

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

## Summary of Activities



### 2020 Calendar Year

#### Overview

Although the pandemic created challenges for the Stream Team in 2020 we were still able to engage many residents in meaningful actions to improve stormwater in their community. We hosted a contactless rain barrel kit pickup and two in-person riparian tree planting events. In the digital realm, we presented online lectures, participated in remote radio and TV interviews and launched the Clean Water Challenge to inspire people to clean out their neighborhood storm drains. For the first time in the history of the program we were unable to collect water quality samples for chemical analysis due to state budget cuts, so we re-worked the program by asking volunteers to collect photographs, drawings and stories. The portfolio of presentations, handouts and new programs that were created this year will serve as a resource for member municipalities and residents for years to come.

#### RRST Estimated Impact by Municipality

The table below depicts the estimated number of individuals engaged in each RRST municipality in 2020. This table reflects both digital and in-person interactions where it was possible to log participants' town of residence.

Municipality	# of people reached in 2020
Burlington	17
Colchester	9
Town of Essex	31
Village of Essex Junction	10
Milton	4
Shelburne	21
Williston	13
South Burlington	16
Winooski	2
<b>TOTAL</b>	<b>123</b>

Table 1: Interaction with the Stream Team by municipality

## Organizational Partnerships

The Rethink Runoff Stream Team partnered with **10** organizations in 2020:

1. **Essex Free Library:** Hosted our Watershed Explorers public program and helped create posters for advertising materials for the event.
2. **Essex Conservation & Trails Committee:** Invited us to their meeting to share about RRST program, discuss water quality data and partner on rain barrel outreach.
3. **Shelburne Natural Resources and Conservation Committee:** Invited us to join their meeting to share info about the RRST program and describe findings of Stream Team data results per request of the committee.
4. **Williston Conservation Commission** Invited us to join their meeting to share about the RRST program and describe changes homeowners can make to become more "stormwater friendly."
5. **ECHO:** Provided a digital platform for us to host a talk in a Zoom event called "Change Your Stormwater Footprint" Helped with advertising and technical issues.
6. **UVM Sea Grant:** Hosted a training about best practices for citizen science projects during the pandemic. This presentation helped us decide how to restructure the Stream Team summer volunteer program with safety in mind.
7. **Colchester Scouts:** Planned to volunteer for a catch basin painting day. Event deferred to 2021 due to concerns around covid safety.
8. **Lake Champlain Chocolates:** Donated 25 bars of chocolate to provide incentive for our Clean Water Challenge program.
9. **Winooski Valley Parks District:** Provided land and staff time to support the riparian tree planting project in Colchester.
10. **Meach Cove Farm:** Provided land and staff time to support the riparian tree planting project in Shelburne.

## Outreach -----

**Media** Rethink Runoff Stream Team had **6** media appearances in 2020:

1. **Positively VT** Invited us to participate in a 20-minute Zoom interview for Positively VT on Channel 17. Watch it [here](#).
2. **WDEV** Invited us to participate in a 30 min Radio Interview on Vermont Viewpoint Segment Listen [here](#).
3. Posts were published on **Front Porch Forum** in Essex to advertise the Rain Barrel Kit Pickup event.
4. Posts were published on **Front Porch Forum** in South Burlington to advertise the Clean Water Challenge.
5. Posts were published on **Front Porch Forum** in Shelburne to advertise the Clean Water Challenge.
6. A press release about how individuals in South Burlington can make a difference for clean water was sent to **The Other Paper**, but was not published. The same article was shared with South Burlington Municipal staff to add to the quarterly SoBu newsletter, but printing of the publication was stopped due to covid-related budget cuts.

## Social Media

### Facebook

- Total Posts = 32
- 283 page "likes"
- 340 "follows"

### Instagram

- Total Posts = 14
- 272 total "followers"

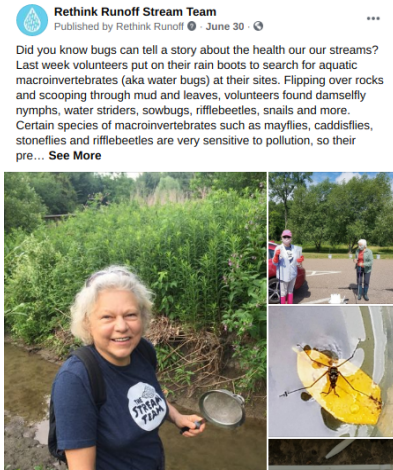


Figure 1: Two instagram posts from 2020

## RRST Website

We maintained the "events" section of the website and occasionally helped to develop ideas for new web content in collaboration with Pluck Design including:

- How to Build a Rain Barrel PDF
- "Book A Speaker" website text
- "What is a Watershed" infographic

## Newsletter

At the end of 2020 there were **770** subscribers to the RRST newsletter (an increase from 629 in 2019). Three newsletters were published this year in March, May and July.

