



Best Management Practices: How Homeowners Can Help Lake Mohegan

Lake Mohegan played some part in attracting many residents to their homes. We can swim, fish, kayak, canoe, sail, bird watch, and hike—all in our neighborhood! Our lake draws bald eagles, red foxes, minks, herons, kingfishers, monarchs, and other stunning wildlife to our area. The lake even protects our property values. But all this is threatened by toxic blue-green algae, or cyanobacteria. Even our property values will suffer if toxic algae consistently makes Lake Mohegan unswimmable, unboatable, unsightly, and smelly.

Lake Mohegan needs YOUR help to fight toxic algae! A few simple things that we can do at home can help keep the lake clean.



Harmful algae blooms may make the water look like green pea soup, or they may rest on the surface, appearing like a slick of green paint. Big blooms can also produce a pungent, rotting smell.

If you see an algae bloom, do not enter the water. Do not let dogs enter the water. Dogs are the most frequent victims of toxic algae blooms, because they ingest algae when they lick their fur after swimming.

For more information about cyanobacteria poisoning: please go to <https://www.cdc.gov/habs/materials/factsheet-cyanobacterial-habs.html>

Toxic algae blooms are caused by excess nutrients in the lake—specifically, phosphorus and nitrogen. Since our lake is fed mostly by runoff water, these nutrients enter the lake with runoff from our yards and roads. The best way to prevent algae blooms is to stop these nutrients from entering the lake.

Your actions can keep excess nutrients out of the lake and help reduce toxic algae blooms. Here are some of the easy steps you can take to help our lake.

Don't fertilize your lawn.

Grass in our region does not need chemical fertilizer to be healthy, and most added nutrients actually end up in runoff—and in our lake—rather than absorbed by the grass. Fertilizer—both chemical and livestock—is the #1 culprit behind the now-worldwide plague of toxic algae blooms. If you must use fertilizer, look for the three numbers on the bag, such as 9-0-2. Nitrogen is the first number, Phosphorus is the second, and Potassium is the third. Always make sure the middle number, phosphorus, is 0. Keep reading for fertilizer-free ways to keep lawns healthy—which are also cheaper, easier, and more effective!



Photo: MichaelPloujnikov

Clean out your septic tank.

Westchester County will even help pay for it! Download and fill out the form at the link below (program extended through 2026), and the county will provide up to \$300 per pump-out, once every 3 years. If you have questions about this program, call the county's Department of Environmental Facilities at 914-813-5447. <https://health.westchestergov.com/images/stories/realty/septic/SepticReimb.pdf>

Mow over your fall leaves, and leave grass clippings on the lawn.

Mulching leaves and grass with a lawnmower adds plenty of nutrients to lawns. It is also more effective than chemical fertilizers at getting the nutrients to the grass. If the leaf clippings are too large after one pass with the mower, mow over them again, or buy a mulching or Gator blade for about \$35. No raking, bagging, or blowing required! This will not look messy or smell. If the leaves are mulched into small enough pieces, as soon as it rains, the clippings fall between the blades of grass and start to decompose.



Photo courtesy leaveleavesalone.org

To read more about dealing with fall leaves, see the resource started by our neighbors in Bedford: www.leaveleavesalone.org

Remove leaves from the street before it rains.

When leaves wash into gutters or drains, they start to decompose. The water that runs through these leaves becomes a phosphorus-rich tea that algae loves. Removing leaves from the streets and gutters can reduce the phosphorus in our stormwater by 80%. Do not blow leaves into the street or dump yard waste near the lake. Rake or blow the leaves from the street onto your lawn, then run a lawnmower over the pile a few times



to make free mulch for garden beds. For more information, see the resources gathered by lake advocates in Wisconsin: www.cleanlakesalliance.org/leaves



Tonypang, CC0, via Wikimedia Commons

Bag and throw away pet waste.

Pet waste left on the ground can wash into the lake, and it is like candy for algae. Animal feces packs a double whammy; it promotes toxic algae blooms while potentially raising the lake's bacteria levels.

Use sand instead of salt in the winter.



