

WATER WITHDRAWAL REGISTRATION INSTRUCTIONS

State of Ohio Department of Natural Resources Division of Water

WHY SHOULD I REGISTER?

The information you provide through the water withdrawal registration program is of great importance to Ohio Department of Natural Resources' (ODNR) water resource management efforts. Water is one of our most basic and precious natural resources. The state's economic development will continue to place increased demands on this plentiful resource. Water resource planners need reliable information to be able to plan for the future.

Analysis of the state's naturally occurring water supply is conducted primarily by ODNR. Community recommendations for long-term water development are presented in regional water plans. Information from the water withdrawal registration program will help determine water use in the various regions of the state and will enable the state to determine the availability of water in a region.

A knowledge of regional water availability will benefit all water withdrawers. New businesses and industries will be able to determine more accurately if their water needs can be met at a particular location based on the amount of ground water and surface water available and the amount of water withdrawn by users in the area. As a result, water supplies of existing businesses and industries will less likely be interrupted or threatened by increased demands on water resources that are already meeting optimal demands.

The drought of 1988 raised many concerns about water use and management in Ohio. Many communities and businesses sought alternative water sources to supplement depleted supplies. The state did not have adequate information to assist everyone seeking additional water. Without the knowledge of water use in an area, state officials risked referring water withdrawers to a source of water already meeting maximum demands. Future droughts will be dealt with in Ohio by a state government better prepared to meet the needs of all Ohioans.

Water withdrawal registration will also help protect the quality of our water resource. Siting studies for landfills and other potential threats to water quality are greatly enhanced when accurate water withdrawal information is available.

Registration could benefit you in a conflict over water rights. When the Division of Water becomes involved in a water withdrawal conflict, the information obtained through the registration program may be used. If a dispute over water rights is decided in a court of law, the date of registration under Section 1521.16 of the Ohio Revised Code may be used to determine which facility was withdrawing water first. Thus, it is important to register as early as possible since the court could use this information to assign a higher priority of use to the facility with the earlier registration date.

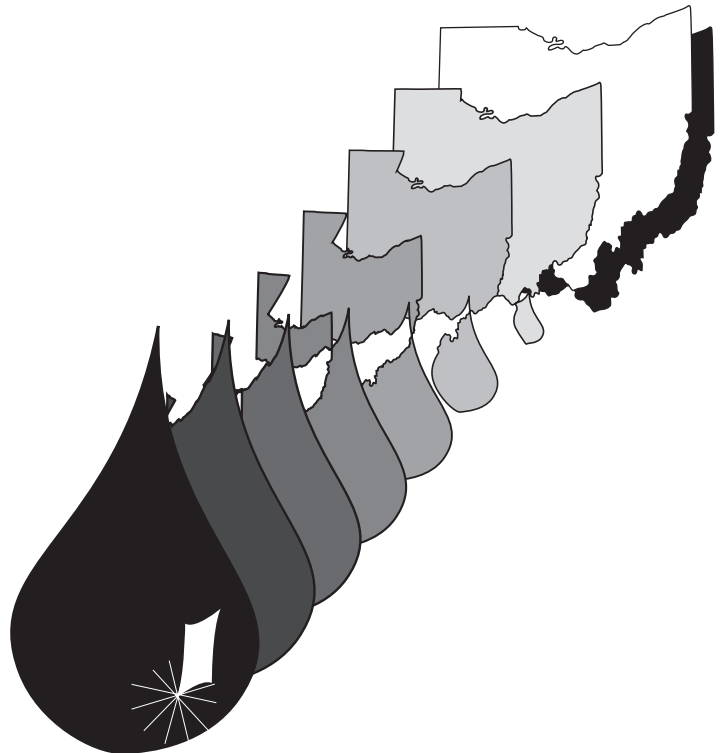
There is another important reason to register your water withdrawal with the Division of Water. **IT'S THE LAW!** Failure to register water withdrawal pursuant to Section 1521.16 of the Ohio Revised Code is punishable by a fine and imprisonment.

