

Minimum Control Measure #2: Public Involvement & Participation Rethink Runoff Stream Team Summary of Activities

This project is supported by the twelve Municipal Separate Storm Sewer System permittees in Chittenden County implementing the regional Rethink Runoff campaign

Prepared by Winooski Natural Resources Conservation District 2023 Calendar Year

Overview

Since July 2011, Winooski Natural Resources Conservation District (WNRCD) has been subcontracted by the Chittenden County Regional Planning Commission (CCRPC) to implement Minimum Control Measure #2 (MCM#2): Public Involvement & Participation program on behalf of twelve MS4 permittees in the county. Amid Administrative staff changes within WNRCD in 2023, the Stream Team engaged many residents in meaningful actions to improve stormwater in their community. The WNRCD responded to CCRPC's RFP for a MCM#2 implementer in January 2023 and was again selected to continue working as Project Coordinator. Adelaide Dumm, WNRCD Conservation specialist and RRST Project Coordinator, took maternity leave from mid June to the end of August and had assistance from the WNRCD Agriculture Specialist on coordination of the water quality sampling program. Adelaide ensured all summer tasks and outreach events were coordinated before her leave and swiftly executed upon return to work. Adelaide was then promoted to the WNRCD District Manager in November and began coordination of hiring a new Conservation Specialist who will continue to support the Rethink Runoff work for the WNRCD in January 2024. Collectively, the WNRCD team organized two rain barrel workshop in Shelburne and Williston, hosted an Earth day clean up event in South Burlington, continued our volunteer water quality monitoring program with increased sampling sites, maintained ongoing participation of the Adopt-a-Drain program, conducted a rain garden revitalization project at Landry Park in Winooski and inventoried all existing rain gardens for functionality and coordinated adopters for each garden. Program Coordinator, Adelaide Dumm, also spoke with local residents about the impacts of Stormwater runoff and passed out Stream Team merchandise at four outreach and education events in the communities of Essex, Colchester, Milton, and South Burlington.

RRST Estimated Impact by Municipality

The table below depicts the estimated number of individuals engaged in each MS4 municipality in 2023. This table reflects in-person interactions where it was possible to log participants' town of residence. For information about residents reached through advertising and

social media outlets, see the MCM #1 annual report from Pluck.

Table 1: Interaction with the Stream Team by municipality

Municipality	# of people reached in-person in 2023
Burlington	107
Colchester	48
Essex	19
Essex Junction	39
Milton	14
Shelburne	8
South Burlington	17
Williston	6
Winooski	15
Total	273

Organizational Partnerships

The Rethink Runoff Stream Team continued partnerships with 5 non-municipal organizations in 2023:

1. [Hamline University](#): Continued work on the Adopt-a-Drain program led to the Hamline University team enhancing the website platform for Adopt a Drain and maintaining the social science research in an effort to engage more volunteers in maintaining the health of storm drains in MS4 communities across the country. See "Projects" section for more details.
2. [Lake Champlain Basin Program - Resource Room](#): A continued partnership with the LCBP that staffs and operates the Resources Room at the ECHO Leahy Center for Lake Champlain has benefited the RRSST through increased public awareness about Stream Team events. The Resources Room staff spreads the word to community members about RRSST projects and distributes Stream Team literature to enhance participation and

- education about stormwater management within the Lake Champlain Basin.
3. [Boves Inc](#) : In 2022 we secured a sustainable partnership with a local pasta sauce company that provides the Stream Team with blue 55 gallon drums with removable lids that can be recycled into rain barrels. This partnership filled a significant need as the old barrel supplier is no longer in business and these can be quite expensive when purchased new or even second hand. This partnership with Boves in Milton is especially valuable because we get the barrels for FREE! We maintained this partnership and were able to offer two rain barrel workshops in 2023.
 4. [VHB Engineering](#): The Stream Team participated in a Earth Day Clean up at the University Mall Stormwater detention ponds with the staff of VHB Engineering. This was an opportunity for staff of VHB and local residents to come together and learn about Stormwater infrastructure.
 5. [The UVM Horticulture Farm](#): The UVM Horticulture farm and the Stream Team worked together to bring on new water quality monitoring sites along Bartlett brook. Program Coordinator, Adelaide Dum also attended a "lead in your soil" workshop hosted by the Master Gardener's program and tabled on behalf of the Stream Team at this event on the UVM Horticulture Farm.

2023 Chittenden County Regional Planning Commission Stormwater Awareness Survey

Rethink Runoff, conducted a [survey](#) in nine cities and towns of Chittenden County about residents' perceptions and habits regarding stormwater runoff. Rethink Runoff has conducted a similar survey every five years for the past 20 years, in an effort to gauge the effectiveness of their program in educating residents and influencing behavior about the impacts of excess stormwater runoff and what practices can mitigate its effects.

