

# Long Lake Watershed Improvement Project

#2005R-24 – WIFAP

Waterbody Name: Long Lake  
Location: Bridgton, Harrison, Naples – Cumberland County  
Waterbody Status: NPS Priority Watershed, Most at Risk  
Project Grantee: Cumberland County SWCD  
Project Duration: December 2005 – July 2008  
319 Grant Amount: \$30,000  
Match: \$22,252 (local), \$20,000 (Maine Dept. Ag.)



## 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 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 numerous businesses along the south and west edge of the lake.

Lakes Environmental Association (LEA) has been collecting water quality data on Long Lake regularly 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. With 319 grant funding, LEA completed the *Long Lake Watershed Study* in 1990. The resulting report includes a step by step process to determine allowable phosphorus loading rates, model ordinances and other lake protection strategies. Over the past decade, LEA has also conducted over 100 free property consultations with watershed landowners. The DEP removed Long Lake from the impaired list in 2006 because of improved trophic state and water quality.

## PROJECT DESCRIPTION:

The primary purpose of this project was to significantly reduce erosion and export of sediment and phosphorus into Long Lake. A secondary goal was to raise awareness about watershed problems and foster long-term watershed stewardship. The project installed BMPs at seven priority erosion sites previously identified by LEA through GIS mapping and field surveys. The project also established the Long Lake Youth Conservation Corps (YCC). The YCC hired local high school students to install BMPs at smaller-scale sites in the summer of 2007 and set the stage for continued YCC work in 2008.



Long Lake YCC Buffer Planting

## PROJECT OUTCOMES:

- Erosion abatement projects were completed at 27 sites throughout the watershed, which will prevent an estimated 112.2 tons of sediment and 95.4 pounds of phosphorous from reaching Long Lake annually (EPA Region 5 Method).
- Conservation practices were installed at seven priority sites throughout the Long Lake watershed. These sites include the Naples Town Beach in Naples, Bridgton Academy Beach in Bridgton, Pine Cove Road in Harrison, Salmon Point Beach in Bridgton, and two sites on Mountain View Road in Naples.
- The Long Lake Youth Conservation Corps was established and worked with watershed residents to implement BMPs, such as footpaths, infiltration trenches and terraces, shoreline buffer planting, runoff diverters, riprap installation on 15 different properties. The program was so successful in 2007 that there was a backlog of 16 sites lined up for the 2008 YCC field season, which continued with funding from a separate 319 grant.



## PROJECT PARTNERS:

Maine Department of Agriculture  
Lakes Environmental Association  
Long Lake Youth Conservation Corps  
Maine Department of Transportation  
Town of Naples  
Town of Harrison  
Town of Bridgton  
Bridgton Academy

## CONTACT INFORMATION:

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