

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

STREAM: Fish Creek (MS-32)
BASIN: Millicoma River
SURVEY TYPE: Pre-Tx
DATE: February 19, 2001
SURVEY CREW: Andy Solez, Peter Bower
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.0 km²
USGS MAPS: Elk Peak
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Fish Creek habitat survey extended 784 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 1.2 (range: 1.0 – 2.0). Land use for the reach was young (3-15 cm dbh) trees. The average unit gradient was 2.4 percent. Riffles (61%) and rapids (20%) dominated stream habitat. Gravel (35%) and bedrock (32%) dominated stream substrate. Wood volume was moderate at 31.1 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 SUMMARY

REACH 1

T23S-R10W-S6SE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	100	Constraining Terraces	0
Moderate V-shape	0	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 1.2 range: 1.0-2.0

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	784	3,381	0
Secondary	25	12	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.8	Width	5.7	7.8	7.8
Depth	0.27	Height	0.5	0.9	1.5
		W:D ratio	12.3	Entrenchment	1.4

Stream Flow Type: MF Water Temp: 6.0-6.0°C
 Avg. Unit Gradient: 2.4% Habitat Units/100m: 4.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	
Riparian Vegetation:	D15	C15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	233	29.7
Volume (m ³)	244	31.1
Key pieces (≥10m x 0.6m)	12	1.5

HABITAT UNIT SUMMARY

REACH 1

T23S-R10W-S6SE

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	Cbbl	Bldr	Bdrk
CASCADE/BEDROCK	1	37	6.1	0.05	223	0	0	0	0	0	0	100
GLIDE	1	17	3.7	0.25	62	0	8	16	28	8	8	32
POOL-LATERAL SCOUR	4	42	3.8	0.68	161	0	6	23	44	19	0	8
POOL-PLUNGE	2	8	4.1	0.60	32	0	4	11	53	15	2	15
POOL-STRAIGHT SCOUR	4	35	3.7	0.50	154	0	4	12	20	14	8	42
RAPID/BEDROCK	3	95	5.0	0.07	491	0	0	0	0	4	6	90
RAPID/BOULDERS	2	56	2.9	0.15	202	0	2	2	33	16	29	18
RIFFLE	15	516	3.9	0.16	2,060	0	2	6	41	18	7	25
STEP/BEDROCK	1	1	4.3	0.05	3	0	0	0	0	0	0	100
STEP/BOULDERS	1	1	1.1	0.10	1	0	0	0	0	0	100	0
STEP/LOG	2	2	2.6	0.13	5	0	0	0	90	10	0	0
Total:	36	809	3.8	0.27	3,392	0	Avg: 3	8	35	14	9	32

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	0	0	-	-	0	0.00	0	0.0
Scour Pools	10	85	3.8	0.59	347	10.23	0	0.0
Glides	1	17	3.7	0.25	62	1.83	0	0.0
Riffles	15	516	3.9	0.16	2,060	60.73	0	0.0
Rapids	5	151	4.1	0.10	692	20.41	0	0.0
Cascades	1	37	6.1	0.05	223	6.56	0	0.0
Step/Falls	4	3	2.6	0.10	8	0.23	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

