

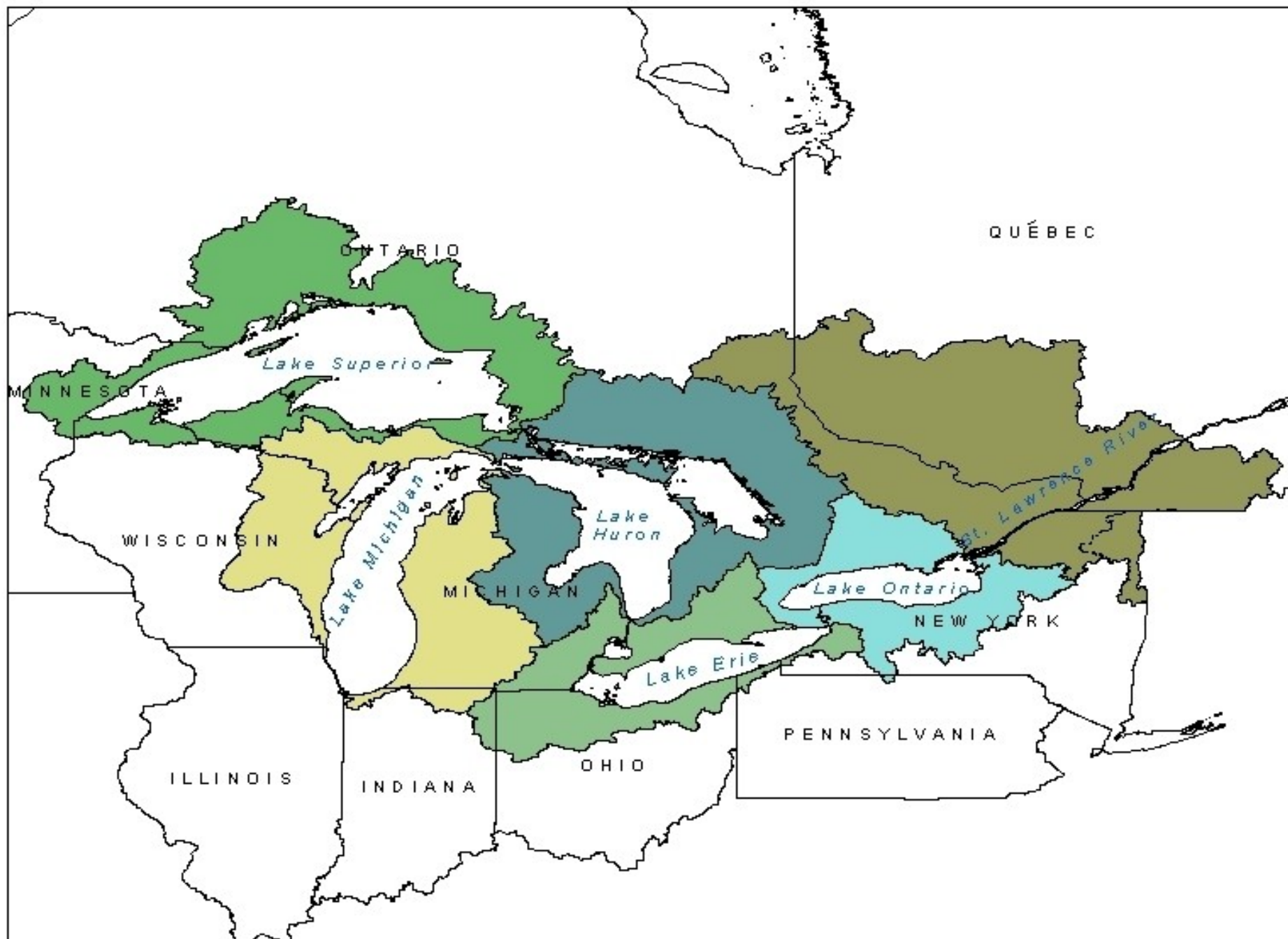
Water Use Reporting Background and Changes for 2012-2013

Abigail Eaton
Michigan Department of Agriculture
and Rural Development

A Brief History of WUR in MI

- December 13, 2005 – Annex 2001 of the Great Lakes Compact Agreement signed by Great Lakes Governors and Premiers
 - provides protections for the Great Lakes-St. Lawrence River Basin
 - includes a ban on new diversions of water outside the Basin
 - stipulates that each State will create a program for the management and regulation of new or increased large withdrawals to ensure an effective and efficient water management program

Great Lakes Basin



A Brief History of WUR in MI

- Michigan's Solution: All Water Users having a capacity to withdraw water quantities averaging 100,000 gallons per day (70 gallons/ minute) must report use on an annual basis to:
 - Agricultural user – to MDEQ or MDARD. No fee if reporting to MDARD
 - All other industries – to MDEQ with an associated fee.
 - New proposed wells/ pumps must now consult the WWAT (www.miwwat.org) prior to installation and subsequent reporting.

