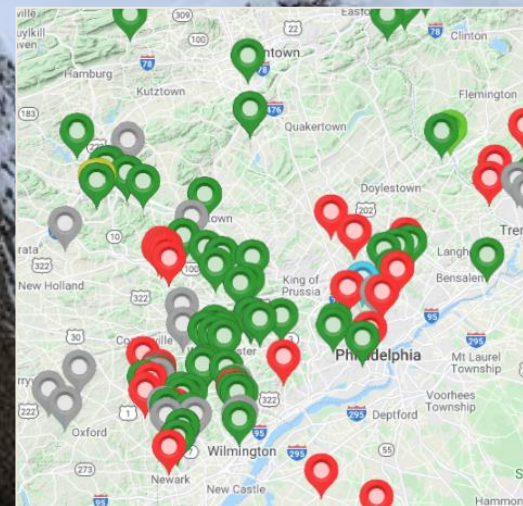


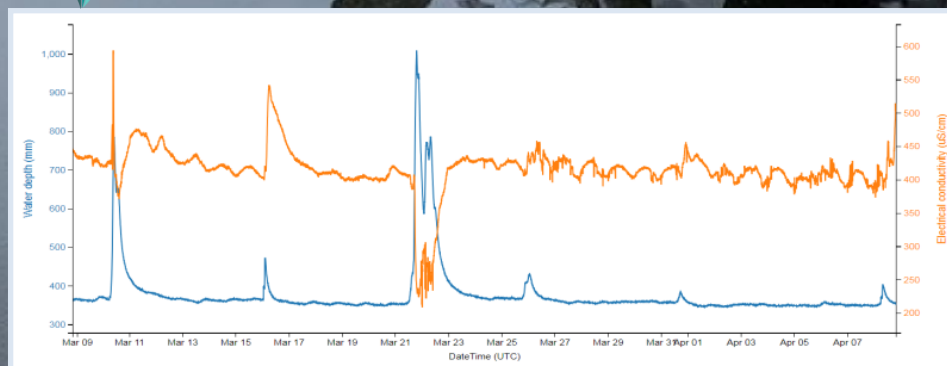
WELCOME!

