Cochnewagon Lake NPS Watershed Protection Project, Phase I #2011RR02

Waterbody Name: Cochnewagon Lake

Location: Monmouth, Kennebec County

Waterbody Status: Impaired, NPS Priority Watershed

Project Grantee: Cobbossee Watershed District (CWD)

Project Duration: January 2011 – March 2013

319 Grant Amount: \$81,005

Local Match: \$81,838



Cochnewagon Lake, Monmouth ME

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 non-shorefront homes, seasonal homes along the shoreline, upland dairy farmland, and gravel roads.

The lake, which flows 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 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, water clarity decreased and severe algae blooms returned starting in 2006. As a first step in developing a strategy to improve lake water quality, the CWD with local support and a 319 grant (#2008PP29), conducted a lake watershed survey in 2009. The survey found that BMPs to control sediment and erosion problems along roads were a top priority for reducing NPS phosphorus in the watershed. Shoreland residential properties were also found to lack conservation practices that could reduce near-shore NPS contributions.

PROJECT DESCRIPTION:

The Cochnewagon Lake NPS Watershed Protection Project, Phase 1, implemented BMPs at NPS pollution sites along roads and the lakefront to reduce sediment and phosphorus loading to the lake and alleviate late summer algae blooms. The project installed BMPs at 20 road and 11 shore sites. CWD entered into cost-sharing agreements with the Town of Monmouth for NPS sites on public roads and with private road associations for NPS sites on private camp roads. The Friends of Cobbossee Watershed (FOCW) employed their Youth Conservation Corps (YCC) to install BMPs at shorefront sites where property owners contributed the cost of materials. This successful BMP implementation project established a stronger partnership between CWD, FOCW, the Town of Monmouth, and the watershed residents who participated in the road and shore projects.

PROJECT OUTCOMES:

- Installation of BMPs on twenty road sites, including significant projects on both public and private roads, stabilizing driveways, roads, ditches, and culverts, installing ditch turnouts and plunge pools, and renovating a wet pond;
- Implementation of eleven shorefront BMPs by the local Youth Conservation Corps;
- Technical assistance visits to sixteen shorefront properties;
- Reduction of pollutant loading to the pond by an estimated 65 tons of sediment and 58 pounds of phosphorus annually (WEPP and Region 5 methods); and
- Demonstration of road and shoreline BMPs that were not generally in use in the watershed and which resulted in inquiries from interested residents and interest in future BMP work.

1st Place State of Maine Excellence Award

Significant reconstruction of eroding sections of the town-owned Packard Road was completed. The Packard Road project won a 1st Place State of Maine Excellence Award at the 2012 Highway Congress sponsored by the American Public Works Association



Before – eroding bank and ditch



During – removing bank, including large boulders



After – bank removed, slope stabilized, ditch installed

PROJECT PARTNERS:

Town of Monmouth Friends of Cobbossee Watershed Dearborn Ridge Road Association P2 Road Association Shorefront property owners

CONTACT INFORMATION:

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