Hardwood	1	1	1				
24	LF	1	HT	5	75	10	90	Conifer							10T 0424550/ UTM 49..985
								Hardwood					1		
24	LF	1	HS	60	90	40	60	Conifer							
								Hardwood		1	1	1			
24	LF	3	HS	70	85	20	80	Conifer				1			
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SP	00	6.8		T=12.5C	
2	RI	00	25.9	WL	METRIC 1	
3	LP	00	34.7	WL		RED-LEGGED FROG
5	LP	00	61.4	HS,DJ, /SS	HS	HS
6	LP	00	76.3	DJ		
8	LP	00	108.3	HS	HS	HS
10	RI	00	157.9	SS/	METRIC 2	RIPARIAN 1
15	LP	00	226.9	DJ,HS	HS	
16	RI	00	242.9			/LT
17	LP	00	264.8			RIPARIAN 2
20	LP	00	325.4	DJ, HS	HS	
21	RI	00	350.4	RF		
23	RI	00	384.7	WL		NEWT, CRAYFISH
24	LP	00	400.4	BC	BC	RIPARIAN 3
25	RI	00	417.6	/SS		
27	RI	00	462.4	/SS, /SS		
29	RI	01	498.1	/TJ	T=13.5C, /TJ, METRIC 5	
30	CB	11	498.1		END SURVEY	END SURVEY



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