

### **3-Protect Your Lake in Three Ways**

By Paul J. Radomski, author of *Lakeshore Living*

Lakeshore owners have a strong desire to protect their lake. Healthy lakes provide the recreational and aesthetic benefits lakeshore residents value. In addition, healthy lakes enhance lakeshore property values. There are three ways we can reduce pollution and maintain healthy lakes.

1. Reduce runoff by getting rainwater into the ground near where it falls.
2. Beautify the shore.
3. Maintain our septic systems.

#### **Reduce Runoff**

Rainwater runoff is a major source of water pollution. Rainwater runoff comes from roads, driveways, roofs and lawns. Rainwater that does not infiltrate into the ground or evaporate becomes runoff. Runoff is not only occurring when streams are full after a rain, but it also occurs when small sheets of water flow over the surface of our lawns and head down to the lake. Runoff carries pollutants, such as dissolved metals, pesticides, suspended solids, pet waste and nutrients, such as phosphorus, which can lead to algae blooms.

Good rainwater management can help reduce pollutants and excessive nutrients from entering our lakes. When rainwater is allowed to infiltrate into the ground, the soil and plants can purify the water before it reaches the lake or river. There are two ways to manage rainwater. The traditional way has been to move water off fast. This approach uses stormwater sewers, pipes and ponds. Unfortunately, civil engineers have found that this expensive approach does not work well. Often, the outcome is water quality and water quantity problems downstream or downhill.

The second way of managing rainwater is to get the water and the pollutants it carries into the ground near where it falls. This can often be a small-scale, decentralized and low-cost option. This approach uses rain gardens, grass overflow parking areas, grass swales, porous or pervious paver blocks, parking lot infiltration basins and fewer impervious surfaces. Infiltration reduces pollutants and nutrients entering our lakes, thus protecting the lake water quality.

For lakeshore owners, a simple start to managing rainwater is to redirect gutter downspouts that run onto impervious surfaces, such as driveways and sidewalks, so they run onto vegetated areas instead. Rain gardens are a good way to capture runoff when greater infiltration is needed.

## **Beautify The Shore**

Managing rainwater also includes protecting natural areas important for water storage and filtering, such as wetlands, streams, and vegetated buffers near water. A shoreline buffer of natural vegetation traps, filters and impedes runoff. The simplest and sometimes most effective way to recreate this buffer is to stop mowing down to the lake. A smaller lawn with a larger shoreline buffer will help infiltration and reduce runoff. To signal to my neighbors that my yard is tidy, I use split-rail fences to designate the boundary between my cared for lawn area and naturalized shoreline buffer. These cues of care show people that I'm both protecting the lake and caring for my yard.

## **Maintain Septic Systems**

Finally, for those lake home owners who use septic systems to treat and disperse waste and recycle water, maintenance is critical. Sludge builds up in the septic tank and should be pumped out every two to three years. If sludge accumulates to the level of the outlet pipe, clogging will occur, which will damage the drainfield and reduce the life expectancy of the system. Drainfields can also fail when they are overloaded, either with too much water or too much garbage disposal waste. The average life of a drainfield is 10 to 20 years.

Lakehome owner management of septic systems is sometimes inadequate. Regular pumping of the septic tank is needed to minimize pollution problems. Consider scheduling maintenance of your system this summer by calling a local septic system pumping provider.

MN Lakes & Rivers Advocates ~ PO Box 22262 ~ St. Paul, MN 55122  
[www.mnlakesandrivers.org](http://www.mnlakesandrivers.org) ~ 952-854-1317 ~ [judy@mnlakesandrivers.org](mailto:judy@mnlakesandrivers.org)