Notes from the Field

Watershed Forestry Partnership Newsletter

SUMMER 2025

INSIDE THIS ISSUE

Attendees listen as Katie Kain from U.S. Fish and Wildlife discusses the riparian buffer planting at the Salmon CREP site. Note the thicket of boxelder that seeded in on its own and the taller, planted silver maples.

Vermont Conservation Groups Gather to Share Riparian Buffer Restoration Successes and Challenges

by Viva Goetze, Franklin County NRCD

In early June, 30 members from Vermont environmental organizations joined the Franklin County Natural Resources Conservation District, U.S. Fish & Wildlife Service, Vermont Agency of Agriculture for the first workshop in the Innovative Riparian Buffer series to learn about and discuss riparian buffer success at two different restoration sites in Montgomery and Berkshire, VT.

The first site visited was the Salmon Conservation Reserve Enhancement Program (CREP) Project in Montgomery, VT. Previously, it was a corn field before being enrolled in CREP. Due to the heavy presence of knotweed, a 5-year treatment plan was developed by U.S. Fish and Wildlife, the Vermont Agency of Agriculture, and NRCS staff. This plan was implemented by Redstart from 2017-2021 beginning with a broadcast herbicide treatment in the Fall of 2017, with follow-up treatments from 2018 – 2021. The site was planted in the spring of 2018, and the Missisquoi River Basin Association added additional stems in 2019.

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Innovative Riparian Buffers, cont'd from page 1

Seven years later, the planted buffer zone is now a fully forested thicket dominated by boxelder, with taller silver maples sprinkled throughout. Knotweed is still present in some areas, even as knotweed management continues. The site was in corn prior to reforestation, and the regular regime of herbicide application and soil disturbance from farm activities created ideal conditions not only for planting but for natural regeneration of nearby tree species. Seeds were able to achieve the crucial soil contact needed to germinate, while both seedlings and the planted stems benefited from reduced competition during their first growing season. As the forest continues to mature, it is anticipated that later successional species will become more dominant.

The group also visited a former hayfield at the Doe CREP Project in Berkshire, VT. The population of knotweed was more contained at this site, allowing for less herbicide application before planting. Taking inspiration from the Salmon site, a plan was made to remove the grass layer from the site prior to planting to facilitate natural regeneration and reduce competition for the planted stems. To prepare the site for planting, a spot-treatment of herbicide was applied to the grass cover in the fall prior to spring 2023 planting. While exploring the site, the group saw an abundance of planted trees now above waist-height, as well as many younger volunteer seedlings beginning to grow.

Some of the main takeaways and discussions at these sites included:

- Managing invasive species: Through specific herbicide use, the U.S. Fish and Wildlife Service has had enough success managing knotweed to allow for the establishment of a healthy forested area.
- Considering natural regeneration: New volunteer trees were observed at the Doe site - a positive sign for continued forest development.
- Preparing a site for planting: These sites highlighted the importance of thoughtful site preparation to ensure long-term planting success.
- Seeing site differences: Each planting site is unique and presents different challenges and maintenance decisions.
- Making management decisions with funding in mind: Effective riparian restoration often depends on available funding, which is an important consideration when developing planting and maintenance plans at a site.
- Collaboration: Funding, planning, planting, and maintenance are often a team effort. Building relationships across agencies and organizations is vital for long-term success!

The Franklin County NRCD truly enjoyed connecting with everyone to discuss riparian planting and share successes and setbacks from previous projects. We're excited to continue to protect Vermont's waterways as a collaborative group of practitioners. From cleaner water to flood resilience, we all benefit from riparian buffers and more protected waterways. Thank you to all who attended this workshop and have expressed interest in riparian buffer projects!

This project was funded by the Vermont Agency of Natural Resources Department of Environmental Conservation and the Lake Champlain Basin Program.

Friends of the Winooski River Project Managers attend AOP Stream Simulation Training in Michigan

by Taylor Litwin

In June 2025, Restoration Project Managers Taylor Litwin and Sam Puddicombe of Friends of the Winooski River attended the week-long Stream Simulation training hosted by the U.S. Forest Service and Trout Unlimited in Cadilac, Michigan.

The objective of the training was to provide engineers, biologists, hydrologists, and other engaged disciplines the necessary skills to design road-stream crossing structures (namely, culverts) that accommodate aquatic organism passage, provide for more natural channel function, and maximize the long-term stability of the structure. *Stream Simulation* refers to a specific design approach that aims to simulate the characteristics of the surrounding natural stream channel *inside* a culvert so that fish experience no greater difficulty moving through the structure than if there were no manmade structure at all.

