

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

STREAM: Clatskanie River (L-215)
BASIN: Clatskanie River
SURVEY TYPE: Pre-Tx
DATE: March 15, 2004
SURVEY CREW: Jim Andrews, April Waters
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 397.0 km²
USGS MAPS: Baker Point
ECOREGION: Coast Range Astoria Willapa

GENERAL DESCRIPTION:

The Clatskanie River habitat survey extended 1,024 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.0 (range: 1.3-4.6). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.5 percent. Scour pools (42%) and riffles (23%) dominated stream habitat. Gravel (40%) and cobble (19%) dominated stream substrate. Wood volume was low at 11.7 m³/100m.

COMMENTS:

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

REACH 1

T06N-R03W-S22NE

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	3.0	VWI Range:	1.3 - 4.6

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	1,024	8,239	0
Secondary	564	1,372	10

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 5.6	Width: 10.9	14.1 (7.6 - 16.4)	15.2 (9.3 - 20.1)
Depth: 0.48	Height: 0.5	1.1 (0.8 - 1.6)	1.9 (1 - 2.8)

W:D ratio: 22.5
Stream Flow Type: MF
Avg. Unit Gradient: 1.5%

Entrenchment (ACW:FPW ratio): 1.3
Water temp (°C): 10.0 - 10.0
Habitat Units/100m: 6.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D15	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</u>
All pieces (>=3m x 0.15m):	165	16.1
Volume (m ³):	119	11.7
Key pieces (>=10m x 0.60m):	5	0.5

OREGON DEPARTMENT OF FISH AND WILDLIFE

CLATSKANIE RIVER PRE-TX (L-215)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/15/2004

REACH 1

T06N-R03W-S22NE

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/BEDROCK	3	66	6.2	0.28	515	0	0	5	5	5	12	73
CASCADE/BOULDERS	1	4	1.2	0.10	5	0	0	5	45	50	0	0
CULVERT CROSSING	1	20	6.0	0.50	120	0	0	5	29	38	29	0
DRY CHANNEL	1	9	3.0	0.00	27	0	20	40	40	0	0	0
DRY UNIT	5	53	3.0	0.00	147	0	10	12	63	14	1	0
POOL-ALCOVE	1	4	2.0	0.20	8	0	30	10	60	0	0	0
POOL-BACKWATER	3	11	1.7	0.42	20	0	26	24	42	8	0	0
POOL-DAMMED	2	32	3.5	0.98	136	0	13	13	60	13	3	0
POOL-LATERAL SCOUR	32	600	5.5	0.77	3,724	0	13	10	44	18	4	11
POOL-PLUNGE	2	43	7.4	2.50	303	0	3	5	20	5	5	63
PUDDLED UNIT	4	82	1.1	0.04	76	0	34	21	29	15	1	0
RAPID/BEDROCK	3	47	8.2	0.32	401	0	0	0	3	3	3	90
RAPID/BOULDERS	6	171	7.8	0.35	1,363	0	1	4	29	40	24	2
RIFFLE	19	368	5.1	0.32	2,060	0	8	8	46	19	5	14
RIFFLE W/ POCKETS	1	18	10.0	0.25	181	0	0	5	42	42	11	0
STEP/BEDROCK	2	4	8.3	0.16	33	0	0	0	0	0	3	98
STEP/BOULDERS	2	18	9.0	0.23	168	0	0	3	18	36	44	0
STEP/COBBLE	6	34	7.0	0.14	232	0	4	2	51	36	6	0
STEP/LOG	1	2	6.5	0.02	13	0	30	30	40	0	0	0
STEP/STRUCTURE	1	4	20.0	0.10	80	0	0	0	0	0	0	100
Total:	96	1,588	5.6	0.48	9,611	0	Avg: 10	9	40	19	6	16

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	47	2.3	0.57	164	1.71%	0	0.0
Scour Pools	34	642	5.6	0.87	4,027	41.90%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	20	386	5.3	0.32	2,241	23.32%	0	0.0
Rapids	9	217	7.9	0.34	1,764	18.35%	0	0.0
Cascades	4	70	4.9	0.23	520	5.41%	0	0.0
Step/Falls	12	62	8.6	0.14	526	5.47%	0	0.0
Dry	10	143	2.2	0.02	250	2.60%	0	0.0
Culverts	1	20	6.0	0.50	120	1.25%	0	0.0

REACH 1

T06N-R03W-S22NE

REACH 1

POOL SUMMARY

	<u>Total</u>	<u># / Km</u>	
All Pools:	40	25.2	564
Pools >=1m deep:	13	8.2	
Complex pools (LWD pieces>=3):	12	7.6	
Pool frequency (channel widths/pool):	3.6		
Residual pool depth (avg):	0.63		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 215 CLATSKANIE RIVER PRE-TX (L-215)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	SC	01	19.6		H=.2M	
6	LP	01	108.5		OLD END SIGN FOR 500M	
7	SC	02	108.5		H=.35M	
9	RB	02	108.5	2-SS/		
13	SB	00	118.5		H=.45M	
17	CR	01	224	LI/, SS/		
18	BW	10	224	DJ	JUV SALMONID	
20	SB	01	253.3		H=.35M	
22	LP	01	280	/SS		
28	SL	02	280	DJ		
31	RB	00	310	SS/	U34, YELLOW FLAGGING	
32	LP	00	339.5		"ODFW AQU START TA"	
34	LP	00	402	DJ, SS/		
36	LP	00	437.8	SS/, LI/		
38	SR	00	453.9		H=.35M	
39	RR	01	472.4	TJ/		
40	CR	11	472.4		ACW=2.2M, T=10C	
41	RI	00	490.7	SS/	RED FLAGGING, TX SITE	
42	LP	01	533.4	TJ/	RED FLAGGING, TX SITE	
43	CB	11	533.4		ACW=1.4M, T=8C	
44	CR	01	555.4		TX SITE, RED FLAGGING	

