

Healthy Watersheds Make Healthy Lakes

The quality of our lakes and streams is ultimately a reflection of how we take care of our land. A watershed is the land area that drains to a lake or stream. Waterfront property owners, inland residents, recreational users, agricultural producers and other businesses all can play a positive role in maintaining and improving the water quality of our lakes and streams. There are 10 simple steps that we can implement to help us reach our goal of maintaining the lake and improving the water quality for many years to come.

Step 1: Choose zero-phosphorus fertilizer

If you must fertilize, avoid fertilizers that contain phosphorus. Remember, it's phosphorus that accelerates algae growth in our lakes and rivers. Most lawns and gardens already contain adequate, and often excessive, amounts of phosphorus. Phosphorus is an essential nutrient for plants. However, when too much phosphorus makes its way into our lakes and streams it promotes the rapid growth of weeds and algae and decreases water clarity, often turning lakes green. Decaying algae also depletes oxygen in the water, so that fish can no longer thrive. Human activities contribute a great deal to the amount of phosphorus that enters a lake or stream. Check out the following website: <http://www.lawntolake.org/>

Step 2: Properly dispose of household hazardous wastes

Do not pour old oil or pesticides into the ditch or wash paint brushes at the end of your driveway. These pollutants end up in our groundwater, lakes and streams. Gasoline, oil, solvents, old paints, thinners, fertilizers, pesticides, cleaners and many other products need to be disposed of properly. Some counties offer Clean-Sweep programs where you can take these products for safe disposal. *Remember, if you wouldn't drink it, don't dump it! Even better, minimize your use of toxic products.*

Step 3: Minimize erosion during construction

During construction is the time that soil with its algae-feeding nutrients washes into a nearby lake or stream unless the builder uses erosion controls. When you're planning a construction project, follow these steps to protect the lake: develop an erosion control plan; fence the construction area to limit construction activity to the necessary area of the site; divert runoff around disturbed areas to minimize erosion; and after construction, establish vegetation right away. The less time bare soil is exposed, the less erosion you will create.

Step 4: Inspect and maintain your septic system regularly

- Pump or inspect your septic system once every three years
- Divert surface water away from the drain field
- Avoid driving or parking on the drain field to prevent compaction of the soil
- Keep the roots of trees and shrubs away from the drain field pipes to avoid obstructed drain lines
- When replacement system is needed, consider aerobic digesters or recirculating sand filters
- Avoid putting cooking grease, oils, coffee grounds, cigarettes, facial tissues, paper towels or disposable diapers down the drain or toilet because they may clog the drain field
- Avoid using a garbage disposal
- Conserve water. Use low-flow toilets, faucets and showerheads to reduce the volume of water the system must filter and absorb

Step 5: Cut Runoff

Runoff is excess water that comes from hard surfaces like roof tops, driveways, parking areas, sidewalks, decks and compacted soil. Runoff water washes fertilizer, eroded soil, car fluids and other pollutants into our lakes and streams. To reduce runoff, let water soak into the ground. Gravel areas quickly become compacted and are nearly as impervious as paved surfaces. Pervious pavers are an option for areas that do not have heavy traffic.

Step 6: Plant trees and shrubs or protect your wooded areas

Wooded areas develop a thick understory of small shrubs and plants and a duff layer. This duff protects soil from rain impact and absorbs water. Root systems keep the duff in place, not in the lake. Lawns absorb little rainfall. Lawns create more runoff because grading a lot removes the natural divots where water naturally ponds and has time to soak in. Removal of trees and shrubs causes more rain to hit the ground and run off rather than landing on leaves and branches. Allowing water to soak in rather than run off your property filters out pollutants and replenishes our groundwater.

Step 7: Direct downspouts onto your lawn or landscaping, not onto hard surfaces

Step 8: Install a rain barrel

Collect water from your rooftop to water your yard during dry periods. The barrel should be covered to keep out silt, leaves and insects.

Step 9: Build a rain garden

"Rain Gardens: A How-To Manual for Homeowners" provides easy-to-follow instructions to create a rain garden providing guidance on the following questions:

- Where is a good spot in my yard for a rain garden?
- How big should it be?
- What plants would work well?
- What do I need to do after it's planted?

This publication is available at: learningstore.uwex.edu/assets/pdfs/GWQ037.pdf

How does a rain garden work? Rain gardens are just what they sound like--areas that soak up rain water during wet times and serve as a beautiful garden all the time. They are landscaped areas planted to wildflowers and other native vegetation to replace areas of lawn. The gardens fill with a few inches of water and allow the water to slowly filter into the ground. Plants in the rain garden act as filters for the rain water, helping to slow the runoff and allowing it to soak into the ground rather than flowing out into ditches or drainage ways on the way to lakes and streams. In addition to the benefits they provide to our water supply, rain gardens also provide wildlife habitat for birds, butterflies and dragonflies.

Step 10: Protect or restore your shoreland buffer

If you have native vegetation along your shoreline, consider yourself and the local wildlife fortunate. A mature native buffer represents many years of nature at work and discourages undesirable exotic plants and animals while attracting songbirds, butterflies, turtles and frogs. Natural shorelands contain a lush mixture of native grasses, flowers, shrubs and trees that help to filter polluted runoff and provide important habitat for animals in the water and on the land. The trees, shrubs and plants not only help shelter and create privacy for both the homeowner and the lake user, but may also act as a noise buffer. Larger areas of natural shoreline provide more benefits. However, any amount of natural shoreline is better than none. When trees and branches fall in the water, they form critical habitat for tiny aquatic organisms that feed bluegills, turtles, crayfish and other critters. Additionally, a fallen tree is like a dock for ducks and turtles, as well as serving for kingfishers osprey and songbirds.