

Governor's Clean Water Initiative: Shoreland Rules Update Project Article Number 9

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Your Lake, Our Lakes: Becoming a good shoreline steward

By Paul Radomski and Russ Schultz

We all can be better stewards of our lakes. To become better stewards, we need to understand how our actions affect our lakes. And, we need to use today's best management practices.

Scientific research shows that the way we treat our shorelines affects lake water quality and fish and wildlife habitat. To improve our lakes, we need to improve our shorelines. Recent studies demonstrate that the best way to do that is by adding or keeping a buffer strip of natural vegetation along the shore. Buffer strips of native species of trees, shrubs, and understory plants protect water quality and provide habitat for fish and wildlife.

Rainwater runoff from shorelines with lawns to the lake is 5 to 10 times higher than runoff from forested shorelines. Runoff sends fine soil particles to the lake. Since our soils are naturally high in phosphorus, 'lawn to lake' shorelines allow 7 to 9 times more phosphorus to enter the lake than more natural native vegetated shorelines.

Phosphorus is plant nutrient, and more of it entering the lake means more algae resulting in lower water clarity (1 pound of phosphorus can grow up to 500 pounds of algae and aquatic plants).

Creating or keeping a native forest buffer along the lake provides better wildlife habitat and reduces the amount of nutrients entering the lake. For example, a 40-foot forested buffer strip along the lake traps about 60% of the phosphorus runoff and about 80% of the sediment pollutants.

Several Brainerd organizations along with the Minnesota Department of Natural Resources (DNR) have combined efforts to publicly recognize lakehome owners and contractors who have chosen to develop their shoreland as good stewards, through the Brainerd Lakes Area Lake-Friendly Development Awards. The 2005 awards, hosted by the Brainerd Lakes Area Audubon Society, will be given on October 27, 2005, at 7:00 p.m. at the Northland Arboretum in Baxter.

The 2004 award for Lake-Friendly Home Construction went to Kevin and Joyce Brick of Sorenson Lake in Merrifield. Their log home and the grounds surrounding it were designed to preserve the natural setting. For example, the gable roof of the home drains rainwater away from the lake, their driveway is pervious sand and soil instead of

impervious asphalt, and a buffer zone of natural vegetation along the lakeshore provides screening, reduces erosion, and offers shelter for wildlife.

The 2004 award for Lakescaping went to the Roosevelt and Lawrence Area Lake Association in Outing. With the support of the Minnesota Department of Transportation and the DNR, grass was removed from a highway right-of-way along State Highway 6, and replaced with native vegetation. The 40-plus native species that were planted do not require mowing and the native plants are better filters for runoff. Over 50 lake association volunteers worked on the project.

The 2003 Lake-Friendly Home Construction Award went to Amy Lichty of Round Lake, and the 2003 Lakescaping Award went to the Birch Lake Association.

By recognizing those who are good stewards of lakeshores, we hope more shoreland property owners will discover or rediscover the importance of forested or native vegetative buffer strips along our shorelines.

Governor Pawlenty's Clean Water Initiative pilot project in the north central lakes area is bringing people together to create an alternative set of shoreland development standards in the lakes area. Citizens working on the project, who understand their community responsibility of being good stewards, have been discussing higher shoreline buffer standards. The updated standards adopted through this project will give local governments an alternative for local ordinances.

Details of the Shoreland Rules Update project are online at www.dnr.state.mn.us/waters (Click on the Governor's Clean Water Initiative link). Email comments to shorelandupdate@dnr.state.mn.us .

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