Monthly EnviroDIY-DRWI User Group Meeting

Online, Thursday February 17, 2021, 2:30-3:30p



 **Monitor My Watershed®**



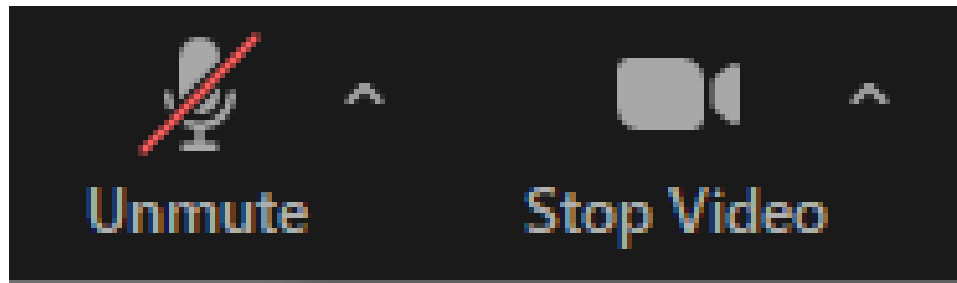
STROUD
WATER RESEARCH CENTER



Zoom Orientation



***Meeting is being recorded**



***Mute unless asking question**

These Monthly Meetings

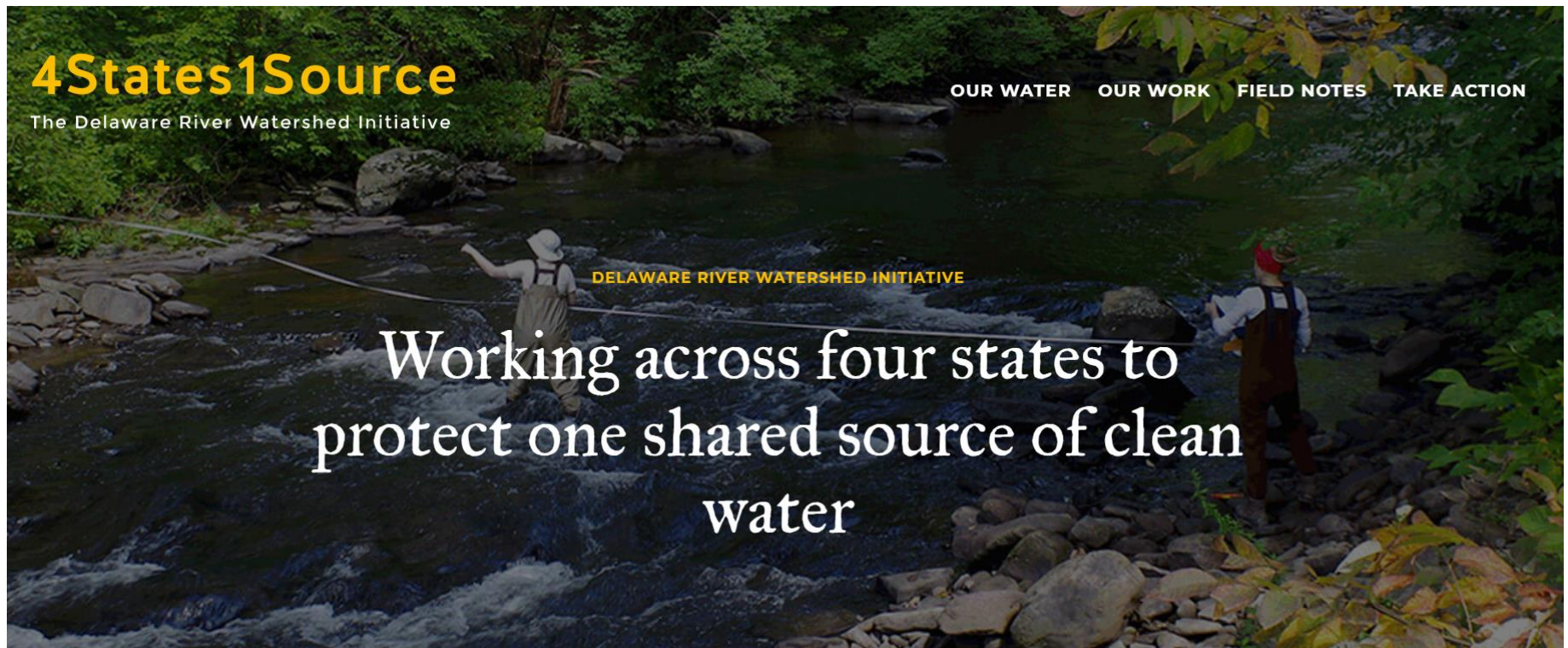
- Every third Thursday of the month
- 2:30-3:30p
- Zoom link will remain the same:
<https://us02web.zoom.us/j/81881801310?pwd=eUFmbXZLbmRibVcxa1dtNVhzRmNvZz09>
- Reminder email one week prior to each month's meeting
 - All are welcome, please share
 - And let us know if others should be added

REMINDER

- Attendees include:
 - Groups working in Delaware River Watershed Initiative (DRWI)
 - Groups working in Delaware River Basin (DRB) but not DRWI
 - Miscellaneous folks from outside the DRB
- Stroud Center support via DRWI and C-SAW

Delaware River Watershed Initiative (DRWI)

<https://4states1source.org/>



C-SAW

<https://www.c-saw.info/>



Home

What's Available?

Who's Eligible?

Who Provides Assistance?

Apply

News

Resources

Contact



What is C-SAW?

The Consortium for Scientific Assistance to Watersheds (C-SAW) is a team of specialists who provide *free* organizational and scientific technical assistance to Pennsylvania-based watershed and conservation organizations.

C-SAW does not conduct watershed monitoring or assessments. Instead, C-SAW helps watershed organizations do a better job with their own monitoring and assessments.

