

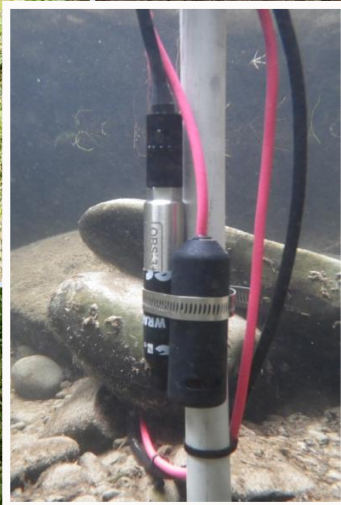
# WELCOME!

## Monthly EnviroDIY-DRWI User Group Meeting

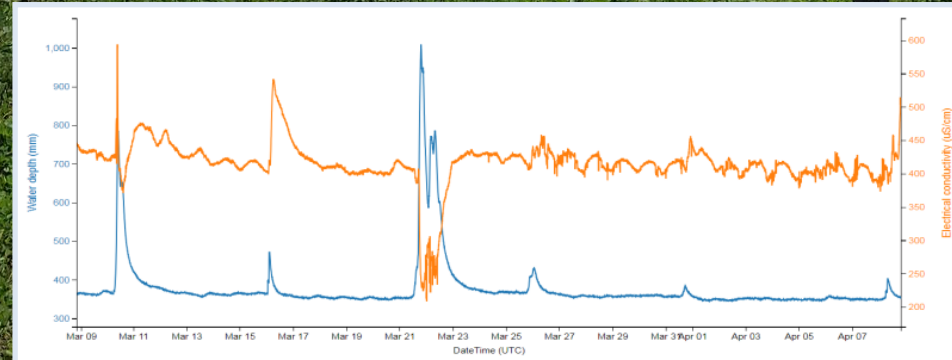
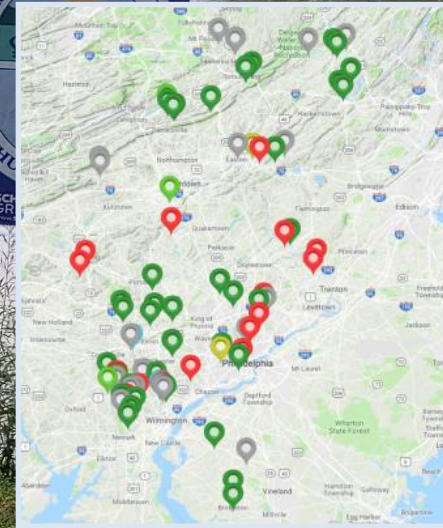
*Online, August 20, 2020, 2:30-3:30p*



 **EnviroDIY**



 **Monitor My Watershed®**



**STROUD**  
WATER RESEARCH CENTER



# Monthly EnviroDIY-DRWI User Group Meeting

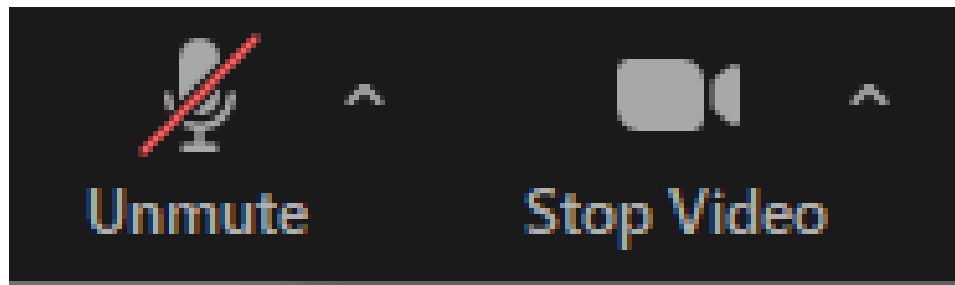
First Meeting!



