

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

STREAM: Sugarbowl Creek (MC-223)  
BASIN: Yaquina River  
SURVEY TYPE: Post-Tx  
DATE: January 18, 2005  
SURVEY CREW: Jeremy Romer, Brian Bangs  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 7.3 km<sup>2</sup>  
USGS MAPS: Marys Peak  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Sugarbowl Creek habitat survey extended 1,349 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 10.0 (range: 1.3-16.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.5 percent. Riffles (55%) and scour pools (37%) dominated stream habitat. Gravel (44%) and sand (31%) dominated stream substrate. Wood volume was very low at 2.6 m<sup>3</sup>/100m.

**COMMENTS:**

There were two potential barriers to upstream fish migration in the surveyed length. These were both high gradient cascades at units 125 and 127, near the end of the survey.

The crew noted several habitat structures during the survey.

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	10.0	VWI Range:	1.3 - 16

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	1,349	2,649	0
Secondary Channel	0	0	0
Off-Channel Units	23	26	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 7	<u>First Terrace</u> n = 1
Width: 2.0	Width: 3.1	16.4 ( 6.7 - 34 )	13.5 ( 13.5 - 13.5 )
Depth: 0.31	Height: 0.6	1.2 ( 0.9 - 1.6 )	1.2 ( 1.2 - 1.2 )

W:D ratio: 5.9                      Entrenchment (ACW:FPW ratio): 6.4  
 Stream Flow Type: MF              Habitat Units/100m (total channel length): 9.6  
 Average Unit Gradient: 2.5%      Habitat Units/100m (primary channel length): 9.8  
 Water temperature (°C): 9.0 - 9.0

**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 primary channel</u>
All pieces (>=3m x 0.15m):	73	5.4
Volume (m <sup>3</sup> ):	35	2.6
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

SUGARBOWL CREEK POST-TX (2-MC, 223)

HABITAT INVENTORY

Report Date: 4/3/2006

Survey Date:

1/18/2005

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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	3	29	1.9	0.07	49	0	0	2	2	0	0	97
POOL-ISOLATED	1	3	2.5	0.10	8	0	50	50	0	0	0	0
POOL-LATERAL SCOUR	47	396	2.3	0.51	849	0	11	44	39	4	1	1
POOL-PLUNGE	10	28	2.2	0.43	68	0	5	42	20	9	11	13
POOL-STRAIGHT SCOUR	5	31	2.4	0.33	73	0	6	36	26	18	4	10
RAPID/BOULDERS	5	60	2.4	0.10	136	0	2	12	34	36	16	0
RIFFLE	50	809	1.7	0.19	1,466	0	3	21	61	10	3	2
STEP/BOULDERS	1	0	1.5	0.05	0	0	0	0	10	0	90	0
STEP/COBBLE	4	14	1.6	0.19	23	0	0	11	66	23	0	0
STEP/LOG	6	3	1.8	0.09	4	0	15	38	32	8	7	0
<b>Total:</b>	132	1,372	2.0	0.31	2,675	0	<b>Avg:</b> 7	31	44	9	4	5

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	1	3	2.5	0.10	8	0.30%	0	0.0	
Scour Pools	62	454	2.3	0.48	989	36.99%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	50	809	1.7	0.19	1,466	54.81%	0	0.0	
Rapids	5	60	2.4	0.10	136	5.07%	0	0.0	
Cascades	3	29	1.9	0.07	49	1.81%	0	0.0	
Step/Falls	11	17	1.7	0.12	27	1.02%	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:	63	45.9	46.7
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	6	4.4	4.4
Pool frequency (channel widths/pool):	6.9		
Residual pool depth (avg):	0.31		

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC**      SITE ID: **223**      **SUGARBOWL CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	26.8		US-MT, G, S	
2	LP	00	32.3	SS\	FISH	
5	LP	00	83.4	BV		
6	RI	00	120.9	SS\, \SS		
7	LP	00	132		FISH	
14	RI	00	224.5	SS/	ADULT COHO CARCASS	
15	LP	00	238.9	/SS		
17	LP	00	258.7	BV		
19	LP	00	273	BV	ADULT COHO CARCASS	
26	RI	00	346.3		ADULT COHO CARCASS	
27	LP	00	350.3	BV	BEAVER DAM	
29	LP	00	366.4		REDD	
33	SL	00	448.85		H = .3	
40	SL	00	486.65		H = .5	
42	RI	00	515.45	/SS	ORANGE+WHITE TAPE = SITE 1	
43	LP	01	540.45	BV		
44	IP	10	540.45		NEWT	
47	SL	00	555.65		H = .15	
48	LP	00	568.95	HS	ORANGE, WHITE FLAG = SITE 2	
49	RI	00	580.95		ADULT COHO CARCASS	
51	LP	00	597.35	/SS		