The survey was conducted from January 12 to January 30, 2023, by Probolsky Research, a market and opinion research firm with locations in California and Washington D.C. that conducts research in business, government, non-profit, election, and association practice areas. The survey included 500 participants from Burlington, South Burlington, Colchester, Essex Junction, Williston, Milton, Essex, Shelburne, and Winooski. The survey yielded a +/- 4.5% margin of error at a 95% level of confidence. 20% of respondents replied by phone while 80% replied online.

Personal Actions

Survey results indicate a sustained public understanding of the role of residents in dealing with stormwater runoff. 79% of those surveyed agree that their own personal actions affect the water quality in Lake Champlain. This was very similar to results of 79%, 72% and 79% reported in the 2018, 2013 and 2008 surveys, respectively. While a near majority of those surveyed definitely felt that roads, parking lots and farms have a great impact on water quality, at the same time, 20% of those surveyed also felt that runoff from residential roofs and driveways had a great impact on water quality as well. Rethink Runoff encourages area residents to adopt various practices to slow and

infiltrate stormwater.

Of those surveyed who make decisions about their property, over the next two years:

- 12% said they definitely plan to install a rain barrel,
- 11% said they definitely plan install a rain garden,
- 15% said they definitely plan to ask their landscaper to use natural lawn care practices, and
- 14% said they definitely plan to plant trees on their property

Pet Waste and Water Quality

One continued focus of Rethink Runoff is the proper disposal of pet waste. Pet waste that is left on the ground is often washed into our streams and rivers, where it is carried to Lake Champlain, leading to high levels of e.Coli and beach closings during the warmer summer months. Fortunately, area residents have taken the message distributed by Rethink Runoff and others to heart as the 2023 survey results demonstrate. In both 2023 and in 2018 only 2% of dog owners surveyed indicated that they left the waste on the ground when walking the dog. This sustained reported behavior represents a definite improvement over reported behavior in 2013 when, for example, 25% and 16% of respondents indicated they left the waste on the ground when walking the dog in a park or trail or walking the dog in winter respectively.

Lawn Care and Fertilizer Use

Reported behavior regarding lawn care was mixed. Unfortunately, we saw an uptick in individuals who use fertilizer on their lawns from 21% in 2018 to 34%. On the other hand, residents are getting the message that it is better to fertilize your lawn in the fall so its nutrients have a longer time to work as well as less likely to wash off. In 2018, 93% of those surveyed who fertilize would spread some fertilizer in the spring but in 2023 that had dropped to 28%. Finally, the 2023 survey results show excellent reported progress by residents in handling grass clippings and leaves to prevent them getting into ditches and storm drains. 94% of respondents in 2023, compared to only 47% in 2018, said that they either compost, leave grass and leaves on the ground or bag them for disposal rather than disposing of them in the nearest ditch or ravine.

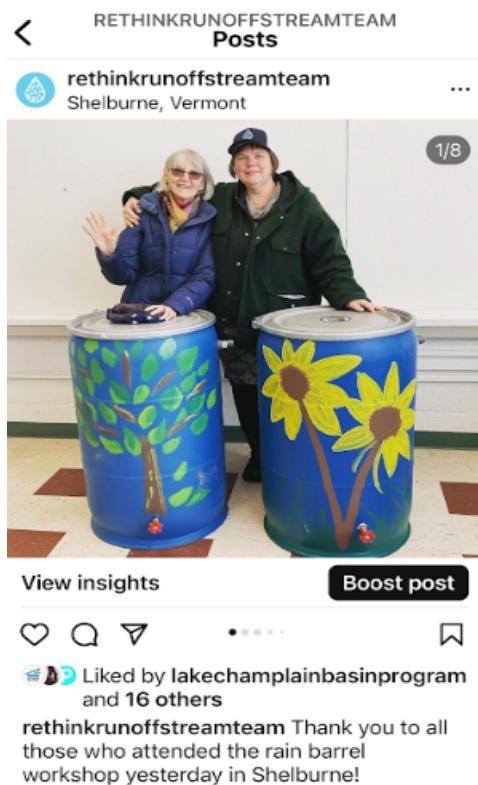
Outreach -----

Social Media

The Stream Team coordinator consistently updated the social media platforms including RRSF Facebook and Instagram pages with information about upcoming outreach events or volunteer opportunities. Sixteen social media posts and many more social media "stories" were created by the stream Team coordinator.



