



Meduxnekeag River

The Targeted Watershed Grants program started in 2002 to encourage community-based approaches to protect and restore the nation's watersheds. The program emphasizes that strong partnerships lead to measurable environmental results. The goal is to provide resources and build on the successes of strong public and private partnerships already working hard to improve their waterways. Nominees for the Targeted Watershed Grants program were required to set clear goals that include strong monitoring components. Watershed plans and project proposals were judged on criteria such as: innovation, environmental results, broad support, outreach, and financial integrity.

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Why Does the Watershed Need Special Attention?

- The Houlton Band of Maliseet Indians, use the river and its watershed to sustain their cultural heritage as a riverine tribe.
- It contains over 200 farms whose 20,000 acres of potato fields drain into the river and its tributaries. The drainage water contains sediment, fertilizer and pesticide residues.
- The Town of Houlton has several issues of urban and residential runoff that may be affecting the river, including bacterial contamination.
- Fish habitat is significantly degraded.
- A municipal wastewater treatment plant and a starch factory discharge into the Meduxnekeag.
- During periods of low flow in the summer, algae clogs the river. Currently, the river does not meet its state water quality classification for dissolved oxygen during low flow periods.

What are the Long Term Goals?

- To promote the use of agricultural winter cover conservation practices on potato fields, and reduce soil loss and runoff of agricultural chemicals. With long-term, widespread use of these practices, up to 60,000 tons of soil and 99,000 lbs. of phosphorus annually can be kept on potato fields.
- To raise the awareness of river issues with the residents of the watershed and promote other environmental projects which will further the health and welfare of the river system and its users.

Progress/Goals for the Future

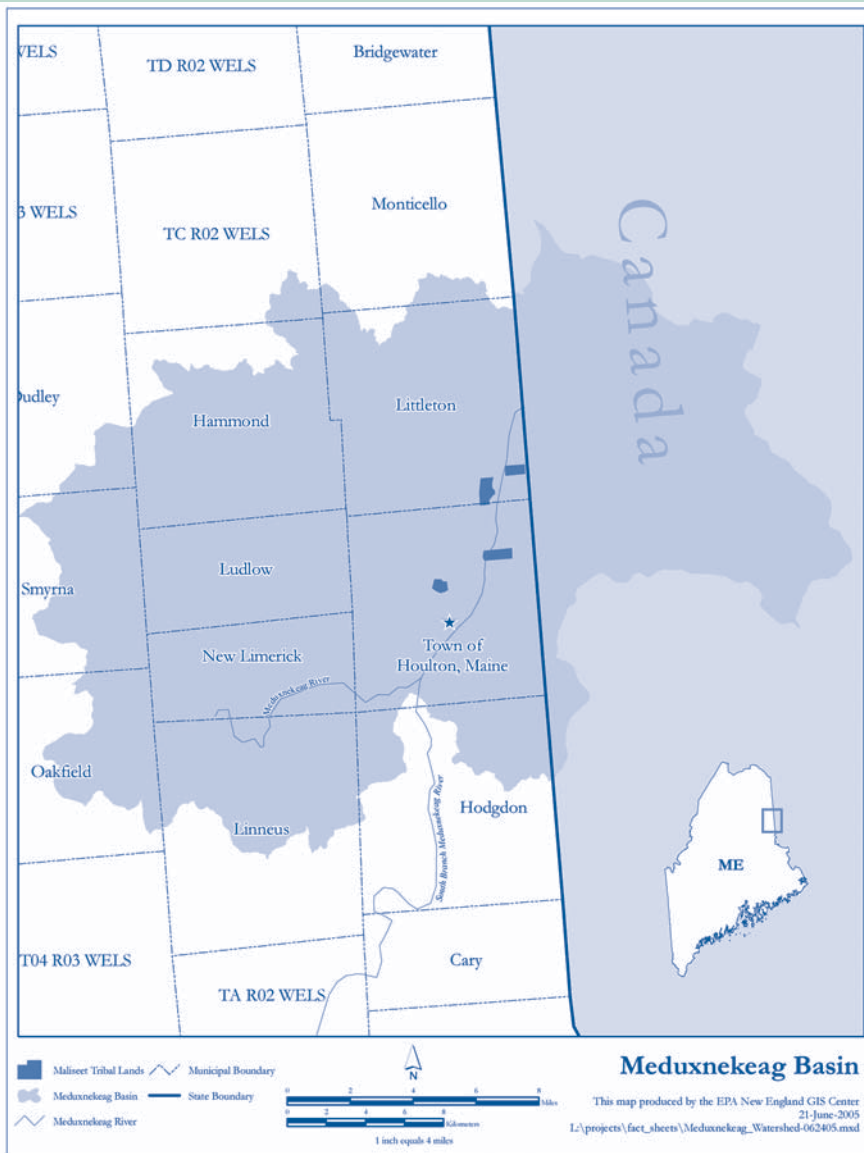
What Partnership Progress has Been Made?

- The Houlton Band of Maliseet Indians (HBMI) and project partners worked with the potato farming community to test innovative techniques designed to reduce runoff losses of soil and agricultural chemicals. In 2004, 1808 acres from 15 farmers used winter cover crop and mulching techniques. The Southern Aroostook Soil and Water Conservation District USDA's Natural Resource Conservation Service (NRCS) and the Maine Cooperative Extension Service and Maine DEP are overseeing the project.
- The Houlton Band of Maliseet Indians with Houlton Water Company, the Town of Houlton and Indian Health Service, identified and fixed a sewer pipe connection to a municipal storm drain allowing untreated sewage to the river.
- The Houlton Band and its partners have identified for EPA other projects to further river and watershed health.

What Major Actions/Goals are Planned for 2006?

- Agricultural "winter cover" conservation practices applied on 10,000 acres and adopted by 33 potato farmers. Sediment and phosphorus loads in the watershed reduced by 30,000 tons and 49,500 pounds per year.
- Fix a sewage leak into the Houlton town stormwater system that causes bacterial contamination of the river. (cont. on back)

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What Major Actions/Goals are Planned for 2006?

- ▶ The partnership plans to sign up additional farm acreage to demonstrate the use of the innovative agricultural conservation practices, and hold winter workshops and open farm days to promote them.
- ▶ HBMI will continue to monitor bacteria levels in and around the Town of Houlton.
- ▶ HBMI is also working with partners to develop education and outreach projects, watershed assessments and studies and other efforts to promote watershed stewardship.



Who are the Partners?

EPA New England • The Houlton Band of Maliseet Indians • The Town of Houlton, Maine • Houlton Water Company • Maine Department of Environmental Protection (ME DEP) • USDA Natural Resources Conservation Service (NRCS) • Southern Aroostook Soil & Water Conservation District • University of Maine Cooperative Extension

Here's what Christie Fitzpatrick, cooperating farmer, says after trying out the spring rain winter cover practice last year: "Watching the field which had the cover crop on it during the winter, I was able to see how effective it was. There was no blowing soil, no standing water or ice and this spring there is a nice catch of organic matter to incorporate. I hope that we'll be able to involve many more farms in this program."

"I can definitely see the many benefits in the small grain application of a winter cover crop" says **Albert Fitzpatrick, another cooperating farmer;** "Preventing soil loss and increased soil health will both be beneficial to our operation."

Danny Cory says "This conservation practice (mulching) is the most "makes sense" program we've done in years. I've even applied it on my own - on a farm next to the river but outside the project area."



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Note: EPA New England offers businesses and municipalities information and assistance to improve compliance with environmental laws and be better stewards of their local environment. Please call to learn how EPA can help.