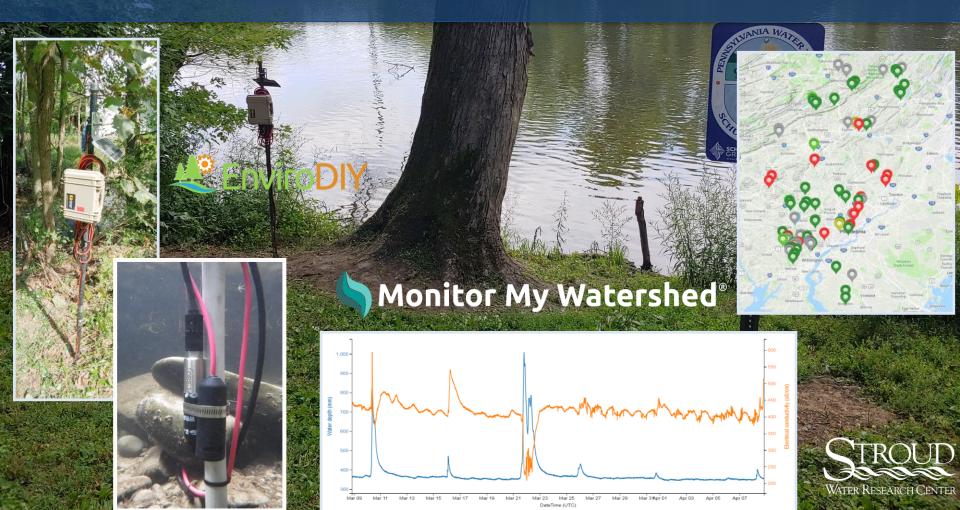
WELCOME!

Monthly EnviroDIY-DRWI User Group Meeting

Online, Thursday November 19, 2020, 2:30-3:30p



Monthly EnviroDIY-DRWI User Group Meeting

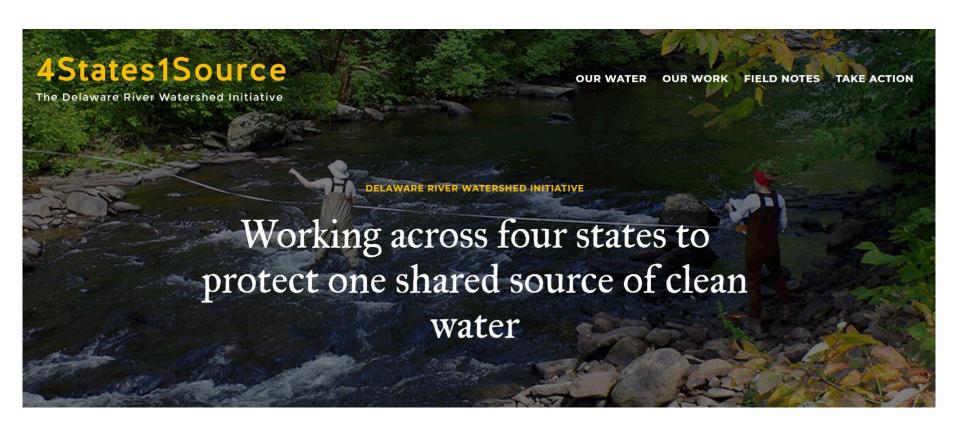


REMINDER

- This is a time for anyone working with EnviroDIY monitoring stations in the Delaware River Basin to check in with Stroud, ask questions of the group, bring up issues, network, and learn
- Attendees include:
 - Groups working directly in Delaware River Watershed Initiative
 - Groups working in Delaware Basin but not specifically in the context of the DRWI
- Stroud Center is able to support groups in using the stations via DRWI Funds (and also Consortium for Scientific Assistance to Watersheds, C-SAW)



Delaware River Watershed Initiative





Goals for these monthly meetings

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

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



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=eUFmbXZLbmRibV cxa1dtNVhzRmNvZz09
- 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



Facilitators

Stroud Center Facilitators:

David Bressler, Rachel Johnson, Christa Reeves, Shannon Hicks









Master Watershed Steward Facilitators:

