

REACH 1

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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: 9.4 range: 5.0-12.0

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	487	1,265	0
Secondary	28	40	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.5	Width	4.5	7.8	12.0
Depth	0.24	Height	0.4	0.8	1.1
		W:D ratio	11.3	Entrenchment	1.8

Stream Flow Type: Water Temp: 13.0-13.0°C  
 Avg. Unit Gradient: 2.0% Habitat Units/100m: 10.5

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	3%	Reach avg: 66%
Undercut Banks	2%	Range: 39-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ( $\geq 3m \times 0.15m$ )	48	9.9
Volume (m <sup>3</sup> )	92	18.8
Key pieces ( $\geq 10m \times 0.6m$ )	1	0.2

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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
POOL-BACKWATER	4	23	1.7	0.28	37	0	88	4	6	3	0	0
POOL-LATERAL SCOUR	21	182	2.6	0.42	468	1	35	29	17	9	0	9
POOL-STRAIGHT SCOUR	1	5	3.0	0.30	14	0	0	5	5	5	0	84
RAPID/BEDROCK	1	5	3.0	0.10	16	0	0	5	11	0	0	84
RAPID/BOULDERS	7	67	2.5	0.11	161	0	1	8	72	17	0	3
RIFFLE	15	221	2.4	0.10	580	0	2	14	52	25	0	7
STEP/BEDROCK	1	2	2.2	0.10	4	0	0	0	0	0	0	100
STEP/COBBLE	4	10	2.6	0.10	25	0	0	7	62	27	0	5
<b>Total:</b>	<b>54</b>	<b>515</b>	<b>2.5</b>	<b>0.24</b>	<b>1,305</b>	<b>1</b>	<b>Avg:21</b>	<b>17</b>	<b>36</b>	<b>15</b>	<b>0</b>	<b>11</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	4	23	1.7	0.28	37	2.81	0	0.0
Scour Pools	22	187	2.6	0.41	483	36.98	1	0.2
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	15	221	2.4	0.10	580	44.44	0	0.0
Rapids	8	73	2.5	0.11	177	13.57	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	5	12	2.5	0.10	29	2.20	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	26	50.5
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	7	13.6
Pool Frequency (channel widths/pool):	4.4	
Residual pool depth (avg)	0.33m	

STREAM SUMMARY

LITTLE ROCK CK (POST SUM 99)

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
54	515	2.5	0.24	1,305	21	17	36	15	0	11	1

Wetted Area

Habitat Group	(m <sup>2</sup> )	Percent
Scour Pool	483	37.0
Backwater Pools	37	2.8
Glide	0	0.0
Riffle	580	44.4
Rapid	177	13.6
Cascade	0	0.0
Step	29	2.2
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	528
Total conifers/1000 ft	41
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	20

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	1.7	0.0	2.0	0.3	0.7	0.3	4.3
15-30cm	0.0	0.0	0.0	2.3	0.0	0.0	0.0	2.3
30-50cm	0.0	0.0	0.0	0.7	0.0	0.3	0.0	1.0
50-90cm	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.7
>90cm	0.0	0.3	0.3	0.0	0.0	0.0	0.3	0.3
Total/100m <sup>2</sup>	0.0	2.0	0.3	5.3	0.3	1.3	0.2	2.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	46		69		68	
Shrub cover	23		39		43	
Grass/forb cover	76		61		41	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	0		40		80
High terrace	60		60		0	
Low terrace	40		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 (%)	0		3		13	

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	528
Total conifers/1000 ft	41
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	0.3	4.3
15-30cm	0.0	2.3
30-50cm	0.0	1.0
50-90cm	0.0	0.7
>90cm	0.3	0.3

