

Wisconsin Water Use

Data and maps

Great Lakes Compact

- Went into effect in 2008
- Ban on water diversions out of the basin
- Registering and reporting large groundwater and surface water withdrawals is required
- Annual water use fees
- Wisconsin has an active Water Use program

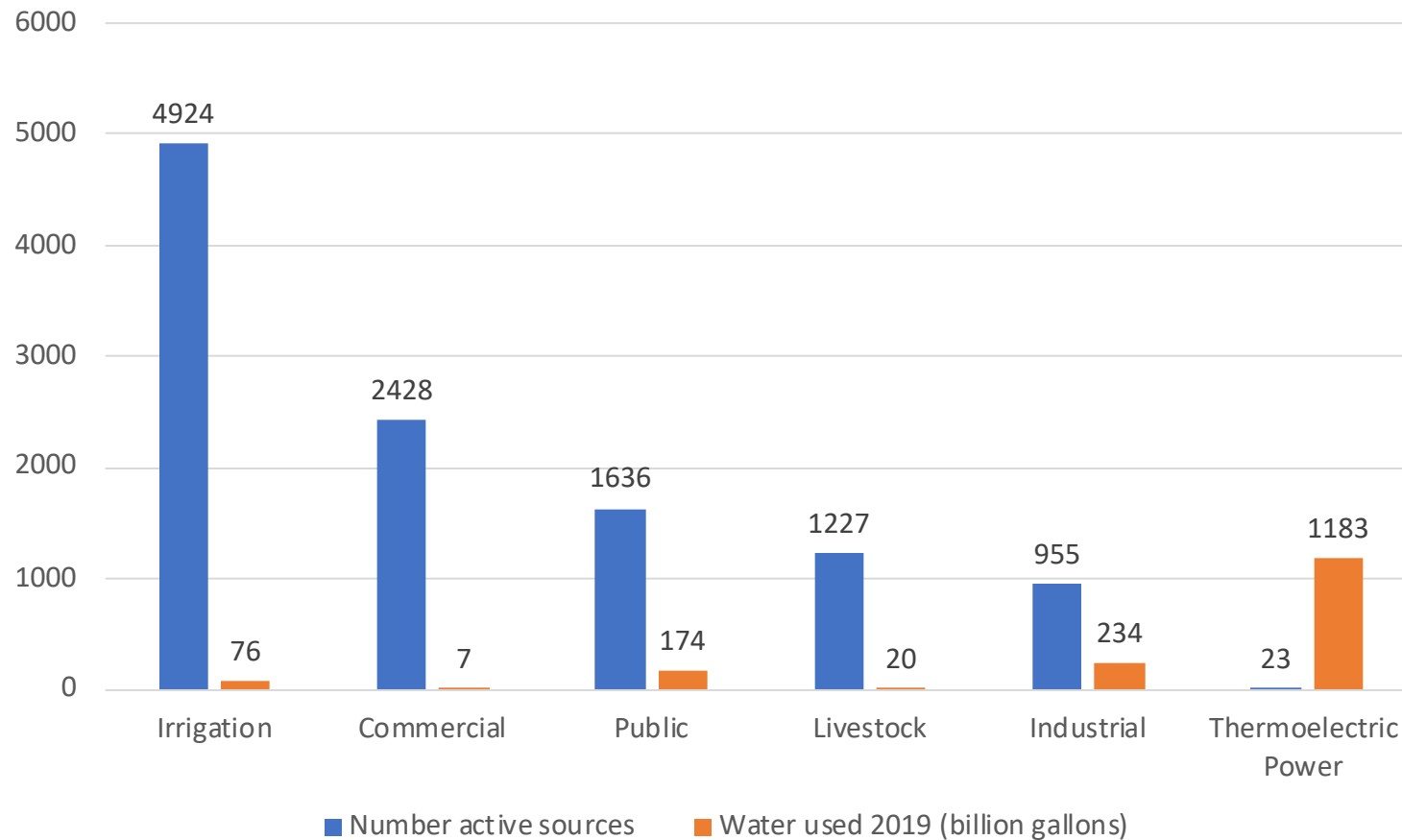


Wisconsin Water Use Data and Maps

- High capacity well owners & property owners who withdraw surface water report their water use each year. They can report online, or using a paper form.
- The public can see water use data via. a public website.
- The public can also browse data through a map viewer.
- Once a year, our program produces a report summarizing the data.



Number of sources vs. water used





REPORTING WATER USE

Registered withdrawers are required to measure or estimate the volume of water they withdraw every month and report that information annually to the DNR. Withdrawals may be reported by the property owner or by an authorized lessee, agent or operator of the source. Even if water is not withdrawn during the previous year, a withdrawal report is still required.

Reporting is required for:

- all high capacity well properties;
- permitted (Chapter 30, Wis. Stats.) surface water withdrawals;
- properties with a Water Use Permit (in the Great Lakes Basin); and
- any properties that withdrew an average of 100,000 gallons per day or more in any 30-day period.

The annual deadline for reporting is March 1.

OPTION 1: REPORT ONLINE

To report online, you need an active Wisconsin Access Management System Identification (WAMS ID), through Wisconsin's Department of Administration.

LOG IN

to submit water use reporting. [Help](#).

Water use in Wisconsin

Additional Resources

[Great Lakes Compact](#)

[High capacity wells](#)

[Wells](#)

[Groundwater](#)

For more information, contact:

Water Use Section

Drinking Water & Groundwater
Program

tel: +1-608-266-2299

Wisconsin Department of Natural Resources

Drinking & Ground Water Use Information System

Welcome to the Water Use Reporting System


- The system will time out after 30 minutes so be sure to save your data often. If you see error messages on the screen when you click save, you will need to correct them in order to save your data and not lose it!
- You can send us an email from within the reporting screen to notify us of address changes or corrections, new owner or operator information or any question you have concerning reporting or your water sources. Just click **Contact Us** in the blue bar! You can also call us at **(608) 266-2299**.
- You can add or change information in any of the yellow boxes. Give your properties and sources meaningful names so you don't have to remember our number identifiers!
- If you don't see all of the sources that you need to report or you need to change the WAMS User ID associated with your records, call us at **(608) 266-2299** or click **Contact Us** on the blue bar above to make that change.

[Begin Reporting](#)

Wisconsin Department of Natural Resources

Drinking & Ground Water Use Information System

Property

| Property No  | Property Name | County | Owner No | Owner Name | Operator Name | Property Status | 2017 Reporting Status | Action |
|---|---------------|-----------|----------|-----------------------|------------------------------------|-----------------|-----------------------|--|
| 6939 | | Sheboygan | 299 | - MONDLOCH, DAN & KIM | MIDWAY SYSTEMS INC - MONDLOCH, DAN | | Incomplete | Enter Report View History |

A property can have one or more wells

Well 1

Well 2

Well 3

| | | | |
|--|----------------------------|-------------------------|-------------------------|
| Did you withdraw water from this source this year? | <div>---Select---</div> | <div>---Select---</div> | <div>---Select---</div> |
| Reason for no withdrawal | <div>---Select---</div> | <div>---Select---</div> | <div>---Select---</div> |
| Water Use Category | <div>---Select---</div> | <div>---Select---</div> | <div>---Select---</div> |
| Water Use Code | <div>---Select---</div> | <div>---Select---</div> | <div>---Select---</div> |
| Water Use Description | | | |
| Method Code | <div>---Select---</div> | <div>---Select---</div> | <div>---Select---</div> |
| Method_Description | | | |
| Month | Withdrawal (gallons/month) | | |
| Source Name | | | |
| January | | | |
| February | | | |
| March | | | |
| April | | | |
| May | | | |
| June | | | |
| July | | | |
| August | | | |
| September | | | |

WATER USE DATA AND MAPS

Use the tools below to search for high capacity wells and surface water withdrawal sources. You can also see the amount of water withdrawn by month and year.

