



WINOOSKI NATURAL RESOURCES CONSERVATION DISTRICT

Fall / Winter 2010

WNRCDC is Working to Improve Aquatic Organism Passage



The Beartown Road culvert in Underhill is one of the culverts considered for a retrofit.

You might be surprised at just how many culverts exist in Vermont. Take a walk down any road and you will likely find at least a few. Why are there so many? A culvert's primary purpose is to channel water from one location to another. In the case of roads, they allow water to travel beneath the surface without jeopardizing the surrounding substrate. Sounds great, right? Not to a fish it doesn't.

Many culverts, unfortunately, act as a barrier to fish and other aquatic organisms, effectively fragmenting stream reaches into independent segments. In some cases, the velocity of water in the culvert is simply too fast. In others, the culvert is perched too high. In still more, there is inadequate depth during low flow conditions. Perhaps if we were talking about one culvert it may not be that big of a deal, but imagine this being a problem in hundreds of locations. Now that's a serious issue.

To address the issue, WNRCDC is partnering with the VT Department of Environmental Conservation, the VT Department of Fish and Wildlife, Partners for Fish and Wildlife, and the Towns of Jericho, Underhill, and Westford. As part of a 2009 culvert and bridge assessment, five culverts were identified within the Browns' River Watershed as being significant barriers to aquatic organism passage. With funding support from the Center for Clean Clear and the Lake Champlain Basin Program, WNRCDC will work with select engineers and consultants to develop a strategy for either replacing or retrofitting these culverts in an effort to make them more suitable for aquatic organism passage. Some proven strategies include bottomless culverts, weirs, baffles, log-drops, and fish ladders. Our hope is to have designs completed by the spring of 2011 with implementation following the next year.

For more info on aquatic organism passage please check out the Vermont Stream Crossing Handbook at www.vtfishandwildlife.com.

Help Us Grow Our Facebook Fan Page

In late September of this year, we successfully launched a WNRCDC Facebook Fan Page. So far we have about 50 fans, with more joining every week. As a fan, you get the latest updates about our projects, educational programs, and workshops. It's a no hassle way to stay connected to the work of the District. Help us reach our goal of 250 fans by the end of 2011 by becoming a fan today. <http://www.facebook.com/pages/Winooski-NRCD/150801898282501>

WHAT'S INSIDE...

- ◇ 3rd Annual Rain Garden Contest Comes to a Close
- ◇ 2010 Annual Dinner
- ◇ Northern Vermont RC&D Area Plan
- ◇ At Work in the Watershed
- ◇ Recognizing Conservation Stewards

...AND MORE

Winooski NRCD Annual Tree Sale

Look for the 2011 Tree Sale order form in early March in our spring newsletter. We are looking forward to selling a wide variety of Vermont native trees and shrubs to landowners.

It is our hope that you enjoy reading our newsletters as much as we enjoy writing them. However, if you no longer wish to be on our mailing list, please contact Justin Kenney at 802-865-7895 x104 or Justin.Kenney@vt.nacdnet.net to be removed.

WNRCD STAFF

Justin Kenney, *District Manager*
Karina Dailey, *Project Manager*
Cherie Staples, *Bookkeeper*

VACD TECHNICAL STAFF

Agriculture Resource Specialists
Pam Stefanek
Sarah Damsell

WNRCD SUPERVISORS

Mike Dominique, *Chair*
Rita Bisson, *Vice Chair*
Catherine Scribner, *Treasurer*
Tom Bushey, *Supervisor*
Paul Hartshorn, *Supervisor*
Don Hipes, *Associate Supervisor*
Allaire Diamond, *Associate Supervisor*

A SPECIAL THANK YOU TO OUR MEMBERS !