# Zoom Orientation



**\*We WILL be recording presentations but  
WILL NOT be recording the Questions  
section**



**\*Everyone should be  
muted other than current  
speaker**

\*Other than zoom logistics, audio, video etc. please save questions for the question period

# Introductions

## Stroud Center Facilitators:

David Bressler, Rachel Johnson, Christa Reeves, Shannon Hicks



## Master Watershed Steward Facilitators:

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



# Monthly Meetings

- Every third Thursday of the month
- 2:30-3:30p
- Zoom link will remain the same
- 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

# Monthly Meeting Agenda Format

1. Introduction – 5-10 min
2. Monthly station owner/manager presentation – 10 min
3. Monthly focus topic – 10 min
4. Open discussion – 25 min
5. Conclusion – 5-10 min

***\*Adjust this format according to natural progression/development/needs of meetings***



# Today's Agenda

1. Introduction, review agenda, updates – 5-10 min
2. Monthly station owner/manager presentation – 10 min
  - Christa Reeves, Musconetcong Watershed Association and Stroud Water Research Center
3. Monthly focus topic: Power/battery questions, issues, and recommendations – 10 min
  - Rachel Johnson, Stroud Water Research Center
4. Open discussion – 25 min
  - Discuss questions from attendees, address technical issues, review projects, goals, logistics
5. Conclusion – 5-10 min

# Goals for these monthly meetings

- Time/space to check-in, ask questions, report issues, network, etc.
- Station owners/managers to communicate about their individual situations
- Educate on important technical/ecological/other focus topics each month.
- Updates from Stroud Center

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



# Delaware River Watershed Initiative

**4States1Source**

The Delaware River Watershed Initiative

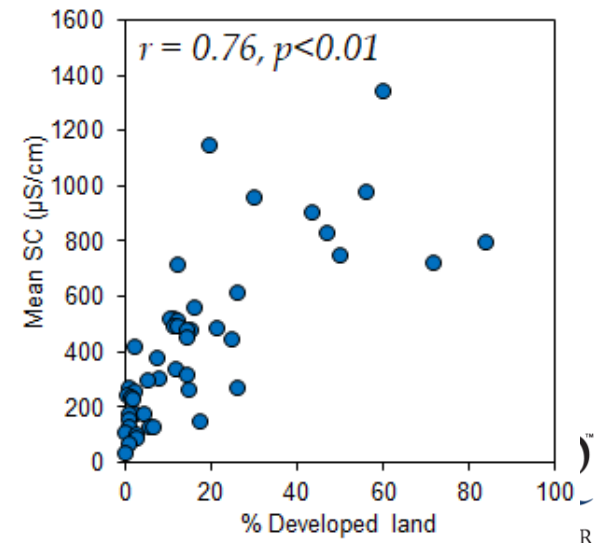
[OUR WATER](#) [OUR WORK](#) [FIELD NOTES](#) [TAKE ACTION](#)

DELAWARE RIVER WATERSHED INITIATIVE

Working across four states to  
protect one shared source of clean  
water

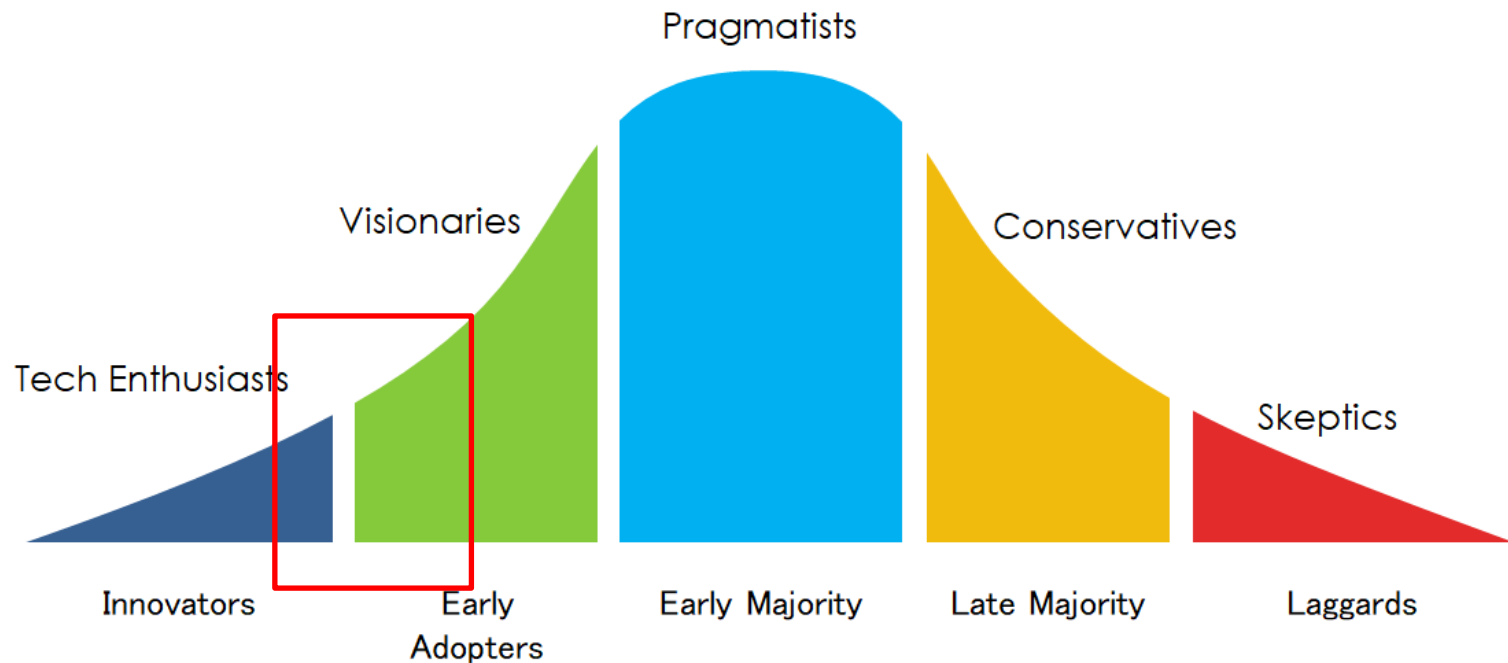
# Stroud Center Perspective – EnviroDIY in DRWI

