

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

STREAM: Clear Creek#3 (L-254)
BASIN: Clackamas River
SURVEY TYPE: Post-Tx
DATE: March 7, 2006
SURVEY CREW: Brian 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 481 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 3.9 (range: 2.6-5.0). Land use for the reach was large (30-50 cm dbh) trees and rural residential. The average unit gradient was 0.4 percent. Scour pools (66%) and riffles (29%) dominated stream habitat. Silt (34%) and sand (27%) dominated stream substrate. Wood volume was very high at 49.0 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

T02S-R03E-S56NE

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	3.9	VWI Range:	2.6 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	481	8,297	0
Secondary Channel	204	1,260	1
Off-Channel Units	253	1,503	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u>	<i>n = 5</i>	<u>First Terrace</u>	<i>n = 0</i>
Width: 9.5	Width: 31.8	110.0	(100 - 150)	(-)	
Depth: 0.83	Height: 1.3	2.6	(2 - 3.1)	(-)	

W:D ratio: 25.7
 Stream Flow Type: MF
 Average Unit Gradient: 0.4%
 Water temperature (°C): 9.0 - 9.0

Entrenchment (ACW:FPW ratio): 3.6
 Habitat Units/100m (total channel length): 2.6
 Habitat Units/100m (primary channel length): 5.0

Riparian, Bank, and Wood Summary

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

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):	129	26.8
Volume (m ³):	236	49.0
Key pieces (>=12m x 0.60m):	23	4.8

HABITAT INVENTORY

Report Date: 1/24/2007

Survey Date:

3/7/2006

REACH 1		T02S-R03E-S56NE					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
DRY CHANNEL	1	42	3.0	0.00	126	0	20	70	7	3	0	0
POOL-BACKWATER	3	52	6.6	0.87	332	0	42	53	5	0	0	0
POOL-ISOLATED	3	44	3.7	0.87	175	0	77	23	0	0	0	0
POOL-LATERAL SCOUR	8	534	13.9	1.52	7,244	0	24	13	42	20	1	1
RAPID/BOULDERS	1	17	1.7	0.10	29	0	5	5	45	45	0	0
RIFFLE	7	248	11.3	0.36	3,153	0	27	5	28	39	1	0
STEP/LOG	1	0	3.8	0.01	1	0	50	0	50	0	0	0
Total:	24	938	9.5	0.83	11,060	0	Avg: 34	18	27	20	0	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	6	96	5.1	0.87	507	4.58%	0	0.0
Scour Pools	8	534	13.9	1.52	7,244	65.50%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	7	248	11.3	0.36	3,153	28.51%	0	0.0
Rapids	1	17	1.7	0.10	29	0.26%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	0	3.8	0.01	1	0.01%	0	0.0
Dry	1	42	3.0	0.00	126	1.14%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

