

REACH 1

T5N-R9W-13SW

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

Valley Width Index avg: 7.3 range: 5.0-8.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	100
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	510	2,005	0
Secondary	92	331	2

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.8	Width	8.4	30.0	10.6
Depth	0.40	Height	0.4	0.8	0.6
		W:D ratio	21.0	Entrenchment	3.6

Stream Flow Type: LF Water Temp: 14.5-14.5°C
 Avg. Unit Gradient: 1.2% Habitat Units/100m: 7.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	M30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	15%	Reach avg: 74%
Undercut Banks	16%	Range: 56-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	88	17.3
Volume (m ³)	288	56.6
Key pieces ($\geq 10m \times 0.6m$)	15	2.9

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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-BACKWATER	5	20	3.6	0.44	65	0	26	35	26	13	0	0
POOL-LATERAL SCOUR	15	183	3.9	0.63	716	0	12	25	44	19	0	0
POOL-PLUNGE	1	6	4.2	1.10	25	0	5	10	20	60	5	0
POOL-STRAIGHT SCOUR	2	17	5.4	0.70	93	0	13	20	48	20	0	0
PUDDLED CHANNEL	2	59	3.7	0.40	240	0	40	40	10	10	0	0
RIFFLE	19	315	3.7	0.17	1,191	0	1	16	46	36	2	0
STEP/COBBLE	1	2	2.3	0.10	4	0	0	10	55	30	5	0
STEP/LOG	1	1	4.0	0.10	2	0	0	10	30	60	0	0
Total:	46	602	3.8	0.40	2,335	0	Avg: 9	22	41	27	1	0

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders Number	#/100m ²
					(m ²)	Percent		
Dammed & BW Pools	5	20	3.6	0.44	65	2.78	0	0.0
Scour Pools	18	206	4.0	0.66	834	35.71	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	19	315	3.7	0.17	1,191	51.01	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	2	3.2	0.10	6	0.24	0	0.0
Dry	2	59	3.7	0.40	240	10.26	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	23	38.2
Pools ≥1m deep:	3	5.0
Complex pools (LWD pieces≥3):	5	8.3
Pool Frequency (channel widths/pool):	3.1	
Residual pool depth (avg)	0.51m	

STREAM SUMMARY

GRINDY 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	
46	602	3.8	0.40	2,335	9	22	41	27	1	0	0

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	834	35.7
Backwater Pools	65	2.8
Glide	0	0.0
Riffle	1,191	51.0
Rapid	0	0.0
Cascade	0	0.0
Step	6	0.2
Dry	240	10.3

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RIPARIAN ZONE VEGETATION SUMMARY

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

Total hardwoods/1000 ft	549
Total conifers/1000 ft	406
Total conifers >20" dbh/1000 ft	102
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	0.3	0.3	1.0	0.0	1.3	0.0	2.7	0.3
15-30cm	0.0	2.0	0.7	2.0	0.3	3.3	1.0	7.3
30-50cm	0.0	1.0	1.0	0.0	0.3	0.3	1.3	1.3
50-90cm	0.0	0.0	1.0	0.0	0.7	0.0	1.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.3	3.3	3.7	2.0	2.7	3.7	2.2	3.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	55		54		45	
Shrub cover	63		63		63	
Grass/forb cover	38		34		37	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	0		0		17
High terrace	50		67		50	
Low terrace	50		17		33	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		17		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	2		1		3	

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	549
Total conifers/1000 ft	406
Total conifers >20" dbh/1000 ft	102

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	2.7	0.3
15-30cm	1.0	7.3
30-50cm	1.3	1.3
50-90cm	1.7	0.0
>90cm	0.0	0.0

