



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF AGRICULTURE
LANSING

DON KOIVISTO
DIRECTOR

December 3, 2007

Dear Agricultural Water User:

This is your copy of Michigan's 2007 Water Use Conservation Plan form for agricultural operations, along with important instructions that will ensure you comply with Michigan's Water Use Reporting Law. There is no fee for reporting this information to the Michigan Department of Agriculture (MDA). You are, however, required by law to report this information to the state if you meet the reporting criteria. We have included a list of frequently asked questions and a postage-paid return envelope. **The completed form is due no later than *April 1, 2008*.**

Agricultural operations with the capacity to withdraw over 100,000 gallons per day (70 gallons per minute) are required to report to the state the water withdrawals and water conservation practices used on their farms. This was mandated by Public Act 148 of 2003, now Part 327 of P.A. 451 of 1994, the Natural Resources and Environmental Protection Act. The MDA is required to combine all reported agricultural water withdrawal information at the township level and report the township totals to the Michigan Department of Environmental Quality (MDEQ).

If you meet water use reporting capacity requirements, but you withdraw water for a commercial purpose other than a farm operation, you must report your water use to the MDEQ. For the purposes of water use reporting to the MDA, farm operations include the commercial production, harvest, and storage of farm products, such as grain and feed crops, forage and sod crops, dairy and livestock, poultry, fruit and vegetables, fish, and nursery stock. Facilities that process agricultural products, and landscaping businesses that do not raise their own horticultural stock, are *not* considered farm operations for the purposes of water use reporting and should report to MDEQ. Private well water used for domestic purposes does not need to be reported.

If you have any questions, or need assistance, please call Abby Eaton at 517-241-3933, or visit the MDA water-use Web page at <http://www.michigan.gov/mdamichiganwateruse>. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Gordon Wenk".

Gordon Wenk, Director
Environmental Stewardship Division

MICHIGAN DEPARTMENT OF AGRICULTURE WATER USE REPORTING

FREQUENTLY ASKED QUESTIONS

All information in this document has been reviewed and is correct as of December 3, 2007

1. Who do I report my water use to?

If you are an agricultural producer, you must report your water use to the MDA. All others that meet the reporting requirements must report their water use to the Michigan Department of Environmental Quality (MDEQ).

2. How much do I have to pay when I submit my water use reports?

There are no fees for reporting agricultural water use to the MDA. The water must be used to produce field crops, dairy products, horticultural crops, nursery, livestock, poultry, trees, turf, aquaculture, and so forth.

3. What happens to the information I report to the Michigan Department of Agriculture?

Agricultural water use information reported to the MDA is combined with other agricultural water use information from the same township. The total water withdrawn for agricultural production, on a township level, is then reported by the MDA to the MDEQ. The latitude and longitude of water withdrawals will also be reported to the MDEQ, but the data will not be disclosed to the public. The remaining information is not released to the MDEQ, but is retained by the MDA. It may be combined with other data for reports about agricultural water use.

4. Is my water use report information subject to the Freedom of Information Act?

Information about the amount of water used, the latitude and longitude of the water withdrawal, the system capacity, and descriptions of system capacity are exempt from the Freedom of Information Act, *unless the MDEQ determines that the withdrawal is causing an adverse resource impact*. The determination must be based on reasonable, scientifically-based evidence. Other information reported is subject to the Freedom of Information Act.

5. Are there penalties for not reporting water use as required by law?

Yes. The law states that 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.

6. Do all water users have to report?

Yes. After the passage of legislation in 1990, water use reporting was phased in over several years for public water supply systems, industrial self-supply systems (ex: GM's water system), golf courses, power plants, and other water users. They are required to report their water use to the MDEQ if they have the total capacity to withdraw 100,000 gallons per day for 30 days.

7. Do I have to get a permit to use water for irrigation or other agricultural purposes?

The law states that anyone who develops *new* or *increased* withdrawal capacity of 2 million gallons of water a day from the waters of the state, other than the Great Lakes and their connecting waters, to supply a common distribution system, must obtain a water withdrawal permit before beginning the withdrawal. This is approximately 1,400 gallons/minute. Anyone who develops *new* or *increased* withdrawal capacity of 5 million gallons of water a day (approximately 3,500 gallons/minute) from the Great Lakes and their connecting waters to supply a common distribution system must obtain a water withdrawal permit before beginning the withdrawal.

