

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

STREAM: Dietz Creek (N-134)
BASIN: Kilchis River
SURVEY TYPE: Post-Tx
DATE: March 17, 2004
SURVEY CREW: Michael Scheu, Carmen Vandyke
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.4 km²
USGS MAPS: Kilchis River
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Dietz Creek habitat survey extended 498 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.1 (range: 1.0-3.5). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 4.6 percent. Cascades (58%) and rapids (20%) dominated stream habitat. Gravel (35%) and cobble (33%) dominated stream substrate. Wood volume was very high at 43.8 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.

REACH 1

T01N-R09W-S23NE

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 - 3.5

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	498	2,000	0
Secondary	63	103	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 3.5	Width: 8.9	11.0 (7.5 - 14.8)	13.9 (11 - 16.5)
Depth: 0.39	Height: 0.5	1.0 (0.8 - 1.2)	1.5 (1.2 - 1.8)

W:D ratio: 18.4
Stream Flow Type: MF
Avg. Unit Gradient: 4.6%

Entrenchment (ACW:FPW ratio): 1.3
Water temp (°C): 9.0 - 9.0
Habitat Units/100m: 8.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D15	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</u>
All pieces (>=3m x 0.15m):	114	22.9
Volume (m ³):	218	43.8
Key pieces (>=10m x 0.60m):	18	3.6

OREGON DEPARTMENT OF FISH AND WILDLIFE

DIETZ CREEK POST-TX (N-134)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

3/17/2004

REACH 1

T01N-R09W-S23NE

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	1	6	2.2	0.30	14	0	0	0	5	0	11	84
CASCADE/BOULDERS	20	318	3.6	0.22	1,210	0	1	10	29	40	21	0
POOL-DAMMED	2	14	3.0	0.65	40	0	0	22	32	33	13	0
POOL-ISOLATED	1	4	1.0	0.30	4	0	10	20	55	10	5	0
POOL-LATERAL SCOUR	4	31	2.9	0.64	86	0	0	12	60	20	6	2
POOL-PLUNGE	8	58	4.0	0.85	237	0	2	23	36	23	15	1
RAPID/BOULDERS	5	103	4.1	0.22	430	0	0	11	34	50	6	0
RIFFLE	2	22	2.9	0.23	72	0	0	10	75	15	0	0
STEP/LOG	2	5	2.2	0.13	10	0	12	21	21	32	14	0
Total:	45	561	3.5	0.39	2,103	0	Avg: 1	13	35	33	15	2

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	17	2.3	0.53	44	2.08%	0	0.0
Scour Pools	12	89	3.6	0.78	322	15.32%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	2	22	2.9	0.23	72	3.44%	0	0.0
Rapids	5	103	4.1	0.22	430	20.46%	0	0.0
Cascades	21	324	3.5	0.22	1,224	58.20%	0	0.0
Step/Falls	2	5	2.2	0.13	10	0.49%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km	
All Pools:	15	26.8	63
Pools >=1m deep:	1	1.8	
Complex pools (LWD pieces>=3):	3	5.4	
Pool frequency (channel widths/pool):	4.2		
Residual pool depth (avg):	0.55		

STREAM SUMMARY

DIETZ CREEK POST-TX (N-134)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
45	561	3.5	0.39	2,103	1	13	35	33	15	2	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	44	2.08%
Scour Pools	322	15.32%
Glides	0	0.00%
Riffles	72	3.44%
Rapids	430	20.46%
Cascades	1,224	58.20%
Step/Falls	10	0.49%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 134 DIETZ CREEK POST-TX (N-134)

