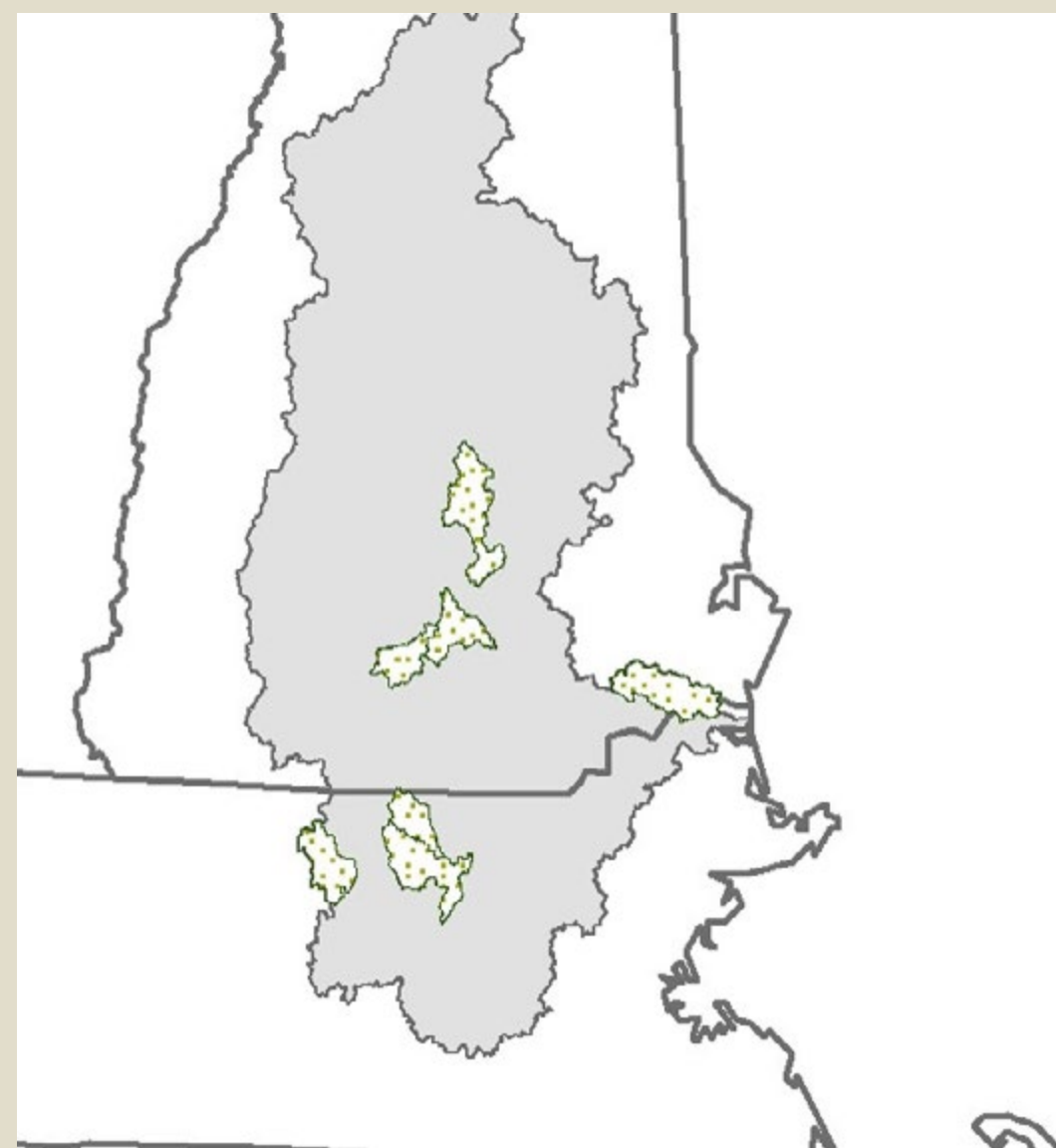


# Protecting and Restoring Riparian Forest Buffers— Working with Landowners and Communities in the Merrimack River Watershed

## About the Project

The Merrimack River watershed is the most threatened watershed in the nation based on loss of private forested land.