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











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



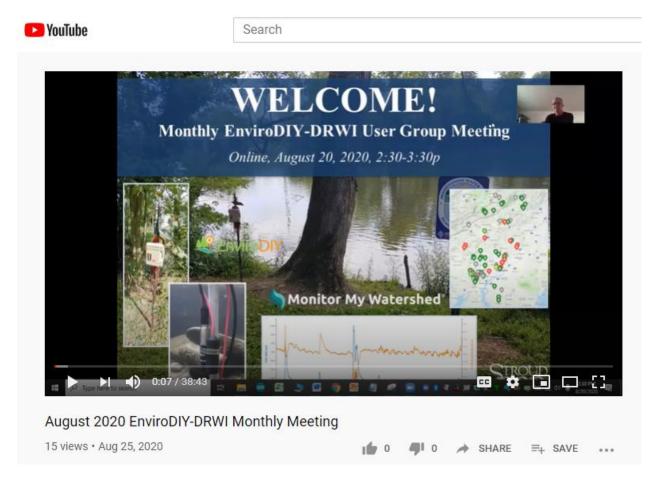
*Everyone should be muted other than current speaker

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



These Monthly Meetings

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





Monthly Meeting Agenda Format

- 1. Introduction
- 2. Monthly station owner/manager presentation
- 3. Monthly focus topic
- 4. Open discussion
- 5. Photos of the month!
- 6. Conclusion

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



PLEASE, share photos

http://bit.ly/2SmhZBK

Shared with me > DRWI Sensor Station Photos >

Name ↑	Owner	Last modified
_Field and Station Issues	me	Oct 15, 2020 me
_MonthlyMeetings_PhotosoftheMonth	me	11:38 AM me
_oldformat	me	10:32 AM me
	me	Aug 29, 2019 me



Today's Agenda

- 1. Introduction, review agenda, updates 5-10 min
- 2. Monthly station owner/manager presentation 15-20 min
 - Cobbs Creek watershed monitoring an impervious and piped watershed for potential "daylighting" and neighborhood-wide green BMPs – Derron LaBrake, Darby Creek Valley Association
- 3. Monthly focus topic -10-15 min
 - Electrical Conductivity in Streams, Part 1 John Jackson, Stroud Water Research Center
- 4. Open discussion 10-20 min
 - Discuss questions from attendees, address technical issues, review projects, goals, logistics
- 5. Conclusion 5-10 min



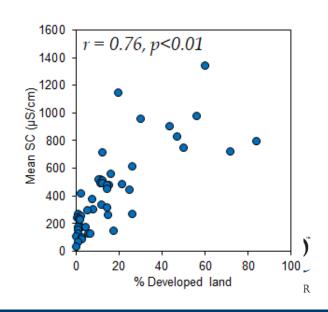
Stroud Center Perspective – EnviroDIY in DRWI

Primary Goal

- Support Station owners, managers, and volunteers
 - Maintaining stations
 - Using stations for their own purposes

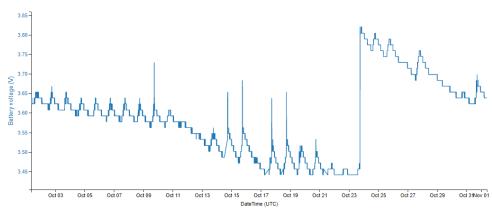


- Secondary Goal
 - Analyze basin-wide data set
 - Develop tools for station owners to characterize and contextualize watersheds



 Fall is leaves in the stream fouling sensors time and for battery drain!





- This is just another example of the need to:
 - Check Monitor My Watershed regularly (daily is ideal)
 - Visit station regularly (weekly or biweekly)
 - Conduct QC quarterly AND/OR when sensor readings look suspicious
 - Swap batteries as needed

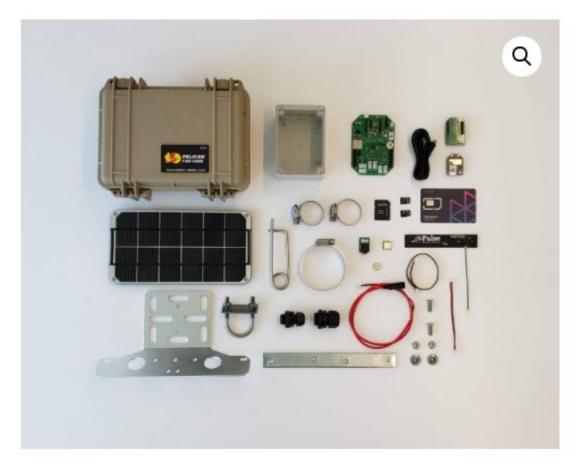
 New battery charger available – AVAILABLE IN LIMITED SUPPLY FROM STROUD (requires modification from supplier)



