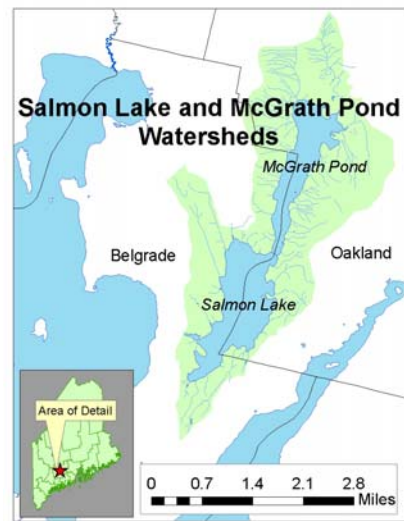


Salmon-McGrath Watershed Load Abatement Project, Phase 2

#2003-08

Waterbody Names: Salmon Lake and McGrath Pond
Location: Belgrade and Oakland, Kennebec County
Waterbody Status: NPS Priority Watersheds
Project Sponsor: Kennebec County SWCD
Project Duration: May 2003 – January 2005
319 Grant Amount: \$80,420
Local Match: \$68,996



PROBLEM:

Salmon Lake and McGrath Pond are part of the Belgrade Lakes watershed. McGrath Pond flows via a short stream to Salmon Lake, which then flows to Great Pond, Long Pond and Messalonskee Lake. McGrath Pond has a surface area of 485 acres and a 3.8 square mile watershed. Salmon Lake has a surface area of 667 acres and a 3.14 square mile watershed.

Approximately 20 years of data for Salmon and McGrath indicate that water clarity has improved in both lakes. Despite this progress, conditions in both lakes remain susceptible to algae blooms. Salmon Lake experienced a series of algal blooms prior to a restoration project in the mid 1980s. Since then phosphorus and dissolved oxygen levels remain a concern. Salmon Lake, in particular experiences depressed oxygen levels in deep water causing release of phosphorus from sediments. This existing phosphorus load is very hard to control making Salmon Lake susceptible to periods of high algae growth and sensitive to additional nutrient pollution. Moreover, within the last 15 years the predominant land use in the Salmon and McGrath watersheds has changed from agriculture to development, including seasonal conversions and conversion of farmland to residential development.

A 1999 watershed survey identified 132 NPS sites in the watershed, and another 15 sites were added during the Salmon – McGrath Watershed Load Abatement Project, Phase I. In Phase 1, 38 medium and high priority sites were addressed with cost share and technical assistance.

PROJECT DESCRIPTION:

The purpose of this project was to continue to install fix identified NPS sites. The Kennebec County SWCD contracted with Belgrade Regional Conservation Alliance to update the list of sites addressed and new NPS sites. A total of 39 projects were completed on 25 sites with a total of 11,000 feet of road, 2200 feet of ditches and 125 feet of shoreline stabilized. Additional technical assistance was provided by the District to landowners who requested assistance. The Belgrade Conservation Corps provided labor and assistance with low tech/low priority sites not included for cost share. Education and outreach included newspaper and newsletter articles, workshops for camp road associations, and a final brochure.



PROJECT OUTCOMES:

- A total of 39 conservation practices were installed on 25 sites. Over 11,000 feet of road, 2200 feet of ditches and 125 feet of shoreline were stabilized.
- Voluntary remediation on many additional low priority sites was achieved through landowner contacts and technical assistance.
- The project's total estimated pollutant load reduction was 25 tons of sediment and 27 pounds of phosphorus per year (Region 5 Method).
- The Belgrade Lakes Conservation Corps assisted with providing labor on low priority sites not included for cost-share assistance.
- Belgrade Regional Conservation Alliance completed a watershed survey to update the number of remaining sites and identify new NPS sites.
- A strong relationship was established between the Kennebec County SWCD and lake association who was instrumental in the success of the project.



Before – Soil erosion at culvert outlet and road shoulder.



After – Culvert extended. Culvert outlet and road shoulder stabilized.

PROJECT PARTNERS:

McGrath Pond/Salmon Lake Association

Belgrade Regional Conservation Alliance

Belgrade Lakes Conservation Corps

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