What is the WWAT?

- The WWAT is one tool to measure potential Adverse Resource Impacts (ARIs) on characteristic fish populations based on a formula calculating decreased index flow of a defined surface water type resulting in a percentage reduction in either a characteristic or thriving fish population in that particular surface water.
- In other words, it “forecasts” when a fish population can no longer succeed because of a reduced amount of water that may result from increased withdrawals

What does the WWAT NOT do?

- The tool cannot assess potential impacts of a new/ increased large capacity well's drawdown (i.e. cone of depression) on neighboring wells.
- When installing a new large capacity well you should also take into account potential impacts your large capacity wells may have on smaller capacity domestic wells (another topic for another day).

Disclaimer!!

- Note that this is a very brief synopsis of a very complicated definition for ARI.
- For the specific language of this definition of ARI, please consult the legislation (Part 327, Act 451 of 1994, as amended).
- For an excellent layman's overview of the WWAT and ARI's consult the Michigan Farm Bureau's *Water Resource Guide*

WUR Program Snippets

- 2011: 1386 agricultural operations reported
- 2011: 6,217 individual pumps
- Maintain records for more than 2400 individual LQW users reporting 12,000 pumps
- Since 2004, the number of individual reports has ranged from a low of 1076 (2005) to 1542 (2008).

WUR Program Snippets - 2011

Pump Water Source	
Pond Supplied by Well	246
Surface Water	1595
Groundwater	4376

A thing of the Past: Paper Forms

2011 WATER USE CONSERVATION PLAN
 Required under Part 327 of P.A. 451 of 1994, as amended, MCL 324.32708
Due by April 1, 2012. Failure to report water use as required may result in a civil fine of up to \$1,000.
KEEP A COPY OF YOUR COMPLETED REPORT!

Mail to:
 Michigan Department of Agriculture &
 Rural Development
 ESD - Water Use Reporting
 P.O. Box 30017
 Lansing, MI 48909
FAX: 517-335-3329



1. FARM INFORMATION:

Farm Name: _____ Manager/Owner: _____ Phone: _____ Ext. _____

Mailing Address _____ City _____ State _____ Zip Code _____ E-mail _____

2. PUMP INFORMATION: PLEASE COMPLETE THE FOLLOWING FOR EACH PUMP YOU OWN AND/OR OPERATE. DO NOT REPORT WATER FROM MUNICIPAL/PUBLIC WATER SUPPLIES. COPY AND COMPLETE ADDITIONAL SHEETS AS NECESSARY.

A. PUMP ID, LOCATION, AND CAPACITY Pump ID: _____ County: _____ Township: _____ Rated Capacity: _____ Gal/Min	B. WATER SOURCE <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Pond Supplied by Well	Static Water Level: _____ ft. _____ in. Date Taken: _____ Location: Lat. _____ Long. _____				
	C-1. WATER USES Crop _____ Acres _____ Or Other Use _____	C-2. WATER USES Crop _____ Acres _____ Or Other Use _____	C-3. WATER USES Crop _____ Acres _____ Or Other Use _____			
D. WATER USE BY MONTH: INDICATE REPORTING UNITS <input type="checkbox"/> acre-inches <input type="checkbox"/> gallons						
Jan	Feb	Mar	Apr	May	June	ANNUAL Total:
July	Aug	Sept	Oct	Nov	Dec	

A. PUMP ID, LOCATION, AND CAPACITY Pump ID: _____ County: _____ Twp: _____ Rated Capacity: _____ Gal/Min	B. WATER SOURCE <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Pond Supplied by Well	Static Water Level: _____ ft. _____ in. Date Taken: _____ Location: Lat. _____ Long. _____				
	C-1. WATER USES Crop _____ Acres _____ Or Other Use _____	C-2. WATER USES Crop _____ Acres _____ Or Other Use _____	C-3. WATER USES Crop _____ Acres _____ Or Other Use _____			
D. WATER USE BY MONTH: INDICATE REPORTING UNITS <input type="checkbox"/> acre-inches <input type="checkbox"/> gallons						
Jan	Feb	Mar	Apr	May	June	ANNUAL Total:
July	Aug	Sept	Oct	Nov	Dec	

I hereby certify under penalty of law (MCL 324.32713) that the information I have reported is accurate and complete.

