

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

STREAM: Dietz Creek (N-134)
BASIN: Kilchis River
SURVEY TYPE: Pre-Tx
DATE: June 26, 2003
SURVEY CREW: Trevor Diemer, Ben Walczak
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 514 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.1 (range: 1.0-5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 4.8 percent. Rapids (65%) dominated stream habitat. Cobble (36%) and gravel (31%) dominated stream substrate. Wood volume was low at 18.1 m³/100m.

COMMENTS:

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

OREGON DEPARTMENT OF FISH AND WILDLIFE

DIETZ CREEK PRE-TX (N-134)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/26/03

REACH 1		T01N-R09W-S23SE					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	9	3.0	0.20	26	10	0	0	15	15	20	50	
CASCADE/BOULDERS	2	29	4.8	0.13	146	15	0	10	38	36	16	0	
POOL-BACKWATER	1	5	3.6	0.45	18	3	5	15	35	40	5	0	
POOL-DAMMED	1	5	4.0	0.50	21	5	5	15	30	40	10	0	
POOL-LATERAL SCOUR	7	50	3.3	0.51	168	31	0	12	32	36	18	3	
POOL-PLUNGE	2	10	4.4	0.73	45	18	0	15	39	29	17	0	
POOL-STRAIGHT SCOUR	2	16	4.6	0.95	71	12	0	15	34	27	17	7	
RAPID/BOULDERS	18	348	3.4	0.15	1,192	263	0	9	29	38	24	0	
RIFFLE	3	46	3.2	0.15	133	6	0	8	27	34	20	10	
STEP/LOG	3	2	1.8	0.07	3	7	0	10	39	42	9	0	
Total:	40	519	3.5	0.29	1,823	370	Avg	0	10	31	36	20	3

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		5
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	2	10	3.8	0.48	39	2.15%	8	20.4	
Scour Pools	11	76	3.7	0.63	285	15.62%	61	21.4	
Glides	0	0			0	0.00%	0	0.0	
Riffles	3	46	3.2	0.15	133	7.30%	6	4.5	
Rapids	18	348	3.4	0.15	1,192	65.38%	263	22.1	
Cascades	3	37	4.2	0.15	171	9.40%	25	14.6	
Step/Falls	3	2	1.8	0.07	3	0.15%	7	260.2	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	13	25.1
Pools >=1m deep:	1	1.9
Complex pools (LWD pieces>=3):	1	1.9
Pool frequency (channel widths/pool):	4.8	
Residual pool depth (avg):	0.51	

STREAM SUMMARY

DIETZ CREEK PRE-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	
40	519	3.5	0.29	1,823	0	10	31	36	20	3	370

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	39	2.15%
Scour Pools	285	15.62%
Glides	0	0.00%
Riffles	133	7.30%
Rapids	1,192	65.38%
Cascades	171	9.40%
Step/Falls	3	0.15%
Dry	0	0.00%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	589
Total conifers/1000 ft	305
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	1.0	0.7	0.0	1.3	0.3	1.0	1.3	3.0
15-30cm	0.3	2.0	0.7	1.0	1.0	1.7	2.0	4.7
30-50cm	0.3	0.7	0.3	1.3	1.0	0.0	1.7	2.0
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	1.7	3.3	1.0	3.7	2.3	2.7	1.7	3.2

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	90		90		90	
Shrub cover	31		35		57	
Grass/forb cover	68		64		43	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	50		67		100	
High terrace	33		17		0	
Low terrace	17		17		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 (%)	15		27		48	

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	589
Total conifers/1000 ft	305
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	1.3	3.0
15-30cm	2.0	4.7
30-50cm	1.7	2.0
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

