

WELCOME!

Monthly EnviroDIY-DRWI User Group Meeting

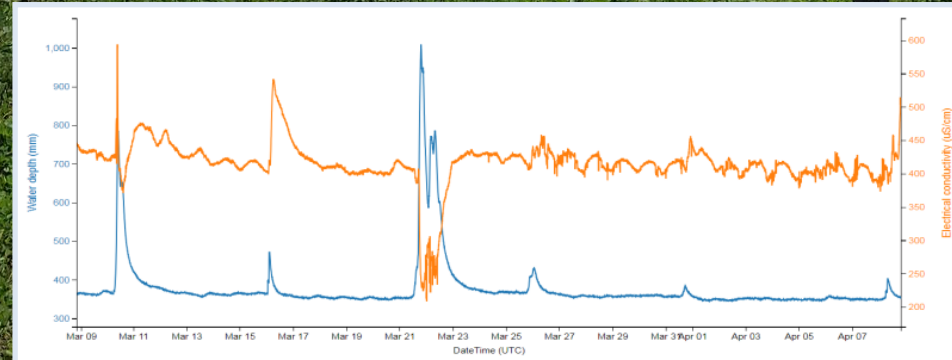
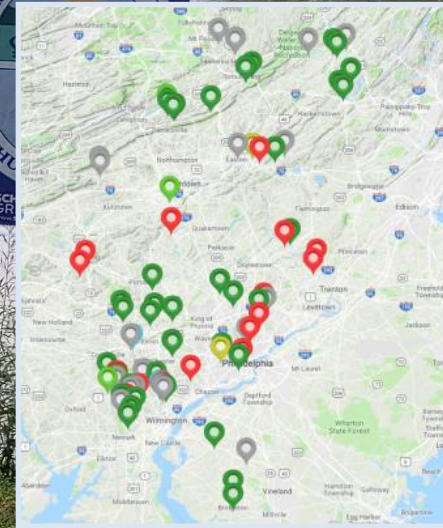
Online, Thursday May 20, 2021, 2:30-3:30p



 **EnviroDIY**



 **Monitor My Watershed®**



STROUD
WATER RESEARCH CENTER

These Monthly Meetings

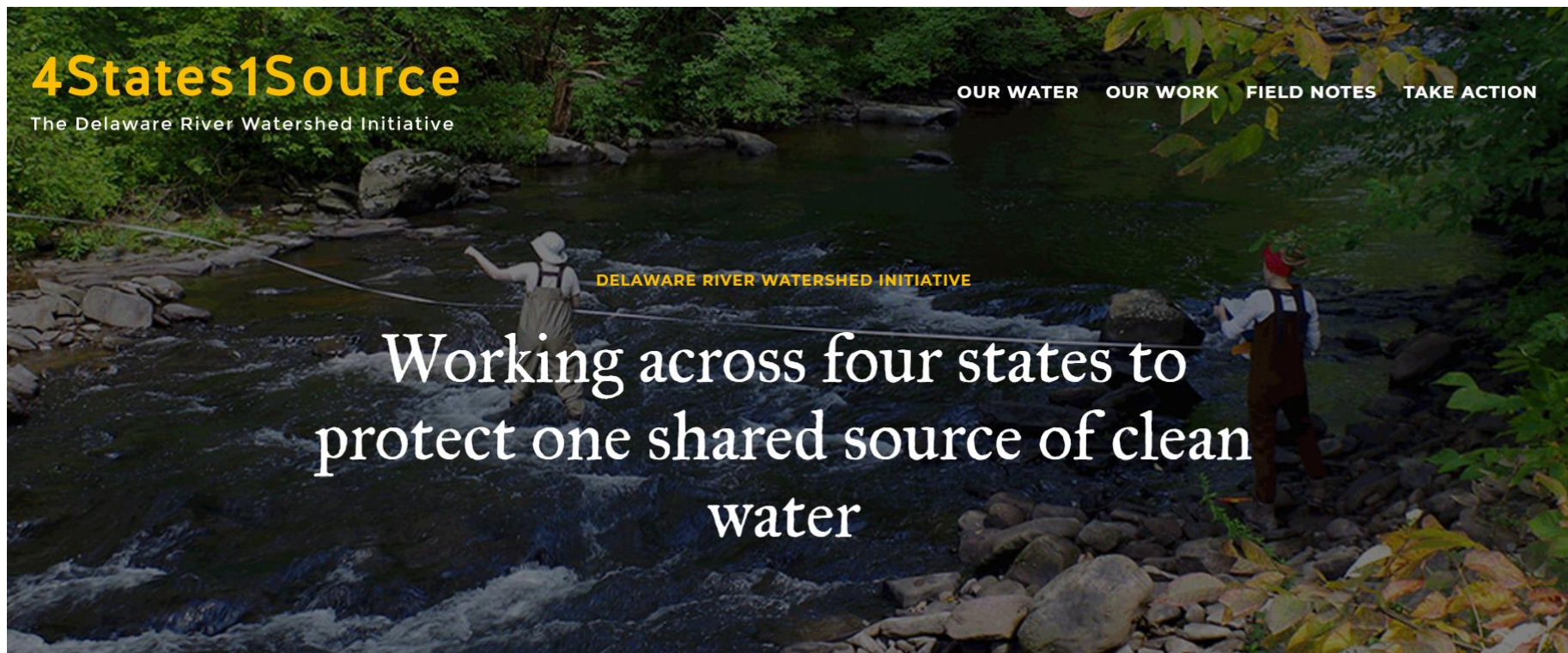
- Every third Thursday of the month
- 2:30-3:30p
- Zoom link will remain the same:
<https://us02web.zoom.us/j/81881801310?pwd=eUFmbXZLbmRibVcxa1dtNVhzRmNvZz09>
- Reminder email will be sent one week prior to each month's meeting
 - Station owners/managers organize volunteers/others to attend and share Zoom link

