

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

STREAM: Miller Creek (MC-178)
BASIN: Siuslaw River
SURVEY TYPE: Pre-Tx
DATE: June 23, 2003
SURVEY CREW: Tory Fitchett, Sarah Beldin
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 15.1 km²
USGS MAPS: Walton
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Miller Creek habitat survey extended 525 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 11.8 (range: 6.5-20.0). Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 1.2 percent. Scour pools (54%) and riffles (39%) dominated stream habitat. Gravel (71%) dominated stream substrate. Wood volume was low at 11.1 m³/100m.

COMMENTS:

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

OREGON DEPARTMENT OF FISH AND WILDLIFE

MILLER CREEK PRE-TX (MC-178)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/23/03

REACH 1

T17S-R07W-S19SW

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
DRY CHANNEL	1	5	1.0	0.00	5	0	0	5	65	25	5	0
POOL-BACKWATER	1	4	3.2	0.40	12	0	40	40	20	0	0	0
POOL-LATERAL SCOUR	23	279	2.5	0.57	710	0	12	14	68	7	0	0
POOL-STRAIGHT SCOUR	1	8	3.1	0.55	26	0	5	30	55	10	0	0
RAPID/BOULDERS	2	21	2.5	0.05	49	0	8	15	68	10	0	0
RIFFLE	15	235	2.2	0.07	528	0	6	8	78	8	0	0
STEP/COBBLE	3	11	3.1	0.05	33	0	2	3	90	5	0	0
Total:	46	563	2.4	0.33	1,364	0	Avg 9	12	71	7	0	0

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	1	4	3.2	0.40	12	0.89%	0	0.0
Scour Pools	24	287	2.5	0.56	736	53.98%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	15	235	2.2	0.07	528	38.71%	0	0.0
Rapids	2	21	2.5	0.05	49	3.58%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	11	3.1	0.05	33	2.44%	0	0.0
Dry	1	5	1.0	0.00	5	0.40%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km
All Pools:	25	44.4
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	4	7.1
Pool frequency (channel widths/pool):	3.0	
Residual pool depth (avg):	0.51	

STREAM SUMMARY

MILLER CREEK PRE-TX (MC-178)

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	
46	563	2.4	0.33	1,364	9	12	71	7	0	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	12	0.89%
Scour Pools	736	53.98%
Glides	0	0.00%
Riffles	528	38.71%
Rapids	49	3.58%
Cascades	0	0.00%
Step/Falls	33	2.44%
Dry	5	0.40%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1	REACH 1
Summary of Riparian Zone (0-30m) 3 transects	
Total hardwoods/1000	1443
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	41

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	4.7	0.3	5.3	0.0	5.0	0.3	15.0
15-30cm	0.0	2.0	1.7	0.3	1.0	2.3	2.7	4.7
30-50cm	0.0	1.7	0.0	0.3	0.3	1.3	0.3	3.3
50-90cm	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.7
>90cm	0.0	0.0	0.3	0.0	0.3	0.0	0.7	0.0
Total/100m2	0.0	8.3	2.3	6.3	1.7	9.0	1.3	7.9

Canopy closure and ground cover

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Canopy closure	90	81	89
Shrub cover	89	81	70
Grass/forb cover	11	16	27

Predominant landform in each zone

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Hillslope	0	17	17
High terrace	83	83	83
Low terrace	0	0	0
Floodplain	17	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
Riprap	0	0	0
Surface slope (%)	3	16	16

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	1443
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	41

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	0.3	15.0
15-30cm	2.7	4.7
30-50cm	0.3	3.3
50-90cm	0.0	0.7
>90cm	0.7	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		
4	RT	2	HT	5	100	65	25	Conifer	1	5				1	
								Hardwood							
4	RT	1	HT	5	100	100	0	Conifer							SLOPE ESTIMATED
								Hardwood	4						
4	LF	3	HT	5	100	70	30	Conifer							
								Hardwood			2	1			
4	LF	2	HT	-2	100	90	10	Conifer							
								Hardwood			1				
4	RT	3	HT	0	100	15	65	Conifer		3	1				
								Hardwood	5	1					
4	LF	1	HT	7	100	90	10	Conifer							FIRST RIP TAKEN @ 250M
								Hardwood		4	3				
31	LF	3	HS	75	85	60	40	Conifer							
								Hardwood		2	2				
31	RT	1	FP	4	95	95	5	Conifer							
								Hardwood	9		2				
31	LF	1	HT	-5	100	70	30	Conifer							2ND RIP @ 375M
								Hardwood		2					
31	RT	2	HT	5	100	100	0	Conifer							VINE MAPLE
								Hardwood	11						
31	RT	3	HT	5	90	100	0	Conifer							VINE MAPLE
								Hardwood	6						
31	LF	2	HS	75	90	50	40	Conifer							VINE MAPLE
								Hardwood	3	1					
46	LF	2	HT	5	20	80	20	Conifer							
								Hardwood							
46	LF	3	HT	5	90	80	20	Conifer							HS OF END OF Z3
								Hardwood		4					
46	RT	1	HT	3	65	90	10	Conifer							SALMONBERRY CITY!
								Hardwood							
46	RT	2	HT	5	75	100	0	Conifer							
								Hardwood	2			1			
46	RT	3	HT	5	70	95	5	Conifer						1	CEDAR, VINE MAPLE
								Hardwood	4						
46	LF	1	HT	2	80	90	10	Conifer							RIP ESTIMATED
								Hardwood	1						

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **2-MC** SITE ID: **178** **MILLER CREEK PRE-TX (MC-178)**

