

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

STREAM: South Myrtle Creek (U-249)  
BASIN: South Umpqua River  
SURVEY TYPE: Pre-Tx  
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 1,122 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 11.8 (range: 1.8-20.0). Land use for the reach was light grazing and rural residential. The average unit gradient was 2.7 percent. Rapids (50%) and scour pools (35%) dominated stream habitat. Bedrock (33%), cobble (30%) and boulders (27%) dominated stream substrate. Wood volume was very low at 1.2 m<sup>3</sup>/100m.

**COMMENTS:**

There was one potential barrier to upstream fish migration in the surveyed length. This was a 2.0 meter high bedrock step, 867 m upstream from the start of the survey.

The crew noted several habitat structures during the survey.

REACH 1

T29S-R03W-S15NE

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	11.8	VWI Range:	1.8 - 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	1,122	6,481	0
Secondary	6	10	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 5.5	Width: 8.6	11.4 ( 8.5 - 18.6 )	14.8 ( 12.2 - 20.6 )
Depth: 0.82	Height: 0.8	1.6 ( 1.6 - 1.6 )	3.0 ( 1.9 - 4.5 )

W:D ratio: 10.8  
Stream Flow Type: HF  
Average Unit Gradient: 2.7%  
Water temperature (°C): 9.5 - 9.5

Entrenchment (ACW:FPW ratio): 1.3  
Habitat Units/100m (total channel length): 4.8  
Habitat Units/100m (primary channel length): 4.8

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LG	RR
Riparian Vegetation:	M3	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 primary channel</u>
All pieces (>=3m x 0.15m):	34	3.0
Volume (m <sup>3</sup> ):	13	1.2
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

SOUTH MYRTLE CREEK PRE-TX (U-249)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/9/2004

REACH 1

T29S-R03W-S15NE

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	22	4.5	0.90	100	0	0	0	0	0	0	100
CASCADE/BOULDERS	1	14	8.0	0.40	114	0	0	0	0	20	80	0
POOL-LATERAL SCOUR	16	276	5.6	1.11	1,572	0	0	13	10	41	15	21
POOL-PLUNGE	7	103	6.3	1.76	664	0	0	11	7	27	15	40
POOL-STRAIGHT SCOUR	1	7	4.3	1.10	31	0	0	0	0	0	20	80
RAPID/BEDROCK	4	81	4.7	0.48	383	0	0	0	3	18	36	44
RAPID/BOULDERS	12	490	5.7	0.45	2,831	0	0	0	2	38	49	11
RIFFLE	3	71	4.6	0.45	447	0	0	7	7	30	33	23
STEP/BEDROCK	6	39	4.2	0.30	182	0	0	0	0	0	3	97
STEP/BOULDERS	2	13	6.0	0.40	84	0	0	0	0	25	75	0
STEP/COBBLE	1	12	7.1	0.45	83	0	0	0	0	80	20	0
<b>Total:</b>	<b>54</b>	<b>1,128</b>	<b>5.5</b>	<b>0.82</b>	<b>6,491</b>	<b>0</b>	<b>Avg: 0</b>	<b>6</b>	<b>5</b>	<b>30</b>	<b>27</b>	<b>33</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	0	0			0	0.00%	0	0.0
Scour Pools	24	386	5.8	1.30	2,267	34.92%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	3	71	4.6	0.45	447	6.89%	0	0.0
Rapids	16	571	5.5	0.45	3,214	49.51%	0	0.0
Cascades	2	37	6.3	0.65	215	3.31%	0	0.0
Step/Falls	9	64	4.9	0.34	349	5.37%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	24	21.3	21.4
Pools >=1m deep:	16	14.2	14.3
Complex pools (LWD pieces>=3):	1	0.9	0.9
Pool frequency (channel widths/pool):	5.5		
Residual pool depth (avg):	0.84		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **4-UMP**    SITE ID: **249**    SOUTH MYRTLE CREEK PRE-TX (U-2)

