

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

STREAM: Byron Creek (U-10)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: March 8, 2000
SURVEY CREW: Clark Watly, Brent Crowe
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 11.8 km²
USGS MAPS: Tenmile
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Byron Creek habitat survey extended 503 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was rural residential. The average unit gradient was 1.5 percent. Rapids (33%), scour pools (30%) and riffles (24%) dominated stream habitat. Cobble (25%), gravel (23%), and bedrock (21%) 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

T29S-R7W-S29NE

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	20.0	VWI Range:	20 - 20

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	503	1,568	0
Secondary	23	42	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.1	Width	4.9	7.9	9.3
Depth	0.35	Height	0.5	1.0	1.7
		W:D ratio	9.8	Entrenchment	1.6
Stream Flow Type:	MF	Water temp (C):		8.0	- 8.0
Avg. Unit Gradient:	1.5%	Habitat Units/100m:		7.2	

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	RR	
Riparian Vegetation:	S	G

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):	9	1.8
Volume (m ³):	6	1.3
Key pieces (>=10m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

BYRON CREEK (PRE-WINTER)

HABITAT INVENTORY

Report Date: 11/12/03

Survey Date:

3/8/00

REACH 1

T29S-R7W-S29NE

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
GLIDE	4	64	2.5	0.42	161	0	14	18	28	24	0	18
POOL-ALCOVE	1	3	3.5	0.69	11	0	60	40	0	0	0	0
POOL-BACKWATER	3	14	1.7	0.47	27	0	23	30	20	23	0	3
POOL-ISOLATED	1	6	0.8	0.37	5	0	30	30	20	20	0	0
POOL-LATERAL SCOUR	6	75	3.9	0.51	276	0	16	25	21	16	0	23
POOL-STRAIGHT SCOUR	5	62	3.7	0.43	213	0	9	25	19	16	0	31
RAPID/BOULDERS	10	176	3.0	0.19	534	0	7	11	25	35	0	23
RIFFLE	6	126	3.1	0.22	384	0	7	10	25	32	0	27
Total:	36	525	3.1	0.35	1,610	0	Avg 13	19	23	25	0	21

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	5	23	1.9	0.49	42	2.63%	0	0.0
Scour Pools	11	136	3.8	0.48	489	30.37%	0	0.0
Glides	4	64	2.5	0.42	161	10.02%	0	0.0
Riffles	6	126	3.1	0.22	384	23.85%	0	0.0
Rapids	10	176	3.0	0.19	534	33.13%	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

	Total	# / Km
All Pools:	16	31.8
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	1	2.0
Pool frequency (channel widths/pool):	6.7	
Residual pool depth (avg):	0.34	

STREAM SUMMARY

BYRON CREEK (PRE-WINTER)

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	
36	525	3.1	0.35	1,610	13	19	23	25	0	21	

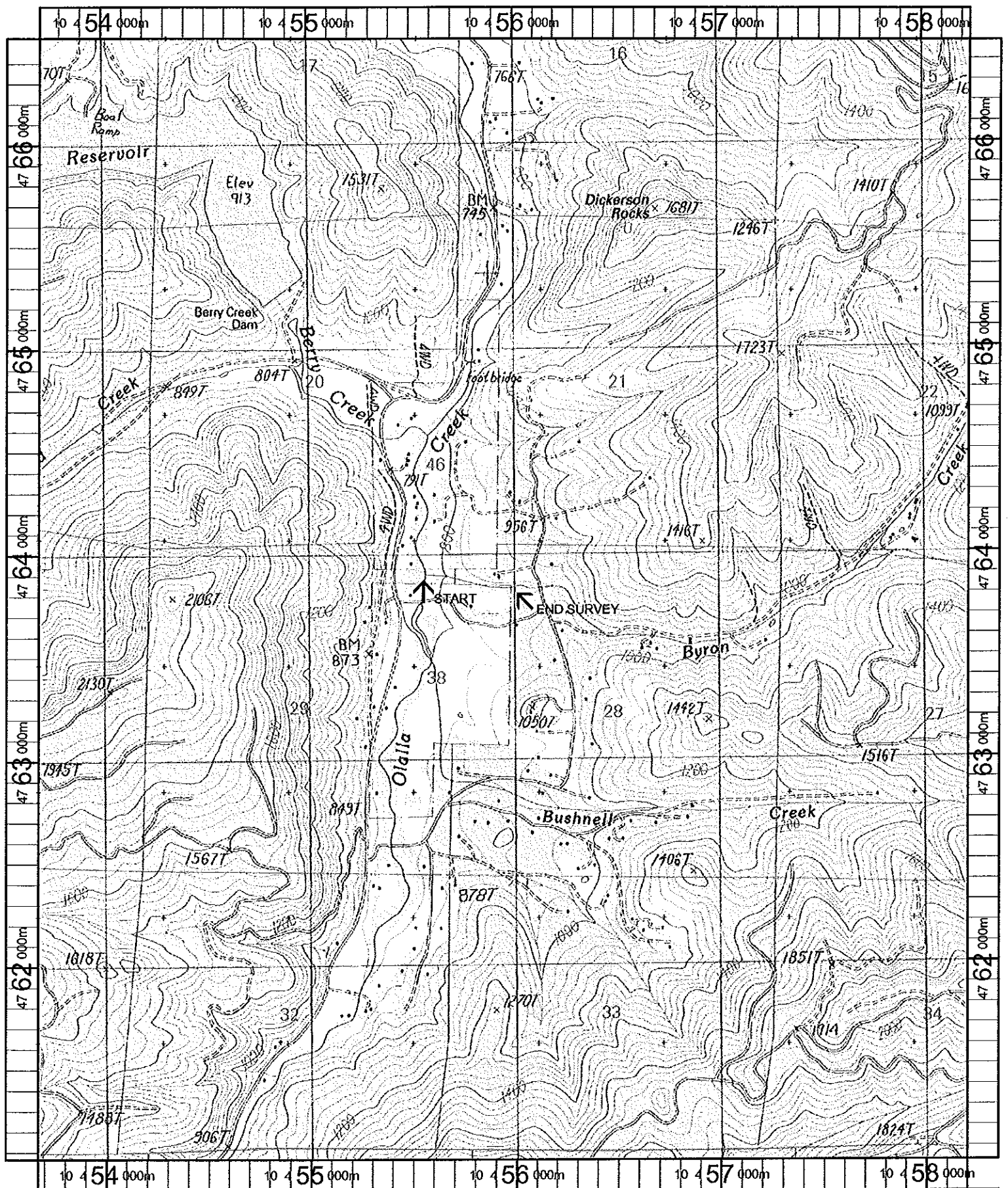
Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	42	2.63%
Scour Pools	489	30.37%
Glides	161	10.02%
Riffles	384	23.85%
Rapids	534	33.13%
Cascades	0	0.00%
Step/Falls	0	0.00%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Restoration Monitoring Sites 2003

MONITORING AREA: 4-UM SITE ID: 10 BYRON CREEK (PRE-WINTER)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
2	RB	00	42.5		VWI=20	
14	GL	00	143.6		VWI=20+	
21	GL	00	251.8		VWI= 20+	
30	LP	00	381.9		VWI= 20+	
36	RI	00	502.8		VWI= 20+	



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

Location: 10 455854 E 4763762 N
 Caption: BYRON CREEK RESTORATION SITE
Umpqua Basin