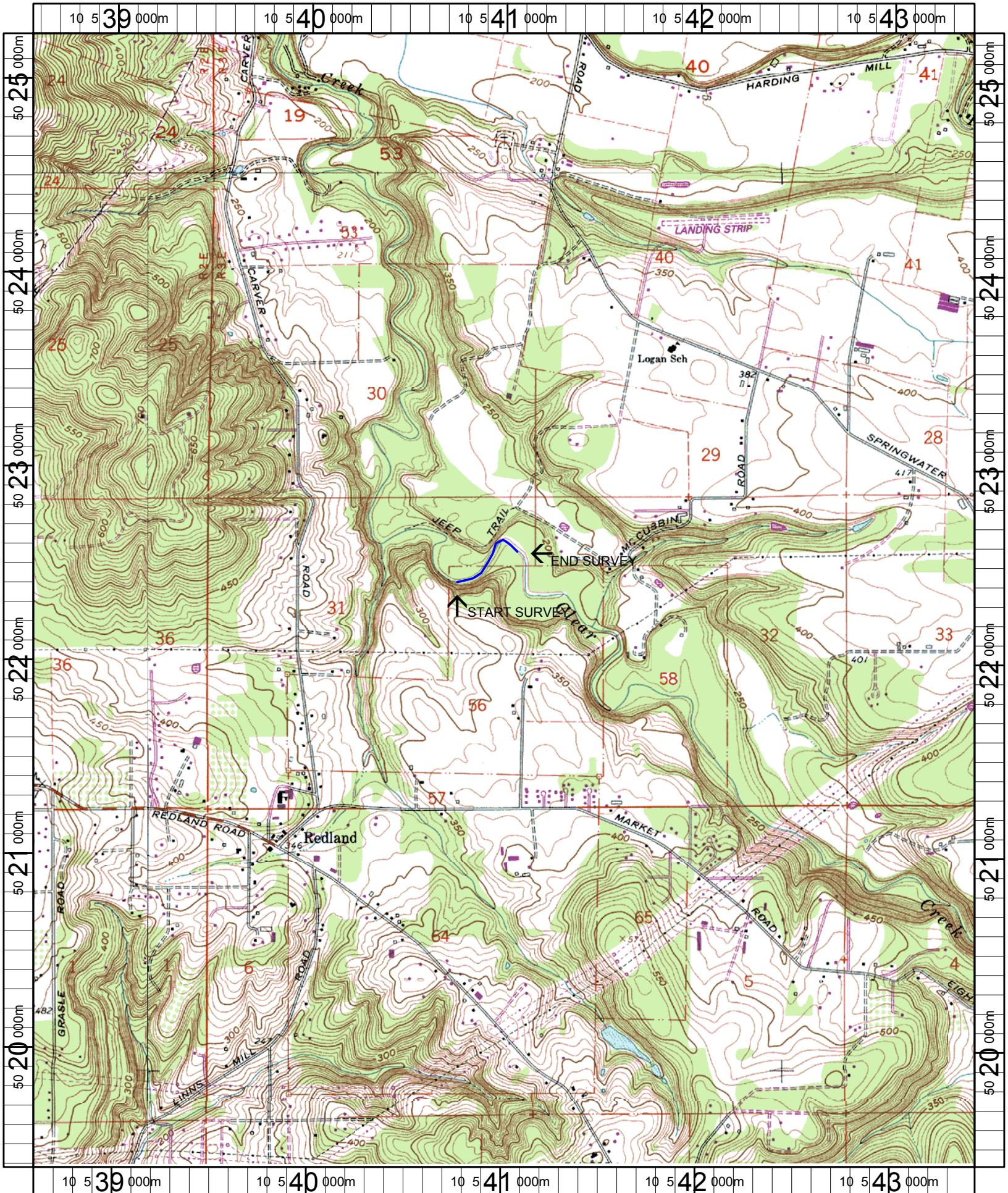
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	14	14.9	29.1
Pools >=1m deep:	9	9.6	18.7
Complex pools (LWD pieces>=3):	8	8.5	16.6
Pool frequency (channel widths/pool):	2.1		
Residual pool depth (avg):	1.03		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 7-L SITE ID: 254 CLEAR CREEK #3 POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	01	85		US-MT,D30,G	
6	BW	10	176.2		US-MT,D30,G	
10	RI	00	278.2		US-MT,D30,S	
16	LP	01	481.2		US-BC,M30,S	
17	LP	02	481.2	7 HS, SS/		
18	DC	02	481.2	TJ		
19	SL	11	481.2		H=0.30M, TRIB ENTERS AT 130M	
23	RB	11	481.2	RF	SUBSTRATE IS FROM ROAD	
24	RI	10	481.2		US-MT,D30,G	



Name: REDLAND
 Date: 6/9/2005
 Scale: 1 inch equals 2000 feet

Location: 10 541000 E 5022323 N
 Caption: CLEAR CREEK #3 (METRO#1) RESTORATION SITE -
 CLACKAMAS BASIN