

Square Pond Watershed Improvement Project, Phase I

#2008RR11

Waterbody Name: Square Pond

Location: Acton and Shapleigh – York County

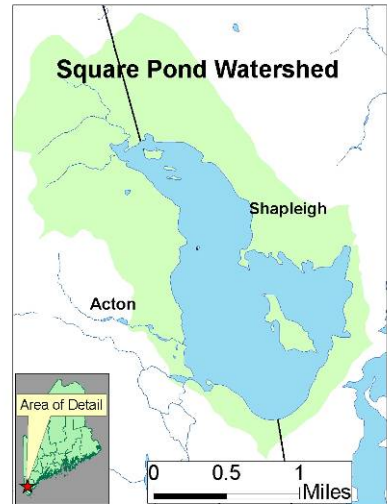
Waterbody Status: NPS Priority Watershed

Project Grantee: York County SWCD

Project Duration: March 2008 – September 2010

319 Grant Amount: \$81,034

Local Match: \$85,081



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 80 seasonal homes are located 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 and moderate oxygen depletion in one of the two basins. The SPIA formed a water quality committee in 2003 to focus its energies on water quality, and the local Acton Shapleigh Youth Conservation Corps (YCC) has completed several erosion control projects on lakefront properties. A 2006 watershed survey (#2006P-12) identified 207 NPS sites including a mix of residential areas (67%), beaches (10%), driveways (8%) and private and town roads (8%).

PROJECT DESCRIPTION:

The project purpose was to fix 21 priority NPS sites from the watershed survey, including three roads, a parking lot, a town beach and 16 residential properties. The project also aimed to provide technical assistance to 20 landowners and partner with the Acton Shapleigh YCC to install conservation practices at another 16 residential sites. Community outreach included four newsletters to the 500 watershed residences, press releases to local newspapers and six neighborhood ‘septic socials’ to teach residents about septic system maintenance.



The Acton Shapleigh YCC fixed 27 sites on Square Pond, exceeding their project goal of 20 sites.

PROJECT OUTCOMES:

- The project fixed erosion problems at 23 NPS sites (exceeding the goal of 21 sites). As a result, pollutant loading to Square Pond was reduced by an estimated 21.8 tons of sediment and 17.6 pounds of phosphorus per year (Region 5 Method and WEPP Model). The Treasure Island Parking Lot site was one of the most notable sites. This 100-car lakeside parking lot was re-graded and surfaced with recycled asphalt; a rain garden was installed to treat the runoff; and vegetated buffers were planted.
- The Acton Shapleigh YCC completed 27 projects (exceeding the goal of 20 sites). York County SWCD and YCC staff completed 79 technical assistance visits (far exceeding the goal of 20 visits).
- 54 people attended six septic socials, which were hosted by local residents, the Treasure Island Landowners Association (TILOA) and the Towns. The socials provided a relaxed setting for participants to learn about septic system function and maintenance.
- The project helped build the capacity, partnerships and commitment of local organizations for ongoing lake stewardship. TILOA, which had historically focused only on island issues, joined the SPIA for the first time, hosted 5 NPS projects and raised \$5,000 in cash match. The SPIA also moved water quality to the forefront of their organization's mission, and the Acton Shapleigh YCC Board reorganized and stepped up their fundraising efforts to adjust to town budget cuts.



The Treasure Island ferry parking lot was re-graded and resurfaced with recycled asphalt, and a central rain garden was installed to capture and treat runoff. Volunteers installed ECM and 84 plants to create a shoreline buffer.

PROJECT PARTNERS:

Acton Shapleigh Youth Conservation Corps
Square Pond Improvement Association
Town of Acton
Town of Shapleigh
Treasure Island Landowners Association

CONTACT INFORMATION:

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Suggested Citation:

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