

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

STREAM: South Myrtle Creek (U-253)  
BASIN: South Umpqua River  
SURVEY TYPE: Reference  
DATE: March 9, 2004  
SURVEY CREW: Michael Scheu, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 150.0 km<sup>2</sup>  
USGS MAPS: White Rock  
ECOREGION: Coast Range Klamath Siskiyou

**GENERAL DESCRIPTION:**

The South Myrtle Creek habitat survey extended 502 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 11.2 (range: 4.5-20.0). Land use for the reach was second growth (15-30 cm dbh) trees and rural residential. The average unit gradient was 2.7 percent. Rapids (56%) dominated stream habitat. Cobble (35%), bedrock (27%) and boulders (20%) dominated stream substrate. Wood volume was very low at 2.9 m<sup>3</sup>/100m.

**COMMENTS:**

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

REACH 1

T29S-R03W-S10NE

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	11.2	VWI Range:	4.5 - 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	502	2,785	0
Secondary	31	112	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.2	Width: 7.3	10.3 ( 8.5 - 14.2 )	14.7 ( 11.5 - 18.3 )
Depth: 0.57	Height: 0.7	1.4 ( 1.2 - 1.6 )	3.1 ( 1.4 - 5 )

W:D ratio: 10.5 Entrenchment (ACW:FPW ratio): 1.4  
 Stream Flow Type: HF Water temp (°C): 9.5 - 9.5  
 Avg. Unit Gradient: 2.7% Habitat Units/100m: 5.6

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	RR
Riparian Vegetation:	M15	C30

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):	18	3.6
Volume (m <sup>3</sup> ):	15	2.9
Key pieces (>=10m x 0.60m):	1	0.2

**OREGON DEPARTMENT OF FISH AND WILDLIFE SOUTH MYRTLE CREEK REFERENCE (U-253)**

**HABITAT INVENTORY**

Report Date: 6/16/2004

Survey Date:

3/9/2004

**REACH 1**

**T29S-R03W-S10NE**

**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	1	25	5.2	0.35	130	0	0	0	0	10	20	70
CASCADE/BOULDERS	1	16	5.2	0.40	83	0	0	0	10	40	50	0
POOL-BACKWATER	1	5	1.3	0.30	7	0	50	50	0	0	0	0
POOL-LATERAL SCOUR	6	85	4.7	0.85	415	0	0	10	13	49	10	18
POOL-PLUNGE	3	15	5.4	1.20	80	0	0	23	3	30	23	20
RAPID/BEDROCK	1	17	5.8	0.40	99	0	0	0	0	10	20	70
RAPID/BOULDERS	10	265	5.7	0.42	1,516	0	0	4	10	43	22	22
RIFFLE	4	87	5.6	0.43	478	0	0	9	15	36	35	5
STEP/BEDROCK	2	11	6.2	0.38	62	0	0	0	0	0	0	100
STEP/BOULDERS	1	7	3.9	0.35	27	0	0	0	0	20	30	50
<b>Total:</b>	<b>30</b>	<b>533</b>	<b>5.2</b>	<b>0.57</b>	<b>2,897</b>	<b>0</b>	<b>Avg: 2</b>	<b>8</b>	<b>9</b>	<b>35</b>	<b>20</b>	<b>27</b>

**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	5	1.3	0.30	7	0.22%	0	0.0
Scour Pools	9	100	4.9	0.97	495	17.09%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	4	87	5.6	0.43	478	16.49%	0	0.0
Rapids	11	282	5.7	0.41	1,615	55.75%	0	0.0
Cascades	2	41	5.2	0.38	213	7.36%	0	0.0
Step/Falls	3	18	5.4	0.37	89	3.08%	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:	10	18.8	31
Pools >=1m deep:	3	5.6	
Complex pools (LWD pieces>=3):	1	1.9	
Pool frequency (channel widths/pool):	7.3		
Residual pool depth (avg):	0.58		

**STREAM SUMMARY**

**SOUTH MYRTLE CREEK REFERENCE (U-253)**

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
30	533	5.2	0.57	2,897	2	8	9	35	20	27	

