

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

STREAM: Clear Creek #7 (L-360)
BASIN: Clackamas River
SURVEY TYPE: Pre-Tx
DATE: March 13, 2007
SURVEY CREW: Matt Strickland, Ryan Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 81.1 km²
USGS MAPS: Elwood
ECOREGION: Willamette Valley Plains

GENERAL DESCRIPTION:

The Clear Creek habitat survey extended 1,027 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 16.0 (range: 10.0-20.0). Land use for the reach was greenway as it located at Metzler Park. The average unit gradient was 2.8 percent. Riffles (57%) dominated stream habitat. Cobble (37%) and gravel (32%) dominated stream substrate. Wood volume was very low at 2.2 m³/100m.

COMMENTS:

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

REACH 1

T04S-R04E-S07SW

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	16.0	VWI Range:	10 - 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	1,027	16,070	0
Secondary Channel	10	50	0
Off-Channel Units	57	184	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 13.0	Width: 19.0	24.1 (15.5 - 32)	28.3 (16.4 - 35.6)
Depth: 0.72	Height: 1.2	2.5 (1.2 - 3.6)	3.8 (2.3 - 4.3)

W:D ratio: 17.4
 Stream Flow Type: MF
 Average Unit Gradient: 2.8%
 Water temperature (°C): 9.0 - 9.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 2.9
 Habitat Units/100m (primary channel length): 3.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	GN
Riparian Vegetation:	C30	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):	109	10.6
Volume (m ³):	22	2.2
Key pieces (>=12m x 0.60m):	0	0.0

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

3/13/2007

REACH 1		T04S-R04E-S07SW					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	9	2.3	0.10	21	0	0	5	10	0	0	85
POOL-BACKWATER	2	23	2.7	0.40	54	0	63	25	13	0	0	0
POOL-LATERAL SCOUR	8	269	11.5	1.34	3,314	0	7	13	33	37	5	6
RAPID/BOULDERS	6	204	14.4	0.51	3,356	0	0	10	33	39	18	0
RIFFLE	13	572	15.0	0.58	9,277	0	0	7	34	43	15	1
STEP/BOULDERS	1	10	15.0	0.50	150	0	0	10	20	50	20	0
STEP/STRUCTURE	1	7	19.0	0.40	133	0	0	10	50	30	10	0
Total:	32	1,094	13.0	0.72	16,304	0	Avg: 6	10	32	37	12	4

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	23	2.7	0.40	54	0.33%	0	0.0	
Scour Pools	8	269	11.5	1.34	3,314	20.32%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	13	572	15.0	0.58	9,277	56.90%	0	0.0	
Rapids	6	204	14.4	0.51	3,356	20.58%	0	0.0	
Cascades	1	9	2.3	0.10	21	0.13%	0	0.0	
Step/Falls	2	17	17.0	0.45	283	1.74%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

