

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

STREAM: Gods Valley Creek (N-207)
BASIN: Nehalem River
SURVEY TYPE: Pre-Tx
DATE: July 3, 2003
SURVEY CREW: Trevor Diemer, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 21.5 km²
USGS MAPS: Soapstone Lake
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Gods Valley Creek habitat survey extended 508 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.0. Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 0.5 percent. Scour pools (81%) dominated stream habitat. Gravel (57%) and sand (29%) dominated stream substrate. Wood volume was low at 15.9 m³/100m.

COMMENTS:

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

REACH 1

T03N-R09W-S03NE

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	7.0	VWI Range:	7 - 7

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	508	2,388	0
Secondary	43	76	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.0	Width	8.0	10.2	15.4
Depth	0.54	Height	0.7	1.3	1.6
		W:D ratio	12.0	Entrenchment	1.3
Stream Flow Type:	LF	Water temp (C):		13.0 - 13.0	
Avg. Unit Gradient:	0.5%	Habitat Units/100m:		5.4	

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	
Riparian Vegetation:	C30	

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	20%	Reach avg: 97%
Undercut Banks:	8%	Range: 83 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	26	5.1
Volume (m ³):	81	15.9
Key pieces (>=10m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

GODS VALLEY CREEK PRE-TX (N-207)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/3/03

REACH 1		T03N-R09W-S03NE					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	
GLIDE	1	15	7.6	0.50	110	0	15	30	55	0	0	0	
POOL-ISOLATED	1	6	4.0	0.20	24	0	30	40	30	0	0	0	
POOL-LATERAL SCOUR	16	383	4.6	0.83	1,969	0	14	30	56	0	0	0	
POOL-PLUNGE	1	4	6.1	0.45	22	0	15	25	60	0	0	0	
RIFFLE	10	143	2.6	0.17	338	0	10	25	62	0	0	3	
STEP/LOG	1	1	2.1	0.10	1	0	10	20	70	0	0	0	
Total:	30	551	4.0	0.54	2,465	0	Avg 13	29	57	0	0	1	

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		43
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	1	6	4.0	0.20	24	0.97%	0	0.0	
Scour Pools	17	387	4.6	0.81	1,991	80.77%	0	0.0	
Glides	1	15	7.6	0.50	110	4.47%	0	0.0	
Riffles	10	143	2.6	0.17	338	13.73%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	1	2.1	0.10	1	0.05%	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:	18	32.7
Pools >=1m deep:	5	9.1
Complex pools (LWD pieces>=3):	3	5.4
Pool frequency (channel widths/pool):	3.8	
Residual pool depth (avg):	0.71	

STREAM SUMMARY

GODS VALLEY CREEK PRE-TX (N-207)

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	
30	551	4.0	0.54	2,465	13	29	57	0	0	1	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	24	0.97%
Scour Pools	1,991	80.77%
Glides	110	4.47%
Riffles	338	13.73%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	1	0.05%
Dry	0	0.00%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	20
Total conifers/1000 ft	650
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		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.3
15-30cm	0.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0
30-50cm	3.0	0.0	3.3	0.0	3.3	0.0	9.7	0.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	3.3	0.0	4.0	0.3	3.3	0.0	3.6	0.1

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	90		90		90	
Shrub cover	3		3		0	
Grass/forb cover	31		47		46	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		0		0	
High terrace	67		100		100	
Low terrace	33		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 (%)	0		0		1	

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	20
Total conifers/1000 ft	650
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	0.3	0.3
15-30cm	0.7	0.0
30-50cm	9.7	0.0
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

