

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

STREAM: Woodruff Creek (MS-169)
BASIN: Millicoma River
SURVEY TYPE: Post-Tx
DATE: March 3, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 7.8 km²
USGS MAPS: Allegany
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Woodruff Creek habitat survey extended 719 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 8.0 (range: 1.0-20.0). Land use for the reach was timber harvest and young (3-15 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (45%) and riffles (38%) dominated stream habitat. Gravel (50%) and sand (27%) dominated stream substrate. Wood volume was very high at 46.3 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

T25S-R11W-S08NE

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	8.0	VWI Range:	1 - 20

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	719	3,961	0
Secondary	30	38	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 5.3	Width: 8.4	10.0 (7 - 12.5)	16.9 (12.9 - 20)
Depth: 0.58	Height: 0.5	1.0 (1 - 1.2)	2.1 (1.4 - 3.5)

W:D ratio: 16.3

Stream Flow Type: HF

Avg. Unit Gradient: 1.3%

Entrenchment (ACW:FPW ratio): 1.2

Water temp (°C): 8.0 - 8.0

Habitat Units/100m: 7.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	YT
Riparian Vegetation:	D15	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</u>
All pieces (>=3m x 0.15m):	147	20.5
Volume (m ³):	332	46.3
Key pieces (>=10m x 0.60m):	44	6.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

WOODRUFF CREEK POST-TX (MS-169)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/3/2004

REACH 1

T25S-R11W-S08NE

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
CASCADE/BOULDERS	1	7	2.0	0.20	14	0	0	4	17	61	17	0
POOL-BACKWATER	3	23	1.0	0.38	24	0	33	67	0	0	0	0
POOL-DAMMED	1	17	8.0	1.00	138	0	15	60	25	0	0	0
POOL-LATERAL SCOUR	21	280	5.7	0.79	1,614	0	5	32	53	6	2	2
POOL-PLUNGE	5	28	6.5	1.06	195	0	4	34	43	10	5	5
RAPID/BOULDERS	4	63	5.1	0.43	321	0	1	16	43	23	16	0
RIFFLE	15	299	5.3	0.34	1,534	0	4	17	67	9	2	1
STEP/BEDROCK	1	1	2.4	0.20	2	0	0	0	0	0	0	100
STEP/BOULDERS	1	3	3.0	0.40	10	0	0	0	0	30	70	0
STEP/COBBLE	3	22	5.9	0.30	118	0	2	12	63	22	2	0
STEP/LOG	1	1	7.1	0.30	7	0	18	73	9	0	0	0
STEP/STRUCTURE	1	4	6.0	0.20	24	0	0	10	90	0	0	0
Total:	57	749	5.3	0.58	3,999	0	Avg: 6	27	50	10	5	3

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	4	40	2.8	0.54	161	4.03%	0	0.0
Scour Pools	26	308	5.9	0.84	1,809	45.23%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	15	299	5.3	0.34	1,534	38.35%	0	0.0
Rapids	4	63	5.1	0.43	321	8.03%	0	0.0
Cascades	1	7	2.0	0.20	14	0.35%	0	0.0
Step/Falls	7	31	5.2	0.29	160	4.01%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	<u>Total</u>	<u># / Km</u>
All Pools:	30	40.1
Pools >=1m deep:	8	10.7
Complex pools (LWD pieces>=3):	16	21.4
Pool frequency (channel widths/pool):	3.0	
Residual pool depth (avg):	0.56	

STREAM SUMMARY

WOODRUFF CREEK POST-TX (MS-169)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
57	749	5.3	0.58	3,999	6	27	50	10	5	3	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	161	4.03%
Scour Pools	1,809	45.23%
Glides	0	0.00%
Riffles	1,534	38.35%
Rapids	321	8.03%
Cascades	14	0.35%
Step/Falls	160	4.01%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **169** WOODRUFF CREEK POST-TX (MS-16)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SB	00	3.2		H=1.1M	
2	RB	00	11.1		T=8C, PIPE IN CR	
3	LP	00	25.6		FRY	
5	LP	00	63.3		CULVERT CHUNK IN POO	
7	RI	00	98.7	CS/CS, BC	SG=6M	
9	RI	00	120.9	/LI,/SS	SG=8M	
10	LP	00	144.2	LI/		
11	RI	00	153.8	CS/CS	SG=4M, PIPE IN CR, OLD	
13	SR	00	159.4		H=.5M	
15	LP	00	185.2		SG=4M	
16	SC	00	190.9		SG=8M	
18	PP	01	214		SG=6M	
19	BW	10	214		RS NEWT, FRY	
20	RI	00	244	HS	SG=8M, 3 HAB LOGS	
21	RI	01	255		SG=4M	
22	BW	10	255	SS/		
23	LP	01	266.3	HS	3 LOGS	
24	BW	10	266.3		FRY	
25	RI	00	276.3		SG=5M	
26	LP	00	293.5	HS	1 LOG	
27	RI	00	321.9	SS/	SG=4M	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **169** WOODRUFF CREEK POST-TX (MS-16)