Training participants worked in small, interdisciplinary teams throughout the week to learn and implement each step of the stream simulation method through a combination of field work, discussions, and calculations guided by the course instructors. The training concluded with a session on monitoring methods for culvert replacement projects to ensure long-term ecological health and functionality. “As I manage my first culvert replacement project which is scheduled for construction in 2026, I have a much better understanding of the process necessary to design a culvert for fish passage,” says Taylor. “As project managers, we were certainly within the target audience for this training. Working alongside engineers, hydrologists, and contractors helped us understand the full picture of what this type of project can look like from start to finish.”

FWR’s attendance for this training was funded by Watershed United Vermont’s (WUV) Capacity Grant. The team is excited to forge ahead with new skills and knowledge in the world of AOP.

Resilient Sites Workshop Kicks Off with Successful Hands-On Training at Yestermorrow

by Lucas Goldfluss

On June 17, the Yestermorrow Design/Build School in Waitsfield hosted the first workshop in the new Resilient Sites training program. Organized by the Winooski Natural Resources Conservation District and funded by the Lake Champlain Basin Program, the event brought together professionals from across Vermont to learn practical strategies for managing stormwater and building more resilient infrastructure.

The training focused on a real-world challenge: how to properly install a culvert and manage drainage on a washed-out forest road. Attendees included natural resource professionals, trail technicians, landscape designers, and construction workers. All shared an interest in learning techniques that reduce erosion, improve water quality, and prevent future flood damage.

Instructors Branden Martin of Stone Environmental and Kolbey Haupt of Hilltop Construction led the session. Branden began by walking participants through the engineering plans, explaining design considerations like culvert sizing, slope, and flow direction. Kolbey operated an excavator on site, preparing the trench and transporting materials for the installation. His demonstration showed how equipment can be used effectively to shape and stabilize a site before and during construction.

Once the site was ready, participants worked together to position the culvert and build an inlet using strategically placed stone. The design created an L-shaped entry that allows stormwater to settle in a plunge-pool style basin before flowing into the culvert. This helps slow runoff, promote infiltration, and improve the long-term function of the drainage system.

The group completed the full installation in just under four hours. For many, it was a chance to apply concepts they had only seen on paper.

This workshop was part of the Sustainable Sites program, a collaboration among Winooski NRCD, Stone Environmental, Lake Champlain Sea Grant, Hilltop Construction, the New England Interstate Water Pollution Control Commission, and Yestermorrow Design/Build School.

The first Resilient Sites workshop set the stage for a series of practical, engaging trainings that equip participants with the tools to make landscapes and waterways safer, cleaner, and more resilient.

White River NRCD — Free Trees for Livestock Farms in the CT Watershed

The White River NRCD, in partnership with the Xerces Society for Invertebrate Conservation and American Farmland Trust, is launching a multi-year Free Trees for Livestock Farms initiative to integrate agroforestry, pollinator habitat, and perennial food systems into working farms across our District and neighboring regions in the Connecticut River Watershed.

This program supports livestock farms—especially those with limited access to existing conservation funding—with free trees, materials, planning and planting assistance, and opportunities to participate in peer learning and public education events. It aims to promote the ecological and economic benefits of perennial food systems, enhance pollinator habitat, and build capacity for long-term farm planning and stewardship.

What the Program Offers

- **Fall 2025 and Spring 2026:** Free Tree Bundles (25–50 trees per farm) selected for their value to pollinators, forage and food systems, and biodiversity. **View species profiles here.**
- **Free Site-Specific Technical Assistance**, including help developing simple agroforestry, grazing, or forest management plans tailored to each farm's needs.
- **Free Materials,** including tree protection (tubes, hardware cloth, mulch, mats), mycorrhizal inoculant, and optional watering aids (e.g., tree bags).
- **Free Planting Support** via educational and volunteer opportunities. Participate in trainings or host work brigades if desired, with support from **Farm Force.**

Program Goals

- Expand tree-based conservation practices on livestock farms in ways that enhance pollinator habitat, pasture health, and soil biodiversity.
- Provide access to trees and agroforestry materials for farms, especially those not currently receiving federal funding.
- Build long-term capacity for agroecological planning, with farm-friendly tools like bundled species packages and on-farm conservation planning support.
- Strengthen community-based conservation, youth engagement, and public education through integrated work brigades and learning events.

Eligible Farms will be prioritized based on:

- Readiness and capacity for long-term tree care.
- Need for pollinator or riparian habitat.
- Lack of access to other funding sources.
- Willingness to engage in education or host work brigades.

