

Our Lake Management Plan (or LMP done by Onterra LLC) is an assessment of the five components of lake health as they relate to Lake George: water chemistry, watershed, shoreland condition, aquatic vegetation, and fisheries. In addition, it recommends actions that need to be taken to maintain, improve and protect that lake health. The LMP stresses the continued need for education of association members on the ecology of the lake, rules and regulations regarding activities on the lake, and what we can do to protect or restore Lake George. Of particular concern is the amount of developed shoreland around the lake. This is the first of several informational articles for 2016 compiled by Board committees geared to the needs of the lake and the people who live on and enjoy it.

Shoreland Condition – What Can Be Done to Improve It

The shoreland zone of a lake is highly important to the overall health of the lake. Shorelands in their natural state help preserve water quality, provide privacy for the homeowner, allow runoff from hard surfaces to soak into the ground before getting to the lake, and promote places for wildlife to nest, perch, raise their brood, feed, and travel. When shorelands are developed (that is, containing hard surfaces such as roof tops, driveways, sidewalks, decks and compacted soils with the natural vegetation removed) the resulting impact on the lake ranges from a loss of biological diversity to impaired water quality. In 2012, the shoreland assessment survey of the LMP indicated that 31% of Lake George's shoreline is considered "Urbanized or Developed Unnatural" which has a significant impact on lake health.

Onterra created a map for us indicating the levels of development along the shoreline of the lake. *Natural Undeveloped – green, Developed Natural – light green, Developed Semi-natural – yellow, Developed Unnatural – orange, Urbanized - red.* You can view the map at the end of this article.

The good news is that 24% of the shoreline is natural or nearly natural. And 45% is developed but semi-natural. If you have this native vegetation along your shoreline, please continue to encourage it and protect it.

If you have lawn up to or near the water's edge, do any of these sound appealing to you?

- Keeping geese out of your yard
- Having fewer mosquitoes on a summers evening
- Improved quality of fishing
- Diminished algae on the lake to interfere with swimming and recreation
- Reducing the time you spend on yardwork

If so, consider creating a shoreland buffer. Studies say it should run along the shoreline and extend 35 feet inland. By restoring your shoreline, you can slow or eliminate runoff to the lake of unwanted sediments, pesticides, and fertilizers. Native plants do not require the use of pesticides and/or fertilizers. After establishment, these

vegetated buffer areas are virtually maintenance free. You can establish this buffer zone by several methods:

