

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

STREAM: Gods Valley Creek Trib H (N-309)  
BASIN: Nehalem River  
SURVEY TYPE: Post-Tx  
DATE: March 15, 2006  
SURVEY CREW: Brian Cannon, Jon Nott  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 2.9 km<sup>3</sup>  
USGS MAPS: Soapstone Lake  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Gods Valley Creek Trib H habitat survey extended 1,189 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 16.4 (range: 3.5-20.0). Land use for the reach was large (30-50 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 0.9 percent. Scour pools (39%), beaver pools (33%) and riffles (24%) dominated stream habitat. Sand (42%), gravel (30%) and silt (26%) comprised the stream substrate. Wood volume was very high at 55.1 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. They also noted beaver activity and several beaver dams.

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	16.4	VWI Range:	3.5 - 20

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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 Channel	1,189	5,577	0
Secondary Channel	38	57	0
Off-Channel Units	54	112	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 1
Width: 4.4	Width: 6.5	33.2 ( 10 - 60 )	18.0 ( 18 - 18 )
Depth: 0.68	Height: 0.7	1.5 ( 1.2 - 1.8 )	1.6 ( 1.6 - 1.6 )

W:D ratio: 9.0  
 Stream Flow Type: MF  
 Average Unit Gradient: 0.9%  
 Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 5.3  
 Habitat Units/100m (total channel length): 4.7  
 Habitat Units/100m (primary channel length): 5.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	YT
Riparian Vegetation:	C30	D30

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):	376	31.6
Volume (m <sup>3</sup> ):	655	55.1
Key pieces (>=12m x 0.60m):	31	2.6

OREGON DEPT OF FISH AND WILDLIFE

GODS VALLEY TRIB H POST-TX (1-NC, 309)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

3/15/2006

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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	1	6	0.3	0.10	2	0	70	30	0	0	0	0
GLIDE	1	29	1.4	0.40	41	0	15	45	40	0	0	0
POOL-BACKWATER	2	29	3.4	1.00	63	0	65	35	0	0	0	0
POOL-BEAVER DAM	4	206	8.1	1.23	1,712	0	24	53	24	0	0	0
POOL-DAMMED	2	30	3.5	0.95	99	0	13	55	33	0	0	0
POOL-LATERAL SCOUR	23	494	4.2	1.04	2,195	0	14	48	35	2	0	1
POOL-PLUNGE	2	16	2.9	1.05	44	0	10	50	40	0	0	0
RAPID/BOULDERS	1	61	2.3	0.20	140	0	5	20	50	25	0	0
RIFFLE	7	230	2.9	0.28	699	0	8	39	46	8	0	0
RIFFLE W/ POCKETS	5	167	3.9	0.32	654	0	12	43	44	1	0	0
STEP/BEAVER DAM	8	11	7.4	0.16	88	0	68	28	5	0	0	0
STEP/LOG	3	2	3.8	0.13	8	0	67	23	10	0	0	0
STEP/STRUCTURE	1	1	1.7	0.20	2	0	50	20	30	0	0	0
<b>Total:</b>	<b>60</b>	<b>1,281</b>	<b>4.4</b>	<b>0.68</b>	<b>5,746</b>	<b>0</b>	<b>Avg: 26</b>	<b>42</b>	<b>30</b>	<b>2</b>	<b>0</b>	<b>0</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	8	265	5.8	1.10	1,873	32.59%	0	0.0	
Scour Pools	25	509	4.1	1.04	2,239	38.98%	0	0.0	
Glides	1	29	1.4	0.40	41	0.71%	0	0.0	
Riffles	12	397	3.3	0.30	1,353	23.55%	0	0.0	
Rapids	1	61	2.3	0.20	140	2.44%	0	0.0	
Cascades	1	6	0.3	0.10	2	0.03%	0	0.0	
Step/Falls	12	14	6.0	0.15	98	1.70%	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	Primary Channel Length
		# / Km	# / Km
All Pools:	33	25.8	27.7
Pools >=1m deep:	22	17.2	18.5
Complex pools (LWD pieces>=3):	20	15.6	16.8
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.79		

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC      SITE ID: 309      GODS VALLEY TRIB H POST-TX

