

REACH 1

T14S-R8W-S25SE

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	100
Moderate V-shape	0	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 7.3 range: 4.5-9.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	100	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	465	2,309	0
Secondary	55	107	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.2	Width	7.2	9.7	12.3
Depth	0.29	Height	0.4	0.7	1.0
		W:D ratio	18.6	Entrenchment	1.4

Stream Flow Type: LF Water Temp: 11.8-11.8°C
 Avg. Unit Gradient: 4.1% Habitat Units/100m: 5.4

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	11%	Reach avg: 96%
Undercut Banks	17%	Range: 81-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	82	17.6
Volume (m ³)	61	13.0
Key pieces ($\geq 10m \times 0.6m$)	2	0.4

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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	2	24	4.0	0.20	97	18	0	10	23	43	25	0
POOL-BACKWATER	1	3	2.0	0.30	6	0	90	5	5	0	0	0
POOL-LATERAL SCOUR	6	82	3.9	0.55	316	16	12	22	37	24	2	4
POOL-STRAIGHT SCOUR	3	33	3.8	0.43	127	15	10	22	45	16	4	3
RAPID/BOULDERS	8	211	4.4	0.21	1,062	58	5	11	31	40	12	1
RIFFLE	5	134	4.7	0.13	669	17	7	18	33	31	7	4
RIFFLE W/ POCKETS	1	26	3.8	0.25	100	7	5	10	30	45	10	0
STEP/BEDROCK	1	3	5.6	0.05	18	0	0	0	0	0	0	100
STEP/COBBLE	1	3	6.3	0.05	21	0	0	5	5	85	0	5
Total:	28	521	4.2	0.29	2,416	131	Avg:10	15	30	32	8	6

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	1	3	2.0	0.30	6	0.26	0	0.0
Scour Pools	9	115	3.8	0.51	443	18.34	31	7.0
Slides	0	0	-	-	0	0.00	0	0.0
Riffles	6	160	4.6	0.15	769	31.81	24	3.1
Rapids	8	211	4.4	0.21	1,062	43.97	58	5.5
Cascades	2	24	4.0	0.20	97	4.01	18	18.6
Step/Falls	2	7	6.0	0.05	39	1.60	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	10	19.2
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	4	7.7
Pool Frequency (channel widths/pool):	7.2	
Residual pool depth (avg)	0.41m	

STREAM SUMMARY

BUMMER CREEK PRE-TX (#9)

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	
28	521	4.2	0.29	2,416	10	15	30	32	8	6	131

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	443	18.3
Backwater Pools	6	0.3
Glide	0	0.0
Riffle	769	31.8
Rapid	1,062	44.0
Cascade	97	4.0
Step	39	1.6
Dry	0	0.0

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RIPARIAN ZONE VEGETATION SUMMARY

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

Total hardwoods/1000 ft	1,402
Total conifers/1000 ft	0
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	0.0	2.7	0.0	2.0	0.0	3.0	0.0	7.7
15-30cm	0.0	5.7	0.0	3.0	0.0	1.7	0.0	10.3
30-50cm	0.0	2.0	0.0	1.3	0.0	1.0	0.0	4.3
50-90cm	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.0	10.3	0.0	6.3	0.0	6.3	0.0	7.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	83		82		61	
Shrub cover	67		73		63	
Grass/forb cover	29		21		25	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	17		33		67
High terrace	83		67		33	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	3		5		8	

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	1,402
Total conifers/1000 ft	
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	0.0	7.7
15-30cm	0.0	10.3
30-50cm	0.0	4.3
50-90cm	0.0	0.7
>90cm	0.0	0.0

