

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

STREAM: Bales Creek (MC-1)
BASIN: Yaquina River
SURVEY TYPE: Post-Tx
DATE: February 6, 2001
SURVEY CREW: Eric Brown, Joe Zuccarello
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 497 meters. The channel was single channel unconstrained in a broad valley floor. The average valley width index was 6.3 (range: 5.0 – 8.0). Land use for the reach was light grazing and second growth (15-30 cm dbh) trees. The average unit gradient was 0.6 percent. Scour pools (54%) and riffles (37%) dominated stream habitat. Gravel (59%) and sand (31%) dominated stream substrate. Wood volume was high at 49.0 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 SUMMARY

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	100
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 6.3 range: 5.0-8.0

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	497	3,118	0
Secondary	14	26	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.6	Width	8.6	32.4	12.0
Depth	0.55	Height	0.6	1.2	1.2
		W:D ratio	13.6	Entrenchment	3.8

Stream Flow Type: MF Water Temp: 6.0-6.0°C
 Avg. Unit Gradient: 0.6% Habitat Units/100m: 6.1

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	80	16.1
Volume (m ³)	244	49.0
Key pieces (≥10m x 0.6m)	29	5.8

HABITAT UNIT SUMMARY

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	Grvl	Cbbl	Bldr	Bdrk
GLIDE	2	44	5.6	0.28	216	0	8	23	70	0	0	0
POOL-BACKWATER	3	14	2.0	0.48	26	0	35	37	23	3	2	0
POOL-LATERAL SCOUR	16	278	5.9	0.83	1,685	0	4	45	47	2	0	1
RIFFLE	7	149	6.5	0.19	1,057	0	4	8	85	3	0	0
RIFFLE W/ POCKETS	1	15	7.1	0.25	108	0	0	10	80	10	0	0
STEP/COBBLE	2	11	4.9	0.20	52	0	0	3	98	0	0	0
Total:	31	511	5.6	0.55	3,144	0	Avg: 7	31	59	2	0	1

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	3	14	2.0	0.48	26	0.82	0	0.0
Scour Pools	16	278	5.9	0.83	1,685	53.59	0	0.0
Glides	2	44	5.6	0.28	216	6.88	0	0.0
Riffles	8	165	6.5	0.19	1,165	37.06	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	11	4.9	0.20	52	1.64	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

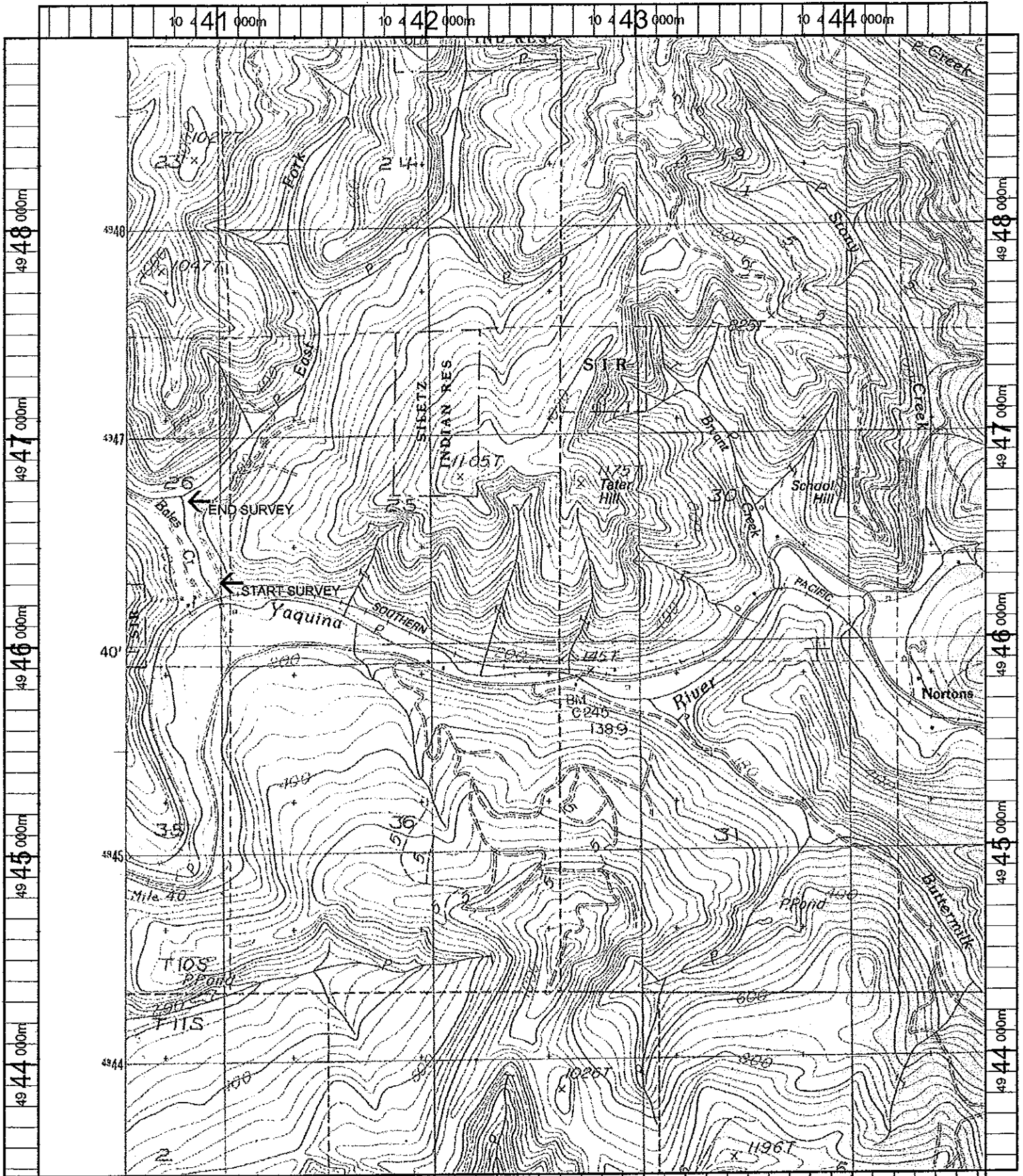
All Pools	<u>Total</u>	<u>#/Km</u>
	19	37.2
Pools ≥1m deep:	4	7.8
Complex pools (LWD pieces ≥3):	5	9.8
Pool Frequency (channel widths/pool):	3.1	
Residual pool depth (avg)	0.50m	

STREAM SUMMARY

BALES CREEK POST-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area					Total Large Boulder	
					S/O	Sand	Grvl	Cbbl	Bldr		Bdrk
31	511	5.6	0.55	3,144	7	31	59	2	0	1	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,685	53.6
Backwater Pools	26	0.8
Glide	216	6.9
Riffle	1,165	37.1
Rapid	0	0.0
Cascade	0	0.0
Step	52	1.6
Dry	0	0.0



Name: NORTONS
 Date: 10/23/100
 Scale: 1 inch equals 2000 feet

Location: 10 442293 E 4946159 N
 Caption: BALES CREEK RESTORATION SITE - YAQUINA BASIN