Comment Summary

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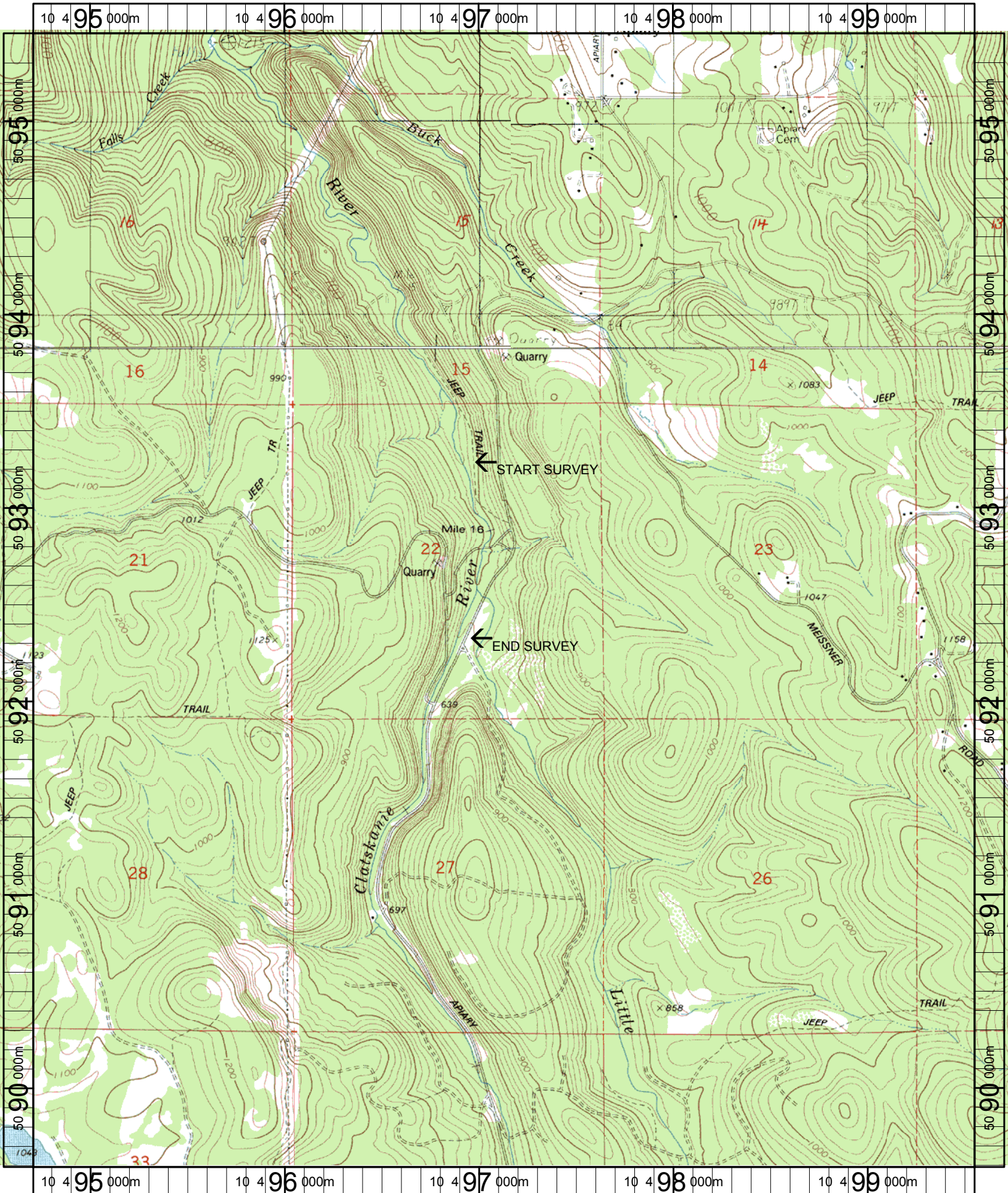
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
46	SS	00	559.4	DJ, BC	H=.9M, CAUSES SL/DJ	
47	DP	00	583.4	DJ		
48	LP	01	611.4	/TJ, BV		
49	RI	11	611.4		ACW=2.0M, T=11.5C	
51	LP	01	634.6		SG=4M, 3M TAILOUT	
52	LP	01	667.6	BV	SG=4M, OLD END SIGN	
55	LP	02	684.5	WL	AMPH EGG MASS	
56	RI	02	684.5	/SS		
58	RI	01	716.5	BV		
59	LP	01	736.5		4M OF TAILOUT	
61	LP	03	736.5	WL	AMPH EGG MASS	
63	DC	03	736.5		WATER FLOWING UNDE	
64	PP	01	755		HP	
65	SR	01	757		HP, H=.6M	
66	RR	01	769.2		HP	
67	LP	01	781.8	DJ		
80	RI	01	798.8		HP	
81	LP	01	814.3	SS/		
82	SC	01	818.3		H=.4M	
83	LP	01	837.1	TJ/	LITTLE CLATSKANIE R.	
84	CC	11	837.1	CC	ACW=6.1M, T=10C	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L SITE ID: 215 CLATSKANIE RIVER PRE-TX (L-215)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
96	PP	00	1024	/SS	EOS, T=10C/1636	



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

Location: 10 497124 E 5092526 N
 Caption: CLATSKANIE RIVER RESTORATION SITE - CLATSKANIE BASIN