

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

STREAM: Sugarbowl Creek (MC-223)
BASIN: Yaquina River
SURVEY TYPE: Pre-Tx
DATE: February 17, 2004
SURVEY CREW: April Waters, Jim Andrews
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 7.3 km²
USGS MAPS: Marys Peak
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Sugarbowl Creek habitat survey extended 1,444 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 13.7 (range: 1.0-26.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.8 percent. Riffles (47%) and scour pools (40%) dominated stream habitat. Gravel (55%) and sand (23%) dominated stream substrate. Wood volume was very low at 1.3 m³/100m.

COMMENTS:

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

REACH 1

T12S-R08W-S14NE

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	13.7	VWI Range:	1 - 26

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	1,444	3,755	0
Secondary	36	35	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 8
Width: 2.7	Width: 3.4	9.1 (2.8 - 24)	13.4 (3.6 - 33)
Depth: 0.51	Height: 0.5	0.9 (0.7 - 1.2)	1.4 (0.9 - 3.4)

W:D ratio: 7.6 Entrenchment (ACW:FPW ratio): 2.6
Stream Flow Type: MF Water temp (°C): 8.5 - 8.5
Avg. Unit Gradient: 1.8% Habitat Units/100m: 7.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
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):	59	4.1
Volume (m ³):	18	1.3
Key pieces (>=10m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

SUGARBOWL CREEK PRE-TX (MC-223)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/17/2004

REACH 1

T12S-R08W-S14NE

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	2	22	1.4	0.24	44	0	6	10	13	3	3	68
CASCADE/BOULDERS	4	49	3.0	0.39	143	0	2	8	33	16	15	26
POOL-BACKWATER	1	4	1.2	0.40	5	0	70	25	5	0	0	0
POOL-LATERAL SCOUR	42	516	3.1	0.75	1,475	0	10	29	57	3	1	1
POOL-PLUNGE	2	13	4.3	0.60	54	0	6	20	66	3	3	3
RAPID/BEDROCK	1	6	4.0	0.01	24	0	0	0	0	0	0	100
RAPID/BOULDERS	7	110	2.1	0.25	231	0	2	10	57	24	7	0
RIFFLE	41	748	2.4	0.40	1,779	0	10	24	65	1	0	0
STEP/BEDROCK	4	9	1.9	0.07	19	0	0	0	0	0	0	100
STEP/COBBLE	1	5	4.0	0.25	18	0	2	8	75	15	0	0
Total:	105	1,480	2.7	0.51	3,791	0	Avg: 9	23	55	4	1	8

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	1	4	1.2	0.40	5	0.13%	0	0.0
Scour Pools	44	528	3.2	0.74	1,528	40.32%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	41	748	2.4	0.40	1,779	46.92%	0	0.0
Rapids	8	116	2.3	0.22	255	6.72%	0	0.0
Cascades	6	70	2.4	0.34	187	4.94%	0	0.0
Step/Falls	5	13	2.3	0.10	37	0.97%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km	
All Pools:	45	30.4	36
Pools >=1m deep:	1	0.7	
Complex pools (LWD pieces>=3):	2	1.4	
Pool frequency (channel widths/pool):	9.7		
Residual pool depth (avg):	0.46		

STREAM SUMMARY

SUGARBOWL CREEK PRE-TX (MC-223)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
105	1,480	2.7	0.51	3,791	9	23	55	4	1	8	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	5	0.13%
Scour Pools	1,528	40.32%
Glides	0	0.00%
Riffles	1,779	46.92%
Rapids	255	6.72%
Cascades	187	4.94%
Step/Falls	37	0.97%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **223** SUGARBOWL CREEK PRE-TX (MC-2)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	22		START TJ/, SIGN ALDER	
2	RI	00	33.5	WL	ELK TRAIL	
5	RI	00	96.7	WL	ELK TRAIL	
6	LP	00	109.7	BV		
8	LP	00	138.7	WL	NEWT	
10	RI	00	162.3	/SS		
12	RI	00	195.9	WL		
14	LP	01	227.9	/TJ		
16	RI	11	227.9		ACW=1.25M, T=8C	
18	LP	00	245.2	WL	NEWT	
23	RI	00	302.7	WL	DEER SIGN	
24	LP	00	332.2		COHO CARCASS	
26	LP	00	363.6	WL	NEWT	
30	RI	00	429.4	WL	NEWT	
32	RI	00	477.7	DJ	COHO CARCASS	
34	PP	00	494.2	SS/		
35	SR	00	496.2		H=.7M, HARDPAN	
37	LP	00	541.3	BV	T=8.8C,	
41	LP	00	602.2		FLAGGING (SITE #2)	
42	LP	01	608.2	/TJ		
43	CR	11	608.2		ACW=.4M, HARDPAN	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **223** SUGARBOWL CREEK PRE-TX (MC-2)