At left, Figure 1. Promotional post for the Rain Garden Revitalization event in Winooski, VT
Ar right, Figure 2. Rain Barrel workshop post for event in Williston, VT



At left, Figure 3. Rain Barrel workshop post for event in Shelburne, VT
At right, Figure 4. Promotional post for the Explore Essex event in Essex, VT



RRST Website

We maintained the "[events](#)" section of the www.rethinkrunoff.org website and occasionally helped to develop ideas for new web content in collaboration with Pluck Design. The events that were added to the website included content on the rain barrel construction workshop held in Shelburne and Williston, "Explore Essex" and "The Colchester Corner's Annual Autumn Market", Rain Garden Revitalization event in Winooski and the Milton Library Event. In addition, there has been regional advocacy for participants to join the Adopt-a-Drain initiative. For more information on the website and the ongoing projects of the Stream Team please visit: <https://rethinkrunoff.org/>

Newsletter

Frequent newsletters were released and kept the RRST community informed of events and ongoing projects. At the end of 2023 there were 768 subscribers, down from last year's number at 794 subscribers to the RRST newsletter. In an effort to increase newsletter subscriptions we created a social media post encouraging followers to subscribe to the newsletter and coordinated with Pluck Design Professional, Dave Barron to add a popup to the website prompting visitors to subscribe last year. "Open" rates for each newsletter were as follows:

- [Adopt a Drain K-12 program](#), November 2023, 282 subscribers opened
- [Summer newsletter](#), June 2023, 313 subscribers opened
- [The Rethink Runoff survey Results are in!](#) May 2023, 266 subscribers opened
- [RRST Spring Newsletter](#), May 2023, 267 subscribers opened
- [Join the Stream Team](#), April 2023, 243 subscribers opened
- [Rain Barrel workshop](#), February 2023, 276 subscribers opened

Outreach Events

The RRST outreach events held in 2023 consisted mainly of tabling efforts at which the Project Coordinator spoke to residents about the Stream Team. The outreach events took place in South Burlington, Colchester, Essex and Milton. The deliverable associated with the outreach events was 3 events and connecting with 50 residents and in 2023 74 people were recorded for engagement at outreach events. Outreach efforts also included informing local media outlets prior to major programs and posting volunteer opportunities on social media calendars, Front Porch Forum, etc.



Figure 5. Rethink Runoff tabling display

- Colchester Corner Annual Autumn Market on September 16th, 2023

- Explore Essex event on October 7th, 2023
- LCBP presentation tabling in Milton at the Public Library on October 28th, 2023
- Master Gardeners workshop at the UVM Horticulture Farm in South Burlington



Figure 6. Rethink Runoff coordinator Adelaide Dumm and her young son at three Outreach events in 2023.

Projects -----

Four in-person project events were held in 2023 in Winooski, Williston, Shelburne, and South Burlington. A total of 198 people participated in hands-on volunteer events in their communities. The projects are described in detail below:

- Stream Team Water Quality Sampling (10 volunteers)
- Rain Barrel Construction workshop in Shelburne (15 participants)
- Rain Barrel Construction workshop in Williston (18 participants)
- Earth Day Clean up at the University Mall Stormwater detention ponds with VBH staff (8 volunteers)
- Adopt-a-Rain Garden Program (6 rain garden stewards)
- Adopt-a-Drain Program (17 new storm drain adopters in 2023, 135 total adopters to date)
- Rain Garden Revitalization event(6 volunteers from MS4 towns)

Water Quality Monitoring

Summary: The Stream Team has maintained an ongoing water quality monitoring program since 2012. Community science volunteers collect water samples in urban or suburban streams that are impacted by excessive nutrient loading, high chloride and other pollution.

In 2021 the VT DEC's (Department of Environmental Conservation) [LaRosa Partnership Program](#) (LPP) provided financial support for analysis of the water samples at the Vermont Agriculture and Environmental Laboratory (VAEL), wrote the Quality Assurance Project Plan (QAPP), transported samples from partners' offices to the lab, and took on the responsibility of analyzing data from all state-wide partners. This change allowed us to focus more on volunteer recruitment and engagement in 2022 and 2023 and less on behind-the-scenes paperwork. Of

note, the state-wide data analysis has not been published yet, so a Stream Team Data Analysis document is not available with this report. The estimated report release date will be in February 2024 and will be distributed to the MS4 town representatives and Stream Team volunteers when it becomes publicly available.

Ten dedicated Stream Team volunteers collected biweekly water quality samples at sixteen sites on seven streams during the sampling season from April-August 2022. The sampling sites were located along Allen Brook in Milton, Indian Brook in Colchester, Englesby Brook in Burlington, Morehouse Brook in Winooski, Bartlett Brook in South Burlington, Potash Brook in Burlington, and Sunderland Book in Essex Junction. This is an increase in sampling efforts from 2022 and three streams were removed from the sampling list due to sufficient data for DEC management decisions, these streams included Centennial Brook, Alder Brook, and Munroe Brook. The next step for DEC is continuous monitoring with chloride loggers along with biological sampling. Both are necessary for our assessment and listing process to determine if a stream should be listed as impaired.

