

**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: July 5, 2005
SURVEY CREW: Scott Young, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.5 km²
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanics

GENERAL DESCRIPTION:

The Game Hog Creek habitat survey extended 745 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.6 (range: 1.3-5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 4.5 percent. Rapids (74%) dominated stream habitat. Gravel (39%) and cobble (32%) dominated stream substrate. Wood volume was moderate at 21.6 m³/100m.

COMMENTS:

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

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	0%	Constraining Terraces	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.6	VWI Range:	1.3 - 5

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	745	3,091	0
Secondary Channel	62	217	0
Off-Channel Units	31	68	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 4.1	Width: 9.4	11.6 (8.3 - 17.3)	15.8 (12.1 - 19.5)
Depth: 0.26	Height: 0.3	0.7 (0.6 - 0.8)	1.5 (0.8 - 2.1)

W:D ratio: 29.0

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: MF

Habitat Units/100m (total channel length): 6.0

Average Unit Gradient: 4.5%

Habitat Units/100m (primary channel length): 6.7

Water temperature (°C): -

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 91%
Undercut Banks:	0%	Range: 44 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	245	32.9
Volume (m ³):	161	21.6
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

7/5/2005

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/BOULDERS	2	44	4.3	0.20	211	4	0	10	29	42	5	15
POOL-BACKWATER	2	19	2.3	0.30	62	0	8	39	37	16	0	0
POOL-LATERAL SCOUR	6	68	4.0	0.60	277	6	5	38	27	26	2	3
POOL-PLUNGE	6	39	4.3	0.59	158	1	3	21	25	25	1	26
RAPID/BEDROCK	2	50	4.3	0.20	213	12	0	5	10	22	5	59
RAPID/BOULDERS	25	571	3.9	0.15	2,276	144	0	10	42	40	6	2
RIFFLE	2	36	3.1	0.10	115	0	0	16	73	11	0	0
STEP/LOG	5	11	5.6	0.10	64	1	0	19	56	22	1	2
Total:	50	837	4.1	0.26	3,375	168	Avg: 1	17	39	32	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	2	19	2.3	0.30	62	1.82%	0	0.0	
Scour Pools	12	107	4.1	0.60	435	12.89%	7	1.6	
Glides	0	0			0	0.00%	0	0.0	
Riffles	2	36	3.1	0.10	115	3.42%	0	0.0	
Rapids	27	621	3.9	0.15	2,488	73.73%	156	6.3	
Cascades	2	44	4.3	0.20	211	6.26%	4	1.9	
Step/Falls	5	11	5.6	0.10	64	1.89%	1	1.6	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	14	16.7	18.8
Pools >=1m deep:	1	1.2	1.3
Complex pools (LWD pieces>=3):	3	3.6	4.0
Pool frequency (channel widths/pool):	6.4		
Residual pool depth (avg):	0.50		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

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

Survey Date 7/5/2005

RIPARIAN ZONE

Report Date: 4/26/2006

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	345
Total conifers/1000 ft	122
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-30cm	0.0	1.7	0.7	1.3	0.3	2.0	1.0	5.0
30-50cm	0.0	0.7	0.3	0.0	0.7	0.0	1.0	0.7
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	0.0	2.3	1.0	1.3	1.0	2.0	0.7	1.9

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	70		73		75	
Shrub cover	8		11		9	
Grass/forb cover	87		87		85	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	83		100		100	
High terrace	17		0		0	
Low terrace	0		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 (%)	51		78		78	

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	345
Total conifers/1000 ft	122
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	0.0	0.0
15-30cm	1.0	5.0
30-50cm	1.0	0.7
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

