

REACH 1

T23S-R10W-S7NW

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 avg: 2.2 range: 1.0-4.0

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	706	6,904	0
Secondary	0	0	0

Channel Dimensions (m)

	<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>		<u>First Terrace</u>
Width	9.8	Width	11.5		15.1		17.2
Depth	0.46	Height	0.7		1.3		2.4
		W:D ratio	16.9	Entrenchment	1.3		

Stream Flow Type: LF Water Temp: 12.0-12.0°C  
 Avg. Unit Gradient: 1.0% Habitat Units/100m: 3.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	3%	Reach avg: 79%
Undercut Banks	6%	Range: 44- 89

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	50	7.1
Volume (m <sup>3</sup> )	102	14.5
Key pieces (≥10m x 0.6m)	4	0.6

REACH 1

T23S-R10W-S7NW

REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbbl	Bldr	Bdrk
POOL-DAMMED	1	23	10.0	0.70	230	0	10	20	35	5	0	30
POOL-LATERAL SCOUR	1	19	11.0	0.90	209	4	0	5	10	0	10	75
POOL-PLUNGE	1	29	12.0	0.90	342	6	10	5	10	5	20	50
POOL-STRAIGHT SCOUR	7	227	10.2	0.91	2,424	49	8	12	19	7	5	48
RAPID/BEDROCK	4	131	9.5	0.29	1,232	23	0	8	12	16	6	57
RIFFLE	4	199	8.5	0.25	1,670	42	2	17	37	9	8	27
RIFFLE W/ POCKETS	1	36	10.0	0.20	360	16	0	10	30	20	25	15
STEP/BEDROCK	7	43	9.7	0.11	437	11	0	2	3	2	8	85
<b>Total:</b>	<b>26</b>	<b>706</b>	<b>9.8</b>	<b>0.46</b>	<b>6,904</b>	<b>151</b>	<b>Avg: 3</b>	<b>9</b>	<b>17</b>	<b>8</b>	<b>8</b>	<b>55</b>

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m <sup>2</sup> )	Wetted Area Percent	Large Boulders Number	Boulders #/100m <sup>2</sup>
Dammed & BW Pools	1	23	10.0	0.70	230	3.33	0	0.0
Scour Pools	9	275	10.5	0.91	2,975	43.10	59	2.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	5	235	8.8	0.24	2,030	29.41	58	2.9
Rapids	4	131	9.5	0.29	1,232	17.84	23	1.9
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	7	43	9.7	0.11	437	6.33	11	2.5
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	10	<u>#/Km</u>	14.2
Pools ≥1m deep:		3		4.2
Complex pools (LWD pieces ≥3):		3		4.2
Pool Frequency (channel widths/pool):		6.1		
Residual pool depth (avg)		0.70m		

STREAM SUMMARY

ELK CREEK PRE-TX (#29)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
26	706	9.8	0.46	6,904	3	9	17	8	8	55	151

Wetted Area

Habitat Group	(m <sup>2</sup> )	Percent
Scour Pool	2,975	43.1
Backwater Pools	230	3.3
Glide	0	0.0
Riffle	2,030	29.4
Rapid	1,232	17.8
Cascade	0	0.0
Step	437	6.3
Dry	0	0.0

---

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	467
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	163
Total conifers >35" dbh/1000 ft	61

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	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
15-30cm	0.3	3.0	0.7	0.3	0.0	2.3	1.0	5.7
30-50cm	0.3	0.3	0.0	0.3	0.0	0.3	0.3	1.0
50-90cm	0.3	0.7	0.0	0.0	1.3	0.0	1.7	0.7
>90cm	0.7	0.0	0.3	0.0	0.0	0.0	1.0	0.0
Total/100m <sup>2</sup>	1.7	4.0	1.0	1.0	1.3	2.7	1.3	2.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	62		73		75	
Shrub cover	29		37		20	
Grass/forb cover	57		47		58	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	83		83		83
High terrace	0		17		17	
Low terrace	0		0		0	
Floodplain	17		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	40		31		29	

---

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	467
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	163

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	0.0	0.3
15-30cm	1.0	5.7
30-50cm	0.3	1.0
50-90cm	1.7	0.7
>90cm	1.0	0.0