WATER QUANTITY DATA VIEWER

View the locations and volumes of high capacity well and surface water withdrawals on an interactive map. View pending high capacity well applications and approved wells. View water quantity data measurement locations.

- [Water Quantity Data Viewer](#).

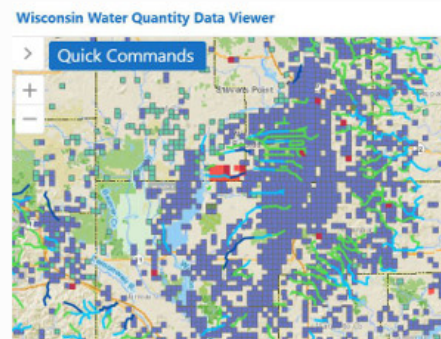
Long-term water level monitoring can assist with issues like groundwater flooding. Learn more about [water levels and groundwater flooding](#).

NOTE: Not all applications or approval documents may be available for download. For advanced data requests including specific locations, shapefiles, etc. (not available in map view or query tool), please email the [Water Use Program](#).

APPLICATION SEARCH

Search for pending or past high capacity well and surface water withdrawal applications. View approval request letters and approval letters.

- [Search for applications](#).




Water use in Wisconsin

Additional Resources

[Great Lakes Compact](#)

[High capacity wells](#)

[Wells](#)

[Groundwater](#)

For more information, contact:

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HIGH CAPACITY WELL OR SURFACE WATER WITHDRAWAL SEARCH

<https://dnr.wisconsin.gov/topic/WaterUse/data.html>

Public query tool

Drinking & Ground Water Use Information System

ApplicationSo

Source Search

Source Type

☒ Registered Groundwater Sources ⓘ
☐ Registered Surface Water Sources ⓘ
☐ Both

Owner Name ⓘ

County

Ashland

Status

---Select---

Major Basin Code ⓘ

---Select---

Well Construction ⓘ

From

Max Approved(GPM) ⓘ

From

WI Unique Well #

Town

Owner# ⓘ

Water Use Code ⓘ

Select one or more water use code

Source# ⓘ

Range

Well Approval ⓘ

From

Property# ⓘ

HiCap Well No

DIR

--

Section

Advanced Search

Search

Clear


Export to Excel

| Owner Name | County | Town | Range | DIR | Section | HiCap Well No | Water Use Code | Well Approval Date | Well Construction Date | WI Unique Well # | Status | Source Type | Max Approved (GPM) | Action |
|--|---------|------|-------|-----|---------|---------------|----------------|--------------------|------------------------|------------------|--------|-------------|--------------------|---|
| LA POINTE, TOWN OF - | Ashland | 50 | 3 | W | 12 | 72995 | PS31 | 05/21/2013 | 06/11/2013 | XC278 | Active | Groundwater | 65 | <div>View Water Use</div> <div>View WCR</div> |
| BUTTERNUT, VILLAGE OF - UTILITY - FURTAK, JOHN | Ashland | 41 | 1 | W | 28 | 72670 | PS11 | 10/09/2012 | 12/17/2012 | YI504 | Active | Groundwater | | <div>View Water Use</div> <div>View WCR</div> |
| BUTTERNUT REGIONAL HOLDINGS LLC - | Ashland | 41 | 1 | W | 28 | 68264 | IN10 | 06/14/2006 | 06/28/2006 | TB476 | Active | Groundwater | 201 | <div>View Water Use</div> <div>View WCR</div> |
| BUTTERNUT REGIONAL HOLDINGS LLC - | Ashland | 41 | 1 | W | 28 | 3107 | IN10 | 04/05/2000 | 04/18/2000 | OC507 | Active | Groundwater | 201 | <div>View Water Use</div> <div>View WCR</div> |

<https://dnr.wisconsin.gov/topic/WaterUse/data.html>


| Water Use Category | Business/Commercial/School | Business/Commercial/School | Business/Commercial/School | Business/Commercial/School | Business/Commercial/School |
|-----------------------|--|--|--|--|---|
| Water Use Code | PS31 - Public/non-transient | PS31 - Public/non-transient | PS31 - Public/non-transient | PS31 - Public/non-transient | PS44 - Business, retail |
| Water Use Description | Public/Non-Transient/Non-Community potable use (examples are day cares and factories); all uses except academic institutions serving 25 or more people | Public/Non-Transient/Non-Community potable use (examples are day cares and factories); all uses except academic institutions serving 25 or more people | Public/Non-Transient/Non-Community potable use (examples are day cares and factories); all uses except academic institutions serving 25 or more people | Public/Non-Transient/Non-Community potable use (examples are day cares and factories); all uses except academic institutions serving 25 or more people | Businesses and retail stores, including office parks and malls serving 25 or more people 60 or more days per year |
| Method Code | Totalizing flow meter | Totalizing flow meter | Totalizing flow meter | Totalizing flow meter | Totalizing flow meter |
| Method_Description | Measured with a totalizing flow meter. Flow meters must be read and documented at least once every month. | Measured with a totalizing flow meter. Flow meters must be read and documented at least once every month. | Measured with a totalizing flow meter. Flow meters must be read and documented at least once every month. | Measured with a totalizing flow meter. Flow meters must be read and documented at least once every month. | Measured with a totalizing flow meter. Flow meters must be read and documented at least once every month. |
| Month | Withdrawal (gallons) | | | | |
| January | 28,424 | 23,190 | 14,213 | 28,426 | 31,418 |
| February | 22,440 | 24,686 | 23,938 | 20,197 | 24,686 |
| March | 32,164 | 28,426 | 39,647 | 29,922 | 29,922 |
| April | 27,676 | 34,410 | 26,182 | 33,662 | 29,922 |
| May | 21,692 | 25,434 | 26,182 | 27,678 | 23,938 |
| June | 25,432 | 28,426 | 29,174 | 26,930 | 29,922 |
| July | 21,692 | 28,426 | 28,426 | 31,418 | 26,182 |
| August | 25,432 | 28,426 | 23,190 | 38,151 | 25,434 |
| September | 26,928 | 21,693 | 27,678 | 30,670 | 26,930 |
| October | 26,180 | 30,670 | 20,945 | 29,922 | 31,418 |
| November | 23,936 | 32,166 | 35,158 | 26,930 | 25,434 |
| December | 25,423 | 30,670 | 17,205 | 32,914 | 23,938 |
| Total | 307,419 | 336,623 | 311,938 | 356,820 | 329,144 |