Goals for these monthly meetings

- Time to check-in, ask questions, report issues, network, etc.
- **Updates** from the Stroud Center
- **Presentations**
 - **Station Owner/Manager Presentations** – communicate about individual situations, local watershed work
 - **Focus Topic Presentations** – guest presenters talk about technical/ecological/other focus topics

****All of this to support gathering good data and using it purposefully***

Stroud Center project personnel

Stroud Center Facilitators:

David Bressler, Rachel Johnson, Christa Reeves, Shannon Hicks



Project facilitator



Research Engineer
Technician



Northern DRB
technician and
organization
collaborator



Research Engineer,
Mayfly and EnviroDIY
Inventor/Designer

Stroud Center project personnel

Master Watershed Steward Facilitators:

Carol Armstrong, George Seeds (Chester & Delaware Co.)



Master Watershed Steward Program



PennState Extension

Stroud Center project personnel

Stroud Center DRWI Leads:

Dr. John Jackson



Senior Research Scientist

Matt Ehrhart



Director of Watershed Restoration

Dr. David Arscott



Executive Director, President
Research Scientist

These Monthly Meetings

Recordings available at: <https://wikiwatershed.org/drwi/>



Search



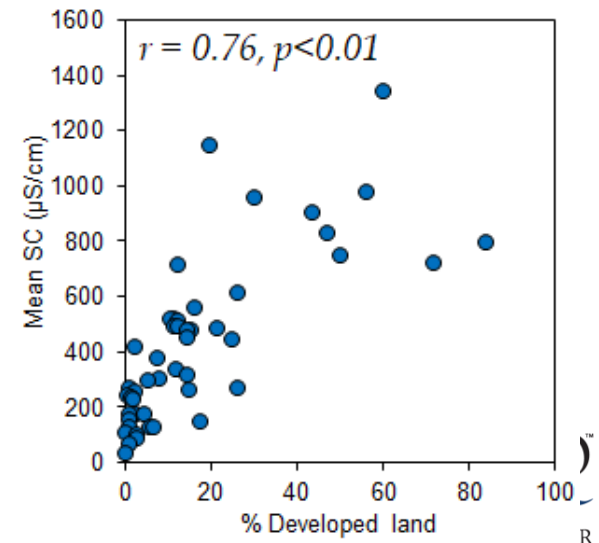
August 2020 EnviroDIY-DRWI Monthly Meeting

15 views • Aug 25, 2020

0 0 SHARE SAVE ...

Stroud Center Perspective – EnviroDIY in DRWI

- Primary Goal
 - Support Station owners, managers, and volunteers
 - Use stations for local purposes
- Secondary Goal
 - Analyze basin-wide data set
 - Develop tools to characterize and contextualize watersheds



Today's Agenda

1. Introduction
2. Stroud Updates
3. Presentations:
 - A Stream Runs Through it: Using Basic Stream Monitoring Tools to Query Local Trends and Concerns – Carol Armstrong, PA Master Watershed Steward, Chester/Delaware Co.
 - EnviroDIY technology updates – Shannon Hicks
4. Discussion
5. Conclusion

Stroud Center Updates

- Stroud Center (Rachel Johnson, Steve Mohapp, and Shannon Hicks) recent field support
 - Lots of cell board/mayfly replacements
 - >60 site visits across DRB recently



Stroud Center Updates



Problems with Digi cell boards

- NEW Shannon-designed cell boards – actively being replaced in DRB
 - Updated Mayfly Data Logger is usually replaced too
- ***If a station goes offline but battery was well above 3.5v then it's likely a cell board issue**

Stroud Center Updates

- Request for EnviroDIY blog posts for 2022!!
<https://www.envirodiy.org/blogs/>, types of blogs:
 - Technology (“Tips and Pointers”)
 - Organizational (“Showcase”)
 - Timely information (“News”)



NEWS

EnviroDIY Summer Camp Helps Students Build Skills and Monitoring Stations

by [Nancy Lilly](#) • 2021-09-29 • [No Comments](#)

Over the summer, all the stars lined up to make one perfect program: an EnviroDIY camp for high school students in Lynchburg, Virginia.



TIPS & POINTERS

My Experience Building an EnviroDIY Monitoring Station

by [Cheryl Nolan](#) • 2021-05-13 • [10 Comments](#)

Computer program downloading and circuit board wiring were not my forte, so the first thing I did was enlist the help of the most tech-savvy people I know.

