

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

STREAM: Charlotte Creek (U-14)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: March 1, 2000
SURVEY CREW: Chris Mease, Trevan Cornwell
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 10.0 km²
USGS MAPS: Deer Head Point
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Charlotte Creek habitat survey extended 501 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 2.8 (range: 2.3 – 3.5). Land use for the reach was mature (50-90 cm dbh) trees. The average unit gradient was 0.9 percent. Riffles (65%) and scour pools (27%) dominated stream habitat. Gravel (47%) and cobble (31%) dominated stream substrate. Wood volume was low at 10.3 m³/100m.

COMMENTS:

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

REACH 1

T22S-R10W-S17NW

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	2.8	VWI Range:	2.3 - 3.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	501	3,275	0
Secondary	20	50	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	6.2	Width	11.3	13.5	15.6
Depth	0.63	Height	0.5	1.0	1.7
		W:D ratio	22.3	Entrenchment	1.2
Stream Flow Type:	MF	Water temp (C):	-		
Avg. Unit Gradient:	0.9%	Habitat Units/100m:	4.0		

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	
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</u>
All pieces (>=3m x 0.15m):	104	20.8
Volume (m ³):	52	10.3
Key pieces (>=10m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

CHARLOTTE CREEK PRE-TX

HABITAT INVENTORY

Report Date: 11/12/03

Survey Date:

3/1/00

REACH 1

T22S-R10W-S17NW

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/BOULDERS	1	16	5.5	0.25	85	0	0	0	15	35	50	0
POOL-DAMMED	1	18	6.3	1.25	113	0	5	30	45	15	5	0
POOL-LATERAL SCOUR	8	146	6.3	1.04	911	0	8	16	42	29	5	0
RAPID/BOULDERS	1	11	5.3	0.50	56	0	0	10	35	20	35	0
RIFFLE	8	305	6.3	0.24	1,991	0	3	6	55	35	2	0
RIFFLE W/ POCKETS	1	26	6.5	0.35	169	0	2	5	64	29	0	0
Total:	20	521	6.2	0.63	3,325	0	Avg 5	11	47	31	7	0

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	1	18	6.3	1.25	113	3.41%	0	0.0
Scour Pools	8	146	6.3	1.04	911	27.39%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	9	331	6.3	0.26	2,160	64.96%	0	0.0
Rapids	1	11	5.3	0.50	56	1.67%	0	0.0
Cascades	1	16	5.5	0.25	85	2.56%	0	0.0
Step/Falls	0	0			0	0.00%	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:	9	18.0
Pools >=1m deep:	6	12.0
Complex pools (LWD pieces>=3):	9	18.0
Pool frequency (channel widths/pool):	5.1	
Residual pool depth (avg):	0.80	

STREAM SUMMARY

CHARLOTTE CREEK PRE-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
20	521	6.2	0.63	3,325	5	11	47	31	7	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	113	3.41%
Scour Pools	911	27.39%
Glides	0	0.00%
Riffles	2,160	64.96%
Rapids	56	1.67%
Cascades	85	2.56%
Step/Falls	0	0.00%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Restoration Monitoring Sites 2003

MONITORING AREA: 4-UM SITE ID: 14 CHARLOTTE CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	30.5		STRT@TOP OF CV,SIGN	
6	LP	00	128		VWI = 2.6	
8	LP	00	152		ROCKFALL FROM HILL RI	
9	DP	00	170	SS/		
10	RI	00	184		ROAD WORK ON RIGHT	
12	RI	00	257	/CE	VWI= 3.5	
14	RI	00	337.5	/SS		
16	RI	00	429		VWI= 2.3	
17	LP	00	444		SALMON FRY	
20	RI	00	500.8		VWI= 2.6 END OF SURVE	

