

Franklin County Natural Resources Conservation District

www.FranklinCountyNRCD.org

50 S. Main St., Ste. B-20, St. Albans, VT 05478

info@FranklinCountyNRCD.org

Dear friends,

The Franklin County Natural Resources Conservation District has grown substantially over 2023 to better meet the needs of the communities we serve. We have added four new staff to our team, making us a team of six assistance providers to help land stewards with a variety of opportunities. You might have even noticed that we have updated our mission statement to:

“The Franklin County Natural Resources Conservation District empowers and partners with land stewards and communities on the ground by supporting connections that benefit natural resources, water quality, soil health, and the working landscape in Franklin County and across Northwest Vermont.”



District Staff left to right: Lauren Weston, Kerry Brosnan, Kate Wettergreen, Dorothy Kinney-Landis, Mel Auffredou, & Charles Williamson

Through the Local Led Conservation Process, we have been working with other conservation districts and the USDA-NRCS to provide more funding for conservation practices tailored to the unique needs of our region. We hope to involve many more people in this process in the coming years. See how you can get involved by learning more about Local Led later in this newsletter.

We have also begun working more in Forestry and Maple, learning more about grants and resources available to a major industry in our county. We have even begun hosting a skidder bridge rental program for folks working in the woods who need to cross streams and protect water quality. We also completed some construction projects including removing an unused bridge along Dead Creek that was causing a disruption for the stream, restoring a natural shoreline at a camp on Lake Carmi, and installing rain gardens and check dams to reduce erosion on a tributary to the Missisquoi River! We also planted trees, shrubs, and live stakes on 16.2 acres of land in Franklin County along waterways!

We have continued assisting farmers through grant writing, soil health consultations, Nutrient Management Plan creation and updates, assistance with the VT Pay for Performance Program, and more. Training new staff has been a major focus so that we can provide assistance based on the latest research and on-the-ground efforts.

We have updated the Guide to Assistance for Agricultural Producers of Vermont for 2024 to include more programs that may be of interest to land stewards across Vermont. Be sure to check it out! Once again, we hosted our largest Tree Sale ever. Thanks to all our customers and collaborators for planting nearly sixteen thousand stems this spring! We are excited for some new plant offerings for the 2024 sale. Take a look in this newsletter to see what we've got!

2023 By the Numbers:

15,832 Tree stems sold to **345** customers,
8,430 Plants planted along waterbodies and streams with help from **141** volunteers at **7** sites,
67 Farms assisted,
241 Soil samples collected,
93 Water quality samples collected,
62 Posts about events, grants, opportunities, and surveys on our “Stay Up to Date” webpage,
31 grant proposals written with **94%** success rate,
 Staff spent **41%** of their time working on Agriculture Programs,
39% on Natural Resources Conservation and Restoration Projects,
 and **20%** on Education Programs, the Tree Sale, Administration, Stormwater Remediation, and Water Quality Monitoring.

You might have seen us around town at various conservation and planning commission, or selectboard meetings connecting with local leaders to share our services. We really want everyone in the community to know about how we can help! None of this work would have been possible without our incredible land stewards, farmers, producers, forest managers, and partner organizations. It is such an honor to work in this community with people who truly care about the natural resources around us and want to do their part to make it better.

Sincerely,
 Lauren Weston, District Manager

Meet New Members of the FCNRCD Team



Mel Auffredou

Mel is a dedicated team member with a deep-rooted love for nature cultivated in the Southern Adirondacks of upstate New York. Initially, she pursued a career in English education and lived in several countries including Brazil, France, and South Korea. Upon her return to the US, she decided to shift her focus to environmental conservation, earning a master's degree in Environmental Sciences and Policy with a concentration in environmental justice from Johns Hopkins University. Her experience includes serving with ECO AmeriCorps at NorthWoods Stewardship Center and the VTDEC Monitoring and Assessment Program, where she honed her skills in water quality, aquatic ecology, and riparian restoration.