Interested farmers should fill out the form on the WRNRCD website: https://www.whiterivernrcd.org/free-trees-for-livestock-farms

For more information contact
WhiteRiverNRCD@gmail.com

Watershed Forestry Partnership Summer Intern Assesses Riparian Buffer Plantings

by Shawn White

Julia Figueroa, a wildlife and fisheries biology major at the Rubenstein School at the University of Vermont, has been braving hot, sticky, rainy, smoky, and sometimes beautiful weather this summer collecting data on the success of riparian buffer plantings. With very little supervision she developed a Survey 123 app to record the species, vigor, and height of trees in addition to observations of natural regeneration, invasive species, animal browse, and other factors influencing the overall success of planting projects. So far, she has collected data on 1084 trees on five sites: 4 in the Winooski River watershed and 1 in the Lamoille. The age of the plantings varied between one and ten years.

The goal of this monitoring is to determine which species tend to survive and thrive in different site conditions and under threats like deer browse, bindweed, and inundation during flood events. Julia is crunching the numbers as this newsletter goes to press, so stay tuned for her exciting conclusions!

Ideally, future student interns will continue to monitor these and other riparian buffer plantings to document how they do over time and to add to the robustness of the collected data.

Other activities Julia was involved with during her internship included planting seedlings from the greenhouse into the fields at the Intervale, doing bird counts at riparian restoration sites with Audubon Vermont, and participating in the Innovative Riparian Buffers field trips. Julia says her favorite part of the internship was not only getting to spend time outdoors but also meeting the passionate people in the riparian restoration community. She will return to UVM this fall for her senior year and hopes to focus on avian species field work after graduating next spring. It has been a pleasure working with Julia—Wishing her all the best in her future endeavors!

Locally Led Conservation - Local Fund Pools

One of the outcomes of the Locally Led Conservation process is to secure federal USDA NRCS funding for identified priority natural resource concerns in each Conservation District through Local Fund Pools.
Note that landowners would be the applicants for this funding and NRCDs would assist with the application process. The landowner can then decide if they want to do the project themselves or hire a contractor. The contractor could be a watershed group, conservation district, business, or other entity.)
Applications are due August 22, 2025.

Bennington County NRCD

Bennington County Agroforestry and Flood Resilience EQIP Local Fund Pool

- $250,000 available
- Goal: to promote and incentivize the completion of Agroforestry and Flood Resilience projects in Bennington County on 1000 acres of private land by 2035.

Apply and learn more.

Caledonia County NRCD

Community-Scale Agricultural Resiliency Local Fund Pool

- $200,000 available
- Funding will support community-scale agricultural resiliency projects including high & low tunnel systems, conservation crop rotation, conservation cover, irrigation pipeline, micro irrigation system, irrigation water management, and soil carbon amendment.

Apply and learn more.

Franklin County NRCD

Farmstead & Infrastructure Improvements Local Fund Pool

- $1,500,000 available
- Funding will support infrastructure improvements that are critical to water quality, regulatory compliance, and long-term farm viability in Franklin County.

Apply and learn more.

Grand Isle County NRCD

Soil Health Local Fund Pool

- $300,000 available
- Funding will support Grand Isle County farmers and landowners to implement soil health practices such as cover cropping, rotational grazing, and reduced tillage.
- Goal: Create and maintain healthy soils which are essential for water quality, carbon storage, biodiversity, and food security.

Apply and learn more.

Lamoille County NRCD

Forest Structure and Health Local Fund Pool

- $200,000 available
- Funding will support forest landowners in Lamoille County through technical assistance to enhance forest health, biodiversity, and economic resilience.

To apply and learn more, contact Sarah Skelding, Agriculture Program Specialist at lccd.ag.ss@gmail.com

Orleans County NRCD

Slow the Flow Local Fund Pool

- $200,000 available
- Funding will support projects that stabilize headwater areas to achieve cleaner water, reduce pollution, improve runoff management, enhance habitats, and increase flood resilience.
- Objectives:
  - Install conservation practices on at least 6 landowners' properties.
  - Restore streams and riparian areas by at least 2,500 linear feet.

Apply and learn more.

Slow the Spread Local Fund Pool

- $200,000 available
- Funding will support projects that slow the spread of invasive plants specifically by targeting smaller infestations of phragmites, bush honeysuckle, Japanese knotweed, common barberry, and glossy buckthorn.
- Objectives:
  - Collaborate with landowners to reduce the size and number of already established infestations.
  - Achieve at least 80% depletion of biomass in treated areas compared to baseline data.

Apply and learn more.

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Partner Updates, cont'd.

Support Small Farms Local Fund Pool

- $200,000 available
- Funding will allow OCNRCD to work with partners to utilize and expand the district's existing Nutrient Management Planning technical assistance programming which is funded by VAAFM.
- Objectives:
  - -Conduct targeted outreach to engage with at least 50 small farmers.
  - -Assist 15 small-scale farmers in implementing conservation practices.
  - -Provide tailored conservation practices by developing and implementing 15 customized conservation plans that improve agricultural productivity and environmental responsibility.