Pubic Map Viewer


 Wisconsin Department of Natural Resources


Wisconsin Water Quantity Data Viewer


Tools


 Home


 Identify


 Query


 Filter


 Zoom In


 Zoom Out


 Pan


 Initial View


 Previous Extent


 Bookmarks


 Point

 Distance

 Plot Coordinates

 Water Use Codes

 Print

 Export

Basic ToolsFind DataNavigationDraw

Wisconsin Water Quantity Data Vie...< Quick Commands

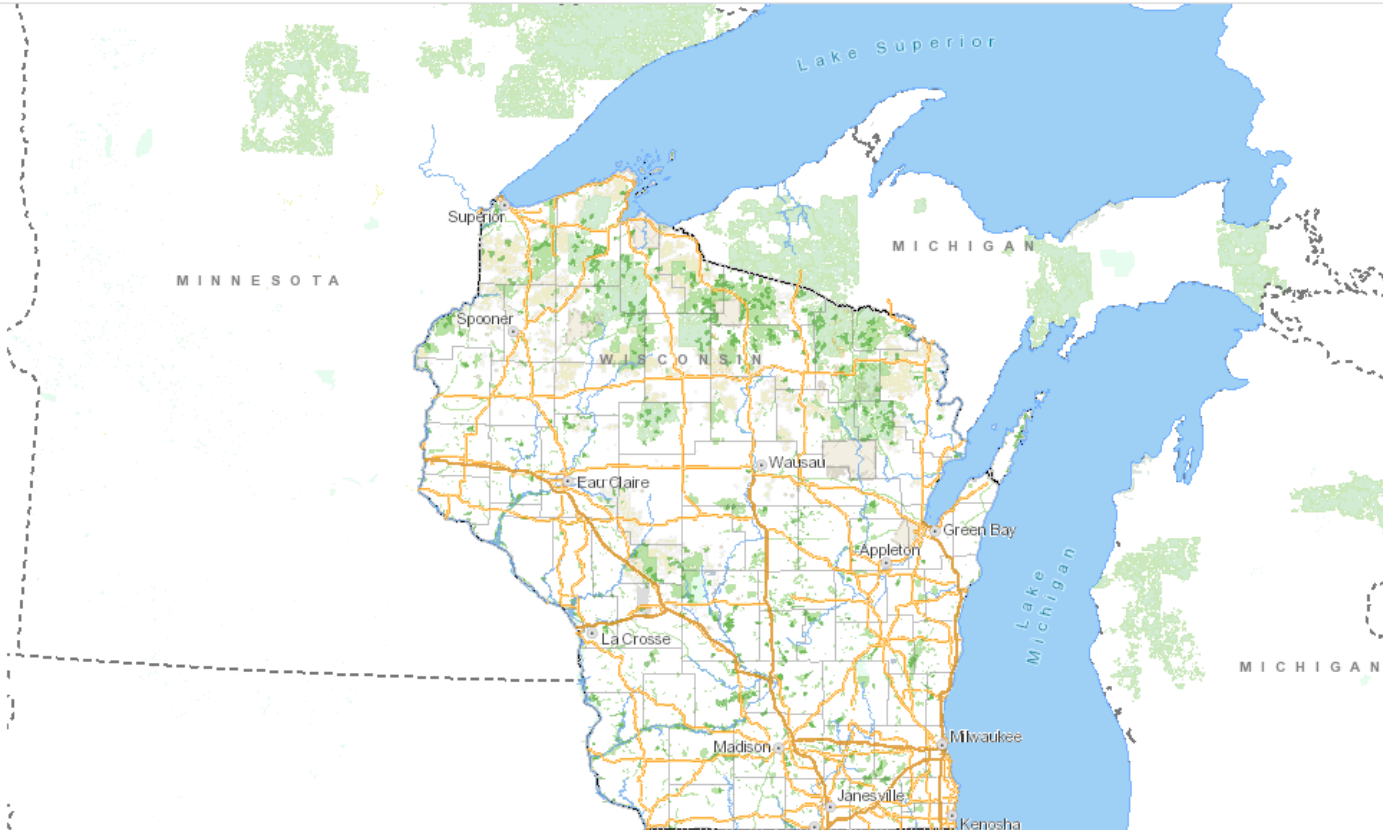
Mapping Application Last Updated 2/22/2018
Data Updated Daily

This map viewer was created for use by the general public to view water quantity data collected by Wisconsin DNR (WDNR), the US Geological Survey (UGSG) and the Wisconsin Geological and Natural History Survey (WGNHS).

This viewer also provides a means for the public to view pending high capacity well applications and recently approved wells. As required by Wisconsin law, these locations are generalized to display at the public land survey section level. Therefore, any well or surface water intake is symbolized by the section in which is located. Clicking identify on sections may return multiple records, one for each data point. This viewer contains a number of layer groups:

Well Applications and Approvals – This layer displays the locations of pending and approved high capacity well applications. It includes:

- High capacity wells that have been applied for by the owner but have not yet been approved by the Department
- High capacity wells approved in the last 30



<https://dnr.wisconsin.gov/topic/WaterUse/data.html>



Wisconsin Water Quantity Data Viewer

Search...



Tools

☒ Tool Labels



Home



Identify



Query



Filter



Zoom In



Zoom Out



Pan



Initial View



Previous Extent



Bookmarks



Point



Distance



Plot Coordinates



Water Use Codes



Print



Export

Basic Tools

Find Data

Navigation

Draw

Layers



Click or tap a location on the map to learn what's there.



All Available Layers

Filter Layers...



Filter

☒ Well Applications and Approvals

☒ Wells Approved in Last 30 Days

☒ Wells Applications Pending

Review

☐ Approved Wells Not Yet Drilled

☐ High Capacity Withdrawal Locations

☐ USGS Water Quantity Monitoring

☐ WDNR Water Quantity Monitoring

☐ WGNHS Spring Monitoring

☐ Groundwater Protection Features

☒ Basemaps

Quick Commands



Basemaps



Layers

0 10 20mi

3500

Scale 1: 1,013,760

Go

Tools



Terms of Use

WDNR/DG



Wisconsin Water Quantity Data Viewer

Tools



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Zoom In



Zoom Out



Pan



Initial View



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Plot Coordinates



Water Use Codes



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Layers



All Available Layers

Filter Layers...



Filter

☐ Well Applications and Approvals☒ High Capacity Withdrawal Locations☒ High Capacity Well Locations☒ Surface Water Withdrawal Locations☐ USGS Water Quantity Monitoring☐ WDNR Water Quantity Monitoring☐ WGNHS Spring Monitoring☐ Groundwater Protection Features☒ Basemaps

Quick Commands

Click or tap a location on the map to learn what's there.



Basemaps



0 15 30mi



1:500

Scale 1: 2,027,520



Go



Wisconsin Water Quant...



Layers



Wisconsin Water Quantity Data Viewer

Tools



Home



Identify



Query



Filter



Zoom In



Zoom Out



Pan



Initial View



Previous Extent



Bookmarks



Point



Distance



Plot Coordinates



Water Use Codes



Print



Export

Basic Tools

Find Data

Navigation

Draw



USGS Streamflow Sites (1)



NEW WOOD RIVER NEAR MERRILL, WI - USGS Streamflow

NEW WOOD RIVER NEAR MERRILL, WI - 05394000
3,286 meas. of ST
Sep-1952 to Sep-1961
[Link to USGS-NWIS Data](#)



Quick Commands

Displaying 1 - 1 (Total: 1)



Page 1 of 1



Wisconsin ...



Layers



USGS Strea...