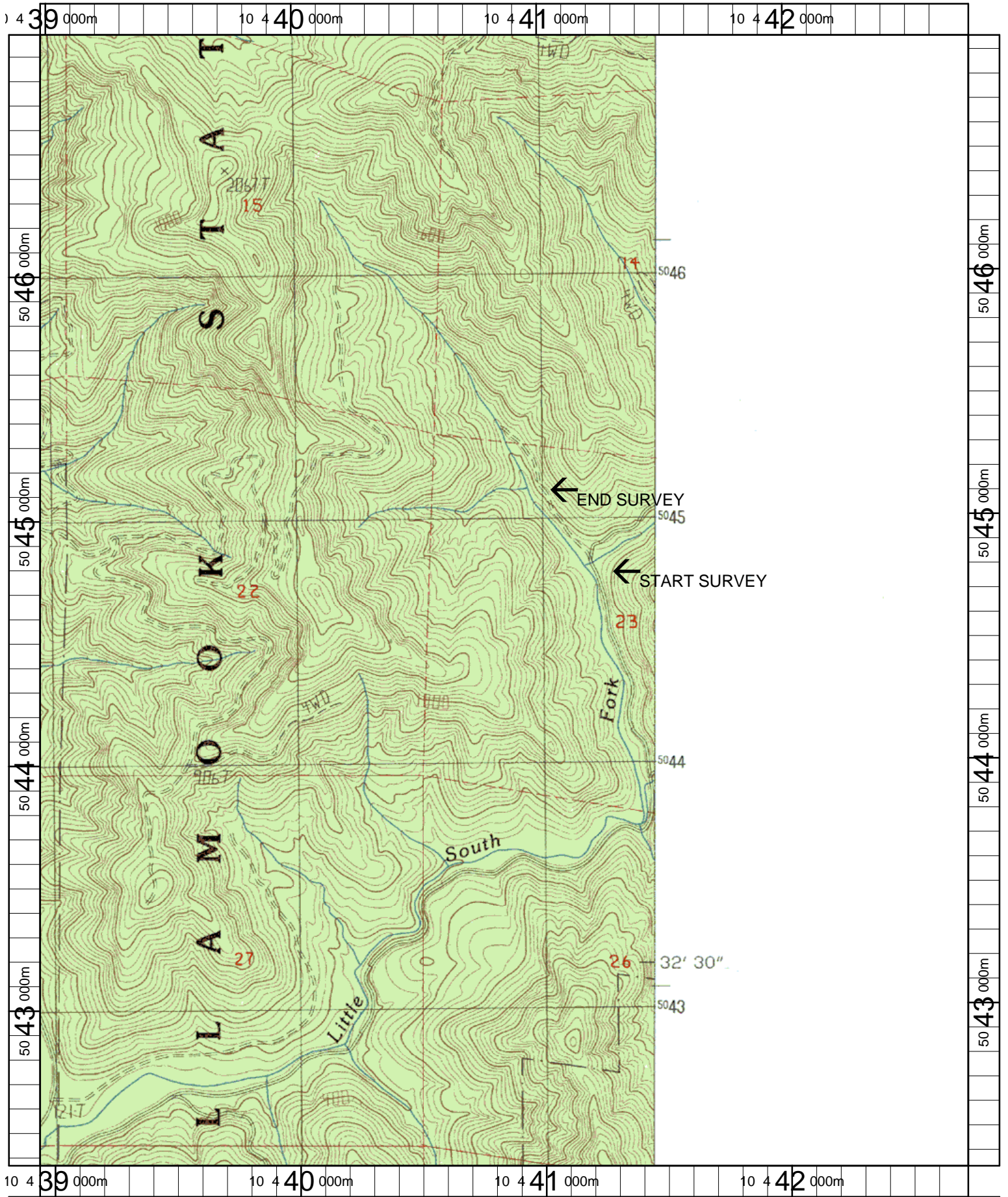
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
9	LF	2	HT	0	90	15	85	Conifer							5044845
								Hardwood				1			
9	LF	1	HT	0	90	15	85	Conifer					1		N 134R1 10T
								Hardwood					1		044489
9	RT	3	HS	30	90	80	20	Conifer	1	2					
								Hardwood	1						
9	RT	2	HS	30	90	70	30	Conifer		2					
								Hardwood	1						
9	RT	1	HS	30	90	70	30	Conifer	3	1					
								Hardwood							
9	LF	3	HS	40	90	60	40	Conifer					1		
								Hardwood		1					
17	RT	1	HS	20	90	15	85	Conifer							
								Hardwood	2	1					
17	RT	2	HS	20	90	15	85	Conifer						1	
								Hardwood	2	1					
17	LF	3	HS	70	90	70	30	Conifer							
								Hardwood		2					
17	LF	2	LT	0	90	35	65	Conifer							
								Hardwood		1					
17	LF	1	LT	0	90	10	90	Conifer							N134R2 10
								Hardwood		1					0441107
17	RT	3	HS	35	90	10	90	Conifer		1	1				5044902
								Hardwood							
27	LF	3	HS	75	90	70	30	Conifer					1		
								Hardwood	1	1					
27	LF	3	HS	40	90	50	50	Conifer							
								Hardwood	1	1					
27	LF	2	HS	70	90	25	70	Conifer							
								Hardwood					1		
27	LF	2	HS	40	90	50	50	Conifer							
								Hardwood	1	1	2				
27	LF	1	HT	0	90	25		Conifer							10T 0441040
								Hardwood		2					5044992
27	LF	1	HS	40	90	50	50	Conifer							
								Hardwood		2	1				

Comment Summary

Oregon Plan Monitoring Sites 2003

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	23.4		TEMP @ 11:30= 11 DEG C	
2	RB	00	36.4	J/HS		
3	SL	00	36.7		H=.55M	
5	LP	00	57.6	//HS		
9	RB	00	106.6		SITE # 2 RIP 7.	@ S OF SITE # 3 RIP/ MET
10	RB	00	121.6		TEMP @ 12:08= 11 DEG C	
11	PP	00	127.2		FRY	
12	SL	00	128.3		H=.80 M	TOP OF SITE # 3
17	RB	01	226.7		RIP T @ PP # 17 (FLAGGI	RIP/ MET
18	BW	10	226.7	SS//		
23	SP	00	310.5	-/SS		
27	LP	00	357.7		RIP.T.	
34	SL	00	452		H=.50 M	
35	DP	00	457.3	-WL		
40	RB	00	513.7	IL		N134E



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