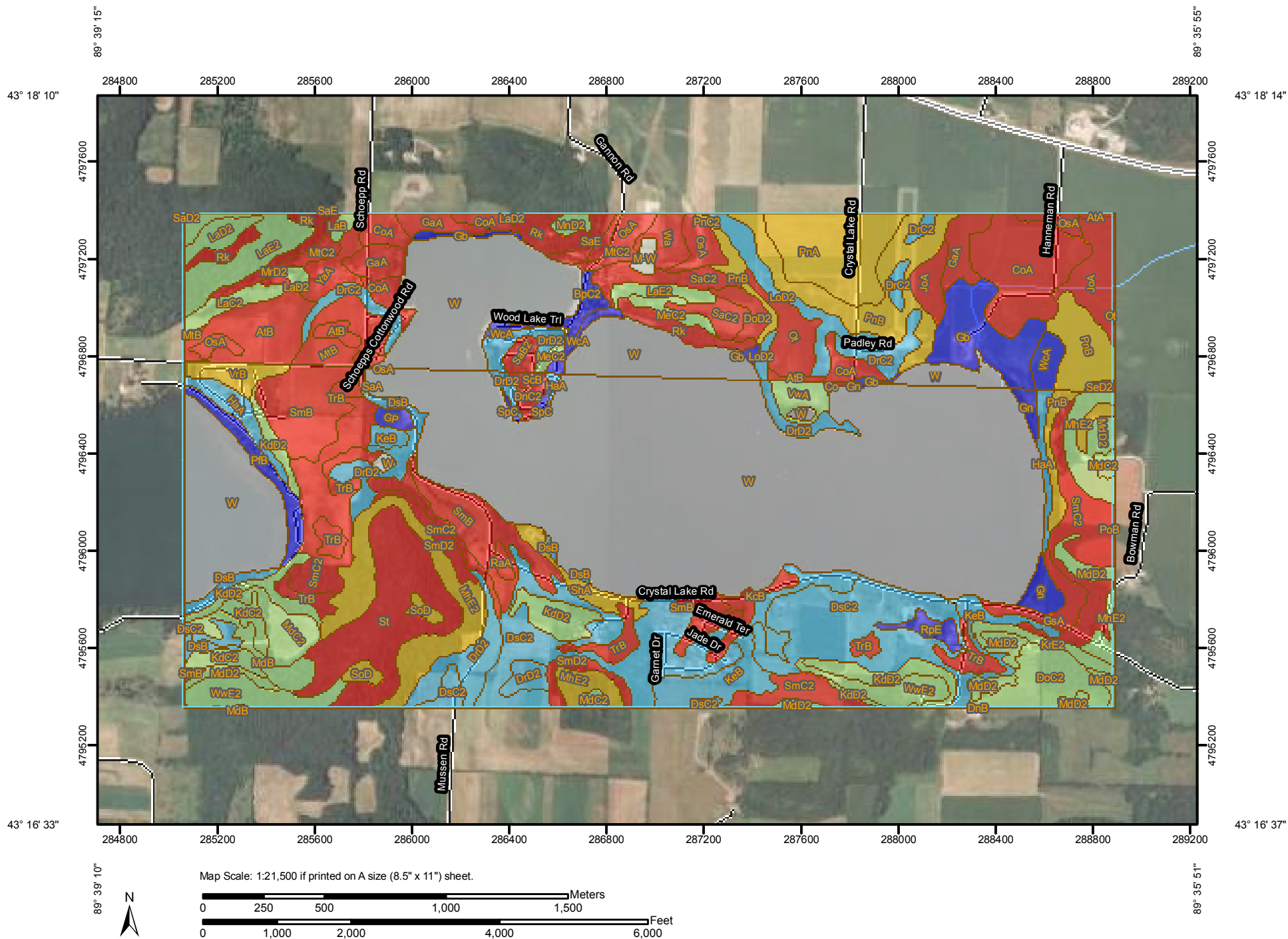


Saturated Hydraulic Conductivity (Ksat)—Columbia County, Wisconsin, and Dane County, Wisconsin



## MAP LEGEND







### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Units


### Soil Ratings

  $\leq 9.17$   
  $> 9.17$  AND  $\leq 14.8543$   
  $> 14.8543$  AND  $\leq 30.8543$   
  $> 30.8543$  AND  $\leq 70.5364$   
  $> 70.5364$  AND  $\leq 117.053$   
 Not rated or not available