WHO MUST REGISTER?

Section 1521.16 of the Ohio Revised Code requires any owner of a facility, or combination of facilities, with the capacity to withdraw more than 100,000 gallons of water daily (GPD) to register such facilities with the Ohio Department of Natural Resources, Division of Water. Portable equipment, such as some agricultural irrigation equipment, must be registered if its capacity exceeds 100,000 GPD capacity. The water quantity conversions at the top of page one on the registration form will help determine if a facility must register. 100,000 gallons per day (GPD) = 0.1 million gallons per day (MGD) = 4200 gallons per hour (GPH) = 70 gallons per minute (GPM).

For example: An industry withdraws water from a river and from a well. The river intake has the capacity to withdraw 35 gallons per minute (GPM). The well has the capacity to pump 50 GPM. The total combined withdrawal capacity of the two water sources is 85 GPM. The water quantity conversions on page one indicate that a withdrawal of 70 GPM equals 100,000 gallons per day (GPD). Therefore, 85 gallons per minute (GPM) is greater than 100,000 gallons per day (GPD) (70 gallons per minute). The industry in this example would be required to register with the Division of Water.

Only water users that are self-supplied are required to register. Facilities purchasing water from water suppliers do not have to register. The instructions in this booklet are presented in the same order as the corresponding sections in the registration form.





**STATE OF OHIO
WATER WITHDRAWAL
FACILITY REGISTRATION**

SEND TO: OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER
WATER RESOURCES DEVELOPMENT SECTION
2045 MORSE ROAD, BLD. B-2
COLUMBUS, OHIO 43229-6693
(614) 265-6739

AUTHORITY: Ohio Revised Code Section 1521.16 requires that any owner of a facility, or combination of facilities, with the capacity to withdraw more than 100,000 gallons of water daily, register such facilities with the Ohio Department of Natural Resources, Division of Water.

100,000 Gallons Per Day (GPD) = 0.1 Million Gallons Per Day (MGD) = 4200 Gallons Per Hour (GPH) = 70 Gallons Per Minute (GPM)

Detailed directions are on a separate instruction sheet. Please type or print the following information:

1. OWNER OF WATER WITHDRAWAL FACILITY

Owner's Name _____ Contact Person (If other than owner) _____

Company Name _____ Company Name _____

Mailing Address _____ Mailing Address _____

City, County, State, Zip _____ City, County, State, Zip _____

SIC (Standard Industrial Classification)-4 digit _____ Phone (____) _____

The annual withdrawal report form should be sent to: Owner Contact person (Check one)

2. WATER USE

Estimate percentage of the total water use from all sources for each type of use for both ground water and surface water. Total water use for both ground and surface water = 100%; GW = Ground water; SW = Surface water

WATER USE			WATER USE		
	GW%	SW%		GW%	SW%
Public Water Supply	_____	_____	Mineral Extraction	_____	_____
Community	_____	_____	Coal	_____	_____
Non-community (OEPA # _____)	_____	_____	Oil	_____	_____
Agricultural	_____	_____	Salt	_____	_____
Livestock Watering	_____	_____	Sand and Gravel	_____	_____
Crop Irrigation	_____	_____	Limestone	_____	_____
Nursery/Turf/Landscaping	_____	_____	Other _____	_____	_____
Industrial	_____	_____	(Please specify)	_____	_____
Process Water	_____	_____	Miscellaneous	_____	_____
Cooling Water	_____	_____	Recreation/Amusement	_____	_____
Power Generation	_____	_____	Water Quality Remediation	_____	_____
Nuclear	_____	_____	Heating/Cooling	_____	_____
Thermoelectric	_____	_____	Domestic	_____	_____
Hydroelectric	_____	_____	Fish Hatchery	_____	_____
			Dewatering	_____	_____
			Golf Course Irrigation	_____	_____
			Other _____	_____	_____
			(Please specify)	_____	_____

3. WATER WITHDRAWAL FACILITY CAPACITY

Total withdrawal capacity of the facility: _____ GPD or MGD (Circle one)

NOTE: Total withdrawal capacity is the sum of the withdrawal capacity for all wells and surface water intakes combined.

