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:	August 1, 2006
SURVEY CREW:	Paul Jacobsen, Brian Cannon
REPORT PREPARED BY:	Paul Jacobsen
BASIN AREA:	10.5 km^2
USGS MAPS:	High Point
ECOREGION:	Coast Range Sedimentary

GENERAL DESCRIPTION:

The Dogwood Creek habitat survey extended 536 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 8.0 (range: 4.0-12.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 1.0 percent. Scour pools (77%) dominated stream habitat. Gravel (32%) and bedrock (30%) dominated stream substrate. Wood volume was moderate at 28.6 m^3/100m.

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 8/3/99	Post 7/5/00	Post 8/1/06		
Habitat Variable	**Desirable**	**Undesirable**					
% Pool Area	>35%	<10%	71.6	74.5	77.1		
Number of Pools			13	20	17		
Deep Pools/km (>1.0 m)			0	0	0		
% Off-Channel			0.0	1.7	**3.7**		
LWD – Pieces/100m	>20	<10	15.8	13.4	**23.7**		
LWD – Volume/100m	>30	<20	7.8	**16.7**	**28.6**		
LWD – Key Pieces/100m	>3	<1	0.0	**0.6**	**0.9**		
Large Wood Jams/km			8.4	9.9	**11.2**		
% Riffle Fines	<10	>20	14	38	36		
% Riffle Gravel	>35	<15	46	24	43		
% Bedrock			23	28	30		

Bold is noticeable change

Comments: This site was treated with large wood and it appears that not only is the wood staying in the reach, it is accumulating additional material. Pool area has remained relatively stable, but in a pool-rich stream segment, large change would be unexpected. There are still no deep pools, but this may be in part due to the relatively large amount of exposed bedrock, preventing pool scour. With time, if the stream aggrades, deeper pools may be created. Riffle fines appear to be increasing, but since substrate is estimated, only large differences between surveys can be considered a real change.

OREGON DEPT OF FISH AND WILDLIFE **DOGWOOD CREEK POST-TX (2-MC, 28)**

HABITAT INVENTORY Report Date: 2/7/2007 Survey Date: 8/1/2006

REACH 1 **T19S-R06W-S28SW** **REACH 1**

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 8.0 VWI Range: 4 - 12

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary Channel	536	1,808	0
Secondary Channel	0	0	0
Off-Channel Units	18	69	0

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 5	First Terrace *n* = 5
Width:	3.0	Width:	7.2	12.8 (10 - 18.2)	17.0 (10.5 - 23)
Depth:	0.28	Height:	0.5	1.1 (1 - 1.1)	1.3 (1.2 - 1.5)

W:D ratio: 13.4
Stream Flow Type: LF
Average Unit Gradient: 1.0%
Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.8
Habitat Units/100m (total channel length): 5.8
Habitat Units/100m (primary channel length): 6.0

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	ST	YT
Riparian Vegetation:	D15	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	2%	Reach avg: 98%
Undercut Banks:	29%	Range: 72 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	127	23.7
Volume (m^3):	153	28.6
Key pieces (>=12m x 0.60m):	5	0.9

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HABITAT INVENTORY Report Date: 2/7/2007 Survey Date: 8/1/2006

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^2)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	6	0.2	0.01	1	0	0	15	75	10	0	0
GLIDE	1	11	2.2	0.10	24	1	0	5	0	0	0	95
POOL-BACKWATER	1	5	0.6	0.05	3	0	15	35	50	0	0	0
POOL-LATERAL SCOUR	16	344	3.9	0.50	1,443	13	4	26	26	7	0	37
RAPID/BEDROCK	1	10	4.4	0.10	45	0	0	5	15	0	0	80
RIFFLE	8	146	2.6	0.07	312	0	6	30	43	11	0	11
RIFFLE W/ POCKETS	1	19	1.3	0.15	25	0	0	25	60	15	0	0
STEP/BEDROCK	1	2	1.1	0.05	3	0	0	0	0	0	0	100
STEP/COBBLE	2	11	2.0	0.05	20	5	0	15	35	40	10	0
Total:	32	554	3.0	0.28	1,877	19	**Avg:** 4	24	32	9	1	30

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Wetted Area Percent	Large Boulders Number	Large Boulders (# / $100m^2$)
Dammed & BW Pools	1	5	0.6	0.05	3	0.16%	0	0.0
Scour Pools	16	344	3.9	0.50	1,443	76.89%	13	0.9
Glides	1	11	2.2	0.10	24	1.30%	1	4.1
Riffles	9	165	2.4	0.07	337	17.97%	0	0.0
Rapids	1	10	4.4	0.10	45	2.41%	0	0.0
Cascades	1	6	0.2	0.01	1	0.05%	0	0.0
Step/Falls	3	13	1.7	0.05	23	1.22%	5	21.9
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:	17	30.7	31.7
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	9	16.2	16.8
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.45		