### Political Features

 Cities

### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

## MAP INFORMATION

Map Scale: 1:21,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Columbia County, Wisconsin  
Survey Area Data: Version 9, Apr 19, 2011

Soil Survey Area: Dane County, Wisconsin  
Survey Area Data: Version 8, Aug 14, 2010

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 6/20/2005; 7/8/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Saturated Hydraulic Conductivity (Ksat)

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Columbia County, Wisconsin (WI021)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
AtA	Atterberry silt loam, 0 to 2 percent slopes	9.0000	0.7	0.0%
AtB	Atterberry silt loam, 2 to 6 percent slopes	9.0000	29.6	1.5%
BpC2	Boyer loamy sand, 6 to 12 percent slopes, eroded	110.7881	6.5	0.3%
CoA	Colwood fine sandy loam, 0 to 3 percent slopes	7.3709	57.5	3.0%
DoD2	Dodge silt loam, 12 to 20 percent slopes, eroded	9.0000	5.6	0.3%
DrC2	Dresden loam, 6 to 12 percent slopes, eroded	56.2715	20.9	1.1%
DrD2	Dresden loam, 12 to 20 percent slopes, eroded	56.2715	6.8	0.4%
GaA	Gilford fine sandy loam, stratified substratum, 0 to 3 percent slopes	9.0000	21.6	1.1%
Gb	Granby loamy sand	92.0000	32.0	1.7%
JoA	Joy silt loam, 0 to 4 percent slopes	9.0000	23.5	1.2%
LaB	Lapeer fine sandy loam, 2 to 6 percent slopes	20.2252	2.1	0.1%
LaC2	Lapeer fine sandy loam, 6 to 12 percent slopes, eroded	20.2252	7.2	0.4%
LaD2	Lapeer fine sandy loam, 12 to 20 percent slopes, eroded	20.2252	8.8	0.5%
LaE2	Lapeer fine sandy loam, 20 to 30 percent slopes, eroded	20.2252	27.5	1.4%
LoD2	Lorenzo loam, 12 to 20 percent slopes, eroded	70.5364	16.1	0.8%
M-W	Miscellaneous water		2.6	0.1%
MeC2	McHenry silt loam, 6 to 12 percent slopes, eroded	16.2980	6.6	0.3%
MnD2	Military fine sandy loam, 12 to 20 percent slopes, eroded	16.5762	2.8	0.1%
MrD2	Mt. Carroll silt loam, 12 to 20 percent slopes, eroded	9.0000	5.1	0.3%
MtB	Mt. Carroll silt loam, benches, 2 to 6 percent slopes	8.6026	16.4	0.9%
MtC2	Mt. Carroll silt loam, benches, 6 to 12 percent slopes, eroded	8.6026	6.5	0.3%
OsA	Ossian silt loam, 0 to 3 percent slopes	9.0000	22.6	1.2%
Ot	Otter silt loam	9.0000	13.1	0.7%

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Columbia County, Wisconsin (WI021)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
PnA	Plano silt loam, 0 to 2 percent slopes	12.5232	36.8	1.9%
PnB	Plano silt loam, 2 to 6 percent slopes	12.5232	59.2	3.1%
PnC2	Plano silt loam, 6 to 12 percent slopes, eroded	12.5232	0.7	0.0%
Rk	Rock land	0.0000	21.7	1.1%
SaB2	St. Charles silt loam, 2 to 6 percent slopes, eroded	9.0000	4.2	0.2%
SaC2	St. Charles silt loam, 6 to 12 percent slopes, eroded	9.0000	17.0	0.9%
SaD2	St. Charles silt loam, 12 to 20 percent slopes, eroded	9.0000	0.2	0.0%
SaE	St. Charles silt loam, 20 to 30 percent slopes	9.0000	4.4	0.2%
SeD2	Saybrook silt loam, 12 to 20 percent slopes, eroded	6.4967	1.1	0.1%
W	Water		116.6	6.1%
Wa	Wacousta mucky silt loam	9.0000	7.6	0.4%
WcA	Wasepi fine sandy loam, 0 to 3 percent slopes	88.6159	10.8	0.6%
YaA	Yahara fine sandy loam, 0 to 4 percent slopes	9.0000	8.7	0.5%
<b>Subtotals for Soil Survey Area</b>			<b>631.2</b>	<b>32.9%</b>
<b>Totals for Area of Interest</b>			<b>1,917.8</b>	<b>100.0%</b>