Basemaps

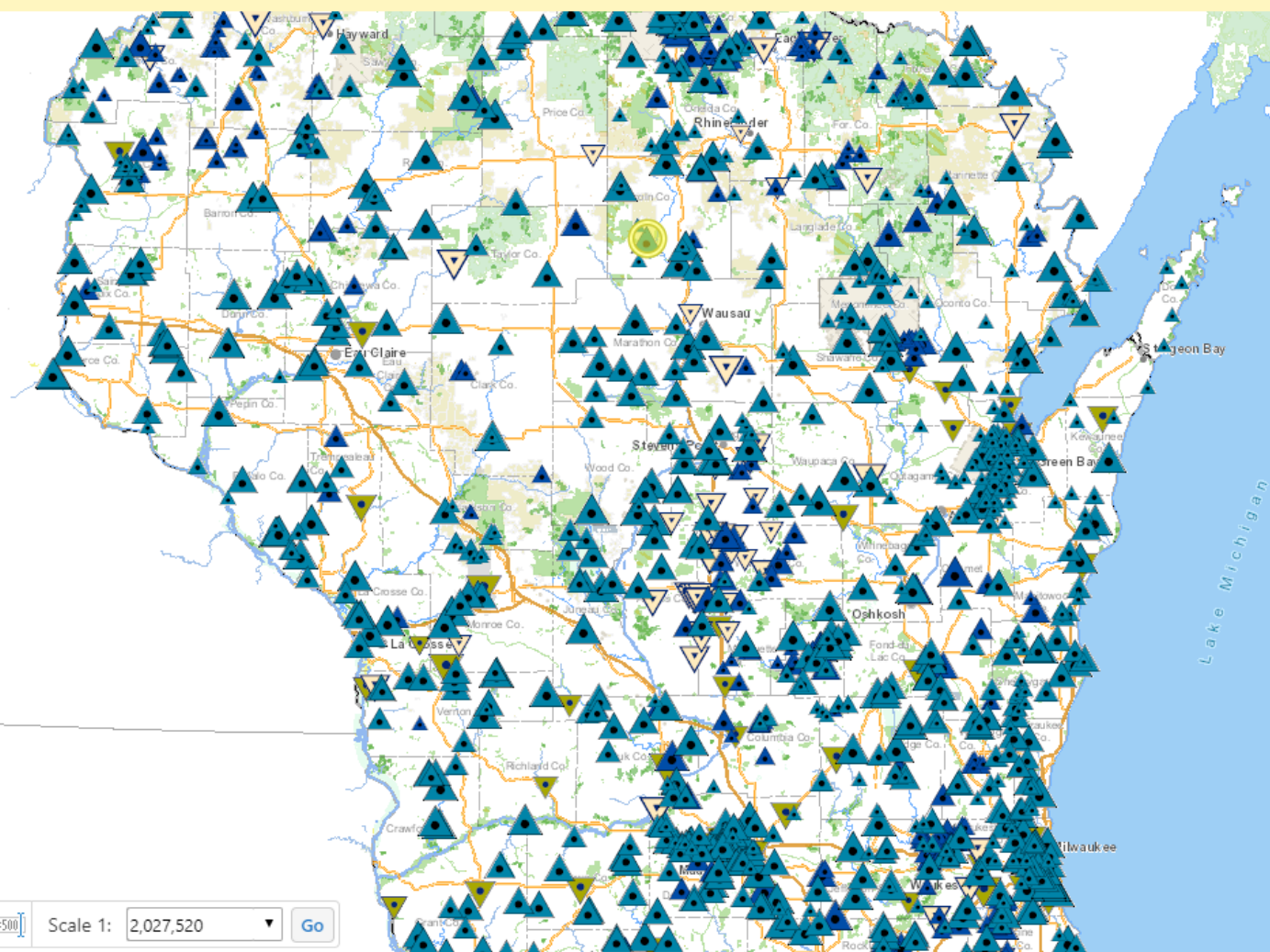


0 15 30mi



Scale 1: 2,027,520

Go



Click or tap a location on the map to learn what's there.



Wisconsin Water Quantity Data Viewer

Tools



Home



Identify



Query



Filter



Zoom In



Zoom Out



Pan



Initial View



Previous Extent



Bookmarks



Point



Distance



Plot Coordinates



Water Use Codes



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Layers



All Available Layers

Filter Layers...



Filter

☐ Well Applications and Approvals☐ High Capacity Withdrawal Locations☐ USGS Water Quantity Monitoring☒ WDNR Water Quantity Monitoring☒ Baseflow Data - Current Sites☐ Baseflow Data - Historical Sites☒ DNR SWIMS Lake Levels☐ DNR SWIMS Flow Data☒ Groundwater Levels - Current

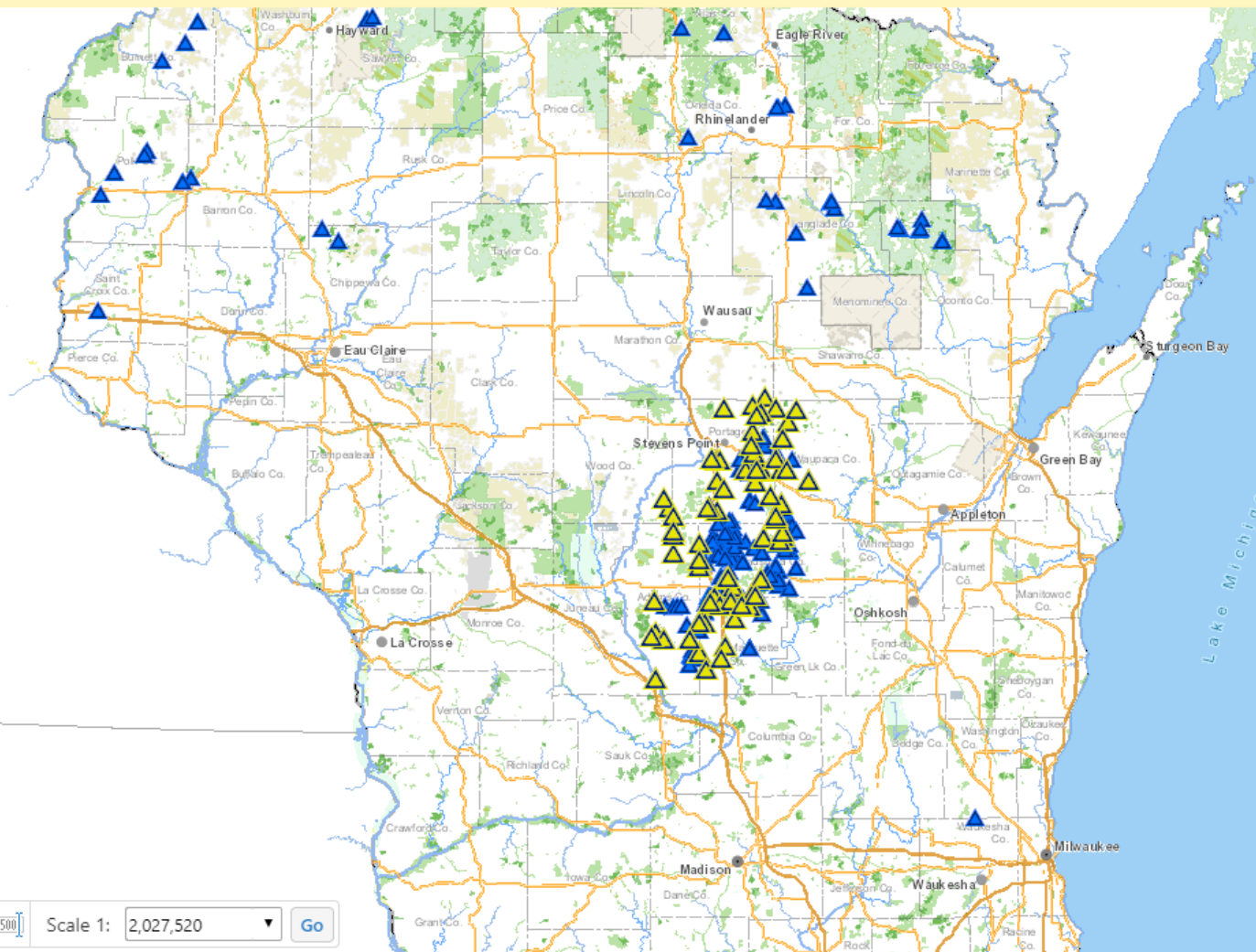
Sites

☐ WGNHS Spring Monitoring☐ Groundwater Protection Features☒ Basemaps

Quick Commands



Click or tap a location on the map to learn what's there.



