

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

STREAM: Gods Valley #2 Creek (N-227)
BASIN: Nehalem River
SURVEY TYPE: Pre-Tx
DATE: March 18, 2004
SURVEY CREW: Michael Scheu, Carmen Vandyke
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 882 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 8.2 (range: 5.0-15.0). Land use for the reach was large (30-50 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 1.5 percent. Scour pools (44%) dominated stream habitat. Cobble (41%) and gravel (23%) dominated stream substrate. Wood volume was low at 9.5 m³/100m.

COMMENTS:

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

The crew noted beaver activity during the survey.

REACH 1

T03N-R09W-S03NW

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	8.2	VWI Range:	5 - 15

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	882	3,639	0
Secondary	51	96	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.9	Width: 6.2	14.4 (8.9 - 20.9)	17.9 (11.5 - 29)
Depth: 0.40	Height: 0.4	0.8 (0.6 - 1)	1.3 (1.1 - 1.8)

W:D ratio: 15.7

Stream Flow Type: MF

Avg. Unit Gradient: 1.5%

Entrenchment (ACW:FPW ratio): 2.3

Water temp (°C): 8.0 - 8.0

Habitat Units/100m: 7.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	YT
Riparian Vegetation:	M30	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):	81	9.2
Volume (m ³):	84	9.5
Key pieces (>=10m x 0.60m):	5	0.6

REACH 1		T03N-R09W-S03NW					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	3	46	3.0	0.15	153	0	7	17	14	41	7	15	
DRY UNIT	1	11	1.6	0.00	17	0	63	16	21	0	0	0	
POOL-BACKWATER	1	6	2.2	0.40	14	0	35	40	20	0	0	5	
POOL-DAMMED	4	108	4.7	0.85	553	0	36	35	20	6	1	1	
POOL-LATERAL SCOUR	28	392	3.6	0.66	1,442	0	8	16	22	40	4	9	
POOL-PLUNGE	3	19	3.4	0.57	65	0	18	27	13	13	3	25	
POOL-STRAIGHT SCOUR	2	37	3.1	0.45	118	0	5	13	15	55	12	0	
RAPID/BOULDERS	7	138	4.1	0.18	567	0	5	9	26	57	3	0	
RIFFLE	3	85	4.2	0.23	360	0	5	10	34	43	5	3	
STEP/BEDROCK	2	5	2.6	0.13	14	0	0	3	3	3	3	90	
STEP/COBBLE	18	86	4.8	0.12	426	0	2	6	26	60	5	1	
STEP/LOG	2	2	3.1	0.15	7	0	40	33	28	0	0	0	
Total:	74	933	3.9	0.40	3,735	0	Avg: 10	14	23	41	4	8	

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	5	114	4.2	0.76	567	15.18%	0	0.0
Scour Pools	33	448	3.5	0.64	1,625	43.50%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	3	85	4.2	0.23	360	9.64%	0	0.0
Rapids	7	138	4.1	0.18	567	15.18%	0	0.0
Cascades	3	46	3.0	0.15	153	4.09%	0	0.0
Step/Falls	22	93	4.5	0.12	447	11.96%	0	0.0
Dry	1	11	1.6	0.00	17	0.45%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	38	40.7
Pools >=1m deep:	2	2.1
Complex pools (LWD pieces>=3):	6	6.4
Pool frequency (channel widths/pool):	4.0	
Residual pool depth (avg):	0.49	

STREAM SUMMARY

GODS VALLEY CREEK #2 PRE-TX (N-227)

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	
74	933	3.9	0.40	3,735	10	14	23	41	4	8	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	567	15.18%
Scour Pools	1,625	43.50%
Glides	0	0.00%
Riffles	360	9.64%
Rapids	567	15.18%
Cascades	153	4.09%
Step/Falls	447	11.96%
Dry	17	0.45%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **1-NC** SITE ID: **227** GODS VALLEY CREEK #2 PRE-TX (N

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	DP	00	46.8	BC,BV	SPAWN SURVEY SIGN	
2	SC	00	54.5	BV		
3	LP	00	64.5	BV		
4	SC	00	66.5	BV		
5	LP	00	84	BV		
6	SC	00	90.3	BV		
7	LP	01	102.5	BV		
8	RB	02	102.5	BV		
9	SC	00	104.5	BV		
10	LP	00	118	BV		
11	SC	00	120.3	BV		
12	LP	00	129.4	BV		
13	SC	00	139.8	BV		
14	SP	00	161.5	BV		
15	RB	00	178.1	BV		
16	PP	01	184.7	BV		
17	SL	01	186	BV	H=1.0M	
18	DU	02	186	BV		
19	DP	00	213.5	BV	SG=6M, FRY	
20	RI	01	246.2	BV,/TJ		
21	CB	11	246.2		T=9C, ACW=2.0M	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **1-NC** SITE ID: **227** **GODS VALLEY CREEK #2 PRE-TX (N**

