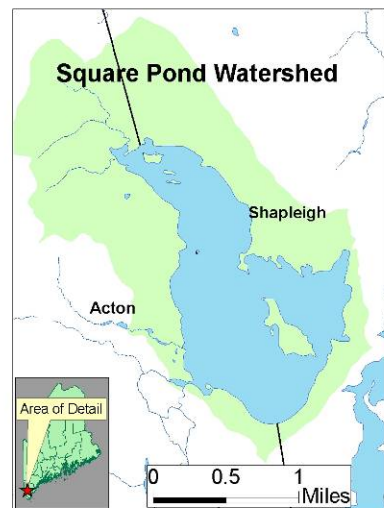


Square Pond Watershed Survey

#2006P-12

Waterbody Name: Square Pond
Location: Acton and Shapleigh – York County
Waterbody Status: NPS Priority Watershed
Project Grantee: York County SWCD
Project Duration: April 2006 – December 2007
604(b) Grant Amount: \$12,445
Local Match: \$17,711



PROBLEM:

Square Pond is a 910-acre lake with a direct watershed of 4.3 square miles. Square Pond flows into Goose Pond and then Mousam Lake, which was recently removed from the state's impaired waters list. The pond is highly developed with over 500 seasonal camps and year-round homes, a state-owned boat launch and a town-owned beach. About 180 seasonal residents live on Treasure Island. The residents operate their own ferry service to the island, which does not have formal roads or automobiles.

The Square Pond Improvement Association (SPIA) and Maine DEP have monitored the pond's water quality since 1977. Data indicates that the lake currently has above average water quality. However, the pond is at risk of future water quality problems due to its high density shoreline development, relatively slow flushing rate of 0.27 times per year, and moderate oxygen depletion in one of the two basins. The SPIA formed a water quality committee in 2003 to focus its energies on this threat. The Mousam Lake Youth Conservation Corps also completed several erosion control projects on lakefront properties.

PROJECT DESCRIPTION:

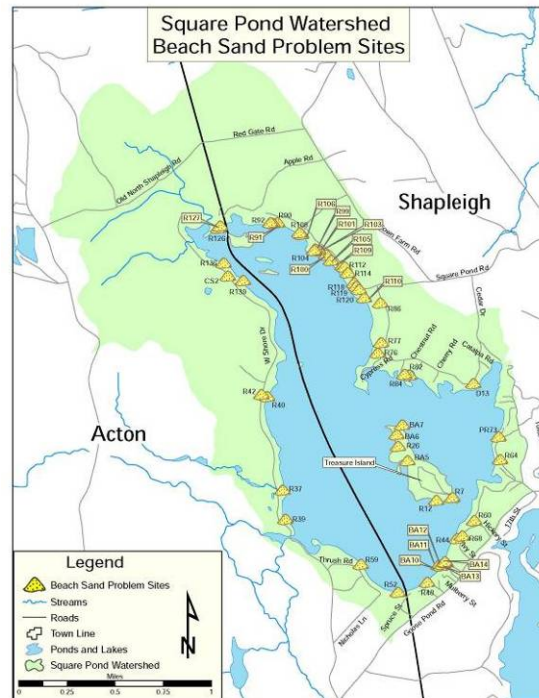
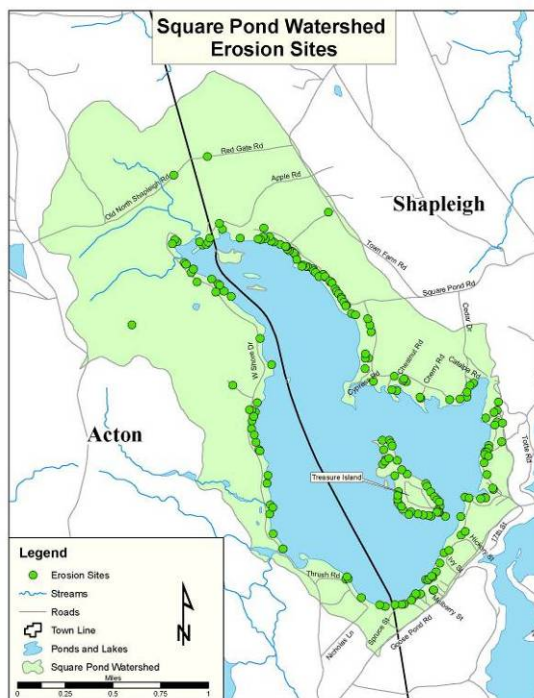
The purpose of the project was to identify, document and prioritize soil erosion sites in the Square Pond Watershed and to recommend conservation practices for each of these sites. Survey methods were based on those outlined in the DEP publication, *Citizen's Guide to Lake Watershed Surveys*. The day-long volunteer training session was held on May 20, 2006. Thirty-two volunteers completed the survey over the following month, and technical staff checked their work in the fall.



The watershed survey identified a total of 207 erosion sites. Survey data was summarized in the *Square Pond Watershed Survey Report*. Survey reports and two-page summaries of the survey findings were distributed to town officials and watershed residents. The SPIA also took the initiative to send tailored notification letters to landowners associated with identified sites. Project staff delivered presentations at the SPIA annual meetings in 2006 and 2007, organized a hands-on workshop to fix erosion problems on a property identified during the survey, and conducted several technical assistance visits in the summer of 2007.

PROJECT OUTCOMES:

- Project staff and 32 volunteers surveyed the entire Square Pond watershed and documented 207 erosion sites. The *Square Pond Watershed Survey Report* was completed in May 2007. The report summarizes watershed survey findings and lists specific descriptions and recommendations for identified sites.
- During the survey, 55 sites were found that had sand added to their beaches. In response to this pervasive problem, project staff developed a two-page flyer outlining the environmental impacts, legal implications and alternatives to adding sand to beaches. 500 copies were printed, and copies were distributed by the SPIA.
- A hands-on workshop was held in July 2007 at a property identified in the watershed survey. During this workshop, volunteers planted 82 plants, spread 14 cubic yards of Erosion Control mulch, installed a roof dripline trench and stabilized a path to the lake.
- The project laid the foundation for mitigation efforts in the watershed. York County SWCD was awarded a 319 grant to start mitigation work in the watershed in April 2008.



PROJECT PARTNERS:

Square Pond Improvement Association
Town of Acton
Town of Shapleigh

CONTACT INFORMATION:

Wendy Garland, DEP – (207) 822-6320, wendy.garland@maine.gov

Joe Anderson, York County SWCD – (207) 324-0888, janderson@yorkswcd.org

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