Stuart Alexander, Michael Belding, Elisabeth Bossi, Danny Breer, S.F. Chadwick, Bruce Chapell, Barbara & Robert Chappelle, Bernie Chenette, David Childs, Ginny DeFede-Cove & Bill Cove, Dean Menke and Patti Delaney, Donna & Mike Domingue, James Ehlers, Janet & David Ellison, Thomas Esnes, Mary Evslin, Ken Felderman, Karen Fiebig, Scott Gardener, Claire Ewald & Walter Gaylord, Nicole Gorman, Marjorie Gormel, Ian Govett, Patrick and Christine Grangien, Phyllis Gray, Gary Gulka, Kimberly Hagen, Rick Hamilton, John & Dorrice Hammer, Karl Hammer, Dan Holland, John Hoogenboom, Linda Howe, Nicole Hynes, Wally Jenkins, Rebecca Kibby, Stephen Kiernan, Robbin LaRue, Ted & Margaret Lindsay, Mark & Jill Lyons, Ben Machin, Kevin Mailepors, Chris Mason, , Bob & Linda Nelson, Krista Nickerson, Caitrin Noel, Dru Oren, Emma Ottolenghi, Robert Pierce, David Potter, Beatrice & John Ramsey, Justin Rich, Robin Schunk, Angela and Nat Shambaugh, Ellen Sivret, Ann Smith, Ann Squires, Amy Stevens Saar, Steve Sweeney, Tim and Mary Taft, Jessica Tanner, Christine R. Turner, Mary Van Vleck, Tom Vogelmann, Joan Wallace, Margaret Woodruff, Wayne Zeilenga

2010 RAIN GARDEN CONTEST COMES TO A CLOSE

This summer the Winooski Natural Resources Conservation District (WNRCD) and UVM Extension Lake Champlain Sea Grant partnered to hold the third Annual Vermont Rain Garden Contest. A rain garden is an attractive, landscaped garden that is used to treat stormwater runoff usually from a roof, parking lot, or other impervious surface. The goal of the contest was to encourage the installation of rain gardens to reduce stormwater runoff and improve water quality in the Lake Champlain Basin. Participants of the contest received a copy of the Vermont Rain Garden Manual, were invited to attend rain garden workshops and demonstration installations, and received on-site technical assistance, all free of cost. Nine residential, commercial, and school/educational facility rain gardens were judged as part of the contest.



In late September, volunteer judges visited the gardens in the contest and selected the following five gardens as winners of the 2010 Vermont Rain Garden Contest:

Best in Chittenden County: Ben Bush (On the Rise Bakery, Richmond)

Best Outside of Chittenden County: Holly Farrington (Majestic Car Rental, Rutland)

Most Original: Donna Leban (Residence, South Burlington)

Best Stormwater Reduction: Heather Burt (Montpelier High School, Montpelier)

Best Use of Native Plants: Jeff Schumann (Residence, Montpelier)

The five contest winners will receive prizes that were generously donated by Marijke's Perennial Gardens Plus, the Tractor Supply Company, Erin's Edibles, Paquette Full of Posies, and the Red Hen Baking Company.

This contest was made possible by the Vermont Agency of Natural Resources and the Vermont Watershed Grant program. For more information about rain gardens or to learn about what you can do to improve water quality in local waterways, visit www.vacd.org/~winooski



Winooski NRCD Mission Statement

Connecting people to a sustainable landscape

- ◇ To ensure the wise use, protection and enhancement of Vermont's natural resources through the use of local initiatives, education, and partnerships;
- ◇ To foster public awareness and appreciation for the value and need for natural resource conservation; and
- ◇ To advance the understanding that we are all stewards of the living earth.

Serving landowners in Washington and Chittenden Counties since 1940

COME CELEBRATE WITH WNRCD AT THEIR ANNUAL DINNER

Join WNRCD staff and partners for their Annual Dinner on December 8th at 6:00pm at the Waterbury Congregational Church in Waterbury, VT. The evening festivities will include a brief project slideshow, a local goods raffle, remarks by WNRCD Staff and Supervisors, the honoring of our 2011 Farm and Forestry Stewards, and of course the best chicken pot pie you will ever eat thanks to the wonderful ladies of Circle II. To top it all off, we will have Ben Falk of Whole Systems Design as our guest speaker.

