

LOVELL LAKE WATERSHED SURVEY SUMMARY FACT SHEET

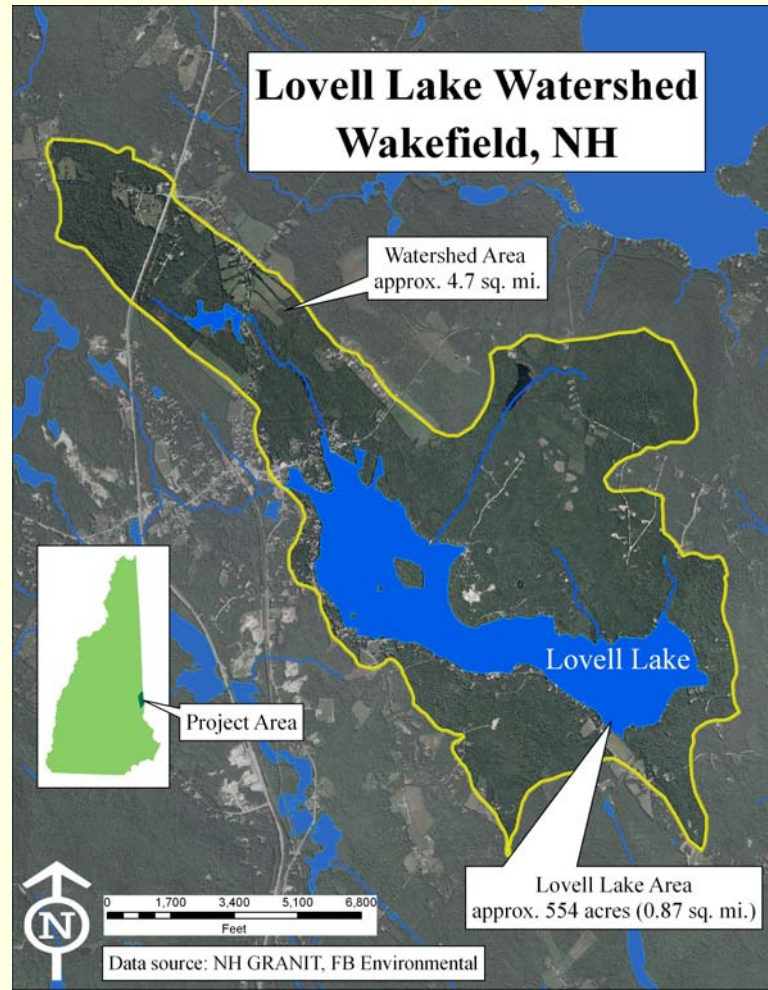


BACKGROUND:

The Lovell Lake watershed (all the land that drains to Lovell Lake) covers 4.7 square miles in the village of Sanbornville in the town of Wakefield.

Lovell Lake's water quality is above average, according to the NH Dept. of Environmental Services (DES), but it is threatened by polluted runoff. Soil erosion, in particular, is the single greatest source of pollution to Lovell Lake.

- Soil contains the nutrient phosphorus which has the potential to promote algae blooms when it enters a lake in large quantities. As the algae die off, the water becomes depleted of oxygen through the breakdown process, and fish and animals are unable to survive.
- Algae blooms also turn water green and make a lake virtually unusable.
- Studies have shown that as water clarity decreases, property values also drop.



WATERSHED SURVEY:

In September 2008, a team of 32 local volunteers and technical staff from Acton Wakefield Watersheds Alliance, York County SWCD, NH DES, and Maine DEP conducted a survey of the watershed and identified 161 sites that are contributing polluted runoff to Lovell Lake.

Teams documented polluted runoff sources from roads, properties, driveways, and shorelines using cameras and standardized field data sheets. Teams made recommendations to remediate each source using erosion control practices and rated the impact and cost to fix.

Results and recommendations were compiled in the ***Lovell Lake Watershed Survey Report***.



Examples of Identified Erosion Problems

KEY SURVEY RESULTS:

Volunteers and technical staff identified 161 sites in the Lovell Lake Watershed that are impacting or have the potential to impact water quality.

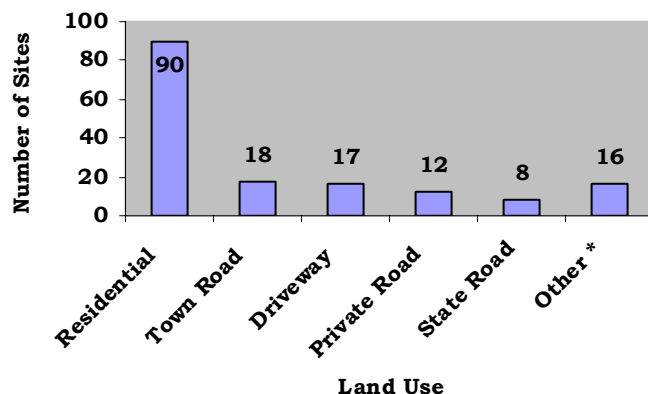
- 90 of the identified sites (57%) were found on residential properties. Most of these sites have a low impact on water quality and will be inexpensive to fix (less than \$500) with little technical expertise required. These tend to be simple fixes that can be done by the landowners themselves.
- 38 of the sites identified (24%) are associated with roads: State, town, and private. These sites tend to have a more severe impact on the lake with higher associated costs (greater than \$2500) and required technical knowledge. Also, the procedures involved with remediating these sites are more time and resource consuming.
- Route 109 poses a serious problem for the lake. This paved road produces a large amount of surface runoff during periods of precipitation. The road is also pitched in such a way as to shed the majority of this runoff towards the lake. Winter sand, road salt, oil and gas, heavy metals, and other pollutants wash off the road and are carried into the lake, creating a water quality hazard. The buffer between the road and the lake is severely limited. In some areas only a few feet separate the two.

Erosion sites were identified all around the watershed and on 8 different types of land uses (see above). As such, everyone has a role to play in lake protection. The Town of Wakefield, waterfront landowners, road associations, and even people living far from the lake can all help reduce lake pollution.

Project Partners:

Lovell Lake Association, Acton Wakefield Watersheds Alliance, NH DES, York County SWCD, Maine DEP, Town of Wakefield

Number of Sites Identified by Land Use



* Other includes: Beach Access (7), Boat Access (4), Commercial (3), and Municipal/Public (2)

NEXT STEPS:

- The information gathered from the watershed survey will be utilized in the creation of a Watershed Based Management Plan for the Headwaters of the Salmon Falls River .
- The Lovell Lake Association will work with the Acton Wakefield Watersheds Alliance to apply for grants to help landowners, road associations, and the town to fix some of the larger erosion problems identified in the survey.
- Letters will be mailed to all landowners with identified erosion problems to encourage them to take action to fix their property and to provide them with access to the necessary resources.
- Landowners of identified sites will have the opportunity to meet with the AWWA Technical Director and receive a site-specific remediation design as well as be considered as a YCC project host.
- Grants will be sought by the LLA and AWWA for assistance with remediation of larger projects.

FOR MORE INFORMATION:

A digital copy of the full survey report is available online at awwatersheds.org. If you would like information about fixing erosion problems on your property or a copy of the Lovell Lake Watershed Survey Report, contact:

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