## Outreach Events

Six "outreach" events were held in 2020. A total of **37** people participated in presentations or engaged with digital initiatives. Each outreach event is described in more details below:

1. **Essex Library Event** [January] Hosted a 1-hour workshop for families titled "Clean Water Explorers." Participants looked at a map of the Champlain Valley to determine which subwatershed they live in and then constructed a watershed model using tinfoil. The watershed model was used to discuss the way pollutants travel across the landscape through runoff and was used to discuss potential solutions. 6 participants
2. **Essex Conservation & Trails Committee** [February] asked us to share about the resources and programs offered by RRST and offered to help with rain barrel workshop outreach. Reached 9 people.
3. **Shelburne Natural Resources and Conservation Committee** [February] asked us to describe the results of Stream Team data to inform their understanding of water quality

issues in the town. We also discussed general resources and programs offered by RRST. Reached 8 people.

4. **ECHO Zoom Presentation** [May] This 30 -minute presentation for all ages, titled "Change Your Stormwater Footprint" discussed 8 actions individuals can take to improve stormwater quality in their communities. Topics covered included picking up pet waste, diverting gutters to permeable surfaces and using less salt in the winter. 3 participants
5. **Williston Conservation Commission** [July] asked us to present about actions that individual homeowners can take to improve water quality. We also discussed the Rethink Runoff program goals and brainstormed ways that commission can help spread the word about programs and resources. Reached 6 people.
6. **Clean Water Challenge** [July] In an effort to engage people in hands-on stormwater projects through a digital platform, we launched the Clean Water Challenge online contest in July. Members of the public were invited to clean a storm drain in their neighborhood and submit before and after pictures to be entered into a drawing for a prize. The contest was advertised in our newsletter, Facebook, Instagram and shared on Front Porch Forum by some Stream Team volunteers. The contest was open to residents of all nine RRST municipalities. In total, 5 people participated. All 5 were awarded with Stream Team t-shirts, stickers and Lake Champlain Chocolates. (4 from S. Burlington, one from Essex Junction)



Figure 2: Participants in the Clean Water Challenge clear debris from storm drains in their neighborhood.

## Projects -----

Five "project" events were held in 2020. A total of **86** people participated in hands-on events in their communities. The following projects are described in more details below:

1. Colchester Riparian Tree Planting
2. Shelburne Riparian Tree Planting
3. Rain Barrel Kit Pickup in Essex
4. Stream Team Water Quality Monitoring
5. Rain Garden Maintenance

## Colchester Project: Tree Planting along the Winooski River

**Summary:** RRST helped to advertise and recruit volunteers for a tree planting project at Macrae Farm Park in Colchester that was planned by the Winooski NRCD and co-funded by the Lake Champlain Basin Program and Partners for Fish and Wildlife.

**Advertising:** Advertising was mainly achieved through email outreach to our list of existing volunteers, posting on social media and inviting community members to share a post on Front Porch Forum.

**Challenges:** Completing the event in a covid-safe manner was the biggest challenge. We required each participant to sign a volunteer waiver that included a covid checklist. Participants were asked to wear masks and maintain social distance. Many participants shared a feeling of gratitude to be able to complete hands-on work to improve their community even amidst a pandemic. A secondary challenge was weather. We postponed the original planting day due to predicted thunderstorms, but were able to maintain enough volunteers for a successful event on the rain date.

