

FORESTRY NOTES SPECIAL REPORT



National Association of
Conservation Districts

Districts working to improve water quality

New York district tackles erosion and promotes stream conservation

One New York farmer's erosion concerns has prompted the Tioga County Soil and Water Conservation District (SWCD) to use a \$244,130 grant to install riparian buffers on the property and conduct streambank protection and wetland mitigation downstream.



The farm sustained erosion damage following heavy rains last year and contacted the SWCD for assistance. After walking the site, the district proposed a larger project for retired farmers in Spencer, and in July, the district was awarded the funding through the state's Climate Resilient Farming Grant program.

"In other projects, we do the buffer or the stream component, so this will allow us to do it all together, as well as monitor the stream and

the buffer to ensure we have establishment of the treatments and that we're addressing the erosion," Tioga County SWCD Director Wendy Walsh said.

"We had an opportunity to write a proposal to emphasize not only the erosive bank but the entire streamline corridor, the adjacent land and the other streams that come together on

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Making a major impact in water quality

Of all our natural resources, water may be the most precious. It's essential to our daily lives. Naturally, the conservation projects that impact water quality are among the most important we contribute to.

America's forests help clean our water sources and are critical components to water management strategies. They enhance fish habitat and reduce soil erosion. Trees make a difference.

This Forestry Notes special report highlights how conservation districts are assisting in forest planning efforts around the country to impact water quality. Whether installing riparian buffers or helping to restore a streambank, conservation districts are on the front lines of many of these efforts.

Enjoy the stories highlighted in this report — and please share your story with us! We want to highlight how your district is impacting water quality through its forestry work.



**Steve Hedstrom, Chair
NACD Forestry
Resource Policy Group**



SWCD utilizes available programs to meet military and watershed needs

Minnesota's Morrison Soil and Water Conservation District (SWCD) is using federal and state programming and a partnership with the military to secure easements and establish and maintain buffers. The effort aims to protect and improve water quality and wildlife habitat around the National Guard's Camp Ripley.

"We know if we can protect 75 percent of a watershed, our water quality is going to stay in good condition," District Manager Shannon Wettstein said. "That's a goal for the district, but for the military, the habitat fragmentation and wildlife entering the camp was the concern."

Located near the Nokasippi Wildlife Management Area, Camp Ripley operates 24

hours a day, training about 30,000 military personnel and civilians each year, including firefighters, emergency responders, law enforcement officers and snowplow operators.

Development migrated toward the camp, affecting the National Guard's ability to conduct its training. The state of Minnesota Board of Soil and Water Resources reworked the state's Reinvest in Minnesota (RIM) Reserve program, and the legislature modified it to work within the military's Army Compatible Use Buffer (ACUB) program.

The ACUB program allows the purchasing of development rights through permanent conservation easements to minimize infringement within a three-mile radius of the camp. Landowners receive a per-acre sum and retain the right to continue current land use that often includes farming and hunting.

RIM functions in much the same way. It compensates landowners for voluntarily retiring marginal cropland to benefit wildlife habitat and protect soil and water resources.

"Modifying the framework of our existing RIM Reserve easement program was a 'win-win' opportunity to retain an existing landscape of forest, prairie and agriculture," Minnesota Association of Soil and Water Conservation Districts Executive Director LeAnn Buck said. "They didn't want more development or housing to get in this area, so we are able to leverage resources to use easements to prevent the development."

Since ACUB's inception in 2006, about 650 landowners have shown interest and nearly 290 easements on more than 29,000 acres have been completed. Another 155 parcels across more than 13,600 acres are ready for action.

The buffers preserve wildlife habitat for species like wolves, red-shouldered hawks and the threatened northern long-eared bat. RIM Reserve has also assisted in protecting the state's wild rice habitat and lands within the 400-mile-long Mississippi River headwater region and its water quality along the way.