OREGON DEPARTMENT OF FISH AND WILDLIFE **DOGWOOD CREEK POST-TX**

HABITAT INVENTORY **GCG: 2-MC** **SITE ID: 28**

Survey Date 8/1/2006
Report Date: 2/7/2007

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	2438
Total conifers/1000 ft	325
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	0.7	7.7	0.3	4.7	2.3	19.7	3.3	32.0
15-30cm	0.0	1.3	0.7	2.0	0.3	0.7	1.0	4.0
30-50cm	0.3	2.0	0.3	1.7	0.3	0.0	1.0	3.7
50-90cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	11.3	1.3	8.3	3.0	20.3	1.8	13.3

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	92	83	64
Shrub cover	50	31	33
Grass/forb cover	48	66	63

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	17	17	67
High terrace	33	83	33
Low terrace	50	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
Riprap	0	0	0
Surface slope (%)	20	10	24

OREGON DEPARTMENT OF FISH AND WILDLIFE **DOGWOOD CREEK POST-TX**

HABITAT INVENTORY - RIPARIAN SURVEY **GCG: 2-MC** **SITE ID: 28** **8/1/2006**

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	2438
Total conifers/1000 ft	325
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 0-30 meters Conifer	Hardwood
3-15cm	3.3	32.0
15-30cm	1.0	4.0
30-50cm	1.0	3.7
50-90cm	0.0	0.3
>90cm	0.0	0.0

