

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

STREAM: Clear Creek #2 (L-231)
BASIN: Clackamas River
SURVEY TYPE: Pre-Tx
DATE: March 18, 2004
SURVEY CREW: Jim Andrews, April Waters
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 185.0 km²
USGS MAPS: Redland
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Clear Creek habitat survey extended 513 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 2.9 (range: 1.0-6.6). Land use for the reach was large (30-50 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 0.9 percent. Scour pools (47%) and riffles (40%) dominated stream habitat. Gravel (39%) and cobble (26%) dominated stream substrate. Wood volume was moderate at 20.5 m³/100m.

COMMENTS:

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

REACH 1

T03S-R03E-S53NE

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	2.9	VWI Range:	1 - 6.6

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	513	7,399	0
Secondary	41	100	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 13.3	Width: 17.7	22.3 (13.3 - 28)	27.3 (25 - 31)
Depth: 0.64	Height: 0.6	1.2 (1 - 1.4)	1.8 (1.2 - 2.3)

W:D ratio: 30.4
Stream Flow Type: MF
Average Unit Gradient: 0.9%
Water temperature (°C): 8.8 - 8.8

Entrenchment (ACW:FPW ratio): 1.3
Habitat Units/100m (total channel length): 3.2
Habitat Units/100m (primary channel length): 3.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	MT
Riparian Vegetation:	M30	C50

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):	87	17.0
Volume (m ³):	105	20.5
Key pieces (>=12m x 0.60m):	6	1.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

CLEAR CREEK #2 PRE-TX (L-231)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/18/2004

REACH 1		T03S-R03E-S53NE					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	
POOL-ALCOVE	1	10	3.8	0.25	38	0	80	15	5	0	0	0	
POOL-BACKWATER	1	7	2.0	0.50	14	0	5	10	85	0	0	0	
POOL-LATERAL SCOUR	5	274	13.4	1.28	3,494	0	2	7	27	21	11	31	
RAPID/BOULDERS	2	44	17.0	0.45	751	0	0	5	28	30	35	2	
RIFFLE	6	154	14.0	0.36	2,169	0	0	5	52	33	10	1	
RIFFLE W/ POCKETS	2	55	15.5	0.53	853	0	0	5	31	33	31	0	
STEP/COBBLE	1	10	18.0	0.30	180	0	0	0	45	45	10	0	
Total:	18	554	13.3	0.64	7,500	0	Avg: 5	6	39	26	14	9	

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	2	17	2.9	0.38	52	0.69%	0	0.0	
Scour Pools	5	274	13.4	1.28	3,494	46.59%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	8	209	14.4	0.40	3,022	40.30%	0	0.0	
Rapids	2	44	17.0	0.45	751	10.02%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	10	18.0	0.30	180	2.40%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