During the 2023 sampling season volunteers collected biweekly grab samples from May 1st -August 7th. Special care was taken for safety during the historic July flooding and volunteers were directed to avoid sampling during dangerous high flow events. Grab samples were analyzed for total phosphorus and chloride. These parameters were also sampled at all sites after two high flow events-replacing the regular weekly sample. Some sites required special equipment for sampling like a throw-bucket or dipper stick. Appropriate tools were purchased and/or created to assist with sampling while maintaining volunteer safety around swift waters. To show our appreciation for the Stream Team volunteers who have participated in the water quality monitoring, each volunteer was delivered a hand written thank you note, along with a \$20 gift card to Gardeners Supply Company, Stream Team sticker, hat and tee-shirt.

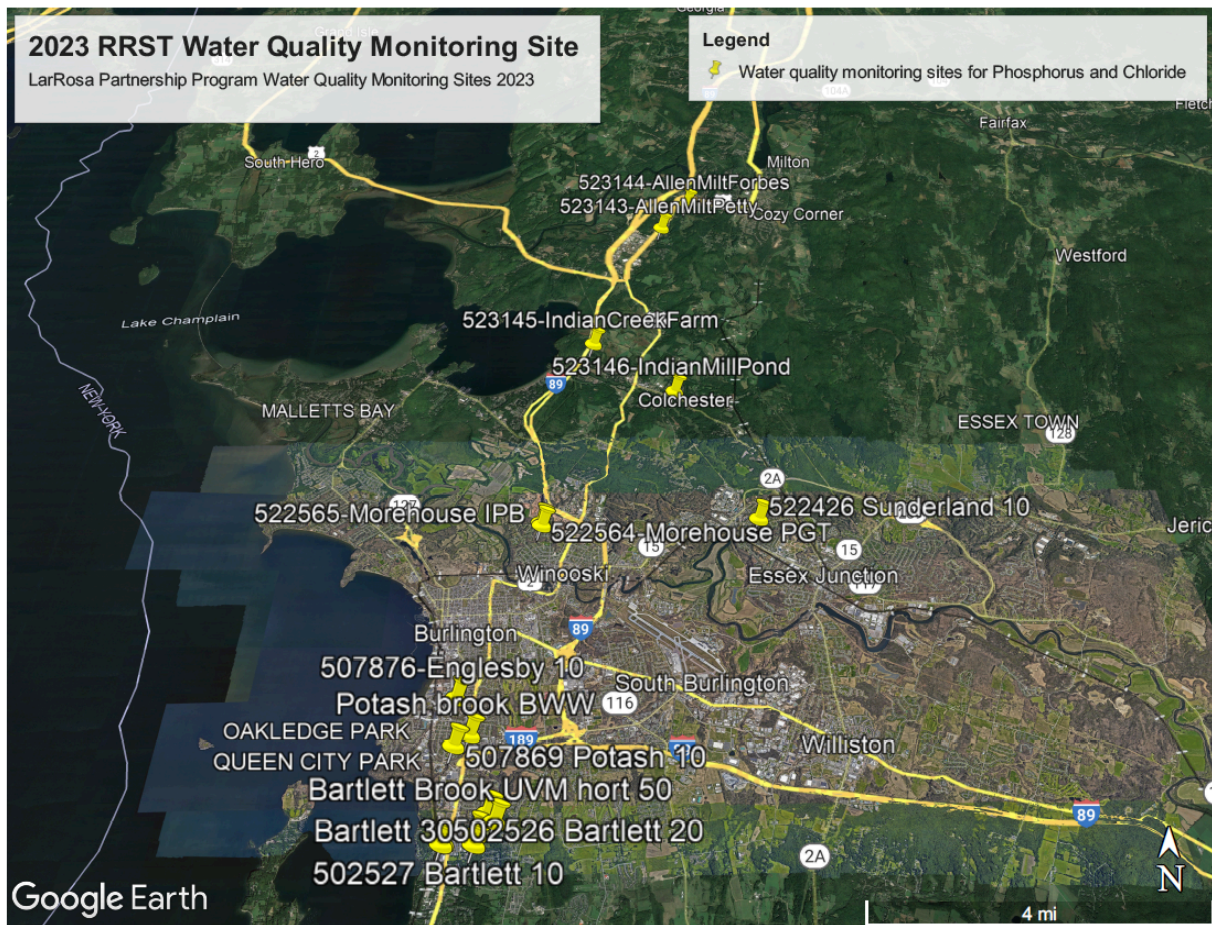


Figure 7. Stream Team Water Quality Sampling sites map.

