

Wilson Pond Water Quality Improvement Project

#2009RT06

Waterbody Name(s): Wilson Pond

Location: Wayne, Monmouth, Winthrop – Kennebec County

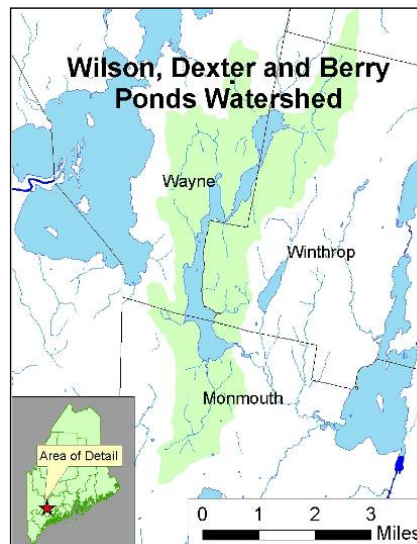
Waterbody Status: Impaired; NPS Priority Watershed

Project Grantee: Cobbossee Watershed District (CWD)

Project Duration: January 2009 – March 2012

319 Grant Amount: \$58,246

Local Match: \$65,755



PROBLEM:

Wilson Pond is a moderate-sized lake that has been monitored for over 30 years, with moderate to sensitive water quality and rising levels of total phosphorus, reduced water clarity, and depletion of dissolved oxygen in bottom waters. From the early 1980's to early 1990's Wilson exhibited reduced water clarity and over the last 16 years the water transparency readings have worsened. The two smaller upstream ponds (Dexter and Berry) are connected to Wilson and together exhibit consistent clarity, high flushing rates, and have a sizable drainage area. Dexter and Berry Ponds are likely influential to Wilson Pond's water quality. All three ponds are listed as "Lakes at Most Risk from Development" under the Stormwater Management Law. Nonpoint sources in the watersheds include eroding camp roads, eroding public roads, shoreline erosion, agricultural runoff, and runoff from developed areas.

PROJECT DESCRIPTION:

The intent of this project was to reduce erosion and phosphorus runoff by installing best management practices (BMPs) on 15-20 NPS sites (camp roads, public roads, and shorefront) and on 10 other shorefront sites using the local Youth Conservation Corps (YCC) in the watersheds of the three ponds. Project sites were previously identified and prioritized during a watershed survey (NPS project #2005R-02) in 2006. A 50:50 cost-share agreement procedure was used with property owners to install BMPs, with the process including site visits, plan reviews, post-construction inspections, site reporting, and pre- and post-construction documentation. Outreach efforts to residents, municipal officials, and local schools advertised the project, invited residents to participate, and provided useful information about the impacts that development and phosphorus can have on lake water quality.

PROJECT OUTCOMES:

- Repairs or upgrades were completed on five camp roads and one residential driveway involving 24 NPS sites. BMPs were designed to reduce erosion, improve drainage and treat stormwater runoff. The road/driveway project work resulted in an estimated annual load reduction of 6.4 lbs. of phosphorus and 10.9 tons of sediment.
- Over 300 lineal feet of eroding shoreline was stabilized with rip-rap and geotextiles. Fourteen landowner requests for technical assistance were received and acted upon.
- Following presentations on the impact of phosphorus to water quality, the Town of Wayne expressed eagerness to adopt formal phosphorus control standards in their land use ordinance.
- More than 360 local students and citizens were involved in and benefited from project outreach work and the education program efforts by the Friends of Cobbossee Watershed, CWD, KCSWCD and local LakeSmart-Start! activities. However, despite these accomplishments the overall level of participation by local property owners was less than expected, resulting in lower than anticipated project grant and match expenditures.

PROJECT PARTNERS:

Friends of Cobbossee Watershed

Kennebec County Soil and Water District (KCSWCD)

Towns of Monmouth, Wayne and Winthrop

Maine DEP/U.S. EPA

CONTACT INFORMATION:

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Upper Chandler Lane – Before:
Ruts, shoulders severely-eroded, ditches are disconnected/ineffective.



Upper Chandler Lane – After:
Cross-drainage culverts installed, runoff directed into plunge pools, and surface gravel with a 6” crown was applied. Ditches were enhanced and rock-lined.

Suggested Citation:

Maine Department of Environmental Protection (2013) “Nonpoint Source Management Program 2012 Annual Report,” Document # DEPLW-1245. Augusta: MDEP.