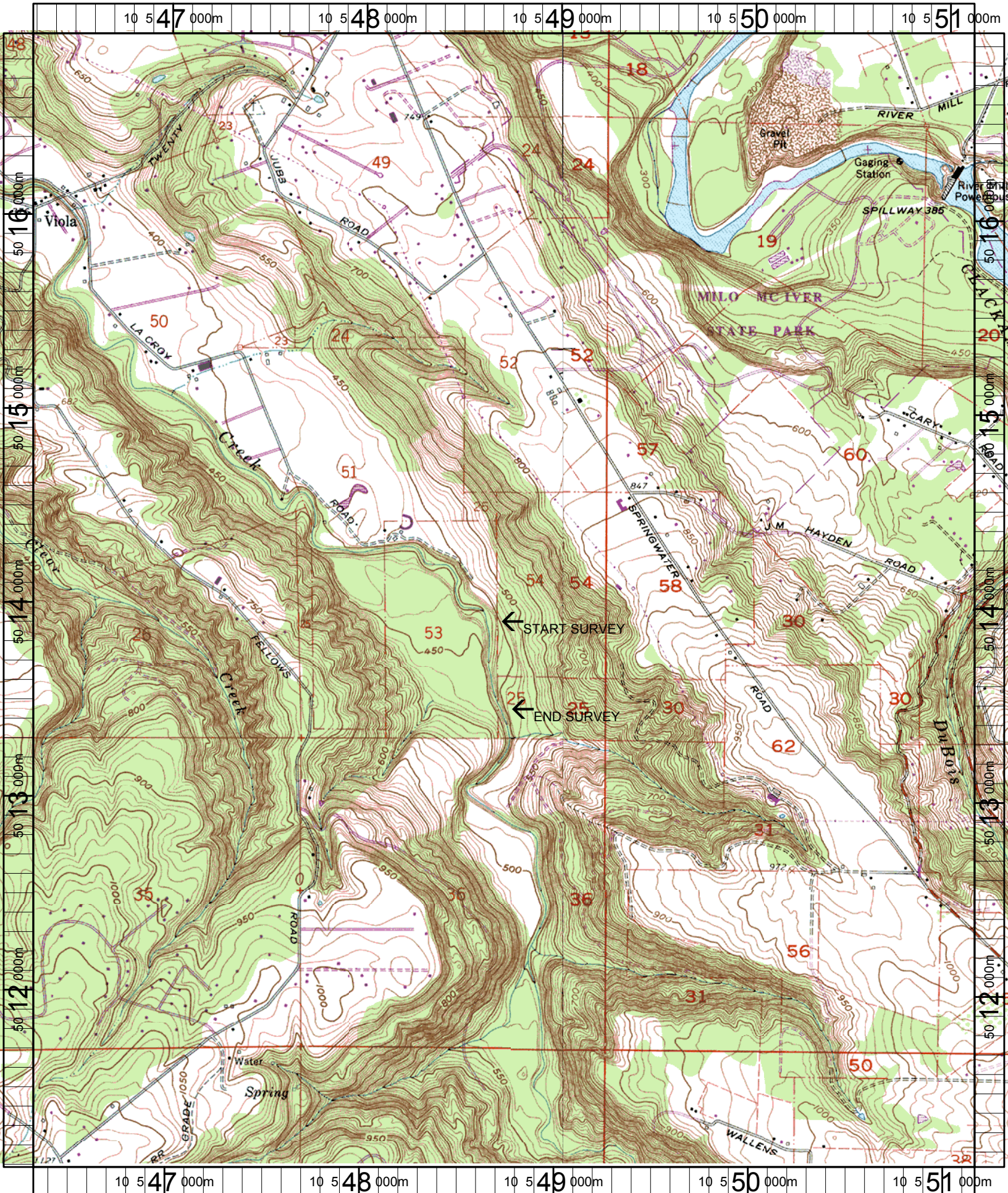
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	7	12.6	13.7
Pools >=1m deep:	4	7.2	7.8
Complex pools (LWD pieces>=3):	5	9.0	9.8
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.84		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 231 CLEAR CREEK #2 PRE-TX (L-231)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	01	60	SS/, DJ	START SIGN ALDER LEFT	
4	RI	00	106.6	WL	DEER TRACK	
5	LP	00	140.9	BV		
6	SC	00	150.9		H=0.3	
7	RI	00	185.9	WL	COYOTE SCAT	
8	RI	01	209.4	DJ	CREATES 02/01	
9	RI	02	209.4	SS/, BW/		
11	LP	00	258.7	SS/		
12	RB	00	288.7	DJ		
13	LP	00	313.7	WL	DEER TRACKS	
14	RP	00	341.9	RF, /SS		
15	RP	00	368.8	/SS		
16	RB	00	383	BV		
17	RI	00	407.4	/SS		
18	LP	00	512.8	SS/SS	END SIGN ALDER LEFT	



Name: REDLAND
 Date: 8/10/2004
 Scale: 1 inch equals 2000 feet

Location: 10 548719 E 5014027 N
 Caption: CLEAR CREEK #2 RESTORATION SITE - CLACKAMAS BASIN