See interactive online version here: [Stream Team Sampling Map 2023](#)

The [virtual training](#) day for volunteer samplers took place in May. When given a choice for an online or in person training all volunteers opted for the online training. Most volunteers were returning from previous seasons and benefited from a refresher. There were three new volunteers recruited and WNRCD staff met them at their sampling site and received demonstration and training on [sampling procedures](#). During the training the Adelaide Dumm, Stream Team coordinator, demonstrated proper sampling technique, described the data collection sheets, explained how the collected data would be used and answered questions. Throughout the season, volunteers returned their samples through a contactless dropoff system to the WNRCD office. The WNRCD staff ensured all samples were properly checked-in and prepared for delivery to the lab.

Advertising: Advertising was completed through direct email outreach to our list of active volunteers. We also sent out a volunteer sign up form through the newsletters, on social media, Front Porch Forum and on the Rethink Runoff website. Primarily, we targeted past volunteers for this program who had prior experience with water quality monitoring. WNRCD recruited

three new volunteers to the Stream Team during 2023.



Figure 8. Stream Team water quality monitoring

Advertising Language used in Rethink Runoff Newsletter promoting the water quality monitoring program: *"The Rethink Runoff Stream Team is an important way for volunteers to be involved in community science! The 2023 Stream Team will be out and about this spring and summer collecting water samples again, as part of the DEC's LaRosa Program Partnership Water Quality Monitoring Initiative. Consistent data related to water quality and quantity allow stormwater managers to better assess the condition of our waters and develop solutions that will have a lasting positive effect. Volunteers are typically used to collect samples at a variety of locations along a stream or within a watershed. On occasion, volunteers may also gather visual data detailing the condition of a stream. Data collected in this way may include presence or absence of riparian buffers, streambank stability, and presence of litter or trash. These water samples will be sent to a lab and analyzed for chloride and total phosphorus. This sampling season the Stream Team will monitor 16 sites within Chittenden county. Water samples are collected bi-weekly from May 1st - August 7th, 2023. The waterways we will be monitoring are Potash Brook, Bartlett Brook, Sunderland Brook, Englesby Brook, Indian Brook, Morehouse Brook, and Allen Brook. If you're interested in being a water quality sampler on the Stream Team click the link below to sign up!"*

Impact: In total volunteers collected 256 individual samples including regular biweekly samples for total phosphorus and chloride and two high flow samples for each site. This data provides information about long term trends that may help towns analyze effectiveness of stormwater BMPs or identify new opportunities for action. Perhaps more importantly, we believe that engaging community members directly in clean-water work creates greater public understanding of the issues VT watersheds are facing and creates greater public support for clean-water initiatives like GSI installation or wastewater treatment plant improvements. In 2024 we plan to add data from this sampling season to the Stream Storytelling online map and use it as an educational tool during outreach events.

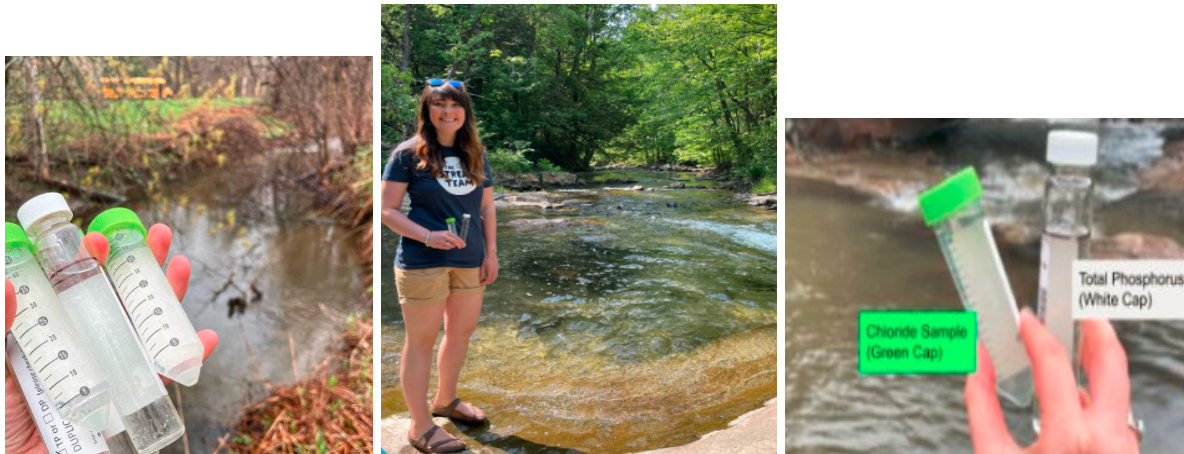


Figure 9. Stream Team water samples collected at various sites across the RRST service area

Table 2: Stream Team Water Quality Sampling Volunteers by town

Municipality	# of volunteer water quality monitors
Burlington	1
Colchester	1
Essex	1
Essex Junction	
Milton	1
Shelburne	2
South Burlington	2
Williston	1
Winooski	1
Total	10