Was construction of this facility completed before January 1, 1990? Yes No

Name of facility _____

4. SUPPLY SOURCES

GROUND-WATER SOURCES	SURFACE-WATER SOURCES
Total number of wells _____	Total number of surface-water intakes _____
Total withdrawal capacity of all wells _____ GPD or MGD (Circle one)	Total withdrawal capacity of all intakes _____ GPD or MGD (Circle one)

DNR 7804 (01/90)

INSTRUCTIONS FOR REGISTERING

1. OWNER OF WATER WITHDRAWAL FACILITY

Provide the name of the owner of the facility. In the case of a public water supply system or other government operated facility, furnish the name of the municipality or agency. If there is an employee or representative of the owner who should be contacted regarding the information on the registration form, his or her name, address, and phone number should be furnished in the space marked "Contact Person."

S.I.C. (Standard Industrial Classification) 4 digit: The S.I.C. system was developed by the federal government for use in classifying establishments by the type of activity in which engaged. Leave space blank if the number is not known, or if not appropriate.

2. WATER USE

Supply sources are divided into 2 types: ground water and surface water. Ground-water sources include wells. Surface-water sources include lakes, reservoirs, ponds, rivers and streams. Water use in this section is listed as a percent. Total water use from all sources must add up to 100%.

NOTE: Dewatering for quarrying operations should be considered ground-water withdrawal if the quarry is pumped regularly. If the quarry only needs to be pumped after precipitation, dewatering should be considered surface-water withdrawal. The applicant must determine if dewatering is one or the other, not both.

Example:
An agricultural operation withdraws 25,000 GPD from a well to water livestock, 80,000 GPD from a stream for crop irrigation, and 20,000 GPD from a stream for a nursery facility. The percent of water used for a particular agricultural purpose is equal to the amount of water used for the purpose divided by the total water used times 100.

Amount of water used for purpose

Total amount of water used

x 100 = percentage

Thus, livestock equals:

$$\frac{25,000}{(25,000 + 80,000 + 20,000)} \times 100 = \text{percentage}$$

$$.20 \times 100 = 20 \text{ percent livestock use}$$

The percent for each purpose is listed on the registration form as follows:

	GW%	SW%
Agricultural livestock watering	<u>20</u>	_____
crop irrigation	_____	<u>64</u>
nursery/turf/landscaping	_____	<u>16</u>

The sum for all water use must add up to 100 percent

$$(20 + 64 + 16 = 100\%)$$

3. WATER WITHDRAWAL FACILITY CAPACITY

Indicate the total amount of water that can be withdrawn by all wells and surface-water intakes. This is generally equal to the sum of the pump capacities of all wells plus the sum of the intake or pump capacities of all surface-water intakes.

$$(\text{Sum of well pump capacities}) + (\text{Sum of surface-water intake capacities}) = \text{total amount of water withdrawal capacity}$$

Indicate the withdrawal capacity in gallons per day (GPD) or millions of gallons per day (MGD).

Suggested Methods of Measuring Withdrawal Capacity:

1. Readings from meters indicating water withdrawal rates during periods of maximum pumpage.
2. Pump capacity as listed on the pump or in a pump's service manual.
3. Direct measurement of amount applied: For irrigation operations, it may be possible to set up a monitoring system similar to rain gages to measure the amounts of water applied at maximum pumpage. The amount of water applied times the number of acres irrigated would equal the amount of water withdrawn. This amount could be converted to gallons per day (GPD) or gallons per minute (GPM).
4. Other methods: There may be other acceptable methods of determining withdrawal capacity. The Division of Water will consider other methods if: 1) an explanation or description of the method is provided, and 2) a relationship can be established between the method of calculation and the withdrawal capacity.

