

Sebasticook Lake Watershed Project Phase 2

#2002R-22 WIFAP

Waterbody Name: Sebasticook Lake

Location: Corinna, Dexter, Exeter, Newport, Palmyra, Saint Albans, Stetson – Penobscot County

Waterbody Status: Impaired, NPS Priority Watershed

Project Sponsor: Penobscot County SWCD

Project Duration: January 2002 – October 2006

319 Grant Amount: \$60,000

Local Match: \$20,920 (local), \$20,000 (ME Dept. Ag.)



PROBLEM:

Sebasticook Lake is located entirely within the Town of Newport. The watershed covers approximately 85 square miles and includes the communities of Corinna, Stetson, Exeter, Dexter, Saint Albans, and Palmyra. Residential development and agriculture comprise over 40% of watershed land use. The watershed contains nine other named lakes and ponds, two of which are public drinking supplies.

Sebasticook Lake has had historical water quality issues. Over the past 19 years, the Penobscot County SWCD in conjunction with the Natural Resources Conservation Service implemented several programs to address agricultural runoff. In 1985, the Maine DEP ranked Sebasticook Lake as one of the most seriously impaired lakes in Maine. In 1996 a State of Maine Water Quality Assessment Report classified the lake as impaired. The 2001 TMDL report listed agriculture and urbanization as the primary sources of phosphorous loading to the lake. A 1998 watershed survey and the 2001 TMDL assessment identified 96 NPS sites in the watershed. From 2002 - 2004, the Phase 1 Implementation project addressed 5 of these high and medium impact NPS sites.

PROJECT DESCRIPTION:

The purpose of the Phase 2 project was to reduce soil erosion and polluted runoff to Sebasticook Lake by installing water quality best management practices (BMPs) on 23 NPS sites.

The Penobscot County SWCD coordinated the project and provided technical and cost share assistance to town, state, and private landowners implement BMPs. Staff prepared outreach materials including displays aimed at educating the public about erosion and its relation to water quality. Project staff also completed a watershed survey of Alder Stream, a Class B waterway and major tributary of Sebasticook Lake.



Buffer planting on Sebasticook Lake.

PROJECT OUTCOMES:

- Town, state, and private landowners corrected erosion problems at 23 high and medium impact NPS sites reducing cumulative pollutant loads by an estimated 54.8 tons of soil, 58.4 pounds of phosphorus, and 116.5 pounds of nitrogen (USEPA Region 5 Method).
- The Alder Stream watershed survey was completed, and 63 NPS sites were documented. State and town roads (40%), private roads and driveways (33%) and agricultural sites (19%) accounted for the majority of the problems.
- The *Alder Stream Watershed Survey Report* was completed in November 2003.
- Project activities were documented in the Penobscot County SWCD's newsletter and website. A display was created using before and after pictures from various Phase 2 construction projects to help the public understand the relationship between erosion and water quality.
- The brochure, *Vegetated Phosphorus Buffer Strips*, was created in conjunction with the Sebasticook Lake Phase 1 project and mailed to local residents.



PROJECT PARTNERS:

USDA Natural Resources Conservation Service

Sebasticook Lake Association

Lake Wassookeag Association

Maine Department of Agriculture

Town of Newport

CONTACT INFORMATION:

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Suggested Citation:

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