Apply and learn more.

Poultney Mettowee & Rutland NRCDs

Conservation Efforts in Rutland County Local Fund Pool

- $500,000 available
- Funding will support pasture and hay planting, early successional habitat management, trails and walkways, watering facility, and/or critical area planting.
- Goals:
  - -Reduce erosion
  - -Promote soil health and healthy crops
  - -Restore native plant communities

To apply and learn more, email whitney@pmnrcd.org or call 802.779.4521.

White River & Ottauquechee NRCDs

Conservation Planning Local Fund Pool

- $75,000 available
- Funding will support access to high-quality, upfront conservation planning for residents of the White River and Ottauquechee Conservation Districts.

Apply and learn more.

Windham County NRCD

Forest Management Plans Local Fund Pool

- $25,000 available
- Goal: encourage landowners in stewarding land that is crucial for the health of our forests, our wildlife, our people and our economy

Apply and learn more.

Forest Health Local Fund Pool

- $350,000 available
- Funding will support cost-share practices that help landowners maintain and improve the health of forested land.
- Goal: encourage landowners in stewarding land that is crucial for the health of our forests, our wildlife, our people and our economy

Apply and learn more.

Small Agriculture Local Fund Pool

- $200,000 available
- Funding will assist small farms with projects that target soil quality limitations, degraded plan condition, pest pressure, concentrated erosion and weather resilience.
- Goals:
  - -Assist farms as they build the tools and resources they need to bolster themselves against extreme weather events and ever changing economies.
  - -Support cost-sharing practices that allow small diversified operations spend more time and resources on growing their businesses in a strategic manner.

Apply and learn more.

Winooski NRCD

Stream & Riverside Plantings Local Fund Pool

- $200,000 available
- Funding will support stream or riverside plantings in the district. These funds will pay for all aspects of the plantings, from site preparation to the plantings themselves.

Apply and learn more.

Supporting Loggers to Comply with Acceptable Management Practices (SLoCAMP)

From the Professional Logging Contractors of the Northeast website:

SLoCAMP is a grant-funded cost-share program created by the Vermont General Assembly (2024) to help logging contractors that work in Vermont implement proactive water quality protection and climate adaptation practices on their harvest sites.

Funded by the Vermont Department of Forests, Parks & Recreation and administered by the Professional Logging Contractors of the Northeast, the program supports contractors in preparing harvest sites responsibly — with long-term forest health in mind.

To qualify, you must be a logging contractor meeting the following:

- The project must be approved and completed by June 30, 2026. Requests for project extensions beyond the June 30 deadline will be considered on a case-by-case basis for projects in good standing at the time of request. Extensions requests must be received after April 1, 2026 and before June 30, 2026. Extensions for 3 – 6 months from the June 30 deadline will be considered for project closeout.
- Harvest site is in Vermont, over 10 acres, and focuses on long-term forest management.
- Applicant is a logging contractor and owns more than 50% of the equipment used on this project.
- Commercial timber harvesting accounts for more than 50% of applicant's income.
- Applicant is in good standing with the Agency of Natural Resources and the Agency of Agriculture, Food, and Markets (Act 154) and Vermont's AMP Enforcement and Compliance Program.
- Land has been under the same ownership for at least 5 years, is currently enrolled in forestland UVA, or has a current conservation easement in place on the harvest area.
- State lands owned in fee simple are not eligible as AMPs are built into stumpage rates.
- State owned Wildlife Management Areas where others own timber rights are eligible.
- Applicant will have a contract with the landowner before operations begin. (Note: This does not apply if the applicant is harvesting on their own land.)

Applications are reviewed as they are received on a first-come first served basis.

For more information, a list of approved practices, application materials, and a video about the program, visit https://plcloggers.org/slocamp/

Ausable Conservation Nursery Celebrates Its First Year of Operation!

by Kiana French, AFC Nursery Curator

Ausable Freshwater Center (AFC) has developed a strong foundation for its newest project, Ausable Conservation Nursery (ACN). ACN is a native tree and shrub nursery located at Uihlein Farm in Lake Placid, New York. The nursery specializes in growing locally adapted genotypes from wild-collected seeds for restoration in the Ausable River watershed and the extended Adirondack region. Since its launch in 2024, our staff has completed numerous updates to existing nursery infrastructure and new construction at ACN. We have installed irrigation in the production field and completed construction on a new 18 × 96 ft hoop house with automated water and climate controls. An 8-ft deer fence has been constructed around 10 acres of bare-root production field, which has been in cover cropping rotations since 2024. Our newly repaired greenhouse at Uihlein Farm has been equipped with overhead irrigation for the propagation of tree and shrub seedlings. We propagated 20,000 stems in 2024 and over 30,000 stems in 2025, with plans to scale up production in 2026 and 2027. AFC plans to use stock produced at the nursery for its planned restoration projects in 2026, 2027, and beyond. ACN stock will also be available for public purchase in 2026.