Signature: _____ Date: _____

Page 1 of

Why On-Line Reporting?

- Transferring data from paper forms is very labor intensive
- Each time data is transferred presents an opportunity for error – the current database is limited in ability to check for discrepancies and redundancy
- Cuts duplication of effort in reporting – i.e. need only report pump name, Lat/Long, other specifications once.
- Puts the onus on the water user for consistency in reporting from year to year
- Ties into the WWAT Registration process
- Will save time in reporting in the long run.
 - The first year of uploading info may be time consuming.

A Potential Concern

- A number of farmers have no access to or little knowledge of computers
 - This first year a limited number of paper forms will be sent out by request only. Forms will not be posted.
 - To have the new system work, it will be mandatory for future (2013) reporting
- Producers without computer access or needing technical assistance may seek assistance from participating local County Conservation Districts and MSUE (call in advance!!)

Timeline

- On-line database is now available to report for the 2012 season – <http://www.deq.state.mi.us/wur>
- Trainings will be scheduled as needed/ requested around the state until April 1st .
 - Looking for opportunities to provide assistance.
 - Encourage you to incorporate into local trainings
- Letters have gone out to LQW users with a tutorial.
- We will post updates on the MDARD site:
<http://www.michigan.gov/wateruserreporting>.

A couple of things to keep in mind:

- There are potential penalties for not reporting water use as required. The state can seek an injunction to stop all water withdrawals, can impose a \$1,000 fine, and can recover the costs of surveillance and enforcement.
- We do not want to enforce penalties – our objective is to locate all large capacity agricultural water users to help bring them into compliance.

A couple of things to keep in mind (cont'd):

- A single pump cannot be reported by more than one producer. Only one producer can assume responsibility to report on a particular pump even if a pump and associated field is shared/rotated among more than one producer from year to year. A pump cannot be submitted to the database under more than one user/record.

Water Use Reporting On-line Overview

<http://www.deq.state.mi.us/wur/>

<http://35.8.121.111/wur/>

<http://www.youtube.com/watch?v=4xYhTg4pAaU>

Michigan's Water Use Reporting Program



[Michigan.gov Home](#) | [Water Use Reporting Home](#) | [Contact MDARD](#) | [Contact DEQ](#)

Welcome to the Michigan Online Water Use Reporting System

For agricultural producers, click the logo to the right to report to the Michigan Department of Agriculture and Rural Development



MDARD

For all other facilities, click the logo to the right to report to the Michigan Department of Environmental Quality



DEQ

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Department of Agriculture & Rural Development



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Login

Username

Password

[Create a new account](#)

[Forgot my password](#)

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Contact Information

1

[Link to Historical Data](#)

2

[Enter Farm Information](#)

3

[Enter Pump/Well Information](#)

4

Please fill out contact information. All the fields with * are required.

*First Name:	<input type="text"/>
*Last Name:	<input type="text"/>
*Mailing Address:	<input type="text"/>
*City:	<input type="text"/>
*State:	<input type="text" value="Michigan"/>
*Zip:	<input type="text"/>
*Primary Phone:	<input type="text"/>
Office Phone:	<input type="text"/>
Cell Phone:	<input type="text"/>
*Email:	<input type="text" value="FranzL@michigan.gov"/>
Fax:	<input type="text"/>

Login edits (optional)

Username:	<input type="text" value="LFranz"/>
New Password:	<input type="text"/>
Re-type New Password:	<input type="text"/>

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Contact Information

1

[Link to Historical Data](#)

2

Enter Farm Information

3

[Enter Pump/Well Information](#)

4

Since this is the first time you are reporting through the new system you must provide information about your farm(s) and pump(s). Please add your farm(s) using the form below. All the fields with * are required.

Farm Information

*Farm Name:
 Street address is same as contact information
*Street Address:
*City:
*State:
*Zip:

Save Farm

List of Farms:

--

Done Adding Farms

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[Contact Information](#)

[Link to Historical Data](#)

[Enter Farm Information](#)

[Enter Pump/Well Information](#)

1

2

3

4

You have successfully added information about your farm(s). Please provide information about the pumps located at the farm(s) using the forms below. All the fields with * are required. If you make a mistake on this page, edits and deletions can be made at the end of this initial data gathering.

