

REACH 0 1

T23S-R10W-S11S

REACH 0 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: 4.3 range: 1.5-8.0

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	548	3,365	0
Secondary	48	102	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.4	Width	13.9	17.8	25.3
Depth	0.36	Height	0.7	1.4	1.8
		W:D ratio	18.9	Entrenchment	1.3

Stream Flow Type: MF Water Temp: 11.0-11.0°C  
 Avg. Unit Gradient: 0.9% Habitat Units/100m: 5.5

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	16%	Reach avg: 87%
Undercut Banks	4%	Range: 67-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ( $\geq 3m \times 0.15m$ )	141	25.8
Volume (m <sup>3</sup> )	75	13.6
Key pieces ( $\geq 10m \times 0.6m$ )	1	0.2

HABITAT UNIT SUMMARY

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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
DRY CHANNEL	1	10	1.0	0.00	10	0	10	10	70	10	0	0
POOL-BACKWATER	3	25	1.9	0.39	51	2	24	24	42	5	5	0
POOL-DAMMED	1	13	7.5	0.50	94	2	16	47	16	5	16	0
POOL-ISOLATED	1	14	3.0	0.80	41	0	15	15	70	0	0	0
POOL-LATERAL SCOUR	9	148	5.6	0.60	872	21	6	9	55	11	4	16
POOL-PLUNGE	1	7	8.4	0.80	61	0	0	10	90	0	0	0
POOL-STRAIGHT SCOUR	2	46	9.3	0.50	418	2	7	19	40	3	2	30
RAPID/BEDROCK	2	54	7.4	0.09	408	27	0	5	17	7	12	59
RIFFLE	12	269	5.1	0.15	1,421	50	2	7	55	12	8	15
STEP/COBBLE	1	11	8.3	0.04	91	0	0	0	80	20	0	0
<b>Total:</b>	<b>33</b>	<b>596</b>	<b>5.4</b>	<b>0.36</b>	<b>3,467</b>	<b>104</b>	<b>Avg: 6</b>	<b>11</b>	<b>52</b>	<b>10</b>	<b>6</b>	<b>15</b>

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m <sup>2</sup> )	Percent	Large Boulders Number	#/100m <sup>2</sup>
Dammed & BW Pools	5	51	3.3	0.50	186	5.35	4	2.2
Scour Pools	12	202	6.5	0.60	1,351	38.98	23	1.7
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	12	269	5.1	0.15	1,421	41.00	50	3.5
Rapids	2	54	7.4	0.09	408	11.78	27	6.6
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	1	11	8.3	0.04	91	2.61	0	0.0
Dry	1	10	1.0	0.00	10	0.29	0	0.0

POOL SUMMARY

	<u>Total</u>	<u>#/Km</u>
All Pools	17	28.5
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	7	11.7
Pool Frequency (channel widths/pool):	2.5	
Residual pool depth (avg)	0.49m	

STREAM SUMMARY

DEER CREEK (PRE-TX)

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	
33	596	5.4	0.36	3,467	6	11	52	10	6	15	104

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Scour Pool	1,351	39.0
Backwater Pools	186	5.4
Glide	0	0.0
Riffle	1,421	41.0
Rapid	408	11.8
Cascade	0	0.0
Step	91	2.6
Dry	10	0.3

REACH *1*

RIPARIAN ZONE VEGETATION SUMMARY

REACH *1*

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

Total hardwoods/1000 ft	1,300
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	20
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	0.0	8.0	0.0	4.7	0.0	4.0	0.0	16.7
15-30cm	0.3	0.0	0.3	2.3	0.0	0.3	0.7	2.7
30-50cm	0.0	0.3	0.0	0.7	0.0	0.3	0.0	1.3
50-90cm	0.0	0.0	0.3	0.3	0.0	0.3	0.3	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m <sup>2</sup>	0.3	8.3	0.7	8.0	0.0	5.0	0.3	7.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	68		76		86	
Shrub cover	33		61		63	
Grass/forb cover	63		38		19	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	50		50		60
High terrace	33		50		20	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		20	
Riprap	0		0		0	
Surface slope (%)	16		28		16	

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	1,300
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	20

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	16.7
15-30cm	0.7	2.7
30-50cm	0.0	1.3
50-90cm	0.3	0.7
>90cm	0.0	0.0