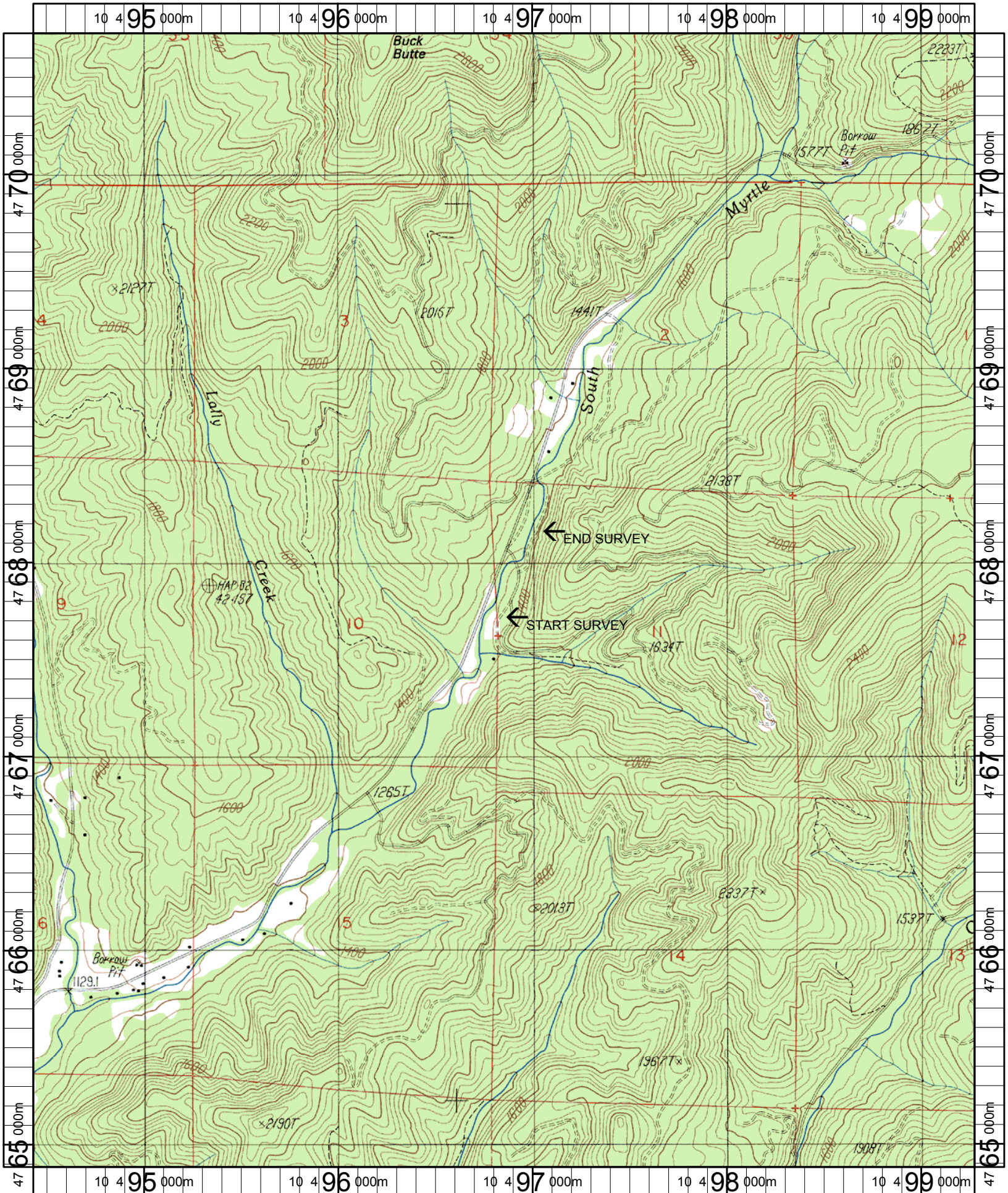
Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	7	0.22%
Scour Pools	495	17.09%
Glides	0	0.00%
Riffles	478	16.49%
Rapids	1,615	55.75%
Cascades	213	7.36%
Step/Falls	89	3.08%
Dry	0	0.00%
Culverts	0	0.00%

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP    SITE ID: 253    SOUTH MYRTLE CREEK REFERENC

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	00	23.2		T=9.5C	
16	RB	00	255.6	SS/		
19	LP	00	308.3	CS/CS, BC	BLM RD	



Name: WHITE ROCK  
 Date: 8/5/2004  
 Scale: 1 inch equals 2000 feet

Location: 10 496853 E 4767805 N  
 Caption: SOUTH MYRTLE CREEK (REFERENCE) RESTORATION SITE -  
 SOUTH UMPQUA BASIN