Pump Information


*Farm Name:

*Pump Name:


*County:

*Township:

*Capacity: GPM

WWATID 

*Source:

Pump Location: (type below or use the map at right) 

Dec. Degrees:

Deg. Min. Sec.:

Latitude (Y):

Longitude (X):

Save Pump

Done Adding Pumps

List of Pumps:

Map

Road Aerial Hybrid

300 miles

bing

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Expand Map Get Lat/Long

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Farm Information

Farms:

<input type="checkbox"/> Farm 1	Farm Name:	<input type="text" value="Farm 1"/>
<input type="checkbox"/> Farm 2	Street Address:	<input type="text" value="1234 Main St"/>
	City:	<input type="text" value="Anytown"/>
	State:	<input type="text" value="Michigan"/>
	Zip:	<input type="text" value="48555"/>

Map



Pump Information (for farm Farm 1)

Pumps:

<input type="checkbox"/>	Pump Name:	<input type="text"/>	Location (type in below or use Map above) ?
	County:	<input type="text"/>	Dec. Degrees: <input type="text"/>
	Township:	<input type="text"/>	Deg. Min. <input type="text"/>
	Capacity: ?	<input type="text"/> GPM	Sec.: <input type="text"/>
	Source Code:	<input type="text" value="Ground Water"/>	Latitude (Y): <input type="text"/>
	WWAT ID: ?	<input type="text"/>	Longitude (X): <input type="text"/>

Pump: Reporting Year:

*Pump Status:

Water Volume

Report by: Gallons Acre Inches

Jan:	<input type="text"/>	gallons
Feb:	<input type="text"/>	gallons
Mar:	<input type="text"/>	gallons
Apr:	<input type="text"/>	gallons
May:	<input type="text"/>	gallons
Jun:	<input type="text"/>	gallons
Jul:	<input type="text"/>	gallons
Aug:	<input type="text"/>	gallons
Sep:	<input type="text"/>	gallons
Oct:	<input type="text"/>	gallons
Nov:	<input type="text"/>	gallons
Dec:	<input type="text"/>	gallons

Water Use

	Use	Acreage
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Pump Information (for farm *Go To Farm*)

Pumps:
 Jake 5
 Add New Pump

Pump Name:
 County:
 Township:
 Capacity: GPM
 Source Code:
 WWAT ID:

Location (type in below or use Map above) ?
 Dec. Degrees:
 Deg. Min. Sec.:
 Deg. Min. Dec.:
 Latitude (Y):
 Longitude (X):

Pump: **Jake 5** Reporting Year:

*2012 Pump Status:

Water Volume

Report by: Gallons Acre Inches (total irrigated acres)

Jan: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
Feb: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
Mar: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
Apr: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
May: Acres:	<input type="text" value="160"/>	Inches:	<input type="text" value=".5"/>	2,172,343 gallons
Jun: Acres:	<input type="text" value="160"/>	Inches:	<input type="text" value="1"/>	4,344,686 gallons
Jul: Acres:	<input type="text" value="160"/>	Inches:	<input type="text" value="3"/>	13,034,057 gallons
Aug: Acres:	<input type="text" value="160"/>	Inches:	<input type="text" value="1"/>	4,344,686 gallons
Sep: Acres:	<input type="text" value="160"/>	Inches:	<input type="text" value=".5"/>	2,172,343 gallons
Oct: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
Nov: Acres:	<input type="text"/>	Inches:	<input type="text"/>	
Dec: Acres:	<input type="text"/>	Inches:	<input type="text"/>	

Water Use

Use	Acreage*
-Corn, seed <input type="text" value="140"/>	140
-Soybeans <input type="text" value="20"/>	20
<input type="text"/>	
<input type="text"/>	
<input type="text"/>	

* Acreage is only required for irrigation uses.

Inches for May acres must be numeric

Pumps:
Jake 5

Pump Name:
County:
Township:
Capacity: GPM
Source Code:
WWAT ID:

Location (type in below or use Map above) ?
Dec. Degrees:
Deg. Min. Sec.:
Deg. Min. Dec.:
Latitude (Y):
Longitude (X):

Pump: **Jake 5** Reporting Year:

*2012 Pump Status:

Water Volume

Report by:

Jan:	<input type="text"/>
Feb:	<input type="text"/>
Mar:	<input type="text"/>
Apr:	<input type="text"/>
May:	<input type="text"/>
Jun:	<input type="text"/>
Jul:	<input type="text" value="13,634,657"/> gallons
Aug:	<input type="text" value="4,344,686"/> gallons
Sep:	<input type="text" value="4,344,686"/> gallons
Oct:	<input type="text" value="0"/> gallons
Nov:	<input type="text" value="0"/> gallons
Dec:	<input type="text" value="0"/> gallons

You are almost done with providing the necessary information for reporting **2012** water use.
The last step is to specify conservation practices you used on your farm(s) in **2012**.
Please click the button below to review and select the applicable practices.
Note: if you did not use any conservation practices this year, click on the button below, leave the selections blank, and save.

