

REACH 1

T5N-R10W-S24SW

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: 7.4 range: 6.5-8.0

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	527	2,996	0
Secondary	35	54	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.2	Width	8.8	23.8	12.3
Depth	0.36	Height	0.5	1.0	0.9
W:D ratio		17.6	Entrenchment	2.7	

Stream Flow Type: LF Water Temp: 13.0-13.0°C
Avg. Unit Gradient: 1.2% Habitat Units/100m: 6.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C30	M15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	11%	Reach avg: 88%
Undercut Banks	14%	Range: 75-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	134	25.4
Volume (m ³)	173	32.9
Key pieces ($\geq 10m \times 0.6m$)	16	3.0

HABITAT UNIT SUMMARY

REACH 1 T5N-R10W-S24SW REACH 1

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	10	2.3	0.20	23	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	11	145	5.5	0.65	827	1	5	10	36	33	5	12
POOL-STRAIGHT SCOUR	3	35	5.9	0.48	206	1	5	7	23	12	5	47
POOL-TRENCH	1	6	2.2	0.70	13	0	0	0	0	0	25	75
RAPID/BEDROCK	1	14	5.3	0.30	72	0	0	0	5	10	10	75
RIFFLE	19	342	5.1	0.19	1,841	0	0	5	32	40	8	14
STEP/COBBLE	2	11	6.5	0.13	69	0	0	0	21	74	5	0
Total:	38	562	5.2	0.36	3,050	2	Avg: 4	6	30	35	7	18

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	10	2.3	0.20	23	0.75	0	0.0
Scour Pools	15	186	5.4	0.62	1,046	34.30	2	0.2
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	19	342	5.1	0.19	1,841	60.34	0	0.0
Rapids	1	14	5.3	0.30	72	2.35	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	11	6.5	0.13	69	2.26	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	16	28.5
Pools ≥1m deep:	2	3.6
Complex pools (LWD pieces ≥3):	6	10.7
Pool Frequency (channel widths/pool):	4.0	
Residual pool depth (avg)	0.46m	

STREAM SUMMARY

MAIL CREEK (POST-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	
38	562	5.2	0.36	3,050	4	6	30	35	7	18	2

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,046	34.3
Backwater Pools	23	0.8
Glide	0	0.0
Riffle	1,841	60.3
Rapid	72	2.3
Cascade	0	0.0
Step	69	2.3
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	528
Total conifers/1000 ft	772
Total conifers >20" dbh/1000 ft	20
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	1.0	0.3	0.7	0.0	2.7	0.7	4.3	1.0
15-30cm	1.7	1.7	2.3	2.0	1.0	2.3	5.0	6.0
30-50cm	0.7	1.3	0.7	0.0	1.7	0.3	3.0	1.7
50-90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	3.3	3.3	3.7	2.0	5.7	3.3	4.2	2.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	70		77		76	
Shrub cover	8		0		7	
Grass/forb cover	92		82		72	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	0		17		17
High terrace	83		67		83	
Low terrace	17		17		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 (%)	4		4		4	

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	772
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	4.3	1.0
15-30cm	5.0	6.0
30-50cm	3.0	1.7
50-90cm	0.3	0.0
>90cm	0.0	0.0