This 3-year project—*Expanding Riparian Forest Buffers in Threatened Urban and Suburban Watersheds: A Precision Stormwater Approach*—aims to protect the waters of the Merrimack River by helping landowners and communities care for the land within the most important subwatersheds.



In New Hampshire, we're focused on 4 subwatersheds:

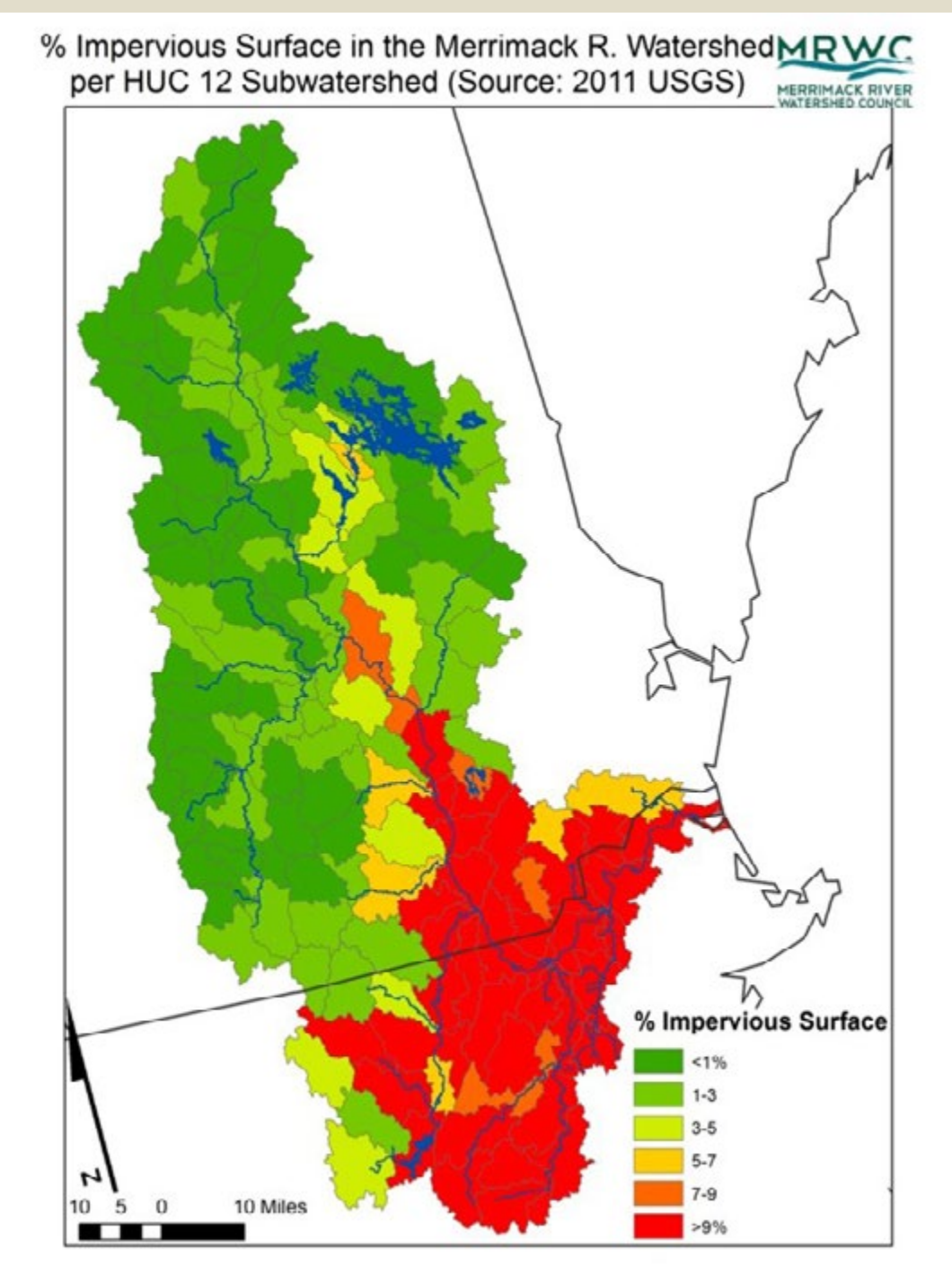
- Merrimack River Drainage (Concord Tributaries)
- Lower Piscataquog River
- South Branch Piscataquog River
- Powwow River

