

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

STREAM: Clear Creek #1 (L-230)
BASIN: Clackamas River
SURVEY TYPE: Pre-Tx
DATE: March 17, 2004
SURVEY CREW: Jim Andrews, April Waters
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 185.0 km²
USGS MAPS: Estacada
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Clear Creek habitat survey extended 1,034 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.5 (range: 5.2-11.6). Land use for the reach was mature (50-90 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.8 percent. Riffles (61%) and scour pools (37%) dominated stream habitat. Gravel (28%) and cobble (27%) dominated stream substrate. Wood volume was moderate at 26.4 m³/100m.

COMMENTS:

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

REACH 1

T04S-R04E-S06NW

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	7.5	VWI Range:	5.2 - 11.6

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	1,034	14,611	0
Secondary	92	349	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 12.0	Width: 17.3	21.7 (14.5 - 27.1)	23.3 (15.6 - 28.5)
Depth: 0.69	Height: 0.5	1.1 (1 - 1.2)	1.4 (1.25 - 1.55)

W:D ratio: 33.1
Stream Flow Type: MF
Average Unit Gradient: 1.8%
Water temperature (°C): 8.2 - 8.2

Entrenchment (ACW:FPW ratio): 1.3
Habitat Units/100m (total channel length): 2.7
Habitat Units/100m (primary channel length): 2.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	LT
Riparian Vegetation:	C30	D15

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):	193	18.7
Volume (m ³):	273	26.4
Key pieces (>=12m x 0.60m):	11	1.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

CLEAR CREEK #1 PRE-TX (L-230)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/17/2004

REACH 1		T04S-R04E-S06NW					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	50	3.0	0.60	149	0	86	10	5	0	0	0	
POOL-BACKWATER	3	35	5.5	0.87	189	0	9	26	24	28	8	5	
POOL-LATERAL SCOUR	10	417	13.2	1.20	5,519	0	8	20	22	22	13	16	
RIFFLE	13	514	13.6	0.34	7,469	0	0	4	38	34	15	10	
RIFFLE W/ POCKETS	2	108	15.0	0.45	1,633	0	3	5	18	31	36	8	
STEP/BEDROCK	1	3	0.6	0.10	2	0	0	5	0	0	0	95	
Total:	30	1,126	12.0	0.69	14,960	0	Avg: 7	12	28	27	14	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	4	84	4.9	0.80	337	2.26%	0	0.0	
Scour Pools	10	417	13.2	1.20	5,519	36.89%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	15	622	13.8	0.35	9,102	60.84%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	3	0.6	0.10	2	0.01%	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	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	14	12.4	13.5
Pools >=1m deep:	6	5.3	5.8
Complex pools (LWD pieces>=3):	10	8.9	9.7
Pool frequency (channel widths/pool):	4.7		
Residual pool depth (avg):	0.92		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 230 CLEAR CREEK #1 PRE-TX (L-230)

