

Frequently Asked Questions about Aquatic Herbicide Use in Wisconsin

**Prepared by Wisconsin Dept. of Natural Resources, Dept. of Health Services and
Dept. of Agriculture, Trade, and Consumer Protection**

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Why are herbicides used in Wisconsin lakes and rivers?

Aquatic herbicides are used to reduce the abundance of invasive species to reduce spread to new water bodies, to help maintain a healthy native plant community that is beneficial for fish and other aquatic organisms, to improve navigational access to lakes and rivers and make boat navigation safer, and to control nuisance plant and algae growth that can pose a hazard to swimmers.

How is aquatic herbicide use regulated in Wisconsin?

In order to be used in Wisconsin, an aquatic herbicide must be all of the following:

- 1) Labeled and registered with U.S. EPA's office of Pesticide Programs;
- 2) Registered for sale and use by the Department of Agriculture, Trade, and Consumer Protection (DATCP);
- 3) Permitted by the Department of Natural Resources (DNR); and
- 4) Applied by a DATCP-certified and licensed applicator, with few exceptions.

Step 1) U.S. EPA's office of Pesticide Programs reviews the chemical and label.

Federal law requires herbicides to be registered with the Environmental Protection Agency (EPA) before they can be sold or used. The registration process determines potential risk to human health and the environment. The human health assessment includes sensitive groups such as infants, and risk is evaluated for both short-term and chronic effects. Ultimately, the EPA registers the herbicide if it determines that use of the pesticide will result in "no unreasonable adverse effects" as defined in federal law. This means that the benefits of using the pesticide according to the label outweigh the risks. Once an herbicide is registered, it is re-assessed by EPA every fifteen years.

Step 2) Herbicides must be registered by DATCP prior to sale or use in Wisconsin.

Most EPA-registered herbicide products are eligible to be registered for sale and use in Wisconsin by DATCP-licensed manufacturers and labelers. DATCP will not register an herbicide for use if it is prohibited for sale, use or distribution in Wisconsin, even if it is registered by EPA.

Step 3) DNR evaluates requests for use of chemicals in public waters when a permit application is submitted.

When making a decision whether or not to issue a permit, the Department considers the appropriateness of the herbicide selected at the site, the likely non-target organism effects, the potential for adverse effects on the water body, as well as the potential hazard to humans. DNR may then issue the permit, issue the permit with conditions, or deny the permit. Permit conditions are frequently used to make sure that the herbicide is used responsibly and in accordance with best management practices for the plant being managed.

Step 4) Applied by a certified applicator.

Most herbicide applications to water bodies in Wisconsin must be done by certified applicators. To become certified, an individual must complete a training course and pass a written exam. Businesses that provide herbicide application services must also be licensed by DATCP. A certified applicator is not needed only if the treatment area is less than ¼ acre in size and the product being applied is a granular herbicide.

Are herbicides safe?

The distinction between “EPA registered” and the terms “approved” or “safe” is important. Registration by the EPA does not mean that the use of the herbicide poses no risk to humans or the environment, only that for use in the U.S., the benefits have been determined to outweigh the risks. Because product use is not without risk, the EPA does not define any herbicide as “safe”. It is prudent to minimize herbicide exposure whenever possible.

When an herbicide is registered, the EPA sets use requirements to minimize risk that are given on the herbicide label. When using herbicides it is important to follow the label instructions exactly, and never use an herbicide for a use not specified on the label.

What does the DNR do to minimize herbicide use and ensure that herbicides are used responsibly?

The Department of Natural Resources evaluates the benefits of using a particular chemical at a specific site vs. the risk to non-target organisms, including threatened or endangered species, and may stop or limit treatments to protect them. The Department frequently places conditions on a permit to require that a minimal amount of herbicide is needed and to reduce potential non-target effects, in accordance with best management practices for the species being controlled. For example, certain herbicide treatments are required by permit conditions to be in spring because they are more effective, require less herbicide and reduce harm to native plant species. Spring treatments also means that, in most cases, the herbicide will be degraded by the time peak recreation on the water starts.

The DNR encourages minimal herbicide use by requiring a strategic Aquatic Plant Management (APM) Plan for management projects over 10 acres or 10% of the water body or any projects

receiving state grants. DNR also requires consideration of alternative management strategies and integrated management strategies on permit applications and in developing an APM plan, when funding invasive species prevention efforts, and by encouraging the use of best management practices when issuing a permit.

The Department also supervises treatments, requires that adjacent landowners are notified of a treatment and have an opportunity to request a public meeting, requires that the water body is posted to notify the public of treatment and usage restrictions, and requires reporting after treatment occurs.

How long do the chemicals stay in the water?

The amount of time an herbicide will stay in the water varies greatly based on a number of different factors, including the type of herbicide used. Residues may only be present in the water for a few hours, or for as long as a few months. Each herbicide has different characteristics that affect where the chemical moves (e.g. if it stays in the water column or settles into the sediment), how it is broken down, and how long it can be detected in water, sediments, and aquatic organisms. For more information on the environmental fate of a particular herbicide, please see the individual chemical fact sheets, available by request from your local lake coordinator (http://dnr.wi.gov/lakes/contacts/Contacts.aspx?role=LAKE_COORDINATOR). These are currently being updated and will be available online soon, as well.

Should I let my kids swim in the water?

None of the aquatic herbicides licensed for use in Wisconsin have swimming restrictions. Dilute amounts of herbicide may be present in the water, but EPA has determined that minimal exposure would result from adults or children swimming in treated waters.