In Massachusetts, we're focused on 3 subwatersheds:

- Squannacook River
- Nashua River— Catacoonamug Brook to Squannacook River
- Whitman River

The Merrimack River Watershed Council identified the most important subwatersheds through landscape analysis. They looked at:

- Impervious surface percentages by HUC12 watershed and 100-meter buffer
- Projected population increases in the next 10 years
- Index of development threats to forests important to drinking water
- 303(d) water quality impairments
- SPARROW modeling
- Outstanding resource waters
- Forest blocks
- Freshwater resilience
- Cold-water fish ranking
- Numbers of threatened and endangered species
- Regional conservation priorities



## New Hampshire Boots on the Ground

UNH Cooperative Extension Foresters are conducting targeted outreach to landowners and communities in the 4 subwatersheds. They provide technical assistance using local information and considering local issues to encourage forest stewardship planning, improve forest management, and protect lands.



We are currently looking for planting sites for riparian restoration. Potential sites have been identified in Pembroke and Concord, and we hope to engage with volunteers through the Stewardship Network: New England.

### Help us find good sites to restore in New Hampshire!

## Key Messages

Using the data gathered by the Merrimack River Watershed Council during their landscape analysis, we created watershed-specific outreach materials for landowners.

### Your Woods Keep Our Water Clean

**How trees help rivers**

- Trees and forests keep water clean and provide essential habitat for animals.
- Trees filter pollutants to prevent them from entering streams and rivers.
- Trees along rivers shade the water, maintaining cool waterways.
- Trees and rivers are critical to controlling erosion.
- Forests reduce sediment. Sediment can be important for groundwater recharge.

Develop land with impervious surfaces, such as pavement and buildings, doesn't provide the above benefits.

**So what can you do to help?**

#### Keep Your Shoreline Planted!

**5 Actions for Homeowners**

1. Get a tree quality assessment for help.
2. Minimize tree use of herbicides and pesticides.
3. Properly dispose of household chemical wastes.
4. Call the Education Center with questions.
5. Plant native trees and shrubs along creeksides, 100 feet or greater in length.

**5 Actions for Woodlot Owners**

1. Call your county extension forester for help.
2. Use best practices for managing your land.
3. Look for invasive plants and insects.
4. Monitor or plant native trees and shrubs along creeksides.
5. Call your local land trust for conservation options.

**We Can Help!**

The advantage of free technical assistance and opportunities to make your land count. Contact the organizations below for assistance.

**Additional Resources**

- *Good Forestry in the Granite State* (www.unh.edu/forestry)
- *Look Up the Book*, a project of the N.H. Department of Environmental Services (www.des.nh.gov)
- *Village Streamkeepers* (www.villagestreamkeepers.org)
- *NH State Forest Nursery*, to order native plants (www.nhstateforests.com)

**Contact these organizations:**

UNH Cooperative Extension: Merrimack County  
603.225.7221 / www.unh.edu

Five Rivers Conservation Trust  
603.225.7221 / www.frcvt.org

UNH Cooperative Extension Education Center  
877.684.2812 / www.unh.edu

Merrimack County Conservation District  
603.975.8119 / www.merrimackcd.org

### Merrimack River Drainage (Concord Tributaries) ranks among the most important in the Merrimack River watershed for protecting water quality and wildlife

**42,350** total acres of land  
60% forested land

**7,259** acres of protected land  
8% impervious cover

**37** number of known endangered (E) or threatened (T) plant and animal species

**Rated as most important in the Merrimack watershed for:**

- endangered plants and animals
- threat to native fish from emerald ash borer
- levels of impervious cover
- land protection

**Already impaired for pathogens and nitrogen**

**About the Merrimack River**

The Merrimack River watershed is 1.1 million acres across New Hampshire and Massachusetts. The watershed is highly developed and is home to 1.6 million people. Less than 10 percent of the land is primarily forested and its riparian areas are degraded. The river is primarily used for recreation and its riparian areas are degraded. The river is primarily used for recreation and its riparian areas are degraded.