2010 WATER USES AND CONSERVATION PRACTICES
(Submitted in accordance with P. A. 451 of 1994, MCL 324.32708)

Conservation Practices Implemented

The Water Use Reporting Law requires farms reporting their water use to the MDA to include applicable water conservation practices, and an implementation plan for those practices. Please check all boxes that represent conservation practices used on your farm. The practices listed are found in the Generally Accepted Agricultural Management Practices (GAAMPS) for Irrigation Water Use. For more information, please visit <http://michigan.gov/mda>. Click on Farming; next, click on Environment; and then click on GAAMPs.

Reporting Year: 2012

System Management

- Determine all water applications accurately
- Monitor pumping plant efficiency
- Evaluate the irrigation system uniformity
- Maintain the irrigation system in good working condition
- Operate sprinkler systems to minimize drift and off-target application
- Ensure sprinkler nozzle/drip applicator flow rates are matched to the infiltration rate of the soil

Record Keeping

- For each crop irrigated, keep records on the crop type and location
- Keep records on the source of the water used
- Record date and amount of each irrigation water application
- Keep records on all system inspections and repairs that influence uniformity and leaks
- Regularly calibrate fertigation and chemigation equipment, if used, and maintain records
- Keep records of the results each time the sprinkler system uniformity is evaluated

Irrigation Scheduling

Pumps:

Jake 5

Add New Pump

Pump Name: Jake 5

County: Saint Joseph

Township: Mendon Township

Capacity: 800 GPM

Source Code: Ground Water

WWAT ID:

Location (type in below or use Map above) ?

Dec. Degrees:

Deg. Min. Sec.:

Deg. Min. Dec.:

Latitude (Y): 42.043277

Longitude (X): -85.411036

Previous Pump

Next Pump

Delete Pump

Save Pump

Pump: *Jake 5*

***2012 Pump**

Water Use

Report by:

Jan:

Feb:

Mar:

Apr:

May:

Jun:

Jul:

Aug:

Sep:

Oct:

Nov:

Dec:

You are about to submit your Water Use Reporting for 2012. Once you submit, you will not be able to go back and edit use information for 2012. You will be able to add farms and pumps to your profile, but you will not be able to report use for those pumps for 2012. If you have more farms and/or pumps to report on, click 'Cancel Report Submission' below and add them to your profile.

Click the link below to view all the information that will be submitted:

[2012 water use report \(pending submission\)](#)

NOTE: If the values in the report do not match what you input on the underlying forms, it is likely that those values have not been saved on the system. Click 'No, cancel submission' below and press 'Save' where appropriate. Then review the report again.

* I have reviewed applicable water use conservation measures; and, to the best of my knowledge, all of the information I am submitting in this water use report is true and accurate.

Would you like to submit the report?

No, Cancel Report Submission

Yes, Submit Report

0 gallons

0 gallons

0 gallons

Save 2012 use for pump Jake 5

View Report

Submit Report

Pumps:
 Jake 5

Pump Name:
 County:
 Township:
 Capacity: GPM
 Source Code:
 WWAT ID:

Location (type in below or use Map above)
 Dec. Degrees:
 Deg. Min. Sec.:
 Deg. Min. Dec.:
 Latitude (Y):
 Longitude (X):

Pump: **Jake 5** Reporting Year:

*2012 Pump Status:

Water Volume

Report by: Gallons

Jan:	
Feb:	
Mar:	
Apr:	
May:	4,344,686
Jun:	4,344,686
Jul:	13,034,000
Aug:	4,344,686
Sep:	4,344,686
Oct:	0
Nov:	0
Dec:	0

Acreage*	140
	20

Congratulations, you have submitted your water use report for 2012.

You can print a report for your records or logoff the system.

You may log-in at any time to review your records and access this report or reports from previous years.

If you believe you submitted this report in error, or have questions or concerns, please contact Abigail Eaton at MDARD (eatona@michigan.gov).

Report submitted on
 Monday, November 19, 2012 at 6:52 PM.

Questions?

Abigail Eaton

eatona@michigan.gov

517-241-3933