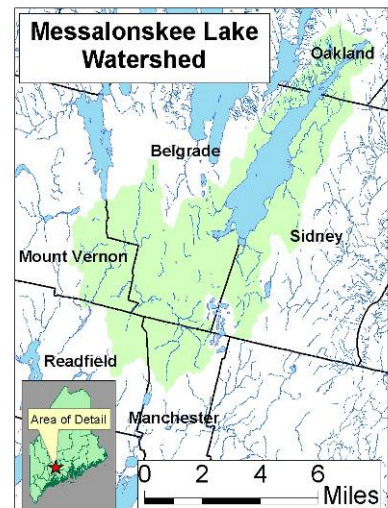


Messalonskee Lake Watershed NPS Remediation Project, Ph I

#2004R-05

Waterbody Name: Messalonskee Lake
Location: Oakland, Belgrade, Sidney – Kennebec County
Waterbody Status: NPS Priority Watershed
Project Grantee: Belgrade Regional Conservation Alliance
Project Duration: May 2004 – January 2007
319 Grant Amount: \$66,846
Local Match: \$53,331



PROBLEM:

Messalonskee Lake, also known as Snow Pond, is the last lake in the Belgrade Lakes chain. It has a surface area of 3,506 acres and a watershed area of 46 square miles. Although the watershed has historically been mostly agricultural, in the 1990's there was a significant amount of camp and home building in the watershed.

Water quality data has been collected on the lake since 1970, and water quality is considered to be average. While there is a low potential for nuisance algal blooms, moderate dissolved oxygen depletion in the bottom waters and moderately high phosphorus levels (12-14 ppb) in the surface waters have led to a continued concern over the future water quality of the lake. A watershed survey, published in 2003, identified 426 erosion sites of varying severity in the watershed.

PROJECT DESCRIPTION:

The purpose of this project was to reduce soil erosion and polluted runoff by installing water quality BMPs on medium and high priority NPS sites identified in the 2003 watershed survey. BMPs included extensive road work and buffer plantings and depended on road association and landowner interest. Through the project, approximately two miles of camp roads were rebuilt, including ditching, crowning, and installing turnouts, and 10,700 square feet of vegetated buffer were planted and mulched. The Belgrade Regional Conservation Corps, which is comprised of local high school students, planted buffers, spread erosion control mulch, and installed rip-rap on 14 watershed sites.

The on-the-ground work was combined with one-on-one education of road associations and landowners. Technical assistance was provided to 41 property owners and five camp road associations beyond those involved with cost-share projects. Outreach regarding the impact of erosion on lake water quality was furthered through newsletter and newspaper articles and through the Snow Pond/Messalonskee Lake Association.



PROJECT OUTCOMES:

- BMPs were implemented on seven camp roads and one driveway, totaling approximately two miles of work. Work included culvert inlet/outlet protection, creation and stabilization of ditches and turnouts, use of geotextile mats to stabilize road bases, and road reshaping.
- Eight vegetated buffers, including a town beach buffer, were established through the project.
- Thirteen buffer plantings and riprap installation projects were completed by the Belgrade Regional Conservation Corps.
- The project reduced pollutant loading to the lake by an estimated 3.1 tons of sediment and 2.2 pounds of phosphorus per year (WEPP Method and Colby Method).
- Technical assistance was provided to over 40 property owners and camp road associations. Project staff discussed NPS issues and provided suggestions for specific site remediation.
- Project information and educational articles were printed in the Snow Pond/Messalonskee Lake Association newsletter and the local paper, *Summertime in the Belgrades*.

The Belgrade Regional Conservation Corps plants a buffer.



Before



During



After

PROJECT PARTNERS:

Belgrade Regional Conservation Corps
Snow Pond/Messalonskee Lake Association
Town of Belgrade
Town of Oakland
Town of Sidney

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