Panther Pond Conservation Project - Phase II

#2009RR02

Waterbody Name: Panther Pond

Location: Raymond, Casco – Cumberland County

Waterbody Status: NPS Priority Watershed, Most at Risk

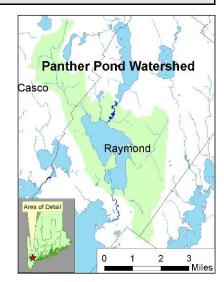
Project Sponsor: Town of Raymond

Project Duration: April 2009 – March 2012

319 Grant Amount: \$63,289

Local Match: \$56,475

PROBLEM:



Panther Pond is a 1439-acre lake located in the Town of Raymond. Panther Pond's shoreline is developed with over 300 homes, four youth summer camps, and an extensive network of unpaved camp roads. The direct watershed covers 12.3 square miles, and the larger watershed includes Crescent Lake, Raymond Pond, and several smaller ponds. Panther Pond contributes about 18% of the flow into Sebago Lake, which serves as a drinking water supply for the Portland region.

The Raymond Waterways Protective Association (RWPA) and Maine DEP have monitored water quality on Panther Pond since 1974. Data indicate that the lake experiences moderate depletion of dissolved oxygen in late summer. In 2002 the Panther Pond Association (PPA) formed to promote conservation efforts in the watershed. In 2003, the PPA, RWPA, Cumberland County SWCD, and Maine DEP conducted an independently-funded watershed survey and identified 84 erosion sites contributing an estimated 61 tons of sediment per year to the lake. A *Phase I* grant project (#2005R-17) installed conservation practices at 26 large-scale erosion sites and 20 smaller sites through small matching grants, reducing pollutant loading to Panther Pond by an estimated 31 tons of sediment per year.

PROJECT DESCRIPTION:

The purpose of the project was to build on the momentum generated by the *Phase I* project and address most of the remaining sites identified in the watershed survey. The project also aimed to raise awareness about watershed problems and foster long-term watershed stewardship. At least 13 high and medium priority sites were targeted for NPS abatement projects, and small matching grants were allocated for another 20 low to medium impact sites on residential properties. A project brochure was mailed to all watershed landowners at the start of the project, and landowners with identified erosion or buffer issues were contacted to get involved in the project. Two boat tours were conducted to highlight



Rain garden installed with a small matching grant.

projects completed through the project. Project updates were presented at RWPA and PPA's annual meetings, and project materials were included on the RWPA website, RWPA newsletters and PPA mailings.

PROJECT OUTCOMES:

- The project successfully completed 14 NPS Abatement Projects including six private road sites, two town road sites, one state road site, two Boy Scout camp sites and three ATV sites. For the ATV sites, project staff worked with local clubs, Scout Troops and other volunteers built bridges to eliminate vehicle traffic through two tributary streams.
- Small matching grants (\$300 each) were awarded for another 22 sites to install conservation practices such as buffers, rubber razor diverters, waterbars and infiltration steps. Many of these conservation practices were installed by local residents, who volunteered to help their friends and neighbors.
- Pollutant loading to Panther Pond was reduced by an estimated 33 tons of sediment and 28 pounds of phosphorus per year (EPA Region 5 Method and WEPP Road Model).

Before: Erosion at trail approach to bridge and at the stream. Bridge was in poor repair (left) and ATVs using trail through the stream (right)





After: Volunteers repaired bridge and stabilized approaches with crushed stone. Large boulders and signs installed to discourage future stream access.





PROJECT PARTNERS:

Cumberland County SWCD Panther Pond Association

Portland Water District Raymond Waterways Protective Association

CONTACT INFORMATION:

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