

REACH 1

T2N-R6W-S36NE

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	0
Open V-shape	100	Wide Floodplain	0

Valley Width Index avg: 3.4 range: 1.5-7.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100	Single Channel	0
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	471	3,248	0
Secondary	90	151	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.8	Width	8.9	21.1	11.6
Depth	0.52	Height	0.7	1.4	0.9
		W:D ratio	13.1	Entrenchment	2.4

Stream Flow Type: MF Water Temp: 13.5-13.5°C
Avg. Unit Gradient: 0.8% Habitat Units/100m: 4.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C15	M15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	22%	Reach avg: 79%
Undercut Banks	4%	Range: 47-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	63	13.4
Volume (m ³)	95	20.2
Key pieces (≥10m x 0.6m)	0	0.0

HABITAT UNIT SUMMARY

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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
CASCADE/BOULDERS	1	15	2.0	0.05	30	0	0	0	10	40	50	0
POOL-BACKWATER	1	5	4.0	0.50	20	0	20	20	20	20	0	20
POOL-LATERAL SCOUR	6	104	6.2	0.83	712	0	14	10	9	44	20	3
POOL-STRAIGHT SCOUR	7	164	6.6	0.78	1,154	0	21	24	15	9	4	27
RIFFLE	12	273	5.5	0.26	1,483	0	7	9	9	37	17	21
Total:	27	560	5.8	0.52	3,399	0	Avg:12	13	11	31	15	18

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	1	5	4.0	0.50	20	0.59	0	0.0
Scour Pools	13	267	6.4	0.80	1,866	54.89	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	12	273	5.5	0.26	1,483	43.64	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	1	15	2.0	0.05	30	0.88	0	0.0
Step/Falls	0	0	-	-	0	0.00	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	14	25.0
Pools ≥1m deep:	3	5.4
Complex pools (LWD pieces≥3):	5	8.9
Pool Frequency (channel widths/pool):	4.5	
Residual pool depth (avg)	0.55m	

STREAM SUMMARY

DEVILS LAKE FK WILSON R. (POST)

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	
27	560	5.8	0.52	3,399	12	13	1.1	31	15	18	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,866	54.9
Backwater Pools	20	0.6
Glide	0	0.0
Riffle	1,483	43.6
Rapid	0	0.0
Cascade	30	0.9
Step	0	0.0
Dry	0	0.0

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RIPARIAN ZONE VEGETATION SUMMARY

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Summary of Riparian Zone (0-30m) (4 transects)

Total hardwoods/1000 ft	213
Total conifers/1000 ft	625
Total conifers >20" dbh/1000 ft	30
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	1.0	0.8	0.0	1.3	0.0	3.0	1.0
15-30cm	0.3	1.5	0.5	0.3	3.0	0.0	3.8	1.8
30-50cm	0.3	0.3	1.8	0.0	1.0	0.0	3.0	0.3
50-90cm	0.0	0.3	0.3	0.0	0.3	0.0	0.5	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Total/100m ²	1.5	3.0	3.3	0.3	5.5	0.3	3.4	1.2

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	55		59		61	
Shrub cover	28		30		28	
Grass/forb cover	48		59		59	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	50		75		75
High terrace	25		0		13	
Low terrace	25		25		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 (%)	19		21		23	

Summary of Riparian Zone (0-30m) for all reaches (4 transects)

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

Total hardwoods/1000 ft	213
Total conifers/1000 ft	625
Total conifers >20" dbh/1000 ft	30

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	3.0	1.0
15-30cm	3.8	1.8
30-50cm	3.0	0.3
50-90cm	0.5	0.3
>90cm	0.0	0.3

