

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: July 9, 2003
SURVEY CREW: Lisa Biggs, Chelsey Girt
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 737 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 11.8 (range: 3.0-20.0). Land use for the reach was timber harvest and young (3-15 cm dbh) trees. The average unit gradient was 1.3 percent. Slackwater pools (42%) and scour pools (31%) dominated stream habitat. Gravel (40%) and sand (37%) dominated stream substrate. Wood volume was very high at 46.7 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.

OREGON DEPARTMENT OF FISH AND WILDLIFE

WOODRUFF CREEK POST-TX (MS-169)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/9/03

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	6	1.5	0.30	8	25	5	0	5	0	90	0
CULVERT CROSSING	3	51	0.9	0.03	53	0	2	14	78	7	0	0
DRY CHANNEL	2	10	1.8	0.00	13	0	0	10	90	0	0	0
POOL-BACKWATER	4	28	4.2	0.30	148	0	24	64	12	0	0	0
POOL-BEAVER DAM	7	232	5.3	0.76	1,227	71	28	40	26	3	2	1
POOL-LATERAL SCOUR	11	149	5.3	0.65	769	21	21	50	27	2	1	0
POOL-STRAIGHT SCOUR	4	63	4.3	0.49	267	10	23	50	23	3	1	0
RAPID/BOULDERS	2	27	2.0	0.04	48	12	3	13	36	46	3	0
RIFFLE	16	246	2.9	0.21	756	59	5	27	64	3	1	0
STEP/BEAVER DAM	6	4	3.3	0.05	12	4	15	40	37	0	1	8
STEP/BEDROCK	1	3	1.0	0.10	3	4	5	5	0	0	5	86
STEP/LOG	1	0	4.0	0.01	2	0	0	95	5	0	0	0
STEP/STRUCTURE	1	0	1.1	0.05	0	0	5	21	21	53	0	0
Total:	59	819	3.6	0.34	3,307	206	Avg 14	37	40	5	2	2

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	11	260	4.9	0.59	1,375	41.58%	71	5.2
Scour Pools	15	212	5.0	0.61	1,036	31.33%	31	3.0
Glides	0	0			0	0.00%	0	0.0
Riffles	16	246	2.9	0.21	756	22.86%	59	7.8
Rapids	2	27	2.0	0.04	48	1.46%	12	24.8
Cascades	1	6	1.5	0.30	8	0.25%	25	297.6
Step/Falls	9	7	2.9	0.05	17	0.51%	8	47.9
Dry	2	10	1.8	0.00	13	0.40%	0	0.0
Culverts	3	51	0.9	0.03	53	1.60%	0	0.0

POOL SUMMARY

	Total	# / Km
All Pools:	26	31.7
Pools >=1m deep:	2	2.4
Complex pools (LWD pieces>=3):	12	14.7
Pool frequency (channel widths/pool):	3.7	
Residual pool depth (avg):	0.54	

STREAM SUMMARY

WOODRUFF CREEK POST-TX (MS-169)

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	
59	819	3.6	0.34	3,307	14	37	40	5	2	2	206

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	1,375	41.58%
Scour Pools	1,036	31.33%
Glides	0	0.00%
Riffles	756	22.86%
Rapids	48	1.46%
Cascades	8	0.25%
Step/Falls	17	0.51%
Dry	13	0.40%
Culverts	53	1.60%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

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

Total hardwoods/1000	386
Total conifers/1000 ft	0
Total conifers >20" dbh/1000 ft	0
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	3.0	0.0	0.7	0.0	0.7	0.0	4.3
15-30cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-50cm	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.7
50-90cm	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0
>90cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Total/100m2	0.0	4.7	0.0	1.0	0.0	0.7	0.0	2.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	22		15		1	
Shrub cover	67		57		64	
Grass/forb cover	32		26		9	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		17		33	
High terrace	83		67		50	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		17		17	
Riprap	0		0		0	
Surface slope (%)	14		3		18	

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	386
Total conifers/1000 ft	0
Total conifers >20" dbh/1000 ft	0
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	0.0	4.3
15-30cm	0.0	0.0
30-50cm	0.0	0.7
50-90cm	0.0	1.0
>90cm	0.0	0.3