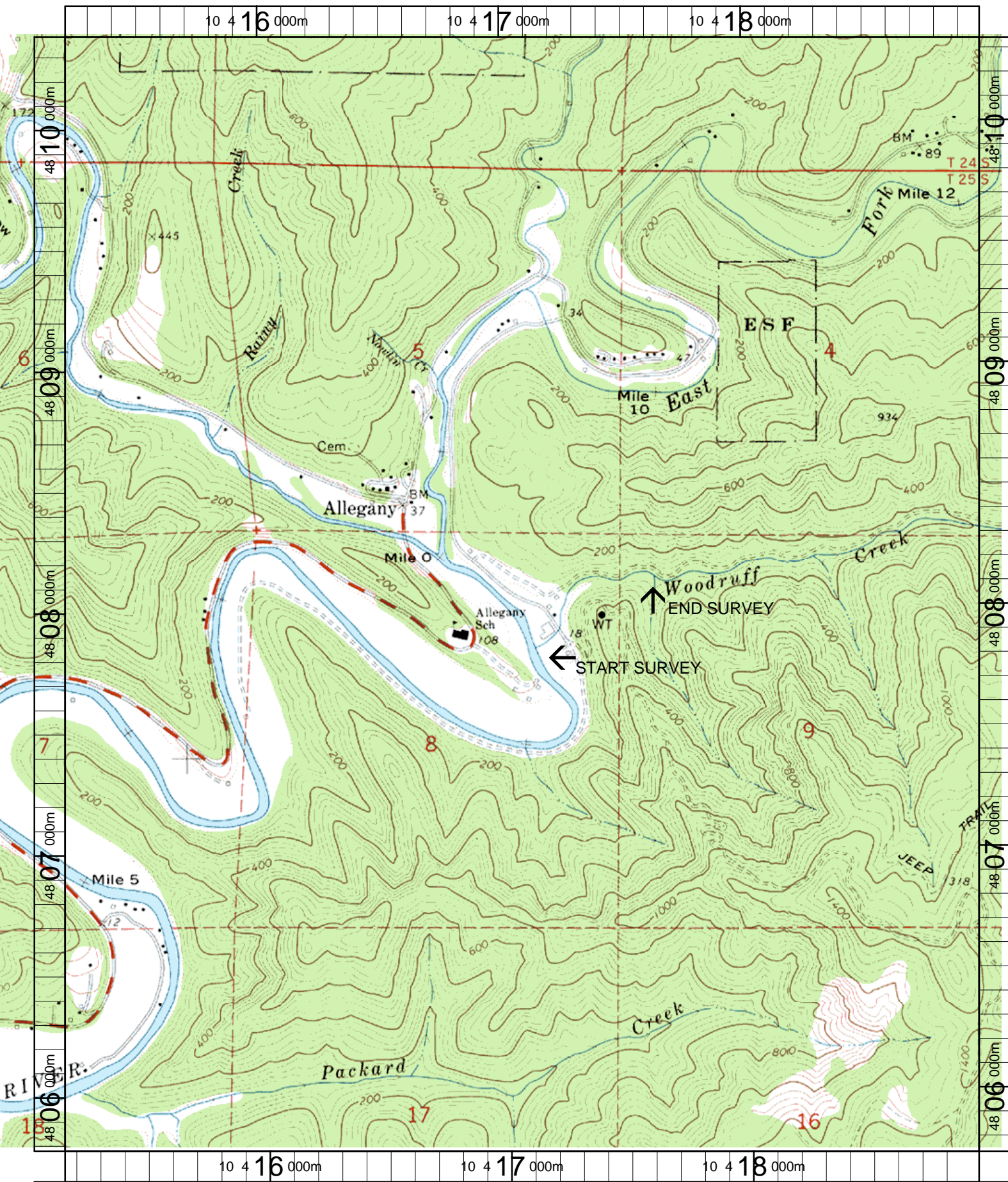
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
28	LP	00	332.2		SG=4M	
29	RI	00	369.2	CE/		
30	LP	00	391.6	HS	SG=4M, 6 LOGS	
31	RI	00	401.8		SG=4M	
32	LP	00	418.5	HS	3 OLD LOGS	
33	LP	00	429.5	HS	LOGS	
34	RB	00	458.3	HS	SG=10M	
35	LP	00	469.8	HS	2 LOGS	
37	SL	00	474.8		H=.6M	
38	DP	00	492	HS, /SS	LOGS	
39	LP	00	509.8	CE,/SS		
41	LP	00	546.8	SS/, HS	FRY, LOGS	
42	SC	00	552.8	HS	SG=6M	
44	SS	00	560.5	HS	LOGS, H=.4M	
45	LP	00	575.3	HS	LOGS, SG=8M	
47	RI	00	596.8	HS		
48	LP	00	603.3	HS	LOG, SG=4M	
49	RI	00	625.3	HS	5 LOGS-OLD	
50	PP	00	632.7	HS	SG=4M	
51	RI	00	668.2	HS	LOG	
52	LP	01	678.2	/TJ, HS	SG=4M, 6 LOGS	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 169 WOODRUFF CREEK POST-TX (MS-16)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
53	CB	11	678.2		ACW=3.5M, T=8.5C	
55	LP	00	696.7	HS		
57	LP	00	718.8		.6	



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

Location: 10 417065 E 4808064 N
 Caption: WOODRUFF CREEK RESTORATION SITE - MILLICOMA BASIN