

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

STREAM: Game Hog Creek (N-297)
BASIN: Wilson River
SURVEY TYPE: Pre-Tx
DATE: February 15, 2006
SURVEY CREW: Brian Cannon, Jon Nott
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.5 km³
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Game Hog Creek habitat survey extended 731 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 1.5 (range: 1.0-2.1). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 3.6 percent. Rapids (39%) and cascades (27%) dominated stream habitat. Gravel (33%) and cobble (25%) dominated stream substrate. Wood volume was very high at 41.6 m³/100m.

COMMENTS:

There was one potential barrier to upstream fish migration in the surveyed length. This was a 3.5 m high bedrock step at the very end of the reach.

REACH 1

T02N-R06W-S33SW

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	100%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.5	VWI Range:	1 - 2.1

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
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	731	3,038	0
Secondary Channel	97	175	1
Off-Channel Units	40	56	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u>	<i>n = 5</i>	<u>First Terrace</u>	<i>n = 0</i>
Width: 3.5	Width: 7.8	12.3	(10.5 - 14.8)	(-)	(-)
Depth: 0.37	Height: 0.6	1.1	(1 - 1.2)	(-)	(-)

W:D ratio: 13.8
 Stream Flow Type: MF
 Average Unit Gradient: 3.6%
 Water temperature (°C): 5.0 - 5.0

Entrenchment (ACW:FPW ratio): 1.6
 Habitat Units/100m (total channel length): 5.9
 Habitat Units/100m (primary channel length): 7.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	ST
Riparian Vegetation:	D30	G

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):	354	48.4
Volume (m ³):	304	41.6
Key pieces (>=12m x 0.60m):	3	0.4

OREGON DEPT OF FISH AND WILDLIFE

GAME HOG CREEK PRE-TX (1-NC, 297)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

2/15/2006

REACH 1		T02N-R06W-S33SW					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/BEDROCK	1	48	4.3	0.25	206	0	0	5	10	10	5	70
CASCADE/BOULDERS	8	210	3.0	0.21	672	0	1	13	28	29	27	3
DRY CHANNEL	1	8	1.1	0.00	9	0	0	20	50	30	0	0
POOL-BACKWATER	1	5	3.9	0.70	18	0	30	50	20	0	0	0
POOL-DAMMED	1	7	2.2	0.70	15	0	0	20	55	20	5	0
POOL-LATERAL SCOUR	11	107	3.3	0.62	350	0	0	17	41	26	10	6
POOL-PLUNGE	3	25	4.0	0.90	97	0	0	10	43	23	10	13
POOL-TRENCH	1	9	3.7	0.50	34	0	0	5	10	10	5	70
RAPID/BOULDERS	10	288	4.3	0.28	1,263	0	0	10	28	31	29	2
RIFFLE	6	143	3.5	0.20	547	0	1	16	48	28	8	0
STEP/BEDROCK	2	8	2.2	0.20	12	0	0	0	0	5	15	80
STEP/BOULDERS	1	1	1.5	0.30	2	0	0	10	30	40	20	0
STEP/LOG	5	10	3.7	0.20	44	0	31	19	22	18	4	6
Total:	51	868	3.5	0.37	3,268	0	Avg: 4	14	33	25	15	9

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	2	11	3.1	0.70	32	0.99%	0	0.0	
Scour Pools	15	141	3.5	0.67	481	14.72%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	6	143	3.5	0.20	547	16.72%	0	0.0	
Rapids	10	288	4.3	0.28	1,263	38.65%	0	0.0	
Cascades	9	258	3.1	0.21	878	26.88%	0	0.0	
Step/Falls	8	19	3.1	0.21	58	1.78%	0	0.0	
Dry	1	8	1.1	0.00	9	0.27%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