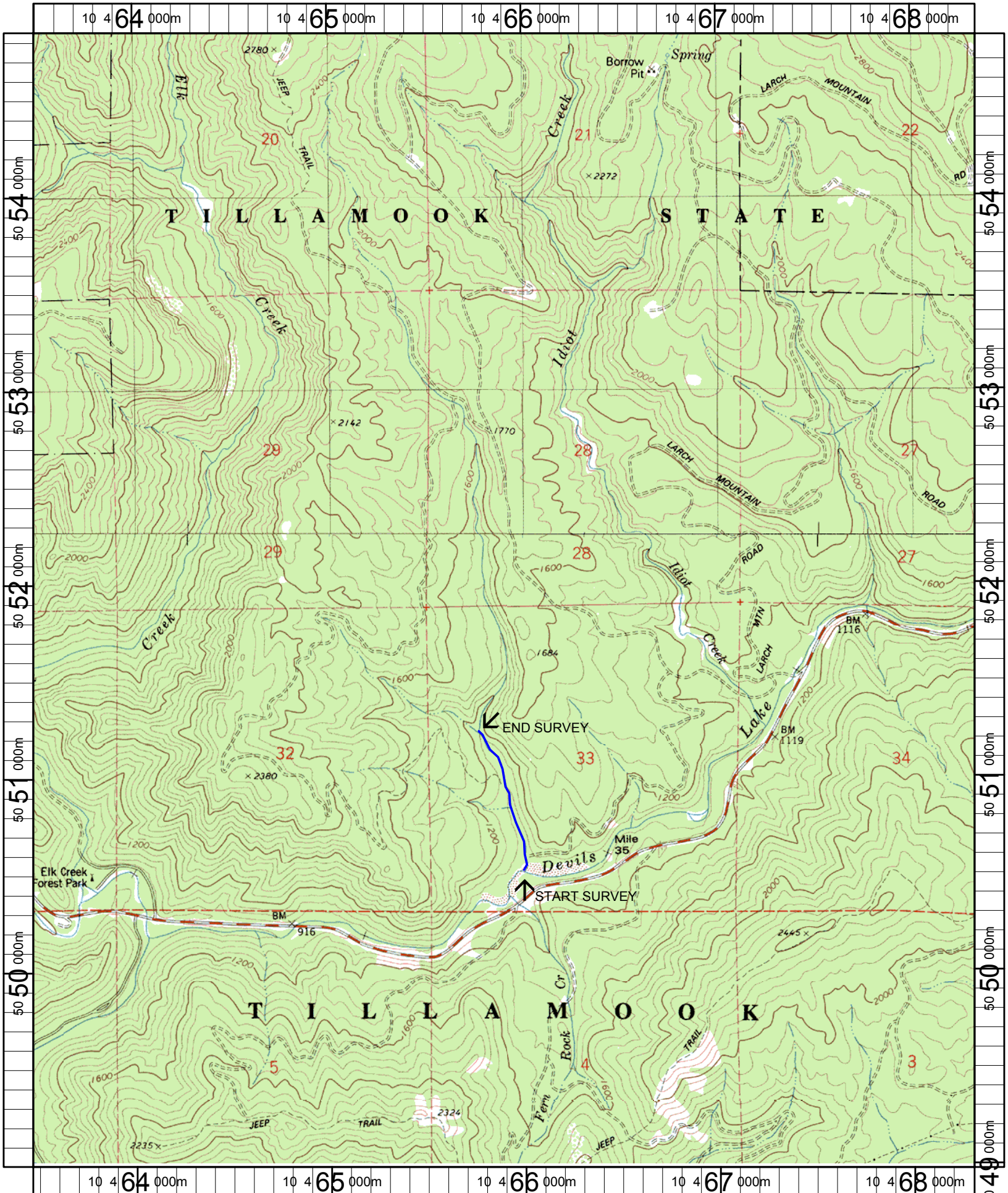
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LF	1	HS	15	80	0	80	Conifer							POOR GPS COVERAGE, BARE SOIL
								Hardwood							
10	RT	3	HS	115	75	0	80	Conifer							BARE SOIL
								Hardwood							
10	RT	2	HS	115	75	0	100	Conifer							BARE SOIL
								Hardwood		1					
10	RT	1	HT	0	80	0	90	Conifer							BARE SOIL
								Hardwood		2					
10	LF	2	HS	30	70	5	95	Conifer							BARE SOIL
								Hardwood		1					
10	LF	3	HS	30	70	5	95	Conifer							BARE SOIL
								Hardwood		2					
19	RT	3	HS	110	80	5	80	Conifer				2			15 PCT BARE SOIL
								Hardwood							
19	LF	1	HS	20	80	5	95	Conifer							POOR GPS COVERAGE
								Hardwood			2				
19	LF	2	HS	20	80	5	95	Conifer							POOR GPS COVERAGE
								Hardwood		1					
19	LF	3	HS	25	80	5	95	Conifer							POOR GPS COVERAGE
								Hardwood		2					
19	RT	1	HS	80	75	5	95	Conifer							POOR GPS COVERAGE
								Hardwood		2					
19	RT	2	HS	110	70	5	80	Conifer				1			15 PCT BARE SOIL
								Hardwood		1					
32	LF	1	HS	80	45	40	60	Conifer							POOR GPS COVERAGE
								Hardwood		1					
32	LF	2	HS	85	65	40	60	Conifer							POOR GPS COVERAGE
								Hardwood		1					
32	LF	3	HS	75	65	30	70	Conifer							POOR GPS COVERAGE
								Hardwood		2					
32	RT	2	HS	110	80	10	90	Conifer							POOR GPS COVERAGE
								Hardwood		1					
32	RT	1	HS	110	60	0	100	Conifer							POOR GPS COVERAGE
								Hardwood							
32	RT	3	HS	110	80	10	90	Conifer							POOR GPS COVERAGE
								Hardwood		1					

Comment Summary

Restoration Monitoring Sites 2005

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	11.4		METRICS AFFECTED BY	
3	BW	10	34.3		PARTLY CREATED BY MA	POSSIBLY PART OF WILSON
10	LP	00	144.1	DJ	RIPARIAN 1	
11	SL	00	147.1		H 0.8M	
19	RB	00	318.7	SS/	RIPARIAN 2	
22	RB	01	388.7	/TJ		
23	RB	11	388.7			TRIB UNIT
28	SL	01	443.25		H=1.0M	
29	RB	01	468.25	DJ		
31	RB	02	468.25	DJ		SAME DJ AS UNIT 29
32	PP	00	475.25		RIP 3, H2O BACKS UP AG	
33	SL	00	477.25		H=0.7M	
35	SL	00	489.3		H=0.4M	
36	RB	00	522	DJ		
49	SL	00	737.6		H 0.7M	
50	PP	00	744.6		END, PHOTO 18	END SURVEY



Name: WOODS POINT
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 465899 E 5051916 N
 Caption: GAME HOG CREEK RESTORATION SITE - WILSON BASIN