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RIPARIAN ZONE VEGETATION

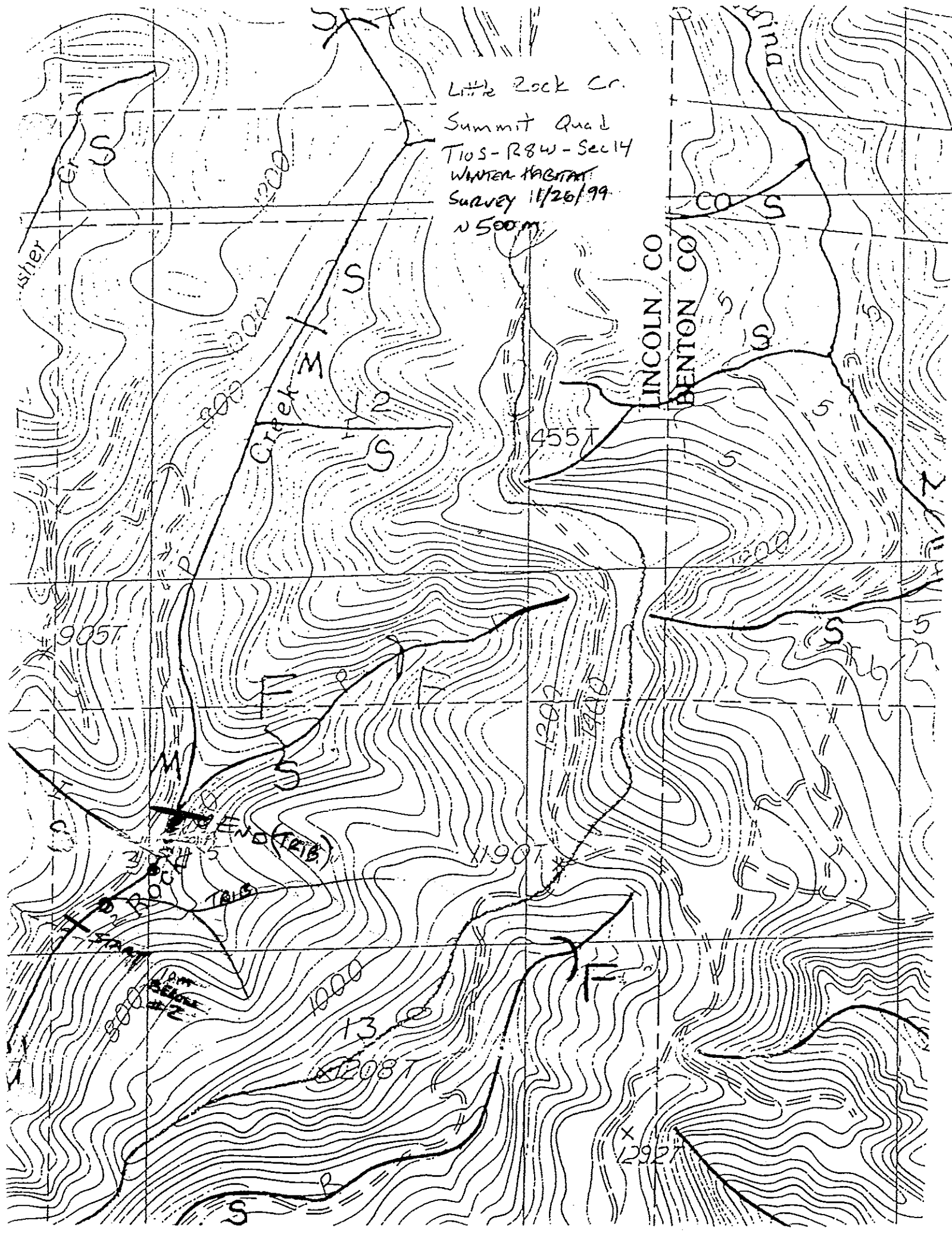
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VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
18	LF	1	HT	0.0	90	10	90	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	1	ALDER
18	LF	2	HS	10.0	95	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	2	2	1	0	ALDER
18	LF	3	HS	5.0	60	20	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	30% ROAD BED
18	RT	1	HT	2.0	0	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
18	RT	2	HS	6.0	70	90	10	Conifer	0	0	0	0	1	
								Hardwood	1	0	0	0	0	DOUGLAS FIR
18	RT	3	HS	8.0	85	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	NO TREES
33	LF	1	LT	0.0	65	10	85	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	5% DIRT
33	LF	2	HT	0.0	90	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	5	0	0	0	
33	LF	3	RB	5.0	65	0	50	Conifer	1	0	0	0	0	
								Hardwood	0	0	0	0	0	GRAVEL=50%
33	RT	1	LT	0.0	0	15	85	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
33	RT	2	HT	0.0	5	5	95	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
33	RT	3	HS	35.0	90	65	35	Conifer	0	0	0	0	0	
								Hardwood	2	0	1	1	0	ALDERS
45	LF	1	HT	0.0	75	60	40	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	0	0	VINE MAPLE
45	LF	2	HT	0.0	85	80	20	Conifer	0	0	0	0	0	
								Hardwood	5	0	0	0	0	VINE MAPLE
45	LF	3	HS	10.0	40	80	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	

Little Rock Cr.  
Summit Quad  
T10S-R8W-Sec14  
WATER TABLE  
SURVEY 11/26/99  
N 500 M



LINCOLN CO  
BENTON CO

Summit

Shier Cr

Creek M

Creek S

END (1216)

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TRIS

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