Charles Williamson

Charles, hailing from Darlington, South Carolina, earned a B.S. in Environmental Studies at Warren-Wilson College, focusing on sustainable forestry. While pursuing his degree, he gained experience on livestock farms, sparking an interest in agricultural impacts on soil health and plant interactions. After graduation Charles worked on diversified vegetable farms in Western North Carolina and Central Vermont, deepening his expertise. Charles later pursued an M.S. in Plant and Environmental Sciences at Clemson University, where he worked as a graduate assistant in a soil health lab, concentrating on soil and plant interactions particularly in the context of cover crops and manure application.



Dorothy Kinney-Landis

Dorothy, originally from Southeastern Vermont, earned a B.S. in Environmental Studies from the University of Vermont, specializing in ecological agriculture and food systems. During her studies, she developed a passion for farming and nurturing productive landscapes, gaining experience on diversified vegetable farms in the Burlington area. Inspired by her coursework and practical experience, she pursued an M.S. in Ecological Design at the Conway School of Landscape Design, focusing on landscape planning, particularly in agricultural contexts.



Kerry Brosnan

Originally from Long Island, New York, Kerry pursued a degree in Natural Resources at the University of Vermont where she explored her interest in the intersection of agriculture and wildlife conservation. Kerry expanded her knowledge studying food systems in Atlanta, Georgia, and Quito, Ecuador,

as well as working on farms in Chittenden County. After college, she developed and managed North Branch Nature Center's volunteer stewardship and invasive species management program and learned about environmental policy while working as a legislative intern with Vermont Natural Resources Council.

2024 District Events

We are hard at work planning events and workshops for 2024! Look out for these events (and more):

- Local-Led Conservation Meetings
- Why Farmers Spread Manure Webinar
- Agricultural water quality events & workshops
- Tree planting days
- Missisquoi River Fishing Festival
- Birding on the Farm

Event details will be shared when available online at FranklinCountyNRCD.org/StayUpToDate

Have an idea for an event that you'd like us to host? Let us know by emailing us at info@FranklinCountyNRCD.org or calling us at 802-528-4176.

Returning Staff: Lauren Weston and Kate Wettergreen

Locally-led conservation is a collaborative approach where communities, organizations, and individuals at the local level take an active role in planning, implementing, and managing conservation efforts. It empowers local stakeholders to be the decision-makers and drivers of conservation initiatives. Over the past year and a half, your Northwest Conservation Districts – Franklin County, Grand Isle County, and Lamoille County NRCDs, and the USDA-Natural Resources Conservation Service (NRCS) held community meetings, surveyed their communities, and developed a conservation action plan to identify solution-based approaches to resource concerns.

Based on these efforts, NRCS has created a Local Funding Pool that is specific to Franklin, Grand Isle, and Lamoille Counties needs, with a subset of NRCS practices and associated funding that are only going to be ranked against other applicants in these three counties. The goal is to fund projects that are uniquely needed in our region that have not ranked high enough on a statewide scale in the past to receive funding for implementation. The practices and amount of funding in the Local Funding Pool were determined based on input from our local communities!

We are hoping to continue this process into the future to grow the amount of funds in the Local Funding Pool and to make sure on-the-ground needs in our region are being met. We need your input to shape this program well. Please help us shape the program for next year by filling out our survey here:

[franklincountynrcd.org/local](https://www.franklincountynrcd.org/local), or keep an eye on our calendar for Local Led Conservation Meetings in 2024!

**View Our Updated Guide
to Assistance for
Agricultural Producers**

<https://www.franklincountynrcd.org/agproducersguide>



2023 Weather & the Land-Based Economy

Winter

This past winter was among the 5 top warmest in Vermont since the 1880s. It brought the warmest January in Vermont on record with very little snowpack, but there were two notably destructive storms that hit the state in December 2022. The warm winter posed challenges to loggers, who rely on frozen ground to access certain forested areas, and ski resorts, who needed to continually produce snow. Many maple syrup producers started production weeks before the sugaring season typically begins.

