

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

STREAM: Clear Creek #6 (L-329)
BASIN: Clackamas River
SURVEY TYPE: Pre-Tx
DATE: March 8, 2006
SURVEY CREW: Brain Cannon, Jon Nott
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 185.0 km²
USGS MAPS: Redland
ECOREGION: Willamette Valley Plains

GENERAL DESCRIPTION:

The Clear Creek habitat survey extended 530 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 10.0. Land use for the reach was rural residential and large (30-50 cm dbh) trees. The average unit gradient was 0.5 percent. Scour pools (65%) and riffles (30%) dominated stream habitat. Gravel (31%) and cobble (26%) dominated stream substrate. Wood volume was very low at 8.7 m³/100m.

COMMENTS:

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

REACH 1

T03S-R03E-S15SE

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	10.0	VWI Range:	10 - 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	530	8,079	0
Secondary Channel	0	0	0
Off-Channel Units	33	87	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 13.1	Width: 21.9	31.8 (25 - 43)	39.8 (31 - 48)
Depth: 0.79	Height: 1.0	2.1 (2 - 2.4)	3.8 (2.2 - 4.5)

W:D ratio: 21.2
 Stream Flow Type: MF
 Average Unit Gradient: 0.5%
 Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.5
 Habitat Units/100m (total channel length): 3.0
 Habitat Units/100m (primary channel length): 3.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	RR	LT
Riparian Vegetation:	C50	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):	40	7.5
Volume (m ³):	46	8.7
Key pieces (>=12m x 0.60m):	1	0.2

HABITAT INVENTORY

Report Date: 1/24/2007

Survey Date:

3/8/2006

REACH 1		T03S-R03E-S15SE					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	8	0.7	0.02	6	0	20	50	20	10	0	0
POOL-BACKWATER	2	25	3.3	0.55	81	0	20	45	10	25	0	0
POOL-LATERAL SCOUR	5	344	15.3	1.70	5,315	0	6	17	40	22	0	15
RIFFLE	7	168	14.7	0.46	2,477	0	5	11	36	35	1	11
STEP/COBBLE	1	18	15.5	0.40	279	0	5	10	35	20	0	30
STEP/STRUCTURE	1	0	21.0	0.20	8	0	80	20	0	0	0	0
Total:	17	563	13.1	0.79	8,165	0	Avg: 12	20	31	26	1	11

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	25	3.3	0.55	81	0.99%	0	0.0	
Scour Pools	5	344	15.3	1.70	5,315	65.09%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	7	168	14.7	0.46	2,477	30.33%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	8	0.7	0.02	6	0.07%	0	0.0	
Step/Falls	2	18	18.3	0.30	287	3.52%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

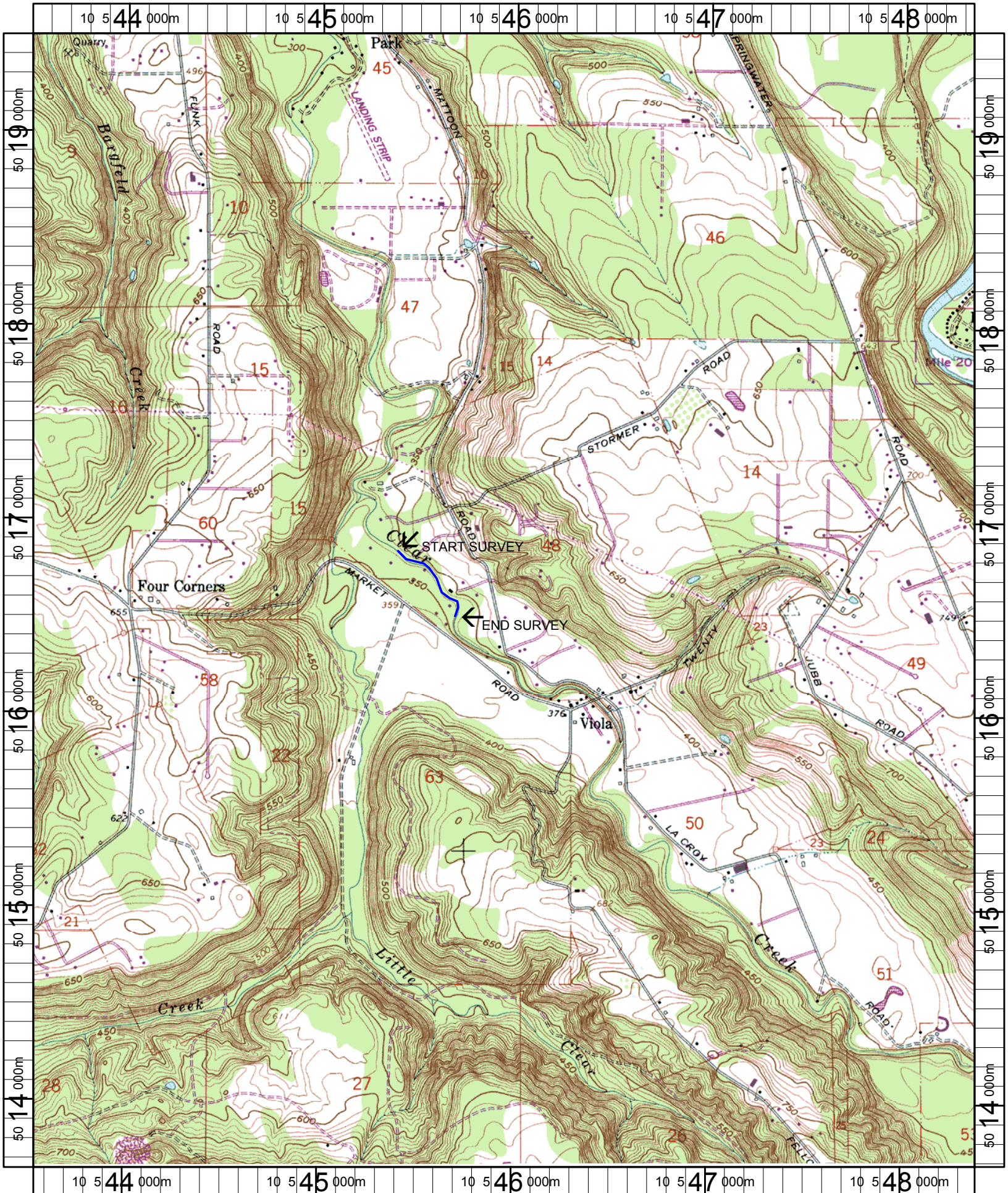
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	7	12.4	13.2
Pools >=1m deep:	5	8.9	9.4
Complex pools (LWD pieces>=3):	3	5.3	5.7
Pool frequency (channel widths/pool):	3.7		
Residual pool depth (avg):	1.23		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 7-L SITE ID: 329 CLEAR CREEK #6 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	79		7.0C AT 1000	
2	LP	01	128	TJ/	CT-CT,C50/D15,RR/LT	
3	CB	11	128		ACW=1.10M	
4	RI	00	151		CT-CT, C50/D15,RR/LT	
5	RI	00	182	LA/		
6	LP	00	243		CT-CT,C50/S,RR/LT	
7	SS	00	243.4		H=0.20M, PIPE CROSSING	
12	LP	00	456.4		CT-CT,M30/S,RR/LT	
16	RI	01	529.9		CT-CT,M30/S,RR/LT	



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

Location: 10 545944 E 5016593 N
 Caption: CLEAR CREEK #6 RESTORATION SITE - CLACKAMAS BASIN