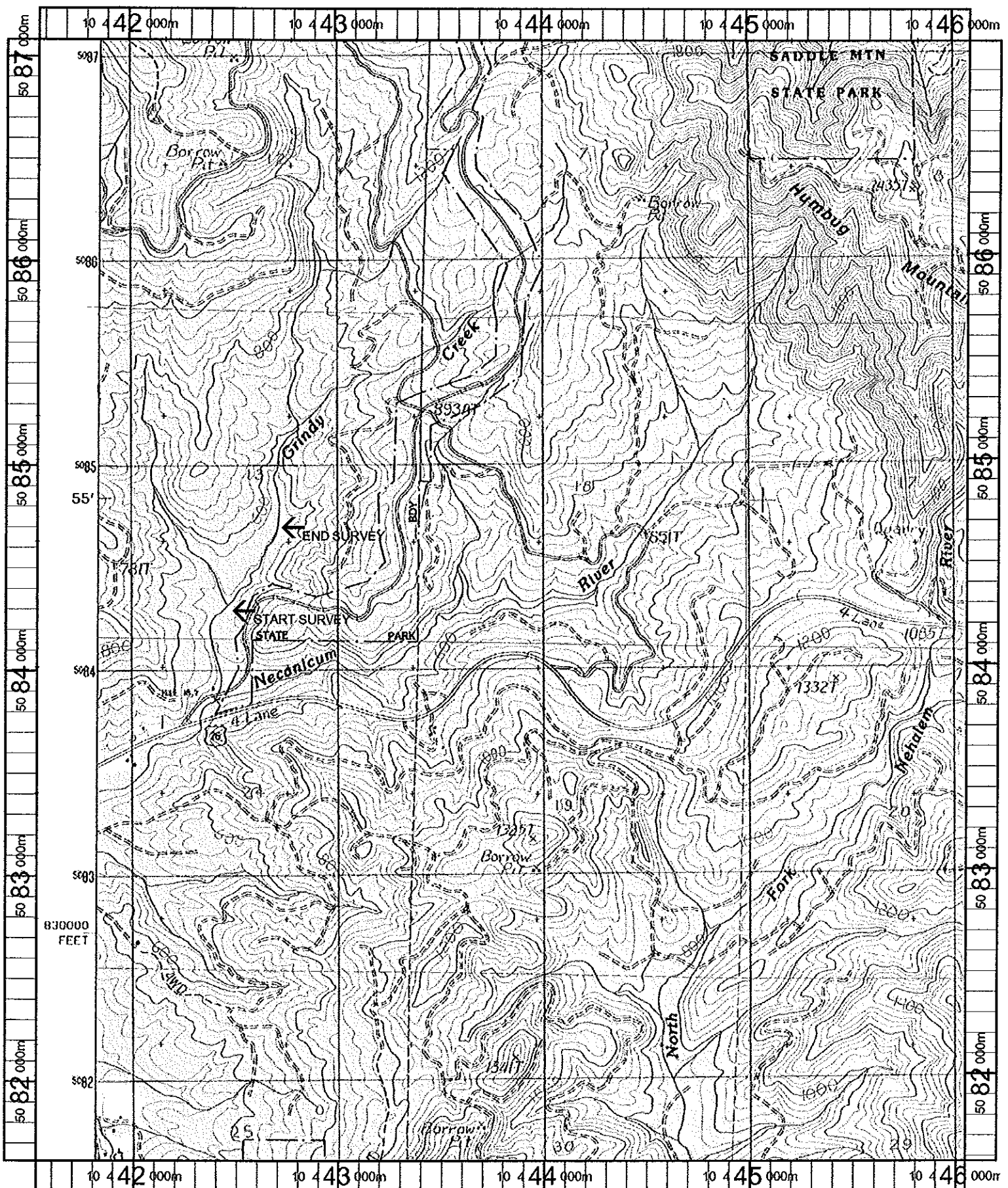
RIPARIAN ZONE VEGETATION

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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	
14	LF	1	HT	1.0	65	80	20	Conifer	1	0	0	0	0	
								Hardwood	0	2	0	0	0	
14	LF	2	HT	0.0	40	80	20	Conifer	0	1	1	0	0	
								Hardwood	0	1	0	0	0	
14	LF	3	HT	0.0	25	80	20	Conifer	2	1	0	0	0	
								Hardwood	0	2	1	0	0	
14	RT	1	LT	2.0	65	75	25	Conifer	0	0	0	0	0	
								Hardwood	1	0	2	0	0	
14	RT	2	LT	1.0	60	75	25	Conifer	0	0	2	1	0	
								Hardwood	0	0	0	0	0	BIG SPRUCE
14	RT	3	LT	1.0	60	80	20	Conifer	0	0	1	1	0	
								Hardwood	0	0	0	0	0	
32	LF	1	HT	5.0	70	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
32	LF	2	HT	2.0	70	60	40	Conifer	0	0	0	2	0	
								Hardwood	0	0	0	0	0	
32	LF	3	HT	1.0	75	50	50	Conifer	0	0	0	1	0	
								Hardwood	0	0	0	0	0	
32	RT	1	LT	0.0	0	80	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
32	RT	2	SC	0.0	0	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
32	RT	3	LT	0.0	0	90	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
43	LF	1	HT	0.0	70	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
43	LF	2	HT	1.0	75	40	60	Conifer	1	0	0	0	0	
								Hardwood	0	5	0	0	0	
43	LF	3	HT	2.0	50	30	70	Conifer	0	0	0	0	0	
								Hardwood	0	6	0	0	0	
43	RT	1	LT	1.0	60	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
43	RT	2	HT	2.0	80	30	50	Conifer	2	1	0	0	0	
								Hardwood	0	0	0	0	0	
43	RT	3	HS	15.0	60	50	50	Conifer	2	0	0	0	0	
								Hardwood	0	2	0	0	0	



Name: SADDLE MT
 Date: 10/23/100
 Scale: 1 inch equals 2000 feet

Location: 10 443707 E 5084312 N
 Caption: GRINDY CREEK RESTORATION SITE - NECANICUM BASIN