"When the ACUB program started, we were identified as the place for getting landowner contacts and walking them through the process," said Wettstein. "But we really needed the easement, so the state made a cooperative agreement with the Department of Defense to say we will hold these easements in perpetuity, and the district will be the one providing the professional services."

The U.S. Department of Defense's Readiness and Environmental Protection Integration program to date has put about \$34 million into ACUB at Camp Ripley.

Protecting the forest surrounding the National Guard's Camp Ripley has brought \$5.7 million in Lessard-Sams Outdoor Heritage Fund investments since 2010 and includes riparian buffers on about 4,800 acres involving land surrounding the Little Nokasippi Wildlife Management Area and the confluence of the Little Nokasippi River.

Specific properties are identified as targets, Wettstein said, and the district works with landowners to implement the program.

"The state has recognized the need to do work before things get bad, and definitely the more pressure on those resources, the more money we'll have to pump in to fix it to slow down some of the causes," Wettstein said. "The water quality piece is still good, and we're working on keeping it that way."

The district maintains contact with the military to ensure it is meeting its goals to continue training efforts while keeping wildlife at bay.

"We're really proud of the program," Wettstein said. "We're talking with the landowners, we know [Camp Ripley's] goals and what needs to be reported back to get funding, so we're really driving this program."

"And it impacts our water quality as well," she said. "It's a great partnership."

Rhode Island district helps maintain statewide high water quality standards

The Northern Rhode Island Conservation District (NRICD) has developed a partnership with the city-owned Providence Water Supply Board and the State of Rhode Island that will utilize \$2.9 million from a U.S. Forest Service grant to continue improving water quality in the Scituate Reservoir Watershed by providing easements to landowners who are managing their forests.

“Private landowners who are actively engaged in the management of their forests are less likely to engage in activities that negatively impact water quality,” NRICD Agriculture and Forestry Program Manager Kate Sayles said. “This is why this partnership is so important.”

In the past, Rhode Island has been identified as having some of the highest water quality in the northeast, likely due to the management of the 93 acres of forestland surrounding the reservoir. Providence Water Supply Board is the largest water supplier in Rhode Island, serving 60 percent of the state’s population. It owns one-third of the watershed and has been actively involved in ensuring the proper management of the land through forest management strategies, land conservation with fee-simple purchases or conservation easements for watershed protection and through water sampling and studies to monitor water quality.

The remaining two-thirds of the watershed is privately owned and comprised of residential neighborhoods with large sections of privately-owned forests and more than 200 farms. That’s where NRICD comes in.

“Forests are essential elements to maintaining water quality, and the types of land uses surrounding drinking water reservoirs



are critical to drinking water for the state,” Sayles said. “Some landowners don’t even know where to start.”

For the last decade, NRICD has partnered with Providence Water Supply Board on outreach and education strategies funded through Natural Resources Conservation Service (NRCS) programs that encourage private landowners to implement forest stewardship strategies.

As the outreach arm, NRICD has sent mailings, visited properties, worked with schools, and encouraged landowners to apply for programs that will improve or sustain the reservoir water quality.

Programs vary depending on the individual landowner, but the goal is “conservation approaches that improve water quality through forest management,” Sayles said. “Some programs provide general technical assistance, while others use innovative approaches to get landowners to consider forest management.”

From 2013 to 2017, NRICD utilized an NRCS conservation technical assistance grant to work with reservoir landowners to apply for and implement forest management plans, including identifying appropriate well locations, addressing animal management practices, and making landscape-scale decisions rather than just focusing on one parcel. In that time, more than 1,930 landowners were assisted, and NRICD continues to manage those contracts.

This past summer, the state received a grant through the U.S. Forest Service Forest Legacy Program to focus on easements on the Scituate Reservoir Watershed. The 2017 grant application identified 716 acres on 14 targeted properties. The project has prompted Providence Water Supply Board to request NRICD’s outreach assistance once again, and another application to assist 407 acres comprised of 11 parcels is being submitted this fall.