***Contact Dave Bressler if you want to write a blog post**

Stroud Center Updates



- **Monitor My Watershed transition to Amazon Web Services** by Limnotech (Anthony Aufdenkampe)
 - Some folks have had to reboot stations
 - Refer to January 2022 monthly meeting recording for details
- **Make sure to register for an EnviroDIY.org account and sign up to get daily or weekly email updates from the Forum*

Stroud Center Updates



- New look and function on Monitor My Watershed as we transition to AWS




Stroud Center Updates

 [About](#) [Participate](#) [Mayfly](#) [Blog](#) [Forums](#) [Videos](#) [Shop](#) [Help](#) [Register](#) [Log In](#) 

An Initiative of Stroud Water Research Center

 [Subscribe](#)  [EnviroDIY on GitHub](#)



Welcome to EnviroDIY, a community for do-it-yourself environmental science citizens, conservation practitioners, municipal decision-makers, researchers, to EnviroDIY? [Start here](#)


[WikiWatershed](#), a web toolkit designed to help knowledge and stewardship of fresh water. **New**

Did you know you can buy the Mayfly Data Logger and other EnviroDIY products in bulk at a discount in [our Shop](#)? You'll also find products there that aren't available on [Amazon.com](#)

Status update on MMW?

[Home](#) > [Forums](#) > [Monitor My Watershed](#) > Status update on MMW?

Viewing 18 reply threads

Author	Posts
	Just wondering if we could please get a status update on MMW. Most of our sites have now been offline for ~21 hours. My colleague replaced a Mayfly and modem this morning (for a separate issue), and its data began

Search the Forums

Mayfly Data Logger Forum

Other Data Loggers Forum

Infrastructure and Equipment Forum

Environmental Sensors Forum

Monitor My Watershed

Miscellaneous Questions Forum

FORUM SPOTLIGHT

[Most popular topics](#)

[Topics with no replies](#)

Stroud Center Updates

- **EnviroDIY Build Workshop scheduled for April 27-28, 2022**
 - **Details and to register:**
<https://www.envirodiy.org/events/>



Stroud Center Updates

- Recent media coverage – salt in streams, <https://stroudcenter.org/media-coverage/>



<https://www.fox29.com/news/experts-explain-how-leftover-road-salt-impacts-water-sources>

Stroud Center Updates

- Recent media coverage – salt in streams, <https://stroudcenter.org/media-coverage/>



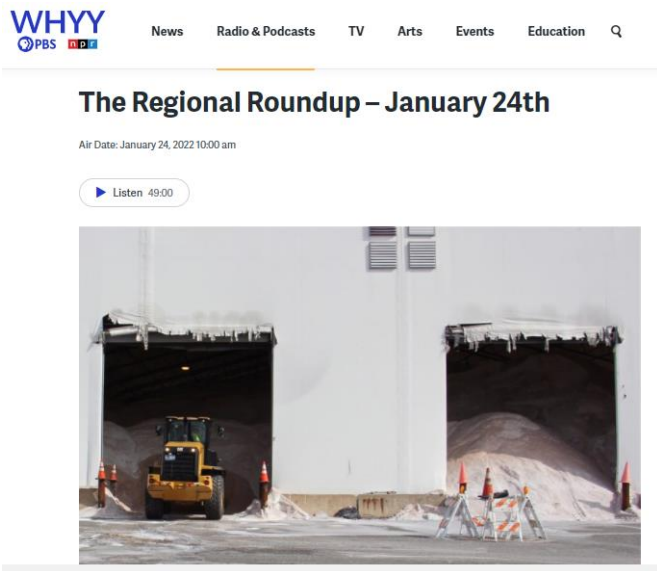
<https://www.inquirer.com/news/philadelphia-salt-roads-environment-delaware-river-brandywine-tookany-tacony-20220111.html>



<https://www.inquirer.com/news/pennsylvania-philadelphia-streams-impaired-pollution-dep-20220119.html>

Stroud Center Updates

- Recent media coverage – salt in streams, <https://stroudcenter.org/media-coverage/>



While using salt to make roads safer in the winter looks like a cheap and effective option, what's the true cost? We'll discuss the shockingly high level of chloride in our local freshwater streams and how it's harming infrastructure, drinking water and marine life that should be thriving.