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			
12	LF	1	HT	0	0	90	10	Conifer							TRANSITION FROM CR TO HT
								Hardwood							HT
12	LF	2	HT	0	0	20	50	Conifer							NO TREES
								Hardwood							
12	LF	3	HT	0	0	5	5	Conifer							NO TREES, BARE GROUND
								Hardwood							
12	RT	1	HS	85	10	90	10	Conifer							
								Hardwood							
12	RT	2	HS	20	10	90	10	Conifer							
								Hardwood							
12	RT	3	HS	25	0	90	10	Conifer							
								Hardwood							
17	RT	2	HT	0	0	90	10	Conifer							NO TREES
								Hardwood							
17	LF	1	HT	0	10	70	30	Conifer							BV ACTIVITY, MYRTLE, ELDERBERRY
								Hardwood	1			1	1		NO TREES
17	LF	2	HT	0	0	40	60	Conifer							
								Hardwood							
17	RT	1	HT	0	5	40	50	Conifer							NO TREES
								Hardwood							
17	RT	3	HT	0	0	90	10	Conifer							NO TREES
								Hardwood							
17	LF	3	RB	0	0	10	20	Conifer							NO TREES
								Hardwood							
27	RT	1	HT	0	85	90	10	Conifer							ALDER, ELDERBERRY
								Hardwood	4		1		1		
27	LF	1	HT	0	20	20	80	Conifer							ALDER, ELDERBERRY
								Hardwood	4				1		
27	LF	2	RB	0	0	5	20	Conifer							NO TREES
								Hardwood							
27	LF	3	HS	85	5	95	5	Conifer							MYRTLE, ALDER
								Hardwood	2						
27	RT	2	HT	0	80	95	5	Conifer							ELDERBERRY, ALDER
								Hardwood	2		1				
27	RT	3	HT	0	0	95	5	Conifer							
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	LP	01	13.4			SALMONIDS
4	SD	00	14	BD	H=.5	
5	BP	00	57.3	BV		COHO
6	SD	00	57.6	BD	H=.5	
7	BP	00	79	BV		COHO, DACE
8	SS	00	79.1		H=.1	
9	CC	00	111.9	CC		DIAM=3.6 X 3.6 CIR. CLOSED
10	SD	00	112.7	BD	H=.65	
11	BP	00	151.2	BV		DACE, COHO
12	BP	00	171.1	BV	MINIMAL SD RIP 1	BRIDGE FOR PIPE XING IN S
14	SD	00	175.2	BD	H=.8	
15	BP	01	255	BV, HS	/HS BEGINS & ENDS 12"	UNCABLED
16	BW	10	255	WK		RSN, DACE, YOUNG OF THE
17	LP	00	265	WL	BEAVER LODGE? RIP 2	DEER
19	SD	00	273.9	BD	H=.4	
20	BP	00	288.6	BV, HS		SALMONIDS
21	RI	00	292.6		CRAWDAD	
22	LP	00	308.6	WL		CRAWDAD, DEER
27	LP	00	402.2	HS	RIP 3	UNCABLED= CABLE ON ONE
29	LP	00	424.3	HS	HS BEGINS	CABLED
30	SD	00	425	BD	OLD DAM 8M L BUILT LG	