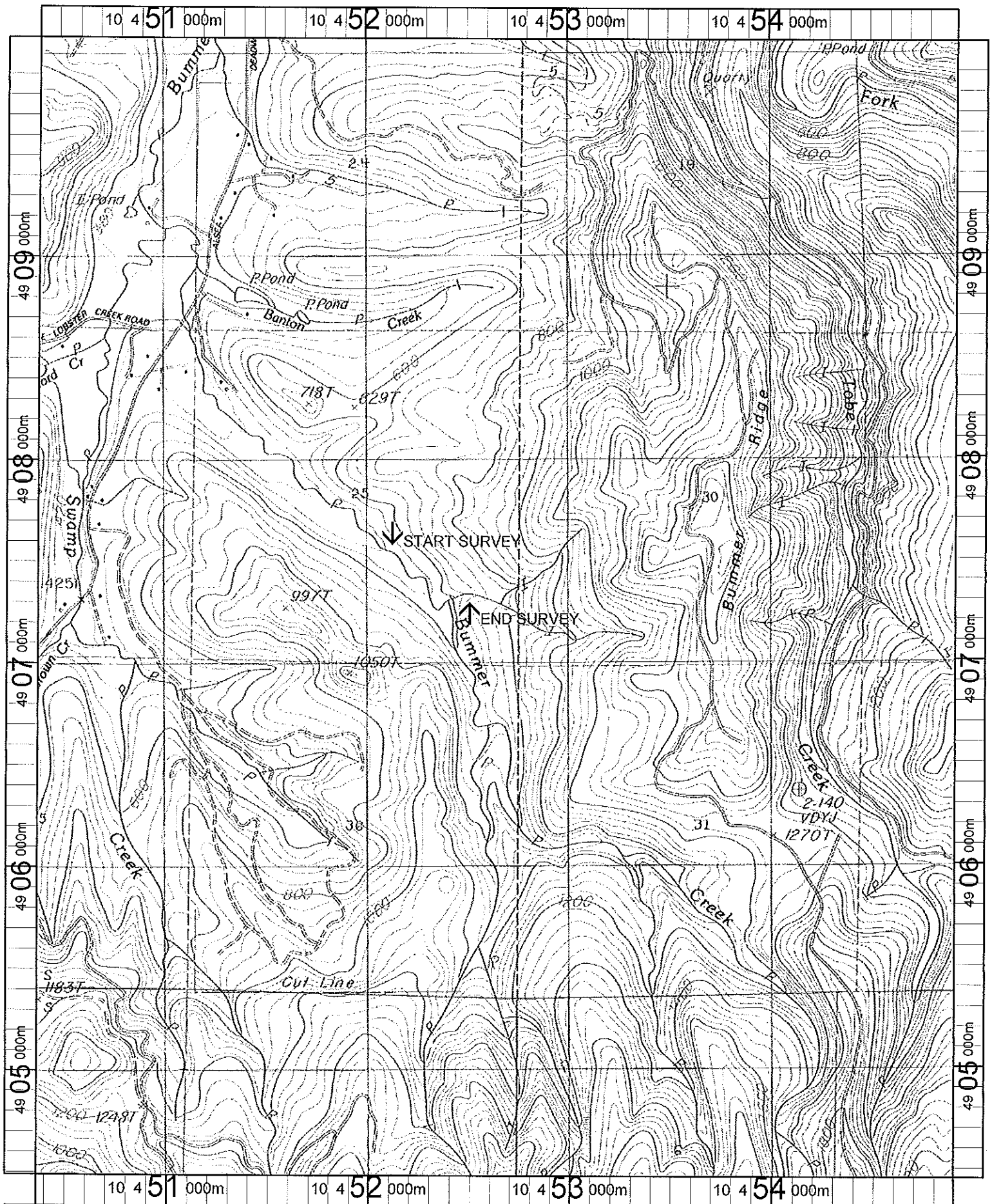
RIPARIAN ZONE VEGETATION

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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	HT	0.0	75	60	30	Conifer	0	0	0	0	0	
								Hardwood	3	3	1	0	0	
10	LF	2	HT	0.0	85	85	5	Conifer	0	0	0	0	0	
								Hardwood	1	3	0	0	0	
10	LF	3	HS	5.0	30	25	30	Conifer	0	0	0	0	0	
								Hardwood	4	1	1	0	0	
10	RT	1	HT	0.0	75	95	5	Conifer	0	0	0	0	0	
								Hardwood	1	3	1	0	0	
10	RT	2	HT	0.0	75	55	30	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
10	RT	3	HS	5.0	60	95	0	Conifer	0	0	0	0	0	
								Hardwood	1	1	0	0	0	
20	LF	1	HS	20.0	90	50	50	Conifer	0	0	0	0	0	
								Hardwood	3	1	0	0	0	
20	LF	2	HS	20.0	85	55	45	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	0	0	
20	LF	3	HS	25.0	50	45	55	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
20	RT	1	HT	0.0	85	80	10	Conifer	0	0	0	0	0	
								Hardwood	1	4	2	0	0	ENGULFED IN SHRUBS
20	RT	2	HT	0.0	80	90	5	Conifer	0	0	0	0	0	
								Hardwood	0	2	2	0	0	
20	RT	3	HT	0.0	85	80	10	Conifer	0	0	0	0	0	
								Hardwood	0	2	1	0	0	
26	LF	1	HT	0.0	90	75	20	Conifer	0	0	0	0	0	
								Hardwood	0	4	0	0	0	
26	LF	2	HT	0.0	85	80	20	Conifer	0	0	0	0	0	
								Hardwood	2	2	0	0	0	
26	LF	3	HT	0.0	75	60	40	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	1	0	
26	RT	1	HT	0.0	85	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	2	2	0	0	
26	RT	2	HS	10.0	80	70	20	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
26	RT	3	HS	10.0	65	75	15	Conifer	0	0	0	0	0	
								Hardwood	1	0	1	1	0	



Name: PRAIRIE PEAK
 Date: 1/10/2002
 Scale: 1 inch equals 2000 feet

Location: 10 452647 E 4907266 N
 Caption: BUMMER CREEK RESTORATION SITE - ALSA
 BASIN