TIOGA COUNTY FARM HELPS IMPROVE LOCAL WATER QUALITY

Conserving streams through agricultural management practices

PROJECT GOALS

Work with farmers to install conservation practices that will improve local water quality.

COMMUNITY AND ECONOMIC BENEFITS

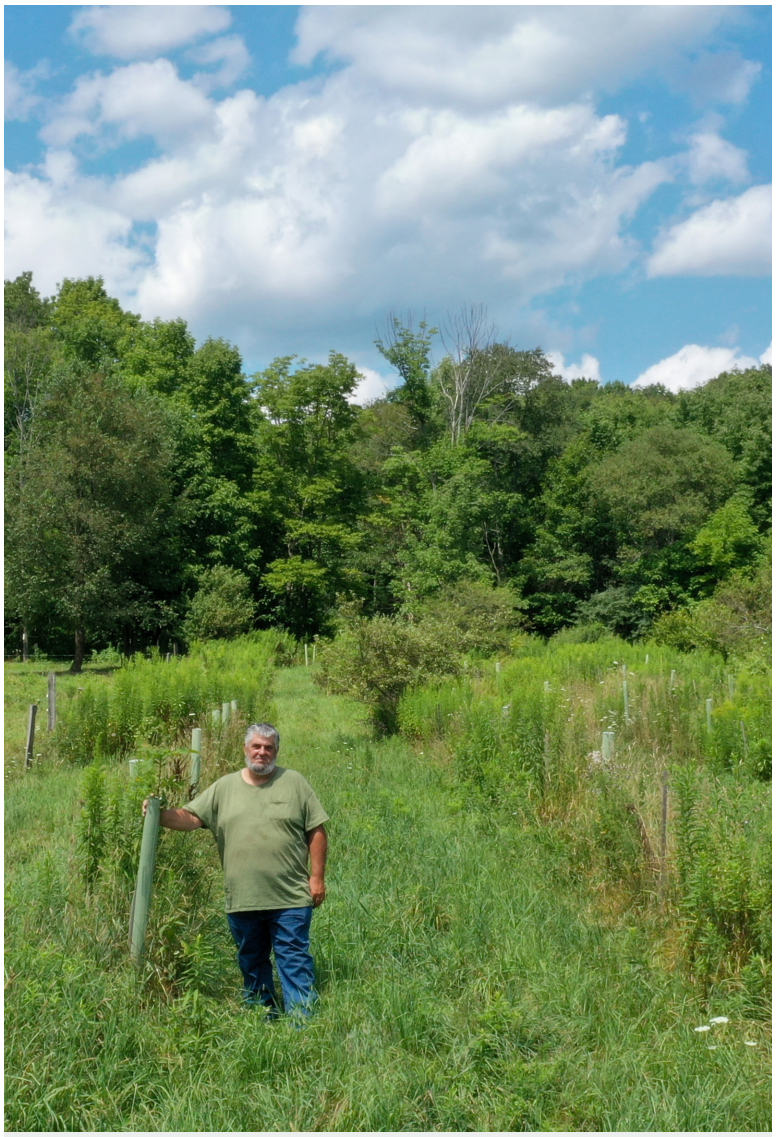
- Reducing erosion and floodwater damage to watershed infrastructure (e.g., road culverts) reduces repair costs to the community.
- Excluding livestock from the stream enhances public health by improving local water quality.
- Planting trees and shrubs along a stream increases soil stabilization, which decreases the impact of flooding and reduces streambank erosion locally and downstream.

ENVIRONMENTAL BENEFITS

- Planting forested riparian buffers along the streambank reduces stormwater runoff and erosion in the stream corridor.
- Trees and shrubs increase air and water quality by being a natural filter for excess nutrients and a carbon sink.
- Installing fencing and adding an alternative water source for livestock decreases nutrient pollution in the stream, which ultimately reduces the number of pollutants entering local waterways.
- Planting trees along the streamside creates upland wildlife habitat and provides shade and cooler water temperatures for aquatic life.

CONSERVATION PROJECTS INSTALLED

- Riparian forest buffers.
- Exclusion fencing.
- Alternative watering source.



