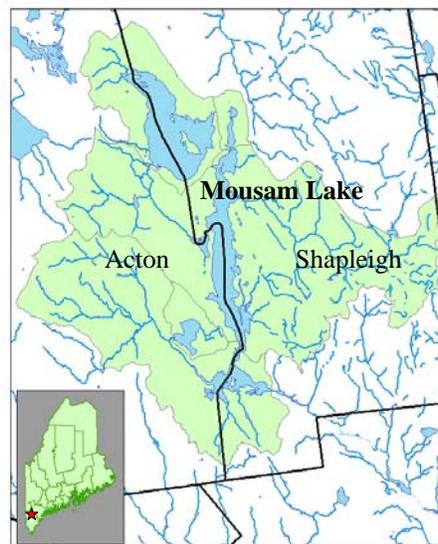


Mousam Lake Water Quality Improvement Project

#2000R-40 - WIFAP

Waterbody Name: Mousam Lake
Location: Acton and Shapleigh - York County
Waterbody Status: Impaired, NPS Priority Watershed
Project Grantee: York County SWCD
Project Duration: November 2000 – December 2003
319 Grant Amount: \$60,000
Match: \$39,920 (local), \$40,000 (ME Dept. Ag.)



PROBLEM:

Mousam Lake is a 926-acre lake located in the Towns of Acton and Shapleigh. Its watershed covers 22 square miles and also includes Square Pond, Loon Pond and Goose Pond. Mousam Lake's shoreline is heavily developed with over 2,200 residences, and there are nearly 3,000 parcels in the watershed. The lake has been monitored by the DEP and volunteers since 1974 and is considered to be declining based on measures of secchi disk transparency, total phosphorus and chlorophyll a. There is also significant depletion of dissolved oxygen in the bottom waters of the lake in late summer. Mousam Lake is on the DEP/EPA 303(d) listing of water non-attaining state water quality standards (TMDL List).

The York County Soil and Water Conservation District (SWCD), Mousam Lake Region Association (MLRA), Town of Acton and Town of Shapleigh started lake protection efforts in 1997 when they conducted a 319-funded survey to identify erosion problems in several hotspots around the lake. They conducted a BMP Demonstration Project from 1999-2001 and installed conservation practices at six erosion sites around the watershed. Since Mousam Lake does not meet state water quality standards, a phosphorus nutrient loading plan (TMDL Assessment) was completed in 2002.

PROJECT DESCRIPTION:

The purpose of the project was to reduce soil erosion and polluted runoff sources to Mousam Lake, build local commitment to lake protection and ultimately to improve water quality. Staff and volunteers coordinated and installed conservation practices at 15 town and private road sites and provided technical assistance to 77 landowners. In addition, the project established a summer Youth Conservation Corps (YCC) that provided watershed residents and road associations with labor to install conservation practices at an additional 17 sites.

The project also distributed three educational newsletters to all watershed households; delivered presentations at the MLRA annual meetings; posted "Gold Star" signs at all construction sites; held three hands-on workshops; and printed numerous articles in local and regional newspapers.



PROJECT OUTCOMES:

- The project fixed 15 large-scale erosion problems in the watershed, thereby keeping an estimated 77 tons of sediment out of the lake each year (EPA Region 5 Method).
- The Mousam Lake Youth Conservation Corps was established through the grant. The YCC installed conservation practices on 17 road and residential sites in 2001. The YCC program was so successful, the Towns of Acton and Shapleigh and the MRLA funded the program in 2002 and 2003.
- Project staff provided technical assistance to 77 landowners through the projects – far exceeding the goals of 15 written into the original workplan.
- Numerous articles were printed about the project and the YCC in local and regional newspapers. The Portland Press Herald, Journal Tribune and Sanford News ran feature stories and photos on the YCC in the summer 2001. This high-profile coverage helped build widespread support for continued local funding for the YCC program.
- The project accomplished work through a variety of innovative partnerships and funding sources. The Maine Department of Agriculture provided \$40,000 in cash match through the WIFAP program. The state road site was fixed by DOT's SWQPP grant program. Local volunteers and town road commissioners completed much of the other construction. Local match totaled almost \$40,000 – \$15,000 over the original project goal.



York County SWCD, Maine Department of Transportation, and volunteers from Maplestone School planted vegetated buffers at the foot of Mousam Lake to keep polluted stormwater out of the lake.

The project was funded through by a grant from the DOT's Surface Water Quality Protection Program (SWQPP).

PROJECT PARTNERS:

Mousam Lake Region Association
Town of Acton
Town of Shapleigh
Maine Department of Agriculture
Maine Department of Transportation

CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2005) "Nonpoint Source Management Program Annual Report 2004," Document # DEPLW0701 2005. Augusta: MDEP.

Teens are working hard and loving it

These
teens
are in the
trenches
Youth conservationists give vulnerable Mousam Lake a fighting chance against pollution.

Save the lakes
Project at Mousam should serve as model for other communities

Foot of lake gets a facelift