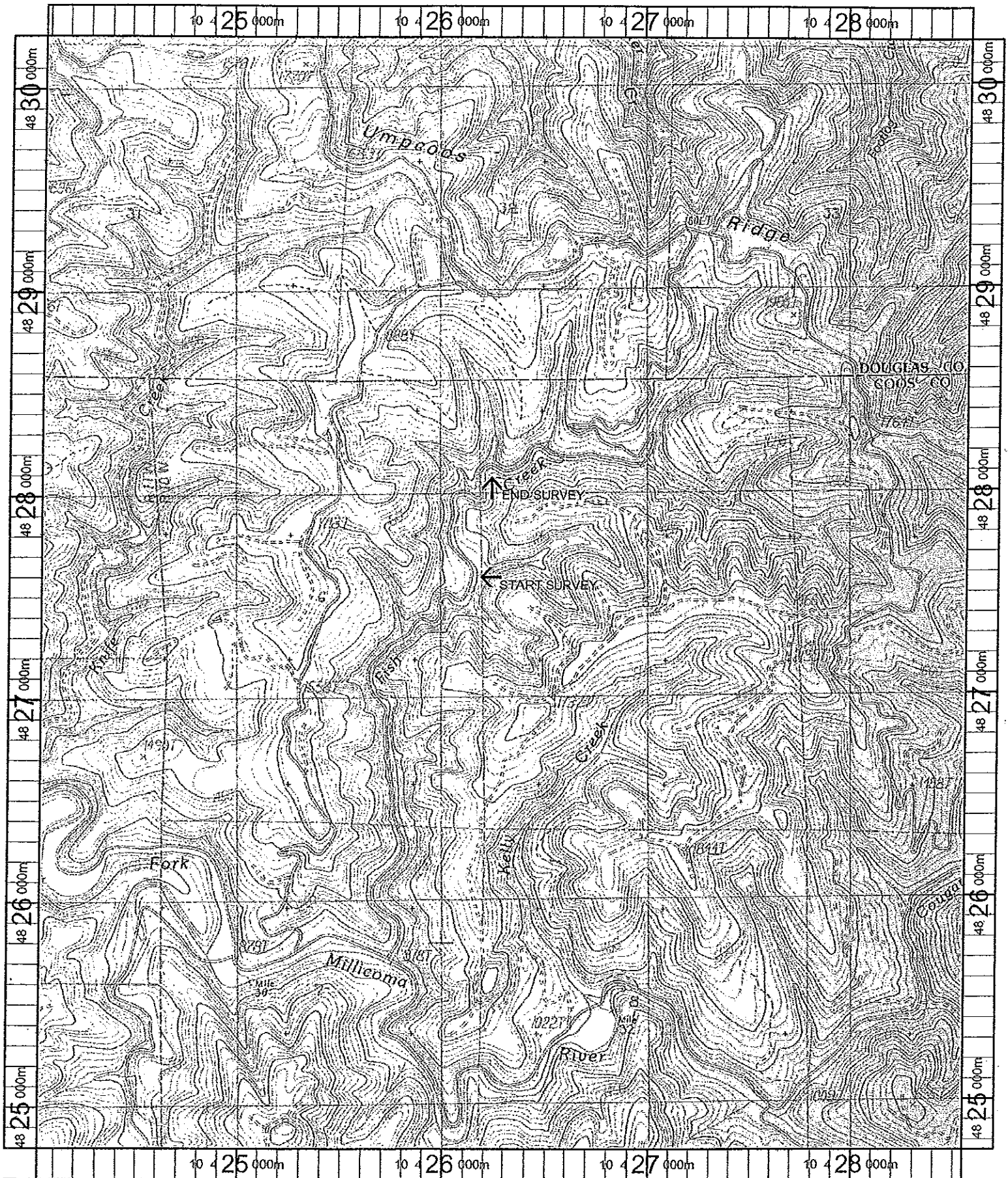
	<u>Total</u>	<u>#/Km</u>
All Pools	10	12.4
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	3	3.7
Pool Frequency (channel widths/pool):	14.2	
Residual pool depth (avg)	0.42m	

STREAM SUMMARY

FISH CREEK PRE-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
36	809	3.8	0.27	3,392	3	8	35	14	9	32	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	347	10.2
Backwater Pools	0	0.0
Glide	62	1.8
Riffle	2,060	60.7
Rapid	692	20.4
Cascade	223	6.6
Step	8	0.2
Dry	0	0.0



Name: ELK PEAK
 Date: 11/7/100
 Scale: 1 Inch equals 2000 feet

Location: 10 426209 E 4827491 N
 Caption: FISH CREEK RESTORATION SITE - MILLICOMA BASIN