

Long Lake Watershed Improvement Project, Phase II

#2006R-01

Waterbody Name: Long Lake

Location: Naples, Bridgton, Harrison, Waterford, Denmark – Cumberland County

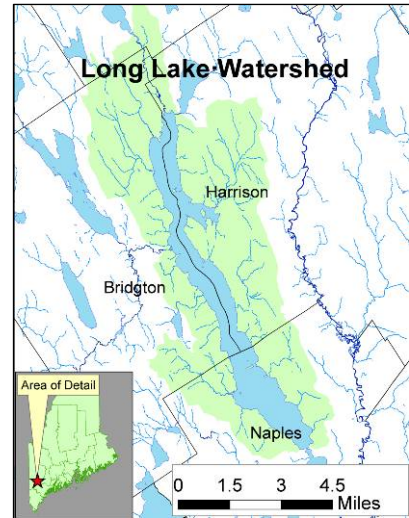
Waterbody Status: NPS Priority Watershed, Most at Risk

Project Grantee: Cumberland County SWCD

Project Duration: September 2006 – November 2009

319 Grant Amount: \$59,567

Local Match: \$43,325



PROBLEM:

Long Lake is a large 5,358-acre waterbody located in the Towns of Bridgton, Harrison and Naples. The lake's direct watershed covers 36 square miles and extends into Waterford and Sweden. Long Lake has a flushing rate of 0.94 times per year, and it flows into Brandy Pond and Sebago Lake. The lake is a popular year-round destination and is developed with 935 seasonal and year-round homes, three public boat launches, one commercial boat launch, two commercial marinas, seven commercial campgrounds, two large boys and girls summer camps and many businesses along the south and west edge of the lake.

Lakes Environmental Association (LEA) has been collecting water quality data on Long Lake since 1976. The lake was placed on the State's list of impaired waters due to a declining water quality trend, and a TMDL Assessment for the lake was completed in 2005. The DEP removed Long Lake from the impaired list in 2006 because of improved trophic state and water quality. *Phase I* of the Long Lake Improvement Project, which extended from 2005 - 2008, fixed erosion problems at 27 sites and established a Long Lake Youth Conservation Corps (YCC).

PROJECT DESCRIPTION:

The primary purpose of the Phase II project was to significantly reduce erosion and export of sediment and phosphorus into Long Lake. The overall goal of Phase II was to address existing erosion issues on the identified road and shoreline phosphorus hot spots; solidify the YCC as a means to provide long-term support for installation of residential conservation practices; and enhance the three watershed towns' shoreland zoning ordinances to put in place long-term protections for Long Lake's water quality.



2008 Long Lake YCC

PROJECT OUTCOMES:

- 36 NPS sites were addressed during the project. BMPs installed at these sites included waterbars; infiltration steps; stone and vegetated swales; plunge pools and sediment basins; shoreline vegetation; road grading and crowning; and mulched paths.
- The 13 high priority NPS abatement projects successfully prevented 87 tons of sediment and 74 pounds of phosphorus from entering Long Lake each year (Region 5 Method).
- The Long Lake YCC addressed 21 erosion problem sites throughout the watershed.
- LEA worked with the Town of Harrison to update its Shoreland Zoning Map. The previous version of the map had not been updated since 1993 and was in black and white. The new map created for Harrison used color and the most current data layers available. Several new areas, including high or moderate value wading bird habitat, were added as Resource Protection District. The new Shoreland Zoning map was adopted at town meeting in June of 2007.
- LEA also worked on updating Bridgton's Shoreland Zoning Map during the project. The primary focus for these revisions was the addition of newly identified high and moderate value wading bird habitat into the Resource Protection District. The map also incorporated several other revisions based on landowner, planning board and DEP input. The new Shoreland Zoning Map was adopted at town meeting in June of 2009.



Private Camp Driveway Before



Private Camp Driveway Before

PROJECT PARTNERS:

Lakes Environmental Association
Town of Bridgton
Town of Harrison
Town of Naples

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.