Wisconsin Water Quant...



Layers



Basemaps



0 15 30mi

1:500

Scale 1: 2,027,520

Go



Tools



Tool Labels



Basic Tools

Find Data

Navigation

Draw

Layers



Click or tap a location on the map to learn what's there.



Quick Commands

All Available Layers

Filter Layers...



Filter

- ☐ Well Applications and Approvals
- ☐ High Capacity Withdrawal Locations
- ☐ USGS Water Quantity Monitoring
- ☐ WDNR Water Quantity Monitoring
- ☒ WGNHS Spring Monitoring
 - ☒ Surveyed Springs ≥ 1 CFS
 - ☒ Surveyed Springs $.25 < \text{CFS} < 1$
 - ☒ Surveyed Springs $< .25$ CFS
- ☐ Groundwater Protection Features
- ☒ Basemaps



0 10 20mi

1:500

Scale 1: 1,013,760



Go



Tools

Terms of Use

WDNR/DG



Wisconsin Water Quantity Data Viewer

Search...



Tools



Tool Labels



Basic Tools

Find Data

Navigation

Draw

Layers



Click or tap a location on the map to learn what's there.



All Available Layers

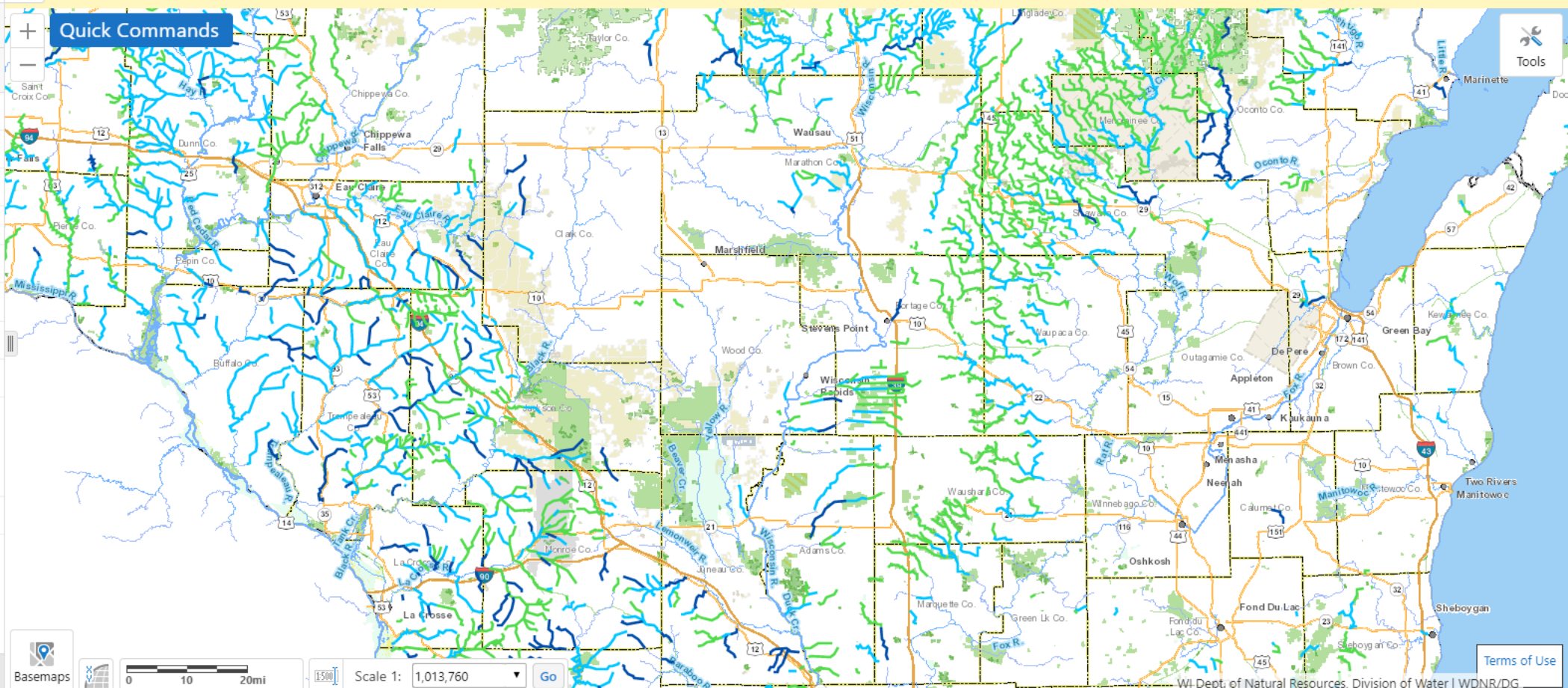
Filter Layers...



Filter

- ☐ Well Applications and Approvals
- ☐ High Capacity Withdrawal Locations
- ☐ USGS Water Quantity Monitoring
- ☐ WDNR Water Quantity Monitoring
- ☐ WGNHS Spring Monitoring
- ☒ Groundwater Protection Features
 - ☒ Trout Streams
 - ☒ Surveyed Springs ≥ 1 CFS
 - ☒ Outstanding/Exceptional Resource Waters
- ☒ Basemaps

Quick Commands



Tools



Tools

Terms of Use

Central Sands Lake Study

A multi-year study, mandated by the Wisconsin Legislature. The study will include the use of a [groundwater flow model](#) to evaluate cumulative impacts from existing and potential groundwater withdrawals on the three lakes.

The DNR will determine if there is the potential for significant impacts to the lake's average seasonal levels as a result of groundwater withdrawals.



Great Lakes Commission Annual Reporting

Site created and maintained by the Great Lakes Commission | www.glc.org

Great Lakes Regional Water Use Database

INTRODUCTION

DOWNLOAD REPORTS

- Annual Reports
 - Recent
 - Archived
- Summary Reports
- Basin Reports
- Jurisdiction Reports
- Use Sector Reports

CREATE YOUR OWN QUERY

AGENCY STAFF RESOURCES

ABOUT THE DATA

- Description of Data Fields
- Consumptive Use Coefficients
- Water Use Sector Definitions
- General Definitions & Abbreviations

CONTACTS

- State/Provincial Contacts
- Regional Contacts

QUESTIONS?

Comments or questions about this website or project? Contact **Margo Davis**, mdavis@glc.org

Great Lakes

Introduction

To get started:

- Just click on the left to select the type of report you'd like to generate.
- Click [Upload Data](#) to manage your state or provincial data (for registered data managers only).

For more information on data definitions and agency contact information, browse the links on the left.

About this website

Welcome to the **Great Lakes Regional Water Use Database**, providing comparable water use information on withdrawals, diversions and consumptive uses. This database supports the states and provinces in implementing Article 4 of the Great Lakes-St. Lawrence River Basin Water Resources Compact and Article 301 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement. Under the Compact and the Agreement, the parties (states and provinces) are required to report water use information to the regional database repository and aggregated information will be made available to the public on an annual basis. In 2012, the database was redesigned to comply with the Interim State/Provincial Reporting Protocols to the Regional Water Use Database, adopted by the Regional Body and Compact Council on December 8, 2009.

