



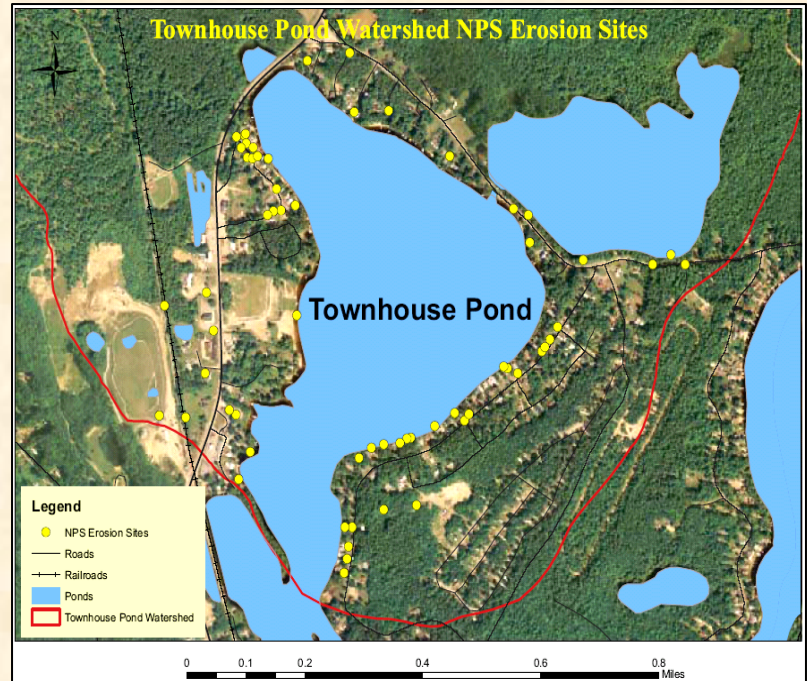
Townhouse Pond Watershed Survey Summary Fact Sheet

BACKGROUND:

Townhouse Pond's watershed (all of the land that drains to Townhouse Pond) is 729 acres (1.14 square miles) and is located entirely in Milton, New Hampshire.

Townhouse Pond's water quality is about average according to the NH Department of Environmental Services (DES), but between 2007 and 2008 the water quality of Townhouse Pond decreased. The greatest threat to water quality in Townhouse Pond, and the likely cause of this drop in water quality data, is nonpoint source (NPS) soil erosion.

- Soil contains the nutrient phosphorus, which has the potential to promote algae blooms when it enters a lake in large quantities. Algae blooms deplete oxygen in the water, essentially killing fish and other animals.
- Algae blooms also turn water green, decreasing water clarity and making the water body virtually unusable. Studies have shown that as water clarity decreases, property values also drop.



WATERSHED SURVEY:

On May 31st 2009 a team of 26 volunteers and trained technical staff from the Three Ponds Protective Association (TPPA), Maine Department of Environmental Protection (DEP), New Hampshire DES, York County Soil and Water Conservation District (YCSWCD), and the Acton Wakefield Watersheds Alliance (AWWA) conducted a watershed survey on Townhouse Pond. Over the course of the day these volunteers and technical advisors identified 65 different NPS erosion sites in the watershed that were either directly impacting or had the potential to impact water quality in Townhouse Pond.

Using cameras and standardized field data sheets, the teams documented NPS runoff sites from areas with the following land use: state and town roads, right of ways (ROW), residential properties, driveways, municipal and public lands, construction sites, commercial properties as well as boat and beach access areas.

Teams also made recommendations to remediate each source of NPS erosion using erosion control practices. All of the NPS sites were assigned an impact (high, medium or low) based on the potential impact that particular site had on the water quality of the pond. The sites were also given a cost estimate (high, medium, or low) to fix the problem.

Results and recommendations were compiled in the *Townhouse Pond Watershed Survey Report*.



Examples of Identified Erosion Problems

KEY SURVEY RESULTS:

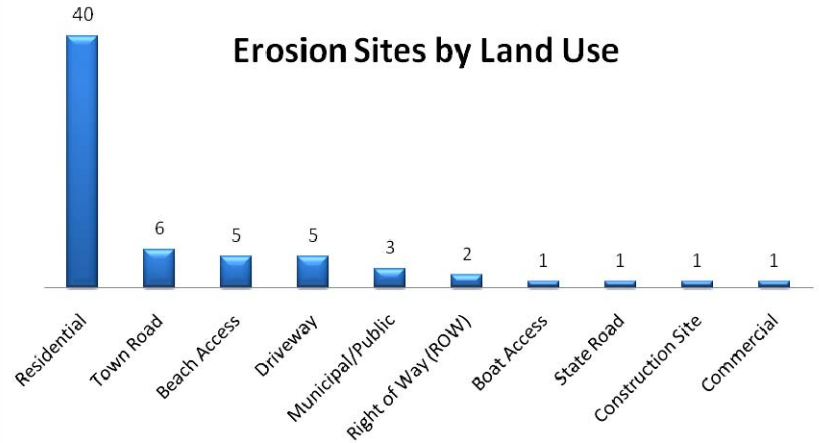
Volunteers and technical staff identified 65 sites in the watershed survey that were either impacting or had the potential to impact water quality.

- Forty of the identified sites (62%) were found on residential properties. Over half 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.
- Seven of the sites identified (11%) are associated with State and Town roads. These sites have the potential to severely impact Townhouse Pond, have higher associated costs (greater than \$2500), and may require engineering to repair.
- Driveways accounted for 5 of the sites identified (8%). Driveways are often placed to provide direct access to the house and beach without planning for the effects of stormwater runoff. Subsequently, many driveways are washed-out and then repaired in the same manner, only to be washed-out again.

Project Partners:

Three Ponds Protective Association
Town of Milton, NH
New Hampshire DES, Maine DEP,
Acton Wakefield Watersheds Alliance,
York County SWCD

Erosion Sites by Land Use



Ten different land uses were identified in the survey. Thus, no *single* source is responsible for pollution of the Pond, and all parties need to be involved in protecting the water quality. Every land use has aspects that can be improved and there are a number of resources available to aid in this improvement.

NEXT STEPS:

- Send letter offering technical assistance to property owners and the Town with identified erosion problems encouraging them to make improvements.
- Make copies of the survey report available and provide educational materials and guidance to members of the Townhouse Pond watershed community.
- Apply for grants to help fix erosion problems identified in the survey.
- Continue to promote the Lake Host, Weed Watch, and other water quality monitoring programs
- Host a meeting and/or workshop with presentations by New Hampshire DES and University of New Hampshire to educate property owners about the Comprehensive Shoreland Protection Act and publications such as “*Landscaping at the Water’s Edge*” for landowners and landscapers.
- Contact TPPA to hear more about the upcoming water quality improvement project proposed for the Milton Town Beach. Lend a hand and learn how to fix problems on your own property!

FOR MORE INFORMATION:

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