

Introduction

March 2012

Vermont's lakes and ponds are beautiful recreational resources as well as critical elements in the ecology and habitat of the state. Keeping them in good shape, or restoring them, involves attention to a myriad of actions of people on the landscape. All those who live, work or play on the shores or in the watersheds of lakes have an important responsibility to take steps to minimize their impact on the lake, whether it be replanting the shoreline, preventing soil erosion or practicing eco-friendly lawn care.

This series of publications is intended to provide lake residents and association members with information to aid them in caring for the lake they care about. It is focused on actions that people can take to manage, protect or improve a lake. The series is primarily about land use and its affect on lake and habitat quality in terms of "nonpoint source" pollution (that from land runoff) and lakeshore management techniques. In most cases, additional information is available on each of the topics covered in this series.

Note that much information is also available from the Lakes and Ponds Section about **exotic species spread prevention and control**. Please contact the Lakes and Ponds Section at (802) 338-4835 or visit www.vtwaterquality.org/lakes.htm to learn more about this important issue.

In addition to publications, members of the Lakes and Ponds Section and others are available to conduct site visits, attend meetings, provide guidance on lake protection:

Lakes and Ponds Section (VT Dept of Environmental Conservation) 802-828-1535 or www.vtwaterquality.org/lakes.htm

Shoreland and watershed management, Amy Picotte, (802) 490-6128

Lake assessment and water quality, shoreland conservation, Kellie Merrell, (802) 595-3538

Volunteer lake monitoring, educational programs, Amy Picotte, (802) 490-6128

Federation of Vermont Lakes and Ponds – an affiliation of lake associations in Vermont, they hold an informative annual meeting in late July each year, and co-sponsor the Lakes Seminar in June of each year. Contact them at PO Box 421 Waterbury VT 05676, or fovlap@vermontlakes.org.

Watershed Coordinators – Vermont is divided into 17 planning basins, mostly based on major river watersheds. On a rotating basis, these basins will undergo a planning, local involvement and project implementation process to identify the water resource issues of the region, present alternative solutions and develop a written plan to fix problems and implement worthwhile projects. The coordinators welcome and need the involvement of lake residents in this process to ensure lake issues are adequately addressed in the plan. In addition, the watershed coordinators can provide technical assistance on lake projects. Contacts for basins currently involved in the planning process:

Winooski and Missisquoi Rivers, northern Lake Champlain - Karen Bates, (802) 490-6144

Poultney and Mettawee Rivers, and Otter Creek - Ethan Swift, (802) 490-6141

Ompompanoosuc, Stevens, Wells, and Waits Rivers; Lake Memphremagog -

Ben Copans, (802) 490-6143

West, Williams, Saxton, Ottauquechee, Black, Deerfield and lower Connecticut Rivers -

Marie Caduto, (802) 490-6142

Lamoille and White Rivers - Jim Ryan, (802) 490-6141

Lake and Watershed Protection: The Basics

Just about everything people do on the land can affect water resources. We can choose to conduct our activities in such a way that we can continue to enjoy Vermont's lakes, ponds, streams and wetlands, and they can remain healthy into the future. The Lake Protection Series is an overview of how to live on the lakeshore and in a lake watershed while protecting it at the same time.

Good land management protects a lake from:

- Phosphorus enrichment—or “eutrophication” is the accumulation of the nutrient phosphorus resulting in algae blooms, problem weed growth, and less clear water.
- Sedimentation—eroded soil settles in the lake, making mucky deltas and filling in coves and shallow areas. Eroded soil also carries phosphorus into the lake.
- Damage to fish and wildlife habitat—eroded soil fills in the spaces between rocks in streams that are essential to quality habitat for fish, aquatic insects, and amphibians. Fine silt deposited in lake shallows likewise fills in the needed spaces between rocks, leaves, and branches that provide healthy and diverse in-lake habitat.
- Shoreline erosion—unstable lake shorelines are most often the result of removal of native vegetation.

Good land management focuses on:

- Reducing nutrient runoff into lakes and streams by preventing soil erosion, reducing fertilizer use near water, and proper household waste disposal.
- Preventing soil erosion through maintenance or reestablishment of naturally vegetated stream banks and lakeshores, use of erosion control measures during construction, adherence to “acceptable management practices” during forestry and agriculture operations, and good road and driveway maintenance.
- Maintenance of naturally vegetated buffers along lakeshores and conserving undeveloped shores wherever possible, protection of wetlands, and conservation of stream and river “corridors.”



Lake and watershed protection is dependant on responsible and knowledgeable actions by landowners. Lake associations play a vital role in getting the word out to landowners, as many activities are not regulated under state regulations. **A comprehensive lake protection approach could include effective outreach to, and environmentally sound decisions by, landowners, good local zoning measures, and adherence to application state regulations.**

The Lakes and Ponds Section welcomes your comments and suggestions on the Lake

For more information or to obtain other topics in the Lake Protection Series, contact the Lakes and Ponds Section at (802) 828-1535 or visit www.vtwaterquality.org/lakes.htm.
Vermont Agency of Natural Resources, Deborah Markowitz, Secretary
Governor Peter Shumlin