The Great Lakes Regional Water Use Database has been around for over 20 years! Originally, it was established by the Great Lakes states and provinces in response to the recommendation of the Great Lakes Charter of 1985, which calls for a uniform, consistent base of data of Great Lakes water withdrawals, diversions and consumptive uses. Beginning in 1987, water use data have been submitted to the repository on an annual basis and reports provided to assist the jurisdictions in Great Lakes-St. Lawrence River water resources planning and management. As specified

Great Lakes Commission Annual Report

Annual Report of the Great Lakes Regional Water Use Database Representing 2018 Water Use Data

Figure 5 shows total water withdrawals by jurisdiction over the past five years (excluding in-stream hydroelectric water use). Water use in each jurisdiction has generally stayed steady or decreased over the past five years. Variances from this general trend are typically explained by one or two large water users in those jurisdictions using more or less water from previous years. Figure 6 shows total consumptive use by jurisdiction over the past five years. Consumptive use in each jurisdiction follows a similar steady trend seen in overall water use. Québec's more variable trend in consumptive use reflects updates and improvements to reporting accuracy and consumptive coefficients. Because each water use sector has different consumptive use factors, changes in the makeup of each jurisdiction's water withdrawals can impact trends in consumptive use.

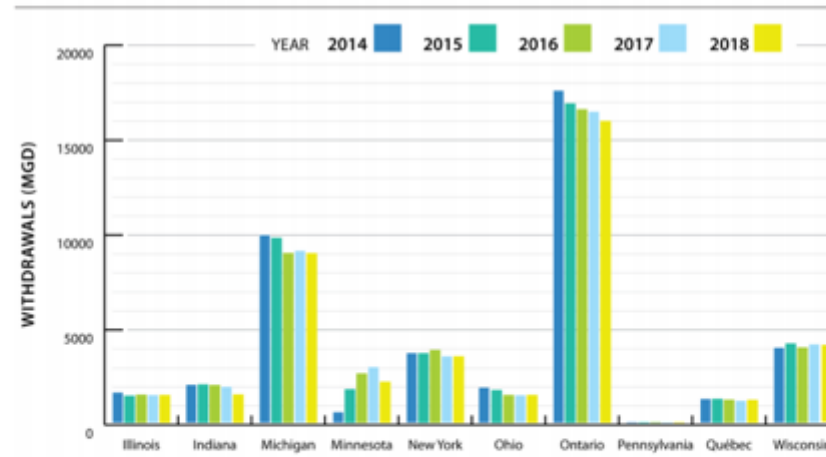


Figure 5. Water withdrawals by jurisdiction over the past five years.

Annual Water Use Report



Wisconsin Water Use



Wisconsin Water Use

A panoramic look at water use in Wisconsin

A product of the DNR, Water Use Section

Mt. Vernon Creek, Donald Park Spring,
Dane County, Wisconsin (Credit: DNR)

<https://dnr.wisconsin.gov/topic/WaterUse/WithdrawalSummary.html>



Great Lakes Surface Water

Greater than 26% of Wisconsin's land area is within the Great Lakes Basin and more than 50% of Wisconsin's population live near Lake Michigan or Lake Superior. These 1.6 million residents depend on the Great Lakes for their drinking water and other industrial or commercial uses.

More than half of Wisconsin's water withdrawal comes from the [Great Lakes Basin](#).

Non-contact cooling for power production facilities is the single largest use of water in the state. In the Great Lakes Basin, these facilities are concentrated along the Great Lakes shoreline.

Lake Michigan, Schlitz Audubon Nature Center,
Milwaukee County, Wisconsin (Credit: DNR)

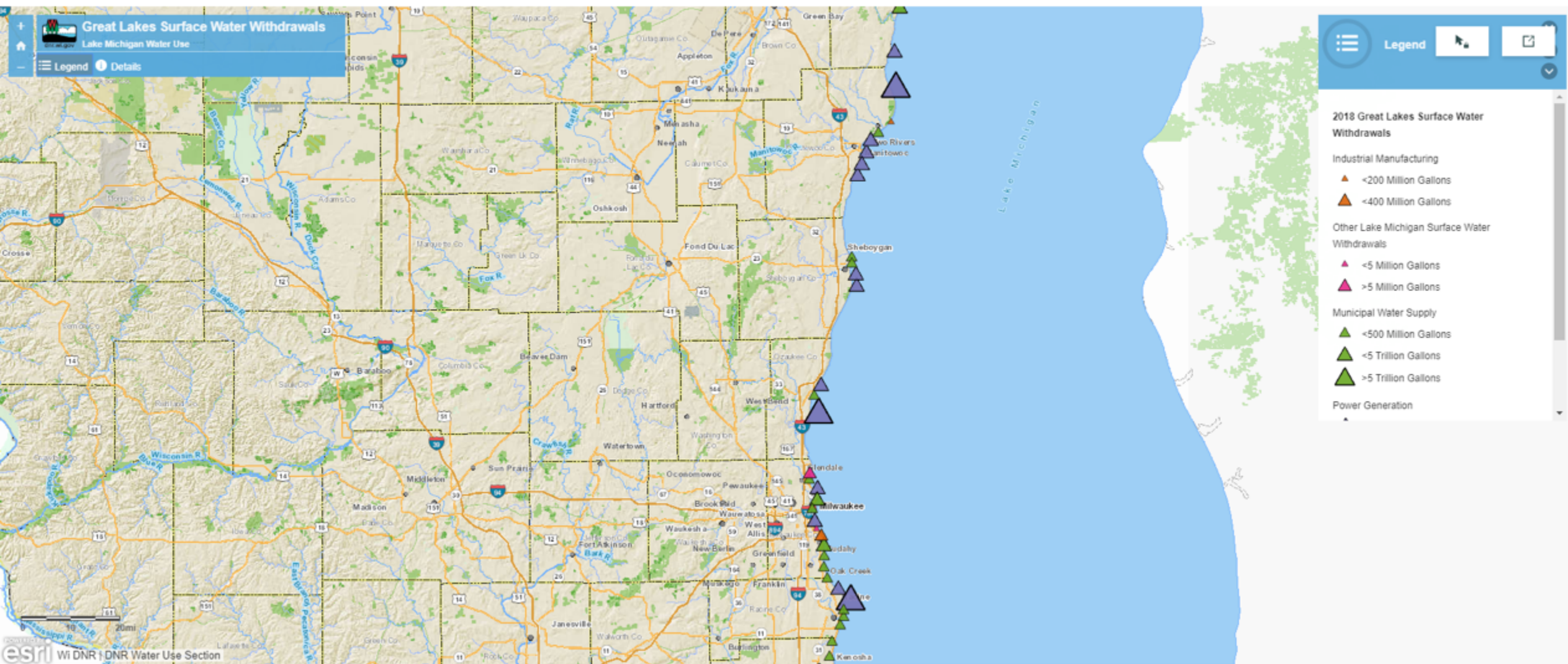


Lake Michigan, Kohler-Andrea State Park,
Sheboygan County, Wisconsin (Credit: DNR)

Lake Michigan Surface Water Withdrawals

In 2018, Lake Michigan was the single largest source of water in the state, supplying nearly 1.3 trillion gallons of water, 68% of Wisconsin's total water withdrawals. Over 1.2 trillion gallons were used for power generation while just over 0.7 trillion gallons were used for other purposes.

Water use for municipal water supply is the second largest user of Lake Michigan. Municipal surface water intakes along the Lake Michigan shoreline supply many larger cities as well as smaller, nearby communities. Other uses include geothermal cooling for heating and cooling systems and wastewater treatment.

