

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

STREAM: Myrtle Creek (MS-144)  
BASIN: Coquille River  
SURVEY TYPE: Post-Tx  
DATE: July 15, 2004  
SURVEY CREW: Greg Ryder, Justin Gerding  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 184.6 km<sup>2</sup>  
USGS MAPS: Powers  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Myrtle Creek habitat survey extended 594 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 2.9 (range: 1.0-4.5). Land use for the reach was timber harvest and rural residential. The average unit gradient was 0.4 percent. Scour pools (51%), glides (26%) and riffles (22%) dominated stream habitat. Gravel (38%) dominated stream substrate. Wood volume was low at 16.4 m<sup>3</sup>/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

T30S-R11W-S09NE

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	2.9	VWI Range:	1 - 4.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	594	6,901	0
Secondary	72	203	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 9.0	Width: 20.2	24.3 ( 23.5 - 25.6 )	27.3 ( 25 - 28.5 )
Depth: 0.41	Height: 1.3	2.7 ( 2.6 - 2.8 )	3.6 ( 3 - 4.6 )

W:D ratio: 15.2

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: LF

Habitat Units/100m (total channel length): 3.5

Average Unit Gradient: 0.4%

Habitat Units/100m (primary channel length): 3.9

Water temperature (°C): 19.0 - 19.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	RR
Riparian Vegetation:	M30	M15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	0%	Reach avg: 81%
Undercut Banks:	7%	Range: 58 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	26	4.4
Volume (m <sup>3</sup> ):	97	16.4
Key pieces (>=12m x 0.60m):	6	1.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

MYRTLE CREEK POST-TX (MS-144)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/15/2004

REACH 1		T30S-R11W-S09NE					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	
DRY UNIT	1	15	3.5	0.00	53	0	0	5	80	10	5	0	
GLIDE	7	169	11.1	0.36	1,873	23	4	13	43	13	12	14	
POOL-BACKWATER	1	13	1.5	0.30	19	4	5	20	0	5	10	60	
POOL-LATERAL SCOUR	3	251	10.3	1.37	3,332	5	7	32	18	15	8	20	
POOL-PLUNGE	1	21	12.3	0.75	260	2	5	10	30	10	5	40	
RIFFLE	9	196	7.4	0.19	1,562	31	0	10	45	28	11	5	
STEP/BEDROCK	1	0	13.9	0.10	6	0	0	5	5	5	0	85	
<b>Total:</b>	23	666	9.0	0.41	7,104	65	<b>Avg:</b> 3	14	38	18	10	17	

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	13	1.5	0.30	19	0.27%	4	20.8	
Scour Pools	4	272	10.8	1.21	3,591	50.55%	7	0.2	
Glides	7	169	11.1	0.36	1,873	26.37%	23	1.2	
Riffles	9	196	7.4	0.19	1,562	21.99%	31	2.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	0	13.9	0.10	6	0.08%	0	0.0	
Dry	1	15	3.5	0.00	53	0.74%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	5	7.5	8.4
Pools >=1m deep:	2	3.0	3.4
Complex pools (LWD pieces>=3):	2	3.0	3.4
Pool frequency (channel widths/pool):	6.6		
Residual pool depth (avg):	1.09		

**RIPARIAN ZONE VEGETATION SUMMARY**

REACH 1

REACH 1

**Summary of Riparian Zone (0-30m)**

3 transects

Total hardwoods/1000	1077
Total conifers/1000 ft	203
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	20

**Average number of trees in a 5-meter wide band**

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	1.7	0.0	2.3	0.7	5.0	0.7	9.0
15-30cm	0.0	4.0	0.7	1.3	0.0	1.0	0.7	6.3
30-50cm	0.0	0.7	0.0	1.0	0.0	0.3	0.0	2.0
50-90cm	0.0	0.0	1.3	0.0	0.3	0.0	1.7	0.0
>90cm	0.0	0.3	0.3	0.0	0.0	0.0	0.3	0.3
Total/100m2	0.0	6.7	2.3	4.7	1.0	6.3	1.1	5.9

**Canopy closure and ground cover**

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	77		74		63	
Shrub cover	25		43		32	
Grass/forb cover	73		48		68	

**Predominant landform in each zone**

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	83		83		83	
High terrace	17		17		17	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	63		34		31	