Our staff had a busy spring, collecting seeds, propagating plants, and preparing for transplanting in the production field. We are very appreciative of the seed collection training and workshops offered by the Intervale Center and Northwoods Stewardship Center over the last year as we continue to build staff capacity and fine-tune our operations. Seeds collected by AFC staff this year were not only used in the nursery for production but also in large direct seeding projects in the field.

Ausable Conservation Nursery, cont'd from page 3

Thanks to funding from the Lake Champlain Basin Program and NEIWPCC, AFC staff have been implementing direct seeding projects at two sites on the banks of the East Branch Ausable River. A mixture of native seeds collected in 2024 and 2025 was applied directly to recent AFC restoration sites to accelerate the revegetation of the banks. The applied seed mixture contains locally collected native birches, speckled alder, eastern cottonwood, willows, red maples, and herbaceous mixes curated by AFC staff based on botanical inventories conducted at these sites. Differing media treatments, such as peat moss, sand, and vermiculite, were applied to seeded sites to explore optimal direct seeding growth mediums. Temporary irrigation systems have been installed for daily watering at multiple sites. In addition to direct seeding, AFC staff installed over 200 trees and shrubs grown at the Ausable Conservation Nursery, along with a variety of bioengineering materials, including live stakes and fascines. AFC plans to implement a similar restoration approach in 2026 at these sites.

AFC is looking forward to developing these projects and curating a well-rounded and comprehensive revegetation strategy that incorporates direct seeding, bioengineering, and tree planting for future restoration projects.

Free plants for restoration projects available from Verterra

by David Berg, Verterra Nursery

Verterra Nursery still has free plants available for habitat and riparian restoration plantings in the Lake Champlain Basin for fall 2025 and spring 2026! We still have about 3500 plants to find homes for as part of our grant requirements. A big thank you to those that picked up plants this past spring and the previous fall. So far, we have distributed around 3000 plants spread across 11 different projects. We will be harvesting again this fall and the spring of 2026, and we need your help to find projects for these plants. This past spring we expanded our propagation list and now have a few more species to offer. New species [in addition to those offered already] that will be available this fall as part of the grant funded giveaway include sycamore (platanus occidentalis), box elder (Acer negundo), yellow birch (Betula alleghaniensis), balsam poplar (Populus balsamifera), and eastern larch (Larix laricina). We will be sending out a complete availability and pricelist later this summer. Please let us know if you would like to receive a copy (verterranursery@gmail.com).

All the plants offered for free as part of the grant are propagated from seeds or cuttings harvested from wild plants in Vermont. Our complete offering includes many additional species of plants sourced from the Great Lakes region – many of which have been grown on at our nursery in Hinesburg, Vermont for at least one year.

ICN Launches New Inventory and Sales Software

by Ben Rodgers, Intervale Conservation Nursery Manager

The Intervale Conservation Nursery (ICN) is hard at work preparing for the launch of our brand-new inventory and sales software, Cin7 Core. The ICN grows upwards of 100,000 native, locally sourced trees and shrubs annually for riparian restoration projects across Vermont—and this system will help us do that work even better.

Since November 2024, ICN Manager Ben Rodgers, ICN Operations Manager Christine Cramer, and Intervale Center finance team members Amanda Carrubba and Brian Hotaling have worked closely with Stan Ward of Inventory Technology Partners to design and build a platform tailored to the Nursery's needs. One of the most rewarding aspects of this process has been the opportunity to dissect and refine our standard operating procedures—analyzing the many spreadsheets and tools developed over the years to track labor, propagation, mortality, sales, and cost of production.

We've learned that growing trees looks much different on paper than it does in the field, especially compared to growing annual crops, and we've had many, many head-scratching moments trying to find the best way to capture the value and keep track of a tree from seed to sale.

With Cin7 Core, the ICN will have the ability to track our entire inventory in real-time and more accurately analyze the true cost of producing each tree. After nine months of setup, testing, and training, we're ready to make the switch! To ensure a smooth transition, we've entered a week-long "freeze" on operations so that we can upload inventory and finalize the transition away from our spreadsheet-based systems to the new platform. We're looking forward to generating our Fall 2025 availability list directly from the new system—woohoo!

This is a major milestone for the ICN--something our team has been dreaming of for years. Even better, this upgrade will benefit not just our internal operations but also our partners: clearer availability, smoother communication, and smarter systems to support our shared goal of getting as many trees out onto the landscape as possible.