Spring

A very unpredictable spring brought us a record-breaking mid-March snowstorm to start off the season and above-average precipitation and warmer-than-usual temperatures throughout April and May. This brought an early and long mud-season. After weeks of fair weather, a mid-May hard frost presented challenges to many fruit producers, orchards, and vineyards. Vermont remained the country's top producer of maple syrup despite a decline in production from 2022.

Summer

Rain and flooding were devastating throughout Vermont this summer, damaging houses, farmland and crops, businesses, and roads. Flood waters washed more phosphorus into Lake Champlain in one day than all last year, along with other toxic chemicals and waste, heightening concerns about blue-green algae blooms and lake health. Though many farms in Franklin County were spared from direct flooding in July, continuous rain throughout July and August resulted in limited haying and a late season harvest of corn.

Fall

Following a wet summer, drier weather this fall was welcome to many farmers. Some fields have taken longer to dry out and recover from the wet conditions, delaying harvest of field crops, additional hay cuttings, spreading and injecting manure, and fall cover cropping. While the first snowstorms appeared in the late fall, many dairy farmers and custom applicators worked to spread manure on fields before the spreading ban deadline. As the growing season ends, many farmers can start to fully assess the productivity and losses of 2023.

Soil Health

In November, Franklin County NRCD initiated the Soil Health Training Program for Technical Assistance Providers. This program has been developed with collaborators from UVM Extension, USDA-NRCS, Vermont Healthy Soils Coalition, Vermont Agency of Agriculture, Food & Markets, and American Farmland Trust. The goal is to train Vermont-based technical assistance providers on soil health principles and best practices, so they may provide informed and consistent recommendations and services to land stewards including farmers, foresters, and residential landowners.

The program kicked off on November 14th with an all-day workshop attended by 53 people at the Farm at Vermont Youth Conservation Corps in Richmond, VT and will continue online and in person throughout 2024.

In addition to the Soil Health Training Program, the Franklin County NRCD is actively involved in coordinating a Soil Health Cohort in partnership with UVM Extension in Northwest VT. This initiative aids local farmers from diverse backgrounds, including vegetable farmers, cattle, dairy, and other livestock farmers, in interpreting Cornell Assessment of Soil Health test results, creating soil health plans, understanding the impact of their management on the ground, and attempting to address some of the questions farmers have about their landscape. The cohort is a collaborative space where farmers can share insights and learnings, fostering a community-driven approach to enhancing soil health.



Above: Technical assistance providers dig into the soil at the VYCC Farm and discuss how to best work with farmers on soil health principles and practices.

Bridge Removal

The Franklin County NRCD completed the removal of a small, unused bridge over the Dead Creek in Swanton, VT for improved water quality and stream health. The bridge, downstream of the Fairfield Swamp Wildlife Management Area, was a relic of past agricultural use and had fallen into disarray over the years. The bridge acted as an encroachment on the stream channel, disrupting the flow of water, sediment, and debris. Two landowners now own land on each side of the bridge, and both supported the bridge removal to restore stream function and improve stream health.



Above: The Dead Creek following bridge removal. The creek is no longer constricted due to encroachment, improving stream flow and water quality.

The Franklin County NRCD selected Jeff Corey Excavating to remove the bridge and restore the floodplain. In September of 2023, after a long, wet summer, the concrete abutments, steel I-beams, and stacked stones were removed from the stream and disposed of properly. Approximately 305 cubic yards of fill that had been historically placed in the floodplain for access roads was excavated and mounded on the property, outside of the floodplain and river corridor, and covered with tarp to kill the poison parsnip seeds present on this site. The landowner hopes to spread this material on his hayfields once the seeds are nonviable.

To enhance ecological benefits, the Franklin County NRCD team went back to the site in October to plant bareroot trees from the Intervale Conservation Nursery in Burlington, VT and to harvest and plant live stakes of willow, dogwood, and alder from the landowner's nearby properties. These plants are able to propagate themselves from sustainably-harvested cuttings once the plants go dormant. This project was funded by the Vermont Natural Resources Conservation Council through funds from the Vermont Agency of Natural Resources Department of Environmental Conservation Clean Water Program. Thanks to the landowners for supporting this project to improve water quality in our watersheds!

