

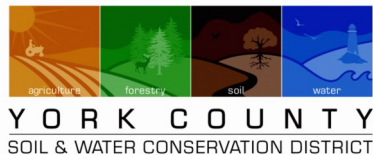
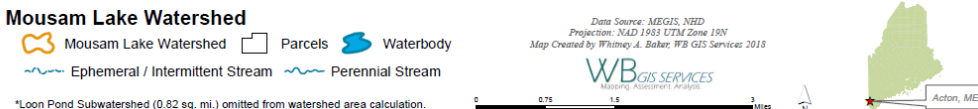
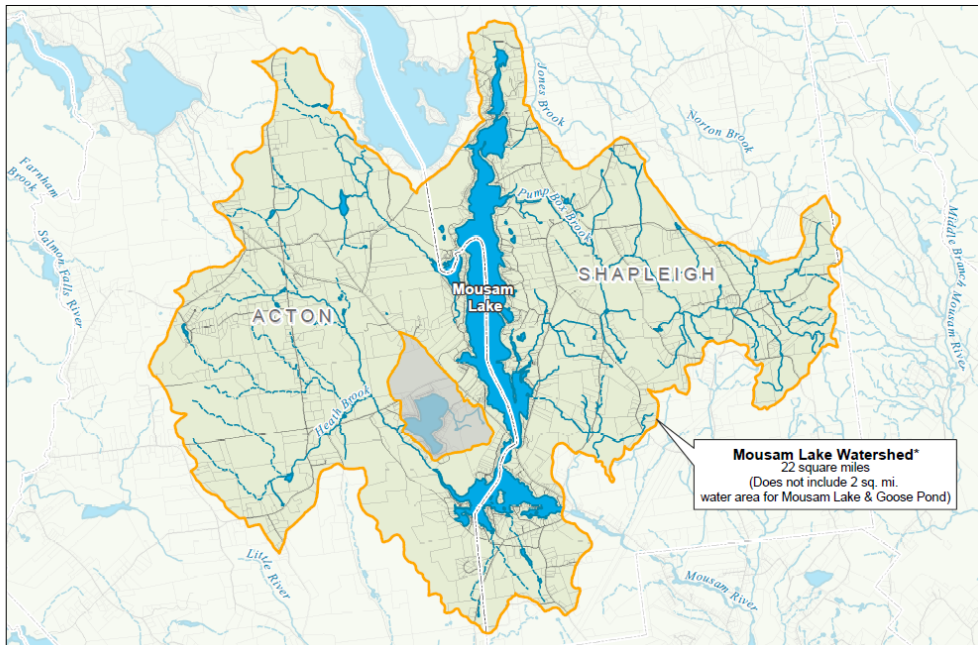
Mousam Lake

Protection Project, Phase I

WATERSHED INFORMATION

Mousam Lake is a dual-basin, 979-acre waterbody located in the towns of Acton and Shapleigh, in York County, Maine. The watershed also includes the watersheds of Goose and Loon Ponds. The lake has a maximum depth of 95 feet and a mean depth of 17 feet. The total drainage area, inclusive of Goose and Loon Pond watersheds, is 25 square miles. Pump Box Brook, and Heath Brook are the only named tributaries flowing to Mousam Lake, though the watershed contains many other tributaries and smaller drainages.

The lake shoreline is heavily developed with over 950 year-round and seasonal residences. There are nearly 1,650 parcels in the Mousam Lake watershed. In 2001, it was reported that only four small farms remain active in the watershed and the largest of these is an apple orchard located on Hubbard Ridge in Acton. Other land uses include commercial boat marinas, gas stations, stores, restaurants, and the Acton Fairgrounds property located near the western shore of Mousam Lake.



PAST ACTIONS

In 2017 a locally-funded watershed survey was completed identifying 189 sites. 60% of all sites were related to erosion on residential properties nearest to the Lake. 28% of identified sites were associated with roads (town roads, private roads, and driveways). However, these sites tend to be larger erosion problems with a greater impact to the Lake.

**PREPARED BY: YORK COUNTY SOIL AND WATER
CONSERVATION DISTRICT
DECEMBER 2021**



NON-POINT SOURCE ABATEMENT PROJECTS

Best Management Practices (BMPs) were installed at six NPS sites, some of which were identified during the 2018 watershed survey and others that were identified through the course of this project. These consisted mainly of larger private residence projects or those on private roads.

These projects were accomplished with technical assistance from YCSWCD and the CCSWCD engineer, cost sharing between the grant and private landowners, and installation either by the landowners or private contractors.

On the next page see some before and after photos of a few of our erosion control projects.



PROJECTS AT A GLANCE:

- Six projects completed
- These projects will reduce the annual load of pollutants to Mousam Lake by:
 - 3.57 tons of sediment
 - 3.05 lbs of phosphorus
 - 6.08 lbs of nitrogen

Before

After





ASYCC PROJECTS

The Acton-Shapleigh Youth Conservation Corps (ASYCC), was founded in 2001, and is committed to protecting the waterways within Mousam Lake and Square Pond Watershed.

This is achieved by providing education, community outreach, courtesy boat inspections, technical assistance, and the installation of effective erosion control practices to the communities of Acton and Shapleigh.

The Erosion Control Crew (ECC) is a group of local high school aged students working under the direction of a crew leader. The ASYCC ECC provides labor at no charge, the property owners are merely asked to supply the project materials.

Turn the page to learn more about some of the best management practices that were installed.



PROJECTS AT A GLANCE:

- 15 completed
- 1,012+ hours
- 55+ yards of erosion control mulch
- 58+ native plants
- 290+ feet of French drains or infiltration trenches
- 100+ infiltration steps



Infiltration Steps

Use crushed stone to allow stormwater to infiltrate, making them more stormwater, erosion, and lake friendly than stairs made of impervious surfaces.



Infiltration Trenches

Often used to capture roof runoff or placed alongside paths, infiltration trenches are 12-18 inches deep, filled with crushed stone and a geotextile fabric to allow stormwater to infiltrate and to filter out sediment and pollutants.



Native Plants and Erosion Control Mulch

Native plants help reduce erosion, absorb and filter stormwater runoff, and improve the natural habitat.

Erosion control mulch was also used to slow runoff on many projects, sometimes alone and sometimes in conjunction with native plants.

EDUCATION & OUTREACH



A educational video detailing the impacts of stormwater runoff on Mousam Lake was produced, featuring the efforts of the Acton-Shapleigh Youth Conservation Corps and several local projects. This video has received over 600 views and has been shared throughout the state, providing an excellent educational resource for lakefront property owners and sharing some of the great conservation work being accomplished on Mousam Lake!



View it on Youtube: <https://www.youtube.com/watch?v=2TaaWqYevls>

Many thanks to the Landry family for producing this excellent resource and to ASYCC for hosting the workshop.

FUTURE PROJECTS

A second 319 grant was awarded in YCSWCD in 2021 to continue restoration work in the Mousam Lake Watershed. This will provide funds to address an additional three road BMP sites, 15 landowner sites with ASYCC, and continue education and outreach efforts.

THANK YOU TO OUR PARTNERS!

Mousam Lake Region Association
Acton-Shapleigh Youth Conservation Corps
Maine Department of Environmental Protection
Town of Shapleigh
Town of Acton
Three Rivers Land Trust
Tattle Street Road Association
Shapleigh Conservation Commission
Cumberland County Soil & Water Conservation District

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