Rain Barrel Construction Workshops

Summary: Two rain barrel construction workshops were hosted in 2023. The first workshop took place in Shelburne on February 24th at the Shelburne Town Center Gymnasium at 5420 Shelburne Road Shelburne, VT 05482. The second workshop took place in Williston on May 26th at the R.E.C Zone 94 Harvest Lane Williston VT, 05495. Participants paid \$40 to attend the workshop which included the cost of the barrel, associated hardware needed to build the rain barrel and time for workshop coordination. Each participant was offered a stream team tee shirt, hat and sticker as an added benefit for attending this event. Project Coordinator, Adelaide Dumm had help from RRST volunteer, Henry Bonges at the Shelburne rain barrel workshop and help from WNRCD staff, Kathleen Lewis and Casey Spencer at the Williston rain barrel event. Both events were held in two sessions. Participants were greeted and given a brief educational lesson on the importance of GSI in management of Stormwater runoff. Then Adelaide led a demonstration of how to drill the holes and assemble the hardware. The rain barrels were sourced for free from Bove's in Milton.

Table 3. Number of Participants at Rain Barrel Workshop by town

Municipality	Williston Rain Barrel Workshop	Shelburne Rain Barrel Workshop
Burlington	6	5
Colchester	0	1
Essex	2	0
Essex Junction	0	1
Milton	0	0
Shelburne	2	4
South Burlington	1	2
Williston	5	0
Winooski	2	2
Total	18	15

Advertising: This event was advertised on the Rethink Runoff website and on social media platforms including Facebook and Instagram. There was also a press release sent to local media outlets to help spread the word about this event. In addition, MS4 municipal representatives were asked to distribute a message on their respective Front Porch Forum pages to advertise this event. A short tik tok [video](#) was created to prompt this event and other rain barrel workshop events in the future.

Impact: In total, 33 residents participated in the 2023 rain barrel workshop events. At these events the Project Coordinator described that by installing a rain barrel you can save water, save money, and help your local streams all at the same time. This event taught participants how to build, install and maintain their own rain barrel. When it rains, stormwater moves quickly over impervious surfaces such as buildings and roads, picking up pollutants like nutrients, sediment, oil, chemicals, road salt, and metals. By capturing stormwater in a rain barrel before it flows over roads residents can help decrease the amount of pollutants entering Lake Champlain. The water participants save in a rain barrel can be used for watering lawns and flower gardens, and washing their car or tools. Rain barrels help decrease runoff to Lake Champlain by capturing and holding rain water during a storm, and that means cleaner water for everyone.



Earth Day Clean up at the University Mall Stormwater detention ponds with VBH staff



Summary: The Stream Team participated in a Earth Day Clean up at the University Mall Stormwater detention ponds with the staff of VHB Engineering. This was an opportunity for staff of VHB and local residents to come together and learn about Stormwater infrastructure. Stormwater detention ponds temporarily store stormwater runoff, cleaning up these areas helps to maintain the systems and promotes healthy space for wildlife.

Advertising: This event was advertised at the VHB workplace and through an email distributed to all employees. This event was hosted by the RRST but targeted outreach focused on participants from within the VHB company.

Impact: 8 VHB employees learned about the Rethink Runoff mission and gave back to the community and planet at this special Earth Day event.



Figure 10. Volunteers with bags of litter removed from stormwater retention ponds behind the University mall.

Table 4. Volunteers at the Earth Day clean up event

Municipality	# of volunteers
Burlington	4
Colchester	0
Essex	0
Essex Junction	0
Milton	0
Shelburne	0
South Burlington	3
Williston	0
Winooski	1
Total	8

Adopt - a- Rain Garden Program



Adopt the Milton Rain Garden!

RETHINK RUNOFF IS IN NEED OF A VOLUNTEER TO MAINTAIN THE RAIN GARDEN AT THE MILTON LIBRARY!

RAIN GARDEN ADOPTERS TYPICALLY CARE FOR THEIR GARDEN FOR A FULL GROWING SEASON (AND SOMETIMES MORE). YOU ONLY NEED TO VISIT THE GARDEN 3-5 TIMES A YEAR, AT LEAST ONCE IN THE SPRING, SUMMER AND FALL.

SCAN THE CODE BELOW TO SIGN UP



OR EMAIL RETHINKRUNOFF@GMAIL.COM




Summary: The Stream Team's Adopt-a-Rain Garden program is an opportunity for individuals to assist in keeping public rain gardens in their community functional and attractive. This involves basic maintenance activities like picking up trash, pruning, pulling weeds, installing new mulch, and informing the coordinator of non-functioning gardens. There are currently twelve public rain gardens managed by Stream Team. In 2022 the rain gardens were cared for by approximately 6 volunteers. Four of the gardens are now cared for by municipal staff or hired landscaping crews, so recruitment for community volunteers stopped in 2021. There is still one 1 rain garden in Williston

that could be used as a steward.