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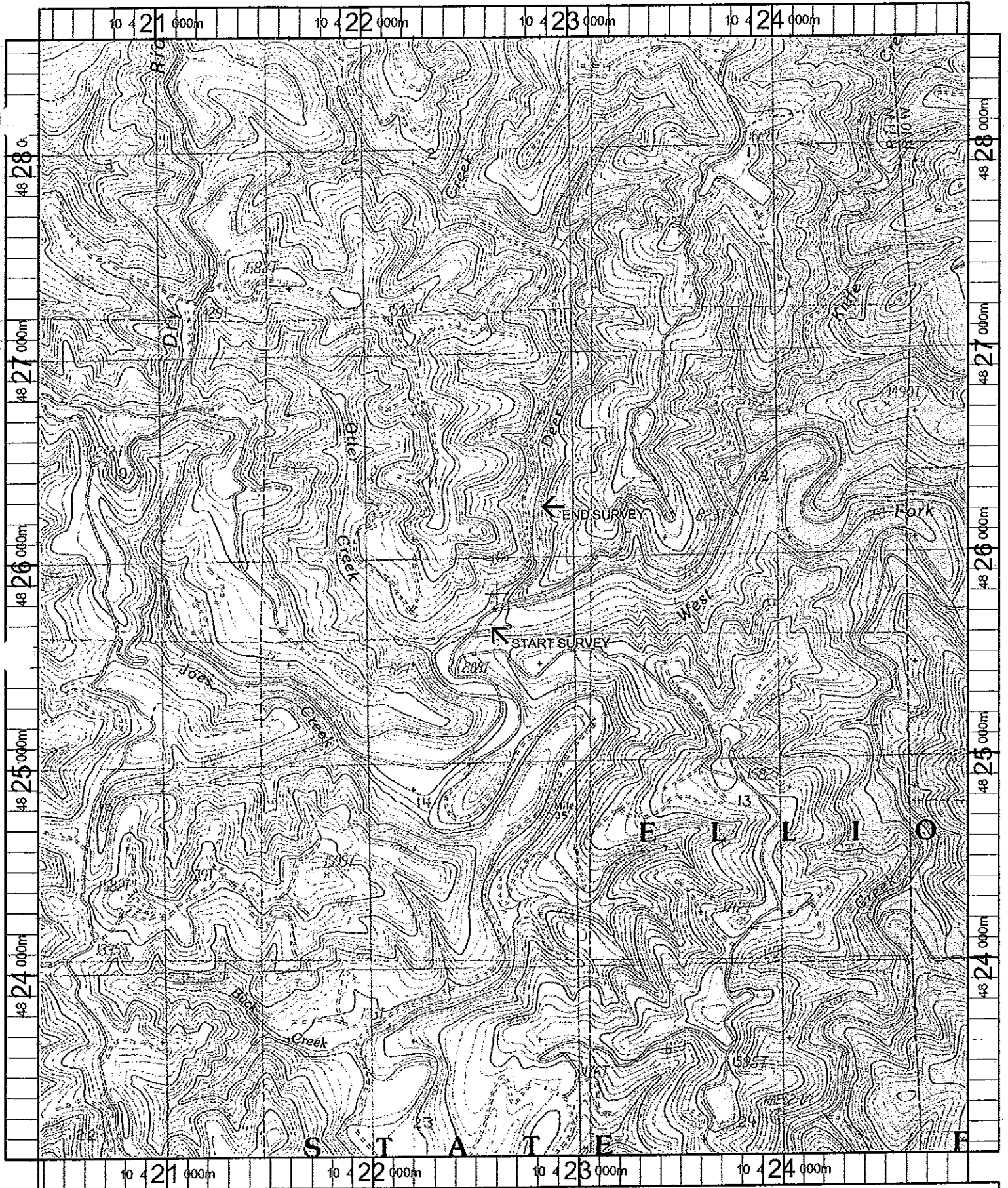
RIPARIAN ZONE VEGETATION

Reach # 2

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	
11	LF	1	HT	5.0	85	50	50	Conifer	0	0	0	0	0	
								Hardwood	4	0	0	0	0	NEAR OLD ROAD BED,
11	LF	2	HT	10.0	90	80	20	Conifer	0	0	0	1	0	
								Hardwood	0	0	0	0	0	DOUG FIR
11	LF	3	HT	10.0	90	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	1	0	
11	RT	1	HS	20.0	70	30	70	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	0	0	
11	RT	2	HT	5.0	80	70	30	Conifer	0	0	0	0	0	
								Hardwood	0	5	0	0	0	
11	RT	3	RB	0.0	80	10	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
17	LF	1	HT	0.0	70	65	30	Conifer	0	0	0	0	0	
								Hardwood	7	0	0	0	0	
17	LF	2	HT	0.0	85	70	20	Conifer	0	0	0	0	0	
								Hardwood	4	1	0	1	0	
17	LF	3	HS	5.0	80	90	10	Conifer	0	0	0	0	0	
								Hardwood	1	1	0	0	0	
17	RT	1	LT	0.0	70	10	90	Conifer	0	0	0	0	0	
								Hardwood	1	0	0	0	0	
17	RT	2	HS	85.0	40	80	20	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	
26	LF	1	HS	20.0	10	0	100	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	
26	LF	2	HS	10.0	70	5	95	Conifer	0	0	0	0	0	
								Hardwood	0	1	2	0	0	GENTLE SLOPE
26	LF	3	HS	5.0	80	45	35	Conifer	0	0	0	0	0	
								Hardwood	10	0	0	0	0	GENTLE, CONTINUOUS
26	RT	1	HS	50.0	100	40	40	Conifer	0	0	0	0	0	
								Hardwood	12	0	0	0	0	
26	RT	2	HS	60.0	90	60	40	Conifer	0	0	0	0	0	
								Hardwood	10	0	0	0	0	
26	RT	3	HS	60.0	100	80	20	Conifer	0	0	0	0	0	
								Hardwood	1	0	1	0	0	ALDER



Name: ELK PEAK  
 Date: 11/8/100  
 Scale: 1 inch equals 2000 feet

Location: 10 422563 E 4825792 N  
 Caption: DEER CREEK RESTORATION SITE - MILLICOMA BASIN