

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

STREAM: Miller Creek (MC-178)
BASIN: Siuslaw River
SURVEY TYPE: Post-Tx
DATE: January 25, 2005
SURVEY CREW: Brian Bangs, Sheila Davis
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 515 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 14.6 (range: 7.0-20.0). Land use for the reach was mature (50-90 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Riffles (51%) and scour pools (39%) dominated stream habitat. Gravel (51%) dominated stream substrate. Wood volume was high at 33.9 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

T17S-R07W-S19SW

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 14.6		VWI Range: 7 - 20	

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
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 Channel	515	1,640	0
Secondary Channel	86	60	2
Off-Channel Units	57	108	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 2.7	Width: 6.3	19.5 (15.2 - 31.7)	24.3 (17.8 - 30.5)
Depth: 0.33	Height: 0.5	1.0 (0.7 - 1.3)	1.4 (1.1 - 1.5)

W:D ratio: 13.8
 Stream Flow Type: LF
 Average Unit Gradient: 1.3%
 Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 3.1
 Habitat Units/100m (total channel length): 9.1
 Habitat Units/100m (primary channel length): 11.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	ST
Riparian Vegetation:	D30	S

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):	124	24.1
Volume (m ³):	175	33.9
Key pieces (>=12m x 0.60m):	13	2.5

OREGON DEPT OF FISH AND WILDLIFE

MILLER CREEK POST-TX (2-MC, 178)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

1/25/2005

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	2	26	1.1	0.00	22	0	50	6	17	22	6	0
GLIDE	2	28	2.1	0.18	69	0	15	45	33	8	0	0
POOL-BACKWATER	5	35	1.7	0.37	63	0	36	36	20	8	0	0
POOL-ISOLATED	1	8	3.0	0.20	23	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	24	235	3.2	0.55	699	0	11	22	55	12	0	0
PUDDLED UNIT	1	6	0.8	0.05	4	0	100	0	0	0	0	0
RIFFLE	25	321	2.7	0.18	929	0	8	13	62	16	0	0
Total:	60	658	2.7	0.33	1,809	0	Avg: 16	19	51	13	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	6	43	1.9	0.34	86	4.76%	0	0.0	
Scour Pools	24	235	3.2	0.55	699	38.63%	0	0.0	
Glides	2	28	2.1	0.18	69	3.82%	0	0.0	
Riffles	25	321	2.7	0.18	929	51.34%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	0	0			0	0.00%	0	0.0	
Dry	3	32	1.0	0.02	26	1.44%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

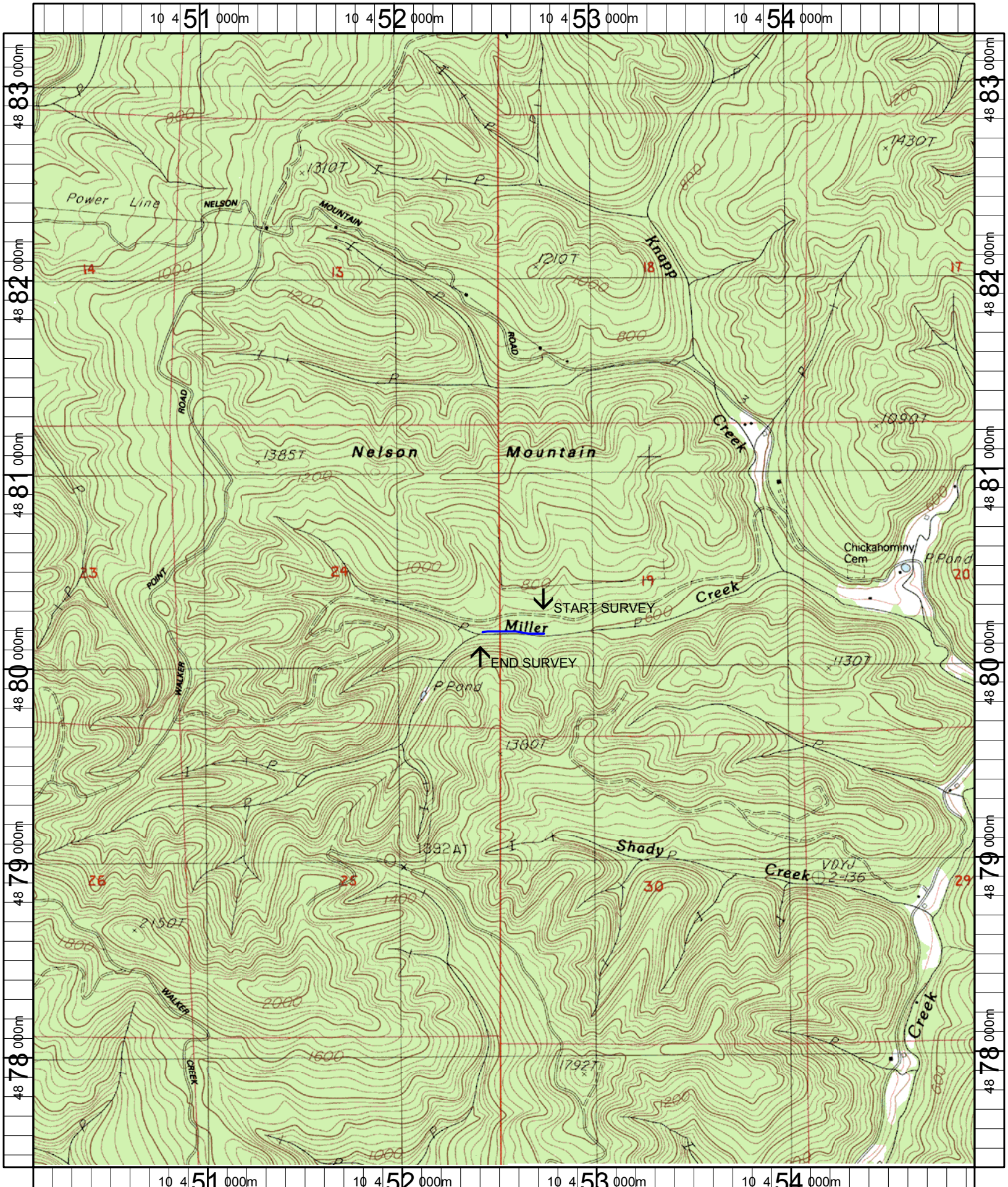
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	30	45.6	58.2
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	10	15.2	19.4
Pool frequency (channel widths/pool):	3.5		
Residual pool depth (avg):	0.38		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **178** MILLER CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
3	RI	00	11.7		JUVENILE COHO	
4	LP	00	16.8	BV		
8	LP	01	58.1	TJ/		
11	LP	00	83.9	/SS		
15	LP	01	108.2	HS	DEAD COHO	
16	IP	10	108.2		NEWT EGG MASSES	
21	LP	01	151.2	DJ		
23	LP	01	170.7	HS	DEAD COHO	
24	RI	01	186.6	DJ		
31	RI	02	230.4		OLD RR, WATER GOES UNDERGROUND	
34	RI	01	251.5	HS		
36	LP	00	255.5	DJ		
39	RI	01	305.4	HS, /TJ		
41	RI	01	334.1	DJ		
48	LP	00	392.9		JUVENILE COHO	
49	LP	00	401.6	HS		
54	LP	00	461.8	HS, DJ		
59	RI	00	494.8	DJ		



Name: WALTON
 Date: 6/13/2005
 Scale: 1 inch equals 2000 feet

Location: 10 452543 E 4880338 N
 Caption: MILLER CREEK RESTORATION SITE - SIUSLAW BASIN