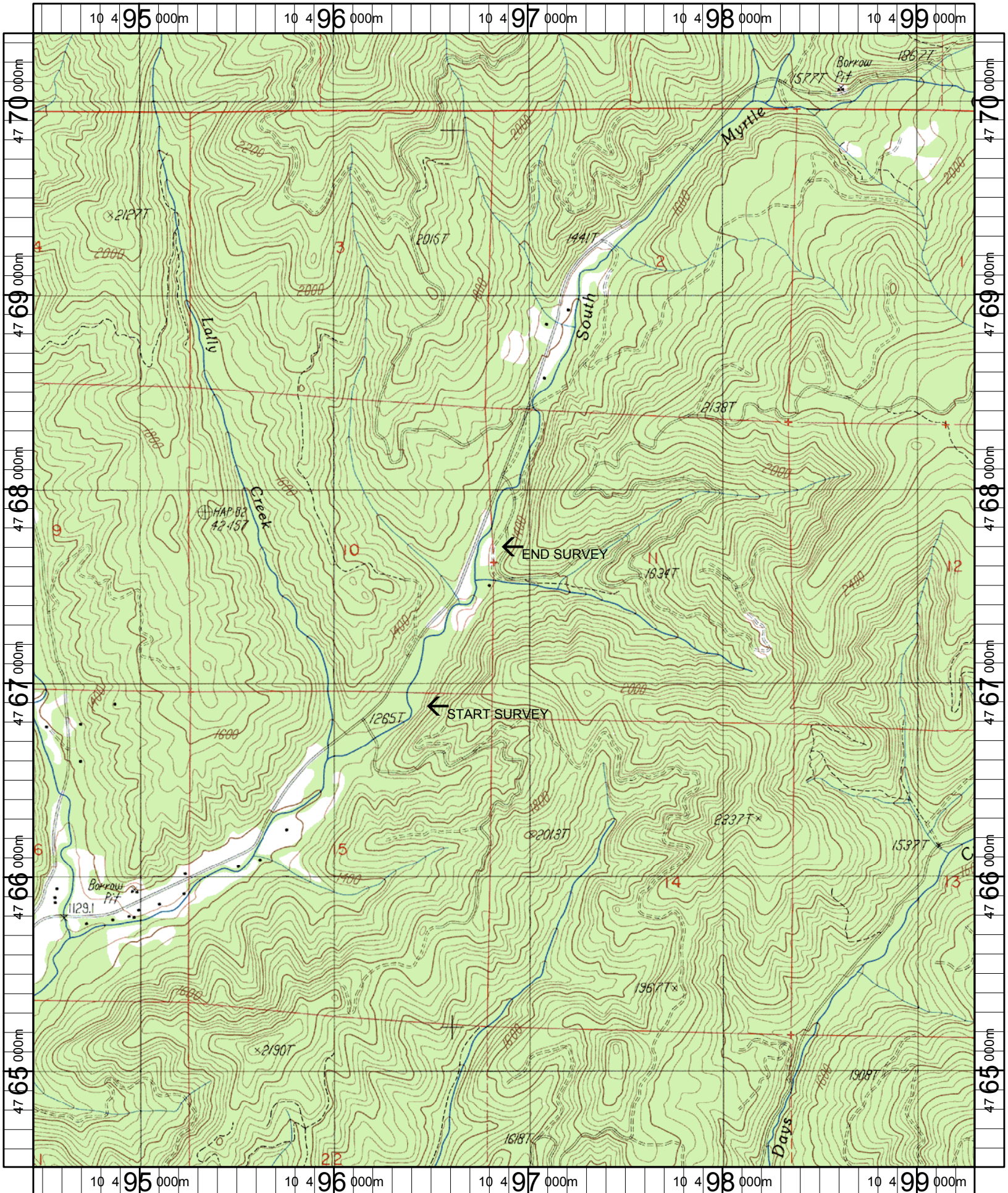
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	PP	00	5.3		T=8.5	
3	CB	00	51.2	SS/		
6	RB	00	217.2		SITE #2-5 LOGS	
9	LP	00	254.3		SITE #3-4 LOGS	
12	RB	00	300.9		SITE #4-3 LOGS; 8 BLDRS	
13	LP	00	313.1	BV	UNIT #20 4/03	
14	RB	00	337.5		SITE #5-3 LOGS; 9 BLDRS	
17	LP	00	372.7		SITE #6-3 LOGS	
18	SC	00	384.4	SS/	SITE #7-5 LOGS; 12 BLDR	
22	LP	00	452.7	FC		
24	LP	00	491.3		SITE #8-6 LOGS	
25	RB	00	520.3		SITE #1-2 LOGS; 4 BLDRS	
26	RB	00	567.3		SITE #2-27 BLDRS	
27	PP	00	598.3	/SS	SITE #3-2 LOGS; 3 BLDRS	
28	SR	00	608.8		H=1.6M	
31	SP	00	650.6	SS/		
33	PP	01	679.9	TJ/	BLUE LINE	
34	SR	11	679.9		H=5.1M; T & ACW NOT AV	
39	RB	00	850.5		UNCLIPPED STW CARCA	
41	SR	00	867	/TJ PN-/	H=2.0M BLUE LINE	
42	SR	11	867		T=9.5C; ACW=2.6M	

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP    SITE ID: 249    SOUTH MYRTLE CREEK PRE-TX (U-2)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
43	RB	00	934.1			SITE #4-4 LOGS/SITE #5-5
45	RR	00	976.8	/CE		
46	LP	00	1001.8			SITE #6-8 LOGS
49	SR	00	1031.3			H=1.1M



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

Location: 10 496876 E 4767427 N  
 Caption: SOUTH MYRTLE CREEK RESTORATION SITE - SOUTH  
 UMPQUA BASIN