What can you expect? You will notice that our availability list and estimates may look slightly different this Fall as we transition to a new format generated directly from the software. You may also notice a more streamlined process for communication and processing sales. We aim to have Fall availability lists ready by the second week of August.

What's next? Our team is actively working on phase 2 of this project, which will include rolling out a new sales platform for our customers. We will be using an online-store style website, linked directly to the inventory software, to enable a much easier ordering process for our partners. Customers can expect simple and faster ordering, reduced back-and-forth communications, and more accurate availability in real-time. We aim to have our online sales platform ready in time for the Spring 2026 sale.

I encourage anyone who wants to learn more to reach out! We'd love to share our excitement about these new and improved systems and give a big shoutout to our partner, Stan, who has gone above and beyond in learning our nursery operations so that we can build the best possible software. HUGE thanks to Stan for his work!

Check out the latest Riparian Lands Native Seed Partnership Summer 2025 Newsletter!

After a couple of years exploring seed collection sites in our base areas of the northern Champlain Valley and Northeast Kingdom, this year, we have expanded our search into southern Vermont--now capturing all four seed zones of Vermont in our collection efforts. Learn more about our seed source map developments, seed collection progress, direct seeding trials, and more: *Riparian Lands Native Seed Partnership Summer 2025 Newsletter*

Introducing New Members

Heather Murphy—Winooski NRCD's New Agriculture Conservation Specialist

Heather Murphy earned her BS in environmental science from Vermont State University - Johnson followed by an MS in biology from SUNY - Oneonta. Despite hopping across Lake Champlain for graduate school, Heather knew her roots were in Vermont and returned to pursue her career. Prior to working for the Winooski NRCD, Heather worked as a conservation planner with the USDA-NRCS in Middlebury where she helped agricultural producers reach their conservation goals.

In July, Heather joined the Winooski NRCD as an Agriculture Conservation Specialist where she will continue to assist producers in adopting conservation strategies to better the environment for generations to come. As a native Vermonter, Heather loves being immersed in all things outdoors whether that is skiing in the winter or sitting lake-side in the summer. Catch her at a local swimming hole with her husband, and best furry friend Kermit.

Julie Frost—Friends of the Mad River's new Watershed Project Manager

Gratitude. Inspiration. Awe. After just one week on the job in a newly created role here at Friends of the Mad River, those are the words that resonated with me as I reflected on becoming part of this team. Gratitude to have landed in a community such as this, inspiration from the passionate community members and volunteers I have already met, and awe for the incredible work my new colleagues - the FMR staff, board, and so many in watershed and conservation organizations in the region – have been doing tirelessly for so many years.

This is an excellent mindset to be gifted as I start work as Friends' Watershed Project Coordinator, managing and implementing "in-the-ground" projects aimed at a healthier watershed. I am psyched to be part of a small organization where I will get to be involved in many types of projects from riparian buffers to aquatic organism passage to invasive species management. Learning from Ira, Luke, and Marcy about all of our incredible programs like Mad River Watch and community education is an opportunity I have dreamed about the last few years.

I come to this organization at the tail end of a Master's program at UVM's Rubenstein School of Environment and Natural Resources. After a 30 year career in biotech, I decided to make some big changes in my life to get back to my true calling focused on the natural world. My Master's project, the Vermont Town Forest Census Project, illuminated for me how individual parcels can play an important role in our watershed for flood mitigation.

I have had a slow migration to Vermont over the last couple of decades from Newport, RI where I was a passionate ocean health volunteer. Finally, landing full time in the MRV in 2020, I knew I had found my new home. I quickly joined the board of Mad River Valley Backcountry Coalition to start to integrate more fully into this special community. An avid outdoor explorer, you can find me frolicking in nature doing almost any kind of human-powered activity, and in the current cohort of the Vermont Master Naturalist Program. I'll be living right in Waitsfield and I'd love to get to know more people in the Valley so feel free to reach out!

Staff at Poultney Mettowee NRCD Bring Outreach to the Forested Headwaters

by Hilary Solomon

The Poultney Mettowee Natural Resources Conservation District (PMNRCD) has recently added two positions to enhance our capacity, serving key areas within our communities. Along with other responsibilities, these new staff members will be responsible for conducting both broad outreach, such as to municipalities, as well as targeted outreach to engage landowners of steep, forested tracts located along the headwaters of streams.

We anticipate that focused efforts within small, dynamic headwater watersheds will positively impact water quality. Staff will identify opportunities and bring resources to implement small, inexpensive improvement projects on private property. One goal of this work is to connect landowners with new funding mechanisms, such as DEC Formula Grants, which support initiatives to address resource concerns on headwater and forested properties, including forest road drainage improvements, resilient stream crossings, and floodplain reconnection projects.

