

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

STREAM: Cedar Creek (NC-13)
BASIN: Wilson River
SURVEY TYPE: Pre-Tx
DATE: June 21, 2000
SURVEY CREW: Sean Allen Todd Boswell
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 13.3 km²
USGS MAPS: Jordan Creek
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Cedar Creek habitat survey extended 749 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.8 (range: 4.0 – 5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.2 percent. Riffles (58%) and scour pools (25%) dominated stream habitat. Cobble (32%) and boulders (31%) dominated stream substrate. Wood volume was moderate at 21.9 m³/100m.

COMMENTS:

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

REACH 1

T1N-R7W-7NE

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	100
Moderate V-shape	0	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 4.8 range: 4.0-5.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	0	Braided Channel	0
Alt. Terrace/Hill	100		
Landuse	0		

Channel Characteristics

<u>Type</u>	<u>Length(m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	749	8,076	0
Secondary	459	2,187	5

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	7.6	Width	17.1	31.0	35.8
Depth	0.40	Height	0.9	1.8	2.0
		W:D ratio	19.0	Entrenchment	1.8

Stream Flow Type: MF Water Temp: 11.0-11.0°C
 Avg. Unit Gradient: 1.2% Habitat Units/100m: 5.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	M30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	17%	Reach avg: 98%
Undercut Banks	7%	Range: 81-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	98	13.1
Volume (m ³)	164	21.9
Key pieces (≥10m x 0.6m)	3	0.4

REACH 1

T1N-R7W-7NE

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 S/O	Wetted Snd	Area Grvl	Cbbl	Bldr	Bdrk
CASCADE/BOULDERS	3	35	1.7	0.07	69	0	0	8	12	40	40	0
DRY CHANNEL	1	8	10.2	0.00	84	0	5	20	10	50	15	0
DRY UNITS	3	59	4.0	0.00	358	0	8	22	27	23	17	3
POOL-BACKWATER	5	27	2.9	0.33	85	0	10	38	23	19	10	0
POOL-LATERAL SCOUR	8	121	8.9	0.76	1,108	2	3	15	11	33	26	12
POOL-PLUNGE	1	12	8.0	0.85	92	0	0	15	10	30	45	0
POOL-STRAIGHT SCOUR	6	141	9.6	1.04	1,402	0	3	13	16	28	27	13
PUDDLED CHANNEL	1	30	8.2	0.10	246	3	0	20	10	20	50	0
RAPID/BOULDERS	4	97	7.7	0.34	765	2	0	8	10	30	50	3
RIFFLE	25	668	8.6	0.28	5,978	15	3	14	15	35	30	2
STEP/BOULDERS	3	10	7.5	0.22	77	2	0	0	2	40	58	0
Total:	60	1,207	7.6	0.40	10,263	24	Avg: 3	15	14	32	31	4

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	5	27	2.9	0.33	85	0.83	0	0.0
Scour Pools	15	273	9.1	0.88	2,601	25.35	2	0.1
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	25	668	8.6	0.28	5,978	58.25	15	0.3
Rapids	4	97	7.7	0.34	765	7.45	2	0.3
Cascades	3	35	1.7	0.07	69	0.68	0	0.0
Step/Falls	3	10	7.5	0.22	77	0.75	2	2.6
Dry	5	97	6.1	0.02	688	6.70	3	0.4

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	20	16.6
Pools $\geq 1m$ deep:	4	3.3
Complex pools (LWD pieces ≥ 3):	5	4.1
Pool Frequency (channel widths/pool):	3.5	
Residual pool depth (avg)	0.62m	

STREAM SUMMARY

CEDAR CREEK (PRE-TX)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
60	1,207	7.6	0.40	10,263	3	15	14	32	31	4	24

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	2,601	25.3
Backwater Pools	85	0.8
Glide	0	0.0
Riffle	5,978	58.3
Rapid	765	7.5
Cascade	69	0.7
Step	77	0.7
Dry	688	6.7

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	813
Total conifers/1000 ft	81
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 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.3	1.7	0.0	1.0	0.0	1.0	0.3	3.7
15-30cm	0.0	2.3	0.0	2.3	0.3	1.3	0.3	6.0
30-50cm	0.0	1.0	0.7	0.7	0.0	0.7	0.7	2.3
50-90cm	0.0	0.0	0.0	0.7	0.0	0.7	0.0	1.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.3	5.0	0.7	4.7	0.3	3.7	0.4	4.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	84		82		75	
Shrub cover	47		53		55	
Grass/forb cover	53		48		45	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	50		50		67
High terrace	50		50		33	
Low terrace	0		0		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 (%)	16		10		9	

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

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

Total hardwoods/1000 ft	813
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	3.7
15-30cm	0.3	6.0
30-50cm	0.7	2.3
50-90cm	0.0	1.3
>90cm	0.0	0.0

