

REACH 1

T20S-R7W-S26SW

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: 9.8 range: 9.0-10.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	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	546	2,246	0
Secondary	3	5	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.7	Width	7.3	10.5	11.3
Depth	0.29	Height	0.4	0.7	1.1
		W:D ratio	20.7	Entrenchment	1.4

Stream Flow Type: LF Water Temp: 12.5-12.5°C
Avg. Unit Gradient: 1.6% Habitat Units/100m: 7.3

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	2%	Reach avg: 88%
Undercut Banks	37%	Range: 53-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	46	8.4
Volume (m ³)	48	8.9
Key pieces (≥10m x 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
POOL-ISOLATED	1	3	1.5	0.30	5	0	75	20	5	0	0	0
POOL-LATERAL SCOUR	19	348	4.5	0.47	1,610	16	18	12	14	13	3	40
POOL-STRAIGHT SCOUR	1	32	3.8	0.70	121	0	15	10	40	20	0	15
RAPID/BEDROCK	4	30	2.5	0.06	71	2	5	3	4	5	3	81
RIFFLE	8	112	2.6	0.12	346	4	9	14	21	39	5	13
STEP/BEDROCK	1	1	4.0	0.01	6	0	0	0	0	0	0	100
STEP/COBBLE	6	23	3.7	0.05	93	2	4	6	22	65	3	0
Total:	40	549	3.7	0.29	2,250	24	Avg:14	10	16	25	3	33

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	1.5	0.30	5	0.20	0	0.0
Scour Pools	20	380	4.5	0.49	1,730	76.90	16	0.9
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	8	112	2.6	0.12	346	15.37	4	1.2
Rapids	4	30	2.5	0.06	71	3.16	2	2.8
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	7	24	3.8	0.05	98	4.36	2	2.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	21	38.3
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	5	9.1
Pool Frequency (channel widths/pool):	3.6	
Residual pool depth (avg)	0.44m	

STREAM SUMMARY

PANTHER CREEK PRE-TX (#96)

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	
40	549	3.7	0.29	2,250	14	10	16	25	3	33	24

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	1,730	76.9
Backwater Pools	5	0.2
Glide	0	0.0
Riffle	346	15.4
Rapid	71	3.2
Cascade	0	0.0
Step	98	4.4
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	2,012
Total conifers/1000 ft	203
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	11.3	0.0	7.0	1.7	7.7	2.3	26.0
15-30cm	0.0	2.3	0.0	0.7	0.3	2.0	0.3	5.0
30-50cm	0.3	1.0	0.0	0.3	0.3	0.3	0.7	1.7
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	0.3	0.0	0.0	0.0	0.3
Total/100m ²	1.0	14.7	0.0	8.3	2.3	10.0	1.1	11.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	71		56		58	
Shrub cover	62		47		23	
Grass/forb cover	22		28		39	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	17		17		33
High terrace	83		83		67	
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		2		5	

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	2,012
Total conifers/1000 ft	203
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	2.3	26.0
15-30cm	0.3	5.0
30-50cm	0.7	1.7
50-90cm	0.0	0.0
>90cm	0.0	0.3