Figure 11. Volunteer opportunity advertising for Rain garden Adoption at the Milton Library

Advertising: Outreach efforts to recruit volunteers included social media posts, posts on the RRST website, and Front Porch Forum posts for Rain garden adopters. We plan to continue advertising these gardens for adoption in 2024. See table below for more details.

Impact: Rain gardens are a way for citizens to become more engaged in the Rethink Runoff Stream Team. By becoming a rain garden adopter the volunteers learn about GSI and how stormwater is managed by this purposeful landscaping. Several of the rain gardens need RRST informative signage replaced. An inventory conducted in 2023 and signs installed in the spring 2024. Currently there are 4 signs available, and only one garden has RRST signage.

Table 5: 2023 Rain Garden Adopters

Location	Adopter Name
Chamberlin School (262 White St, South Burlington, VT 05403)	Chris P.
Farrell Park (95 Swift St, South Burlington, VT 05403)	Jill S.
South Burlington Library (180 Market St, South Burlington, VT 05403)	Maintained by South Burlington
South Burlington High School (550 Dorset St, South Burlington, VT 05403)	Carolyn W.
South Burlington Fire Dept. (575 Dorset St, South Burlington, VT 05403)	Carolyn W.
Coast Guard Station (1 Depot St, Burlington, VT 05401)	Larry K.
Callahan Park, Burlington (45 Locust St, Burlington, VT 05401)	Brad K.
Williston Annex (7900 Williston Rd, Williston, VT 05495)	Open for Adoption!
Dorothy Alling Memorial Library (21 Library Ln, Williston, VT 05495)	Maintained by Library
Brownell Library (6 Lincoln St, Essex Junction, VT 05452)	Maintained by Essex Junction
Milton Public works/ Library(43 Bombardier Rd, Milton, VT 05468)	Maintained by Milton, but the couple who attended outreach event have agreed to informally adopt it.
Landry Park (35 Pine Street, Winooski VT 05404)	Lauren L.

Rain Garden Revitalization Event



Figure 12. Volunteers at rain garden revitalization event in Winooski

Summary: A rain garden revitalization was held at the Landry Park Rain Garden on September 24th at Landry Park at 53 Pine St, Winooski, VT 05404. At this event volunteers learned about the value of rain gardens as Green Stormwater Infrastructure (GSI) in our communities. Volunteers assisted with pulling weeds, removing trash, removing sediment from the inflow of the garden using a flat shovel and by removing rocks and digging out excess sediment. The six volunteers also helped with pruning back existing vegetation and planting perennials.



Impact: The rain garden collected approx. 1.75kg of phosphorus annually - mostly from the road as stormwater is directed to the curb cut garden. Rain gardens are designed to capture and clean stormwater runoff and during rainstorms function like a sponge, absorbing and filtering runoff from the parking lot and nearby roads. The bowl-shaped design of the garden allows the water to slow down and sink into the groundwater instead of flowing over paved surfaces where it could pick up pollutants and deposit them in streams and lakes. Through this event volunteers were able to learn about the impacts that rain gardens have in the community and gain first hand experience with GSI maintenance. [The event was also aired on WCAX.](#)



Figure 12. rain garden event advertising flyer and project location map.

Table 5. Volunteers at rain garden revitalization event

Municipality	# of volunteer by town
Burlington	0
Colchester	2
Essex	0
Essex Junction	0
Milton	0
Shelburne	0

South Burlington	0
Williston	0
Winooski	4
Total	6

Regional: Adopt-a-Drain

Summary: Adopt-a-Drain made its debut on Earth Day, April 22nd, 2022 and efforts continued in 2023. .

Adopt-a-Drain asks residents to adopt a storm drain in their neighborhood and keep it clear of leaves, trash, and other debris to reduce water pollution. Storm drains flow directly to lakes and streams, acting as a conduit for trash and pollutants. Rethink Runoff, an ongoing awareness and public outreach effort to reduce dirt and pollutants from stormwater runoff entering Lake Champlain and local streams, partnered with Hamline University to launch



Adopt-a-Drain in Chittenden County. Hamline University, in Saint Paul MN, first developed this program and it has been used in six states (Minnesota, Washington, Louisiana, New Jersey, Massachusetts, and Vermont) across the country. Currently, the program has been adopted by five municipalities in Vermont including Burlington, Colchester, Essex, Essex Junction, and Milton. Volunteers choose how frequently to clear their drain and report how much debris is collected. They receive a welcome packet, small yard sign, and the clever perk of getting to name a drain!