New tools, like the Survey 123 Road Erosion Inventory (REI) application and new phosphorus credited project types, such as strategic wood addition (SWA), have created opportunities to offer new, low-cost solutions to landowners. Together with groups such as The Nature Conservancy, Redstart, and others, we are actively looking for locations to hold training courses that would include installing relatively simple, inexpensive stream projects as the curriculum. We look forward to connecting with partners and landowners to collaboratively explore these and other options.

Thanks to organizational support grants from the Lake Champlain Basin Program and Watersheds United Vermont, we are able to welcome our two new staff members, Jaden Groff and Victoria Pattison-Willits to this work. Jaden, Vicki, and the rest of the staff at PMNRCD are planning several days this summer to practice our road erosion inventory (REI) skills in the woods. Please contact us if you'd like to join us for a day of shared learning!

Jaden Groff - PMNRCD's new Project and Community Outreach Specialist

Jaden grew up working on her family's farm in Nebraska and holds bachelor's degrees in Environmental Sciences and Spanish from South Dakota State University. Prior to her current role, she served as a conservation technician for Nebraska's Natural Resource Districts, collaborating with agricultural producers to improve groundwater quality and quantity. Jaden moved to West Pawlet in the spring of 2024 and is excited to apply her agricultural and environmental science experience to protect and restore Vermont's watersheds.

Vicki Pattison-Willits—PMNRCD's new Project Manager and Outreach Officer

Vicki Pattison-Willits is originally from the beautiful Chiltern Hills in England. After earning a BSc in Environmental Science and an MSc in Wildlife Management and Conservation from the University of Reading, she worked across both local government and non-profit sectors in the UK, focusing on environmental education, public engagement, and community outreach. More recently, Vicki completed a PhD at the University of Birmingham (UK), where she researched how climate change and urbanization impact breeding timing and success in the Eurasian Blue Tit. She is excited to bring her academic background and hands-on experience to PMNRCD as a Project Manager and Outreach Officer, and to support local landowners and communities in a range of conservation work—from stream and lake protection to forest and agricultural resilience.

Some Recent Research

Disclaimer from Shawn: These research article summaries are my interpretations and emphasize the results and conclusions I thought were most relevant to riparian restoration and native tree nursery professionals and should not be read as complete abstracts. If any spark your interest, please refer to the article itself for more detailed and accurate information. In addition, the articles included do not represent the breadth of research currently being done, nor are they the best representative articles in the field. They are simply a few I've come across. If If you know of any that should be included in future newsletters, please send them my way!

Using the Transtheoretical Model of Behavior Change to Explore Forest Landowner Perspectives on Water Quality Luke H. Briccetti, Elizabeth M. B. Doran, Kimberly J. Coleman; Small-scale Forestry (2024) 23:275–294; https://doi.org/10.1007/s11842-024-09565-3

Summary: The authors interviewed 28 families who owned forests in the Vermont portion of the Lake Champlain Basin to learn how landowner attitudes and beliefs about water quality, quantity, and cli-mate change influence their forest management decisions. The interview protocol, based on the US Forest Service's Version 6 of the National Woodland Forest Owner Survey, asked about family forest owners' attitudes and beliefs about water quality, flooding, how they manage their land; their experience with extreme events such as floods, and how they receive information about land management.

Results of the study included:

-68% of interviewees expressed some level of concern for water resources in Vermont – either regarding extreme weather events or the water quality in lakes and streams.

-57% did not believe there is a connection between the way they manage their forest and water quality.

-Only 21% were able to report specific water quality protection strategies they've taken such as the implementation of BMPs during timber harvests.

The authors discussed the disconnect between landowners' water resource concerns and the impact of their specific parcel on water quality, and concluded there is a need for consciousness raising and "helping relationships" with trusted members of an individual's social network (including foresters and conservation professionals.) They mentioned the Watershed Forestry Partnership as a potential entity to fill that need.

Physiological and morphological responses of Pinus ponderosa seedlings to moisture limitations in the nursery and their implications for restoration Jeremiah R. Pinto, Joshua L. Sloan, Gokhan Ervan, and Owen T. Burney; Front. Plant Sci. 14:1127656 (2023); https://doi.org/10.3389/fpls.2023.1127656

This study explored whether optimal nursery watering regimes limit the success of seedlings planted in stressful restoration site conditions where drought is an issue. Ponderosa pine seedlings were grown in the nursery using low, moderate, and high irrigation levels, then transplanted into simulated mesic (irrigated regularly) or dry (irrigated only once after transplanting) soil conditions. Low and moderate irrigation levels during initial nursery production, starting early after germination, increased hydraulic function (e.g. active xylem and xylem flow rate) and other characteristics associated with drought tolerance. After transplanting in both mesic and dry soils, seedlings grown under low and moderate irrigation during initial nursery production were found to have higher plant biomass than seedlings grown under high irrigation levels. The authors concluded that limiting irrigation during nursery production alters morphological and physiological characteristics and may make the plants better suited to drought conditions at restoration sites. Follow-up research is needed.

