

Cochnewagon Lake Watershed Survey

#2008PP29

Waterbody Name: Cochnewagon Lake
Location: Monmouth – Kennebec County
Waterbody Status: NPS Priority Watershed, Most at Risk
Project Grantee: Cobbossee Watershed District
Project Duration: March 2009 – September 2010
604(b) Grant Amount: \$8,731
Local Match: \$13,270



PROBLEM:

Cochnewagon Lake is a prominent feature in Monmouth. The public beach and boat launch on this 386 acre lake is in walking distance from downtown. Development in the lake's 3.4 square mile watershed consists mostly of year-round and seasonal homes along the shoreline and upland dairy farmland and gravel roads.

The lake, which outflows to Annabessacook Lake, had a history of algae blooms until an alum treatment in 1986. The alum treatment was a major project spearheaded by the Cobbossee Watershed District (CWD) with funding and support from the EPA and DEP. After the treatment, transparency improved to 5.5 to 8.0 meters from 1986 to 2004. After many years of good water quality, recently water clarity has decreased, with algae blooms occurring in 2006 and 2007. CWD and local citizens share the goal of eliminating algae blooms and restoring the water quality of Cochnewagon Lake.

PROJECT DESCRIPTION:

The purpose of this project was to identify specific NPS sites contributing sediment and/or phosphorus to the lake, and to develop recommendations and local support for future implementation of identified BMPs. The project surveyed three types of land use: roads, shoreline residences and agriculture.

The road survey consisted of CWD surveying all 25 roads in the watershed and making return trips during rainstorms to many of the sites. The survey of shorefront properties was done by boat by CWD, and included photographs of all properties and documentation of erosion conditions and NPS pollution potential at the land/water interface. The farm survey was a continuation of a long-standing involvement between CWD and the farm owner, and focused on reviewing current manure spreading practices. The results of the surveys and future action plans were discussed by the Steering Committee, which consisted of local citizens and town representatives, and presented at a well-attended public meeting held in July 2010.



Cochnewagon Lake with algae bloom

PROJECT OUTCOMES:

- An NPS watershed survey was completed for the Cochnewagon Lake watershed. Staff and volunteers identified and documented 50 road soil erosion sites, 96 shoreline sites that are having or have the potential to have a negative impact on water quality and 45 sites with shoreline erosion problems.
- Project staff completed the *Cochnewagon Lake Watershed Survey Report* (September, 2010) and Summary Report (Sept 2010), which highlight the survey methods, findings and recommended BMPs.
- 50 local residents attended a public meeting to find out about the watershed survey results, information on the lake's water quality and recommended BMPs.



Road survey erosion site



Sediment moving during rain event

PROJECT PARTNERS:

Town of Monmouth
Monmouth Kwik Shop
Pine Drive Road Association
Cochrane Drive Road Association
Kennebec County SWCD

CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2011) "Nonpoint Source Management Program 2010 Annual Report," Document# DEPLW-1205 2011. Augusta: MDEP.