

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

STREAM: Game Hog Creek (NC-297)
BASIN: Wilson River
SURVEY TYPE: Post-Tx
DATE: March 27, 2007
SURVEY CREW: Jeff O'Leary, Sheri Etchemendy
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.5 km²
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Game Hog Creek habitat survey extended 744 meters. The channel was constrained by hillslopes in a moderate V-shape valley. The average valley width index was 1.6 (range: 1-2). Land use for the reach was timber harvest and second growth timber (15-30 cm dbh). The average unit gradient was 4.7 percent. Cascades (55%) and rapids (25%) dominated stream habitat. Cobble (32%) and gravel (30%) dominated stream substrate. Wood volume was high at 40.0 m³/100m.

COMMENTS:

The survey ended at a potential barrier to upstream fish migration in the form of a 5-6 meter high waterfall.

The crew did not record any habitat structures in the survey.

1 debris jam was recorded. A beaver was observed during the survey.

REACH 1

T6N-R6W-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	0%	Constraining Terraces	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.6	VWI Range:	1 - 2

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	744	3,980	0
Secondary Channel	0	0	0
Off-Channel Units	21	26	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 5.1	Width: 10.2	12.9 (9.7 - 17.5)	13.4 (11.5 - 15.2)
Depth: 0.39	Height: 0.5	1.0 (0.9 - 1.1)	1.2 (1.1 - 1.2)

W:D ratio: 20.3
 Stream Flow Type: MF
 Average Unit Gradient: 4.7%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 4.7
 Habitat Units/100m (primary channel length): 4.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	ST
Riparian Vegetation:	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):	306	41.2
Volume (m ³):	298	40.0
Key pieces (>=12m x 0.60m):	6	0.8

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

3/27/2007

REACH 1		T6N-R6W-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	2	70	5.4	0.23	375	0	0	7	17	14	12	50
CASCADE/BOULDERS	13	364	4.6	0.24	1,831	0	0	15	28	31	22	4
POOL-LATERAL SCOUR	7	87	4.8	0.86	399	0	0	29	32	31	7	2
POOL-PLUNGE	1	11	6.0	1.30	66	0	0	19	38	38	5	0
RAPID/BOULDERS	6	173	5.7	0.24	1,028	0	0	14	31	39	15	0
RIFFLE	2	34	4.4	0.28	145	0	0	20	53	20	3	5
STEP/BEDROCK	1	13	6.0	0.30	78	0	0	0	0	0	0	100
STEP/COBBLE	2	10	5.1	0.30	68	0	0	10	22	59	10	0
STEP/LOG	2	2	6.5	0.18	16	0	0	17	39	39	5	0
Total:	36	765	5.1	0.39	4,006	0	Avg: 0	17	30	32	13	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	0	0			0	0.00%	0	0.0
Scour Pools	8	98	5.0	0.92	465	11.61%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	2	34	4.4	0.28	145	3.62%	0	0.0
Rapids	6	173	5.7	0.24	1,028	25.68%	0	0.0
Cascades	15	434	4.7	0.24	2,206	55.07%	0	0.0
Step/Falls	5	25	5.8	0.25	161	4.03%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