Guest: [John Jackson](#), Senior Research Scientist at [Stroud Water Research Center](#) (@StroudCenter)

<https://whyy.org/episodes/the-regional-roundup-january-24th/>



<https://www.witf.org/2022/02/04/road-salt-hazardous-to-the-environment/>



Stroud Center Updates

• Recent media coverage – salt in streams

← Tweet



TTF Watershed
@TTFWatershed

Be sure to watch @CBSPhilly with @LaurenCBS3 later today to learn about why #salt is hazardous to our #creeks! @StroudCenter @VCRWSteam @TempleGUS #4states1source @AbingtonEAC @cheltenhameac



Tookany/Tacony-Frankford (TTF)
Watershed Partnership

Jan 9

With the winter season upon us, it's important to recognize that snow and ice bring more than just beautiful views.

Salt is applied to roads and this salt has a big impact on our waterways.

We have been working with our Partners at Stroud Water Research Center to reinvent our fact sheet on road salt.

The factsheet provides data from our volunteers participating in the Winter Salt Watch, as well as other continuously grabbed sample data to show the scope of challenges associated with road salt use in our watershed.

Check out the full fact sheet here:
<https://ttfwatershed.org/resource/road-salt-factsheet/>

#TTFWatershed #Salt #RoadSalt #Winter
#Watershed #Philly #Philadelphia #CleanWater

[Read less](#)



Musconetcong Watershed Association

Jan 17

With winter brings snowy forecasts, and we look to preventative measures like road salt to keep us safe. Despite the benefits of road salt, using too much can cause detriment to our freshwater rivers, streams, and lakes.

Stroud Water Research Center took a closer look at the impact of road salt to water quality:

<http://ow.ly/Ng0t50HvvwS>

[Read less](#)



The Trouble With Road Salt

[ow.ly](#)



The Nature Conservancy in
Pennsylvania

Jan 20

In this article, our partners at Stroud Water Research Center talk about the effects of road salt on our streams and rivers and how volunteers and organizations throughout the Delaware River watershed are working together to monitor what's happening to their freshwater resources.

Jeff Chambers, a volunteer with The Nature Conservancy's Stream Stewards program, says, "In the years ahead, I believe those of us who care deeply about our environment will increasingly turn to organizations like the William Penn Foundation, Stroud Water Research Center, the National Park Service, and The Nature Conservancy to protect our natural resources. With their help and guidance, it will be us, the community scientists, who will become the stewards of our air, land, and water."

<https://nature.ly/3fKN1iY>

[Read less](#)



The Trouble With Road Salt

[nature.ly](#)

Stroud Center Updates

- Recent media coverage – salt in streams

Special issue of the Stroud Center's Upstream newsletter:

<https://stroudcenter.org/news/the-trouble-with-road-salt/>

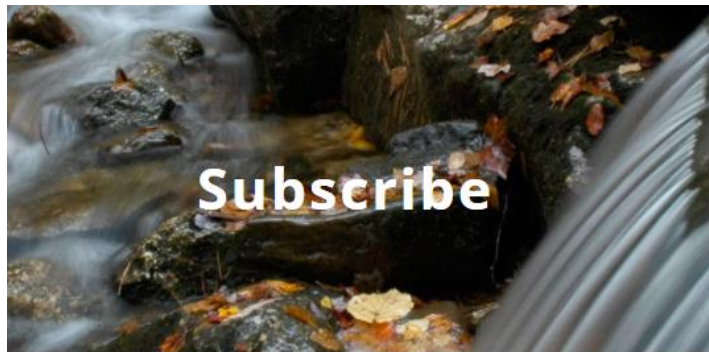


Welcome to a special issue of [UpStream Newsletter](#). Here we take a closer look at the effects of road salt on our

Stroud Center Updates

- **Consider subscribing to Stroud Center's e-news**

<https://stroudcenter.org/subscribe/>



Subscribe to Freshwater E-News

We use MailChimp as our marketing automation platform. By submitting this form, you acknowledge that the information you provide will be transferred to MailChimp for processing in accordance with their [Privacy Policy](#) and [Terms](#).

Stroud Center Updates

- Survey on monitoring and c*science terminology



Stroud Water Research Center Monitoring Terminology Survey

Your feedback on the following survey will help the Stroud Center refine its communications about monitoring efforts in the Delaware River Basin and elsewhere. Your help is greatly appreciated.