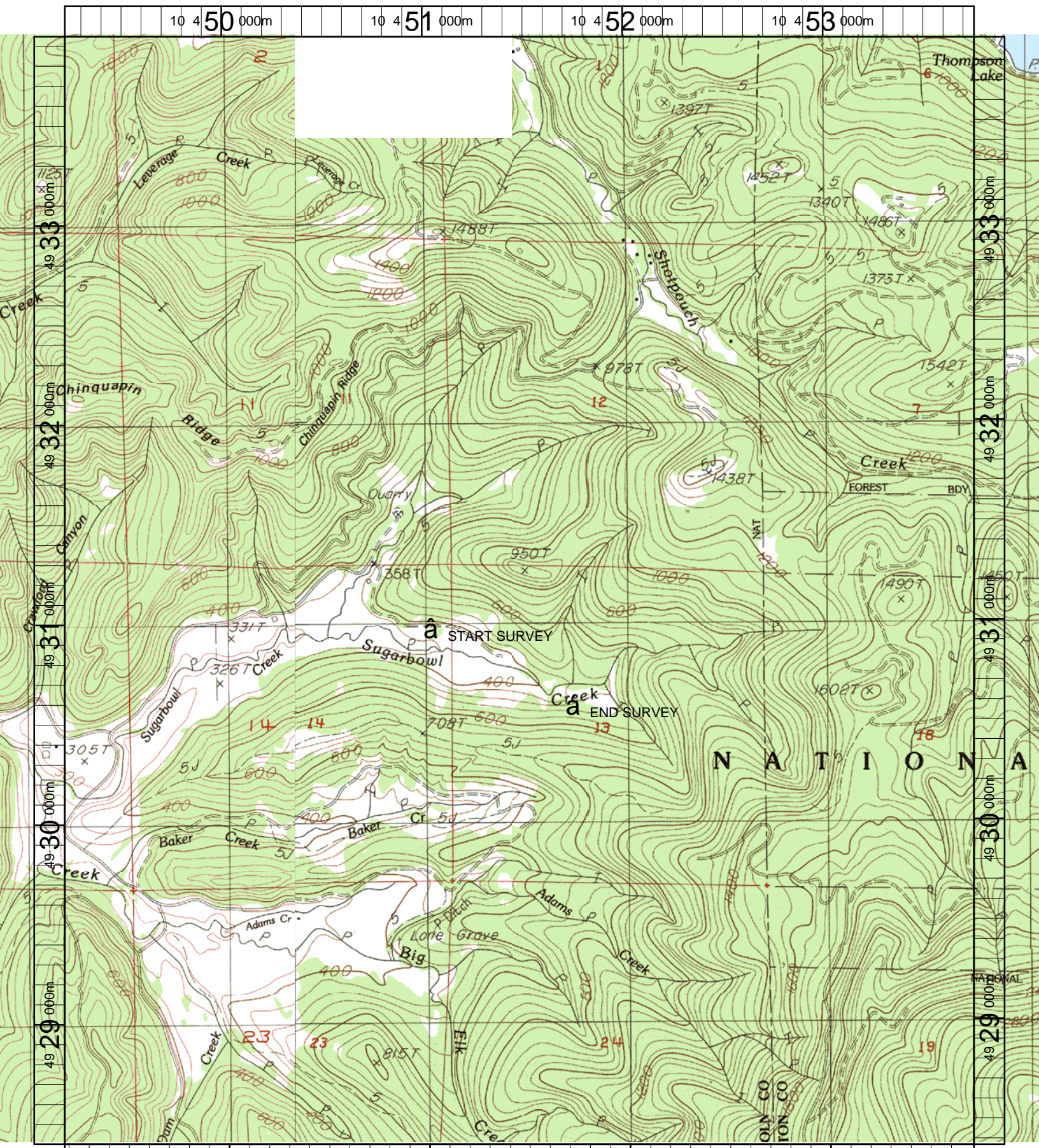
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
45	LP	00	642.1	/SS		
46	RI	00	669.9		SG=4M	
48	RI	00	700.9		SG=4M	
49	LP	00	710.5	SS/		
53	RI	00	804.4		.8M DEEP POCKET	
54	RI	00	823.6	WL	SG=2M, GAME TRAIL	
55	LP	00	832.6		FISH CARCASS-SALMON	
58	RI	00	878	SS/		
59	RI	00	903.2		SALMON BONES	
60	RI	00	918.7		SG=4M	
63	RI	00	963.6		SG=6M	
64	LP	01	976.6	/TJ		
65	SR	11	976.6		H=.6M, T=8.8C	
66	RI	00	996.4		SG=4M	
68	LP	00	1020.6		FLAGGING GPS 179	
73	LP	00	1071.2		SG=4M, FISH BONES	
74	LP	00	1079.5		HARDPAN	
75	RI	00	1099.9	WL	GAME TRAIL	
76	RI	00	1129.7	DJ		
81	LP	01	1174	LA/, /TJ		
82	RB	11	1174		ACW=1.4M, T=8.5C	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **223** SUGARBOWL CREEK PRE-TX (MC-2)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
85	LP	00	1221		2	STHD
87	CB	00	1264.6	DJ		
90	RB	01	1313.8	TJ/		
91	RB	11	1313.8		ACW=.9M, T=9.5C	
95	RR	00	1348.4	/SS		
96	SR	00	1350.4	PN	H=.9M, PICT #31	
99	SR	00	1370.8		H=1.3M	
100	CR	00	1387.8	DJ		
103	CB	00	1412.8	DJ		
104	RI	00	1436.8	/SS		
105	LP	00	1443.8		EOS, T=9C, END SIGN /AL	



Name: MARYS PEAK
Date: 1/21/2004
Scale: 1 inch equals 2000 feet

Location: 10 451462 E 4931162 N
Caption: SUGARBOWL CREEK RESTORATION SITE - YAQUINA BASIN