

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

STREAM: South Fork Wilson River Tributary (N-258)
BASIN: Wilson River
SURVEY TYPE: Post-Tx
DATE: March 23, 2006
SURVEY CREW: Brian Cannon, Jon Nott
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 3.9 km³
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The South Fork Wilson River Tributary habitat survey extended 696 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.1 (range: 1.3-4.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.8 percent. Rapids (39%) and cascades (24%) dominated stream habitat. Gravel (37%) and cobble (32%) dominated stream substrate. Wood volume was very high at 51.5 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

OREGON DEPT OF FISH AND WILDLIFE SF WILSON RIVER TRIBUTARY POST-TX (1-NC, 258)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date: 3/23/2006

REACH 1

T01N-R06W-S09NE

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	2.1	VWI Range:	1.3 - 4

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	696	2,877	0
Secondary Channel	0	0	0
Off-Channel Units	12	7	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 4.3	Width: 6.5	10.6 (8.1 - 13.1)	10.2 (10.2 - 10.2)
Depth: 0.36	Height: 0.6	1.2 (1.2 - 1.3)	1.7 (1.7 - 1.7)

W:D ratio: 10.6

Stream Flow Type: MF

Average Unit Gradient: 4.8%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.6

Habitat Units/100m (total channel length): 6.8

Habitat Units/100m (primary channel length): 6.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	ST
Riparian Vegetation:	D30	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 primary channel</u>
All pieces (>=3m x 0.15m):	246	35.3
Volume (m ³):	358	51.5
Key pieces (>=12m x 0.60m):	3	0.4

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REACH 1		T01N-R06W-S09NE					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	30	3.5	0.25	115	0	0	8	3	13	8	70
CASCADE/BOULDERS	7	146	3.1	0.20	578	0	3	7	27	41	17	4
POOL-DAMMED	1	9	3.0	1.00	28	0	0	35	60	5	0	0
POOL-LATERAL SCOUR	7	74	3.9	0.70	281	0	1	31	41	21	2	3
POOL-PLUNGE	5	36	5.3	0.77	180	0	0	24	38	23	9	6
RAPID/BOULDERS	11	305	3.7	0.28	1,125	0	0	10	40	43	6	0
RIFFLE	4	72	4.0	0.19	293	0	0	13	49	35	4	0
STEP/BEDROCK	1	1	2.3	0.15	2	0	0	0	0	0	10	90
STEP/COBBLE	3	20	7.3	0.22	162	0	0	8	43	40	8	0
STEP/LOG	7	15	5.5	0.16	120	0	0	20	39	31	10	0
Total:	48	708	4.3	0.36	2,884	0	Avg: 1	16	37	32	8	6

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	1	9	3.0	1.00	28	0.98%	0	0.0	
Scour Pools	12	111	4.4	0.73	461	16.00%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	4	72	4.0	0.19	293	10.16%	0	0.0	
Rapids	11	305	3.7	0.28	1,125	38.99%	0	0.0	
Cascades	9	176	3.2	0.21	693	24.02%	0	0.0	
Step/Falls	11	36	5.7	0.18	284	9.85%	0	0.0	
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 <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	13	18.4	18.7
Pools >=1m deep:	3	4.2	4.3
Complex pools (LWD pieces>=3):	8	11.3	11.5
Pool frequency (channel widths/pool):	8.3		
Residual pool depth (avg):	0.54		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 258 SF WILSON RIVER TRIBUTARY POS

