

Long Lake Watershed Survey Phase III

#2002P-05

Waterbody Name: Long Lake

Location: St. Agatha, Madawaska, Van Buren,
T17R4, T17R3 – Aroostook County

Waterbody Status: NPS Priority Watershed

Project Sponsor: Town of St. Agatha

Project Duration: March 2002 - March 2005

319 Grant Amount: \$11,250

Local Match: \$10,500



PROBLEM:

Long Lake is the first in the eastern chain of the Fish River Lakes. The lake has a history of algal blooms both in late summer and fall, which has placed it on DEP's list of NPS Priority Watersheds. There are numerous NPS pollution sources in the watershed. Brown plumes have been observed entering the lake from many brooks and ditches.

The north and east sides of the lake watershed were surveyed in two previous projects. The St. John Valley SWCD and the town of St. Agatha partnered on those two phases as well as this the third and final phase. Previous surveys identified residential, agriculture, roads and forestry activities as contributing NPS pollution.

PROJECT DESCRIPTION:

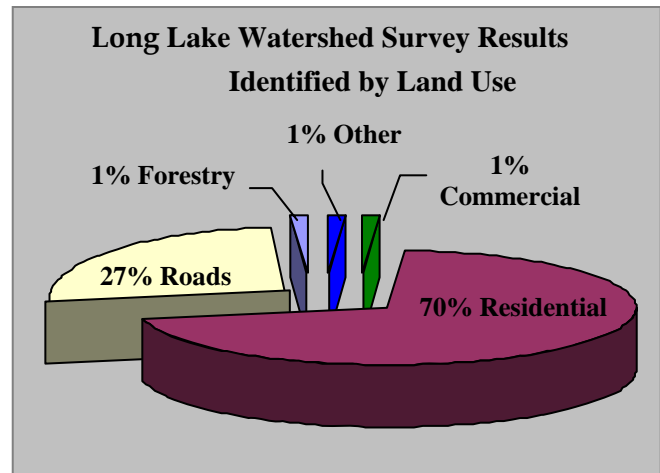
The purpose of this project was to conduct a watershed survey of the remaining southern part of the watershed that was not surveyed in the previous projects. The Town of St. Agatha and St. John Valley SWCD orchestrated the project. They had a difficult time recruiting local volunteers and turned to the University of Maine at Ft. Kent Environmental Science students to conduct the survey. Students were trained to identify problems and suggest potential BMPs. The District also advertised the project in the local paper.

District staff compiled the survey results and tabulated the student's findings. Then a team of natural resource personnel from the St. John Valley SWCD and Natural Resource Conservation Service visited the problem sites to determine technical level needed to fix, cost and potential impact to the lake. Maps and a report were prepared describing the problems found and possible solutions.



PROJECT OUTCOMES:

- Project staff and volunteers surveyed the southern portion of the Long Lake Watershed. Since the rest of the watershed was surveyed in two previous phases, the entire 85 square mile watershed has now been surveyed.
- The watershed survey found that 70% of the potential pollution sites identified were associated with residential land use and 27% were road related problems. One-third of the problems were found in just one sector, which is the area with the most development in the unorganized township of Sinclair (T17R4).
- All three phases of the survey identified the lack of vegetative buffers as common problems.
- Students from the University of Maine at Ft. Kent that assisted in the survey learned about NPS pollution, lake ecology, and water quality issues.



PROJECT PARTNERS:

St. John Valley SWCD

United States Dept. of Agriculture, Natural Resource Conservation Service

University of Maine at Ft. Kent, Environmental Studies students.

CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2006) “Nonpoint Source Management Program 2005 Annual Report,” Document# DEPLW0758. Augusta: MDEP.