Oversalting causes our soil's nutrients to wash out into the lake. Salted soil does a bad job of retaining nutrients, and fewer plants can grow in salted soil to take up the nutrients. Spreading sand (the grittier, the better) on icy spots improves traction without harming our soil, plants, and lake. Sand is also much cheaper than salt. A good approach: shovel, let the sun melt what it can, and then use sand on any icy spots.



Sage Ross - Own work, CC BY-SA 3.0.

Choose permeable surfaces for hardscaping.

Permeable surfaces on driveways, paths, and patios are ones that water can penetrate. Once water soaks through permeable surfaces and into the ground, it may eventually reach the lake via underground springs, but it takes years for that to happen—and the excess nutrients get filtered out in the process. On the other hand, if water does not permeate our driveways, paths, and patios, it rushes into storm drains, gathering excess nutrients on the way, and enters the lake within minutes. Harmful runoff can be greatly reduced if we use permeable surfaces such as gravel, permeable pavers, concrete or plastic grid systems, and special pervious concrete or porous asphalt in our hardscaping. For more information on permeable surfaces, see the guide put together by the Lake George Association: www.lakegeorgeassociation.org/protect/lake-friendly-living/permeable-pavement



Build a rain garden.

Instead of letting runoff feed toxic algae in our lake, let it create beautiful flowers and foliage in our yards! Rain gardens are simply a collection of moisture-loving plants in a slightly depressed spot that collects runoff water. A rain garden should be several feet away from the side of a house so that the water doesn't soak into the foundation. Use a bed of river rocks or PVC pipe to direct surface



James Steakley via Wikimedia Commons

runoff or the water from roof downspouts to the rain garden. In a shady rain garden, consider plants such as Garden Phlox, Woodland or Thin-Leaved Sunflower, Wild Geraniums, Blue Flag (Wild Iris), and Virginia Bluebells. In a sunny rain garden, consider plants such as Foxglove Beardtongue, Wild Bergamot, Coneflowers, Swamp Milkweed, Joe-Pye Weed, Great Blue Lobelia, or Blue Vervain.

Learn how to construct a rain garden, including a recommended plant list, here: <https://libguides.Nybg.org/raingardens>

Plant native plants in rain gardens and along the shoreline.

Dense stands of native plants filter excess nutrients from runoff. Along the shoreline, a buffer of native plants (rather than just grass) is crucial for soaking up runoff, stabilizing the lake edge, preventing erosion, providing shelter for fish and birds, and deterring undesirable birds like Canada geese (whose poop worsens cyanobacteria blooms). Avoid putting materials such as gravel, sand, or especially wood chips along the shoreline, as these tend to increase runoff and nutrients going in the lake. Any of the plants suggested above for rain gardens are also excellent along the shoreline, in addition to Cattails, Swamp Loosestrife (NOT invasive purple loosestrife!), Pickerel Weed, Switchgrass, and Swamp Sunflower. An added bonus of these native plants: we'll start seeing more songbirds and butterflies!

If you have lakefront property or a stream running through your yard, you can apply for 25 free native shrub and trees through New York State's Buffer in a Bag Program in the early spring.

www.dec.ny.gov/animals/115903.html

A plant list for shoreline buffers: www.lakegeorgeassociation.org/wp-content/uploads/2017/04/native-plants-for-shoreline-buffers.pdf

For more information about shoreline buffers:

www.uwsp.edu/cnr-ap/UWEXLakes/PublishingImages/resources/restoration-project/burnett_cty_shoreland_guide_may_2008.pdf



photo: La55i3Girl via Pixabay

These small steps can help us significantly reduce the nutrients feeding toxic algae blooms in Lake Mohegan. If we all take just a few of these steps, our lake will stay cleaner for us to enjoy throughout the year. The lake is there for you—now be there for it!

The Mohegan Lake Improvement District (MLID) oversees the health of the lake, monitors water quality, organizes water treatments, and manages the weed population. MLID also works with local, county, and state governments to secure funding for infrastructure projects that will help keep excess nutrients out of the lake. All are welcome to join our monthly meetings.

Look for us online at www.lakemohegan.org

Facebook: www.facebook.com/MoheganLakeImprovementDistrict

YouTube: www.youtube.com/channel/UCw9t9FCiLlzfTMoCIrs_gw