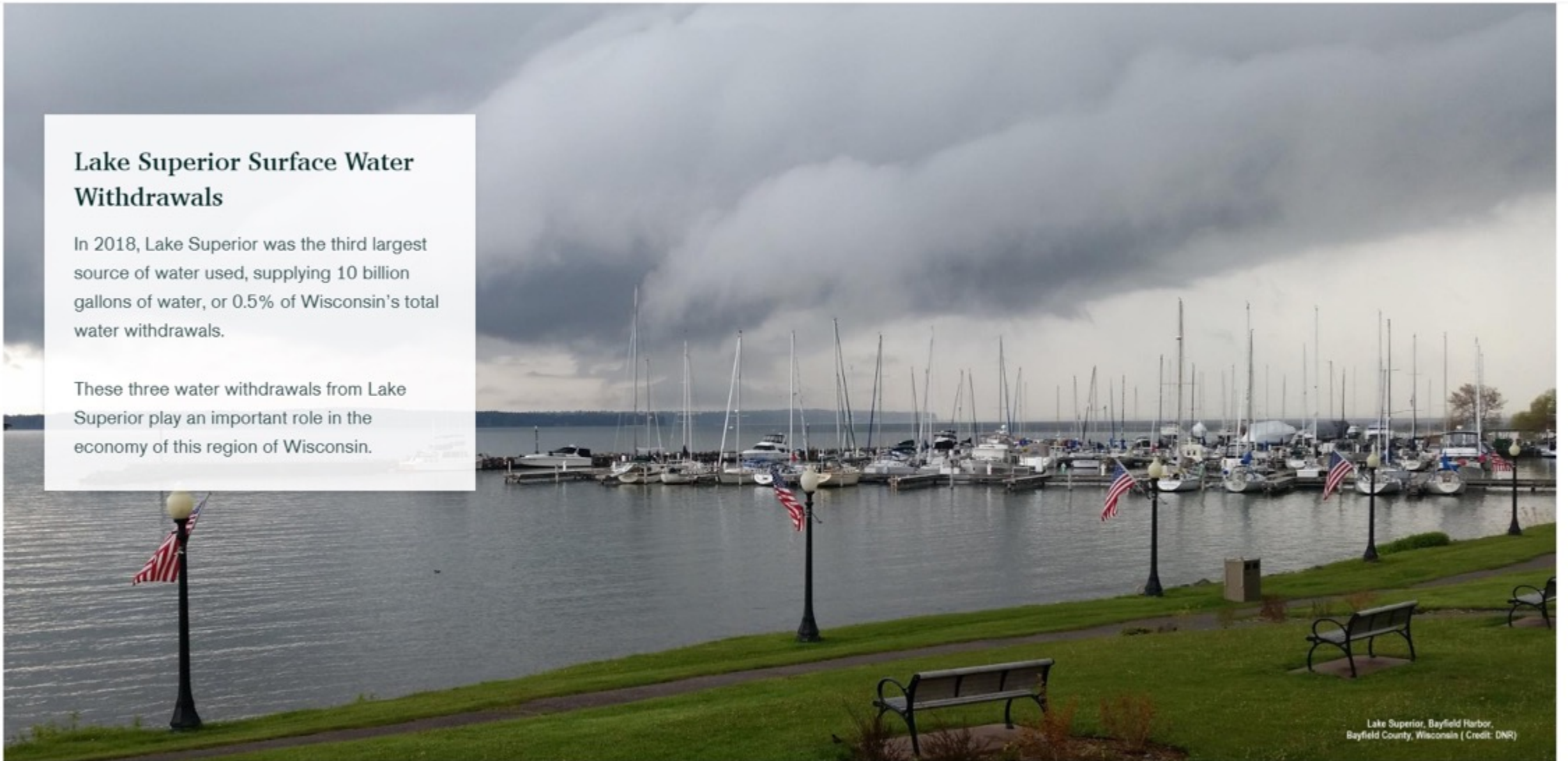




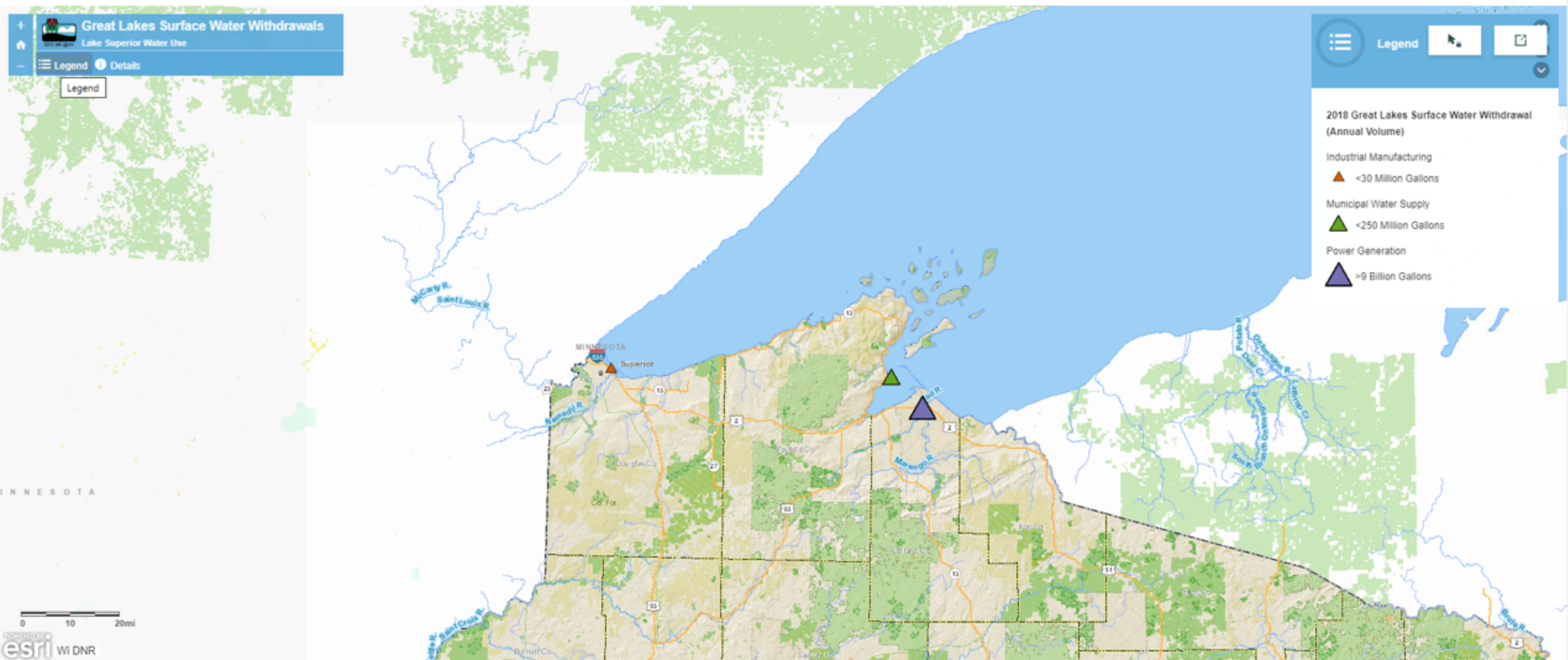
Lake Superior Surface Water Withdrawals

In 2018, Lake Superior was the third largest source of water used, supplying 10 billion gallons of water, or 0.5% of Wisconsin's total water withdrawals.

These three water withdrawals from Lake Superior play an important role in the economy of this region of Wisconsin.



