

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

STREAM: Oxbow Creek (MC-53)
BASIN: Siuslaw River
SURVEY TYPE: Post-Tx
DATE: February 23, 2004
SURVEY CREW: April Waters, Jim Andrews
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 9.6 km²
USGS MAPS: Gunter
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Oxbow Creek habitat survey extended 555 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.2 (range: 5.0-10.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.2 percent. Scour pools (47%) and riffles (43%) dominated stream habitat. Gravel (46%) dominated stream substrate. Wood volume was high at 29.6 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH 1

T20S-R07W-S14SE

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	7.2	VWI Range:	5 - 10

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	555	2,785	0
Secondary	71	191	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.7	Width: 7.5	10.0 (8.2 - 11.5)	13.5 (9 - 17.6)
Depth: 0.35	Height: 0.3	0.7 (0.6 - 0.7)	1.3 (0.8 - 1.95)

W:D ratio: 22.7
Stream Flow Type: MF
Avg. Unit Gradient: 1.2%

Entrenchment (ACW:FPW ratio): 1.3
Water temp (°C): 8.0 - 8.0
Habitat Units/100m: 7.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	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):	118	21.3
Volume (m ³):	164	29.6
Key pieces (>=10m x 0.60m):	14	2.5

OREGON DEPARTMENT OF FISH AND WILDLIFE

OXBOW CREEK POST-TX (MC-53)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/23/2004

REACH 1		T20S-R07W-S14SE					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-DAMMED	1	6	8.0	0.70	48	0	11	53	32	5	0	0	0
POOL-ISOLATED	1	6	1.8	0.30	11	0	86	10	5	0	0	0	0
POOL-LATERAL SCOUR	18	277	5.1	0.62	1,383	0	4	35	33	7	3	18	18
POOL-PLUNGE	1	6	5.0	0.30	30	0	4	9	4	4	0	78	78
RAPID/BOULDERS	2	26	5.5	0.18	141	0	2	2	68	15	3	9	9
RIFFLE	17	288	4.2	0.16	1,286	0	1	7	65	9	3	16	16
STEP/BEDROCK	2	1	4.0	0.18	5	0	0	10	10	0	5	76	76
STEP/COBBLE	3	11	4.5	0.15	54	0	0	5	77	18	0	0	0
STEP/LOG	1	5	4.0	0.05	18	0	0	64	4	0	0	32	32
Total:	46	625	4.7	0.35	2,976	0	Avg: 4	20	46	8	3	19	19

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	12	4.9	0.50	59	1.98%	0	0.0	
Scour Pools	19	283	5.1	0.60	1,413	47.46%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	17	288	4.2	0.16	1,286	43.21%	0	0.0	
Rapids	2	26	5.5	0.18	141	4.75%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	6	17	4.3	0.14	77	2.60%	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:	21	33.6	71
Pools >=1m deep:	0	0.0	
Complex pools (LWD pieces>=3):	9	14.4	
Pool frequency (channel widths/pool):	4.0		
Residual pool depth (avg):	0.48		

STREAM SUMMARY

OXBOW CREEK POST-TX (MC-53)

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	
46	625	4.7	0.35	2,976	4	20	46	8	3	19	

