

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 31, 2003
SURVEY CREW: Pat Burns, Brock Jonasson
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 184.6 km²
USGS MAPS: Powers
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Myrtle Creek habitat survey extended 531 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.8 (range: 1.0-8.0). Land use for the reach was large (30-50 cm dbh) trees and rural residential. The average unit gradient was 0.5 percent. Scour pools (59%) and glides (28%) dominated stream habitat. Gravel (33%) dominated stream substrate. Wood volume was low at 15.3 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 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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index 2.8		VWI Range: 1 - 8	

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
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	531	6,572	0
Secondary	91	289	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	7.2	Width	20.1	21.5	33.2
Depth	0.39	Height	0.9	1.9	3.7

W:D ratio 21.3 Entrenchment 1.1

Stream Flow Type: MF Water temp (C): 20.5 - 20.5
 Avg. Unit Gradient: 0.5% Habitat Units/100m: 4.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	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:		Reach avg: 90%
Undercut Banks:	0%	Range: 78 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	31	5.8
Volume (m ³):	82	15.3
Key pieces (>=10m x 0.60m):	7	1.3

OREGON DEPARTMENT OF FISH AND WILDLIFE

MYRTLE CREEK POST-TX (MS-144)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/31/03

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 ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
GLIDE	10	217	8.9	0.15	1,917	24	11	11	41	15	9	13
POOL-ISOLATED	3	17	1.2	0.15	18	0	23	33	23	13	3	3
POOL-LATERAL SCOUR	3	256	14.4	2.18	4,071	29	12	17	23	17	15	17
POOL-PLUNGE	1	2	2.8	0.40	5	0	0	10	30	30	10	20
PUDDLED UNIT	1	11	0.9	0.05	10	0	10	10	50	20	0	10
RIFFLE	5	104	6.3	0.13	688	24	6	8	30	23	25	8
STEP/BEDROCK	1	1	0.2	0.05	0	0	0	0	0	0	0	100
STEP/COBBLE	1	16	9.6	0.05	152	2	0	5	40	40	15	0
Total:	25	622	7.2	0.39	6,861	79	Avg 10	13	33	18	12	14

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	3	17	1.2	0.15	18	0.27%	0	0.0
Scour Pools	4	258	11.5	1.74	4,076	59.41%	29	0.7
Glides	10	217	8.9	0.15	1,917	27.94%	24	1.3
Riffles	5	104	6.3	0.13	688	10.03%	24	3.5
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	2	17	4.9	0.05	152	2.21%	2	1.3
Dry	1	11	0.9	0.05	10	0.14%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	<u>Total</u>	<u># / Km</u>
All Pools:	7	11.3
Pools >=1m deep:	2	3.2
Complex pools (LWD pieces>=3):	1	1.6
Pool frequency (channel widths/pool):	4.4	
Residual pool depth (avg):	1.63	

STREAM SUMMARY

MYRTLE CREEK POST-TX (MS-144)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
25	622	7.2	0.39	6,861	10	13	33	18	12	14	79

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	18	0.27%
Scour Pools	4,076	59.41%
Glides	1,917	27.94%
Riffles	688	10.03%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	152	2.21%
Dry	10	0.14%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1	REACH 1
Summary of Riparian Zone (0-30m) 3 transects	
Total hardwoods/1000	671
Total conifers/1000 ft	345
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	1.3	1.0	2.3	1.0	1.3	2.0	5.0
15-30cm	0.3	2.3	0.7	1.0	0.7	1.0	1.7	4.3
30-50cm	0.7	1.0	0.0	0.3	0.7	0.3	1.3	1.7
50-90cm	0.0	0.0	0.3	0.0	0.3	0.0	0.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	4.7	2.0	3.7	2.7	2.7	1.9	3.7

Canopy closure and ground cover

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Canopy closure	86	82	73
Shrub cover	33	39	33
Grass/forb cover	63	57	63

Predominant landform in each zone

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Hillslope	100	83	83
High terrace	0	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 (%)	68	52	51

Summary of Riparian Zone (0-30m) for all reaches 3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	671
Total conifers/1000 ft	345
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3 <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	2.0	5.0
15-30cm	1.7	4.3
30-50cm	1.3	1.7
50-90cm	0.7	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

