

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

STREAM: West Fork Millicoma River (MS-171)
BASIN: Millicoma River
SURVEY TYPE: Pre-Tx
DATE: March 3, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 67.7 km²
USGS MAPS: Elk Peak
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The West Fork Millicoma River habitat survey extended 533 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.2 (range: 1.5-3.0). Land use for the reach was large (30-50 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 0.5 percent. Scour pools (60%) and riffles (30%) dominated stream habitat. Bedrock (53%) 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 T23S-R11W-S14NE 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	2.2	VWI Range:	1.5 - 3

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	533	11,379	0
Secondary	35	225	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 19.6	Width: 24.7	29.0 (24 - 33.6)	34.0 (27 - 41)
Depth: 0.93	Height: 1.1	2.1 (1.7 - 2.4)	3.3 (2.5 - 3.8)

W:D ratio: 23.6 Entrenchment (ACW:FPW ratio): 1.2
Stream Flow Type: HF Water temp (°C): 8.0 - 8.0
Avg. Unit Gradient: 0.5% Habitat Units/100m: 3.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	MT
Riparian Vegetation:	C50	D15

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):	35	6.6
Volume (m ³):	55	10.3
Key pieces (>=10m x 0.60m):	2	0.4

REACH 1		T23S-R11W-S14NE					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	
POOL-BACKWATER	2	35	6.5	1.05	225	0	5	51	5	0	10	29	
POOL-LATERAL SCOUR	9	327	20.8	1.26	7,002	0	1	11	12	4	8	64	
RIFFLE	7	167	21.0	0.54	3,508	0	0	4	23	13	11	49	
STEP/BEDROCK	1	17	23.0	0.50	391	0	0	0	30	0	0	70	
STEP/BOULDERS	1	22	21.7	0.80	477	0	0	5	26	21	37	11	
Total:	20	568	19.6	0.93	11,604	0	Avg: 1	12	17	7	11	53	

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	2	35	6.5	1.05	225	1.94%	0	0.0	
Scour Pools	9	327	20.8	1.26	7,002	60.35%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	7	167	21.0	0.54	3,508	30.23%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	2	39	22.4	0.65	868	7.48%	0	0.0	
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:	11	19.4	35
Pools >=1m deep:	11	19.4	
Complex pools (LWD pieces>=3):	3	5.3	
Pool frequency (channel widths/pool):	2.1		
Residual pool depth (avg):	0.61		

STREAM SUMMARY

WEST FORK MILLICOMA PRE-TX (MS-171)

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	
20	568	19.6	0.93	11,604	1	12	17	7	11	53	

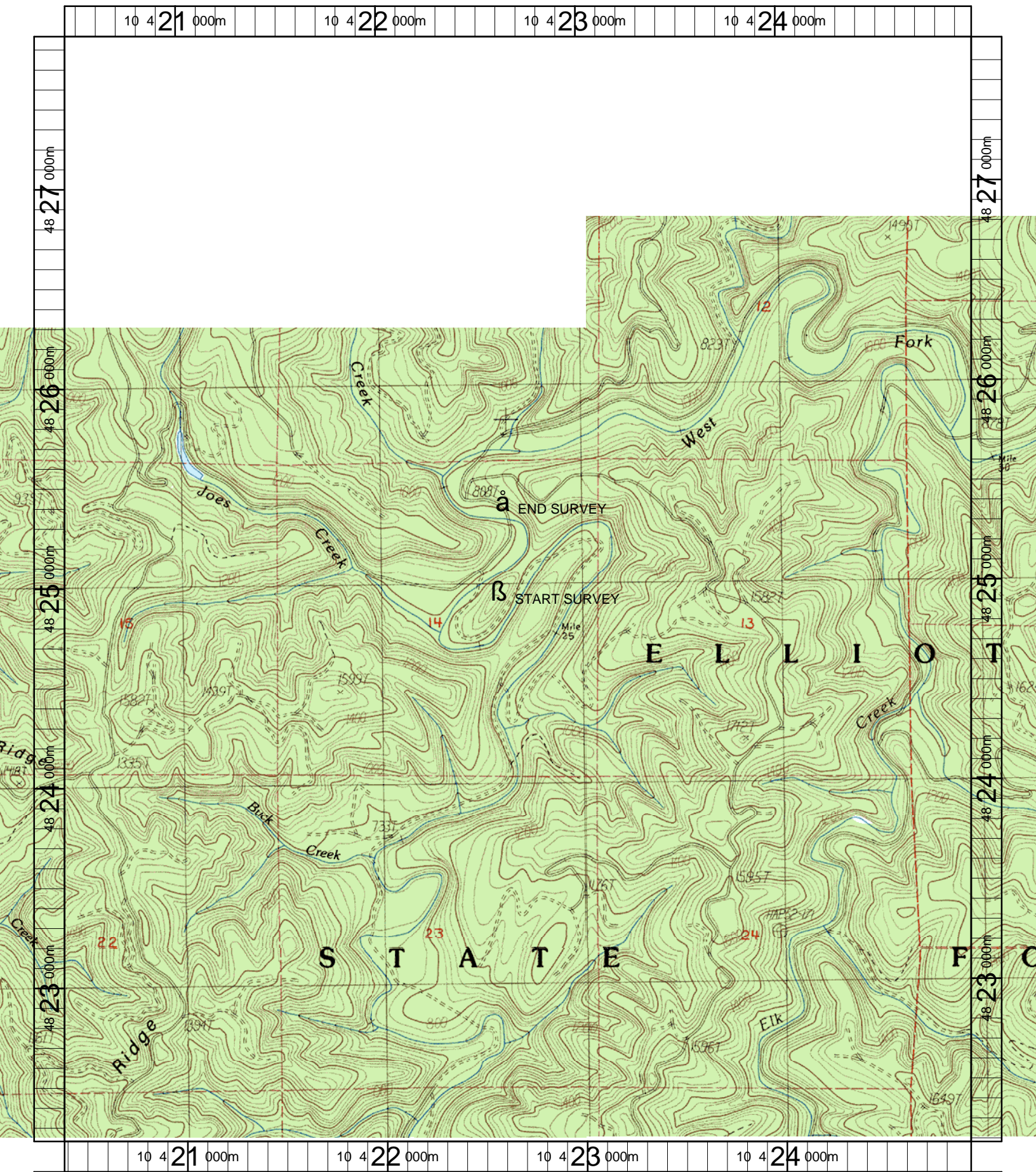
Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	225	1.94%
Scour Pools	7,002	60.35%
Glides	0	0.00%
Riffles	3,508	30.23%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	868	7.48%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **171** WEST FORK MILLICOMA RIVER PRE

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	68	RF	SG=45M, STH REDDS	
2	SR	00	85		SG=15M	
4	RI	00	129		SG=12M, STHD REDD	
5	RI	00	156		SG=10M, STHD REDD	
6	LP	01	172.2		SG=8M	
8	SB	00	194.2		/CLIFF	
12	BW	10	266.2		/CLIFF	
14	RI	00	348.2		SG=10M, STHD REDD	
15	RI	00	373.2		SG=18M, STHD REDD	
19	LP	00	513.7	CS/CS, BC	8000 RD	
20	LP	00	532.7	BV		



Name: ELK PEAK
 Date: 1/21/2004
 Scale: 1 inch equals 2000 feet

Location: 10 422678 E 4824975 N
 Caption: WF MILLICOMA #171 RESTORATION SITE - MILLICOMA BASIN