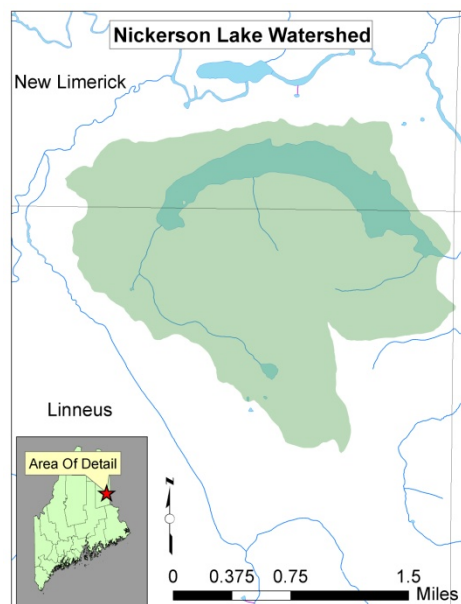


Nickerson Lake Conservation Project Phase I

2010RR04

Waterbody Name: Nickerson Lake
Location: New Limerick – Aroostook County
Waterbody Status: Attains Class GPA
Project Grantee: Southern Aroostook SWCD
Project Duration: January 2010 – September 2012
319 Grant Amount: \$64,789
Local Match: \$49,263



PROBLEM:

New development, renovation of seasonal camps to year-round residences, increased camp road traffic concurrent with year round use, and subsequent road degradation all contribute to nonpoint source (NPS) pollution to Nickerson Lake. Preliminary results from the spring 2009 lake survey indicate that 35% of pollution runoff comes from erosion from camp roads. Nickerson Lake is also close to the Town of Houlton and Interstate 95. This region has experienced a significant increase in development over the past decade.

The Nickerson Lake Wilderness Preservation Corporation voted to conduct a survey of their watershed in the spring of 2009. The survey identified 48 erosion sites which included town and private roads (35%), driveways (42%), camp lots (13%), shoreline (8%) and boat landing sites (2%). The sites were ranked for impact on water quality, 17% were rated high impact, 58% were medium impact, and 25% low impact.

Highly erodible soils data indicate that 70% of the acreage in the Nickerson Lake watershed is highly erodible or potentially highly erodible land, with moderate to severe slopes ranging from 5 to 25%.

PROJECT DESCRIPTION:

The Nickerson Lake Conservation Project – Phase I was managed by the SASWCD and guided by a steering committee made up of local partners including the Nickerson Lake Wilderness Preservation Corporation, Houlton Community Golf Course, the Towns of Linneus and New Limerick and the Houlton Band of Maliseet Indians.

Activities focused on reducing sediment loading by installing BMPs to address erosion from camp roads, residential sites, and one public site - all of which had been identified in the 2009 watershed survey. Project staff provided technical assistance and education to many landowners. Five hands-on educational workshops were held, and topics covered included: camp road maintenance, rain garden installation, and a conservation landscaping workshop focused on vegetative buffers. Outreach to the Nickerson Lake community was reached through mailings and press releases in local newspapers. Workshops as well as the availability of technical assistance and grant cost-shares were advertised.

PROJECT OUTCOMES:

- Six camp road NPS sites were addressed with BMPs including the introduction and installation of rock burritos. Fifteen residential sites and two public recreational sites (a golf course and a state public beach) also were addressed with sediment and erosion control BMPs.
- Technical assistance was provided to residents on creating vegetative buffers and preventing erosion on driveways.
- The LakeSmart program recognized several landowners for maintaining lake friendly BMPs on their properties.
- Pollutant loading to Nickerson Lake was reduced by an estimated 255 tons of sediment, 255 pounds of phosphorus and 511 pounds nitrogen per year.

PROJECT PARTNERS:

Local landowners

Nickerson Lake Wilderness Preservation Corporation



Nickerson Lake shoreline erosion before BMP installation



Nickerson Lake shoreline after BMP installation

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