Jim Simmons stands between the rows of sapplings that were planted as part of the riparian forest buffer. *Photo couresy of Tioga SWCD.*

> **"I like watching the buffer grow and know that it will have a great impact on the stream and wildlife near my home.**
>
> **- William Simmons**
> *Tioga County, New York*

CONTINUED ON REVERSE SIDE

PROJECT SUMMARY

In 2017, William Simmons partnered with the Tioga County Soil and Water Conservation District (SWCD) to use funding from the Farm Service Agency's Conservation Reserve Program (CREP) and the Upper Susquehanna Coalition's (USC) Water Quality Funding Program to install livestock management practices and restore riparian buffers to help reduce his farm's negative impact on the stream corridor. The Tioga County SWCD helped Simmons install livestock fencing and an alterantive watering system on 15 acres of pasture as well as plant 11 acres of forested riparian buffer along the stream running through his farm. With the help of the SWCD, Simmons developed a functional pasture system that keeps livestock out of the stream and adds a buffer zone to filter nutrients. Simmons provided in-kind cost share funds for the grants by building the fence/watering system and doing brush management to prepare the site for planting. As part of the grant contract agreement, Simmons agreed to maintain the riparian buffer, as necessary, until the trees and shrubs become established.

THINGS TO CONSIDER

- The landowner was willing to give up space along the stream for a riparian buffer zone to be established.
- Maintenance is needed in the buffer for 3-4 years while the plants become established.
- Using an alternative watering source will require maintenance associated with operation.

THE PARTNERS AND FUNDING SOURCES

- Upper Susquehanna Coalition
- Tioga Soil and Water Conservation District
- Farm Service Agency
- Natural Resources Conservation Service
- National Fish and Wildlife Foundation

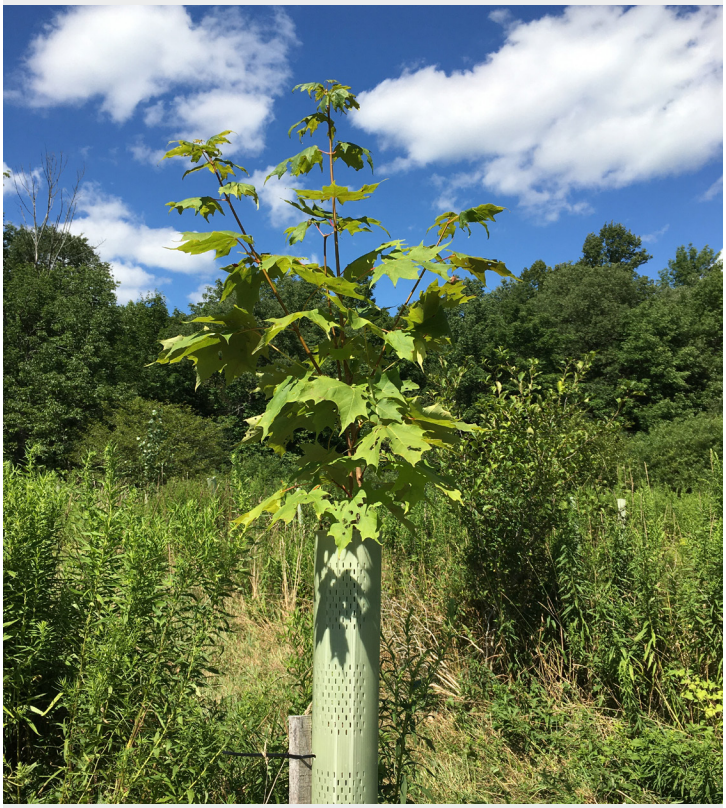
CONTACT

Wendy Walsh – Tioga Soil and Water Conservation District

walshw@co.tioga.ny.us

607.687.3553

A drone photo shows an aeiral perspective of the pasture, the riparian buffer and the stream in the lower right corner. *Photo courtesy of Tioga SWCD.*



The trunk of a young maple tree planted as part of the riparian forest buffer is wrapped in plastic to protect it from pests. *Photo courtesy of Tioga SWCD.*