Lake Breezes

Lake Rescue Association, P.O.Box 372, Ludlow, VT 05149 *July 2012*
www.lakerescue.org

LRA Submits Dredging Proposal

On June 6th the Lake Rescue Association, with the Town of Ludlow as co-applicant, submitted its final application to dredge approximately 1200 cubic yards of sediment from Round Pond. The purpose of this project is to restore navigability in the channel where there is boat traffic between Round Pond and the main lake. The sediment from TS Irene has left parts of this area less than 2 feet deep and significantly narrowed the channel.

Complete details are contained in the Dredging Application found on our website: http://www.lakerescue.org/uploads/9/7/1/7/9717384/dredge_application.pdf

Area of Proposed Dredging in Round Pond

Funding the Dredging Project

With an estimated project cost between $70,000 - $100,000, the LRA has determined that it must embark on a fundraising campaign to pay for the dredging project. While we maintain a Lake Restoration Fund to be accessed for purposes such as this, the costs are far beyond what we can spend from that, without depleting the fund to a perilously low level. We are thus relying on you, our lake community members, to come together and support this vital initiative to "Rescue our Lakes." We are seeking at least $50,000 from our membership and from local businesses. The remainder will come from the Lake Restoration Fund and, hopefully, local grants which we are currently pursuing. If we achieve a total above our goal, that will go toward re-building our fund.

This is the first fundraising campaign that has ever been conducted in LRA's 80-year history. Because of careful stewardship of our budget, no Annual Appeals have ever occurred, and membership dues have remained the same for over 20 years. Beyond inviting additional contributions during annual membership drives, the LRA has relied on member dues and grants to do the work we must do to keep our lakes healthy and safe. TS Irene devastated our area, and created a unique challenge for Lake Rescue that must be proactively addressed. We are counting on your help.

Once the dredging application to the Agency of Natural Resources is approved, we will immediately put our plans in motion to dredge soon after Labor Day, and will mail a fundraising request to you. In the meantime, because we will not have a big window of time between approval and project start-up, we are readying ourselves by collecting pledges from those willing to commit ahead of time. This is very helpful in putting us in a solid financial position from the start and in preparation for future needs. To date, we have accumulated

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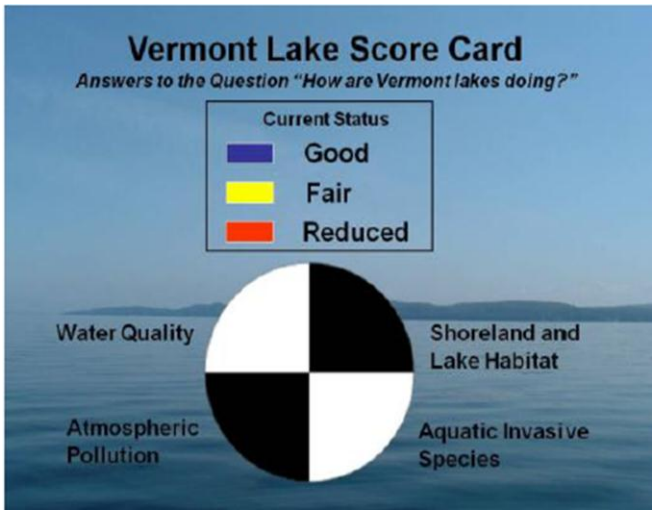
The Vermont Lake Scorecard

Vermont has over 800 lakes with 220 of them larger than 20 acres. The Department of Environmental Conservation (DEC), Water Quality Division, Lakes and Ponds Section monitors these 220 lakes through several programs which will be described below. The data collected through these efforts are then consolidated and presented in a Lake Scorecard. Here's what the scorecard looks like:



The scorecard is a simplified way of answering the question, "how is my lake doing?" by looking at 4 categories.

Water Quality

The water quality score is based on long-term nutrient enrichment trends from three monitoring programs.

- The Spring Phosphorus Sampling Program is conducted annually in the spring right after ice-out. Water is sampled to determine phosphorus levels and compared to prior years.
- The Lay Monitoring Program uses volunteers to monitor total phosphorus, chlorophyll-A and water clarity during the months of June, July and August. On Lake Rescue this valuable service is performed by Janine and Jim Norman. The data are tracked over time and used in the overall score of water quality.
- The third monitoring program is referred to as Lake Assessment and is a combination of several measurements such as alkalinity, dissolved oxygen, temperature, etc. as well as a visual inspection of the lake and shoreline conditions.

Lake Rescue scored "Good" in Water Quality.

Aquatic Invasive Species

There are nearly 40 species of native water plants in our lake, so don't be alarmed if you see vegetation growing in the water. But, several plant and animal species are non-native and harmful. Such species include Eurasian Milfoil and Zebra Mussels. The scorecard shows either 'blue', no known species; or 'red', invasive species are present. We are fortunate to have kept these destructive species out of Lake Rescue. A small number of Eurasian Milfoil plants we found here in the late 1990s, but through our aggressive removal and regular monitoring we have been free of Milfoil since 2004. Our monitoring continues with divers checking for Milfoil regularly during the summer months. Also, the LRA hires monitors to check boats at the boat launch before coming into our lake on summer weekends. We cannot afford to drop our guard in this matter. A milfoil infestation would be devastating, costing hundreds of thousands of dollars to eradicate. This has happened on other VT. Lakes.

