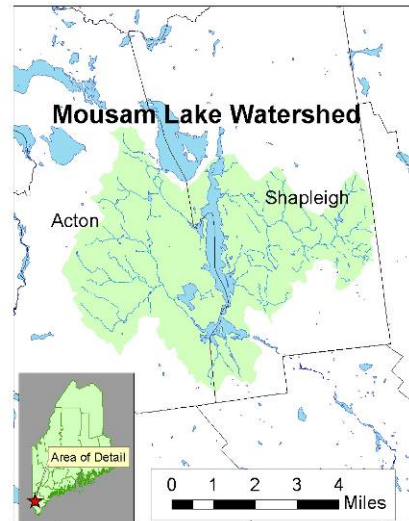


Mousam Lake Water Quality Improvement Project, Phase III #2007WW22 – WIFAP

Waterbody Name: Mousam Lake
Location: Acton and Shapleigh – York County
Waterbody Status: Restored, NPS Priority Watershed
Project Sponsor: York County SWCD
Project Duration: January 2008 – February 2010
319 Grant Amount: \$30,000
Match: \$90,796 (local), \$20,000 (ME Dept. Ag.)



PROBLEM:

Mousam Lake is an 863-acre lake that is heavily developed with over 700 residences, and there are nearly 3,000 parcels in the lake's 21-square-mile watershed. The lake has been monitored by the DEP and volunteers since 1974. In 1998 it was placed on Maine's list of impaired lakes due to declining water clarity. The DEP 2003 Phosphorus Control Action Plan (TMDL Assessment) attributed water quality decline to phosphorus from soil erosion and stormwater runoff from residential properties, camp roads and aging septic systems located in the sandy soils around the lake. In 2006, DEP removed Mousam Lake from the impaired waters list based on improving water clarity trend.

Water quality improvements can be attributed to long-term efforts by York County SWCD, Mousam Lake Region Association (MLRA), Maine DEP and Towns of Acton and Shapleigh to identify and mitigate sources of pollution to the lake. In 1997, the York County SWCD received a 604(b) grant to conduct a survey to identify erosion problems in several hotspots around the lake. Three 319 projects took place in the watershed from 1999 – 2007. These projects provided cost-sharing to fix 51 road and residential sites in the watershed, provided technical assistance to another 157 landowners and conducted outreach programs. A summer Youth Conservation Corps (YCC) was established in 2001, and has continued to fix an average of 18 sites each year with town and MLRA financial support. Popular 'Septic Socials' have taught 197 residents and local officials about proper septic system maintenance.

PROJECT DESCRIPTION:

The purpose of the project was to address the major remaining NPS sources to Mousam Lake and continue to improve Mousam Lake's water quality. Eight high priority sites were fixed with cost sharing assistance, and another 26 residential sites were addressed by the Acton Shapleigh YCC. Project staff provided technical assistance to 66 landowners.

The project distributed two newsletters; printed articles in local newspapers and newsletters; delivered a 'Water Quality 101' presentation; posted signs at the 8 high priority sites; and held 4 Septic Socials (34 participants) and 4 road association workshops. Project staff visited 49 sites fixed during past grants and presented findings to town officials and watershed groups.



In 2008 Pat Baldwin received EPA's Lifetime Achievement Award for her work on Mousam Lake

PROJECT OUTCOMES:

- The project fixed 8 priority erosion problems in the watershed, including one private site and 7 road sites, thereby reducing pollutant loading to Mousam Lake by an estimated 25 tons of sediment and 21.2 pounds of phosphorus each year (Region 5 Method and WEPP Model).
- The Acton Shapleigh YCC installed conservation practices on another 26 road and residential sites. Over the course of the project, the YCC developed into a proactive and professional organization with the capacity to take a leadership role in long term lake stewardship efforts.
- Four ‘Road Socials’ were conducted during the project to encourage residents to form road associations. Similar to Septic Socials, these workshops were designed to be small neighborhood gatherings held on targeted high priority roads. As a result of the workshops, Starboard Lane became organized as an informal road association, and Totte Road residents started the process of forming a statutory road association.
- Local resident Pat Baldwin received EPA’s Lifetime Achievement Award in 2008 in recognition of her contributions to Mousam Lake.



Starboard Lane – This private road was regraded and stabilized, and ditches were installed to carry runoff into this detention basin and then a level spreader.



Knox Road – This town road was regraded and paved. Ditches, which were installed on both sides of the road, direct runoff into vegetation and a new detention basin at base of hill.

PROJECT PARTNERS:

Acton Shapleigh Youth Conservation Corps
Maine Department of Agriculture
Mousam Lake Region Association
Town of Acton
Town of Shapleigh

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