Lake Superior, Bayfield Harbor,
Bayfield County, Wisconsin (Credit: DNR)



2018 Wisconsin's Lake Superior Surface Water Withdrawals



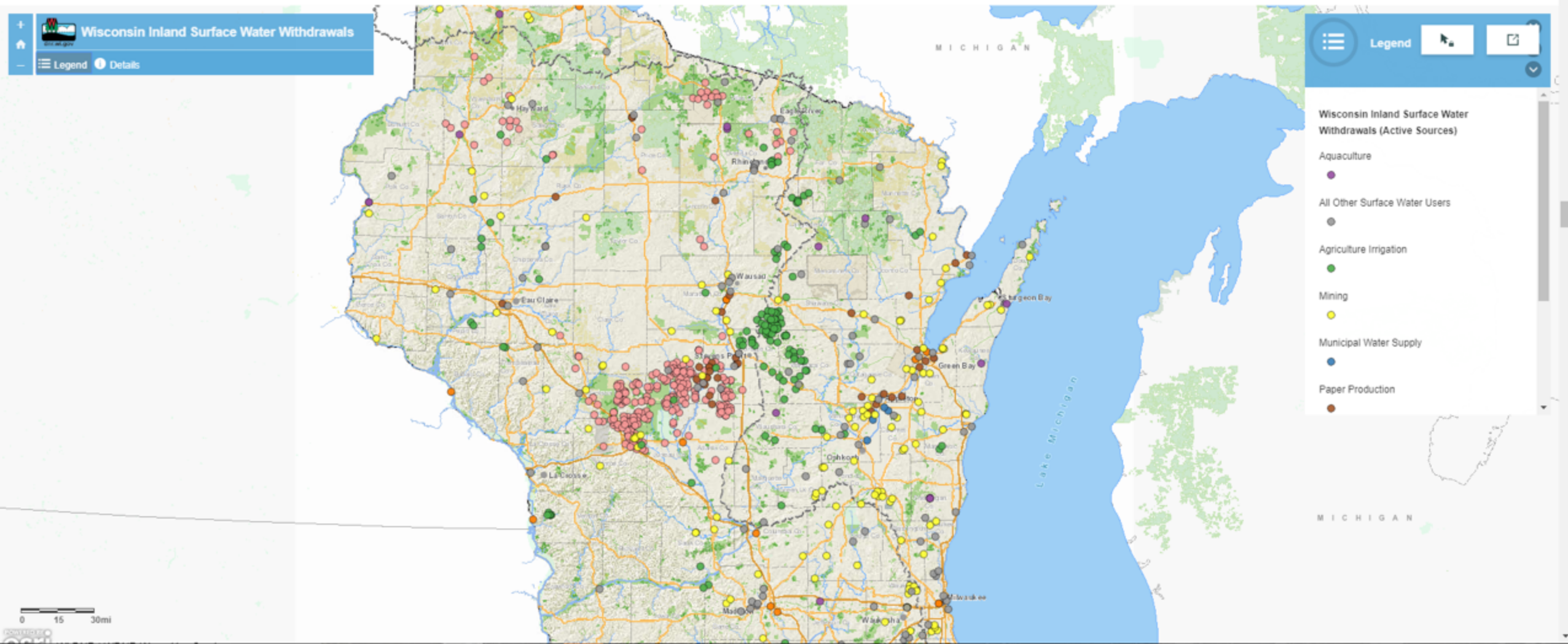
Wisconsin River, Dubay Dam, Portage County, Wisconsin
(Credit: DNR)

Wisconsin Inland Surface Water

Wisconsin surface water is withdrawn from lakes, rivers and small ponds.

Wisconsin's surface water is withdrawn for cranberry production, paper production, power generation and other purposes.

The single largest use of inland surface water in Wisconsin comes from non-contact cooling of power production facilities (217 billion gallons in 2018). In the Mississippi River Basin, these facilities are concentrated on the Wisconsin and Mississippi Rivers.



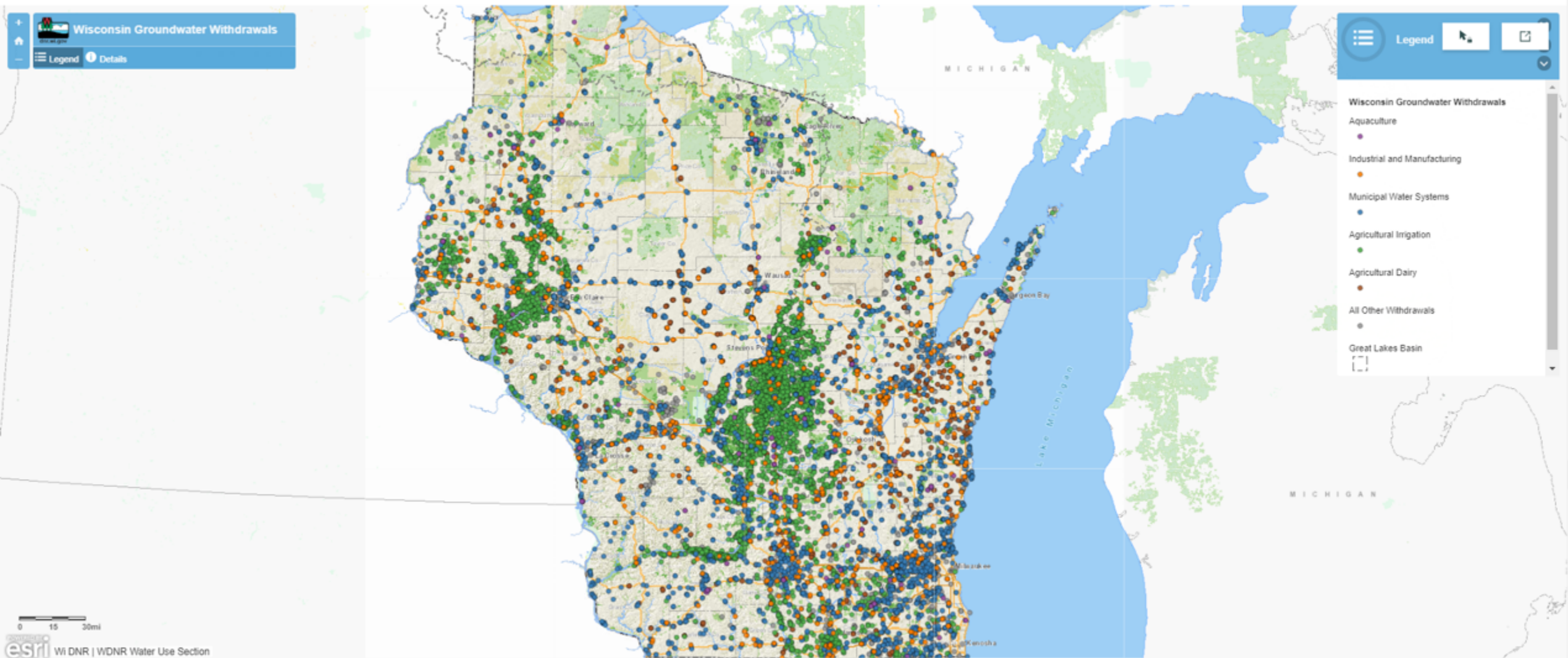


Groundwater Use

Municipal water supply comprises the largest withdrawal of groundwater in Wisconsin. Municipal wells are typically owned by cities and deliver water for residential, commercial, institutional and industrial uses.

Agricultural irrigation is used to grow many of Wisconsin's vegetable crops. Agricultural irrigation peaks in July and August when crops typically require the most water. About 33% of the high capacity wells in Wisconsin are used for agricultural irrigation.

Well Drilling Rig, Central Wisconsin (Credit: DNR)



2018 Wisconsin's Groundwater Withdrawals