

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

STREAM: Molalla River Side Channel (W-327)
BASIN: Molalla River
SURVEY TYPE: Pre-Tx
DATE: February 23, 2006
SURVEY CREW: Seth Ring, Scott Venables
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: km
USGS MAPS: Molalla
ECOREGION: Willamette River and Tributaries Gallery Forest

GENERAL DESCRIPTION:

The Molalla River Side Channel habitat survey extended 539 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was rural residential and light grazing. The average unit gradient was 0.2 percent. Scour pools (93%) dominated stream habitat. Cobble (43%) and gravel (29%) dominated stream substrate. Wood volume was very low at 4.6 m³/100m.

COMMENTS:

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

REACH 1

T04S-R02E-S37NW

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	20.0	VWI Range:	20 - 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	539	5,000	0
Secondary Channel	0	0	0
Off-Channel Units	43	69	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 6.0	Width: 14.1	24.1 (15.6 - 48.5)	29.3 (18.4 - 52.5)
Depth: 0.38	Height: 0.7	1.4 (1.2 - 1.7)	1.9 (1.5 - 2.3)

W:D ratio: 20.8

Stream Flow Type: MF

Average Unit Gradient: 0.2%

Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.7

Habitat Units/100m (total channel length): 2.7

Habitat Units/100m (primary channel length): 3.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	RR	LG
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):	55	10.2
Volume (m ³):	25	4.6
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE MOLALLA RIVER SIDE CHANNEL PRE-TX (8-W, 327)

HABITAT INVENTORY

Report Date: 1/24/2007

Survey Date:

2/23/2006

REACH 1		T04S-R02E-S37NW					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	2	19	0.9	0.05	17	0	3	3	45	50	0	0
POOL-LATERAL SCOUR	8	486	8.5	0.64	4,715	0	32	2	19	41	6	0
RIFFLE	6	77	4.4	0.13	337	0	13	5	36	44	3	0
Total:	16	582	6.0	0.38	5,069	0	Avg: 21	3	29	43	4	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	8	486	8.5	0.64	4,715	93.02%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	6	77	4.4	0.13	337	6.64%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	2	19	0.9	0.05	17	0.34%	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	

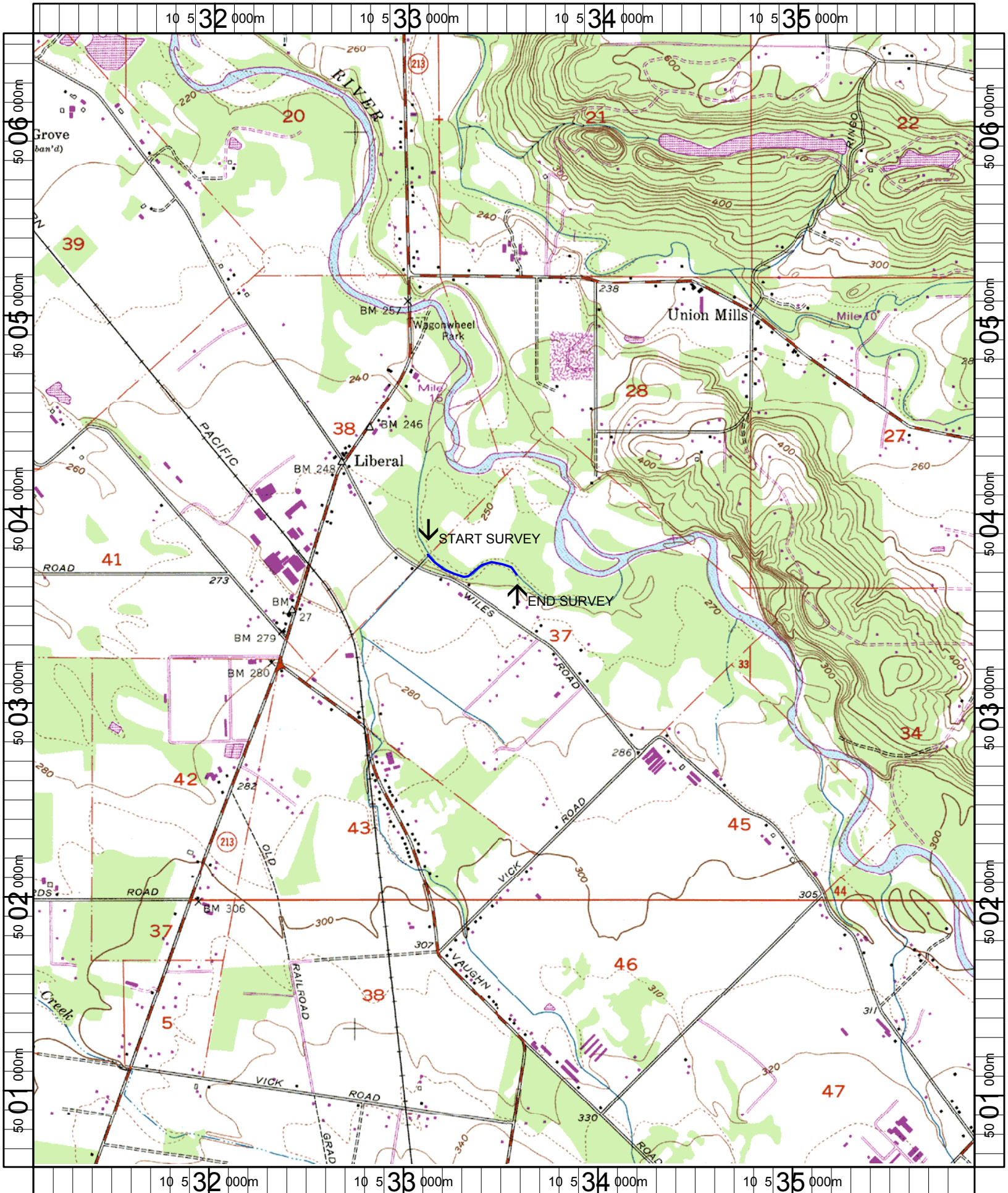
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	8	13.7	14.8
Pools >=1m deep:	2	3.4	3.7
Complex pools (LWD pieces>=3):	2	3.4	3.7
Pool frequency (channel widths/pool):	5.2		
Residual pool depth (avg):	0.48		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 8-W SITE ID: 327 MOLALLA RIVER SIDE CHANNEL PR

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	18.6	/SS	LG-RR,D30-S,CT-MT, T=8.0C	
2	LP	00	30.4		DEAD FISH - DACE?	
3	LP	01	190.5	/SS, /TJ		
4	LP	11	190.5		T=8.5C, ACW=5.11	
8	LP	00	239.6		LG-RR,CT-MT,D30-S	
9	RI	00	247.3		CT-MT,LG-RR,D30-S	
10	LP	00	327.1	BC	FOOT BRIDGE, PHOTO	
12	LP	00	347.4	RF		
13	LP	00	488.1		CT-MT,LG-RR,D30-S	
16	RI	00	539.1		CT-MT,RR-LG,D30-S	



Name: MOLALLA
 Date: 1/19/2006
 Scale: 1 inch equals 2000 feet

Location: 10 533500 E 5003545 N
 Caption: MOLALLA RIVER SIDE CHANNEL RESTORATION SITE -
 MOLALLA BASIN