

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

STREAM: South Fork Wilson River Tributary (NC-258)
BASIN: Wilson River
SURVEY TYPE: Pre-Tx
DATE: March 10, 2005
SURVEY CREW: Sheila Davis, Brian Bangs
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 3.9 km²
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The South Fork Wilson River Tributary habitat survey extended 716 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.5 (range: 1.3-6.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.2 percent. Rapids (54%) dominated stream habitat. Gravel (32%) and cobble (25%) dominated stream substrate. Wood volume was high at 42.4 m³/100m. However, there were virtually no key wood pieces.

COMMENTS:

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

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	2.5	VWI Range:	1.3 - 6

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	716	2,202	0
Secondary Channel	15	28	0
Off-Channel Units	68	70	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 2.7	Width: 4.8	6.8 (4.6 - 9.2)	6.8 (6.8 - 6.8)
Depth: 0.24	Height: 0.3	0.7 (0.6 - 0.8)	2.2 (2.2 - 2.2)

W:D ratio: 14.7
 Stream Flow Type: LF
 Average Unit Gradient: 4.2%
 Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.4
 Habitat Units/100m (total channel length): 12.0
 Habitat Units/100m (primary channel length): 13.4

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):	260	36.3
Volume (m ³):	304	42.4
Key pieces (>=12m x 0.60m):	1	0.1

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

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/10/2005

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	5	2.2	0.05	12	0	0	3	5	10	13	70
CASCADE/BOULDERS	2	22	1.0	0.05	22	0	15	5	30	20	30	0
POOL-BACKWATER	10	20	1.2	0.17	28	0	13	38	24	13	13	0
POOL-LATERAL SCOUR	23	140	3.4	0.60	461	0	7	23	26	20	17	7
RAPID/BEDROCK	3	38	3.1	0.13	115	0	0	5	13	12	13	56
RAPID/BOULDERS	29	347	3.1	0.13	1,126	0	1	6	36	34	22	1
RIFFLE	19	213	2.4	0.14	499	0	3	10	42	26	19	1
RIFFLE W/ POCKETS	1	8	3.6	0.25	30	0	5	10	25	25	20	15
STEP/BEDROCK	1	1	1.5	0.05	1	0	0	0	5	0	0	95
STEP/LOG	5	4	1.8	0.09	7	0	6	20	40	32	2	0
STEP/STRUCTURE	1	0	0.2	0.05	0	0	0	0	30	40	30	0
Total:	96	799	2.7	0.24	2,301	0	Avg: 5	15	32	25	17	7

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	10	20	1.2	0.17	28	1.20%	0	0.0	
Scour Pools	23	140	3.4	0.60	461	20.05%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	20	221	2.5	0.15	529	23.01%	0	0.0	
Rapids	32	385	3.1	0.13	1,241	53.93%	0	0.0	
Cascades	4	27	1.6	0.05	34	1.47%	0	0.0	
Step/Falls	7	5	1.5	0.08	8	0.35%	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:	33	41.3	46.1
Pools >=1m deep:	1	1.3	1.4
Complex pools (LWD pieces>=3):	13	16.3	18.2
Pool frequency (channel widths/pool):	5.1		
Residual pool depth (avg):	0.45		