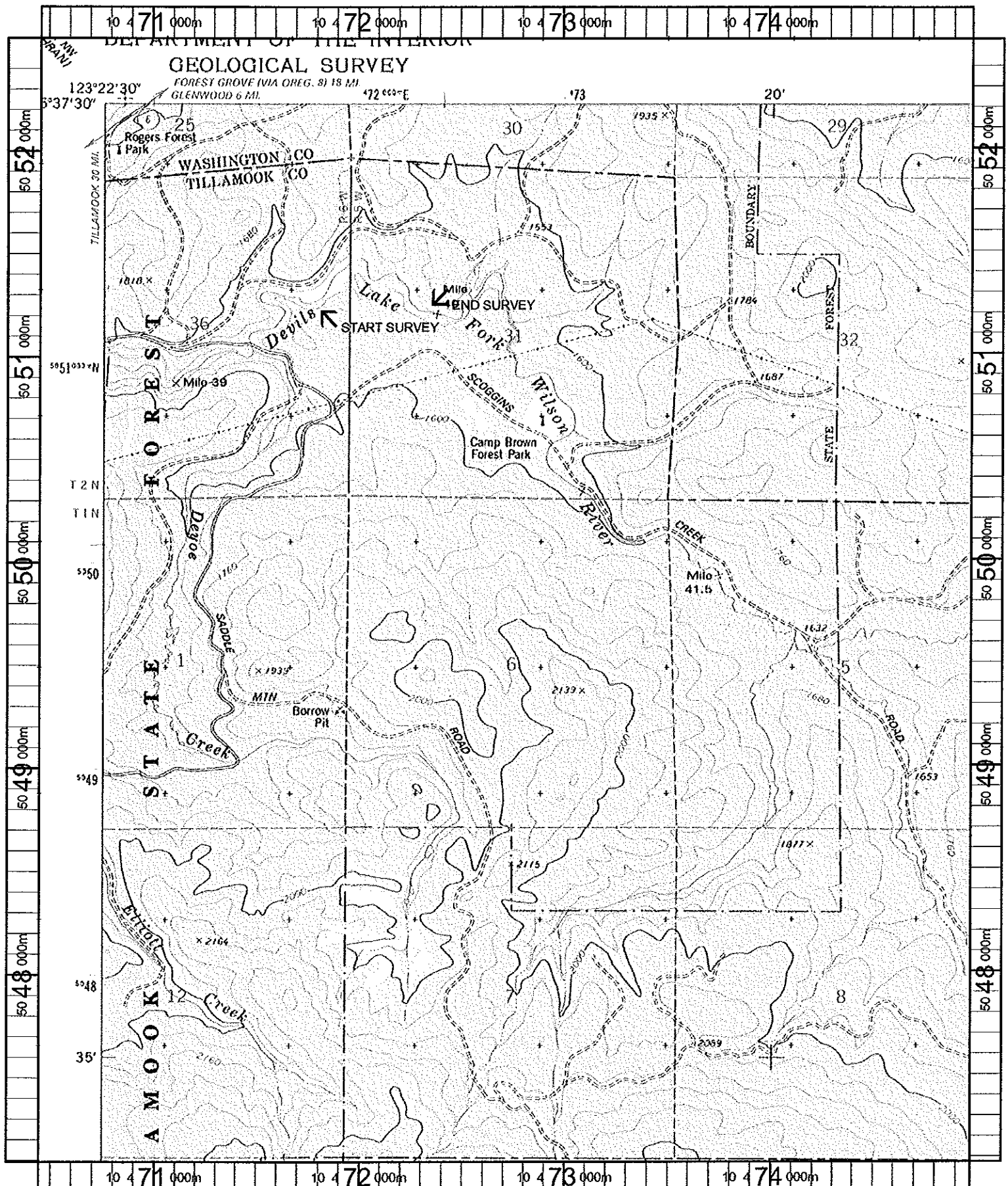
RIPARIAN ZONE VEGETATION

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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	
3	LF	1	HS	35.0	90	10	70	Conifer	1	1	0	0	0	
								Hardwood	3	0	0	0	0	
3	LF	2	HS	40.0	90	30	70	Conifer	1	2	0	0	0	
								Hardwood	0	0	0	0	0	
3	LF	3	HS	25.0	90	30	70	Conifer	0	2	1	0	0	
								Hardwood	0	0	0	0	0	
3	RT	1	HT	12.0	80	80	10	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	1	0	HIKING TRAIL
3	RT	2	HS	20.0	80	30	70	Conifer	0	0	2	0	0	
								Hardwood	0	1	0	0	0	
3	RT	3	HS	25.0	60	30	70	Conifer	0	2	0	0	0	
								Hardwood	0	0	0	0	1	
15	LF	1	HS	28.0	70	30	70	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
15	LF	2	HS	30.0	80	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
15	LF	3	HS	33.0	85	10	90	Conifer	0	3	1	0	0	
								Hardwood	0	0	0	0	0	
15	RT	1	HT	4.0	80	10	10	Conifer	0	0	1	0	0	
								Hardwood	0	0	0	0	0	
15	RT	2	HS	12.0	65	20	80	Conifer	1	0	1	1	0	
								Hardwood	0	0	0	0	0	
15	RT	3	HS	18.0	75	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
18	LF	1	HS	40.0	50	50	40	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
18	LF	2	HS	25.0	30	80	10	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
18	LF	3	HS	13.0	20	50	40	Conifer	3	1	0	0	0	
								Hardwood	0	0	0	0	0	ROAD NEAR TOP
18	RT	1	HS	35.0	70	10	10	Conifer	3	0	0	0	0	
								Hardwood	1	1	0	0	0	
18	RT	2	HS	35.0	90	10	10	Conifer	0	0	1	0	0	
								Hardwood	0	0	0	0	0	
18	RT	3	HD	40.0	80	20	35	Conifer	0	0	1	1	0	
								Hardwood	0	0	0	0	0	
27	LF	1	LT	1.0	0	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
27	LF	2	LT	1.0	0	30	70	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
27	LF	3	HT	10.0	0	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
27	RT	1	LT	0.0	0	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
27	RT	2	LT	5.0	35	30	70	Conifer	1	0	3	0	0	
								Hardwood	0	0	0	0	0	
27	RT	3	HS	16.0	80	20	30	Conifer	2	4	1	0	0	
								Hardwood	0	0	0	0	0	



Name: ROARING CREEK
 Date: 11/8/100
 Scale: 1 inch equals 2000 feet

Location: 10 472616 E 5049795 N
 Caption: DEVILS LAKE FORK WILSON RIVER RESTORATION SITE -
 WILSON RIVER