Ben developed Whole Systems Design, LLC as a land-based response to biological and cultural extinction and the increasing separation between people and elemental things. Life as a designer, builder, ecologist, tree-tender, and backcountry traveler continually informs Ben's integrative approach to developing landscapes and buildings. His home landscape and the WSD studio site in Vermont's Mad River Valley serve as a proving ground for the innovative land developments featured in the projects of Whole Systems Design. Ben has studied architecture and landscape architecture at the graduate level and holds a master's degree in land-use planning and design. He has taught design courses at the University of Vermont and Harvard's Arnold Arboretum as well as on permaculture design, microclimate design, and design for climate change. He serves on the Board of Directors and Faculty at the Yestermorrow Design-Build School.

Tickets are \$13 and can be purchased by calling (802) 865-7895 x104 or by sending a check payable to "WNRCD" to WNRCD, 1193 South Brownell Road Suite 35, Williston, VT 05495. Please include your name, contact info, and the number of people who will be in attendance. We would appreciate a RSVP by November 26 for planning purposes.

NORTHERN VERMONT RC&D COMPLETES AREA PLAN

The Northern VT Resource Conservation and Development (RC&D) Council recently celebrated completion of its five year strategic plan through a signing ceremony with numerous state, local and federal partners participating. This plan, called the RC&D Area plan, covers the eight counties of central and northern Vermont and identifies perceived needs, potential opportunities, goals, objectives and actions for land conservation, land management, water management and community development. The Winooski Conservation District, along with the other Conservation Districts and Regional Planning Commissions in the RC&D area, are the official sponsors of the RC&D Council and make up its board of Directors.

Top priority goals for 2011-2015 include:

- Educate public about agriculture, its importance and needs and the value of the working landscape through regular programming.
- Educate citizens on the effects of not buying locally and provide them with annual updated tools to do so.
- Support development of a local foods system: from the "Farm to Plate" by being an active annual participant in solutions.
- Provide annual options to loggers for resource protection that also increases work efficiency.
- Abate water quality degradation & phosphorus pollution in 300 locations statewide by 2015.
- Empower citizens from 8 towns to be involved in local decision making by providing them relevant tools and services by 2015.
- Annually equip fire departments and municipalities with technical and financial assistance in rural fire protection.
- Provide assistance to 400 low and moderate income folks to secure adequate transportation for their needs by 2015.
- Implement 5 education and development programs to empower citizens in promoting rural solutions by 2015.
- Develop, improve and maintain 10 recreation resources in the Northern VT RC&D Area by 2015.

Fifty-two actions fall under these 10 goals. For a list of them and how to get involved, please contact RC&D Project Coordinator, Beth Ann Finlay at (802) 828-4595 or Beth_Ann.Finlay@vt.usda.gov

CONTACT US

Berlin office: 617 Comstock Road, Suite 1, Berlin, Vermont 05602, (802) 828-4493 x113
Williston office: 1193 South Brownell Road, Suite 35, Williston, Vermont 05495, (802) 865-7895 x104

AT WORK IN THE WATERSHED

Conservation Tillage Money is Available to Worthy Farmers

This year we have a Tri-District grant (shared with Caledonia Co. and White River NRCDC) to encourage farmers to implement spring conservation tillage practices. These practices include alternative manure incorporation on corn and perennial forages as well as reduced/minimum tillage on cropland. Our intent is to compliment cost-share payments by the VT Agency of Agriculture Farm Agonomic Practices (FAP) program. These programs can offer you up to \$37/acre. The District also has secured the use of an Aerway (currently housed in St. Albans) for interested farmers in Chittenden County and we are currently working to secure the use of another for Washington County residents. Contact Karina Dailey in our Williston office (802) 865-7895 x104 to find out more.



Unfortunately, cover cropping incentive payments are now only available through the VT Agency of Agriculture's FAP program.

Portable Skidder Bridges for Rent!

We now have two standard bridges and one heavy duty portable skidder bridge for rent (\$100/month) at Fontaine's Sawmill in East Montpelier. If you are a landowner or logger interested in protecting water quality and/or meeting Accepted Management Practices through the use of one of these bridges, please contact the Winooski NRCDC office in Berlin or Williston.

Is There Funding to Support Planting Trees Along My River Land?