Comment Summary

Restoration Monitoring Sites 2005

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

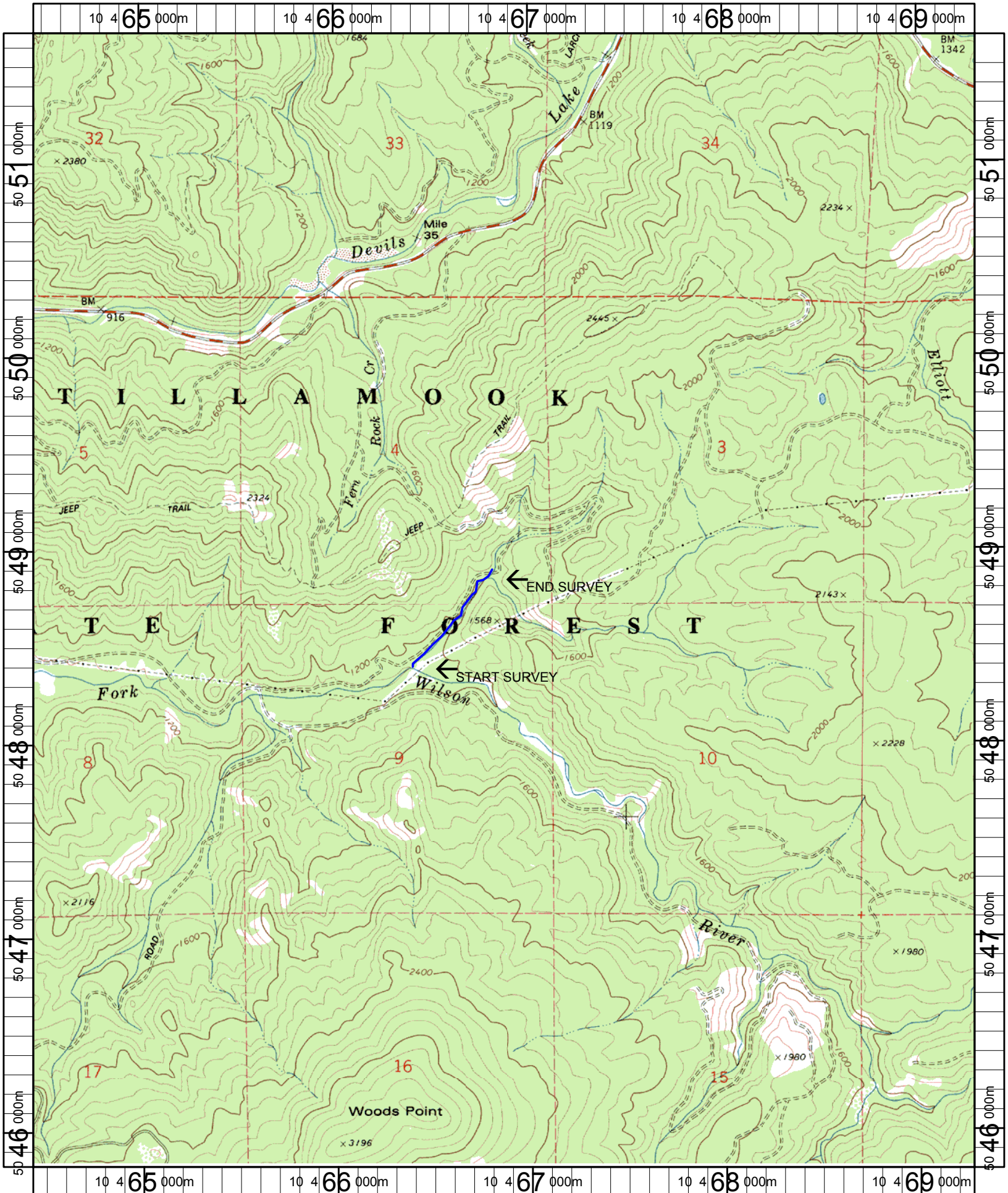
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	01	13.2			CA MT D30 S LT ST
3	LP	00	20.1	DJ		
5	RI	00	52.2	RF		ROAD XS CHANNEL, GATE LH BANK
11	SL	00	85.7	DJ		H=0.5
13	LP	00	105.9			SQUIRREL CARCASS IN POOL
23	RI	01	189.5	DJ		
26	RB	01	207.5	TJ/		CH MV D50 S LT MT
28	CB	11	207.5	CE/		
29	SS	11	207.5			H=1.1, CULVERT D=0.45
34	RB	01	252.8	DJ		CABLE IN RIVER
39	RB	00	283	DJ		
45	SL	00	309			H=0.2
48	RB	01	332.3	DJ		
50	LP	00	336.9	DJ		POOL VERY WIDE
58	RB	00	402.2			CH MV D30 S MT LT
59	RI	00	411.3	DJ		
67	CR	00	494.1	DJ		
68	RI	00	505	CE/		
70	SR	00	515			H=0.35
71	RR	00	528.6	DJ		
72	SL	00	529			H=0.3

Comment Summary

Restoration Monitoring Sites 2005

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
76	LP	00	557.5	SS/		
77	RB	00	567.9	DJ		
78	LP	00	573.7	DJ		
80	SL	00	586.4		H=0.65	
83	LP	00	596.1	DJ		
84	RI	00	604.3	DJ	CH MV D30 S LTST	
86	RI	01	644	TJ/		
87	CB	11	644	CE/		
88	RB	00	661.4	DJ		
91	LP	00	689.4		FRY	
92	SL	00	690.1		H=0.65	
94	RB	01	715.9	TJ/	CH MV D50 S MT LT	
95	RB	11	715.9	CE/		
96	RI	11	715.9		NO SUBSTRATE, METAL	



Name: WOODS POINT
 Date: 6/9/2005
 Scale: 1 inch equals 2000 feet

Location: 10 466866 E 5048739 N
 Caption: SOUTH FORK WILSON RIVER TRIBUTARY RESTORATION SITE
 - WILSON BASIN