Use restrictions for treated water vary by herbicide, but will always be listed on the herbicide label. To find out how to read an herbicide label, see <http://www.epa.gov/pesticides/label/>. Restrictions must be posted at public access points to the water body for at least one day near an herbicide treatment and sent to shoreline landowners in advance of the treatment. To minimize your risk of direct exposure, it is wise to stay a safe distance from the area being treated while herbicide applications are being made.

What if I accidentally ingest some of the water while swimming or my pet drinks the water?

When assessing the risk posed by swimming in treated water, the EPA considers exposure from accidental swallowing of water, as well as from other routes such as through the skin. Any exposure to herbicide in the water while swimming or through accidental ingestion would be small and would not have toxic effects. Similarly, your pet should not have any side effects from swimming in or drinking treated water, so long as any applicable use restriction period is over.

Are there risks to drinking water?

In Wisconsin, most drinking water supplies come from groundwater, not surface water. For water bodies that are used for drinking water, treatments are required to be a minimum distance from any existing intakes (usually ¼ of a mile). Wells are not considered to be intakes, and therefore the setback distance does not apply. Some aquatic herbicides can move through the sediment into the groundwater, but even those that do move through soil have not been detected above drinking water thresholds in wells.

Campers that are treating surface water for drinking should obtain water from an alternate location until after any posted drinking water restrictions have passed.

Can I eat the fish?

There are no restrictions on eating fish for any currently registered aquatic herbicides following application to water. That does not mean you would not be exposed to the herbicide, just that the amount of herbicide that you might be exposed to is not toxic. A common concern with eating fish from treated water is that the herbicide concentration may be higher in fish tissues than in the water, and therefore exposure may be greater from fish than from exposure to lake water. The potential for bioaccumulation in fish varies by herbicide, and is evaluated by the EPA during the registration process.

Can I water my lawn/garden with lake water?

Many of the herbicides used in lakes and ponds are broadleaf herbicides which will damage garden plants including fruits and vegetables. Some aquatic herbicides will also affect grass. Whether you are watering your lawn or your garden, follow water usage restrictions to avoid any unintended damage. These restrictions on watering will be listed on the herbicide label and posted at boat landings and beaches. The limits vary widely, from no restriction to 120 days. If you are unsure about the herbicide used on the lake near your home, the safest option is to use water from your municipal supply or private well to water plants.

How can I find out if an aquatic herbicide treatment is scheduled for my lake, or has occurred recently?

Notices of herbicide applications and the use restrictions of the herbicides used are required to be posted along shore adjacent to a treatment area, as well as at public access points for the day of treatment through the end of the restricted use period. Additionally, landowners adjacent to a treatment area should be sent advance notification of the treatment by mail, email or newsletter. For a large-scale treatment (over 10 acres or over 10% of the area of the lake) all landowners around the lake would receive advance notification.

How can I be notified in advance of when and where an application will occur, even if I am not adjacent to the treatment area?

The DNR will notify any interested person of upcoming applications if they request to be notified in writing each year. To request notification, contact your local DNR aquatic plant management coordinator (http://dnr.wi.gov/lakes/contacts/Contacts.aspx?role=AP_MNGT).

Why can one person or group of people receive a permit to treat my lake if I don't want the treatment?

Any individual or group can request a permit from the DNR for a treatment since water bodies in the state are public property. The DNR is charged with evaluating any proposed treatments to consider the impact on the environment, and permits can be denied.

The permitting process requires that all landowners adjacent to the treated area be notified of the treatment. If you receive the notice and don't want the treatment to occur, you can send a written request to the applicant and the DNR requesting a public informational meeting on topics of concern to you regarding the treatment and alternatives. If 5 or more such requests are received within 5 days of the notice, the applicant is required to conduct such a meeting in a location near the water body.

What can I do to reduce the need for aquatic herbicide use?

Individuals can help reduce requests for herbicide use to control aquatic plants and algae by implementing best management practices on their property to prevent nutrients from running into the water and by preventing the spread of invasive species. To reduce runoff eliminate the use of fertilizers adjacent to a water body, rake leaves out of the street and off the lawn, plant a buffer strip of native vegetation on shore to reduce erosion and filter water coming off lawns, create a rain garden to filter and slow down water from driveways or rooftops, use a rain barrel to collect water from rooftops to use to water plants, or use a pervious option to pave driveways and sidewalks. To prevent the introduction of new invasive species and stop the spread of existing invasives, when boating remove plants, animals, and mud from your boat when leaving a boat launch, drain all water from your boat, and rinse your boat and equipment with hot or high pressure water or allow to dry for at least five days before moving to another water body.

Where can I find more information about a specific herbicide?

The DNR keeps a fact sheet on file for each herbicide used in aquatic systems. These fact sheets can be requested from your local DNR lake coordinator (http://dnr.wi.gov/lakes/contacts/Contacts.aspx?role=LAKE_COORDINATOR), and will be updated and available online soon, as well.

The EPA's risk assessments are available at <http://www.epa.gov/pesticides/reregistration/status.htm>.

Additional information can be found with these resources:

http://www.co.thurston.wa.us/health/ehipm/ehipm_aquaticreview.html

Health assessment of aquatic herbicides by Thurston County, Washington, Public Health and Social Services

<http://extoxnet.orst.edu/pips/ghindex.html>

Specific information on pesticides as well as toxicology

<http://npic.orst.edu/>

Information about pesticides, supported by EPA and Oregon State University

<http://www.datcp.wi.gov/Plants/Pesticides/>

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