# Sabbathday Lake Watershed Survey

# #2008RR14

Waterbody Name: Sabbathday Lake

Location: New Gloucester, Poland – Cumberland County

Waterbody Status: NPS Priority Watershed, Most at Risk

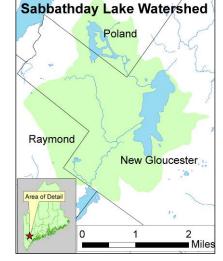
Project Grantee: Cumberland County SWCD

Project Duration: April 2008 – September 2009

319 Grant Amount: \$9,711

Local Match: \$9,387

## PROBLEM:



Sabbathday Lake has a surface area of 331 acres and a 5.3 square mile watershed. The lake's shoreline is fringed with over 100 seasonal and year-round homes and a commercial beach, boat launch and snack bar facility. The watershed is home to the Sabbathday Lake Shaker Community, which owns 1,700 acres of working farmland, forest and the historic village area.

The Maine DEP and the Sabbathday Lake Association have collected water quality data on the lake since 1975. Water quality is considered to be above average based on water clarity. However, moderate dissolved oxygen depletion in deep areas of the lake indicates that there is a high risk of phosphorus recycling problems. In 1996 a DEP-funded watershed survey identified 75 erosion problems in the watershed. From 1998 to 2004, two grant projects fixed 16 of the priority sites, provided 57 landowner technical assistance visits and formed a summer Youth Conservation Corps, which later expanded into the larger Royal River watershed and continued through 2008.

## PROJECT DESCRIPTION:

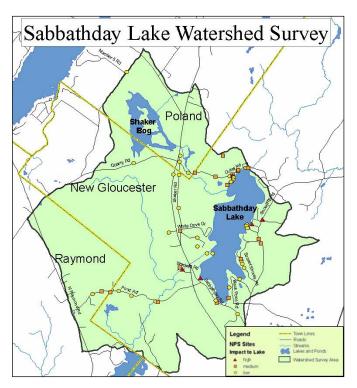
The purpose of the project was to identify, document and prioritize remaining soil erosion sites in the Sabbathday Lake watershed. Survey methods were based on those outlined in the DEP publication, *Citizen's Guide to Lake Watershed Surveys*. On May 3, 2008, 27 volunteers participated in the training session and survey. Most of the watershed was surveyed that day. Technical staff checked their work and estimated pollutant loading from priority sites throughout the summer.



The watershed survey identified a total of 58 erosion sites. Survey data was summarized in the *Sabbathday Lake Watershed Survey Report*. Survey findings were presented at a New Gloucester Planning Board meeting and at SLA's 2009 annual meeting. The SLA also mailed all watershed residents information about the survey and how to get copies of the report. Residents with high and medium impact erosion sites received personalized letters describing the problems and a list of resources to encourage them to fix the issue.

# **PROJECT OUTCOMES:**

- Project staff and volunteers surveyed the entire Sabbathday Lake watershed and documented 58 erosion sites. Most identified sites were associated with town roads (38%) and residential areas (31%).
- The Sabbathday Lake Watershed Survey Report was completed in April 2009. The report summarizes watershed survey findings and lists specific descriptions and recommendations for identified sites.
- Following the survey, the Sabbathday Lake Association immediately took the initiative to start addressing the identified erosion sites. They sent letters to landowners with high and medium impact sites; met with Town Public Works staff about town road sites; appointed a person to spearhead ongoing mitigation efforts; and funded several technical assistance visits by Cumberland County SWCD staff.







# **PROJECT PARTNERS:**

Sabbathday Lake Association Town of New Gloucester Sabbathday Lake Shaker Society

#### **CONTACT INFORMATION:**

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#### Suggested Citation:

Maine Department of Environmental Protection (2010) "Nonpoint Source Management Program 2009 Annual Report," Document# DEPLW-1159 2010. Augusta: MDEP.