United States Environmental Protection Agency

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EPA'S TARGETED WATERSHED GRANTS 2005 ANNUAL REPORT

December 2005

Nashua River

MA, NH

WHY IS THIS WATERSHED SPECIAL?

The Nashua River watershed encompasses 31 communities in north central Massachusetts and southern New Hampshire. Nearly 240,000 people live and work within its 538 square miles. Still largely rural, yet at the edge of a major metropolitan area, the watershed is over 60 percent forested. The Massachusetts portion includes a designated Outstanding Natural Resource Area for cold water fisheries and supports more than 20 rare or endangered species. Because groundwater and surface water are closely linked, the watershed serves as an ideal study area for integrating drinking and surface water protection efforts.

ENVIRONMENTAL CHALLENGES

Protecting existing and future drinking water supply sources in the face of strong development pressures is a critical issue for rapidly growing states. Sharply increasing pressures from rapid growth and the resultant decline of open space contribute to two overarching water problems: nonpoint source pollution of the surface waters and increasingly comprised groundwater supplies. The growth rate in the Massachusetts towns in the study area is projected to be 25 to 40 percent through 2010, and 70 to 140 percent in the New Hampshire towns.

- Build out analyses project water demand in Massachusetts to far exceed safe yields of ground water resources.
- Public water supply land is not adequately protected despite state requirements.
- New development poses threats to water quality from sodium and chloride, pesticides and fertilizers, fecal coliform, and chemicals and solvents.
- Impervious surfaces are about 7 percent, but studies suggest 10 percent is the threshold percent to protect water resources in the study area.
- About 79 percent of the Squannacook subbasin and 66 percent of the Nissitissit subbasin are forested (research suggests 75 percent as the threshold percent to protect water resources).
- Forest land overall is at most only 25 percent actively managed.

RESTORATION ACTIVITIES

The Nashua River Watershed Association (NRWA), which has a proven record of success in taking on difficult environmental issues, will use EPA Targeted Watersheds Grant funds to:

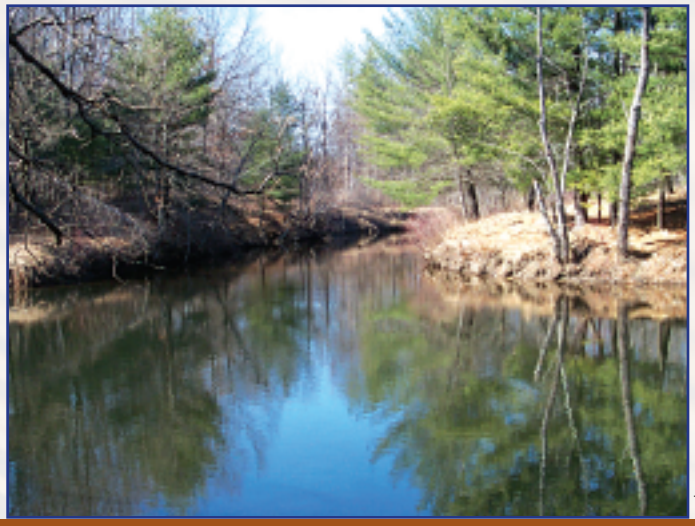
- Increase incentives to individual and municipal forest landowners to voluntarily expand their stewardship and land protection
- Explore market-based opportunity for collective landowners through a forestry cooperative
- Increase incentives for foresters to receive training in ecological approaches
- Provide practical model conservation and restoration sites
- Develop forward-looking smart growth regulatory approaches at the municipal and state level
- Provide baseline water quality information
- Act on new understanding of why some landowners can be resistant to pro-activity

Gulf Brook, a tributary of the Nissitissit River.

A STRONG PARTNERSHIP FOR CHANGE

EPA Targeted Watersheds Grant funds will allow the NRWA to continue in its strong collaborative work. This project follows directly from the recently completed bi-state Source Water Stewardship Demonstration Project, in which NRWA, the State of New Hampshire, the Commonwealth of Massachusetts, and the Trust for Public Land and other organizations all participated. NRWA is currently partnering with:

- Beaver Brook Association
- New England Forestry Foundation
- Trust for Public Land
- A broad interstate coalition of stakeholders



The mouth of the Nissitissit River.

"Working as a broad coalition, the NRWA and its partners are honored that the U.S. EPA is supporting our proactive project to 'protect today's water for tomorrow' in a threatened region of our watershed."

– Elizabeth Ainsley Campbell, Executive Director, Nashua River Watershed Association