- **Primary Goal**
  - Support Station owners, managers, and volunteers in maintaining stations and using them for their own purposes
- **Secondary Goal**
  - Analyze basin-wide data set
  - Develop tools for station owners to characterize and contextualize watersheds



# It's a new project with a new product

## Product Adoption Curve





Any questions before we move on?





# Monthly station owner/manager presentation

## Musconetcong River, NJ and surrounding watersheds



**Christa Reeves, Water Quality Field Specialist, Musconetcong Watershed Association;  
Field Technician, Stroud Water Research Center**

# Monthly Focus Topic

Power/battery questions, issues, and recommendations



**Rachel Johnson, Research Engineer Technician,  
Stroud Water Research Center**



# Questions/Discussion

- Questions for today's presenters?
  - Questions about your station(s)?
  - Questions about field visits and Quality Control?
  - Questions about Monitor My Watershed?
  - Questions about data patterns, ecology?
  - Questions about troubleshooting?
- \*Everyone video on**

# Back up discussion topics

- Covid-19 issues
- 4G upgrades by end of 2020
- Recent storm issues
  - Checking stations in person
  - Importance of latching logger boxes
  - Importance of checking stations even if data look good, e.g., Reeves recent turbidity sensor burying situation
  - Channel changes, e.g, Valley Creek at Valley Creek Park
  - Importance of QC depth, e.g., Taylor Run
- Pressure transducer failure
  - Temperature/Depth correlation as a sign for pressure transducer failure, e.g., Forest Hill Run
  - Negative depth, e.g., UT to Cobbs
  - Out of range depth, e.g., Loper Run
- Temperature data in ecological context, coldwater fish, etc.



# Conclusion

Next month's meeting will be on:

**Thursday September 17, 2020,  
2:30-3:30p**



# Monthly Meetings

- Every third Thursday of the month
- 2:30-3:30p
- Zoom link will remain the same
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  - Station owners/managers organize volunteers/others to attend and share Zoom link

# Future meeting presenters

- Monthly station owner/manager presentations
  - September – Carol Armstrong, Pickering Creek stations
  - October – George Seeds and Patty Haug, West Chester, PA stations
  - November – ???
- Monthly focus topics
  - September – Temperature data?
  - October – CTD pressure transducer and depth data?
  - November – Importance of Quality Control?

# Adjusting meeting template as needed

- Sign-up form for monthly station owner/manager presentations?
- Submission form (or other method) for proposing monthly focus topics?
- Submission form (or other method) for attendees to submit discussion questions in advance?
- Monthly site-specific data investigations – monthly in-depth look at an individual station's data and the watershed?