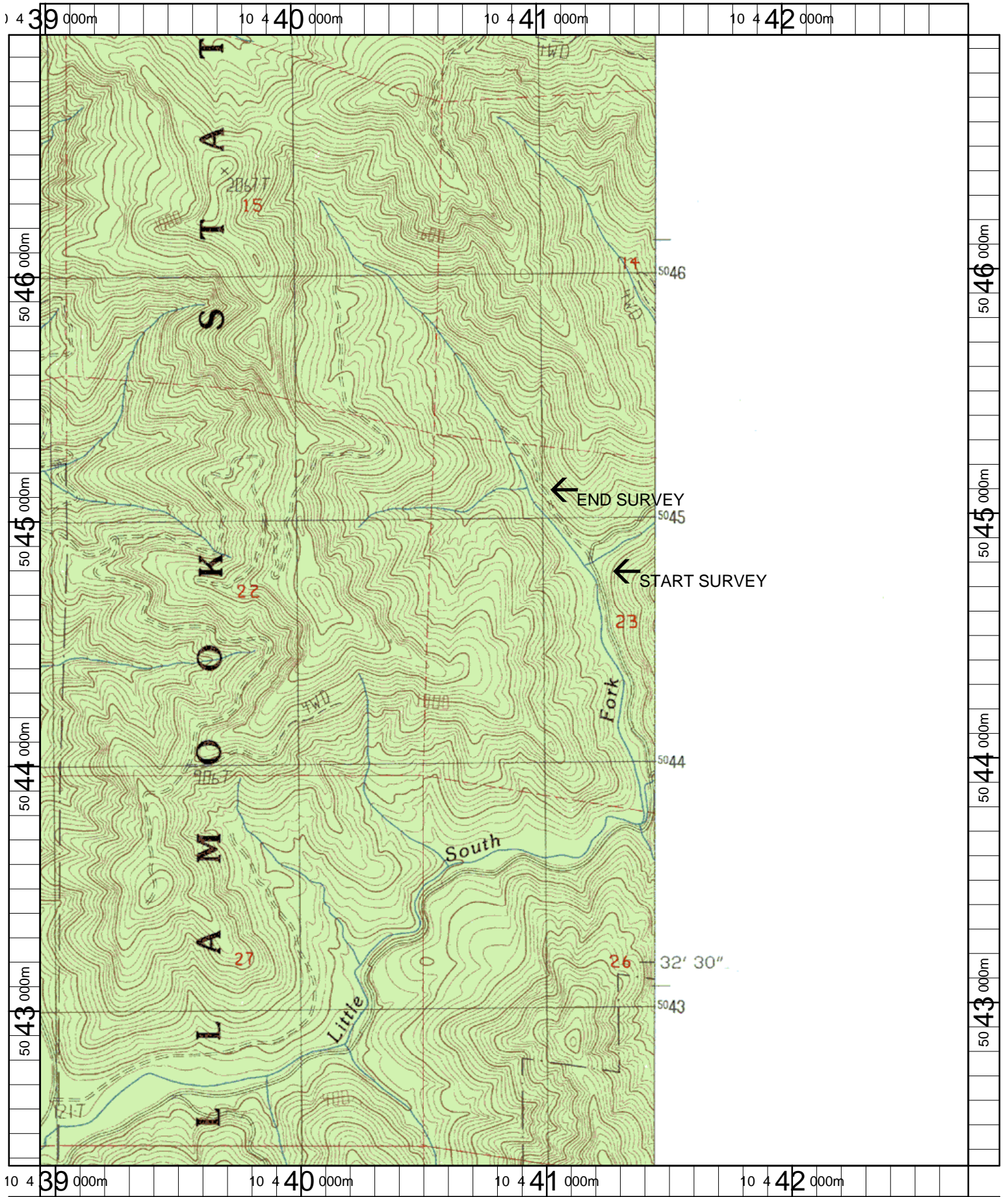
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	CB	00	27	/TJ	T=9C	
2	CB	11	27	HS	T=8C	
3	PP	00	31.7		2 LOGS	
5	PP	00	49.8	/LI		
7	RI	00	66	HS	SITE 1, 2 LOGS	
8	LP	00	72.8	HS	SG=4M, 3 LOGS	
9	RB	00	96.6	HS	SITE 2, 8 LOGS, COHO	
10	CB	00	113.1	HS	FLAG "PP #10" ORANGE	
11	CB	00	132.5	HS	FLAG "PP #9" SITE 3, 5 L	
12	SL	01	137		H=.7	
13	CB	02	137	WL	TRACKS	
14	LP	00	146	HS	1 LOG	
15	RI	00	160.6		SG=4M, COHO	
16	CB	01	182.9	HS		
17	LP	01	187.9	HS	TROUT	
18	CB	01	196.9	HS		
19	CB	02	196.9	HS	SITE 4	
25	PP	00	297.6	SS/	TROUT	
26	CR	00	303.8	SS/		
29	PP	00	337.5	/SS		
33	CB	01	391.4	SS/		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 134 DIETZ CREEK POST-TX (N-134)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
37	CB	00	432.3	/LI		
38	PP	00	439.6	/LI		
39	SL	00	440		H=.5M	
43	CB	01	481.9	TJ,LA		
44	CB	11	481.9		ACW=1.9, T=8.5C	
45	CB	00	497.7	/LI,LA		



Name: KILCHIS RIVER
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 440846 E 5044661 N
 Caption: DIETZ CREEK RESTORATION SITE - KILCHIS BASIN