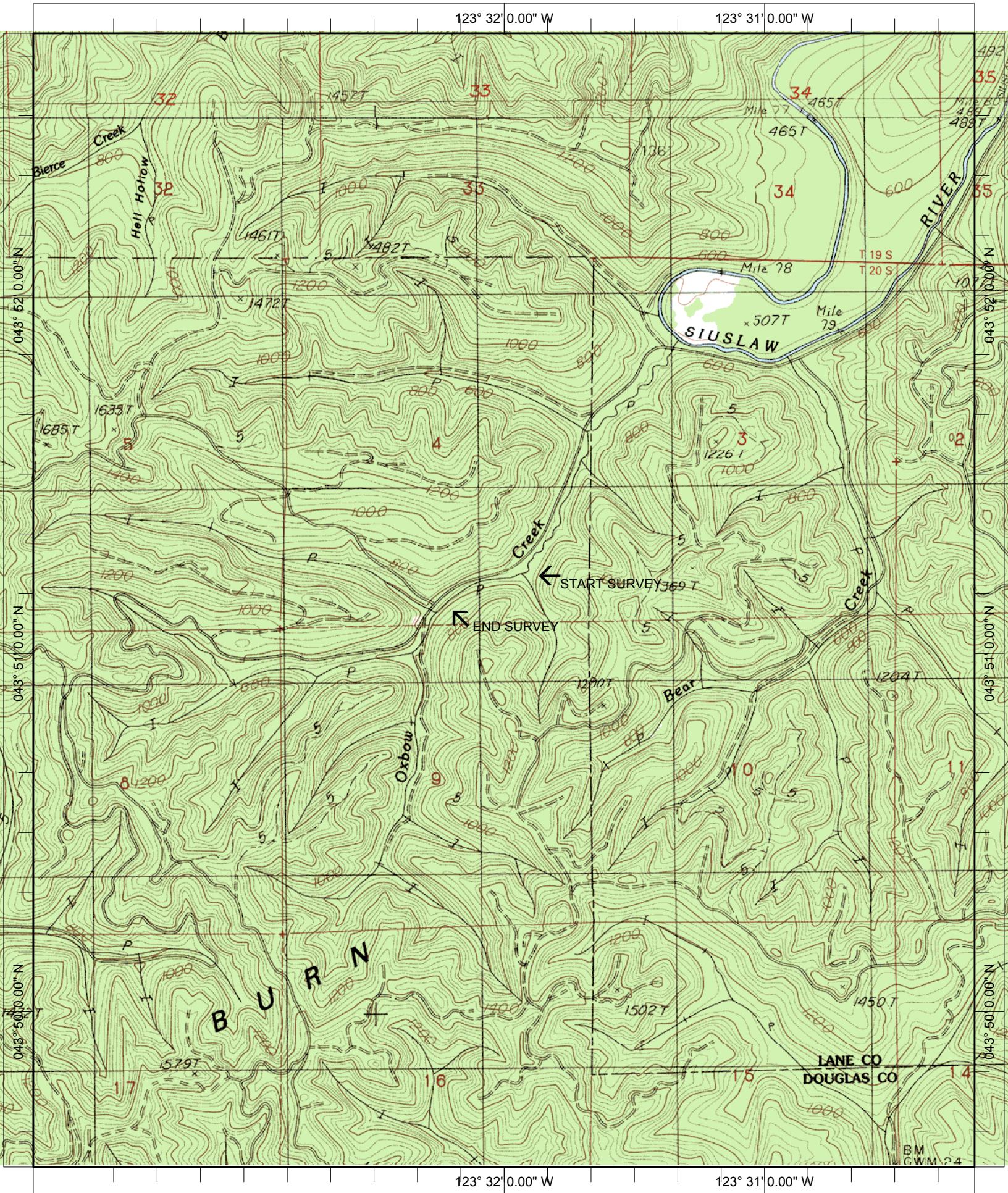
Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	59	1.98%
Scour Pools	1,413	47.46%
Glides	0	0.00%
Riffles	1,286	43.21%
Rapids	141	4.75%
Cascades	0	0.00%
Step/Falls	77	2.60%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **53** **OXBOW CREEK POST-TX (MC-53)**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	12.5		T=8.5C/1443	
2	LP	00	23.7	HS		
5	RI	01	60.2	WL	BIRDS	
8	LP	01	96.9	HS		
14	SC	02	96.9		STEPS INTO U8	
15	RI	00	122		SG=4M, .4M POCKET	
19	IP	10	165.5	WL	NEWT EGG CLUSTERS/	
24	RI	00	247.7		METRIC END OF U24	
31	LP	00	355.9		1" FISH	
34	LP	00	393.1	WL	1" FISH	
37	SL	00	434.9	HS		
38	DP	00	440.9		DAMMED BY HS	
39	RI	00	461.1		SG=4M	
41	LP	00	483.7	HS		
45	SR	00	532.2	HS	HS FORCING STEP	
46	RI	00	554.7		EOS, HS TAG "14", SG=4	



Name: GUNTER
 Date: 7/22/2004
 Scale: 1 inch equals 2000 feet

Location: 043° 51' 09.0" N 123° 32' 00.2" W
 Caption: OXBOW CREEK RESTORATION SITE - SIUSLAW BASIN