# Comment Summary

## Restoration Monitoring Sites 2005

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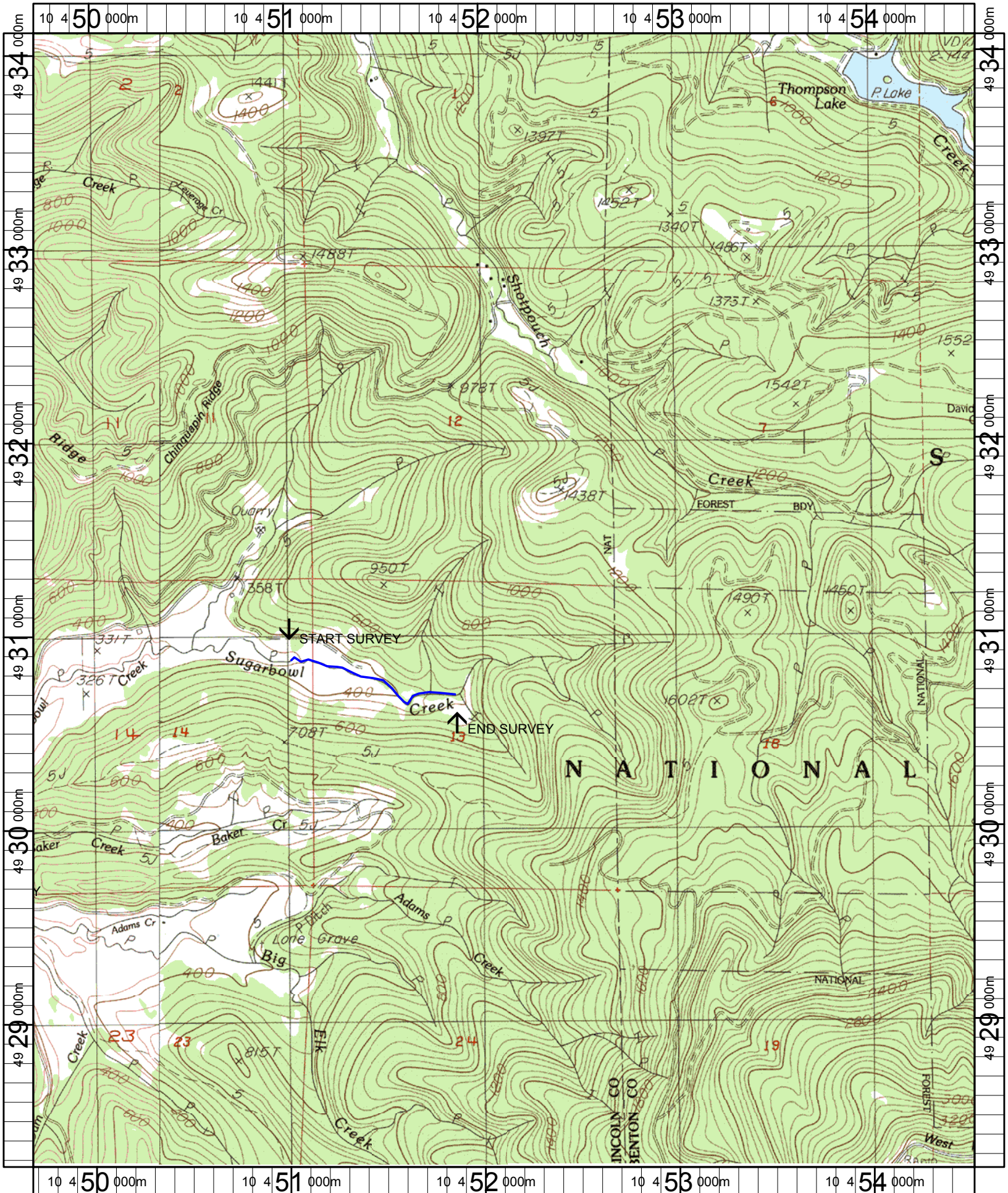
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
52	LP	00	604.85			ADULT COHO CARCASS
53	RI	00	629.95			ADULT COHO CARCASS
54	LP	00	635.55			UNIT=53, ORANGE, WHITE FLAG S3
57	RI	00	658.95			LIVE ADULT COHO AND 2 CARCASS
60	LP	00	682.65			ADULT COHO CARCASS
67	RI	00	761.95			US-MT, S, D15
70	LP	00	779.95	BV		
72	LP	00	802.55	BV		
73	RI	00	818.25			2 ADULT COHO CARCASSES
78	LP	00	872.95	HS		REDDS AND ADULT COHO CARCASS
79	LP	00	885.45			HS CONT
81	LP	00	915.65	/SS		LIVE ADULT COHO
85	LP	00	968.65	HS		
91	RI	00	1005.55	HS		US-MT, D30, S
92	LP	00	1010.75			HS CONT., CHOCKER CABLE
93	SC	00	1012.75			ADULT COHO CARCASS
102	RI	01	1120.55	/TJ		
104	SP	00	1124.25	RF		D30, S
109	SL	00	1182.45			H=.35
112	SL	00	1195.55			H=.35
115	SB	00	1211.55			H = .4

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: 2-MC      SITE ID: 223      SUGARBOWL CREEK POST-TX

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
116	RI	01	1251.95	TJ/		
119	SL	11	1251.95		H = .65	
120	LP	00	1256.75		CA-CT, D15, S	
124	PP	00	1274.75	PN		
127	CR	00	1300.05	PN		
132	SP	00	1349.35		CH-MV, D15, G	



Name: MARYS PEAK  
 Date: 6/13/2005  
 Scale: 1 inch equals 2000 feet

Location: 10 452114 E 4931174 N  
 Caption: SUGARBOWL CREEK RESTORATION SITE - YAQUINA BASIN