# Pushaw Lake NPS Watershed Project, Phase 1 #2003R-36

Waterbody Name:	Pushaw Lake
Location:	Orono, Hudson, Old Town, Glenburn, Bradford – Penobscot County
Waterbody Status:	NPS Priority Watershed
Project Grantee:	Penobscot County SWCD
Project Duration:	April 2006 – September 2008
319 Grant Amount:	\$96,090
Local Match:	\$87,928



# **PROBLEM:**

Pushaw Lake is a 4,680-acre lake located in Orono, Glenburn, Old Town and Hudson. Pushaw Lake's water quality has been a concern for more than 30 years. A University of Maine Lake Studies Group noted that an algal bloom occurred in 1970, and the Soil Conservation Service noted in 1972 that the lake had a "serious water quality problem". Currently the potential for nuisance algal blooms in Pushaw Lake is considered low to moderate but increasing algal growth has been observed during the summers of 2001 - 2004. Data obtained in recent years by volunteer lake monitors show a five-year average phosphorous increase of 3 ug/L.

In 2001-2002 twenty local citizens participated in the Watershed Stewards Program offered by the University of Maine Cooperative Extension, and they subsequently recruited additional volunteers to conduct a watershed survey. The resulting survey documented 259 NPS pollution sites in the direct watershed of Pushaw Lake.

#### **PROJECT DESCRIPTION:**

The goal of this project was to accelerate efforts to protect and improve water quality of Pushaw Lake through funding and technical support to address documented NPS sites. Phase 1 of this project fixed sites in the Towns of Glenburn and Hudson and provided education and outreach to the entire lake watershed. BMP's were installed on residential lots; town, state, and private roads; town boat launches and private driveways.

Since the lack of buffers is a significant issue on Pushaw, the grantee used a landscape professional to design buffers using native plants that were then installed around the lake. The grantee enlisted the University of Maine Cooperative Extension's Buffer Brigade (Youth Conservation Corps) to install several buffers during the first year of the project.



Beech Tree Drive stabilization - Hudson

# **PROJECT OUTCOMES:**

- The project's most successful outcome was fixing NPS problems on Beechwood Ave. in Hudson. Project staff worked with the Roger's Landing Road Association to repair 5,386 feet of the road. The road was crowned, ditches were reestablished, and 16 culverts were installed, replaced or refurbished.
- Nine native buffers were installed along the shoreline of the lake through landowner cost share agreements. Two buffer demonstration sites were constructed one at Lakeside Landing in Glenburn and the other at Gould's Landing in Orono. Both projects included native plant buffers, rip-rap shoreline stabilization and rain gardens.
- Project staff provided technical assistance to 28 NPS sites in the Pushaw Lake watershed.
- During the course of the project, the grantee collaborated with the University of Maine Cooperative Extension to improve capacity of the Greater Pushaw Lake Association (GPLA). The GPLA then assisted with updating the Old Town section of the Pushaw Lake Watershed Survey, which collected information on 88 NPS sites.



Gould's Landing buffer demo - Orono



Lakeside Landing buffer demo - Glenburn

# **PROJECT PARTNERS:**

Natural Resources Conservation Service University of Maine Cooperative Extension Town of Glenburn Town of Hudson Town of Orono Town of Old Town Greater Pushaw Lake Association

# **CONTACT INFORMATION:**

Greg Beane, DEP – (207) 941-4292, <u>greg.e.beane@maine.gov</u> Chris Brewer, Penobscot County SWCD – (207) 990-3676 X3, <u>chris.brewer@penobscotswcd.org</u>