**Expect to receive an email within the next week with this survey included.*

Your feedback is appreciated! It will help the Stroud Center in communicating about the work.

Stroud Center Updates

- Pilot study by the Stroud Center on salt in tap water
- A simple survey of chloride concentration and conductivity of tap water



Salt in Tap Water

A Survey in the Delaware River Basin

Delaware River Basin Survey of Salt in Tap Water

Please use Chloride QuanTab® Test Strips, 30-600 mg/L (<https://www.hach.com/chloride-quantab-test-strips-30-600-mg-l/product?id=7640211602>) or another chloride measurement method and a calibrated conductivity meter (e.g., Hanna DiST®3 Waterproof EC Tester, <https://www.hannainst.com/hi98303-dist-3-ec-tester.html>) to measure the tap water in your home and/or office.

*Note: if you have a water softener in your house or office, please take your sample from an outdoor tap that is not treated with the softener.

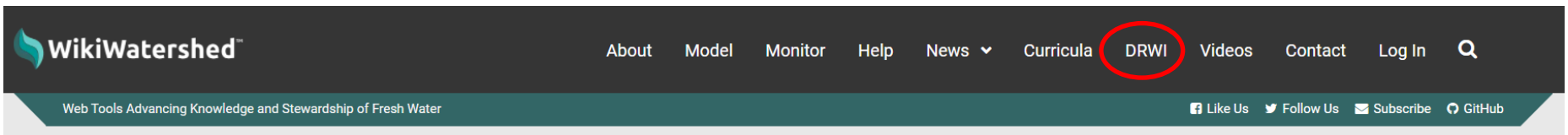
To enter data from more than one location, submit the form and use the "Submit another response" link.

**Expect to receive an email within the next two weeks with this survey protocol included.*

Feel free to pass it on to others.

Stroud Center Updates

- Reminder on resources available at <https://wikiwatershed.org/drwi/>
- <https://wikiwatershed.org>



Use the links below to jump to a specific section of this page.

General Resources

- [EnviroDIY Field Visit Data](#)
- [EnviroDIY Monitoring Station Help Resources](#)
- [Salt Monitoring Resources](#)
- [Data and Data Visualization Resources](#)
- [Volunteer Management Guidance Materials](#)
- [WikiWatershed Toolkit](#)
- [Project Updates](#)

Meetings, Workshops, and Conferences

- [Monthly EnviroDIY-DRWI User Group Meetings](#)
- [User Support Workshops and Trainings](#)
- [Conference Presentations](#)
- [Watershed Ecology Workshops](#)

EnviroDIY Field Visit Data

EnviroDIY Field Visit Data Form (Online)

Any questions before we move on?



Monthly Presentations

- A Stream Runs Through it: Using Basic Stream Monitoring Tools to Query Local Trends and Concerns – Carol Armstrong, PA Master Watershed Steward, Chester/Delaware Co.
- EnviroDIY technology updates – Shannon Hicks

Future meetings

- March 17, 2022 – Presentation???

Mentors currently available

- Carol Armstrong (MWS), mnem.np@gmail.com, 610-659-7477
- George Seeds (MWS), geoseeds@verizon.net, 484-886-9586
- Rachel Johnson (Stroud Center), rjohnson@stroudcenter.org, 973-557-8995
- Christa Reeves (Stroud Center)(in the north, situational), christa@musconetcong.org, 727-520-5849

****Anyone else interested? If so get in touch with Stroud Center or Carol or George***

Conclusion

Next month's meeting will be on:

Thursday March 17, 2021
2:30-3:30p

Onward!

Stroud Water Research Center, EnviroDIY-DRWI contacts:

- David Bressler, dbressler@stroudcenter.org, 410-456-1071
- Shannon Hicks, shicks@stroudcenter.org, 610-268-2153 x267
- Rachel Johnson, rjohnson@stroudcenter.org, 973-557-8995
- Christa Reeves, christa@musconetcong.org, 908-537-7060

Master Watershed Stewards, EnviroDIY-DRWI contacts:

- Carol Armstrong, mnem.np@gmail.com, 610-659-7477
- George Seeds, geoseeds@verizon.net, 484-886-9586