If a system is a (closed) recycling system, only those facilities that are involved with withdrawal for makeup water must be registered. Those facilities that are part of the closed recycling system but are not associated with makeup withdrawal do not have to be registered.

4. SUPPLY SOURCES

Ground-Water Sources (wells)

List the total number of wells and the total withdrawal capacity of all wells. The total withdrawal capacity of all wells is the sum of the well withdrawal capacities. Circle the appropriate conversion unit.

Surface-Water Sources (intakes)

List the total number of intakes and the total withdrawal capacity of all intakes. The total withdrawal capacity of all intakes can be determined by summing the intake withdrawal capacities. Circle the appropriate conversion unit.

FOR EACH WELL PROVIDE THE FOLLOWING:	FOR EACH SURFACE-WATER INTAKE PROVIDE THE FOLLOWING:
<p>A. Owner's well number _____ Well capacity _____ GPD or MGD (Circle one) Well log number (or copy of well log) _____ Well depth _____ (ft) Well diameter _____ (in)</p> <p><u>AQUIFER UTILIZED (Check one)</u></p> <input type="checkbox"/> Sand <input type="checkbox"/> Shale (Sh) <input type="checkbox"/> Sandstone (SS) <input type="checkbox"/> Interbedded SS, LS, Sh <input type="checkbox"/> Sand and gravel <input type="checkbox"/> Underground mine <input type="checkbox"/> Limestone (LS) /Dolomite <input type="checkbox"/> Other _____ <p><u>LOCATION OF WELL</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of well location.	<p>A. Owner's intake number _____ Intake capacity _____ GPD or MGD (Circle one) Name of body of water _____</p> <p><u>SOURCE UTILIZED (Check one)</u></p> <input type="checkbox"/> River, stream, or drainage ditch <input type="checkbox"/> Lake, pond, quarry, or reservoir <input type="checkbox"/> Other _____ <p><u>LOCATION OF INTAKE</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of intake location.
<p>B. Owner's well number _____ Well capacity _____ GPD or MGD (Circle one) Well log number (or copy of well log) _____ Well depth _____ (ft) Well diameter _____ (in)</p> <p><u>AQUIFER UTILIZED (Check one)</u></p> <input type="checkbox"/> Sand <input type="checkbox"/> Shale (Sh) <input type="checkbox"/> Sandstone (SS) <input type="checkbox"/> Interbedded SS, LS, Sh <input type="checkbox"/> Sand and gravel <input type="checkbox"/> Underground mine <input type="checkbox"/> Limestone (LS) /Dolomite <input type="checkbox"/> Other _____ <p><u>LOCATION OF WELL</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of well location.	<p>B. Owner's intake number _____ Intake capacity _____ GPD or MGD (Circle one) Name of body of water _____</p> <p><u>SOURCE UTILIZED (Check one)</u></p> <input type="checkbox"/> River, stream, or drainage ditch <input type="checkbox"/> Lake, pond, quarry, or reservoir <input type="checkbox"/> Other _____ <p><u>LOCATION OF INTAKE</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of intake location.
<p>C. Owner's well number _____ Well capacity _____ GPD or MGD (Circle one) Well log number (or copy of well log) _____ Well depth _____ (ft) Well diameter _____ (in)</p> <p><u>AQUIFER UTILIZED (Check one)</u></p> <input type="checkbox"/> Sand <input type="checkbox"/> Shale (Sh) <input type="checkbox"/> Sandstone (SS) <input type="checkbox"/> Interbedded SS, LS, Sh <input type="checkbox"/> Sand and gravel <input type="checkbox"/> Underground mine <input type="checkbox"/> Limestone (LS) /Dolomite <input type="checkbox"/> Other _____ <p><u>LOCATION OF WELL</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of well location. <p style="text-align: center;">(Note: Use additional sheets if necessary)</p>	<p>C. Owner's intake number _____ Intake capacity _____ GPD or MGD (Circle one) Name of body of water _____</p> <p><u>SOURCE UTILIZED (Check one)</u></p> <input type="checkbox"/> River, stream, or drainage ditch <input type="checkbox"/> Lake, pond, quarry, or reservoir <input type="checkbox"/> Other _____ <p><u>LOCATION OF INTAKE</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of intake location. <p style="text-align: center;">(Note: Use additional sheets if necessary)</p>