REMINDER

- Attendees include:
 - Groups working in Delaware River Watershed Initiative
 - Groups working in Delaware Basin but not DRWI
- Stroud Center support via DRWI and C-SAW

Delaware River Watershed Initiative

<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/space to check-in, ask questions, report issues, network, etc.
- Updates from 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***

Facilitators

Stroud Center Facilitators:

David Bressler, Rachel Johnson, Christa Reeves, Shannon Hicks



Master Watershed Steward Facilitators:

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

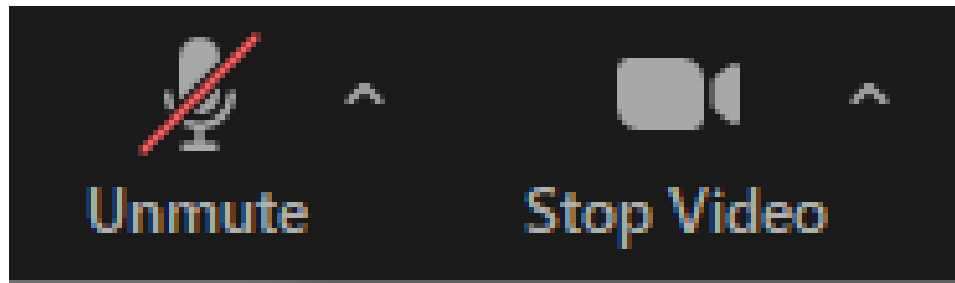




Zoom Orientation



***Meeting is being recorded**



***Mute unless asking question**

These Monthly Meetings

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



Search



August 2020 EnviroDIY-DRWI Monthly Meeting

15 views • Aug 25, 2020

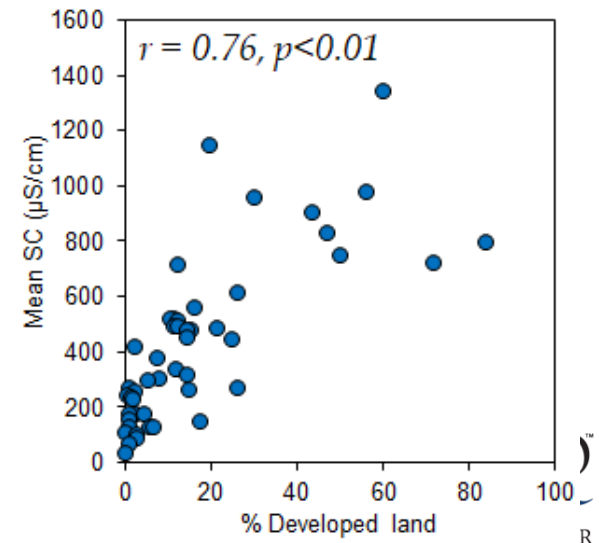
0 0 SHARE SAVE ...