Adopt a drain town	2023 adopters	Total adopters	Total Debris Cleaned for Region in pounds
Essex:	2	16	241.3
Essex Junction:	0	13	115.8
Burlington:	12	79	764.1
Colchester:	3	24	933.55
Milton:	0	4	149
Total:	17	136	2203.75



Adopted Storm Drains in Chittenden County, VT (as of Nov. 30, 2023)

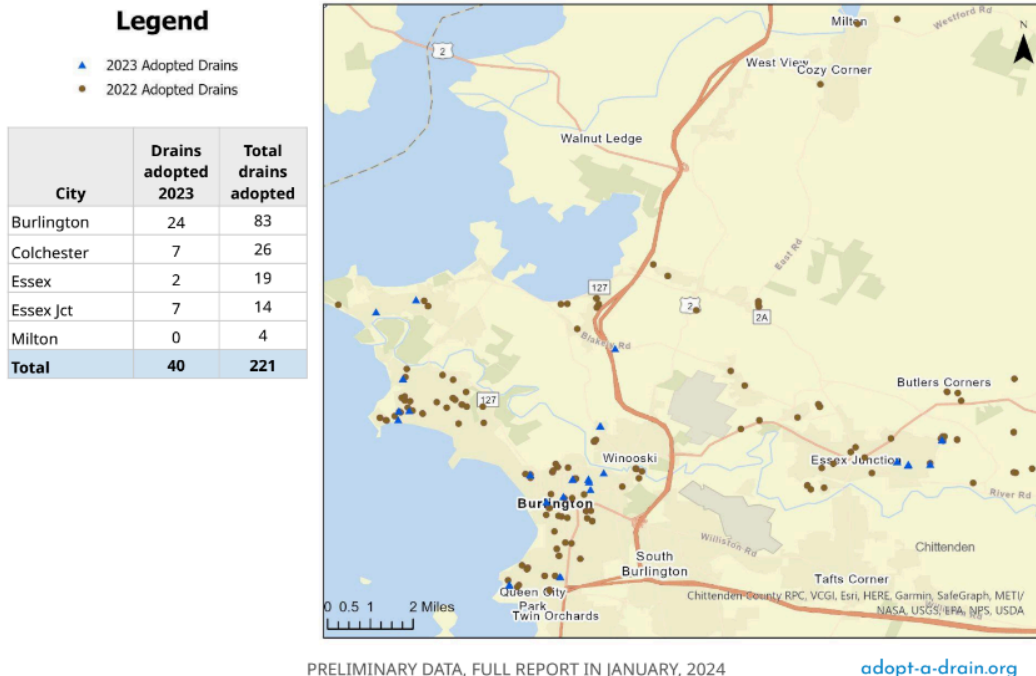


Figure 13. Map created by Hamline University displaying the geographic distribution of drains adopted in VT.

Advertising: The Adopt-a-Drain program has been advertised on social media pages including Facebook and Instagram, through press releases to local media outlets, Front Porch Forum posts, and on the Rethink Runoff website. Towns who have chosen to participate in the program have contributed to advertising efforts by including a flier about the program that was included in residents' water bills. A pamphlet was also distributed at the annual WNRCD tree sale to help spread the word.

Impact: The main goal of the program has been to recruit volunteers to care for storm drains in their neighborhood by clearing trash, sediment, salt and other pollutants on a regular basis. Launching the Adopt-a-Storm-Drain program has been a great fit for the involved communities as residents have continued to be impacted by COVID 19 and this opportunity is a remote option to be involved in the Stream Team and maintain a comfortable level for physical distancing for those who choose to do so. Outreach and engagement efforts for this program have led to 221 storm drains being adopted by 136 people. In 2023 there were 40 drains adopted and the program grew by 17 adopters. To date there have been 2203.75 lbs of debris removed from storm drains by resident adopters. We are confident that this program will continue to grow as residents become more aware of the impact they can make. Adopting a storm drain is a small and simple action that may inspire community members to participate in other Rethink Runoff activities in the years to come and consider the ways water flows through their neighborhood.

WNRCD and the participating towns plan to duplicate the outreach efforts in 2024 and aim to recruit double the number of volunteers for Adopt a Drain to compensate for the relatively low new signups in 2023.

Stream Team Merchandise

The Stream Team coordinated with Pluck to generate a new Stream Team tee shirt and hat in 2022 and this merchandise was distributed to the stream Team and program volunteers throughout 2023.



Figure 14. Stream Team merchandise

Volunteer Appreciation Summary

All volunteers were offered Stream Team tee shirts and stickers at the time of the event and many accepted one or both. We also delivered handwritten thank-you notes and a \$20 gift card to Gardeners Supply Company, and a Stream Team tee shirt and hat to our most dedicated volunteers who participated in the Stream Team as water quality monitors.