

Phillips Lake Watershed Protection – Phase II

#2015RR04

Waterbody Name: Phillips Lake

Location: Dedham, Village of Lucerne - Hancock County

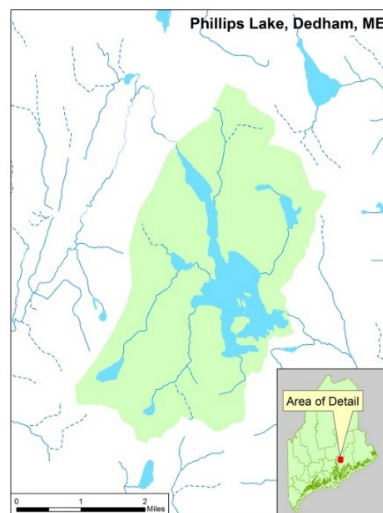
Waterbody Status: NPS Priority Watershed

Project Grantee: Hancock County SWCD

Project Duration: May 2015 – December 2017

319 Grant Amount: \$98,447

Local Match: \$128,555



PROBLEM:

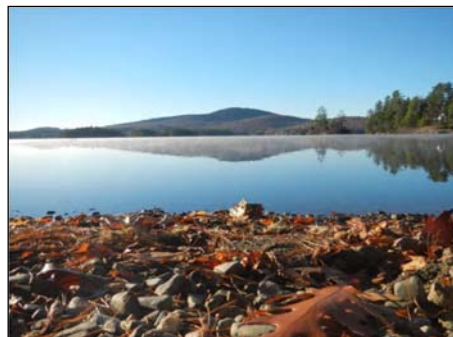
Water quality data has been collected by DEP and the Maine Volunteer Lake Monitoring Program since 1974. The lake's water quality is considered above average; however, secchi disk readings from the last decade reveal a two-meter decline in water clarity. Phillips Lake also has a low flushing rate (0.52 times/year), which makes it sensitive to increases in nutrient loading.

In 2009, a watershed survey was completed which identified 60 NPS sites. In 2012, HCSWCD re-surveyed all road sites in the Phillips Lake watershed and found 44 NPS sites, seven of which were on private roads and 37 on town roads. Most of the sites that were identified in the 2009 survey were still present, but some had been fixed and additional issues were discovered. From 2013-2014, Hancock County SWCD successfully carried out a Phase I 319 grant project (#2013RR02), which implemented BMPs at more than 40 NPS sites and stabilized over 75 feet of shoreline. The project reduced pollutant loading to Phillips Lake by an estimated 138 tons of sediment and 116 pounds of phosphorus per year. However, it was determined that a second phase was needed to address the remaining NPS sites in the watershed.

PROJECT DESCRIPTION:

The Phillips Lake Watershed Protection Project – Phase II was managed by Hancock County SWCD and guided by a Steering Committee that included representatives from the Phillips Lake Association, DEP, the Town of Dedham, the Lucerne-in-Maine Village Corporation, and watershed residents.

The project focused on reducing NPS pollution by fixing high- and medium-priority road sites identified during the 2012 watershed survey. HCSWCD addressed the remaining low priority sites through technical assistance to landowners in the watershed and utilizing in-kind match. Public outreach and education was an essential component of this project and the Education and Outreach Plan developed during Phase I guided all education activities.



PROJECT OUTCOMES:

- The project installed BMPs at 33 road sites in total, including 28 town road sites and five private road projects. BMPs included new culverts, ditches and turnouts.
- Vegetative buffers, shoreline stabilization and other BMPs were installed to reduce erosion and help protect water quality at 12 residential sites.
- The total non-federal match for this project was \$128,555, which exceeded the match requirement by \$62,890.
- 27 watershed property owners received technical assistance but did not elect to utilize the cost-share portion opportunity.
- The project resulted in an estimated 59.4 tons of sediment, 50.3 pounds of phosphorus, and 101.5 pounds of nitrogen from going into Phillips Lake each year (Region 5 Method).



Fitts Mountain Road culvert replacement



Drip-line infiltration trench installation

PROJECT PARTNERS:

Lucerne in Maine Village Corporation
Phillips Lake Association
Town of Dedham

CONTACT INFORMATION:

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