

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

STREAM: Dogwood Creek (MC-28)  
BASIN: Siuslaw River  
SURVEY TYPE: Post-Tx  
DATE: March 8, 2006  
SURVEY CREW: Paul Jacobsen, Brian Bangs  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 10.5 km<sup>3</sup>  
USGS MAPS: High Point  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Dogwood Creek habitat survey extended 513 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.2 (range: 6.0-8.0). Land use for the reach was large (30-50 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (58%) and riffles (29%) dominated stream habitat. Gravel (34%) and sand (31%) dominated stream substrate. Wood volume was moderate at 24.6 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures during the survey.

Stream Dogwood Creek (MC-28)  
 Basin Siuslaw River  
 Treatment Large Wood

	ODFW Benchmark		Pre 2/5/99	Post 1/20/00	Post 3/8/06		
Habitat Variable	Desirable	Undesirable					
% Pool Area	>35%	<10%	36.7	38.6	<b>61.9</b>		
Number of Pools			9	9	<b>13</b>		
Deep Pools/km (>1.0 m)			1.9	0	<b>3.7</b>		
% Off-Channel			3.2	<b>0.2</b>	<b>0.7</b>		
LWD – Pieces/100m	>20	<10	19.1	18.7	17.7		
LWD – Volume/100m	>30	<20	21.3	27.7	24.6		
LWD – Key Pieces/100m	>3	<1	0	0.5	<b>1.2</b>		
Large Wood Jams/km			6.4	<b>11.6</b>	<b>11.7</b>		
% Riffle Fines	<10	>20	40	28	23		
% Riffle Gravel	>35	<15	44	51	40		
% Bedrock			24	37	22		

**Bold** is noticeable change

Comments: Since the treatment was large wood assembled in complex jams, it is no surprise that there was an increase in some of those variables. However, wood pieces have declined through time and wood volume is declining towards pre-treatment conditions, but key pieces and wood jams have increased or remained steady. Pool area, deep pools and the number of pools have increased. Substrate has remained relatively unchanged.

REACH 1

T19S-R06W-S28SW

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	7.2	VWI Range:	6 - 8

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 Channel	513	2,528	0
Secondary Channel	0	0	0
Off-Channel Units	22	19	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.6	Width: 9.5	17.5 ( 14.2 - 21.2 )	23.9 ( 17 - 32 )
Depth: 0.43	Height: 0.6	1.2 ( 1.1 - 1.5 )	1.4 ( 1.3 - 1.7 )

W:D ratio: 15.5  
 Stream Flow Type: LF  
 Average Unit Gradient: 1.3%  
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.9  
 Habitat Units/100m (total channel length): 5.4  
 Habitat Units/100m (primary channel length): 5.7

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	YT
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):	91	17.7
Volume (m <sup>3</sup> ):	126	24.6
Key pieces (>=12m x 0.60m):	6	1.2

OREGON DEPT OF FISH AND WILDLIFE

DOGWOOD CREEK POST-TX (2-MC, 28)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

3/8/2006

REACH 1		T19S-R06W-S28SW					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	9	0.4	0.05	4	0	5	35	50	10	0	0
POOL-DAMMED	1	22	4.1	0.75	88	0	10	65	20	5	0	0
POOL-LATERAL SCOUR	12	276	5.3	0.79	1,486	0	8	46	22	3	1	19
RIFFLE	8	185	3.9	0.19	744	0	5	18	40	9	3	25
STEP/BEDROCK	2	9	5.3	0.10	51	0	0	0	0	0	0	100
STEP/COBBLE	4	32	5.2	0.13	164	0	0	7	76	15	1	0
STEP/LOG	1	2	4.5	0.05	11	0	10	60	30	0	0	0
<b>Total:</b>	<b>29</b>	<b>534</b>	<b>4.6</b>	<b>0.43</b>	<b>2,547</b>	<b>0</b>	<b>Avg: 5</b>	<b>31</b>	<b>34</b>	<b>7</b>	<b>2</b>	<b>22</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	1	22	4.1	0.75	88	3.46%	0	0.0	
Scour Pools	12	276	5.3	0.79	1,486	58.35%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	8	185	3.9	0.19	744	29.21%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	9	0.4	0.05	4	0.14%	0	0.0	
Step/Falls	7	43	5.1	0.11	225	8.84%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