CWSP/Clean Water Funding

Did you know that the way clean water funds for voluntary projects moves from the State to on-the-ground projects has changed? Now, clean water funds move through Clean Water Service Providers and get approval from Basin Water Quality Councils that are made up of local NRCDs, watershed organizations, municipal representatives, planning commissions, and land conservation organizations. Projects can be non-regulatory projects such as green infrastructure stormwater practices, conservation initiatives on farms and forestlands, and natural resources projects like wetland and floodplain restoration and tree plantings along riparian areas. Funds are designed to be allocated to projects that will reduce phosphorus loading in our waterways. Do you have a potential clean water project on your land? Would you like to see if the Franklin County NRCD can help with technical assistance and possible funding if it meets certain eligibility criteria? If so, please reach out to us at info@FranklinCountyNRCD.org!

Forestry Overview

In 2024 and beyond, the Franklin County NRCD plans to expand our work in the forestry sector. Forestland comprises 66% of the United States' portion of the Missisquoi Bay watershed and the [VTDEC's Missisquoi Bay Tactical Basin Plan](#) calls for a reduction in 50% of phosphorus contributions from the forestry sector (Bates 2021). Phosphorus reduction targets for forestland are higher in the Missisquoi Basin than in other watersheds, and therefore more work on forestland's contribution to water quality issues is needed (Bates 2021). As part of this work, the Franklin County NRCD will be coordinating with partners from the Vermont Department of Environmental Conservation and Vermont Forest, Parks, and Recreation on two programs that help address environmental issues within the forestry sector.

Portable Skidder Bridge Program

As of Fall 2023, the Franklin County NRCD is coordinating a portable skidder bridge rental program for logging professionals and forest landowners in Franklin and Grand Isle counties. Two portable skidder bridges will be available to forestry landowners and professionals, with rental fees of \$100 per month. Temporary skidder bridges allow vehicles to cross streams during logging jobs while minimizing impacts to water quality. Skidder bridges are designed to be temporary, portable, and easy to install and allow logging professionals to implement logging jobs in compliance with the [Acceptable Management Practices \(AMPs\) for Maintaining Water Quality on Logging Jobs in Vermont](#). Renters are responsible for bridge transportation and must follow [skidder bridge best management practices](#) to protect water quality and stream health. If you are interested in renting a temporary skidder bridge, please email info@franklincountynrkd.org, call 802-528-4176, or visit www.franklincountynrkd.org/skidderbridge.



Above: Portable Skidder Bridge Workshop in Castleton, VT. Image from 'Best Practices for Using Portable Skidder Bridges' from the VT Department of Forests, Parks & Recreation

Forest Roads & Water Quality

The Franklin County NRCD will also work with our partners, the Vermont Forest, Parks, and Recreation and the Vermont Department of Environmental Conservation, to address water quality issues associated with forest roads in Franklin County. According to the Missisquoi Bay Tactical Basin Plan, maintenance and restoration of forest roads will likely be a large part of water quality solutions within the forest sector (Bates 2021). Forest roads can create soil compaction and increase soil erosion. Unaddressed concentrated water flow can lead to severe gullying. This work will help to address forest roads that exhibit significant erosion issues. Our goal is to coordinate with municipalities and forest landowners throughout Franklin County towards water quality solutions on forest roads.

Bates, K., Missisquoi Bay Watershed Basin 6 Tactical Basin Plan (2021). Montpelier, VT; Vermont Department of Environmental Conservation.

Additional Resources for Forest Landowners

Looking for information on forestry, logging, and water quality? Check out the resources below:

[Landowner Guides to a Successful Timber Harvest](#)
[Voluntary Harvesting Guidelines for Landowners](#)

Lake Carmi Overview

In 2023, the Franklin County NRCD continued our work in the Lake Carmi watershed. We work with local partners to coordinate educational events, implement clean water projects, and connect with Franklin community members.

