

REACH 1

T20S-R6W-S34SE

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

Valley Width Index avg: 10.0 range: 10.0-10.0

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	663	6,503	0
Secondary	12	10	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	9.0	Width	10.5	13.1	15.4
Depth	0.47	Height	0.6	1.2	1.8
		W:D ratio	16.9	Entrenchment	1.2

Stream Flow Type: MF Water Temp: 9.0-9.0°C  
 Avg. Unit Gradient: 0.5% Habitat Units/100m: 3.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	RR
Riparian Vegetation:	M15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ( $\geq 3m \times 0.15m$ )	18	2.7
Volume (m <sup>3</sup> )	41	6.2
Key pieces ( $\geq 10m \times 0.6m$ )	2	0.3

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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
GLIDE	2	45	9.7	0.43	435	0	5	19	3	0	2	71
POOL-LATERAL SCOUR	5	194	10.7	1.02	2,062	0	6	35	4	4	0	52
POOL-PLUNGE	1	23	10.5	0.80	239	0	5	10	5	5	0	75
POOL-STRAIGHT SCOUR	2	33	10.3	0.80	346	0	7	17	5	5	5	62
RAPID/BOULDERS	2	10	0.8	0.07	9	0	6	38	54	3	0	0
RIFFLE	11	366	9.4	0.32	3,395	0	2	10	10	6	2	71
STEP/BEDROCK	3	4	8.0	0.08	26	0	0	0	0	0	0	100
<b>Total:</b>	<b>26</b>	<b>674</b>	<b>9.0</b>	<b>0.47</b>	<b>6,513</b>	<b>0</b>	<b>Avg: 4</b>	<b>17</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>65</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	Boulders #/100m <sup>2</sup>
Dammed & BW Pools	0	0	-	-	0	0.00	0	0.0
Scour Pools	8	250	10.6	0.94	2,648	40.65	0	0.0
Glides	2	45	9.7	0.43	435	6.68	0	0.0
Riffles	11	366	9.4	0.32	3,395	52.13	0	0.0
Rapids	2	10	0.8	0.07	9	0.13	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	3	4	8.0	0.08	26	0.40	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	8	11.9
Pools ≥1m deep:	3	4.4
Complex pools (LWD pieces ≥3):	1	1.5
Pool Frequency (channel widths/pool):	8.1	
Residual pool depth (avg)	0.69m	

STREAM SUMMARY

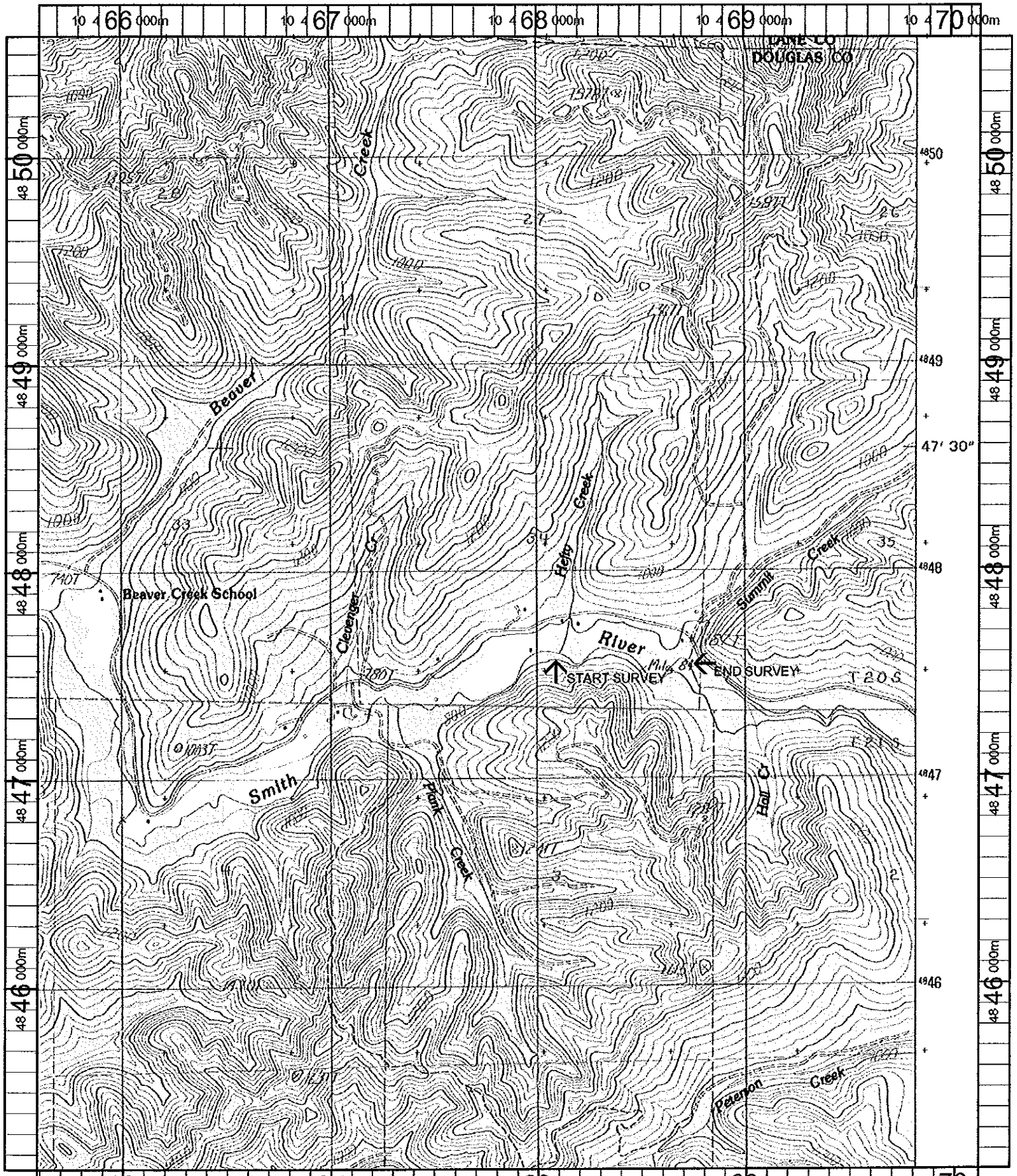
SMITH RIVER (PRE-TX)

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	
26	674	9.0	0.47	6,513	4	17	10	4	1	65	0

Wetted Area

Habitat Group	(m <sup>2</sup> )	Percent
Scour Pool	2,648	40.7
Backwater Pools	0	0.0
Glide	435	6.7
Riffle	3,395	52.1
Rapid	9	0.1
Cascade	0	0.0
Step	26	0.4
Dry	0	0.0

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Name: BEAVER CREEK  
 Date: 10/16/100  
 Scale: 1 inch equals 2000 feet

Location: 10 467765 E 4847831 N  
 Caption: SMITH RIVER RESTORATION SITE