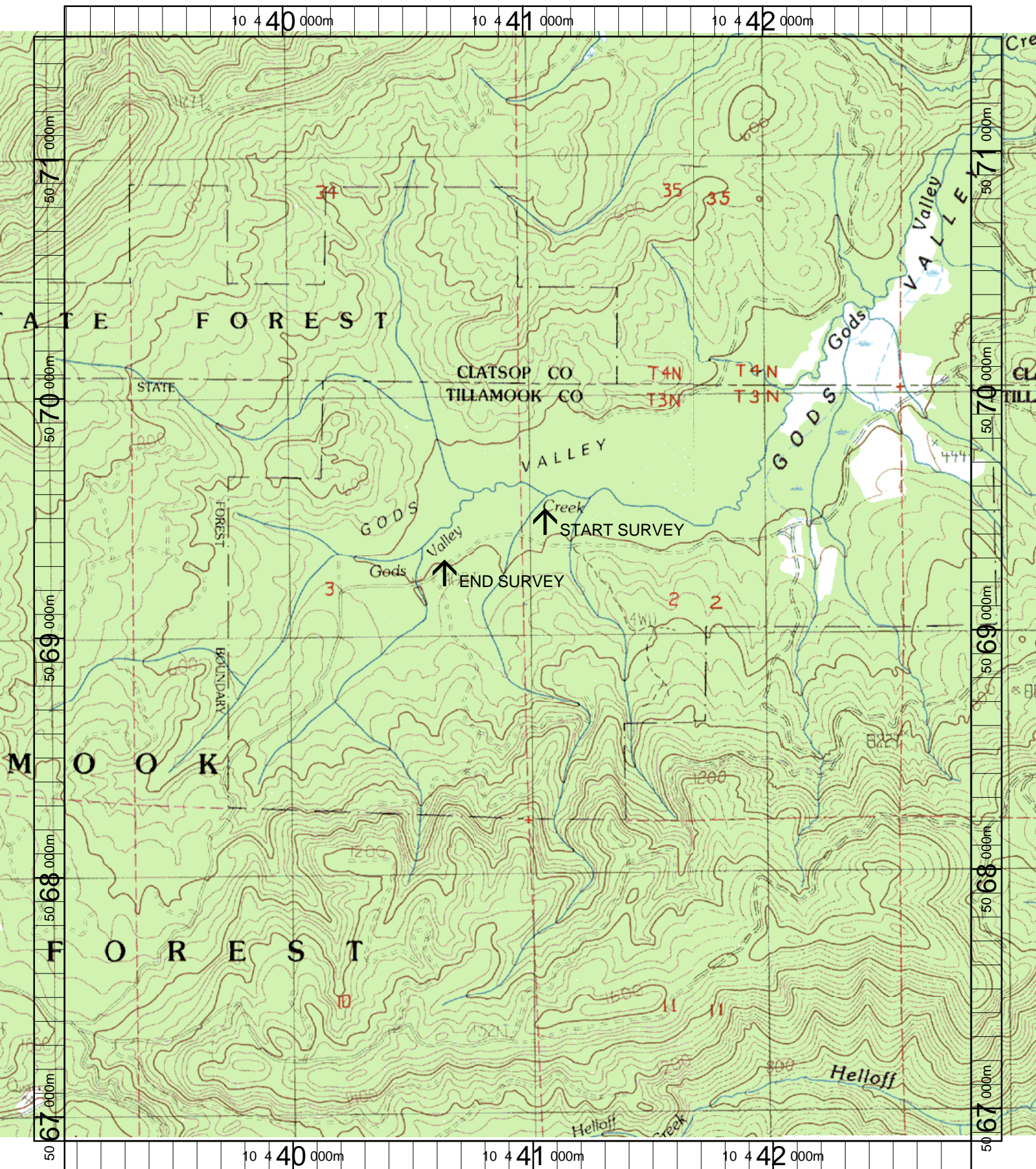
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
5	LF	2	HT	0	90		80	Conifer			2			10T 0440861 5069649
								Hardwood	1					
5	LF	1	LT	0	90		10	Conifer						TREE FARM DENSE CON- N/ I INDFRG
								Hardwood						
5	RT	2	HT	0	90		40	Conifer			1			
								Hardwood						
5	RT	1	HT	0	90		30	Conifer			3			
								Hardwood						
5	LF	3	HT	0	90		80	Conifer			1			
								Hardwood						
5	RT	3	HT	0	90		70	Conifer			1			
								Hardwood						
13	RT	3	HT	2	90	0	25	Conifer			1			
								Hardwood						
13	LF	2	HT	0	90	10	60	Conifer						
								Hardwood						
13	RT	1	HT	0	90	0	25	Conifer			2			
								Hardwood						
13	LF	1	HT	0	90	10	20	Conifer			1			POOR GPS COVERAGE
								Hardwood						
13	RT	2	HT	1	90	0	10	Conifer			3			
								Hardwood						
13	LF	3	HT	0	90	0	20	Conifer			3			
								Hardwood						
22	LF	2	HT	0	90	0	40	Conifer		1	2			
								Hardwood						
22	LF	1	LT	0	90	0	70	Conifer	1		1			POOR GPS COVERAGE
								Hardwood						
22	LF	3	HT	0	90	0	40	Conifer			2			
								Hardwood						
22	RT	1	HT	0	90	0	30	Conifer			2			
								Hardwood						
22	RT	2	HT	0	90	0	50	Conifer		1	2			
								Hardwood						
22	RT	3	HT	2	90	0	40	Conifer			2			
								Hardwood						

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 1-NC SITE ID: 207 GODS VALLEY CREEK PRE-TX (N-20)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	38.7	WL		10T 0440956 5069637
2	GL	00	53.2	WL		
3	LP	00	92.7	WL		GAME TRAIL
5	LP	00	141.6	WL, SS/		@ HEAD OF POO, RIP.T.
7	LP	00	186.8			FRY- COHO
8	RI	00	193	WL		
10	RI	01	240.6	/TJ; WL		GAME TRAIL
13	LP	00	269.1	/SS		RIP.T.
18	LP	00	360.1			COHO FRY
21	SL	00	371.9		H=.15	
22	RI	00	390	WL		RIP. T.
25	LP	00	418.6			COHO FRY
29	RI	00	477.8			HARDPAN CLAY BDRK.
30	LP	00	508		10T 0440642 5069448	COHO FRY



Name: SOAPSTONE LAKE
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 440954 E 5069193 N
 Caption: GODS VALLEY CREEK RESTORATION SITE - NEHALEM BASIN