**About the Concord Tributaries**

The watershed of the Merrimack River is a combined watershed of more than 42,000 acres, including the towns of Concord, Loudon, Carroll, Franklin, and New York. The watershed is highly developed and is home to 1.6 million people. Less than 10 percent of the land is primarily forested and its riparian areas are degraded. The river is primarily used for recreation and its riparian areas are degraded.

**About the project**

This project aims to protect the waters of the Merrimack River by helping homeowners, businesses, and communities on the land along the tributaries of the Merrimack River. It is a collaboration of the Merrimack River Watershed Council, UNH Cooperative Extension and N.H. Division of Forests and Lands. Funded by the U.S. Forest Service and the National Fish and Wildlife Foundation.

## Massachusetts

## Boots on the Ground

The Merrimack River Watershed Coalition and Nashua River Watershed Association are working to complete 9 plantings within the 3 subwatersheds, and several more are planned for Spring 2017.

So far, the plantings have been conducted with volunteers including a local scout troop, DPW staff, and homeowners. Planting has taken place at diverse sites, such as an eroded bank at a town-owned swimming beach, an unused grass patch at a charter school, a gravel lot at a municipal parking lot, and private residences.



## Key Messages

The Merrimack River Watershed Coalition and Nashua River Watershed Association presented to 12 Massachusetts conservation commissions and at a workshop to the Massachusetts Association of Conservation Commissions.

The Nashua River Watershed Association sent letters to 80 landowners with expiring forest stewardship plans. The letters encouraged landowners to update their plans and offered free technical assistance and planting.

**SAMPLE**

Dear Landowner,

January 27, 2016

The Nashua River Watershed Association (NRWA) is working with the Merrimack River Watershed Council (MRWC) on a multi-year partnership project funded by the US Forest Service – "Expanding Riparian Buffers". One of the project's goals is to encourage forest landowners to participate in Massachusetts' Department of Conservation and Recreation (DCR) Forest Stewardship Program. The Forest Stewardship Program (FSP) offers free technical assistance and financial incentives to forest landowners and municipalities, encouraging good stewardship on these properties. We are writing you because you are located in a project focus area.

We would like to extend an invitation for you to take advantage of the "Expanding Riparian Buffers" and Forest Stewardship Program's opportunities to benefit your land.

MRWA currently has a **cost-share reimbursement** program available to landowners with more than 10 acres of forest no matter what part of the state you are in.

- Could you use financial assistance in developing a Forest Stewardship Plan for your property?
- Do you wonder if there is more you can be doing to protect water quality or provide better wildlife habitat?
- Would you like to develop your woodlot's recreational value, perhaps establish a system of trails?
- Would you like information regarding your woodlot's income potential?
- Are you interested in an on the ground inventory of your forestland?

If you are interested in learning more about the Forest Stewardship Program, please come to a program:

**"MRWA DCR's Working Forest Initiative"**  
Wednesday February 24<sup>th</sup> from 7 to 8:30 PM  
at the NRWA's office – 592 Main Street, Groton MA

(A snow date is the following evening, Thursday Feb. 25<sup>th</sup>) We would appreciate your RSVPing to Al Futterman. These cost-share incentives are limited and applications are reviewed on a first-come basis each fiscal year. Please find additional information at the state's website [www.mass.gov/forestry](http://www.mass.gov/forestry) and find the cost-share application online at [www.mass.gov/forestry](http://www.mass.gov/forestry).

Feel free to contact: Al Futterman, MRWA's Land Director at 978-448-0209 / [alf@nashuariverwatershed.org](mailto:alf@nashuariverwatershed.org) or Mike Downey, MA DCR FSP coordinator at 978-368-0126 ext. 129 / [mikedowney@state.ma.us](mailto:mikedowney@state.ma.us) for further assistance or if you have any questions. Thank you for your attention.

Sincerely,  
Al Futterman

As part of this same project we are offering free plantings of native shrubs and trees along certain riparian buffer areas. (See enclosure for more information and please contact me.)

For more information, contact Alicia Carlson at [alicia.carlson@unh.edu](mailto:alicia.carlson@unh.edu), Alex Krofta at [akrofta@merrimack.org](mailto:akrofta@merrimack.org), or Al Futterman at [alf@nashuariverwatershed.org](mailto:alf@nashuariverwatershed.org).

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