The Watershed Forestry Partnership Newsletter is edited by Shawn White, Watershed Forestry Partnership Coordinator at the University of Vermont. If you would like to comment on the newsletter, submit a story idea or article for a future issue, or subscribe/unsubscribe from the Watershed Forestry Partnership mailing list, contact Shawn at shawn.white@uvm.edu

For more information about the Watershed Forestry Partnership, please contact Shawn or visit our website

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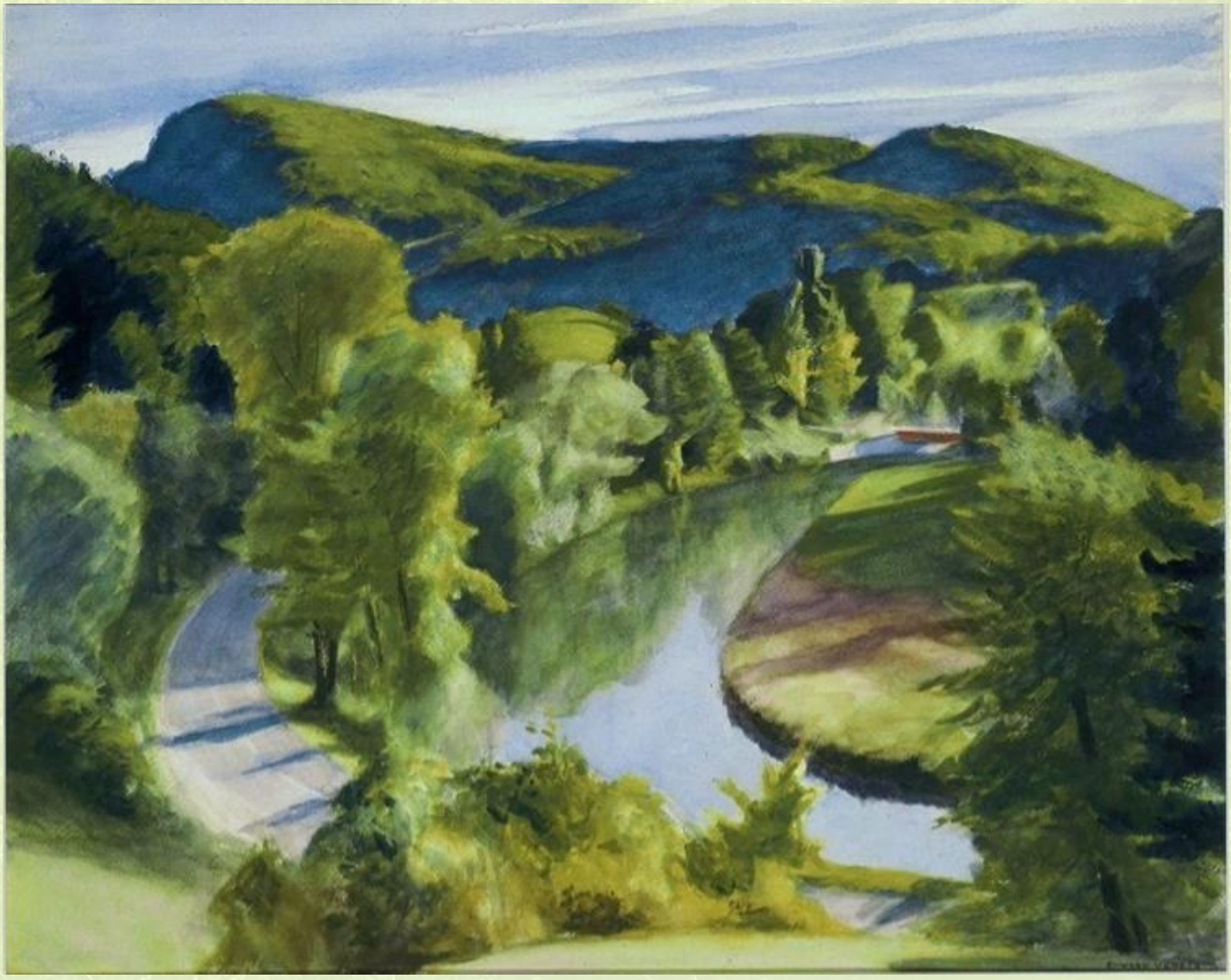

First Branch of the White River, Vermont

Edward Hopper
1938

Accessed at WikiArt.org