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Dane County, Wisconsin (WI025)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
Co	Colwood silt loam	7.5695	0.6	0.0%
DnB	Dodge silt loam, 2 to 6 percent slopes	9.0000	0.0	0.0%
DnC2	Dodge silt loam, 6 to 12 percent slopes, eroded	9.0000	3.8	0.2%
DoC2	Dodge and Kidder soils, 6 to 20 percent slopes, eroded	18.5629	21.3	1.1%
DrD2	Dresden loam, 12 to 20 percent slopes, eroded	42.5298	37.9	2.0%
DsB	Dresden silt loam, 2 to 6 percent slopes	42.5298	10.1	0.5%
DsC2	Dresden silt loam, 6 to 12 percent slopes, eroded	42.5298	122.9	6.4%
Gn	Granby loamy sand	92.0000	9.2	0.5%
GP	Gravel pit	92.0000	3.0	0.2%
GsA	Grays silt loam, 0 to 2 percent slopes	9.0000	9.4	0.5%
HaA	Hayfield silt loam, 0 to 3 percent slopes	51.8742	15.1	0.8%

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Dane County, Wisconsin (WI025)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
KcB	Kickapoo fine sandy loam, 2 to 6 percent slopes	9.0000	5.3	0.3%
KdC2	Kidder loam, 6 to 12 percent slopes, eroded	18.5629	10.0	0.5%
KdD2	Kidder loam, 12 to 20 percent slopes, eroded	18.5629	33.6	1.8%
KeB	Kegonsa silt loam, 2 to 6 percent slopes	68.4437	33.9	1.8%
KrE2	Kidder soils, 20 to 35 percent slopes, eroded	18.5629	6.7	0.4%
MdB	McHenry silt loam, 2 to 6 percent slopes	17.5563	10.0	0.5%
MdC2	McHenry silt loam, 6 to 12 percent slopes, eroded	17.5563	15.8	0.8%
MdD2	McHenry silt loam, 12 to 20 percent slopes, eroded	17.5563	38.3	2.0%
MhE2	Military loam, 20 to 30 percent slopes, eroded	14.8543	48.4	2.5%
PfB	Plainfield sand, 1 to 6 percent slopes	92.0000	11.2	0.6%
PnB	Plano silt loam, 2 to 6 percent slopes	13.4503	6.0	0.3%
PoB	Plano silt loam, gravelly substratum, 2 to 6 percent slopes	30.8543	0.2	0.0%
RaA	Radford silt loam, 0 to 3 percent slopes	9.0000	2.1	0.1%
RpE	Rodman sandy loam, 12 to 35 percent slopes	117.0530	5.4	0.3%
SaA	Sable silty clay loam, 0 to 3 percent slopes	9.0000	0.6	0.0%
ScB	St. Charles silt loam, 2 to 6 percent slopes	9.0000	1.2	0.1%
ShA	Salter sandy loam, wet variant, 0 to 3 percent slopes	14.0662	8.4	0.4%
SmB	Seaton silt loam, 2 to 6 percent slopes	9.0000	62.2	3.2%
SmC2	Seaton silt loam, 6 to 12 percent slopes, eroded	9.0000	77.7	4.1%
SmD2	Seaton silt loam, 12 to 20 percent slopes, eroded	9.0000	11.8	0.6%
SoD	Sogn silt loam, 2 to 20 percent slopes	13.4444	4.8	0.3%
SpC	Spinks and Plainfield loamy sands, 6 to 12 percent slopes	92.0000	1.7	0.1%
St	Stony and rocky land	9.1700	55.2	2.9%
TrB	Troxel silt loam, 1 to 3 percent slopes	9.0000	27.1	1.4%
VrB	Virgil silt loam, 1 to 4 percent slopes	11.0397	8.1	0.4%
VwA	Virgil silt loam, gravelly substratum, 0 to 3 percent slopes	17.7417	7.3	0.4%

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Dane County, Wisconsin (WI025)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
W	Water		534.5	27.9%
WwE2	Whalan loam, 20 to 30 percent slopes, eroded	17.8462	25.7	1.3%
<b>Subtotals for Soil Survey Area</b>			<b>1,286.7</b>	<b>67.1%</b>
<b>Totals for Area of Interest</b>			<b>1,917.8</b>	<b>100.0%</b>

## Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

## Rating Options

*Units of Measure:* micrometers per second

*Aggregation Method:* Dominant Component

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Fastest

*Interpret Nulls as Zero:* No

*Layer Options:* Depth Range

*Top Depth:* 1

*Bottom Depth:* 5000

*Units of Measure:* Centimeters