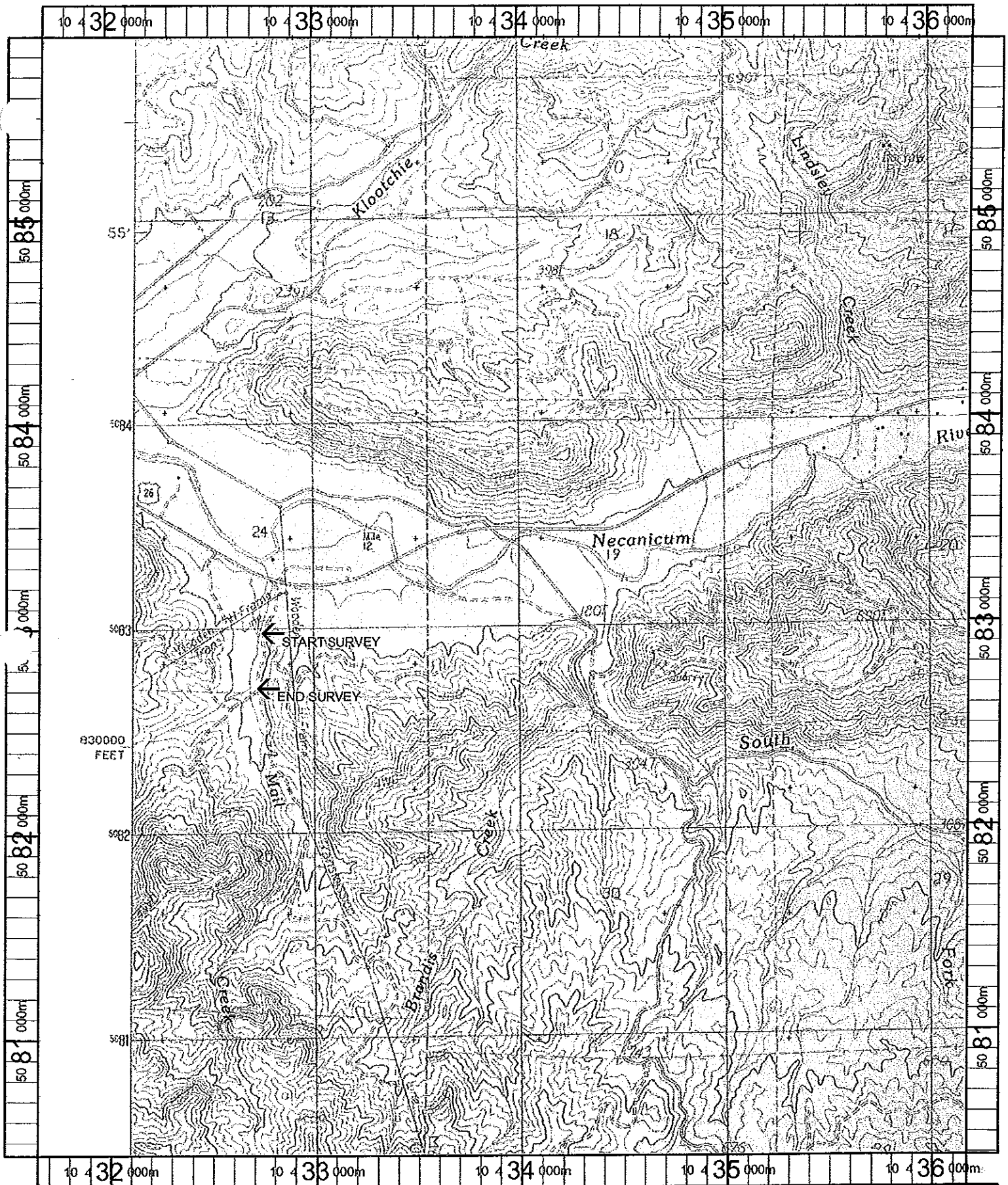
RIPARIAN ZONE VEGETATION

Reach 1

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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		
9	LF	1	HT	4.0	80	0	100	Conifer	0	2	0	0	0	
								Hardwood	0	1	2	0	0	
9	LF	2	HT	2.0	70	0	50	Conifer	0	2	0	0	0	
								Hardwood	0	0	0	0	0	
9	LF	3	HT	0.0	80	0	20	Conifer	1	1	0	0	0	
								Hardwood	0	2	0	0	0	
9	RT	1	HT	3.0	75	0	100	Conifer	2	1	0	0	0	
								Hardwood	0	0	0	0	0	
9	RT	2	HS	15.0	75	0	100	Conifer	0	0	2	0	0	
								Hardwood	0	0	0	0	0	
9	RT	3	HS	20.0	80	0	100	Conifer	2	0	2	1	0	
								Hardwood	0	0	0	0	0	
23	LF	1	HT	1.0	80	20	80	Conifer	0	1	2	0	0	
								Hardwood	0	0	0	0	0	
23	LF	2	HT	3.0	80	0	80	Conifer	0	2	0	0	0	
								Hardwood	0	0	0	0	0	
23	LF	3	HT	0.0	80	20	65	Conifer	3	0	1	0	0	
								Hardwood	0	4	0	0	0	
23	RT	1	LT	1.5	70	20	80	Conifer	1	0	0	0	0	
								Hardwood	0	0	2	0	0	
23	RT	2	LT	0.0	80	0	60	Conifer	0	2	0	0	0	
								Hardwood	0	2	0	0	0	
23	RT	3	HT	1.0	80	0	65	Conifer	0	0	2	0	0	
								Hardwood	0	0	0	0	0	
37	LF	1	HT	5.0	50	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
37	LF	2	HT	2.0	80	0	100	Conifer	2	0	0	0	0	
								Hardwood	0	2	0	0	0	
37	LF	3	HT	0.0	60	20	80	Conifer	2	0	0	0	0	
								Hardwood	0	1	1	0	0	
37	RT	1	HT	8.0	65	0	100	Conifer	0	1	0	0	0	
								Hardwood	1	2	0	0	0	ROAD NEAR
37	RT	2	HT	2.0	75	0	100	Conifer	0	1	0	0	0	
								Hardwood	0	2	0	0	0	
37	RT	3	HT	0.0	75	0	100	Conifer	0	2	0	0	0	
								Hardwood	2	0	0	0	0	



Name: NECANICUM JUNCTION
 Date: 11/8/100
 Scale: 1 inch equals 2000 feet

Location: 10 43831 E 5083125 N
 Caption: MAIL CREEK RESTORATION SITE - NECANICUM BASIN