

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

STREAM: Bales Creek (MC-1)
BASIN: Yaquina River
SURVEY TYPE: Pre-Tx
DATE: January 20, 2000
SURVEY CREW: Barry Thom, Jeff Johnson
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.3 km²
USGS MAPS: Nortons
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Bales Creek habitat survey extended 436 meters. The channel was single channel unconstrained in a broad valley floor. The average valley width index was 7.3 (range: 4.3 – 10.2). Land use for the reach was second growth (15-30 cm dbh) trees and light grazing. The average unit gradient was 0.5 percent. Scour pools (54%) and riffles (44%) dominated stream habitat. Gravel (62%) dominated stream substrate. Wood volume was low at 17.4 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

T10S-R9W-S26SE

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	0%
Open V-shape	0%	Wide Floodplain	100%
Valley Width Index	7.3	VWI Range:	4.3 - 10.2

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	436	2,848	0
Secondary	52	61	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.7	Width	9.3	59.0	10.0
Depth	0.69	Height	0.8	1.6	1.1
		W:D ratio	11.7	Entrenchment	6.5

Stream Flow Type:	HF	Water temp (C):	-
Avg. Unit Gradient:	0.5%	Habitat Units/100m:	6.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LG
Riparian Vegetation:	D30	P

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):	33	7.6
Volume (m ³):	76	17.4
Key pieces (>=10m x 0.60m):	12	2.8

OREGON DEPARTMENT OF FISH AND WILDLIFE

BALES CREEK (PRE-TX)

HABITAT INVENTORY

Report Date: 11/12/03

Survey Date:

1/20/00

REACH 1

T10S-R9W-S26SE

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	Grv	Cbl	Bldr	Bdrk
POOL-ALCOVE	1	40	1.0	0.10	40	0	100	0	0	0	0	0
POOL-BACKWATER	2	10	2.0	0.45	20	0	18	40	35	8	0	0
POOL-ISOLATED	1	3	0.5	0.10	1	0	50	50	0	0	0	0
POOL-LATERAL SCOUR	14	236	6.5	1.02	1,568	0	4	16	58	3	0	19
RIFFLE	10	200	6.2	0.40	1,279	0	0	5	85	3	0	8
Total:	28	487	5.7	0.69	2,909	0	Avg 9	14	62	3	0	13

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	52	1.4	0.28	61	2.10%	0	0.0
Scour Pools	14	236	6.5	1.02	1,568	53.91%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	10	200	6.2	0.40	1,279	43.99%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	0	0			0	0.00%	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>	<u># / Km</u>
All Pools:	18	41.3
Pools >=1m deep:	8	18.4
Complex pools (LWD pieces>=3):	3	6.9
Pool frequency (channel widths/pool):	2.9	
Residual pool depth (avg):	0.74	

STREAM SUMMARY

BALES CREEK (PRE-TX)

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	
28	487	5.7	0.69	2,909	9	14	62	3	0	13	