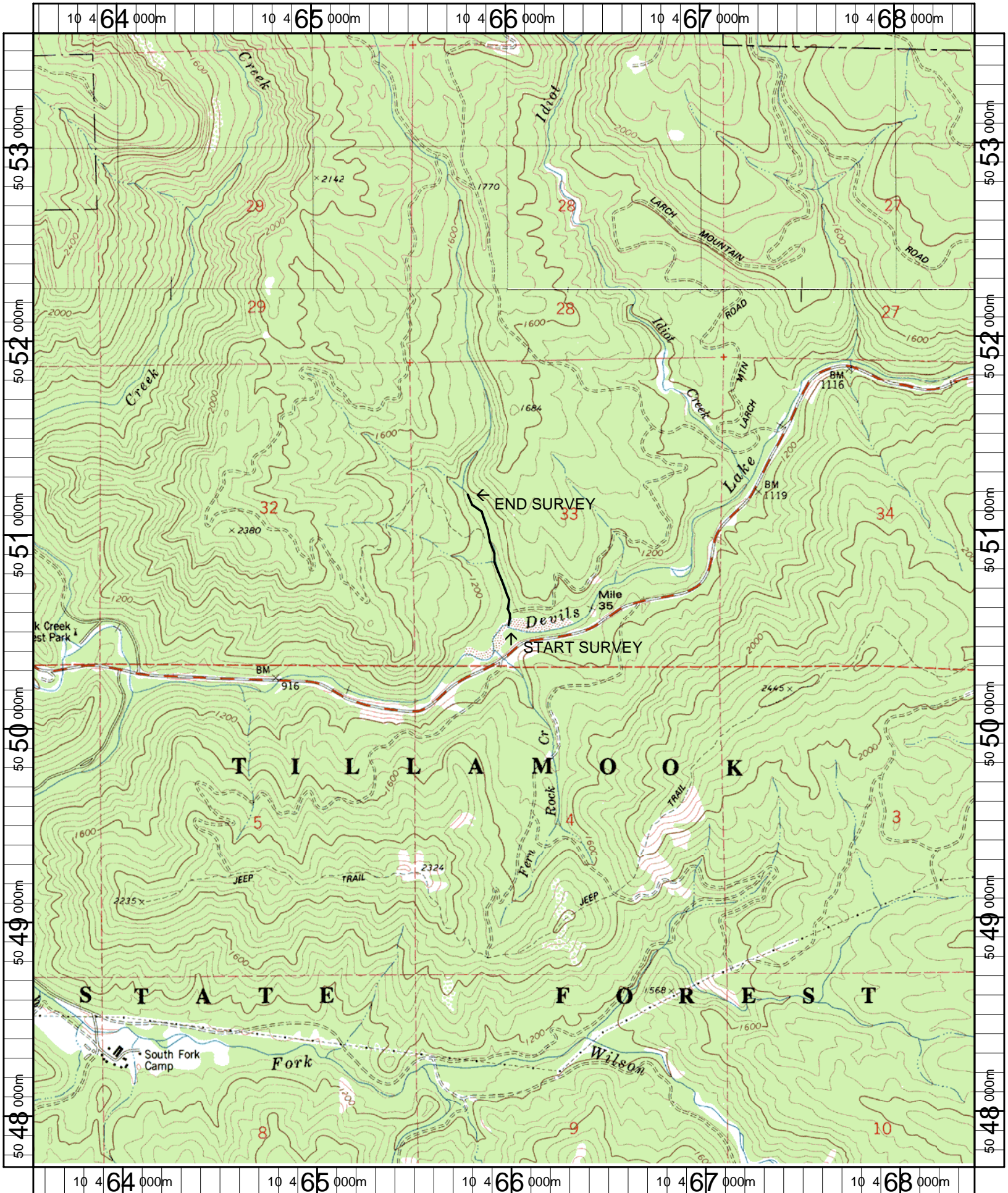
POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	8	10.5	10.8
Pools >=1m deep:	3	3.9	4.0
Complex pools (LWD pieces>=3):	5	6.5	6.7
Pool frequency (channel widths/pool):	9.4		
Residual pool depth (avg):	0.62		

Comment Summary

Restoration Monitoring Sites 2007

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
5	RB	00	124.2	BC	CABLED LOGS FOR BRIDGE CROSSIN
12	SL	00	254.8	DJ	
17	PP	00	300.6		BEAVER SPOTTED IN POOL.
20	CB	11	336.1		ACW=2.1
29	CB	00	535.6	SS/	
30	CB	00	570.6	/SS	
36	SR	00	743.6		5 TO 6M HIGH WATERFALL.



Name: WOODS POINT
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0465976 E 5050653 N
 Caption: GAME HOG CREEK RESTORATION SITE - WILSON BASIN