For each well provide the following:

- Owner's well number: This is the number assigned to a well by the owner or operator of the well.
- Well capacity: You may use pump capacity (which may appear on the pump or in the pump service manual). Circle the appropriate conversion unit.
- Well log number: Whenever a well is drilled, the driller is required to provide a well log to the County Board of Health and ODNR. Well logs are often given to the buyer of property during a land transaction. Please provide this number if known. If the well log was properly filed, you can contact the Ground Water Resources Section of the Division of Water at 614/265-6739 to obtain your well log number. (Be prepared to provide the following information: county, township and street address for the well location).
- Well depth and well diameter: Record the well depth (in feet) and the well diameter (in inches) in the spaces provided.
- Aquifer utilized: Check the type of aquifer utilized by the well. An aquifer is a geologic formation that has the ability to receive, store or transmit water.
- Location of well: Record the county, township, section and nearest city/town nearest the well location. Use names of roads, buildings or other distinctive landmarks in your description of the well location.

For each surface water intake provide the following:

- Owner's intake number: This is the number assigned to an intake by the owner or operator.
- Intake capacity: This may be limited by pump capacity or diameter of the intake pipe(s). Pump capacity may appear on the pump or in a service manual. Pipe capacity may appear in design drawings for the intake structure. Circle the appropriate conversion unit.
- Name of body of water: Record the name of the body of water
- Source utilized: If source differs from those listed, check "other" and state the source.
- Location of intake: Record the county, township, section and nearest city/town to the intake. Use names of roads, buildings or other distinctive landmarks in your description of the intake location.

5. LOCATION OF WATER USE

Record the state, county, township and section of the water use location. Use names of roads, buildings or other distinctive landmarks in your description of the water use location.

6. TYPE AND LOCATION OF DISCHARGE POINTS

Discharge water is that portion of water withdrawn which is not consumed or lost to evapotranspiration during use and is returned to some source. Water used for crop irrigation is presumed to be 100% consumed. It is not considered to involve a discharge or return of water to some source.

Estimate the percentage of discharged water entering specific sources by dividing the discharge to a specific area by the total amount of water discharges and multiplying by 100. When selecting the specific source, please be sure to select the ultimate source where the discharge will end.

$$\frac{\text{Discharge to a specific area}}{\text{Total amount of water discharges}} \times 100 = \text{percentage}$$

Example: total daily discharge = 100,000 gallons; daily discharge to a lake = 10,000

$$\frac{10,000}{100,000} \times 100 = \text{percentage};$$

Thus, percent of discharge entering lake = 10 %

Location of Discharge Facility: Record the state, county, township and section of the discharge point location. Use names of roads, buildings or other distinctive landmarks in your written description of the water use location.