However, the law also states that anyone using no more than 180 million gallons of water from the waters of the state through a common distribution system, equal to 6,629 acre-inches of water, in any consecutive 90 day period, does *not* require a water withdrawal permit. This is an *average* of no more than 2 million gallons/day in any 90 day consecutive period.

8. What is a common distribution system?

A common distribution system can be considered as a system connected from the water source(s) to the end use(s). In the case of an irrigation system, one example would be one or more wells connected or linked to each other and to one or more center pivot systems. Two separate wells, not linked to each other, each connected to a separate center pivot, would be considered different distribution systems.

9. I have two wells that can each pump 40 gallons a minute, but I never use them at the same time, or for more than a few hours a day. Do I have to report my water use?

Whether or not you are required by law to report your water use is based on the *capacity*, or the ability, to pump water. In this situation, if the wells can be run continuously without running out of water, then the property owner would be required to report. The *amount* he or she would report would be the actual amount of water withdrawn and used.

10. If I'm pumping out of a pond that is fed by a spring, do I need to report?

If the combined capacity of all pumps equals 100,000 gallons per day (70 gallons per minute) or more, for 30 days, regardless of water sources, you are required to report your water use.

11. I pump water from a well with less than 100,000 gallons per day (gpd) capacity into a pond. Then I irrigate from the pond with a pump that has a capacity greater than 100,000 gpd. Do I have to report?

If the combined capacity of all pumps equals 100,000 gallons per day (70 gallons per minute) or more, for 30 days, regardless of water sources, you are required to report your water use.

12. I pump water from a well to fill a pond, and then pump from the pond to irrigate. How do I report my water use?

The water use reporting legislation defines a withdrawal as the removal of water from its source. For this reason, people that pump from a well to a pond or other storage system and then withdraw the water for an agricultural use should report the amount of water that is pumped from the pond. (Observations of these systems suggest that the majority of the water being used is ground water from the well; however, the water withdrawn from the pond is a combination of ground water and surface water.)

13. Should I report my water use in acre-inches or in gallons?

The law states that agricultural water users can report in acre-inches or gallons. An acre-inch is the amount of water it takes to cover one acre with an inch of water. One acre-inch equals 27,154 gallons. It's recommended that those reporting consider whether or not the amount reported makes sense. For example, if reporting in gallons, divide the gallons reported by 27,154 to get the total acre-inches reported, and then divide that figure by the total acres irrigated to estimate how many inches of water were applied to the acreage reported.

14. If my irrigation/barn well supplies my residence, do I need to report my *household* use?

No.

15. I own several farms in different townships/counties. Should I combine them or report them separately?

The reporting form is largely concerned with the location of the pumps and wells used for water withdrawals. Operations with separate corporate identities, or under separate management, or that are otherwise distinct farm operations, should report separately. A single farm operation, under one management, with fields in several townships, or even several counties in some cases, could combine the reports. However, each pump will still have to be identified and reported.

16. Are livestock and poultry operations required to report?

If the combined capacity of all pumps equals 100,000 gallons per day (70 gallons per minute) or more, for 30 days, you are required to report your water use.

17. Who should report water use on rented farm land?

Water use reporting is ultimately the responsibility of the landowner. The MDA suggests that the person who is renting the land, and withdrawing ground water or surface water, report the water use. They should gather the data, provide the information to the land owner, report it, and keep a copy for their records.

18. Do I have to report the static water level of my wells?

Changes in the law passed in 2006 state that the static water level should be reported if practicable, that is, if it can be determined by a reasonable amount of effort. It is no longer a requirement.

