

Moose Pond Watershed Implementation Project, Phase I

#2012RR03

Waterbody Name: Moose Pond

Location: Bridgton, Denmark, and Sweden –
Cumberland and Oxford Counties

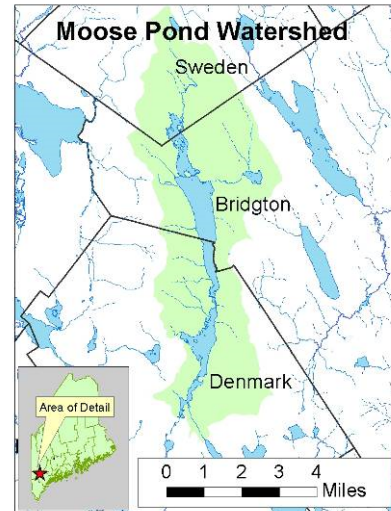
Waterbody Status: NPS Priority Watershed

Project Grantee: Cumberland County SWCD

Project Duration: January 2012 – January 2014

319 Grant Amount: \$60,371

Local Match: \$43,266



PROBLEM:

Moose Pond has three distinct basins with a combined surface area of 1,617 acres. The lake sits at the base of Pleasant Mountain, and its shoreline is fringed with three public boat launches, a scenic public picnic/rest area on Route 302, a public beach, a private campground, two summer residential youth camps and numerous homes. The 17.4 square mile watershed includes the Shawnee Peak Ski Area and is part of the Saco River watershed.

Lakes Environmental Association (LEA) and local volunteers have monitored Moose Pond water quality since 1976. The uppermost basin, which is located in the least developed part of the watershed, is considered to have above average water quality. The lower two basins show moderate oxygen depletion in the bottom waters of the lake, which can limit the pond's cold-water fish habitat. As a result, LEA rates Moose Pond as a moderate to high degree of concern.

In 2010, CCSWCD along with Moose Pond Association (MPA), LEA, and volunteers conducted a 319-funded watershed survey and identified 208 sites with soil erosion and uncontrolled runoff to the lake. Of these 208 sites, 23 were rated as having a high impact to water quality, 75 as medium impact, and 110 as low impact. Sites were found on residential properties (73 sites), town roads (34 sites), commercial properties (30 sites), driveways (24 sites), beach access (18 sites), and private roads (17 sites).

PROJECT DESCRIPTION:

The primary purpose of this project was to reduce erosion and export of sediment and phosphorus into Moose Pond. Another purpose was to raise awareness about watershed problems and work to foster long-term watershed stewardship. Conservation practices that reduce erosion and polluted runoff were installed at 25 sites throughout the watershed. Work was conducted through successful collaboration between four local water protection organizations: CCSWCD, LEA, MPA, and OCSWCD.



Moose Pond

PROJECT OUTCOMES:

- Installation of conservation practices at 11 priority sites. Work included ditch creation and stabilization, construction of a riprapped swale, gravel road improvements, installation of culverts, and stabilization with erosion control mulch and riprap.
- Installation of 28 conservation practices on 14 matching grant sites. Matching grant recipients were offered 50/50 cost share up to \$300 to install recommended conservation practices.
- Completion of nearly 50 technical assistance site visits, including providing written recommendations for most of the sites.
- Reduction of an estimated 62.5 tons of sediment and 53.1 pounds of phosphorus per year entering Moose Pond (WEPP and Region 5 Methods).



Before



After

This heavily eroded access site on the Route 302 causeway in Bridgton was stabilized using stone riprap and erosion control mulch. Key goals of protecting water quality include diverting, spreading out, and infiltrating runoff.



Before



After

Erosion along this residential walkway was addressed using lumber and crushed stone to create steps or tiers, and bare soil was covered with three to four inches of erosion control mulch.

PROJECT PARTNERS:

Lakes Environmental Association
Town of Bridgton

Moose Pond Association
Town of Denmark

Oxford County SWCD

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