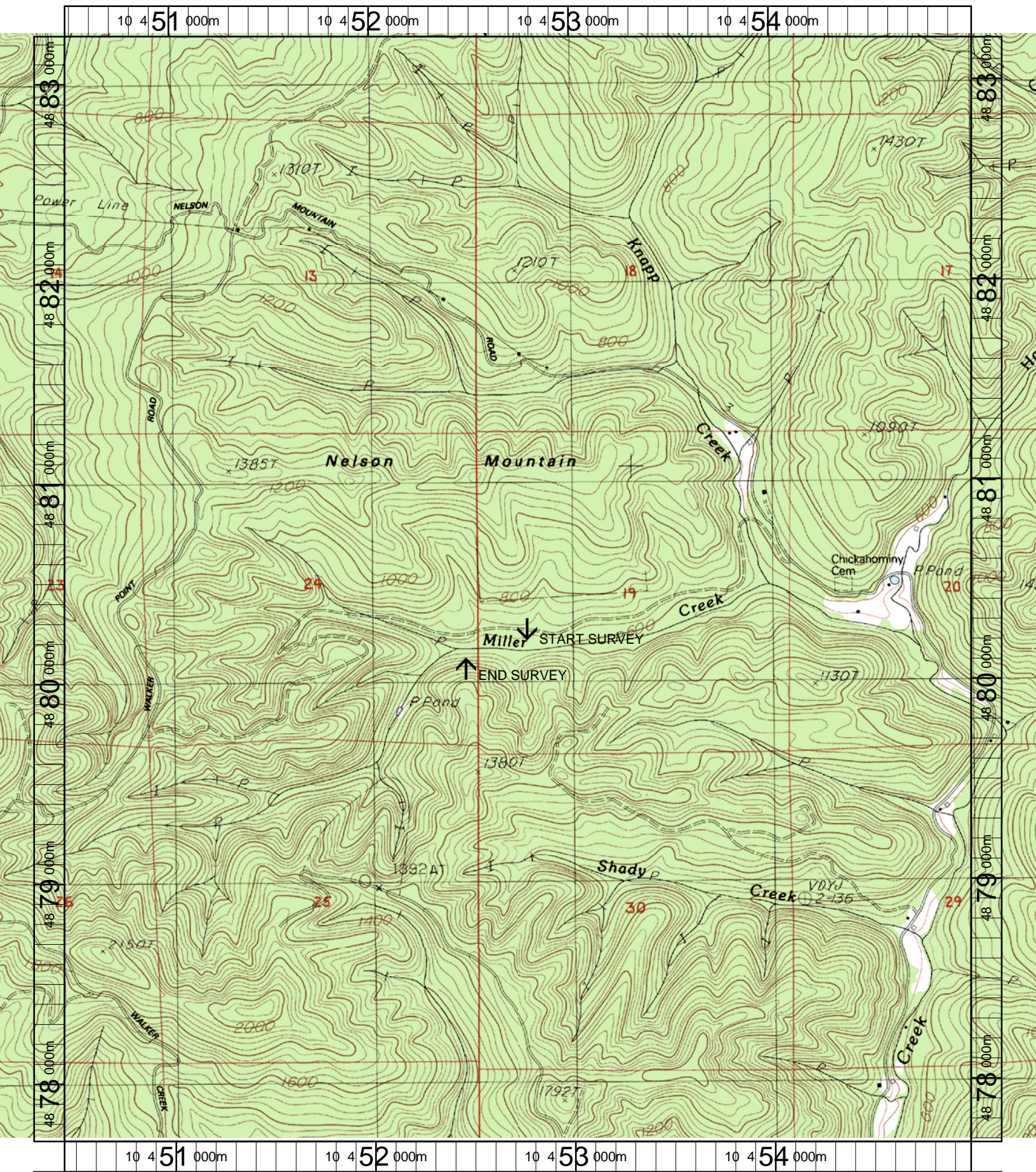
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	00	16			T=11 DEG C SIGN ON /ALDE
2	RI	00	29.8			JUV COHO THROUGHOUT
4	LP	00	48.4	BV	PTC 2M LONG, BV	OLD STICKS: 2M LONG PTC
5	RI	01	70.4	TJ/		
9	LP	00	99.9			DEEP UNDERCURRENT
10	SC	00	102.8		H=.25M	
12	RI	01	137.4	TJ/	SMALL TRIB. JCT.	METRICS #1; NO RIP
14	LP	00	145.9	DJ		BW-LIKE IN LOCATION
17	BW	10	174.2	DJ		
18	LP	00	189.5			DEEP UNDERCUT
20	LP	00	209.1			MOSQUITO HATCH
21	RI	00	233.5			METRICS #2: 1ST RIP
22	RI	00	258.5			ORANGE FLAGGING IN RIP Z
26	LP	00	312.8	WL		NEWT
27	LP	01	324.8	/TJ	SMALL TRIB JCT.	4M LONG PTC
31	RB	00	354.3			METRICS #3: 2ND RIP
32	LP	00	367.6			LEFT HS PINCHING IN
35	LP	00	405.2	BV	LOTS OF COHO FRY	OLD STICKS
39	SC	00	441		H=.35M	
41	LP	00	469.1		5M PTC LENGTH	ORANGE FLAG IN UNIT, 5M
44	LP	00	497.3			2M RI IN UNIT

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 2-MC SITE ID: 178 MILLER CREEK PRE-TX (MC-178)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
45	SC	00	499.5		H=.3M	
46	RI	00	525.3		END SIGN ON LOG	END SIGN ON LOG OVER



Name: WALTON
 Date: 12/17/2003
 Scale: 1 inch equals 2000 feet

Location: 10 452725 E 4880462 N
 Caption: MILLER CREEK RESTORATION SITE - SIUSLAW BASIN