OREGON DEPT OF FISH AND WILDLIFE **DOGWOOD CREEK POST-TX (2-MC:28)**

HABITAT INVENTORY Report Date: 2/7/2007 Survey Date: 8/1/2006

GCG: 2-MC SITE ID: 28

RIPARIAN ZONE VEGETATION

Reach 1 Reach 1

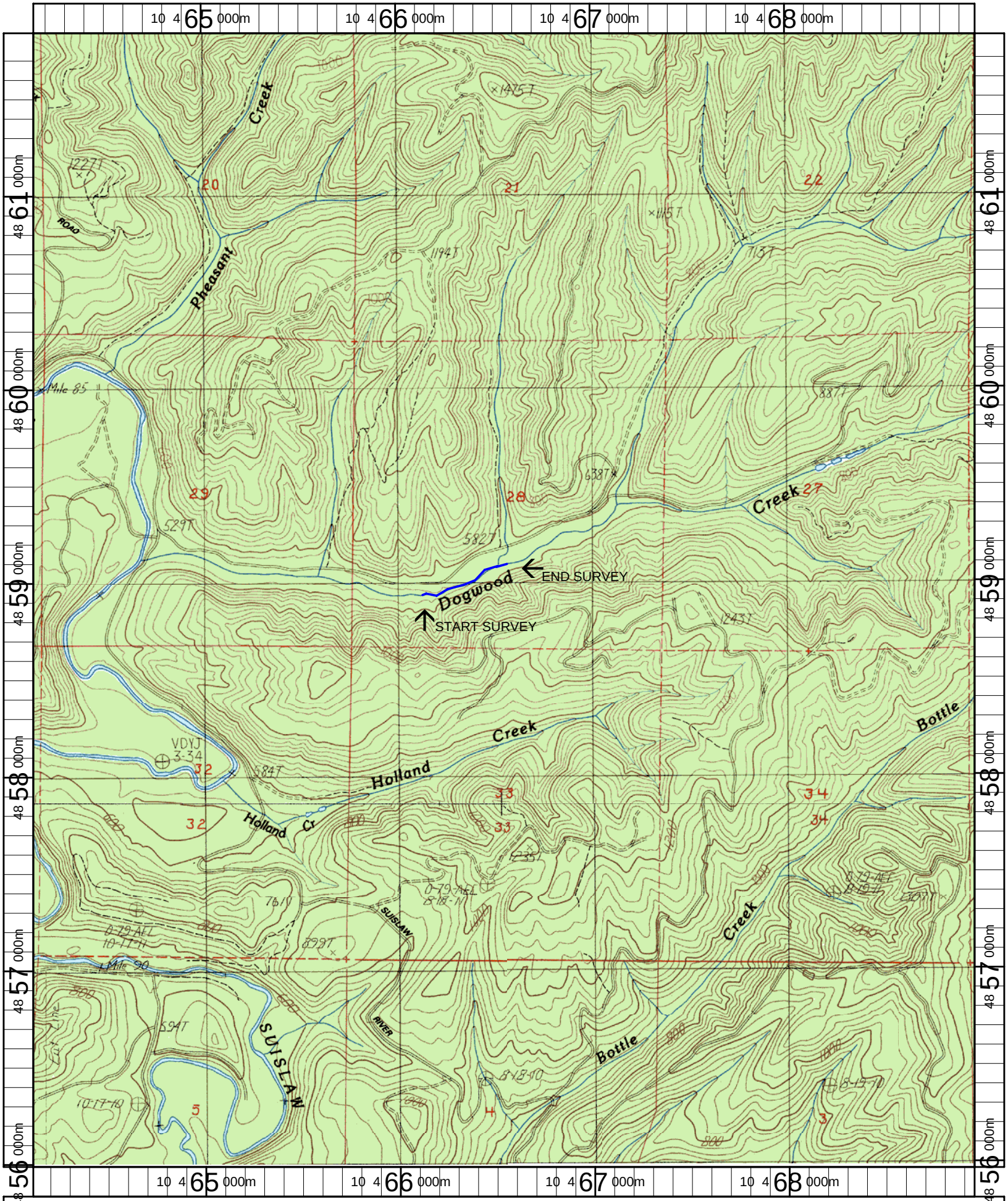
					Cover (percent)				Diameter class (cm)					
Unit	Side	Zone	Surface	Slope	Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	Notes
10	RT	3	HT	0	95	50	50	**Conifer**						VINE MAPLE
								Hardwood	37					
10	RT	2	HT	5	95	40	50	**Conifer**						VINE MAPLE
								Hardwood	3					
10	RT	1	LT	5	95	70	20	**Conifer**						VINE MAPLE, ALDER
								Hardwood	18			1		
10	LF	3	HS	15	10	90	10	**Conifer**	1					MAPLE, ALDER
								Hardwood	5					
10	LF	2	HT	5	50	60	40	**Conifer**			1			DOUGLAS FIR
								Hardwood						
10	LF	1	HT	5	85	60	40	**Conifer**						ALDER
								Hardwood		1				
18	RT	2	HS	40	80	20	70	**Conifer**	1	1				
								Hardwood	1					
18	RT	1	HS	110	90	30	70	**Conifer**	2		1			CEDAR, DOUG FIR, ALDER
								Hardwood		1	1			
18	LF	3	HT	3	20	30	70	**Conifer**	3					VINE MAPLE, ALDER
								Hardwood	4					
18	LF	2	HT	0	85	20	80	**Conifer**		1				VINE MAPLE, MAPLE
								Hardwood	6	4	1			
18	LF	1	LT	2	95	60	40	**Conifer**						ALDER
								Hardwood		1	2			
18	RT	3	HS	45	80	10	70	**Conifer**	1					VINE MAPLE
								Hardwood	1					
25	RT	2	HT	5	95	15	85	**Conifer**						MAPLE, ALDER
								Hardwood	1	1	2			
25	RT	3	HS	50	95	10	90	**Conifer**		1	1			ALDER
								Hardwood		2				
25	RT	1	LT	0	95	40	60	**Conifer**						ALDER, VINE MAPLE
								Hardwood		1	3			
25	LF	3	HS	30	85	10	90	**Conifer**	2					ALDER
								Hardwood	12					
25	LF	2	HT	3	90	30	70	**Conifer**						MAPLE, VINE MAPLE
								Hardwood	3	1	2			
25	LF	1	HT	0	90	40	60	**Conifer**						VINE MAPLE
								Hardwood	5					

Comment Summary

Restoration Monitoring Sites 2006

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	14.2	TJ/, HS	CT-MT,D15,S,YT,ST; HS	T=13.0C
3	LP	00	51.6	HS	HS, FRY, TROUT, WINTER W	
5	RI	00	84.7	HS		
6	LP	00	97.2			CF
9	SR	00	116.5		PACIFIC SLOPE FLYCATCHE	
10	LP	00	149.5	HS	CT-MT,YT,ST,D15,S; HS; DJ	COHO FRY, COT
15	BW	10	239		2 RSN	
16	LP	00	258	HS		
17	SC	00	262.9	HS	VIREO, DJ	
18	LP	00	284.4		CA-CT,7YT,ST,D15,S	
21	LP	00	327.7	HS		
25	LP	00	413.2	HS	YT,ST,CT-MT,D30,S; HS; DJ	
27	LP	01	455.2	/TJ		
28	CB	11	455.2		ACW=0.80M	
29	LP	00	475.3	HS	HS, DJ	
30	RI	01	511.3	TJ/		
31	RI	11	511.3		ACW=2.0M	
32	LP	00	535.8		BEGIN YT RIGHT;CT-MT,ST,	



Name: HIGH POINT
Date: 5/22/2006
Scale: 1 inch equals 2000 feet

Location: 10 466544 E 4858904 N
Caption: DOGWOOD CREEK RESTORATION SITE - SIUSLAW BASIN