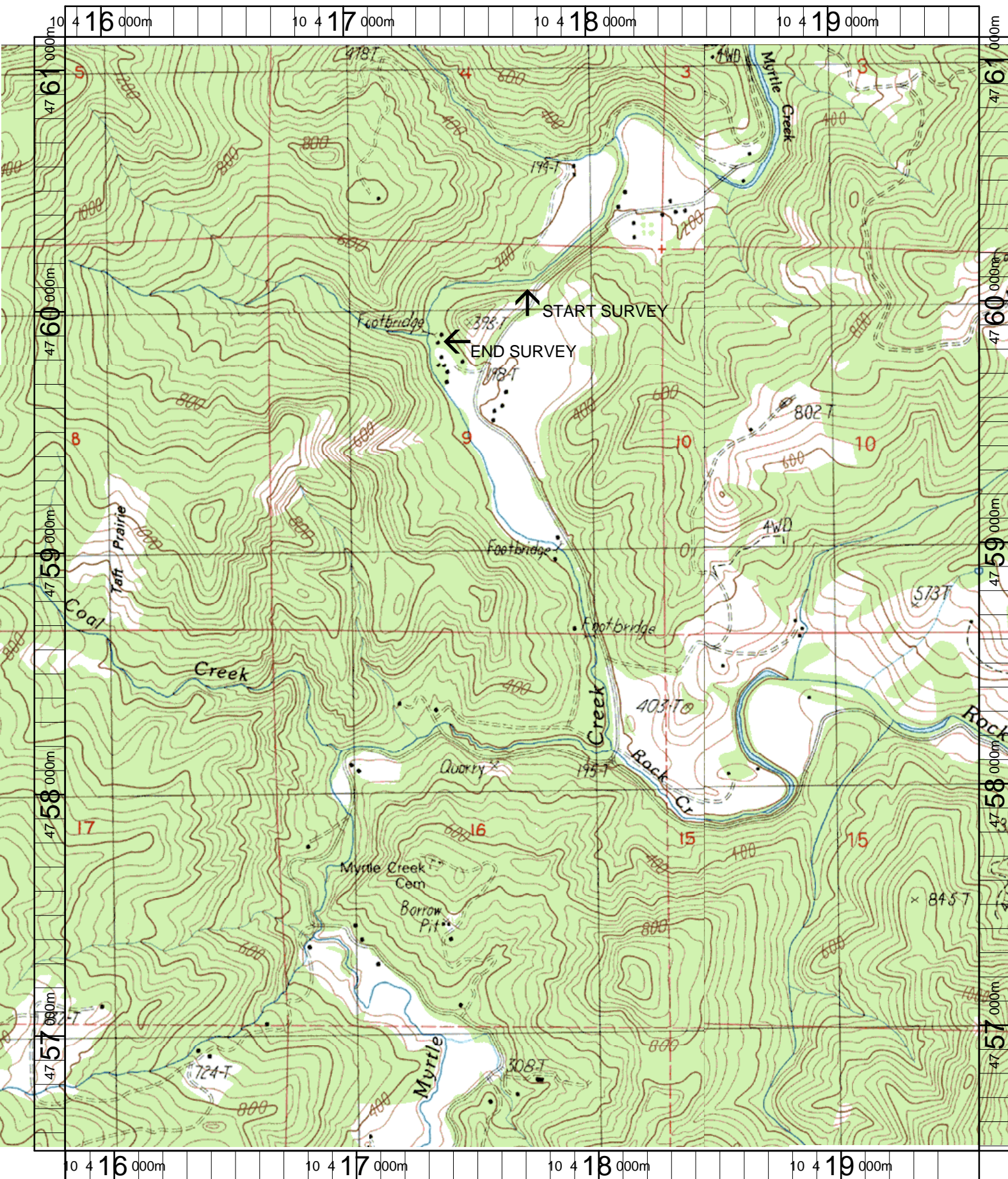
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
7	RT	2	HS	70	95	10	80	Conifer					1	
								Hardwood	1					
7	RT	1	HS	85	90	5	90	Conifer						
								Hardwood		1				
7	LF	3	HT	0	0	5	90	Conifer						BUILDING
								Hardwood						
7	RT	3	HS	70	95	20	70	Conifer	1	1	1			
								Hardwood						
7	LF	1	HS	45	90	5	90	Conifer						
								Hardwood	1	3	2			
7	LF	2	HT	0	50	10	90	Conifer						
								Hardwood			1			
11	RT	3	HS	75	75	60	40	Conifer					1	
								Hardwood						
11	LF	2	HS	30	80	5	90	Conifer						HUMAN TRAIL, CUT LOGS
								Hardwood						
11	RT	2	HS	85	80	70	30	Conifer						
								Hardwood	1					
11	LF	1	HS	55	90	5	90	Conifer			1	2		HUMAN TRAIL, CUT LOGS
								Hardwood						
11	LF	3	HS	35	80	5	90	Conifer	2					
								Hardwood	1	1				
11	RT	1	HS	85	75	50	50	Conifer						
								Hardwood	2					
15	RT	3	HS	75	95	60	40	Conifer						
								Hardwood	3	2	1			
15	LF	1	HS	65	90	70	20	Conifer						
								Hardwood		2				
15	LF	2	HS	55	95	70	20	Conifer	3	2				
								Hardwood	3					
15	LF	3	HS	50	95	50	50	Conifer			1	1		
								Hardwood						
15	RT	1	HS	70	80	60	40	Conifer						
								Hardwood	1	1	1			
15	RT	2	HS	70	90	70	30	Conifer						
								Hardwood	2	3				

Comment Summary

Oregon Plan Monitoring Sites 2003

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		REACH PHOTO #50	START
5	GL	00	105			1.8 M UNDERCUT
7	SC	00	139.6		RIP PHOTO #51	
8	LP	01	307.8	HS, WL		LOGS & RIPRAP, CF FISH, KI
11	RI	01	332.8	HS	RIP PHOTO #52	LOGS, RIPRAP
20	GL	02	462.6		METRIC #4 RIP #3	
22	LP	01	531.3	/TJ		
23	RI	11	531.3		ACW=3.3	
24	PP	11	531.3		T=16 DEG @ 10:35	
25	SR	11	531.3		H=1.1	END



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