

Unity Pond Watershed Restoration- Phase II

#2006R-21 – WIFAP

Waterbody Name: Unity Pond (Lake Winnecook)

Location: Burnham, Thorndike, Troy, Unity – Waldo County

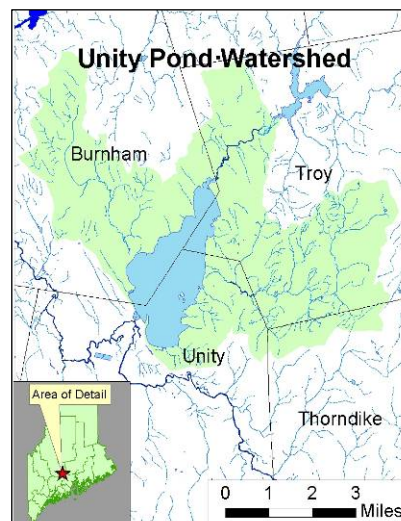
Waterbody Status: Impaired, NPS Priority Watershed, Most at Risk

Project Grantee: Waldo County SWCD

Project Duration: February 2007 – December 2008

319 Grant Amount: \$16,317

Match: \$11,109 (local), \$20,000 (ME Dept. Ag.)



PROBLEM:

Unity Pond is a 2,423 acre waterbody valued for fishing, swimming, boating and wildlife. It has direct watershed of 32.7 square miles and a mean depth of 22 feet. The pond is listed as impaired and has a long history of nuisance algae blooms in the late summer and early fall, due to phosphorus from erosion and sediment sources in the watershed and from phosphorus accumulated in the pond bottom sediments. The watershed is mostly forested with about 7% agricultural and 6% developed lands. Residential areas along the lakeshore, agricultural lands, roads, and low density residential are the more significant watershed phosphorus sources.

The Unity Pond Phosphorus Control Action Plan and TMDL Report (2004) and the Unity Pond Watershed Based Plan (2006) provide a thorough assessment of the watershed, water quality of the pond and actions needed to help restore water quality. The Phase I grant project (2004 – 2006) installed BMPs at 20 NPS sites in the watershed.

PROJECT DESCRIPTION:

The purpose of the Phase II project was to continue to build local support and action to control erosion and export of sediment and phosphorus loads in order to reduce the magnitude and duration of algal blooms in Unity Pond.

Guided by the TMDL report and Watershed Based Plan, Waldo County SWCD and key partners coordinated water quality improvement efforts to prompt adoption of BMPs at the high priority sources of phosphorus. The project provided technical at 11 sites and financial cost sharing assistance for BMP design and installation at four sites. Considerable time and effort was expended on projects that did not materialize despite extensive outreach efforts. A direct watershed survey of state, town and camp roads was also conducted and a report was filed with DEP and distributed to interested parties and stakeholders.



PROJECT OUTCOMES:

- Technical assistance and educational information was provided at 11 sites including two informal camp road associations and nine shoreline properties. Conservation practices that reduce sediment and nutrient loading were installed at two public access sites and two shoreline properties.
- Friends of Unity Wetlands and project staff co-hosted, organized and conducted a Nonpoint Education for Municipal Officials (NEMO) workshop in May 2008 at the Unity Center for Performing Arts. 16 participants attended, with some traveling more than 75 miles.
- Waldo County SWCD, University of Maine Cooperative Extension and other project partners launched the Unity Pond watershed newsletter to promote watershed stewardship. Three editions were produced throughout the project. 500 copies were mailed to shoreline owners, and copies were distributed at several local businesses, town offices and through local organizations.
- Unity College faculty and student volunteers participated in NPS site identification and assessment training in order to conduct Phase I of the Unity Pond Direct Watershed Survey in October 2007. Phase II of the survey was completed by the project coordinator in April 2008. A final report with photo documentation was completed in July 2008. 20 printed copies of the report were distributed to project partners, town offices and local organizations.



Phase I Survey, Mount Rd., Burnham -
Ditch erosion/exposed soils



Phase II Survey, Oak Lane, Burnham -
Improperly sized/installed camp road culvert

PROJECT PARTNERS:

Unity College
University of Maine Cooperative Extension
Friends of Lake Winnecook
Unity Barn Raisers
Friends of Unity Wetlands

CONTACT INFORMATION:

Norm Marcotte, DEP – (207) 287-7727, norm.g.marcotte@maine.gov
Shawn Biello, Waldo County SWCD – (207) 948-3744, sbiello@unity.edu

Suggested Citation:

Maine Department of Environmental Protection (2009) “Nonpoint Source Management Program 2008 Annual Report,” Document# DEPLW-0973 2009. Augusta: MDEP.