**Impact:** 10 Volunteers participated in two shifts throughout the day. 450 trees were planted at this site. These trees will help to decrease erosion, improve water quality and provide wildlife habitat for years to come. We have recruited a community volunteer to check in on the trees throughout 2021 which should help to ensure greater survival rates. Furthermore, the social impact of engaging people in a meaningful and safe in-person event amidst a pandemic cannot be overestimated. Building a sense of community around watershed conservation gave volunteers joy and a sense of purpose. Most participants accepted a Stream Team t-shirt and sticker as thanks for assisting. Finally, about 50 people opted to join our email list after expressing interest in the tree planting. We hope to engage folks who were not able to attend the planting, but chose to connect to our newsletter in activities in 2021.



*Figure 3: Volunteers plant saplings along the Winooski River at the Colchester tree planting*

## Shelburne Project: Tree Planting along McCabe's Brook

**Summary:** RRST helped advertise and recruit volunteers for a tree planting project at Meach Cove Farm Park along McCabe's Brook in Shelburne that was planned by the Winooski NRCDC and co-funded by the PUR Project and Partners for Fish and Wildlife.

**Advertising:** Advertising was mainly achieved through email outreach to our list of existing volunteers, posting on social media and inviting community members to share a post on Front Porch Forum. Staff at Meach Cove Farm also helped to recruit community members through a variety of local connections.

**Challenges:** Similarly to the Colchester tree planting, completing the event in a covid-safe manner was the biggest challenge. We required each participant to sign a volunteer waiver that included a covid checklist. Participants were asked to maintain social distance. Again, many participants shared a feeling of gratitude to be able to complete hands-on work to improve their community even amidst a pandemic. At this site a secondary challenge was also weather. We postponed the original planting day due to predicted rainstorms, but were able to maintain enough volunteers for a successful event on the rain date.

**Impact:** 16 Volunteers participated in two shifts throughout the day. 250 trees were planted at this site. These trees will help to decrease erosion, improve water quality and provide wildlife habitat for years to come. Finally, about 30 people opted to join our email list after expressing interest in the tree planting. We hope to engage folks who were not able to attend the planting, but chose to connect to our newsletter in activities in 2021.



*Figure 4: Volunteers of all ages plant saplings along McCabe's Brook at the Shelburne tree planting event.*

## Town of Essex Project: Rain Barrel Kit Pickup

**Summary:** We hosted a rain barrel kit pickup event in the Town of Essex that was covid-compliant and enabled us to share rain barrel supplies with 39 residents of RRST municipalities. We created a new instructional PDF and video about rain barrel construction.

**Challenges:** When our original plans of hosting an in-person rain barrel workshop in April came to a halt due to covid restrictions we decided to pivot and host a contactless rain barrel kit pickup day instead. We washed the barrels, pre-drilled holes and created hardware kits so that participants could assemble their barrels at home without specialized tools. On August 15th, we set up a tent at the Essex Fire Department and distributed kits to 39 people.

**Advertising:** This event was advertised on the RRST website, newsletter and social media pages. Municipal staff and members of the Essex Conservation and Trails Committee also helped to spread the message on Front Porch Forum.

**Impact:** Once the rain barrels are installed, they will help to decrease stormwater runoff volume in member municipalities. All participants were given educational handouts about the Stream Team and many elected to join our newsletter mailing list. Additionally, we produced an informational [VIDEO](#) about how to build a rain barrel and worked with Pluck Design to create a [PDF](#) handout about how to build a rain barrel. Both the video and PDF will serve as excellent resources to share with residents in the years to come.

**Cost:** The cost of materials was fully covered by the registration fee (\$40), so the only expense for this program was staff time.



*Figure 5: Left to right: Hardware kits with Rethink Runoff handouts ready to be distributed, rain barrels with pre-drilled holes wait to be picked up by participants, Kristen masked and ready for a covid-safe distribution day*

## Water Quality Monitoring

RRST has maintained an ongoing water quality monitoring program since 2012. Historically, citizen science volunteers have collected water samples in urban or suburban streams that are impacted by sedimentation, excessive nutrient loading, high temperatures, bacteria, and other pollution. This data provides information to towns about long term trends and may help towns identify good locations for stormwater BMPs.

In 2020 the program was forced to adapt since funding from VT DEC's LaRosa program was unavailable due to COVID-19 related budget cuts. Instead of collecting water samples for chemical analysis, volunteers were recruited to collect pictures and stories of our urban streams.

