Pleasant Pond NPS Abatement Project #2006R-05

Waterbody Name:	Pleasant Pond
Location:	Litchfield, Richmond – Kennebec County
Waterbody Status:	Impaired, NPS Priority Watershed, Most at Risk
Project Grantee:	Kennebec County SWCD
Project Duration:	May 2006 – January 2008
319 Grant Amount:	\$70,100
Local Match:	\$62,553



PROBLEM:

Pleasant Pond is a relatively shallow five-mile-long pond with a 23.4 square mile watershed. While the developed portion of the watershed is relatively small, development is concentrated along the shoreline. The pond does not meet state water quality standards due to high concentrations of phosphorus, re-occurring algal blooms for the past 20 years, and low transparency readings. The lake's TMDL report (2004) indicated that agriculture accounted for 39% of the phosphorus load. The next largest source was public and private roads (15%). Residential sites and septic systems were estimated to be 7% of the load. The number of active farms has decreased in recent years, and the Natural Resources Conservation Service (NRCS) has been actively addressing agricultural runoff in the watershed.

A shoreline survey was performed by the Cobbossee Watershed District (CWD) in 2000, and a NPS road and ditch survey was conducted by Kennebec County SWCD in 2005. These surveys resulted in a list of over 180 sites where NPS road or residential work was needed.

PROJECT DESCRIPTION:

This project was intended to help restore the water quality of Pleasant Pond. The project complemented NRCS work on agricultural areas by treating non-agricultural NPS sources in the watershed. A steering committee was organized by the Four Towns Watershed Association to share information on potential work sites, work with towns on road repair and NPS issues, and develop programs for the public workshops. Project sites were determined through a priority list resulting from past surveys and from individual inquiries in response to project publicity.



Kennebec County SWCD developed and oversaw cost-share agreements and provided technical assistance and overall project guidance. The Friends of the Cobbossee Watershed performed much of the outreach, and organized a summer Youth Conservation Corps to implement BMPs that did not require a road contractor. CWD staff monitored pond water quality during the project and reported the results to the project steering committee. The interest and involvement of the various steering committee entities resulted in a successful project and led to a second phase of work in the watershed, which is currently underway.

PROJECT OUTCOMES:

- The project treated 18 NPS sites and installed BMPs including road crowning and rebuilding, creating and stabilizing ditches, constructing plunge pools, and installing and armoring culverts.
- The informal boat launch on Thorofare Road was stabilized and protected with support from state, local and private landowners.
- The Friends of the Cobbossee's Youth Conservation Corps installed another nine projects, including vegetated buffers, shoreline rip-rap and waterbars.
- Pollutant loading to Pleasant Pond was reduced by an estimated 33.3 tons of sediment, 33.3 pounds of phosphorus, and 66.5 pounds of nitrogen per year (EPA Region 5 Method and WEPP Model).
- Project staff conducted two educational workshops including one on gravel road maintenance and one "septic social" about the proper care of private septic systems.
- The Cobbossee Watershed District completed two seasons of water quality monitoring and a summary report of the collected data.



Before - Severe shoreline erosion



After - Shoreline stabilized with geotextile fabric, rip-rap and Erosion Control Mix

PROJECT PARTNERS:

Friends of the Cobbossee Watershed Youth Conservation Corps Cobbossee Watershed District Four Towns Watershed Association Maine Department of Transportation

CONTACT INFORMATION:

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