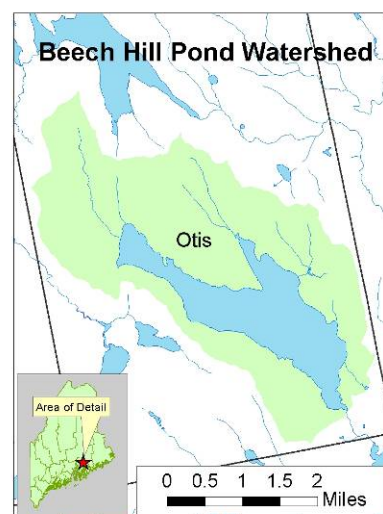


Beech Hill Pond Watershed Survey

#2009PP19

Waterbody Name: Beech Hill Pond
Location: Otis – Hancock County
Waterbody Status: NPS Priority Watershed
Project Grantee: Hancock County SWCD
Project Duration: December 2009 – March 2011
604(b) Grant Amount: \$12,899
Local Match: \$9,197



PROBLEM:

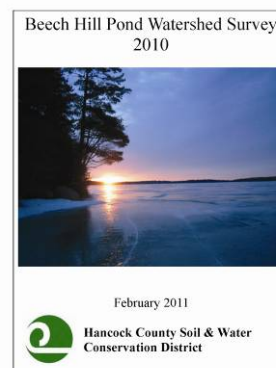
Beech Hill Pond is a 1,422 acre lake that has a direct drainage area of 8.56 square miles. The lake outlet, Beech Hill Stream, flows into Graham Lake. Beech Hill Pond has a public boat launch and beach and is a popular recreation area for swimming, boating, fishing, and floatplane flying. The Maine State Record Lake Trout weighing in at 31 pounds, 8 ounces was caught in Beech Hill Pond in 1958.

Since 1974 water quality data has been collected for Beech Hill Pond by the Maine DEP and the Volunteer Lake Monitoring Program. The water quality of Beech Hill Pond is considered to be above average and the potential for nuisance algae blooms is low. However, the recent increase in watershed development has heightened concerns about lake water quality and impacts from NPS pollution. The Beech Hill Pond Association (BHPLA) formed in 2008 to educate and inform members how to preserve and improve Beech Hill Pond and its watershed. Since then, the group has been actively monitoring lake water quality and conducting invasive plant patrols. In 2010, many lake residents participated in the University of Maine Cooperative Extension (UMCE) Watershed Stewards Program in the town of Otis.

PROJECT DESCRIPTION:

The purpose of the project was to identify and prioritize existing sources of polluted runoff in the Beech Hill Pond watershed and raise local awareness about the impact of soil erosion on lake water quality. The survey was managed by Hancock County SWCD and guided by a steering committee that included representatives from BHPLA, DEP, the Town of Otis, watershed residents, and UMCE.

The watershed survey was conducted by project staff and 24 volunteers, including watershed residents and participants in the Watershed Stewards Program. Survey methods were based on those outlined in Maine DEP's *A Citizen's Guide to Lake NPS Watershed Surveys*. A mailing was sent to 790 residents in Otis to inform them about the project and increase awareness of NPS issues in the watershed. The survey report will be used to plan future restoration projects and to attract local support for developing and conducting a NPS Watershed Project.



PROJECT OUTCOMES:

- The entire Beech Hill Pond watershed was surveyed during the project. Project staff and volunteers identified and documented 167 NPS sites, including 115 sites on residential properties and 52 sites on private roads.
- The *Beech Hill Pond Watershed Survey Report* was completed in February 2011. The report summarizes the findings of the watershed survey and includes information on the number and type of sites, the severity of each site's erosion problems, recommended fixes, impacts to the lake, and the cost and technical level to fix the problem. Available at: <http://tinyurl.com/73msov3>
- Project staff estimated that the annual pollutant loading from the 12 worst sites in the watershed totaled 242 tons of sediment and 206 pounds of phosphorous (Region 5 Method).
- The project laid the foundation for watershed mitigation efforts in the watershed. HCSWCD was awarded a 319 grant for the *Beech Hill Pond Watershed Improvement Project – Phase I*, which will begin in March 2012.



An eroded channel carries sediment directly into Beech Hill Pond.



A volunteer helps document an erosion site on a private road.

PROJECT PARTNERS:

Beech Hill Pond Lake Association
Town of Otis

Beech Hill Pond Watershed Stewards
University of Maine Cooperative Extension

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Suggested Citation:

Maine Department of Environmental Protection (2012) “Nonpoint Source Management Program 2011 Annual Report,” Document # DEPLW-1237. Augusta: MDEP.