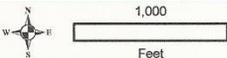
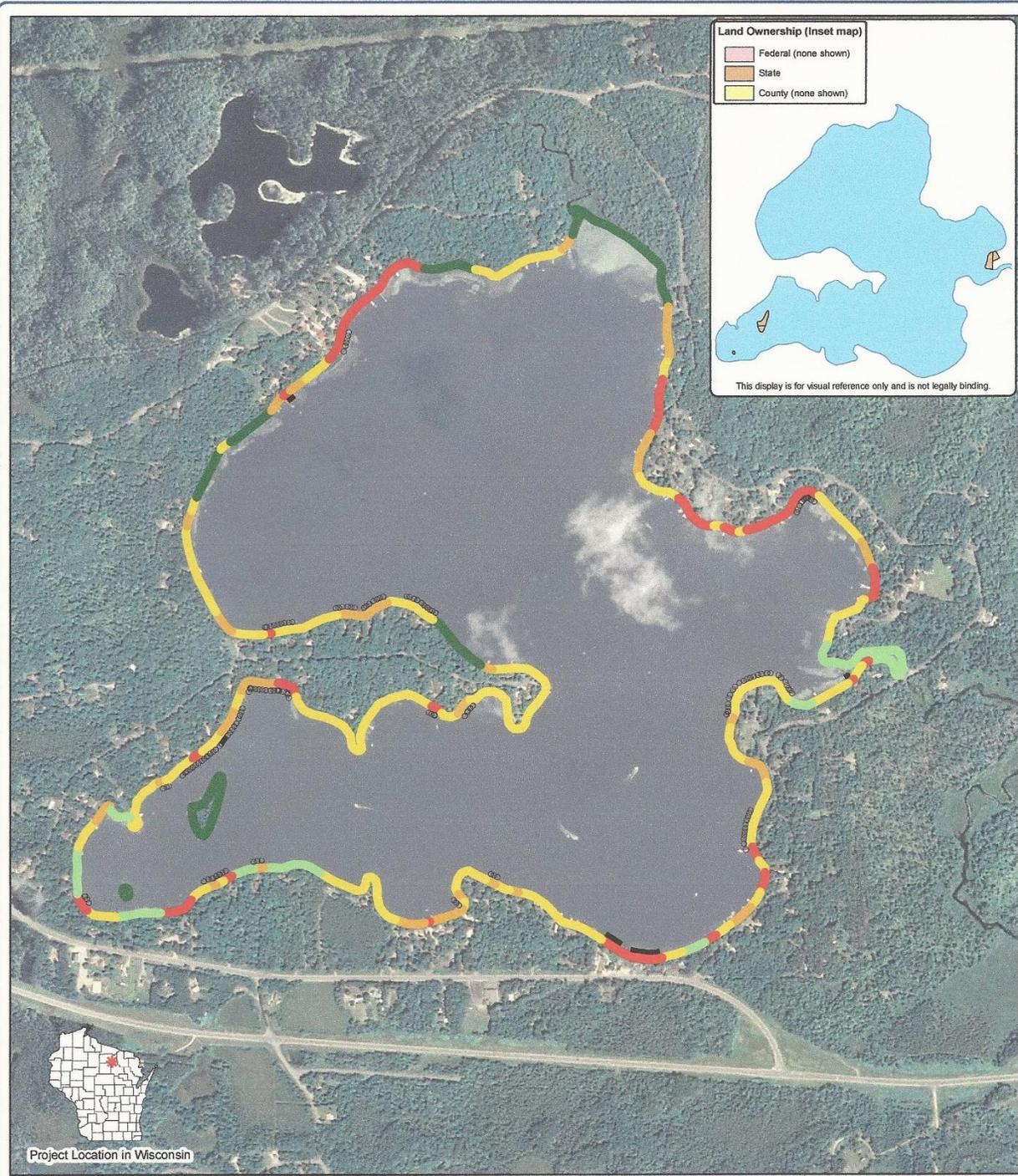
- **Simply stop mowing the area** – seeds will germinate and valuable native plants will begin to reappear. In just a few years, native grasses will germinate and become dense enough that geese cannot easily walk through it into your yard. It will take several years for shrubs and trees to appear.
- **Replant native trees, shrubs, grasses and wildflowers.** This will give Mother Nature a hand and speed up the restoration process. The larger vegetation will attract the “critters” that make their meal on those pesky mosquitoes. The main area where water runs off your property is the best location to start planting to improve water quality.
- **Keep the area watered to promote faster germination and growth.** Use lake water whenever you water your landscape. It is high in nutrients so no additional fertilizers are needed. If you must fertilize any area of your landscape, use a phosphorus-free brand to keep that nutrient from running off into the lake.
- **Consider applying to Oneida County Land & Water Conservation Dept.** for a Cost Share Grant for property owners wanting to implement a shoreline restoration plan. (jhansen@co.oneida.wi.us)

The healthiest lakes are those where the impact from humans is minimized. If you have questions or would like more information, please contact any member of the Water Quality Committee of the Board: Russ Fisher 715-362-3691, Joan May 715-362-7303, or Jane Sharkey 715-369-1117.

For detailed information on shoreline restoration, the WDNR in cooperation with the UW Extension has many publications on the subject. You can find them on their website: <http://dnr.wi.gov/topic/ShorelandZoning/Care/resources.html>.

Shoreline Plants and Landscaping has an extensive list of native plants suitable for shoreline restoration. You can find it at <http://clean-ater.uwex.edu/pubs/pdf/shorlpl.pdf>. *Lakescaping for Wildlife and Water Quality* is an excellent resource book published by the Minnesota DNR and available at the Rhinelander Public Library.

For a summary of the “Lake George Comprehensive Management Plan” click that box on the website homepage.



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Sources:
 Orthophotography: NAIP, 2010
 Shoreline Assessment: Onterra, 2012
 State Land: WDNR
 Map date: January 3, 2013
 Filename: Map3_George_ShorelineCondition_2012.mxd

Legend

- Natural/Undeveloped
- Developed-Natural
- Developed-Semi-Natural
- Developed-Unnatural
- Urbanized
- Seawall
- Wood Seawall
- Rip-Rap

Map 3
Lake George
 Oneida County, Wisconsin
Shoreland
Condition