

Pleasant River Watershed Restoration Project, Phase I

#2011RT04

Waterbody Name: Pleasant River

Location: Gray and Windham - Cumberland County

Waterbody Status: NPS Priority Watershed, Impaired

Project Grantee: Cumberland County Soil & Water Conservation District (CCSWCD)

Project Duration: January 2011 – September 2013

319 Grant Amount: \$60,032

Local Match: \$46,304



PROBLEM:

The Pleasant River has a 29 square mile watershed. The headwaters originate at Gray Meadows and Thayer Brook in Gray. Many smaller tributaries and wetlands feed the river including Wiggins Brook, Allen Bog, Baker Brook, and Ditch Brook which drains Collins Pond. The Pleasant River joins the Presumpscot River which drains to Casco Bay. Land uses in the watershed include forest - 69%, agriculture- 14%, wetlands- 4%, open space- 4%, and development- 9%. The Maine Department of Inland Fisheries and Wildlife manages the river for cold water fisheries, stocking Brown Trout and Brook Trout. Native Brook Trout are also present in the river and tributaries. As a result, the river is one of the most prized fly-fishing rivers in Southern Maine. Pleasant River does not attain Class B water quality standards due to high levels of bacteria and low dissolved oxygen.

In 2006, Casco Bay Estuary Partnership (CBEP), in conjunction with the Presumpscot River Water Coalition (PRWC) was awarded a Targeted Watershed Initiative Grant from the USEPA. This helped to initiate on-the-ground fixes throughout the Presumpscot River watershed. Presumpscot River Watch was awarded federal 604(b) funds to carry out a watershed survey of Pleasant River conducted from 2008-2009. In 2011, CCSWCD, with funding from CBEP and in partnership with local stakeholders, completed a watershed-based management plan describing actions needed to restore the river.

PROJECT DESCRIPTION:

The purpose of the project was to reduce erosion and export of sediment and phosphorus into the Pleasant River. Conservation practices that reduce erosion and polluted runoff were to be installed at 14 of the highest priority sites identified in the watershed survey. Another goal was to raise awareness about watershed problems and work to foster long term watershed stewardship.

The workplan focused on addressing 14 high priority sites. However many sites were not addressed due to high costs in addressing key sites or disinterest from agricultural landowners whose properties were identified in the survey. However, six NPS sites were addressed including three road sites and three sites with significant bank failure and erosion. Additionally, technical assistance was provided on 25 sites and significant outreach occurred, in part during the attempts to find additional projects.

PROJECT OUTCOMES:

- Outreach, site visits, and recommendations were provided for 25 sites (nine agriculture, six private landowners, five Town of Gray, two Town of Windham, two private roads, and one Department of Transportation site).
- Six large abatement sites were addressed. BMPs installed at the three road sites included inlet/outlet stabilization, new road ditches, sediment basins, and gully and bank stabilization. Severe bank erosion was addressed along Windham High School's cross country trail (12' x 28' exposed river bank) and a 30' landslide on private property following recommendations provided by a geomorphologist. A vegetated buffer was installed and shoreline stabilized at another private property.
- Over 72 tons of sediment per year is no longer reaching the Pleasant River due to BMPS installed.
- The Town and landowners increased their awareness about the Pleasant River and NPS pollution. Public works staff for the towns of Windham and Gray received technical assistance and education that should result in ongoing improved road maintenance practices.
- Outreach and education included the following: presentation to the Gray Town Council; information to the Windham Town Council; numerous newspaper and newsletter articles advertising the grant and its opportunities; four Yardscaping presentations providing landowners with information on lawns and impacts to water quality; and creation and distribution of a final brochure provided to the towns, steering committee, and interested residents highlighting the accomplishments of this project.



Windham High School trail
riverbank stabilization



Vegetative buffer, residential property in
Windham

PROJECT PARTNERS:

Maine Department of Environmental Protection
Casco Bay Estuary Partnership
Watershed Residents

Presumpscot River Watch
Towns of Gray and Windham

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