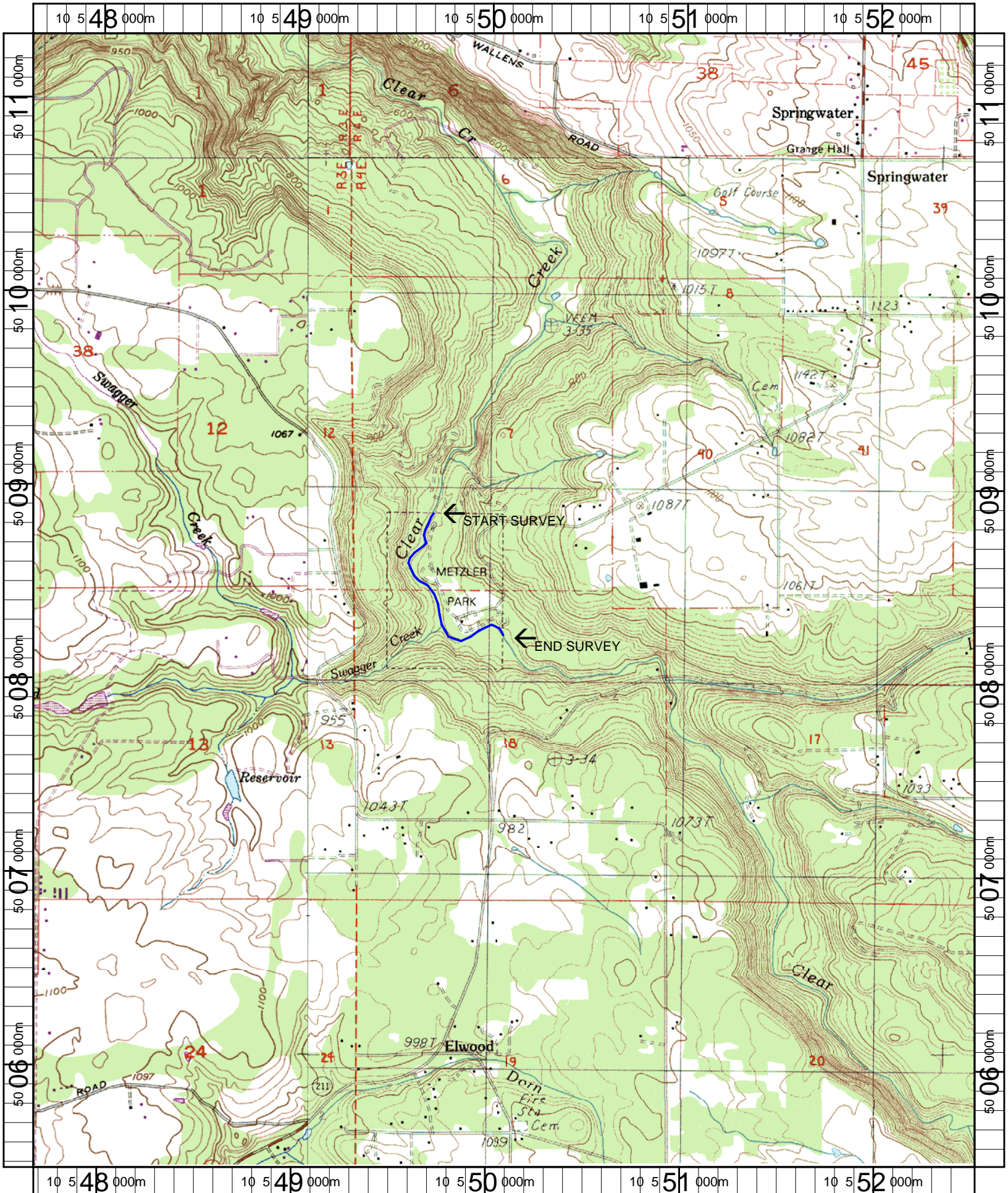
POOL SUMMARY			
	Total	Total of all Channel Lengths	
		# / Km	Primary Channel Length # / Km
All Pools:	10	9.1	9.7
Pools >=1m deep:	8	7.3	7.8
Complex pools (LWD pieces>=3):	2	1.8	1.9
Pool frequency (channel widths/pool):	5.8		
Residual pool depth (avg):	0.88		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 7-L SITE ID: 360 CLEAR CREEK #7 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
7	RI	00	211.4	SS/	
10	CB	00	330.4		ACW=3.0 TEMPERATURE=10.0
16	RI	00	589.9		
17	SS	00	596.9		OLD CONCRETE FISH WEIR.
18	RI	00	646.9	BC	
20	RI	11	696.9		ACW=7.0, TEMP=10.0
27	RB	11	878.9		ACW=2.7, TEMP=10.0



Name: ELWOOD
 Date: 1/3/2007
 Scale: 1 inch equals 2000 feet

Location: 10 550075 E 5008417 N
 Caption: CLEAR CREEK #7 RESTORATION SITE - CLACKAMAS BASIN