Lake Wise

The Franklin County NRCD and Franklin Watershed Committee (FWC) completed 14 Lake Wise evaluations in 2023. During evaluations, we met with folks that own lakeshore properties on Lake Carmi to discuss stormwater management and lake health and to identify steps that individual property owners can take to improve water quality. Common recommendations include adding shoreline vegetation, installing dripline infiltration trenches to manage roof runoff, and establishing no- or low-mow zones. Particularly lake-friendly properties received Lake Wise Awards. We were excited to present two new Lake Carmi properties with Lake Wise Awards this summer.

Interested in discussing stormwater management on your lakeshore property? Please reach out to Franklin County NRCD staff by emailing info@franklincountynrcd.org or calling 802-528-4159. For more information on the Lake Wise program, visit the [VTDEC Lake Wise webpage](#).

Watershed Workshop Series

In summer 2023, the Franklin County NRCD and FWC hosted four educational Watershed Workshops designed for Franklin community members and Lake Carmi campers. Expert guest speakers presented on unique and relevant water quality topics. Each workshop consisted of a 1-hour presentation and 1-hour Q&A and discussion session encouraging participants to share their thoughts and questions on water quality in the Lake Carmi watershed. Guest speakers included River Scientist Staci Pomeroy of the VTDEC Rivers Program, who presented on healthy streams and holistic watershed health, and Chief Scientist Matt Vaughan of the Lake Champlain Basin Program, who presented on lake chemistry and biology. We are grateful for the enthusiastic engagement of those who attended and participated in this Watershed Workshop series. All resources from these events are available online.

Curious to learn more about our work in Lake Carmi? Visit franklincountynrcd.org/lakecarmi

Best Management Practice Assessment

The Franklin County NRCD has continued our Best Management Practice (BMP) Assessment in the Lake Carmi watershed. The goal of this work is to assess existing best management practices and the potential for future BMPs for natural resources management along rivers, in wetlands, and on shorelines at Lake Carmi. In 2024, the Franklin County NRCD will assess and prioritize potential high-impact projects to recommend for 30% design and future implementation.



Left: Algae Bloom at Lake Carmi Beach boat launch area on September 6, 2023

In addition to this work, the Franklin Watershed Committee (FWC) and Franklin County NRCD worked with the Vermont Youth Conservation Corps to coordinate a crew to complete infiltration trench installations, shoreline plantings, and a patio replacement. These projects were chosen from Lake Wise evaluations performed in 2022.

New Items in the 2024 Tree Sale!

This year we have substantially expanded the diversity of species offered in our tree sale, with the goal of providing species to fit a greater variety of site conditions, production goals, and ecological services. We have added 11 new hardwood species to our inventory, including Black Cherry and White Walnut, which are valuable wildlife forage, and Cottonwood, Yellow Birch, and American Elm, which are suitable for planting in wet areas. Two of our favorite wetland shrubs, Pussy Willow and Speckled Alder, are now available as well. We have continued to add to our edible and medicinal species offered in the tree sale, adding new apple, strawberry, and blackberry varieties, and aronia. We continue to offer many popular species from previous years, including Vermont native and naturalized species.

We source our trees from Vermont and neighboring states, when possible, to ensure that the plants we offer are adapted to and will thrive in the climate and soils of our state. In addition to trees and shrubs, we also offer seed mixes and trout for stocking ponds!

Stream Wise

Franklin County NRCDC participated in the Lake Champlain Basin Program's pilot year for Stream Wise, a program that brings together watershed organizations and streamside landowners to protect and restore healthy streams and rivers throughout the Lake Champlain basin. Like the Lake Wise program, Stream Wise encourages property owners to care for their watershed by taking action to improve stormwater management and stream health on their properties.



Franklin County NRCDC staff had the opportunity to visit 12 landowners located throughout Franklin County, with varying stream types and land uses. Each parcel had unique benefits and challenges for stream health and water quality, and we were excited to learn about each landowner's unique relationship with their stream and provide recommendations for improved stewardship. We are happy to share that seven Franklin County properties received Stream Wise Awards in 2023. Property owners were excited to learn more about their streams and steps they can take to improve water quality.

We plan to continue participating in Stream Wise in 2024 and beyond and look forward to connecting with more landowners to discuss riparian buffers and water quality on their properties.

