

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

STREAM: Upper Devils Lake Fork Wilson River (N133)
BASIN: Wilson River
SURVEY TYPE: Pre-Tx
DATE: February 19, 2002
SURVEY CREW: Sean Allen, Rachel Werner
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 69.9 km²
USGS MAPS: Roaring Creek
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Devils Lake Fork Wilson River habitat survey extended 529 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 3.1 (range: 1.5-5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.8 percent. Riffles (47%) and rapids (34%) dominated stream habitat. Gravel (40%) and cobble (26%) dominated stream substrate. Wood volume was low at 7.8 m³/100m.

COMMENTS:

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

REACH

T1N-R5W-S8NW

REACH

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	3.1	VWI Range:	1.5 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
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	529	2,552	0
Secondary	136	314	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 4.0	Width: 12.3	28.4 (16.1 - 45.2)	32.0 (20 - 46)
Depth: 0.34	Height: 0.5	0.9 (0.8 - 1)	1.0 (0.85 - 1.2)

W:D ratio: 27.6
Stream Flow Type: MF
Average Unit Gradient: 3.8%
Water temperature (°C): 4.5 - 4.5

Entrenchment (ACW:FPW ratio): 2.6
Habitat Units/100m (total channel length): 5.7
Habitat Units/100m (primary channel length): 7.2

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:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	61	11.5
Volume (m ³):	41	7.8
Key pieces (>=12m x 0.60m):	2	0.4

OREGON DEPARTMENT OF FISH AND WILDLIFE

DEVILS LAKE FK UPP PRE (N133)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/19/2002

REACH	T1N-R5W-S8NW							REACH					
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	
POOL-BACKWATER	1	3	4.0	0.30	12	0	30	70	0	0	0	0	0
POOL-DAMMED	1	7	5.5	0.90	41	0	0	5	75	0	0	0	20
POOL-ISOLATED	1	4	1.0	0.50	4	0	30	70	0	0	0	0	0
POOL-LATERAL SCOUR	6	66	5.1	0.67	338	0	1	14	43	29	8	5	5
POOL-PLUNGE	2	12	5.6	0.60	78	0	0	13	68	10	5	5	5
PUDDLED UNIT	2	29	1.0	0.18	27	0	18	40	38	5	0	0	0
RAPID/BOULDERS	7	209	4.7	0.27	966	0	0	4	28	41	26	1	1
RIFFLE	9	211	3.2	0.21	815	0	2	11	45	36	5	1	1
RIFFLE W/ POCKETS	5	113	4.3	0.28	539	0	2	15	57	20	6	0	0
STEP/BEDROCK	1	1	2.1	0.20	1	0	0	0	5	15	20	60	60
STEP/BOULDERS	1	9	4.4	0.25	41	0	0	0	25	50	25	0	0
STEP/LOG	2	1	4.2	0.10	5	0	5	40	40	5	5	5	5
Total:	38	665	4.0	0.34	2,866	0	Avg: 4	16	40	26	10	4	4

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	3	14	3.5	0.57	57	1.98%	0	0.0	
Scour Pools	8	78	5.2	0.65	416	14.50%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	14	324	3.6	0.23	1,353	47.22%	0	0.0	
Rapids	7	209	4.7	0.27	966	33.71%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	11	3.7	0.16	47	1.65%	0	0.0	
Dry	2	29	1.0	0.18	27	0.95%	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:	11	16.5	20.8
Pools >=1m deep:	1	1.5	1.9
Complex pools (LWD pieces>=3):	3	4.5	5.7
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.53		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 133 DEVILS LAKE FK UPP PRE (N133)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	SL	01	0.6		H = .75
13	RP	01	206.5	/TJ	
18	RI	02	268.3	BV	
19	RB	01	304.1	TJ/, SS/	
33	SL	01	489.7	DJ	H = .8