This spring, in collaboration with Friends of the Winooski River, we were able to produce an online Landowner Assistance Guide for Winooski Watershed residents. This resource material is for landowners in the District who want to be good river and land stewards but are unaware of the best management practices or the technical and financial assistance available. The Guide provides contact info, program eligibility details, & program intent info. You can view or download a PDF version at our website www.vacd.org/~winooski/. We hope to disseminate a hard copy version soon.

Reforestation the Banks of the Winooski and Browns Rivers

In 2010 we planted approximately 1,775 trees and shrubs along 7,135 linear feet of river bank in the towns of Plainfield and Cabot on the main stem of the Winooski, on the North Branch just outside Worcester Village, along Pekin Brook in East Calais, and at three locations in Underhill on the Browns River. These projects could not have been completed without you, our expert tree planters!



Thank you to all the community volunteers and local school groups that helped to improve water quality and wildlife habitat along the river!!

We are always seeking interested landowners within the Winooski and Browns River watersheds who would like to voluntarily improve their streambank. We also work with community organizations and schools with an interest in future 'Trees for Streams' efforts in their community. Please call (802) 865-7895 x 104 if you would like to be involved.

Water Quality in the Upper Winooski

This year the Winooski Headwaters Partnership was able to purchase a turbidity meter to support water quality monitoring efforts in the Upper Winooski. Additionally, we have more funds secured through this Partnership and the Four Rivers Partnership to further improve our water quality monitoring equipment in the Upper Winooski. These funds are supported by the Friends of the Winooski River and the Conservation District. We hope to maximize equipment use in the upper Winooski for the 2011 water quality monitoring season with increased collaboration between community monitoring programs and local schools.

We are co-facilitating with Friends of the Winooski River and the Winooski Headwaters Partnership on the production of a Watershed Health Status Report for the Upper Winooski. This document will provide the public with a general summary of our water quality monitoring findings and watershed restoration activities.



TAKING ACTION

Local Work Group Sets Priorities

On a yearly basis, Conservation District's throughout the state call upon Local Work Groups to help set local ranking criteria for the Agricultural Management Assistance (AMA) Program, the Environmental Quality Incentives (EQIP) Program, and the Wildlife Habitat Incentive (WHIP) Program. The Local Work Group is made up of WNRCD staff, conservation partners, landowners, and other members of the public. At our October 18th meeting, a number of pressing conservation issues were discussed. Topping off the list was phosphorous, invasive species, habitat, soil erosion, and pest management. These issues, and others brought up by participants of the meeting, were given to the State Conservationist and State Technical Committee for review.

Honoring Farm and Conservation Stewards

Every year the Winooski NRCDC honors those who manage their land utilizing exemplary conservation practices. This year we have chosen the Pouliot Farm, Arethusa Farm, and the Marshfield Inn.

Farm Steward Award

Pouliot Farm (Westford, VT): Don Pouliot is a long time dairy farmer who over the past few years has been steadily making improvements to his operations with help from his two sons Arlo and Tony. In January of 2010, Don installed a new manure pit to assist in waste management at the farm. Manure is dumped into the pit and then mixed with rainfall water to create a slurry. The slurry is then pumped out of the pit and used as a fertilizer for corn. In contrast to a broadcast spreader, Don is experimenting with the use of a manure injector. The injector deposits manure into the sub-surface with minimal disruption to the soil. This process has been known to reduce ammonia emissions, odor, and loss of water-soluble phosphorous as well as maintain the soil health. Additionally, Don has incorporated the use of a "frac" tank on the farm. The "frac" acts as a satellite manure tank which allows for fewer trips to the manure pit, helping to reduce compaction of soil and fuel use.



The Pouliot's new manure house

Farm Steward Award

Arethusa Farm (Burlington, VT): The Arethusa Farm is a certified organic vegetable farm which was established in 2002 at the Intervale. Thomas Case, a Goddard College graduate, is co-founder of the farm. Over the past nine years, Thomas and his cohorts have worked hard to build up a loyal network of local businesses and supporters, including UVM and many Farmer's Market patrons. They have also worked hard to improve soil fertility, relying less on compost and manure inputs, and more on cover cropping and a scheduled crop rotation. These practices help retain nutrients in the soil and build beneficial organic material. In addition, the farm does a fair amount of work solely with their hands, which helps to maintain soil structure. Although they focus mainly on the production of carrots and mesclun greens, they have a number of other crops available to round out the mix.