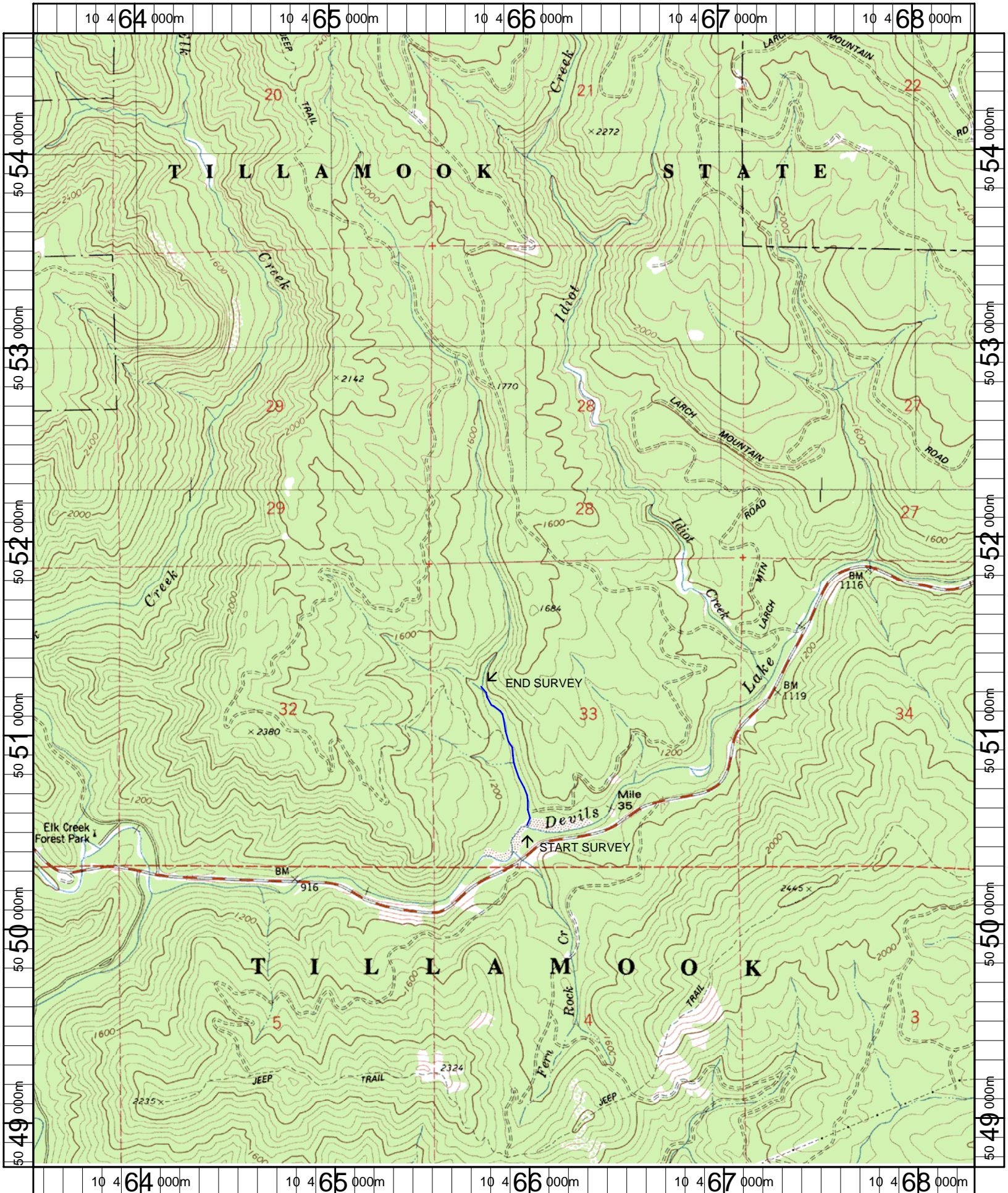
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	17	19.6	23.3
Pools >=1m deep:	1	1.2	1.4
Complex pools (LWD pieces>=3):	14	16.1	19.1
Pool frequency (channel widths/pool):	6.5		
Residual pool depth (avg):	0.43		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 297 GAME HOG CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SL	00	2.5		T = 5 C AT 0530	
10	SB	00	123.5		H = .4 M	
11	DP	01	130.2	DJ		
13	SL	00	130.7		NO H GIVEN, USED .3 M	
15	RB	00	197.3		CH-MV, D30, LT	
19	RB	00	288.2		CH-MV, D30, G, LT	
20	RB	01	318.9	TJ/		
21	CB	11	318.9		ACW = 2.7 M, TRIB=10 PER FLOW	
23	CB	00	341.3	DJ		
25	RB	01	378.9	TJ/		
26	RI	11	378.9		ACW = 2.3 M, TRIB = 5 PER FLOW	
28	CB	01	448	DJ		
31	SL	00	455.6		H = .4 M	
33	SL	00	466.1		H = .5 M	
35	LP	00	485.5		CH-MV, D30, G, LT, ST	
38	RB	00	557.5	/SS		
41	SR	00	616.2		H = .65 M	
43	LP	01	664		CH-SV, D30, G, LT, ST	
50	PP	00	724.6		CH-SV, D15, G, LT, ST	
51	SR	00	731.1	PN	H = 3.5 M	



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

Location: 10 0465883 E 5051687 N
 Caption: GAME HOG CREEK RESTORATION SITE - WILSON BASIN