Comment Summary

Oregon Plan Monitoring Sites 2003

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

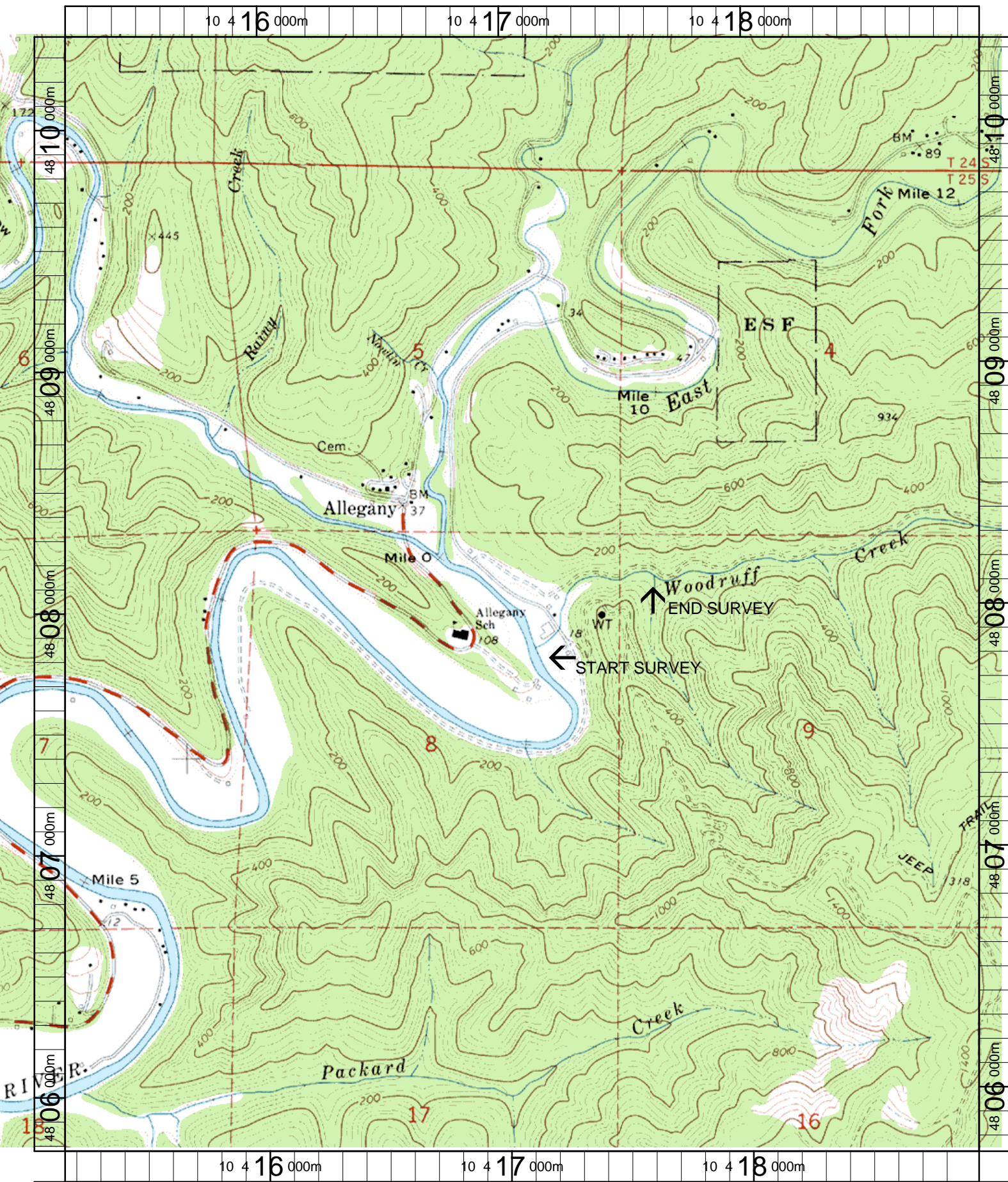
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
31	BP	00	439.2	BV, HS	CLEARCUT RIGHT	CABLED
32	RI	00	470.2			COHO
33	LP	00	486.2	HS		UNCABLED
34	SL	00	486.6	HS	H=.8	UNCABLED
35	RI	01	511.6	HS, WL		RACCOON, OPPOSUM, SLO
36	BW	10	511.6	WL		BEAR, COHO
37	RI	01	534.6			SLOW H2O MOVEMENT
38	DC	11	534.6	TJ	CLAY RIFFLE-LIKE UNIT	DRY RIFFLE- LIKE UNIT
39	CC	11	534.6	CE, CC	CULVERT LIP .1 ABOVE S	SM STEP OVER STRUC. B/F
40	DC	11	534.6		HOLE IN BETWEEN CULV	DRY RIFFLE-LIKE UNIT
41	CC	11	534.6	CC		DIAM=0.75X 0.75M
42	SP	00	555.7	HS		SOME CABLED, SOME NOT,
44	LP	00	566.7	DJ		
45	RI	00	582.2	BV		
46	LP	00	592.3	BV HS		
47	RI	00	604.3		CLEARCUT RIGHT	
48	SP	00	618.1	HS		COHO
50	SP	00	635.7	HS		COHO
53	LP	00	677	WL		RACCOON, COHO
55	LP	01	700.6	/SS, TJ HS		CABLED
56	RB	11	700.6		TRIB	

Comment Summary

Oregon Plan Monitoring Sites 2003

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>
58	LP	00	718			COHO
59	RI	00	737.4	WL		RACCOON, ELK, COHO



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