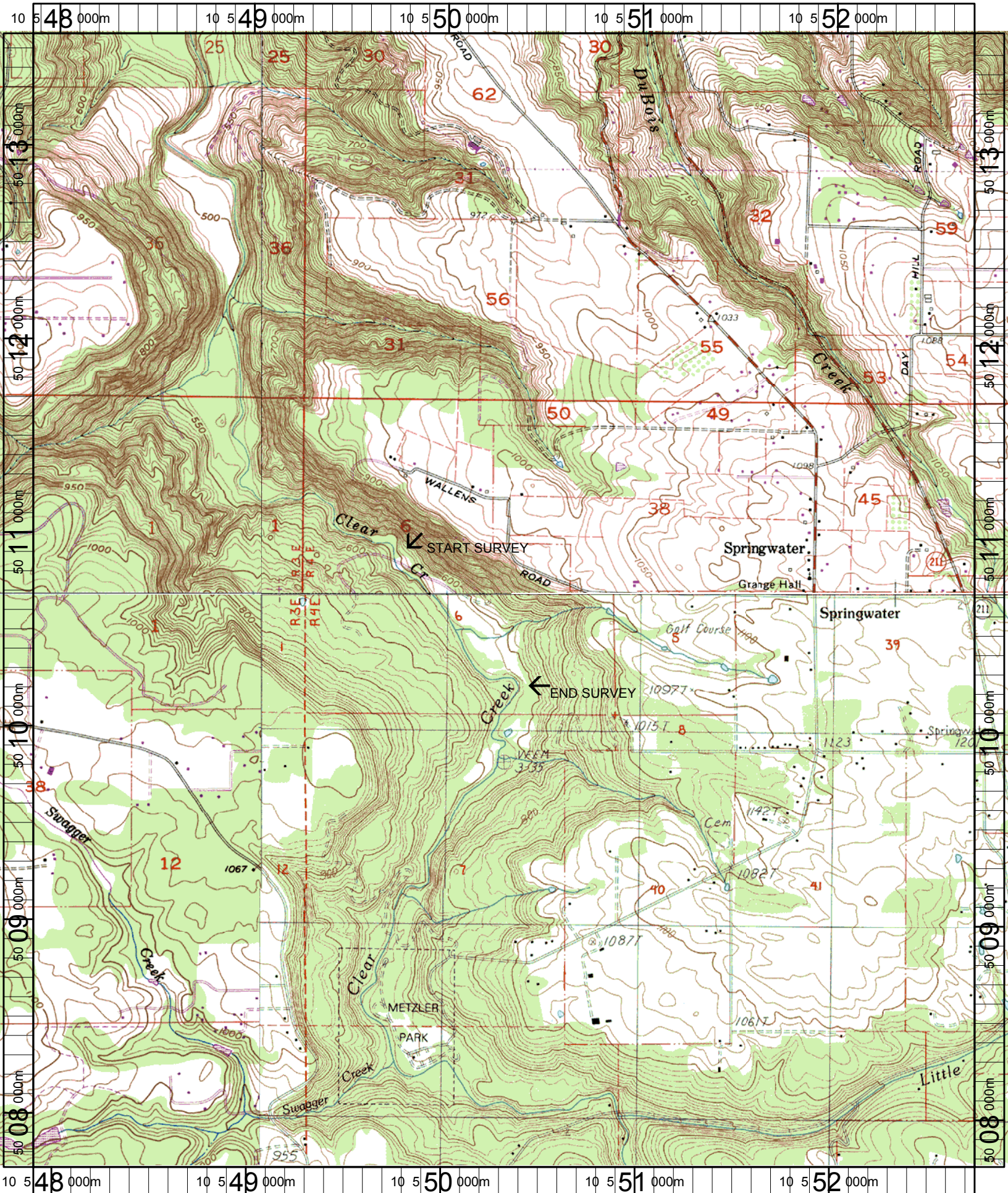
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	39.4	CS BC -/SS	T=8.2C; SG=21Msq@PTC	
2	LP	01	91.7	/LA -/SS	DJ; SG=24Msq@PTC; WW	
3	SR	11	91.7		3% FLOW TRIB UNIT	
5	LP	00	184.7	2-SS/		
6	RI	00	213.9	WL SS/		
7	LP	00	263	1% HP	HP=HARDPAN	
8	RI	00	319.2	/SS	METRIC @ START OF U	
9	LP	00	372.7	BV 2-SS.	2 CH REDDS; SG=16Msq	
10	RI	00	423.7	SS/		
12	RI	00	510.2	2-/SS	METRIC @UPTSTREAM E	
13	RI	01	565.5	BV TJ/		
15	LP	00	597.62	DJ		
16	RP	00	654.32	BV /SS	POCKETS ~0.6M	
17	RI	00	692.52	BV /SS		
18	RP	01	743.52	WL	SOME POCKETS IN CHAN	
19	RI	01	778.32	DJ BV AL/		
21	LP	00	813.72	BV /SS /LS	3% HP	
22	LP	01	864.72	3-/SS	METRIC @ START OF U#	
23	BW	10	864.72	DJ	@ HEAD	
26	LP	00	930.52	SS/		
27	LP	00	963.22	DJ SS/ BV	SEEP ALONG LEFT SIDE	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 230 CLEAR CREEK #1 PRE-TX (L-230)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
30	RI	00	1034.12	SS/	END T=10C @ 14:56	



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

Location: 10 550300 E 5010671 N
 Caption: CLEAR CREEK #1 RESTORATION SITE - CLACKAMAS BASIN