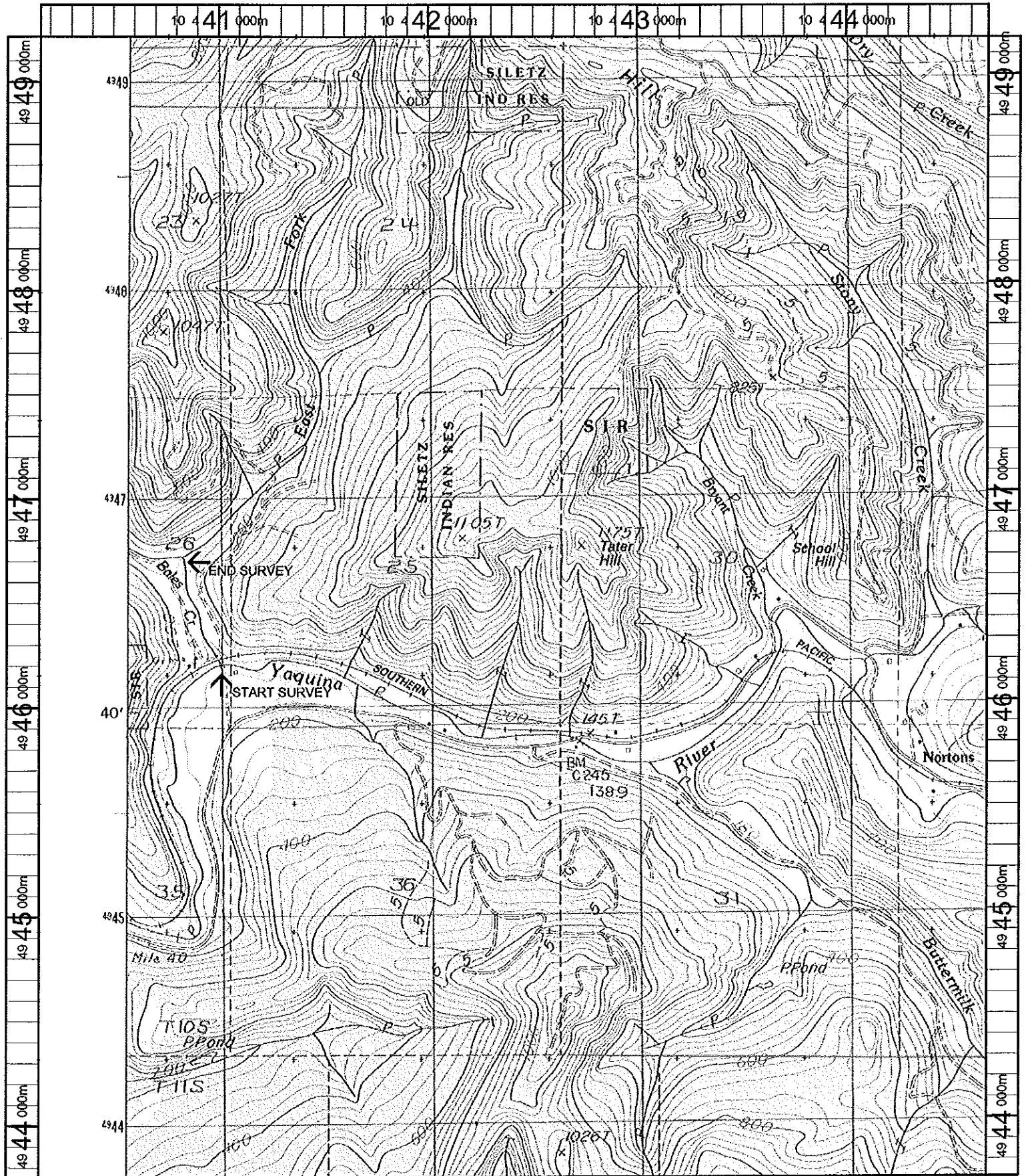
Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	61	2.10%
Scour Pools	1,568	53.91%
Glides	0	0.00%
Riffles	1,279	43.99%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	0	0.00%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Restoration Monitoring Sites 2003

MONITORING AREA: 2-MC SITE ID: 1 BALES CREEK (PRE-TX)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	15.9			STRT ABOVE TRIB,WWI=8.
8	LP	00	94.3			WWI= 8.8
12	LP	00	163.7	/CE		
14	LP	01	234.3	HS		WWI= 5.1
17	RI	00	261.3	HS		
18	LP	00	275.8	HS		
21	RI	01	341.4			W/POCKET POOLS
23	RI	00	380.7			WWI=10.2
24	LP	00	392.7	HS		
26	LP	01	427.1	HS		
28	RI	00	435.5			WWI=4.3,END @ SS SIGN



Name: NORTONS
 Date: 10/16/100
 Scale: 1 inch equals 2000 feet

Location: 10 442296 E 4946450 N
 Caption: BALES CREEK RESTORATION SITE - YAQUINA BASIN