---

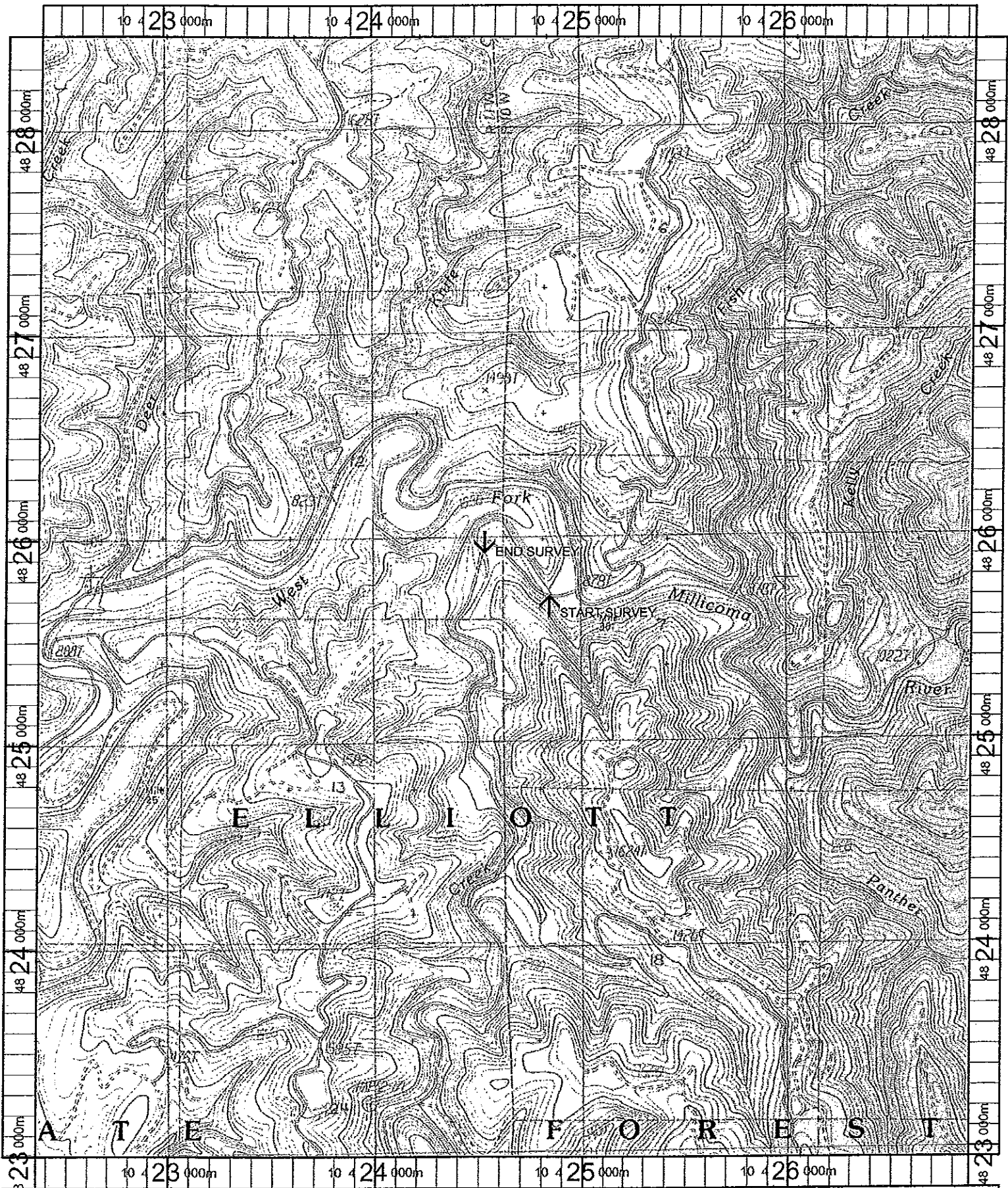
RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Cancpy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
9	LF	1	HS	20.0	60	10	70	Conifer	0	0	0	1	0	
								Hardwood	0	0	0	1	0	
9	LF	2	HS	30.0	70	10	70	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
9	LF	3	HS	10.0	80	10	70	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
9	RT	1	HS	65.0	65	10	80	Conifer	0	0	0	0	1	
								Hardwood	0	0	1	1	0	
9	RT	2	HS	60.0	75	10	80	Conifer	0	0	0	0	1	
								Hardwood	0	0	0	0	0	HEMLOCK
9	RT	3	HS	40.0	60	10	80	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
15	LF	1	HS	40.0	65	40	40	Conifer	0	0	1	0	0	
								Hardwood	0	1	0	0	0	
15	LF	2	HS	10.0	70	40	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
15	LF	3	HS	10.0	90	10	30	Conifer	0	0	0	2	0	
								Hardwood	0	1	0	0	0	
15	RT	1	HS	70.0	60	60	40	Conifer	0	0	0	0	1	
								Hardwood	0	2	0	0	0	
15	RT	2	HS	60.0	70	70	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
15	RT	3	HS	60.0	70	30	70	Conifer	0	0	0	2	0	
								Hardwood	0	0	0	0	0	
22	LF	1	FP	5.0	60	50	50	Conifer	0	1	0	0	0	
								Hardwood	0	5	0	0	0	
22	LF	2	HT	5.0	70	50	50	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	
22	LF	3	HT	5.0	70	40	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
22	RT	1	HS	40.0	60	5	60	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
22	RT	2	HS	20.0	80	40	20	Conifer	0	1	0	0	0	
								Hardwood	1	0	0	0	0	
22	RT	3	HS	50.0	80	20	50	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	



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

Location: 10 424542 E 4825690 N  
 Caption: ELK CREEK RESTORATION SITE - MILLICOMA BASIN