

REACH 1

T23S-R10W-S6NE

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: 2.5 range: 1.0-5.0

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	780	2,031	0
Secondary	54	113	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u>	<u>First Terrace</u>
Width 2.4	5.6	11.5	16.6
Depth 0.24	0.5	1.2	1.4
W:D ratio	13.2	Entrenchment	2.1

Stream Flow Type: MF Water Temp: 13.0-13.0°C
 Avg. Unit Gradient: 3.8% Habitat Units/100m: 7.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	MT
Riparian Vegetation:	D30	M50

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	6%	Reach avg: 94%
Undercut Banks	9%	Range: 67-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	69	8.9
Volume (m ³)	127	16.2
Key pieces ($\geq 10m \times 0.6m$)	2	0.3

REACH 1

T23S-R10W-S6NE

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/BOULDERS	4	57	1.2	0.14	74	25	0	0	10	51	39	0
CULVERT CROSSING	1	12	1.2	0.10	14	0	0	0	0	0	0	0
GLIDE	1	18	2.5	0.20	45	3	0	9	41	36	9	5
POOL-DAMMED	4	32	2.6	0.38	88	5	6	14	6	18	9	47
POOL-LATERAL SCOUR	9	96	2.8	0.45	281	7	2	6	44	35	1	13
POOL-PLUNGE	5	24	3.7	0.50	88	6	3	7	26	30	12	23
POOL-STRAIGHT SCOUR	4	51	3.1	0.55	159	11	7	16	18	11	14	33
RAPID/BEDROCK	11	304	2.9	0.10	866	23	0	0	0	1	12	86
RAPID/BOULDERS	5	79	2.2	0.14	174	4	1	4	42	52	1	0
RIFFLE	12	154	2.2	0.16	339	22	1	6	35	43	5	11
STEP/BEDROCK	2	6	1.8	0.05	15	0	0	0	0	0	0	100
STEP/BOULDERS	1	1	1.0	0.02	1	6	0	0	0	10	60	30
STEP/LOG	2	1	1.0	0.03	1	0	0	0	45	55	0	0
STEP/STRUCTURE	1	1	0.5	0.05	0	0	0	0	0	0	0	100
Total:	62	834	2.4	0.24	2,145	112	Avg: 2	5	23	28	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	4	32	2.6	0.38	88	4.11	5	5.7
Scour Pools	18	172	3.1	0.49	527	24.59	24	4.6
Glides	1	18	2.5	0.20	45	2.07	3	6.7
Riffles	12	154	2.2	0.16	339	15.81	22	6.5
Rapids	16	383	2.7	0.11	1,040	48.50	27	2.6
Cascades	4	57	1.2	0.14	74	3.43	25	34.0
Step/Falls	6	8	1.2	0.04	17	0.81	6	34.5
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

	Total	#/Km
All Pools	22	26.4
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	6	7.2
Pool Frequency (channel widths/pool):	6.8	
Residual pool depth (avg)	0.36m	

STREAM SUMMARY

FISH CREEK (PRE-TX)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
62	834	2.4	0.24	2,145	2	5	23	28	9	32	112

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	527	24.6
Backwater Pools	88	4.1
Glide	45	2.1
Riffle	339	15.8
Rapid	1,040	48.5
Cascade	74	3.4
Step	17	0.8
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	671
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	0
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	0.7	1.3	0.3	1.3	2.3	4.0	3.3	6.7
15-30cm	0.3	1.7	0.0	0.7	0.7	1.0	1.0	3.3
30-50cm	0.0	0.7	0.3	0.3	0.7	0.0	1.0	1.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	1.0	3.7	0.7	2.3	3.7	5.0	1.8	3.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	67		59		87	
Shrub cover	46		48		51	
Grass/forb cover	36		32		24	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
Hillslope	50		83		100	
High terrace	0		0		0	
Low terrace	50		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		17		0	
Riprap	0		0		0	
Surface slope (%)	23		34		50	

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	671
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	0

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	3.3	6.7
15-30cm	1.0	3.3
30-50cm	1.0	1.0
50-90cm	0.0	0.0
>90cm	0.0	0.0