Today's Agenda

1. Introduction
2. Stroud Updates
3. Presentation – John Jackson, Stroud Water Research Center
4. Discussion
5. Conclusion

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



Stroud Center Updates

**EnviroDIY Troubleshooting Workshop
(virtual), June 23, 2021, 1-4p,
registration:**

<https://forms.gle/XAQ634gjCaVwu3zS6>

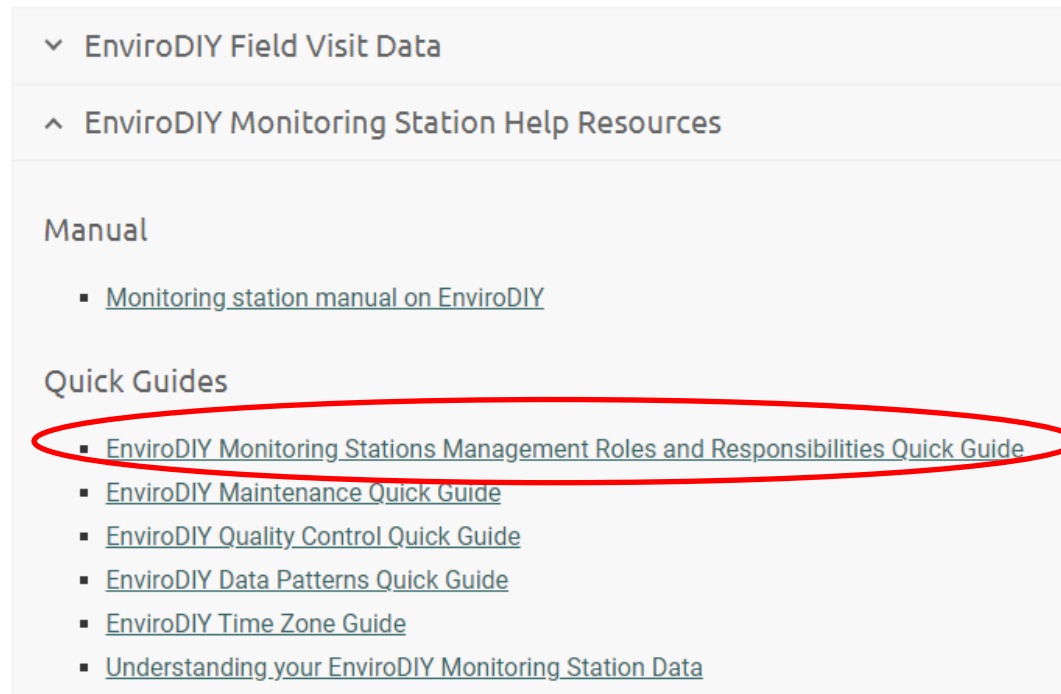
***Paste into chat**

Stroud Center Updates

Quick Guide: Recommended Roles/Responsibilities for Managing an EnviroDIY Monitoring Station

Located at: <https://wikiwatershed.org/drwi/>

General Resources



▼ EnviroDIY Field Visit Data

▲ EnviroDIY Monitoring Station Help Resources

Manual

- [Monitoring station manual on EnviroDIY](#)

Quick Guides

- [EnviroDIY Monitoring Stations Management Roles and Responsibilities Quick Guide](#)
- [EnviroDIY Maintenance Quick Guide](#)
- [EnviroDIY Quality Control Quick Guide](#)
- [EnviroDIY Data Patterns Quick Guide](#)
- [EnviroDIY Time Zone Guide](#)
- [Understanding your EnviroDIY Monitoring Station Data](#)

Stroud Center Updates

Station Owner/Manager – ensuring station is managed properly

- Assign individuals to the following roles: 1) desktop monitoring of station functionality via Monitor My Watershed, 2) sensor cleaning and station maintenance, and 3) quality control (QC)
- Track above tasks and make sure that they are being accomplished
- Ensure Hologram cell plan is paid to ensure data transmission to Monitor My Watershed
- Contact Stroud Center with any issues (dbressler@stroudcenter.org)

Desktop monitoring of station functionality via Monitor My Watershed (Daily)

- Check site(s) of interest on a daily basis via Monitor My Watershed:
 - On “Browse Sites” map: Is the station live (i.e., dark green)?
 - Are the quick view data panels showing expected data ranges?
 - Are there any abnormal numbers/patterns in quick view data panels or in Time Series Analyst graphs?
- Contact station owner/manager, maintenance, and/or QC people with any issues identified (e.g., sensor fouling, low battery)
- Any unknowns contact station owner/manager and Stroud Center (shicks@stroudcenter.org; rjohnson@stroudcenter.org; dbressler@stroudcenter.org)

Sensor cleaning and station maintenance (Weekly)

- Visit station at least once a month (weekly is recommended)
- Clean sensor(s)
- Clear sediment and debris from under and near sensor(s)
- Clear vegetation and debris from around the logger and solar panel
- Complete Field Visit Data sheet and enter into online form via <https://wikiwatershed.org/drwi/>
- Reference EnviroDIY Maintenance Quick Guide as needed

Conduct Quality Control (Quarterly)