Supply Sources Continued:

<p>D. Owner's well number _____ Well capacity _____ GPD or MGD (Circle one) Well log number (or copy of well log) _____ Well depth _____ (ft) Well diameter _____ (in)</p> <p><u>AQUIFER UTILIZED (Check one)</u></p> <input type="checkbox"/> Sand <input type="checkbox"/> Shale (Sh) <input type="checkbox"/> Sandstone (SS) <input type="checkbox"/> Interbedded SS, LS, Sh <input type="checkbox"/> Sand and gravel <input type="checkbox"/> Underground mine <input type="checkbox"/> Limestone (LS) /Dolomite <input type="checkbox"/> Other _____ <p><u>LOCATION OF WELL</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of well location.	<p>D. Owner's intake number _____ Intake capacity _____ GPD or MGD (Circle one) Name of body of water _____</p> <p><u>SOURCE UTILIZED (Check one)</u></p> <input type="checkbox"/> River, stream, or drainage ditch <input type="checkbox"/> Lake, pond, quarry, or reservoir <input type="checkbox"/> Other _____ <p><u>LOCATION OF INTAKE</u></p> County _____ Township _____ Section _____ Nearest City or Town _____ Provide written description of intake location.
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5. LOCATION OF WATER USE

State _____ County _____ Township _____ Section _____

Provide written description of location of water use. If more than one water use location exists, attach separate sheets providing the above information for each.

6. TYPE AND LOCATION OF DISCHARGE POINTS

Estimate percentage of water discharged to the following:

___ Recharge Well	___ Land Application	___ Pond, Lake, or Reservoir Name _____
___ On Site Sewage Disposal	___ Recycling Basin	___ River, Stream, or Drainage Ditch Name _____
___ Ground-water Recharge Basin	___ Wetland	___ Other _____

(Please specify)

Location of Discharge Facility

State _____ County _____ Township _____ Section _____

Provide written description of location of discharge facility. If more than one point of discharge exists, attach separate sheets providing the above information for each.

Please complete a water withdrawal facility location sketch on page 4.

7. STATEMENT OF AFFIRMATION

I hereby certify that to the best of my knowledge the information submitted herein, is true, accurate and complete.

Owner or authorized representative's signature _____	Date _____
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WATER WITHDRAWAL FACILITY LOCATION SKETCH: Locate all wells, intake pipes, places of use, and discharge points with references to water sources, named roads, highways, buildings, or other distinctive landmarks. This section may be divided for additional maps or separate maps may be attached.

↑ N	FOR OFFICE USE ONLY:
	Date of Registration
	Basin
	Registration Number
	Latitude
	Longitude

4

7. STATEMENT OF AFFIRMATION

Please be sure to sign and date the registration form. All the information should be accurate to the best of your knowledge. If the forms are not complete, staff from the Division of Water will contact you for more information. The facility will not be considered registered until the form is complete. If you have any questions, contact the Division of Water at 614/265-6739. Send the registration form to:

The Ohio Department of Natural Resources
Division of Water
Water Resources Section
2045 Morse Road, Bldg. B-2
Columbus, Ohio 43229-6693

WATER WITHDRAWAL FACILITY SKETCH:

You may either draw or attach a map with facility locations marked.

Drawing the sketch:

- Include state, county, or township roads that surround the discharge point, well or intake location.
- If no roads exist close to the location, draw major streams, railroad tracks, township lines or county lines.
- Label distances from noted intersections.
- Use a symbol marking the location. For example, use "•" for a well and "x" for an intake.
- Show relationship of buildings and other notable structures.
- Please orient your sketch according to the north arrow that appears on the sheet.

County highway maps or U.S. Geologic Survey topographic maps may be useful guides for location sketches. County highway and topographic maps can be viewed at your local County Engineers Office. Topographic maps can also be purchased by contacting the Division of Geological Survey, Ohio Department of Natural Resources, 4383 Fountain Square Drive Bldg. B-1, Columbus, Ohio 43224, (614) 265-6608. The cost is \$3.39 per map (includes tax and shipping and handling).

Hints on using U.S. Geological Survey Topographic Maps:

- Find location of property on topographic map.
- Use proper map orientation; on most maps the top of the page is north, east is to the right, south at the bottom and west to the left.

**THANK YOU FOR SUPPORTING THIS IMPORTANT EFFORT.
YOUR INFORMATION IS GREATLY APPRECIATED.**