**RIPARIAN ZONE VEGETATION**

Reach 1

Reach 1

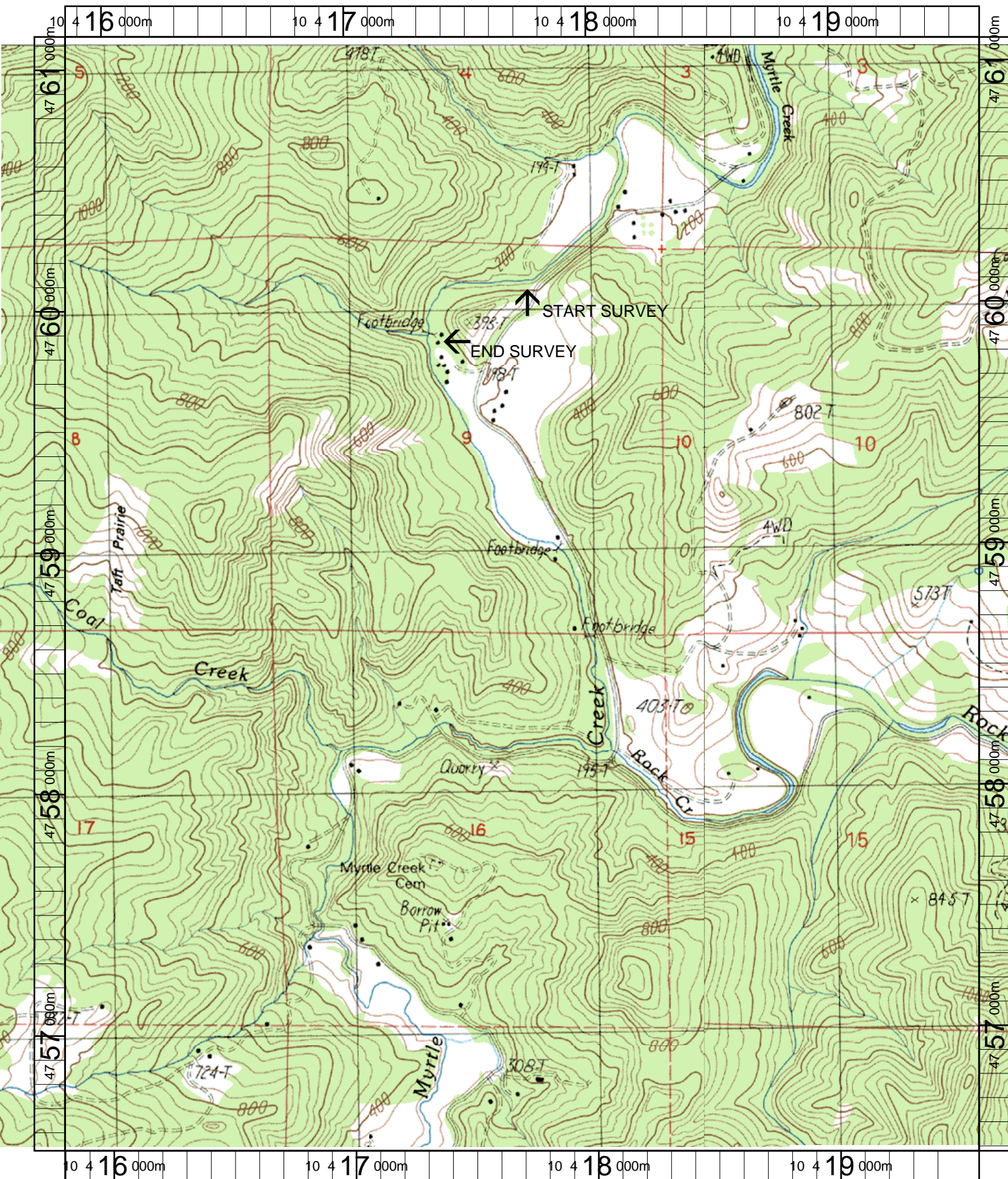
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
6	RT	3	HS	50	60	20	80	Conifer							
								Hardwood	3	1					
6	RT	2	HS	50	80	20	80	Conifer						1	
								Hardwood							
6	RT	1	HS	95	60	5	95	Conifer							DEAD .25 HARDWOOD
								Hardwood							
6	LF	3	HT	0	0		100	Conifer							
								Hardwood							
6	LF	2	HT	5	85	40	60	Conifer							
								Hardwood	3		1				
6	LF	1	HT	5	100	10	90	Conifer							
								Hardwood	3	4	1		1		
11	LF	3	HS	60	90	20	60	Conifer	1						
								Hardwood	5	1	1				
11	RT	1	HS	125	90	20	80	Conifer							
								Hardwood		3					
11	RT	2	HS	20	10	40	60	Conifer					4		NURSE LOG PLACEMENT
								Hardwood		2					
11	LF	1	HS	70	100	20	40	Conifer							
								Hardwood	1	3	1				
11	RT	3	HS	20	40	20	80	Conifer					1		LIVING OLDGROWTH CEDAR
								Hardwood	2						
11	LF	2	HS	65	100	40	20	Conifer							
								Hardwood		2	2				
19	RT	1	HS	40	50		100	Conifer							
								Hardwood	1	2					
19	RT	2	HS	45	70	100		Conifer							
								Hardwood							
19	RT	3	HS	45	90	80		Conifer							
								Hardwood	5	1					
19	LF	1	HS	40	60	70	30	Conifer							EST
								Hardwood							
19	LF	2	HS	20	100	20	20	Conifer			2				
								Hardwood	4						
19	LF	3	HS	10	100	20	20	Conifer	1						
								Hardwood							

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS**      SITE ID: **144**      MYRTLE CREEK POST-TX (MS-144)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	GL	00	25		PHOTO 0023 AT 9:40	T=19 DEG C AT 9:40
2	GL	00	50		OLD LAMPREY REDDS	
4	RI	00	94.2		OLD LAMPREY REDDS	
5	RI	00	119.2		OLD LAMPREY REDD	LAMPREY REDD
7	PP	00	173.5		LAMP REDD	
9	LP	00	246.5	HS		
10	BW	10	246.5		FORMED BEHIND HS STR	
12	GL	00	286.7		CUTTHROAT	
14	RI	01	336.7	HS		
15	RI	01	361.7	BV		DOWN LOG BV
22	LP	01	594.4	/TJ, BC	COHO FRY	FOOTBRIDGE
23	DU	11	594.4		PHOTO AT13:55 END 002	TRIB DRY



Name: POWERS  
 Date: 3/21/2003  
 Scale: 1 inch equals 1666 feet

Location: 10 417706 E 4758813 N  
 Caption: MYRTLE CREEK RESTORATION SITE - COQUILLE BASIN