Interested in scheduling a Stream Wise visit for your property? Please reach out via email to info@FranklinCountyNRCDC.org or call 802-528-4159. We are not scheduling Stream Wise visits at this time, but there is a waitlist for 2024 Stream Wise assessments on a first-come, first-served basis.

2023 Tree Plantings

This year our staff, interns, and volunteers planted over 8,000 trees and shrubs at 7 sites in Franklin County! In addition to planting, we did maintenance on 30 acres at 16 sites where we have planted trees in previous years!



Above: Summer 2023 Interns Isaac Ellis (left) and Avery Feeley (right) pose with a tree at planting site. This tree had been submerged in floodwaters during the July 2023 flooding!

Why are trees important for water quality?

Trees help to slow down water; the branches and leaves help capture and slow down rain drops, and their roots act like a sponge, helping absorb and hold onto water. This helps prevent erosion and holds soil in place. Trees also help to filter water and trap nutrients and pollutants before they enter waterways. In addition to water quality, they provide countless benefits for wildlife, improve air quality, create shade, sequester carbon, and more!

What impact did the summer flooding have?

Most of our tree planting sites are along streams, rivers, or wetlands. During the flooding, some of our trees were underwater for a period of time. After the water receded, we visited all of the sites and for the most part, the trees were doing exactly what we hoped: holding soil in place and slowing the flow of the water.

Want to get involved?

- If you own land along a waterway, the Franklin County NRCDC offers free tree-planting consultations. We may be able to provide free trees, planting labor, and financial incentives at eligible sites.
- If you have native shrub willow, speckled alder, or dogwood on your property and you would be willing to have FCNRCDC staff come evaluate and potentially take cuttings, please let us know! **Note that we only harvest a few branches off each plant, leaving your plant healthy and happy while also allowing us to source plant material from our region so that it is locally adapted and sustainably harvested!**
- If you want to volunteer to plant trees with us, send us an email or sign up for our newsletter to stay up to date!



FRANKLIN COUNTY
NATURAL RESOURCES
CONSERVATION DISTRICT

50 South Main St, Suite B-20
St. Albans, VT 05478
Phone: 802-528-4176
Email: info@FranklinCountyNRCD.org
Web: FranklinCountyNRCD.org

Supervisors:
Richard Noel
Vicky Drew
Molly Magnan
Carissa Stein
Dan Pipes
Phil Parent

Staff:
Lauren Weston, *District Manager*
Lauren@franklincountynrcd.org, 802-528-4176
Kate Wettergreen, *Project Technician*
Kate@franklincountynrcd.org, 802-528-4180
Mel Auffredou, *Natural Resources Planner*
Mel@franklincountynrcd.org, 802-528-4159
Dorothy Kinney-Landis, *Projects Coordinator*
Dorothy@franklincountynrcd.org, 802-528-4186
Charles Williamson, *Projects Coordinator*
Charles@franklincountynrcd.org
Kerry Brosnan, *ECO AmeriCorps Member*
Kerry@franklincountynrcd.org

The Franklin County Natural Resources Conservation District empowers and partners with land stewards and communities on the ground by supporting connections that benefit natural resources, water quality, soil health, and the working landscape in Franklin County and across Northwest Vermont.

Thank you to our "Red Clover" Sponsor:



Interested in sponsoring our newsletter and reaching our 3,000 readers? You can reach us at info@FranklinCountyNRCD.org or 802-528-4176

Tree Sale Information Inside!



FRANKLIN COUNTY
NATURAL RESOURCES
CONSERVATION DISTRICT

Annual Newsletter 2023-2024

IN THIS ISSUE:

- Letter from the District Manager
- Meet New Members of the FCNRCD Team
- 2023 By The Numbers
- Upcoming District Events for 2024
- Locally-Led Conservation
- 2023 Weather & the Land-Based Economy
- Soil Health
- Bridge Removal
- CWSP/Clean Water Funding
- Forestry Overview
- Lake Carmi Overview
- New Species in the 2024 Tree Sale
- Stream Wise
- 2023 Tree Plantings