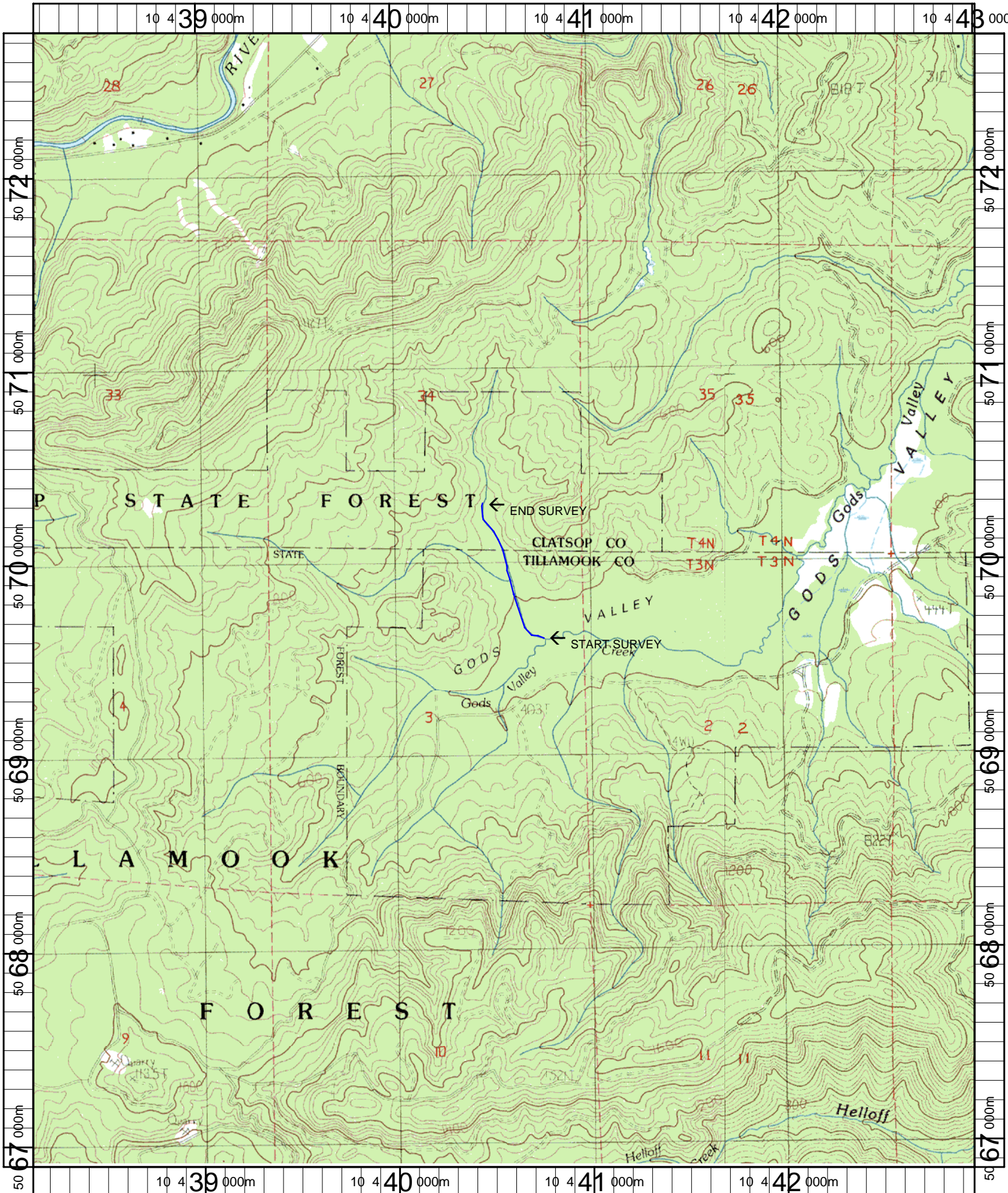
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	45	HS	HS = 4 LOGS	
2	DP	00	57.2	HS	HS = 8 LOGS, START AT MOUTH	
3	RI	00	96.2	HS	T = 8.0 AT 9AM	
4	LP	00	138.2	HS		
5	RP	00	160.2	HS	COHO FRY	
7	LP	00	188.2		SITE 6	
8	RI	00	212.2	HS		
10	LP	00	271.7	HS	SITE 8	
11	LP	00	282.8	HS	HS = 3 LOGS, SITE 9	
12	LP	01	302.1	TJ/		
13	SD	11	302.1	BD	H = 1.2, BEAVER POND	
15	SL	00	313.1		H = 0.2	
16	LP	00	345.4	HS, SS/	SITE 10	
17	LP	00	369.8	HS	HS = 6 LOGS, SITES 11 AND 12	
18	SL	00	370.2		H = 0.2	
19	LP	00	395.2	HS	HS = 9 LOGS, SITE 12	
21	LP	00	440.2	BV	COHO FRY	
23	SD	00	474.7	BD	H = 0.45. MOSTLY BLOWN OUT	
25	RP	01	527.9	HS	HS = 3 LOGS, SITE 13	
27	SD	01	546.7	BD	H = 0.5	
28	BP	01	572.7	HS, BV	SITE 14	

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC      SITE ID: 309      GODS VALLEY TRIB H POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
31	SL	02	596.2		H = 0.3	
32	GL	02	596.2		COHO FRY	
33	SD	02	596.2	BD	H = 0.3, OLD BD	
34	SD	00	596.5	BD	H = 0.2, OLD BD	
35	LP	00	630.7	HS	SITE 16	
39	RP	01	726.6	TJ/	OLD BD AT TOP OF UNIT	
40	RI	11	726.6		T = 9.5 AT 1PM	
43	RP	01	792.6	TJ		
44	CB	11	792.6	SS/	FLOW FOM BV POND	
45	SS	00	793.8	H = 0.3		
47	PP	00	818.6		3-4 INCH TROUT	
48	SD	00	819.6	BD	H = 1.1	
49	BP	01	894.6	BV		
50	BW	10	894.6	/SS		
51	SD	00	896.1	BD	H = 1.1	
52	BP	00	953.1	BV	3-6 INCH TROUT, COHO FRY	
53	SD	00	953.9	BD	H = 0.8	
54	BP	00	1001.9	BV		
55	RP	00	1051.9	HS		



Name: SOAPSTONE LAKE (OR)  
 Date: 2/13/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 0440562 E 5069802 N  
 Caption: GODS VALLEY TRIBUTARY H RESTORATION SITE - NEHALEM BASIN

Distance tool:

Points: 18

Distance: 2673 Feet

#### Markers

Name: .

Short Name: .

Coordinates: 10 0444278 E, 5079754 N

Name: .

Short Name: .

Coordinates: 10 0445556 E, 5075601 N

Name: END SURVEY

Short Name: NDSRVY

Coordinates: 10 0440538 E, 5070296 N

Name: START SURVEY

Short Name: STRTSR

Coordinates: 10 0440848 E, 5069600 N