Sayles has followed up with the forester for each property owner to better understand the landowner’s goals and determine which, if any, forest management practices have occurred to date. Each plan has a comprehensive water quality section, outlining management depending on the location within the watershed.

NRICD holds field days, walks and tours and has partnered with individual landowners currently operating under a management plan with a goal of affecting water quality to speak with anyone who may have questions about the process or implementation, Sayles said.

“We receive at least two contacts a month for landowners in the watershed who are interested in learning more, and have a lot of interest in forest management after hosting outreach events,” she said. “Managing forests overall creates a multitude of benefits, and water quality is an important aspect of that.”



the property,” she said. “The landowners were pretty open to whatever we needed to incorporate into a proposal to get funding. They are excited about moving forward.”

The grant will fund conservation practices to rehabilitate five streambanks that total 910 feet, 3,600 feet of berm removal, 3.5 acres of wetland enhancement, 3.5 acres of upland planting and more than 13 acres of riparian forest buffer, including 1.3 acres of cropland conversion.

Tioga County SWCD also plans to install four stream cross sections to monitor and establish a baseline for the stream so the district can observe how the project work reacts to large storm events.

Over the years, berms have locked water on the land, preventing even distribution, which increases the water velocity and forces water to flow through fields in order to find an area to get back into the streambed channel, causing cropland and streambank erosion. Gravel berm removal will allow for increased floodplain capacity and reduction of invasive species that have covered the berms.

“The landowner has trusted us to do what needs to be done to stabilize the stream,” Tioga County SWCD Nutrient Management and Water Quality Specialist Danielle Singer said. “It takes a lot of creativity to pull funding

together for these kinds of projects with different practices, and the numbers are significant, so we’re trying to pair this with other programs that would provide additional incentives to the landowner and get an easement in place so the project will be safeguarded in the future.”

“The landowners were pretty open to whatever we needed to incorporate into a proposal to get funding. They are excited about moving forward.”

“We ultimately plan to use the project as an example of completed work that we can demonstrate to municipalities, landowners and other farmers to explain the natural stream processes and the benefits of stream conservation work, wetlands and riparian buffer zones,” said Walsh.

Farm Bill and Source Water Protection Meeting in Massachusetts

In October, conservation district staff attended a meeting hosted by the American Water Works Association in Holliston, Mass., facilitated by Kira Jacobs of Environmental Protection Agency (EPA) Region 1. The meeting brought together more than 50 attendees from Rhode Island, Connecticut and Massachusetts to explore source water protection opportunities. The 2018 Farm Bill has a focus on source water protection, requiring that \$400 million be invested. Gina DeMarco of Northern Rhode Island Conservation District was one of the panelists.

The meeting focused on how utilities can form new partnerships to use Farm Bill funds to address source water protection challenges, and how to educate water suppliers about NRCS programs which can help protect their sources of drinking water.

ADDITIONAL MATERIALS RELATED TO THIS SPECIAL REPORT



The Source Water Collaborative was formed in 2006 with the goal to combine the strengths and tools of a diverse set of member organizations to act now, and protect drinking water sources for generations to come. NACD is one of 29 national organizations involved in the Collaborative.

<https://sourcewatercollaborative.org>



A key component of the **Readiness and Environmental Protection Integration (REPI) Program** is the use of buffer partnerships among the military services, private conservation groups, and state and local governments, authorized by Congress. These partnerships share the cost of acquisition of easements or other interests in land from willing sellers to preserve compatible land uses and natural habitats near installations and ranges that helps sustain critical, at-risk military mission capabilities.

<https://www.repi.mil>



The **Forest Legacy Program** is a conservation program administered by the U.S. Forest Service in partnership with State agencies to encourage the protection of privately-owned forest lands through conservation easements or land purchases. Protection of private forests through the Forest Legacy Program maintains a multitude of public benefits including clean and abundant drinking water.

<https://www.fs.fed.us/managing-land/private-land/forest-legacy>

