Bauneg Beg Lake BMP Demonstration Project

#2001-06

Waterbody Name: Bauneg Beg Lake

Location: Sanford and North Berwick, York County

Waterbody Status: NPS Priority Watershed, Most at Risk

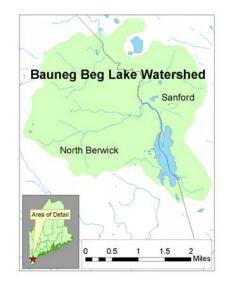
Project Sponsor: York County SWCD

Project Duration: April 2001 – June 2005

319 Grant Amount: \$30,884

Match: \$20,997

PROBLEM:



Bauneg Beg Lake is a 188-acre lake located in the Towns of North Berwick and Sanford. Its direct watershed covers 14.8 square miles and includes agricultural areas as well as high-density areas in downtown Sanford. The lake's shoreline is developed with over 200 seasonal and year-round homes and a large summer camp and year-round childcare and mental healthcare facility. Bauneg Beg Lake is an impounded segment of the Great Works River, which ultimately flows into the Salmon Falls River.

The DEP and volunteers have monitored the lake's water quality since 1975. The data indicates that the lake is below average and that the potential for nuisance algal blooms is high. In addition, the lake has high oxygen depletion in the bottom waters and has a high potential for internal loading problems.

The Bauneg Beg Lake Association (BBLA), DEP and York County Soil and Water Conservation District (SWCD) started lake protection efforts in 1999 when they conducted an independently-funded survey to identify erosion problems around the lake. Volunteers and technical staff documented 130 erosion sites. The most significant sources were associated with residential areas (61%), private roads (12%) and driveways (9%).

PROJECT DESCRIPTION:

The purpose of the project was to demonstrate a variety of conservation practices that reduce erosion and polluted runoff, form a local cadre of individuals skilled in the construction of conservation practices; and raise awareness about watershed problems and solutions.

Project staff and volunteers fixed erosion problems at 10 sites in the watershed and provided technical assistance to 20 landowners. Education and outreach activities included an initial project fact that was mailed to 170 waterfront landowners; two presentations Noble High School classes; signs at six project sites with high visibility; and two public tours to showcase completed projects. Flyers were also posted at the BBLA kiosks on each road, and articles were printed in the local newspapers and BBLA newsletter.



PROJECT OUTCOMES:

- The project installed a variety of conservation practices to fix erosion problems at 10 sites including 4 private roads, 1 private boat launch, 3 residential areas, 1 town park and 1 summer camp.
- Staff estimated that the 10 erosion control projects reduced pollutant loading to the lake by 15 tons of sediment and 13 pounds of phosphorus each year (US EPA, Region 5 Method).
- Project staff provided technical assistance to 20 landowners through the projects exceeding the goals of 15 written into the original workplan.
- 42 volunteers turned out to fix erosion problems at the Camp Waban site. The volunteers spent a day spreading over 300 cubic yards of Erosion Control Mix and planting 80 native shrubs on this highly disturbed summer camp. Camp Waban contributed \$3,200 in cash match, and a local contractor donated time and equipment to the project. The camp also pledged to discontinue their extensive raking of the site. The estimated pollutant load reduction was 4 tons of soil per year.
- The project helped forge a partnership between the BBLA and the Great Works River Watershed Coalition (GWRWC). Several BBLA members now monitor water quality for the GWRWC and have participated in the Great Works River Watershed Surveys and Community Forum.
- It appears that landowners have taken the initiative to fix many of the erosion problems around the lake. Staff conducted follow-up visits to the 130 erosion sites identified in the 1999 watershed survey and found that there may be as few as 40 erosion sites remaining. Several of these will be targeted in the *Northern Great Works River Improvement Project*, a 319 project that will begin in 2006.





PROJECT PARTNERS:

Bauneg Beg Lake Association Town of North Berwick Town of Sanford Great Works River Watershed Coalition

CONTACT INFORMATION:

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