Atmospheric Pollutant Status
Threats from acid rain and mercury deposition are considered in this section. Acidification of lakes affects the entire Northeast of the US, including Vermont. This is associated with the burning of fossil fuels in regions to the west of us and its drifting on the prevailing winds to our region. The pollutants combine with water and ozone to form acids which then fall as rain in our region. The average pH (measure of acidity) of rainfall in Vermont is 4.4 as compared with a pH of 5.6 in unpolluted rainfall. Although the increased acidity is impossible to avoid, Lake Rescue is **not** on the list of the 37 most acid lakes.
Mercury levels in nearly all Vermont lakes are elevated. Only Shelburne Pond and Lake Carmi in Franklin do not have high mercury levels. Therefore, except for these two lakes, all Vermont lakes have a "Fair" rating for Atmospheric Pollution on the Lake Scorecard.

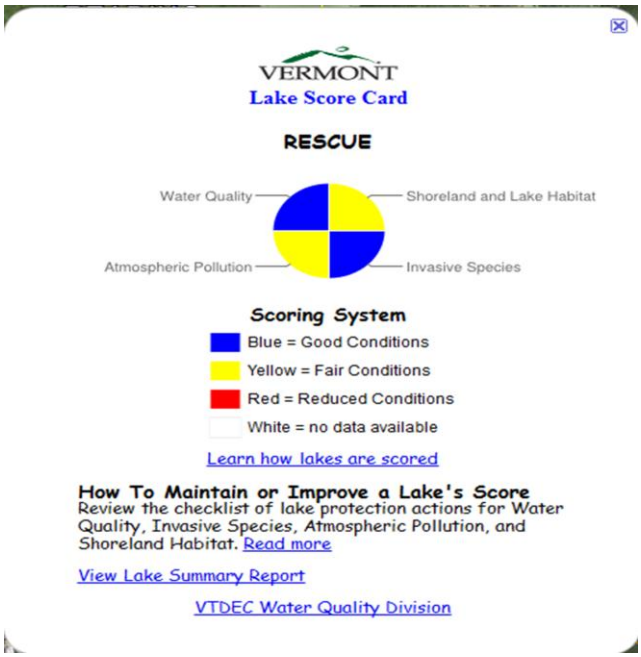
Shoreland Habitat
Three studies were used to grade lakes on the condition of lake shorelands.

- The Littoral Habit Study looked at various measurements at the shoreline and the adjoining shallow water (littoral) for 50 lakes.
- The National Lake Survey assessed 30 lakes in Vermont.
- And, UVM Geographical Information System mapped 97 lakes using satellite imaging.

After compiling the results of these studies, it was apparent that the degradation of the shallow water habitat was directly associated with lakeshore lawns. The scorecard makes use of this association and assigns a lake's grade largely on the degree of vegetation at the shoreline.

Lake Rescue has a "Fair" rating for its shoreland.

Here is Lake Rescue's scorecard:



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Recommendations
If you have a lawn that requires fertilizing, consider using Corn Gluten Meal, a by-product of corn processing. It is an effective organis lawn food and suppresses weeds as well. It can be applied anytime, but is best when applied in early spring, when lilacs are blooming.

The condition of our shoreland is another area where we can work together to improve our Lake Scorecard and improve the health of our shoreland environment. Reducing the amount of cleared shoreland will add a buffer to harmful run-off and aid the lake's ecology. Shoreland buffer strips have multiple benefits. They can filter out pollutants, stabilize soil, provide a protected corridor for wildlife and shade the water's edge, keeping the water temperature cooled.

Dredging:

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about $15,000 in pledges.

If you are willing to make a pledge please visit our website and fill in the pledge form on the Donations page.

Otherwise, we hope you will consider a generous donation when the time comes.

Thank You!

Scorecard:

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Mown grass has shallow roots and cannot withstand the erosive forces of waves and high water. Bank stability can be provided by a buffer width as narrow as 15 feet when the slope is not steep. Bank vegetation should be a mixture of trees, shrubs and groundcover. Greater widths are needed on shores that experience ice damage, high winds and waves, significant water level variations or are steep.

A naturally vegetated bank provides long-term stability that an artificial structure does not. Retaining walls are expensive, need to be periodically repaired or replaced, and provide no habitat benefits. While they may fix an erosion problem, thus benefitting water quality, re-establishing a vegetated bank would provide many more benefits to a lake.

Take a look at you shoreline and think about whether it could be made more eco-friendly.

Source: VTDEC, Lakes and Ponds Section
VTDEC, Water Management Division

Lake Rescue Association
P.O. Box 372
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Website:
www.LakeRescue.org

**Promoting Water Safety,
Environmental Education
&
Improved Water Quality**

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