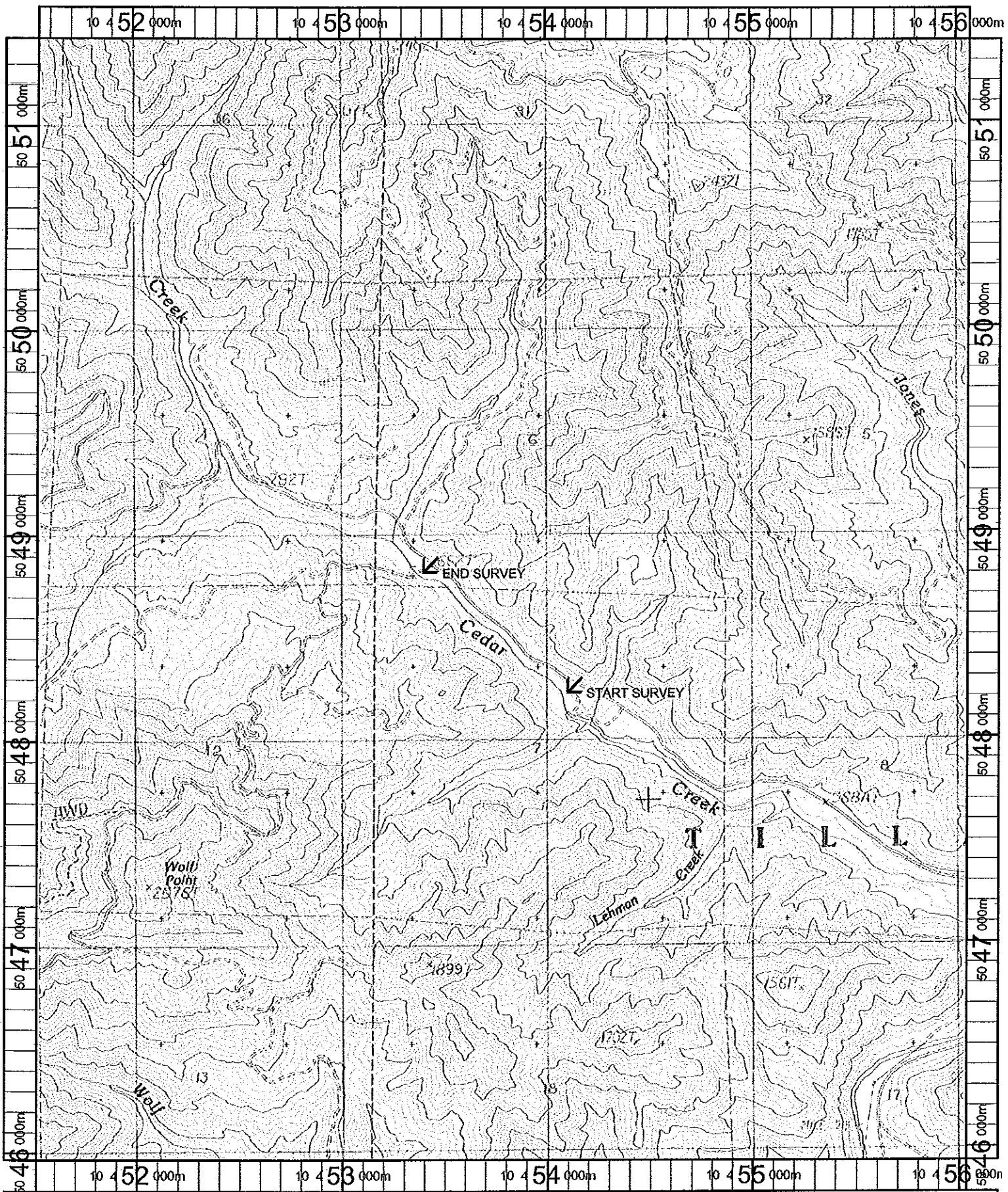
RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
10	LF	1	HT	0.0	85	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
10	LF	2	HT	8.0	85	5	95	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
10	LF	3	HS	2.0	65	80	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	1	0	
10	RT	1	HS	35.0	85	50	50	Conifer	1	0	0	0	0	
								Hardwood	0	0	0	0	0	
10	RT	2	HS	8.0	75	60	40	Conifer	0	0	2	0	0	
								Hardwood	0	0	0	0	0	
10	RT	3	HS	3.0	60	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	1	0	
19	LF	1	HS	30.0	90	70	30	Conifer	0	0	0	0	0	
								Hardwood	0	2	1	0	0	
19	LF	2	HS	25.0	80	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	1	0	
19	LF	3	HS	30.0	80	80	20	Conifer	0	0	0	0	0	
								Hardwood	1	4	0	0	0	
19	RT	1	HT	5.0	75	50	50	Conifer	0	0	0	0	0	
								Hardwood	2	0	1	0	0	
19	RT	2	HT	8.0	85	40	60	Conifer	0	0	0	0	0	
								Hardwood	1	0	2	0	0	
19	RT	3	HT	12.0	80	30	70	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	
34	LF	1	HS	18.0	85	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	2	1	0	0	
34	LF	2	HS	5.0	85	40	60	Conifer	0	0	0	0	0	
								Hardwood	2	2	0	0	0	
34	LF	3	HS	6.0	80	30	70	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
34	RT	1	HT	6.0	85	60	40	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	0	0	
34	RT	2	HT	4.0	80	80	20	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	1	0	
34	RT	3	HT	0.0	85	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	2	0	0	



Name: JORDAN CREEK
 Date: 10/17/100
 Scale: 1 inch equals 2000 feet

Location: 10 453690 E 5048665 N
 Caption: CEDAR CREEK RESTORATION SITE - WILSON BASIN