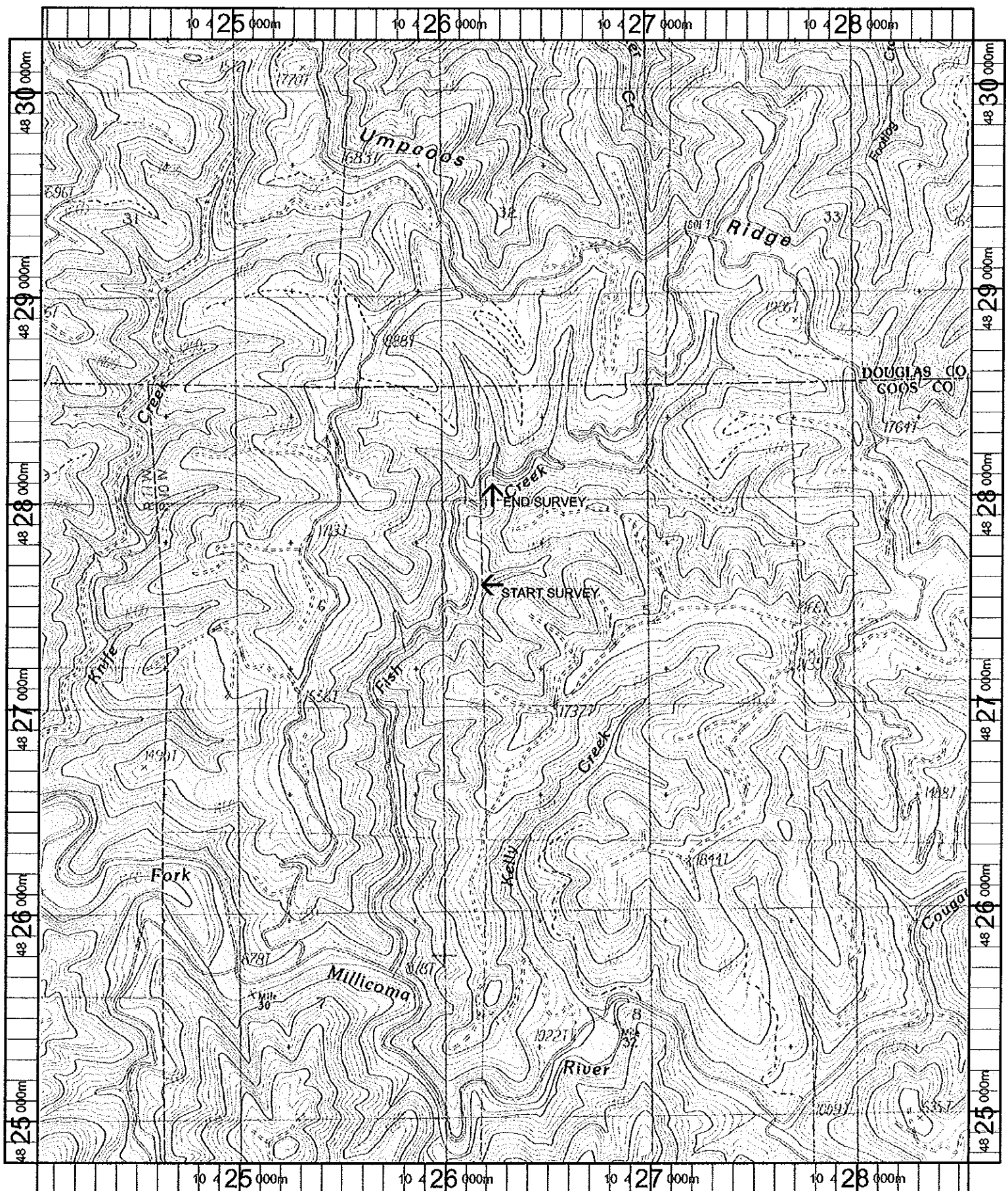
RIPARIAN ZONE VEGETATION

Reach 1

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	
10	LF	1	HS	35.0	45	30	60	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
10	LF	2	HS	40.0	50	5	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
10	LF	3	HS	45.0	90	30	20	Conifer	6	0	0	0	0	
								Hardwood	0	0	0	0	0	
10	RT	1	LT	0.0	50	60	30	Conifer	0	0	0	0	0	
								Hardwood	1	3	0	0	0	
10	RT	2	HS	30.0	70	10	80	Conifer	0	0	0	0	0	
								Hardwood	1	0	0	0	0	
10	RT	3	HS	30.0	95	15	40	Conifer	0	0	0	0	0	
								Hardwood	6	0	0	0	0	
24	LF	1	LT	0.0	80	25	75	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	0	0	
24	LF	2	RB	0.0	70	20	30	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
24	LF	3	HS	40.0	100	60	40	Conifer	1	0	0	0	0	
								Hardwood	6	0	0	0	0	VINE MAPLE
24	RT	1	HS	60.0	90	50	40	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	0	0	
24	RT	2	HS	60.0	60	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
24	RT	3	HS	110.0	80	60	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
35	RT	1	LT	0.0	80	80	10	Conifer	0	0	0	0	0	
								Hardwood	3	1	0	0	0	
35	RT	2	HS	30.0	45	70	20	Conifer	0	0	1	0	0	
								Hardwood	0	1	1	0	0	
35	RT	3	HS	30.0	80	80	15	Conifer	0	1	1	0	0	
								Hardwood	0	2	0	0	0	
35	LF	1	HS	45.0	55	30	0	Conifer	2	1	0	0	0	
								Hardwood	0	0	0	0	0	
35	LF	2	HS	45.0	60	80	10	Conifer	1	0	0	0	0	
								Hardwood	1	1	0	0	0	
35	LF	3	HS	45.0	75	60	0	Conifer	0	1	1	0	0	
								Hardwood	0	1	0	0	0	



<p>Name: ELK PEAK Date: 11/7/100 Scale: 1 inch equals 2000 feet</p>	<p>Location: 10 426209 E 4827491 N Caption: FISH CREEK RESTORATION SITE - MILLICOMA BASIN</p>
---	--