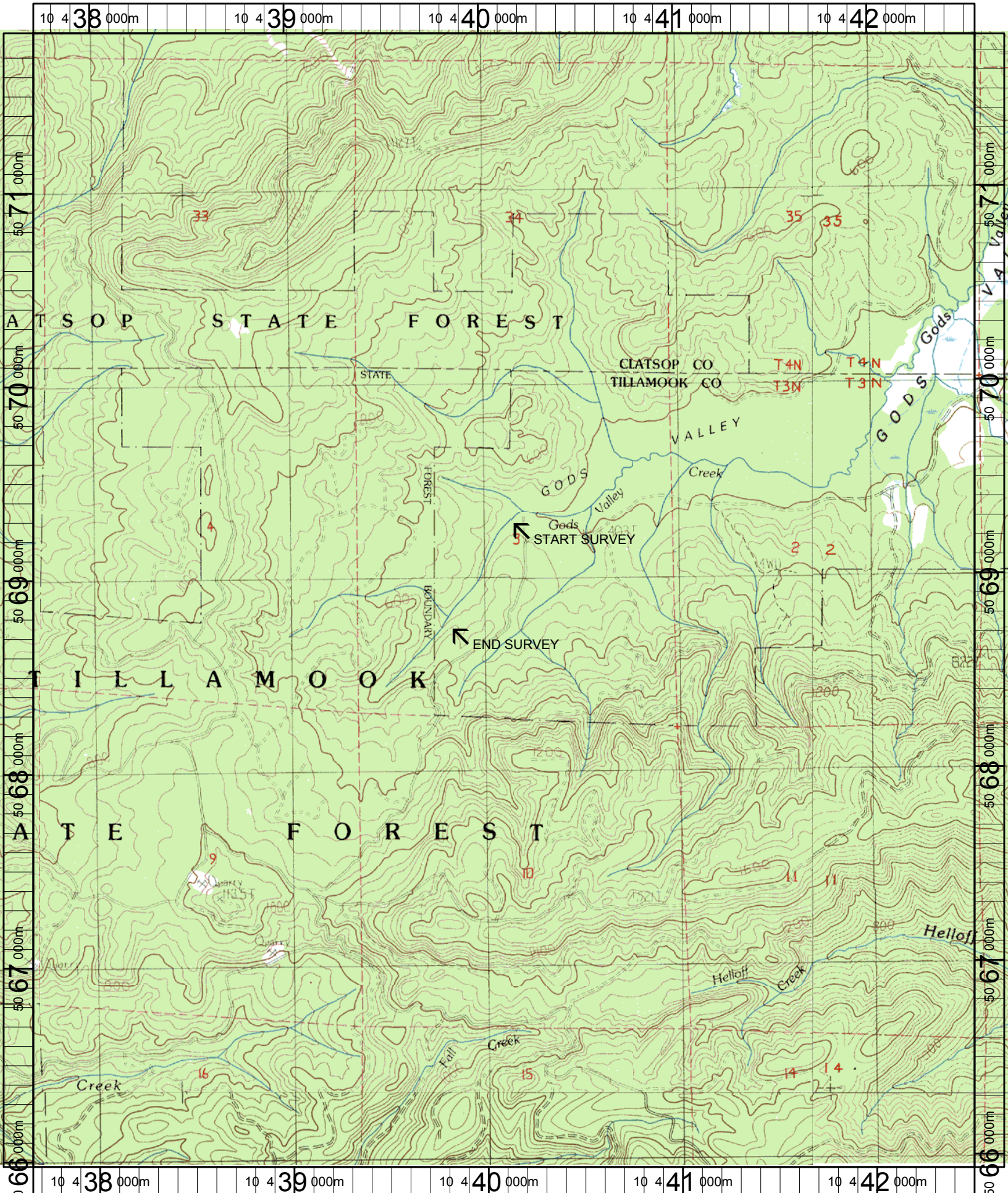
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
22	LP	00	255.9		T=8C	
28	SR	00	316.9	BV	BRK=HARDPAN	
29	DP	00	330.1	BV		
31	LP	00	348.3	BV		
34	SC	00	364.7	BV		
35	LP	00	371	BV		
36	SC	00	374.2	BV		
37	LP	00	401.8	BV	FISH	
38	SC	00	406.6	BV		
39	LP	00	420.4	BV	WL TRAIL	
41	RB	00	445.6	BV		
42	LP	00	455.9	BV		
43	SC	00	462.3		WL TRAIL	
44	LP	00	476.4	BV	WL TRAIL	
46	RI	01	511.1		COHO	
47	PP	01	517.8	LA,BV		
48	SC	02	517.8		COHO FRY	
50	SL	00	518.6	BV	H=1.2M	
51	DP	00	539.1	BV	COHO FRY	
52	LP	00	583.5	BV	SG=4M	
53	LP	00	593.9		SG=4M	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 227 GODS VALLEY CREEK #2 PRE-TX (N

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
55	LP	00	609.7		TROUT	
56	SC	00	614.7	/SS		
57	LP	00	640.9	BV	FRY, BLOWNOUT BD	
58	RB	00	668	SS/		
66	SC	00	780.1	BV		
68	RB	00	801.3	BV		
69	LP	00	816.9	BV		
71	LP	00	855.7	BV	ELK BONES?	
73	LP	00	879.4	BV		
74	SR	00	882.4		H=.4M, SPAWN SURVEY	



Name: SOAPSTONE LAKE
 Date: 7/22/2004
 Scale: 1 inch equals 2000 feet

Location: 10 440102 E 5068883 N
 Caption: GODS VALLEY CREEK PHASE 2 RESTORATION SITE -
 NEHALEM BASIN