# Mentors currently available

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

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

## Delaware River Watershed Initiative Resources

### EnviroDIY Field Visit Data Sheet

- [Enter field visit data](#)
- [View field visit data](#) (Looking for [older data](#)?)

### Data Sheets

- [EnviroDIY Field Visit Data sheet \(blank\)](#)
- [EnviroDIY Field Visit Data sheet tutorial](#)
- [Stream Discharge Data sheet](#)

### Data and Data Visualization Resources

- [Monitor My Watershed](#)
- [Monitor My Watershed help resources](#)
- <http://drwisensors.dreamhosters.com/>

## Sensor Station Help Resources

### Manuals

- [DRWI sensor station manual](#) (more complete, access limited to DRWI users)
- [Sensor station manual](#) (formal, publicly available version)

### Quick Guides

- [Data patterns quick guide](#)
- [Time zone guide](#)
- [Maintenance quick guide](#)
- [Quality control quick guide](#)
- [Understanding your EnviroDIY Mayfly sensor station data](#)

### Video Tutorials

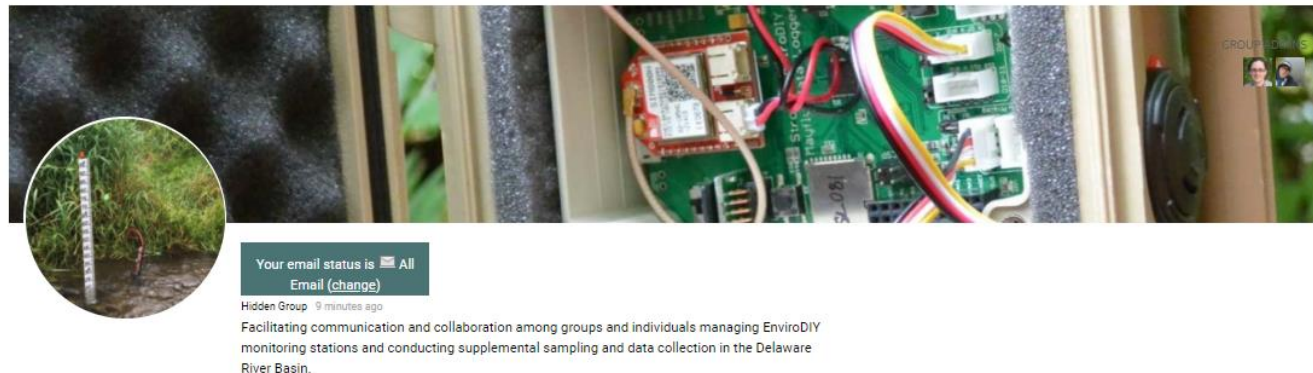
- [Sensor station installation](#)
- Discharge rating curve calculator: [Using Flowmeter Data](#) | [Using Neutrally Buoyant Object Data](#)
- Load calculator: [Part 1, Entering Rating Curves](#) | [Part 2, Preparing Sensor Data](#) | [Part 3, Calculating Storm](#)
- [Stage to Area Predictor: Entering Cross Section Data](#)
- [Sensor Bundle Maintenance: Sensor Cleaning and Bundle Removal](#)
- [Collecting a Grab Sample and Building Site Rating Curves](#)
- [Performing Quality Control on the Site and Sensor Station](#)
- [Downloading Sensor Station Data](#)
- [Installing a Staff Gauge at Your Sensor Station Site](#)

# Resources to Support the Work

- **Private Online Group**

- “Delaware Basin Sensor Stations” private online group  
(<https://wikiwatershed.org/groups/delaware-basin-sensor-stations/>)  
name change to “**Delaware Basin EnviroDIY Monitoring Stations**”

Delaware Basin EnviroDIY Monitoring Stations



- Get familiar with this online group, use it to:
  - Pose questions to the user group community
  - Check for updates and new posts
  - Set it for daily or weekly email updates



# Onward!

Stroud Water Research Center, EnviroDIY DRWI contacts:

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

Master Watershed Stewards, EnviroDIY DRWI contacts:

- Carol Armstrong, [mnem.np@gmail.com](mailto:mnem.np@gmail.com), 610-659-7477
- George Seeds, [geoseeds@verizon.net](mailto:geoseeds@verizon.net), 484-886-9586