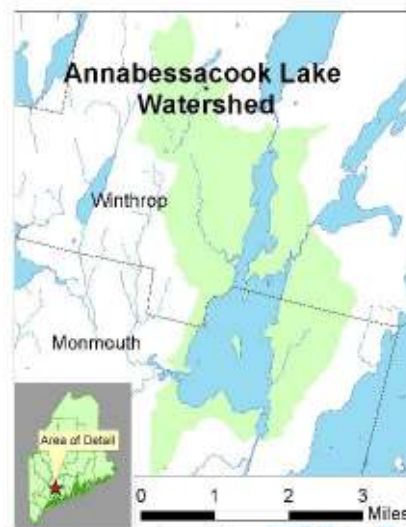


Annabessacook Lake Rehabilitation Project

#2007RR07

Waterbody Name: Annabessacook Lake
Location: Monmouth and Winthrop – Kennebec County
Waterbody Status: Impaired, NPS Priority Watershed, Most at Risk
Project Grantee: Cobbossee Watershed District
Project Duration: March 2007 – March 2010
319 Grant Amount: \$46,400
Local Match: \$50,824



PROBLEM:

Annabessacook Lake is a 1,391 acre lake with a direct watershed area of 21.2 square miles. Four lakes (Maranacook Lake, Lower Narrows Pond, Wilson Pond and Cochnewagon Lake) drain into Annabessacook Lake, which then drains into Cobbossee Lake. The lake's shoreline is developed with 182 shorefront residences, a 100-site campground and the urban center of Winthrop. Urban areas of Monmouth and North Monmouth are located adjacent to lake tributaries.

The Cobbossee Watershed District (CWD) was formed in the early 1970s to improve Annabessacook Lake and other lakes of the Cobbossee Stream drainage. CWD and Maine DEP have collected water quality data since 1975, and the Maine DEP placed Annabessacook Lake on its impaired list due to its low water clarity and dissolved oxygen levels and frequent algae blooms. According to its TMDL report (2004), stormwater runoff from urban areas and soil erosion are the predominant pollution sources.

PROJECT DESCRIPTION:

The project goal was to install BMPs on documented NPS problem sites to help improve water clarity, reduce phosphorus contamination and prevent algae blooms. A major thrust was implementing BMPs on severely eroding camp roads. Local interest was initially low but picked up dramatically during the second and third summers. The Friends of the Cobbossee Watershed's summer Youth Conservation Corps (YCC) stabilized eroding shorefronts with stone rip-rap, geo-textile fabric and native plants.

The Friends disseminated outreach materials to boaters and shorefront residents with their *OTTER II* pontoon boat and carried out their *Tadpole Patrol* educational program for children. Camp owners received technical assistance and design sketches for property NPS repairs and upgrades. At the municipal level, CWD held Planning Board workshops on Low Impact Development (LID) techniques for single family residential and small-scale commercial developments and shared updates on DEP's newly revised guidelines for phosphorus control from new development.



Friends of the
Cobbossee Watershed's
Tadpole Patrol

PROJECT OUTCOMES:

- Thirteen (13) NPS sites received repairs, accounting for an estimated annual pollutant load reduction of 2.3 tons of sediment and 1.2 pounds of total phosphorus (WEPP Model).
- BMPs were installed on five (5) roads to improve drainage, increase treatment of runoff by wooded buffers and reduce road surface erosion.
- More than a quarter-mile of eroding shorefront on 14 properties was stabilized by the Friends of the Cobbossee Watershed's YCC through their *Slow-the-Flow* Program.
- Over two years, more than 200 local students benefited from NPS prevention and education efforts provided by the Friends' *Tadpole Patrol* program.
- More than two dozen property owners received expert recommendations for how to stabilize their shorefronts against erosion and improve site drainage.
- The Town of Monmouth incorporated DEP's new LID guidelines into their recently revised Comprehensive Development Ordinance.



Briggs Shore Lane - Prior to improvements the site was severely eroded with deep rills and gullies carved into the road surface. Following improvements (right) the road now sheds water to a grassed ditch and plunge pools along the north side of the road.

PROJECT PARTNERS:

Annabessacook Lake Improvement Association
Friends of the Cobbossee Watershed
Kennebec County SWCD
Town of Monmouth
Town of Winthrop

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