- Use calibrated hand-held meter to cross check station conductivity and temperature data
 - If turbidity is a high priority, conduct cross check using a turbidity tube or turbidity meter when conditions are suitable (i.e., when water is cloudy/muddy enough to assess turbidity data)
- Use metric ruler and on-site QC rebar pin (or staff gauge) to cross check station depth data
- Swap microSD card with blank SD card and save data to secure location
- Complete Field Visit Data sheet and enter into online form via <https://wikiwatershed.org/drwi/>
- Reference EnviroDIY Quality Control Quick Guide as needed

Stroud Center Updates

<https://www.envirodiy.org/blogs/>

My Experience Building an EnviroDIY Mayfly Monitoring Station



By [Cheryl Nolan](#) on 2021-05-13

[No Comments](#)

The First EnviroDIY Unit

My background is in mechanical engineering technology, so computer program downloading and circuit board wiring were not even close to being my forte. So, the first thing I did was enlist the help of the most tech-savvy people I know, Mike Hewitt and Steve Cornia, from [Eastern Pennsylvania Coalition for Abandoned Mine Reclamation](#) (EPCAMR). Thankfully, Steve had some experience working with Arduino boards and sketches in the past. In addition, these two guys do a lot of electronic monitoring of abandoned mine drainage in northeast Pennsylvania, and they were willing to help out on the first unit.

Stroud Center Updates

Manage My Watershed (<https://managemywatershed.org/>)

Newest Stories

[See all stories »](#)



[How to See a Stream: Part One, Stream Health Dynamics](#)



Dave Bressler / No Comments

Streams and the valleys they drain are complex environments. This complexity makes regulating, restoring, and protecting these aquatic systems a ...



[An Interview With Pete Goodman](#)



Carol Armstrong / 1 Comment

Wisdom and advice on watershed protection from a prodigious environmental leader you've (possibly) never heard of ...



[Saving Primrose Creek](#)



Francis Collins / 2 Comments

Uh-oh! Alert! Water Depth Dropping! It is January 30, 2021, at 1:35 PM (UTC-5:00). In two hours, streamflow at Phillips ...

Stroud Center Updates



Current volatility of cell boards

- The Stroud Center team is diligently investigating more reliable and sustainable tech improvements
- Shannon Hicks, Sara Damiano will have more info soon

Stroud Center Updates

- Monitor My Watershed is working again!
 - See EnviroDIY.org forum for explanations – See @aufdenkampe; <https://www.envirodiy.org/topic/mmw-not-receiving-data/>

Any questions before we move on?



Monthly station owner/manager presentation

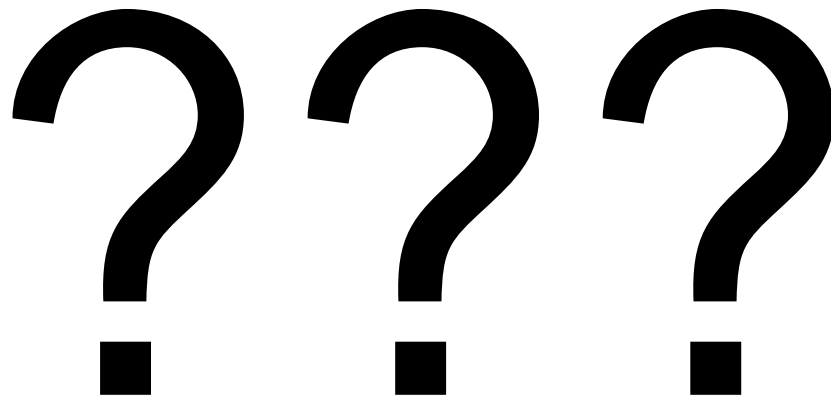
Importance of Water Temperature



Dr. John Jackson, Stroud Water Research Center,
jkjackson@stroudcenter.org

Zoom Survey

Questions for the presenter?



Future meeting presenters

- June 17 – ?? Suggestions??
- July 15 – Mike Burns, Villanova University (Naylors Run)
- August 19 – Jake Lemon and Matt Barney, Trout Unlimited

***Please be in touch if you'd like to do an owner/manager presentation or a focus topic presentation**

Reminder: Resources to Support the Work

<https://wikiwatershed.org/drwi/>

General Resources

- ✓ EnviroDIY Field Visit Data
- ✓ EnviroDIY Monitoring Station Help 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

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- **Station owners/managers organize volunteers/others to attend and share Zoom link**

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***

Resources to Support the Work

- **Delaware Basin EnviroDIY Monitoring Stations**, private online group (<https://wikiwatershed.org/groups/delaware-basin-sensor-stations/>)

Delaware Basin EnviroDIY Monitoring Stations



- Pose questions to the user group community
- Check for updates and new posts
- Set it for daily or weekly email updates

Conclusion

Next month's meeting will be on:

Thursday June 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