Conservation Steward Award

Marshfield Inn (Marshfield, VT): Landowners Tracey Hambleton and Diana Batzel have chosen to both restore and conserve their river corridor in perpetuity. In 2008, a 35' buffer along 2,250' of river was planted with approximately 440 native trees and shrubs by WNRCD volunteers. In 2009, the landowners completed a corridor easement¹ on 12.3 acres along 2,215' held by the Vermont River Conservancy with funding support from the Vermont Agency of Natural Resources River Management Program.

¹Corridor Easement: is a land deed that permanently protects land located along the shoreline of a river. These easements allow rivers to re-establish a stable slope and meander pattern and access to adjacent natural floodplains. Visit www.vermontriverconservancy.org to find out if your land might qualify.



A view of the riparian buffer two years after planting

OUTREACH AND EDUCATION

Planting Trees for Free Apple Pie

Despite ominous weather, we coordinated another successful fall riparian buffer planting in Cabot at the Hogan property in conjunction with the town's annual Apple Pie Festival. Thank you to the volunteers that came out to plant and a big thank you to the Historical Society for honoring the free lunch vouchers provided to the tree planters. Our informational booth allowed us to meet with many of the local community members as well as visitors.

Conservation Initiatives in the Mid Winooski Watershed

We just completed a DEC watershed grant that supported public outreach to the communities of the Mid Winooski Watershed including three high schools (Montpelier, U32 and Spaulding), the City of Montpelier, the Town of Worcester, the City of Barre, the North Branch Nature Center, Food Works, the Central Vermont Regional Planning Commission, the UVM Watershed Alliance, the Department of Environmental Conservation, the UVM Sea Grant, the Vermont Natural Resources Council and Friends of the Winooski. The outreach from this grant has enabled these partners to pool resources on watershed projects of common interest. Additionally, they have a greater awareness of each other's resources, needs, and programs. It is our hope that the formation of this partnership (consequently called the Four Rivers Partnership) and the outreach from this grant has contributed to a sustainable watershed alliance that benefits the community as well as the watershed.

FORESTRY TOUR LEADS BOARD AND STAFF TO THE PROPOSED BARRE TOWN FOREST

On October 20th, as part of our annual fall forestry tour, WNRC board members and staff visited the site of the proposed Barre Town Forest. Nestled between Church Hill Road and Little John Road, the forest encompasses over 300 acres of former quarry land. Remnants of the land's former use remain in the form of deep quarries, abandoned derricks, and ominous grout piles. However, much has been reclaimed as quarry operations ceased and the landscape began the slow process of regeneration. Now, the once active quarries are alive with trees, mosses, and wildlife.



Enjoying the scenery

The effort to protect this area for its cultural, environmental, and recreational value is being led by the Millstone Trails Association in collaboration with the Trust for Public Land. The two entities are working on a plan to raise the roughly one million dollars needed to acquire the land from the Rock of Ages. If the acquisition goes through, the Town of Barre would be the rightful owner of the property subject to a conservation easement held by the Vermont Housing and Conservation Board. The easement would ensure that the property is protected from development and available for timber harvest and open for public use.

To learn more about the Barre Town Forest, go to <http://www.millstonetrails.com>



The view from the top



One of the many abandoned quarries

WHAT'S ON THE HORIZON

As the fall rain turns to winter snow, WNRCD staff will be spending a little more time at our desks and a little less time out in the field. However, we still have plenty of work to keep us busy and a lot of projects to plan for. Below is a short list of the projects and initiatives we are currently working on.

AOP Retrofits in the Brown's River

4th Annual Rain Garden Contest

Spring Rain Barrel Sales and Build-Your-Own Workshops

Trees for Streams

Erosion Control in the Hinesburg Town Forest

Riparian Buffer Plantings

2011 Annual Tree Sale

Conservation Tillage Incentives Program

Low Impact Development and Assessment in Waitsfield

Water Quality Monitoring

2011 Local Grower's Guide

Boissoneault Bridge and Abutment Removal

MEET OUR STAFF



Justin Kenney, *District Manager*

Justin began as District Manager for the Winooski NRCDC during the summer of 2010. He graduated from the University of Vermont in 2003 and has worked in the conservation field for the past four years. He has a strong background in project management and systems design and is hoping to lead the District into new territory with some creative projects and outreach efforts. Originally from Somerset, Massachusetts, Justin now resides in Worcester, Vermont, where he enjoys running on country roads, working in the woods, and spending time with his fiancée Lauren and cat Muffin.