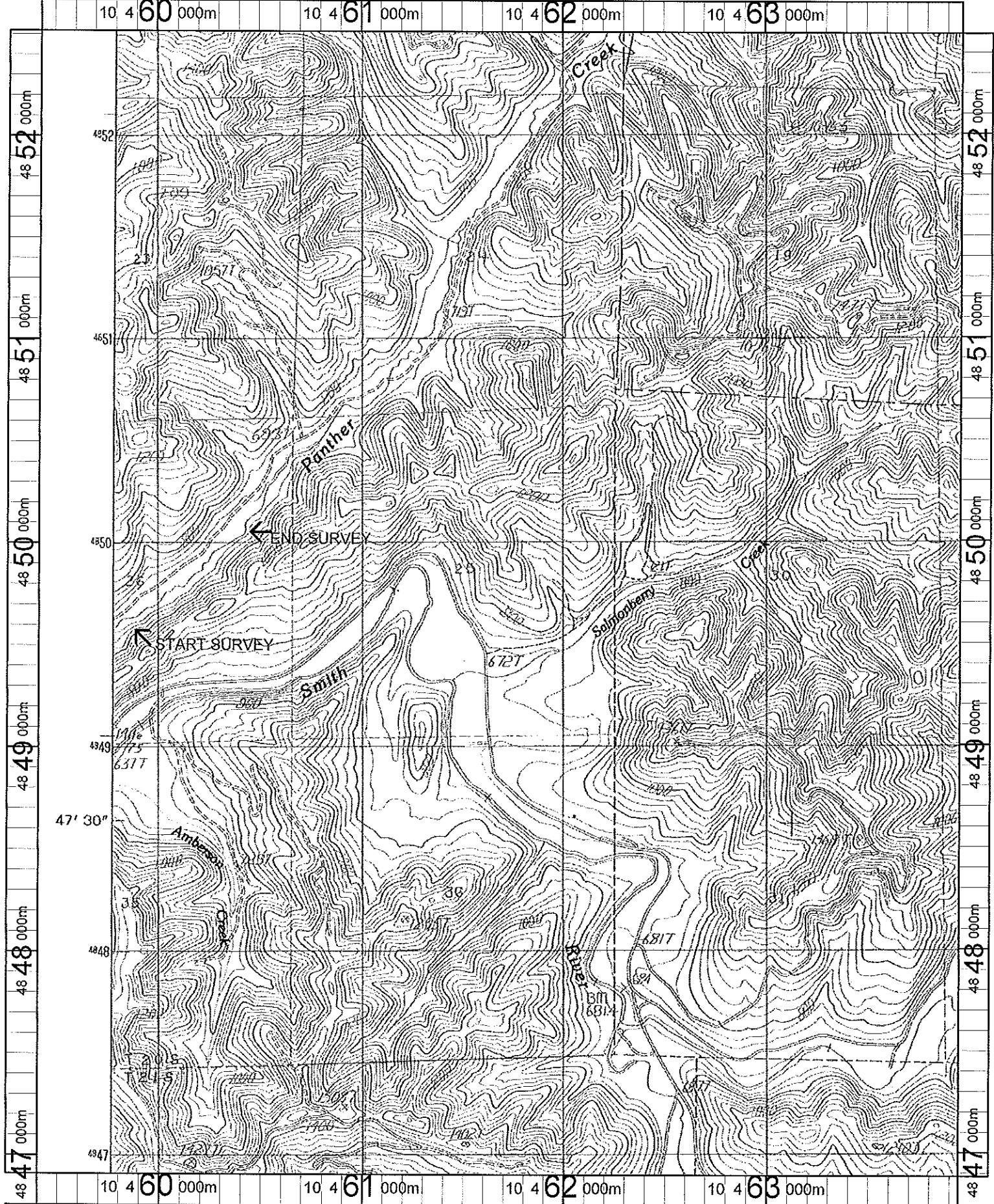
RIPARIAN ZONE VEGETATION

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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	85	90	5	Conifer	0	0	0	0	0	
								Hardwood	4	2	2	0	0	
10	LF	2	HT	0.0	10	5	10	Conifer	0	0	0	0	0	
								Hardwood	3	1	0	0	0	ENTERS CLEARCUT
10	LF	3	HT	0.0	0	0	10	Conifer	0	0	1	0	0	
								Hardwood	0	0	0	0	0	CLEARCUT
10	RT	1	HS	20.0	80	90	10	Conifer	0	0	0	0	0	
								Hardwood	12	0	0	0	0	
10	RT	2	HS	10.0	70	80	20	Conifer	0	0	0	0	0	
								Hardwood	8	0	0	0	0	
10	RT	3	HS	10.0	60	30	20	Conifer	0	1	0	0	0	
								Hardwood	4	0	0	0	0	
21	LF	1	HT	0.0	85	40	10	Conifer	0	0	0	0	0	
								Hardwood	8	3	0	0	0	
21	LF	2	HT	0.0	45	70	10	Conifer	0	0	0	0	0	
								Hardwood	5	0	0	0	0	
21	LF	3	HT	0.0	80	50	30	Conifer	0	0	0	0	0	
								Hardwood	13	0	0	0	0	
21	RT	1	HT	0.0	90	30	60	Conifer	0	0	1	0	0	
								Hardwood	5	2	1	0	0	
21	RT	2	HT	0.0	90	15	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
21	RT	3	HS	20.0	85	5	80	Conifer	4	0	0	0	0	
								Hardwood	4	0	1	0	0	OLD ROAD BED
31	LF	1	HT	0.0	40	80	15	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
31	LF	2	HT	0.0	90	70	25	Conifer	0	0	0	0	0	
								Hardwood	5	1	1	0	0	
31	LF	3	HT	0.0	95	35	50	Conifer	1	0	0	0	0	
								Hardwood	2	4	0	0	0	
31	RT	1	HT	0.0	45	40	30	Conifer	2	0	0	0	0	
								Hardwood	3	0	0	0	0	
31	RT	2	HT	0.0	30	40	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	1	
31	RT	3	HT	0.0	30	20	45	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	



Name: BEAVER CREEK
 Date: 1/10/2002
 Scale: 1 inch equals 2000 feet

Location: 10 461686 E 4849701 N
 Caption: PANTHER CREEK RESTORATION SITE - SMITH BASIN