2007 AGRICULTURAL WATER CONSERVATION PLAN INSTRUCTIONS

1. **Farm information** – please include the farm name, manager/owner, telephone number, mailing address, city, state and zip code. Mailing address information is for the main farm operation.
2. **Pump information** – please complete a section for each pump you own or operate. When reporting, do *not* report pumps that use municipal/public water supplies. If you have more than one pump, please provide the data for all pumps. If you have more than 5 pumps, please complete additional forms (by copying the second page of the form) until you have reported all pumps.
 - A. **Pump identification, location, and capacity** - provide the name or number you use to identify the pump (i.e., north field, No. 13, etc.), the county, and the township or village the pump is in. **Please use the same Pump name/ ID from year to year! Be sure to enter the rated pump capacity for all pumps.** Attach a well log to the report for each well covered by the report, if available. You should only supply a well log for a particular well once.
 - B. **Water source** – for each pump, indicate whether the pump is pumping groundwater (i.e., a well), surface water (i.e., natural pond, river, lake, etc.), or pond water that is supplied by a well. Report static water level if available. *Static water level* is the level of water in a well when no water is being pumped. It is measured as the distance from the ground surface to the water level after the well pump has been shut down over night. Enter the latitude and longitude for all wells.
 - C. **Water uses** – indicate how the water identified in "B" is being used.

If it is being used for irrigation, in C-1, write in the crop name and the acres of that crop being irrigated by the pump identified in "A". If more than one crop is under irrigation and being supplied by the pump identified in "A", then use the additional boxes (C-2, C-3). Examples include: seed corn, dry beans, wheat, oats, hay, alfalfa, sugar beets, tree fruit, berries, sod, mint, mustard, etc. Please do *not* count the same irrigated acreage more than once for the year, no matter how many crops are grown on it.

If the water is being used for other purposes, then write that purpose in the "other use" line. Other uses include, but are not limited to:

Beef cattle and calves	Aquaculture
Dairy cattle and calves	Equipment washing
Chickens	Building sanitation
Turkeys	Crop washing
Hogs and pigs	Greenhouse crops
Sheep and lambs	Field nursery crops
Fruit crop cooling	Container nursery crop

- D. **Water use by month** - complete this section by indicating how much water was pumped by month in calendar year 2007. Please report the amount pumped in either acre-inches or gallons, and indicate which unit is used. Include zeros for months when no water is used. To double check your volumes, divide total gallons by 27,154 to determine total acre-inches. It is unusual for irrigators in Michigan to apply more than 12 inches of water per acre during the irrigation season (i.e., 12 acre-inches for 1 acre of land, 1200 acre-inches for 100 irrigated acres). Add the monthly information together to provide an annual total of water supplied by the pump indicated in "A".

Conservation practices implemented – please check all boxes on the back of this page that represent water conservation practices used within your operation. The completed checklist represents your water use conservation plan, and must be submitted with your water use reporting form.

3. **Deadline** - please complete and return this form for all your pumps by **April 1, 2008**. A completed 2007 water use conservation plan will include:
 - A. Front page with **farm information, signed and dated**.
 - B. Complete **pump information** for every pump or well you own or operate that supplies water for agricultural operations. Copy the second page of the form to use if you have more than 5 pumps.
 - C. The check sheet for **water conservation practices implemented** within your operation.

For more information on agricultural water use reporting requirements,
call Abigail Eaton, Michigan Department of Agriculture, at 517-241-3933.

2007 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*.

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

- Know the available soil water for each unit scheduled
- Know the depth of rooting for each crop irrigated
- Use container capacity in scheduling irrigation for container grown nursery or greenhouse crops
- Know the allowable soil moisture depletion at each stage of crop growth
- Measure, estimate, or use published evapotranspiration data to determine crop water use
- Measure rainfall in each field irrigated and adjust irrigation schedule/amount accordingly

Application Practices

- Choose irrigation application amounts that will avoid surface runoff under sprinkler irrigation
- In the case of container irrigation, runoff is managed through recycling or proper disposal systems
- Assure that sprinkler application rates are below the soil infiltration rate
- When irrigation is used, split nitrogen fertilizer applications
- Incorporate appropriate backflow-prevention safety devices if a chemigation/fertigation system is used
- Avoid applying more water than needed to replace the soil/media moisture deficit

2007 WATER USE CONSERVATION PLAN

Required under Part 327 of P.A. 451 of 1994, as amended, MCL 324.32708
Due by April 1, 2008. 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
 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	

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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: _____

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. _____				
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	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			
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Jan	Feb	Mar	Apr	May	June	ANNUAL Total:
July	Aug	Sept	Oct	Nov	Dec	

Signature: _____ Date: _____