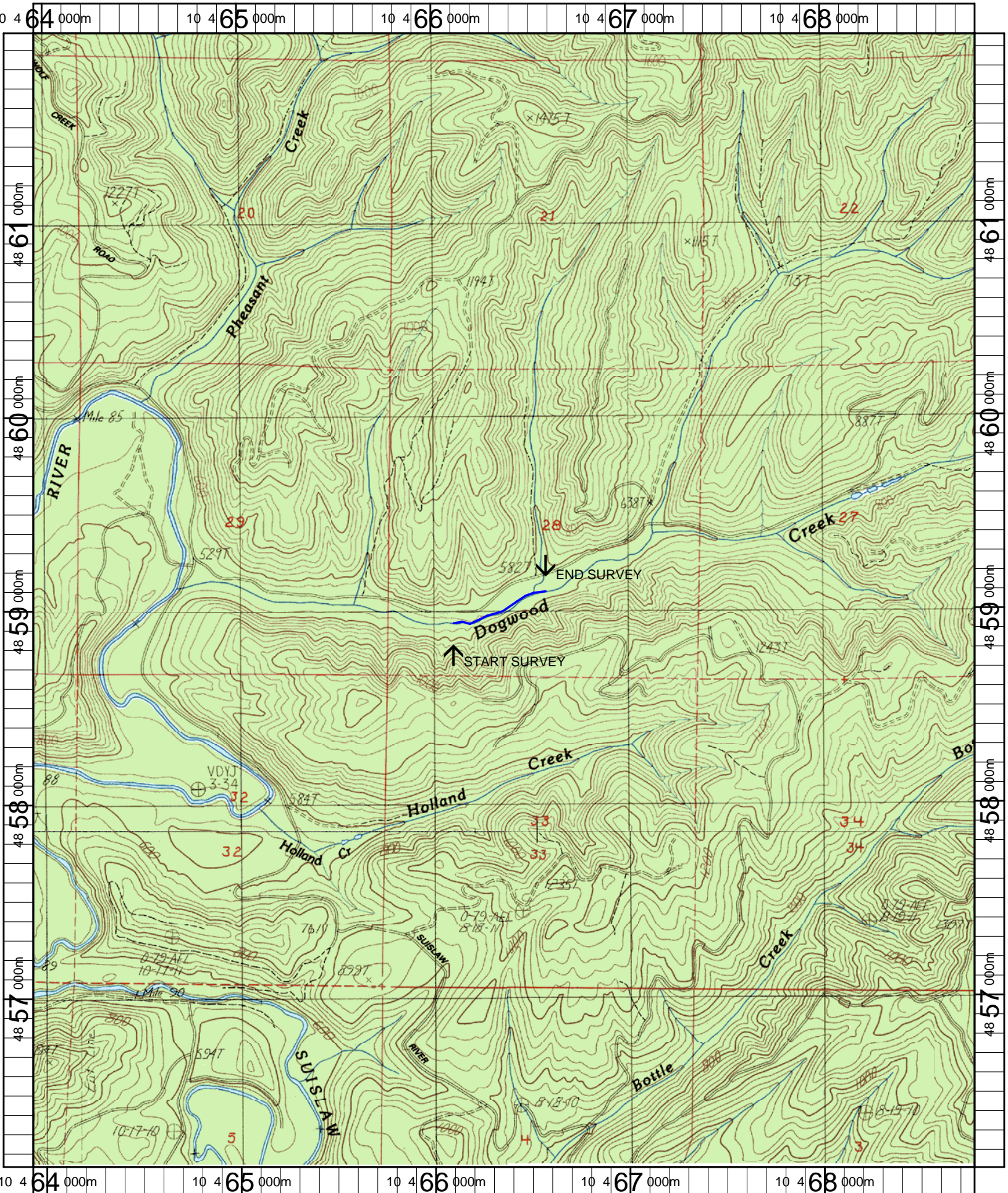
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	13	24.3	25.4
Pools >=1m deep:	2	3.7	3.9
Complex pools (LWD pieces>=3):	8	15.0	15.6
Pool frequency (channel widths/pool):	4.3		
Residual pool depth (avg):	0.64		

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC**      SITE ID: **28**      **DOGWOOD CREEK POST-TX**

<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	RI	00	17.1	HS, BV		
2	LP	00	45.8	HS x 2, BV		
3	RI	00	78.3	HS, BV		
6	SR	00	105.7		H = 0.4	
7	LP	00	137.7	HS, DJ		
8	SL	00	140.1		H = 0.4	
13	SC	00	243.5	HS	SALMON CARCASS	
18	LP	00	309.3	HS, BV		
22	LP	00	396.8	HS, BV, DJ		
24	LP	01	434.5	/TJ		
26	LP	01	464.8	HS, DJ, TJ/		



Name: HIGH POINT  
 Date: 1/25/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 466363 E 4859048 N  
 Caption: DOGWOOD CREEK RESTORATION SITE - SIUSLAW BASIN