Karina Dailey, *Project Manager*

Karina joined the Winooski NRCDC in January 2010. Her work includes managing watershed stewardship projects, providing technical assistance to agricultural producers, and organizing environmental outreach opportunities. Prior to joining the Winooski NRCDC, she worked for two seasons with the Intervale Conservation Nursery and the US FWS Partners Program on her M.S. thesis research from Antioch University New England. Originally from Maine, Karina received her undergraduate degree from St. Lawrence University in environmental studies and then headed west to Jackson, Wyoming where she worked as an environmental educator, wetland scientist, field naturalist, and ski instructor for seven years. Karina now lives on a small farm in Jericho with her husband and newly born son.



Cherie Staples, *Bookkeeper*

Cherie spent eleven years with the Vermont Land Trust, after six years at Vermont Natural Resources Council, and then moved to Colorado for six years, where she helped care for her first granddaughter and then managed the Denver office of The Wilderness Society. Along the way, a camera has been a steady companion and she has quite a raft of photos. Returning to Vermont in 2003, she's become a part-time bookkeeper for several businesses in the central Vermont area. She is a member of the Onion River Chorus and sings in the Old Meeting House Choir, and participates on three East Montpelier community committees. Cherie has two children and three grandchildren.

A special thank you goes out to **Ashley Lidman** who served as a District Manager for most of 2010. We wish you luck in your teaching career. We would also like to thank **Molly Wingersky** who generously donates her time and skills managing and updating Winooski NRCDC's website.

Thank you to the many organizations, agencies, municipalities, and individuals who provide financial support for our work!

Our primary funders for 2010 projects include: Cabot Creamery, Lake Champlain Basin Program, Merchants Bank, Northern Vermont Resource Conservation and Development Council, Northfield Savings Bank, the Oakland Foundation, the Reddus Foundation, New England Grassroots Environmental Fund, Regional Stormwater Education Program, Town of Williston, U.S. Department of Agriculture, U.S. Environmental Protection Agency, U.S. Fish & Wildlife, Vermont Agency of Transportation, VT Department of Environmental Conservation, and VT Agency of Agriculture, Food & Markets. And as always, a special thanks to our members!



Winooski NRCD
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 Berlin, Vermont 05602

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SUPPORT WINOOSKI NRCD THROUGH OUR ANNUAL MEMBERSHIP

WNRCDD works hard to ensure the wise use, protection, and enhancement of natural resources throughout Chittenden, Washington, and parts of Orange County. Our conservation and educational programs require valuable staff time, strong organizational support, and significant resources. We receive a limited amount of annually appropriated funding from the VT Agency of Agriculture and primarily implement our conservation programs with one-time grants that do not typically cover general operating costs. In order to continue our great work, we need your help!

When you become a member of WNRCDD, you support our on-going conservation programs, allow us to develop new initiatives, and help the District to leverage funding from additional sources. You also get the added benefit of special discounts at our Annual Tree Sale, a complimentary copy of our Rain Garden Manual, a chance to win dinner for two at a local restaurant, seasonal deals at local businesses, and the comfort of knowing that the good work of the District will continue into the future.

If you'd like to become a member, simply fill out the form below and send it back to us with your tax deductible donation.

2011 Membership (January 1, 2011 to December 31, 2011)

Name _____
 Address _____

 Phone _____
 E-Mail _____

Student Membership	\$25
Individual Membership	\$35
Family/Couple Membership	\$60
Professional Membership	\$125
Naturalist	\$250
Conservationist	\$500
Steward	\$1000

Please send this form along with your check to:
 Winooski NRCD: Fundraising
 1193 South Brownell Road, Suite 35
 Williston, VT 05495

New Member Renewal

