Little Ossipee Lake Improvement Project Phase I - Implementation

#2004R-24A - WIFAP

Waterbody Name: Little Ossipee Lake

Location: Waterboro – York County

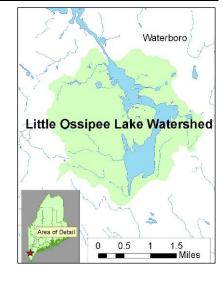
Waterbody Status: NPS Priority Watershed, Most at Risk

Project Sponsor: York County SWCD

Project Duration: November 2004 – March 2008

319 Grant Amount: \$50,830

Match: \$50,439 (local), \$17,500 (ME Dept. Ag.)



PROBLEM:

The Little Ossipee Lake watershed covers 4.7 square miles in the Town of Waterboro. The lake covers 557 acres and is located adjacent to Waterboro Center. The lake's shoreline is developed with over 450 seasonal and year round homes, a private campground and public boat ramp, swimming area and park.

The DEP and volunteers have monitored Little Ossipee Lake's water quality since 1977. The water quality is considered excellent, but as with many of Maine's lakes, Little Ossipee's water quality is threatened by NPS pollution from uncontrolled soil erosion and stormwater runoff. In 1997, the Little Ossipee Lake Association (LOLA), DEP and York County SWCD conducted a watershed survey and identified 103 erosion sites. LOLA then worked with the Town of Waterboro and Maine Department of Transportation (DOT) to fix several of these sites. In 2004 the same project partners updated the survey with funding from another 319 grant and identified 85 erosion sites.

PROJECT DESCRIPTION:

The purpose of the project was to significantly reduce watershed pollutant loading to help protect and improve water quality in Little Ossipee Lake. The project installed conservation practices on 13 NPS sites in the watershed. Three workshops were held in conjunction with project construction, where volunteers learned about and helped install a rain garden, native buffers, infiltration steps and bank stabilization. Two additional construction projects were originally called for in the workplan, but work could not be completed within the project timeline. The project also provided technical assistance to 25 landowners, which exceeded the goal of 15 visits.

A workshop, "How to Form a Road Association" was held in July, 2007 and attended by 30 residents from Little Ossipee Lake and other neighboring lakes. The Little Ossipee Lake Shoreline Stewardship Guide was printed and distributed in May, 2007. Waterboro Selectmen and town staff attended a boat tour around the lake in August, 2006. Other project updates were publicized through local press releases and postings on the LOLA website.



Students from the Maple Stone School in Acton volunteered at two project sites.

Maine Department of Environmental Protection (2009) "Nonpoint Source Management Program 2008 Annual Report," Document# DEPLW-0973. Augusta: MDEP

PROJECT OUTCOMES:

• The project successfully fixed 13 erosion sites in the watershed, including sites on four private roads, two town roads, five residential properties and three driveways. The project incorporated an extensive number and variety of conservation practices including:

Native buffer (107 plants) Road surface stabilization and shaping (3) Rubber razor blades (4) Ditch installation and stabilization (3)

Infiltration trenches (2) Permanent mulching–Erosion Control Mix (2)

Road turnouts (3) Sediment basins (3) Level spreader (1) New culverts (2)

- Pollutant loading to Little Ossipee Lake was reduced by an estimated 35.3 tons/year of sediment and 30.0 pounds/year of phosphorus (EPA Region 5 Method).
- The Little Ossipee Lake Shoreland Stewardship Guide was created in May 2007. LOLA will provide copies of
 this 20-page color booklet to new lakefront property owners. Available at
 http://littleossipeelake.org/Little_Ossipee_Shoreline_Guidebook_WebVersion_2.pdf.
- The Town of Waterboro contributed nearly \$35,000 in cash match to the project. Almost \$16,000 of this town match was allocated to fixing the severe erosion problems associated with the four sites on Courtney Lane (see photos below).





Courtney Lane Before – Severe erosion along the road carried an estimated 20.5 tons of sediment per year across an adjacent property and into the lake.





Courtney Lane <u>After</u> – A sediment basin was installed at the top of the road to detain runoff from the adjacent town road. The road was paved, crowned and ditched. The downhill property was stabilized and its buffer was extended.

PROJECT PARTNERS:

Little Ossipee Lake Association Town of Waterboro Maine Department of Agriculture

CONTACT INFORMATION:

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