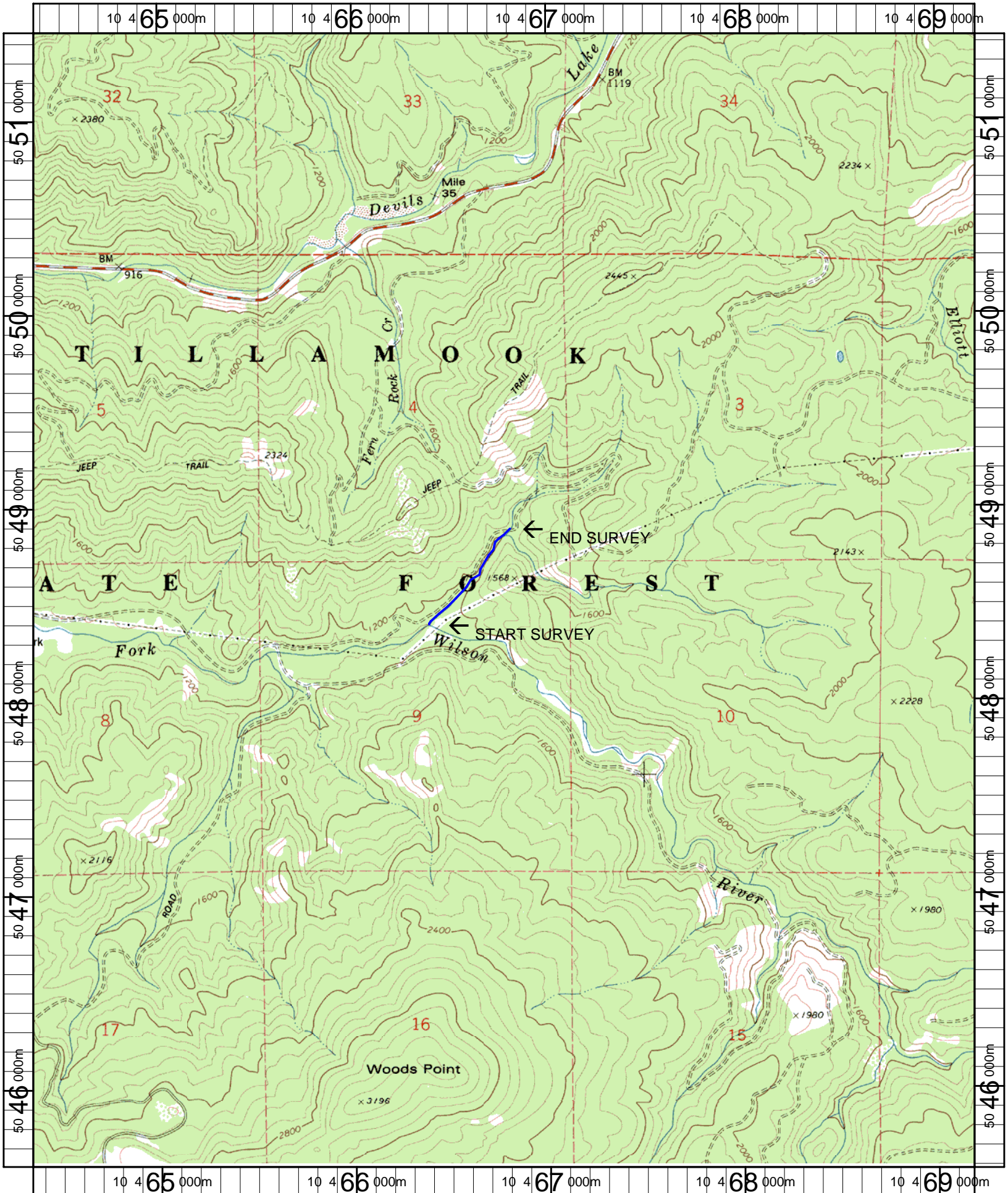
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	CB	00	42.2	HS, SS/	14 LOGS, T = 7 C	
2	RI	00	55.7	RF		
3	RB	00	80.9		CA-CT, D30, S, LT	
4	SL	00	81.5		H = .4 M	
5	RB	00	99.7	HS	9 LOGS	
6	SL	00	100.1		H = .5 M	
7	RB	00	140.8	HS	9 LOGS	
9	SL	00	181.3		H = 1.1 M	
11	RI	01	199.9	TJ/	ACW = .8 M	
13	LP	00	209.2		CH-MV, D30, S, LT	
16	CB	00	248.4	DJ		
25	SL	00	331.9		H = .8 M	
28	SL	00	360.8		CH-MV, D30, S, LT, ST	
29	RI	00	369.5		U 28 = H = .45 M	
33	CR	00	495	SS/		
35	SR	00	506.7		H = .45 M	
36	CB	00	542.8		CH-MV, D30, S, ST, LT	
38	SL	00	548.6		H = .7 M	
41	SL	00	577.7	DJ	STEP OVER LOG/COBBLE	
43	RI	01	631.8	TJ/		
44	CB	11	631.8		ACW = 1.2 M, T = 9 C	

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<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
45	SC	00	640.8	DJ	STEP OVER COBBLE/LOGS	
48	RB	00	696.3		CH-MV, D30, G, ST, LT	



Name: WOODS POINT (OR)
 Date: 2/15/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0466772 E 5048522 N
 Caption: SF WILSON RIVER TRIBUTARY RESTORATION SITE - WILSON BASIN