The RRST coordinator sent seven weekly emails to Stream Storytelling volunteers to share prompts for reflection. The weekly prompts included:

1. Get to Know Your Stream
2. Macroinvertebrates
3. Bird Identification
4. Using iNaturalist to record species diversity
5. Nature Journaling
6. Soil Analysis
7. Opportunities for Action



Figure 6: Stream Team volunteer story submissions including (left to right) macroinvertebrate monitoring, iNaturalist observations, baby snapping turtle in Alder Brook, nature journaling

In total, this program collected about 50 stories, 65 pictures and 15 illustrations. The findings have been compiled and posted in a Google Earth Tour, which can be accessed at the link below. It will be posted on the Rethink Runoff website shortly.

<https://earth.google.com/web/data=MicKJQojCiExMmcyVUVyZTNpVFhvN2ptcExKMS1PeEiwUVdxZDVlb3M6AwoBMA?authuser=0>



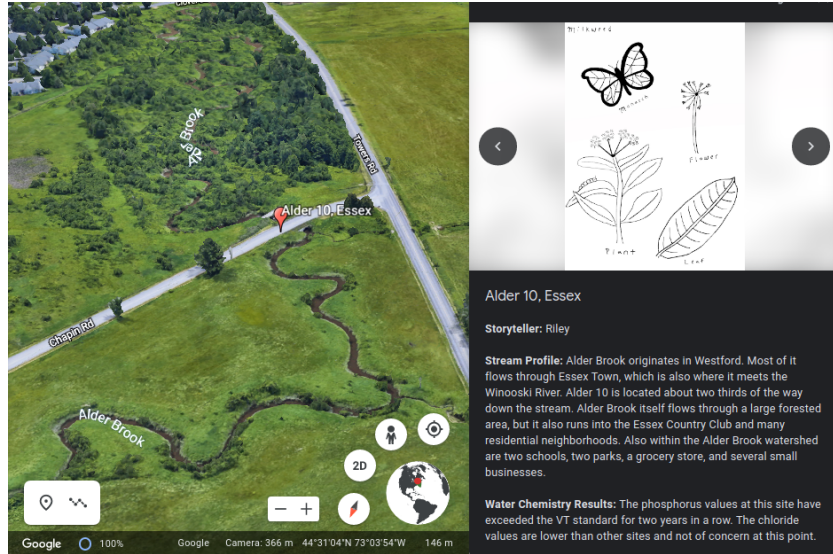


Figure 7: Screenshot of the Google Earth Stream Storytellers Tour

Although this program shifted significantly from years past, many volunteers enjoyed the new format. One volunteer shared, "Thanks so much for your creative and valuable ways to keep us involved and to show us how to build a deeper connection to our stream. You went way above and beyond any expectation I may have had for stream sampling this summer."

Town	# of Volunteers
Burlington	3
Colchester	2
Village of Essex Junction	1
Town of Essex	1
Milton	0
South Burlington	5
Williston	2
Winooski	1
Non -RRST Municipalities	1
<b>TOTAL</b>	<b>16</b>

Table 2: Stream Team Water Quality Sampling Volunteers by town

## Adopt-a Rain Garden Program Summary

The Stream Team's Adopt-a-Rain Garden program is an opportunity for individuals to assist in keeping Chittenden County's public rain gardens 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 eight public rain gardens managed by RRST. In 2020 all eight gardens were cared for by volunteers. See table 2 for more details.

Rain Garden	Adopter 2020
Chamberlin School, South Burlington	Chris P.
Coast Guard Station, Burlington	Larry K.
Williston Annex	Rita D.
Williston Town Library	Library grounds staff
Callahan Park, Burlington	Brad K.
Farrell Park, South Burlington	Roan O.
South Burlington Fire Station	Cub Scouts 678
South Burlington Library	Cub Scouts 678

Table 3: 2020 Rain Garden Adopters

## Volunteer Appreciation Summary

Due to covid we were not able to host an in-person volunteer event, so we sent a small gift to each volunteer on the Stream Team. Each volunteer was invited to choose a pocket field guide (\$5-\$7 each). Field guides were mailed to volunteers with handwritten thank you notes.



Figure 8: A sample of field guides selected by Stream Team Volunteers as gifts.



This document was prepared by the Winooski Natural Resources Conservation District, which is contracted by Chittenden County's MS4 Committee to run the RRST program.