

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

STREAM: Clear Creek #5 (L-328)
BASIN: Clackamas River
SURVEY TYPE: Pre-Tx
DATE: March 12, 2007
SURVEY CREW: Matt Strickland, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 99.1 km²
USGS MAPS: Redland
ECOREGION: Willamette Valley Plains

GENERAL DESCRIPTION:

The Clear Creek habitat survey extended 930 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.3 (range: 6.0-8.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (38%), riffles (32%) and rapids (29%) dominated stream habitat. Cobble (33%) and gravel (26%) dominated stream substrate. Wood volume was very low at 4.7 m³/100m.

COMMENTS:

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

REACH 1

T03S-R03E-S36NE

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	7.3	VWI Range:	6 - 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	930	12,025	0
Secondary Channel	0	0	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 4	<u>First Terrace</u> n = 4
Width: 13.2	Width: 14.2	15.9 (10.3 - 19.3)	17.5 (11.6 - 22.3)
Depth: 0.90	Height: 0.8	1.7 (1.4 - 1.8)	3.9 (2 - 5.4)

W:D ratio: 17.2
 Stream Flow Type: HF
 Average Unit Gradient: 1.3%
 Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 1.1
 Habitat Units/100m (total channel length): 2.6
 Habitat Units/100m (primary channel length): 2.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	YT
Riparian Vegetation:	D3	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):	78	8.4
Volume (m ³):	43	4.7
Key pieces (>=12m x 0.60m):	0	0.0

HABITAT INVENTORY

Report Date: 5/9/2007

Survey Date:

3/12/2007

REACH 1		T03S-R03E-S36NE					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-LATERAL SCOUR	9	340	13.3	1.27	4,540	0	1	10	30	32	15	12
RAPID/BOULDERS	7	287	12.5	0.79	3,584	0	0	7	20	37	26	10
RIFFLE	6	296	12.9	0.68	3,795	0	0	11	30	36	14	9
STEP/BEDROCK	1	3	14.9	0.35	43	0	0	0	0	0	0	100
STEP/STRUCTURE	1	3	18.2	0.20	62	0	0	5	30	35	30	0
Total:	24	930	13.2	0.90	12,025	0	Avg: 0	9	26	33	18	14

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	9	340	13.3	1.27	4,540	37.76%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	6	296	12.9	0.68	3,795	31.56%	0	0.0	
Rapids	7	287	12.5	0.79	3,584	29.81%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	2	6	16.6	0.28	105	0.87%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

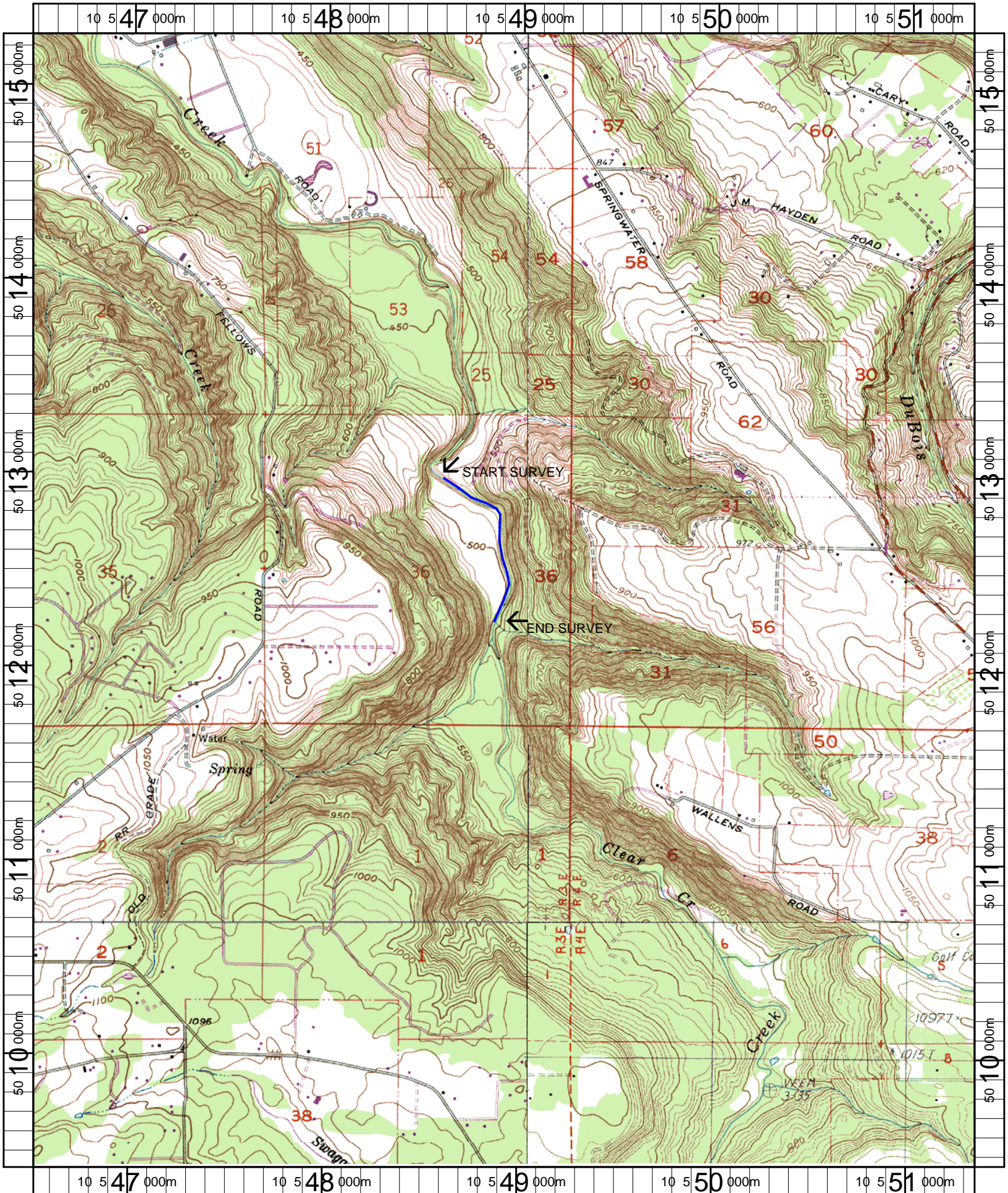
POOL SUMMARY					
	Total	Total of all Channel Lengths		Primary Channel Length	
		# / Km	# / Km	# / Km	# / Km
All Pools:	9	9.7	9.7	9.7	9.7
Pools >=1m deep:	9	9.7	9.7	9.7	9.7
Complex pools (LWD pieces>=3):	6	6.5	6.5	6.5	6.5
Pool frequency (channel widths/pool):	7.3				
Residual pool depth (avg):	0.58				

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 7-L SITE ID: 328 CLEAR CREEK #5 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
3	SS	00	99.9	RF	FARM ROAD CROSSING.
8	RI	00	308.6	SS/	
15	LP	00	612.1	SS/	



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

Location: 10 548914 E 5012357 N
 Caption: CLEAR CREEK #5 RESTORATION SITE - CLACKAMAS BASIN