Recommended 4400 mAh battery, https://www.adafruit.com/product/354



https://www.envirodiy.org/shop/



EnviroDIY Monitoring Station Kit

\$475.00



- JIM MOORE and anyone else with your own DIY stations, to make your Mayfly transmit using 4G:
 - Get the 4G board via <u>https://www.digikey.com/en/products/detail/digi/XB3-C-A2-UT-001/7932027</u>
 - Get LTE adaptor from <u>https://www.envirodiy.org/product/envirodiy-ltebee-adapter-pack-of-5/</u>
 - Get antenna: <u>https://www.digikey.com/en/products/detail/pulselarsen-antennas/W3907B0100/7667474</u>
 - Use this code: <u>https://github.com/EnviroDIY/ModularSensors/tree/master/examples/DRWI_LTE</u>

Any questions before we move on?



Monthly station owner/manager presentation

Cobbs Creek watershed – monitoring an impervious and piped watershed for potential "daylighting" and neighborhood-wide green BMPs



Derron LaBrake, Darby Creek Valley Association, 2ndvp@dcva.org



Monthly Focus Topic

Electrical Conductivity in Streams, Part 1



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



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?



Back up discussion topics

- Assistance/support needs?
- 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
- Conductivity, temperature, depth, turbidity data in ecological context
- Preparing for winter station maintenance, road salt issues



Plum Run at Gordon Natural Area in West Chester, PA, George Seeds, Carol Armstrong, and Patty Haug









Darby Creek Headwaters Monitoring Project, Lauren McGrath, Sue Miller, Derron LaBrake















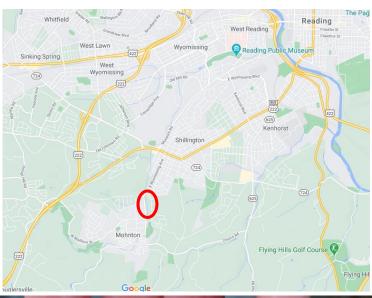
Upper Wyomissing Creek, David Bressler





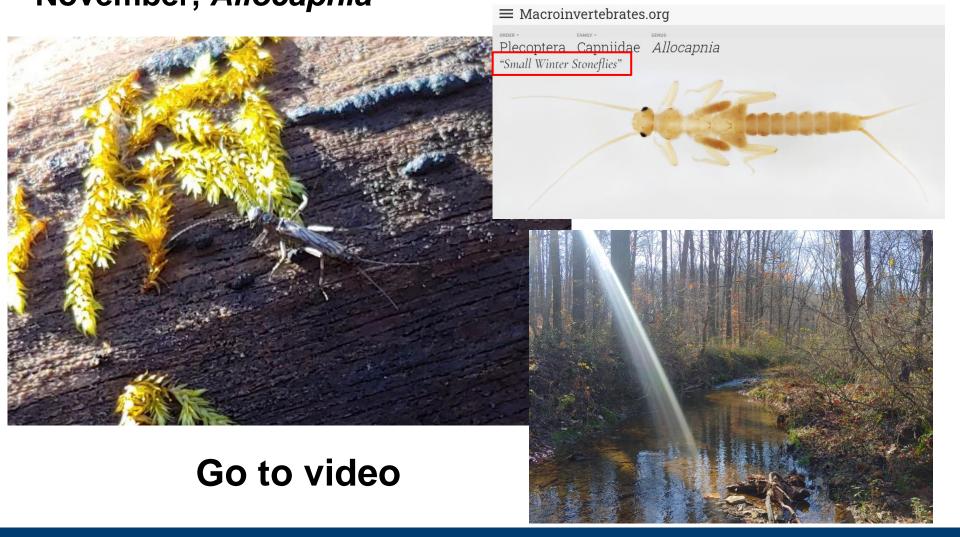








ChesLen Preserve, near West Chester, PA – Stoneflies in November, *Allocapnia*

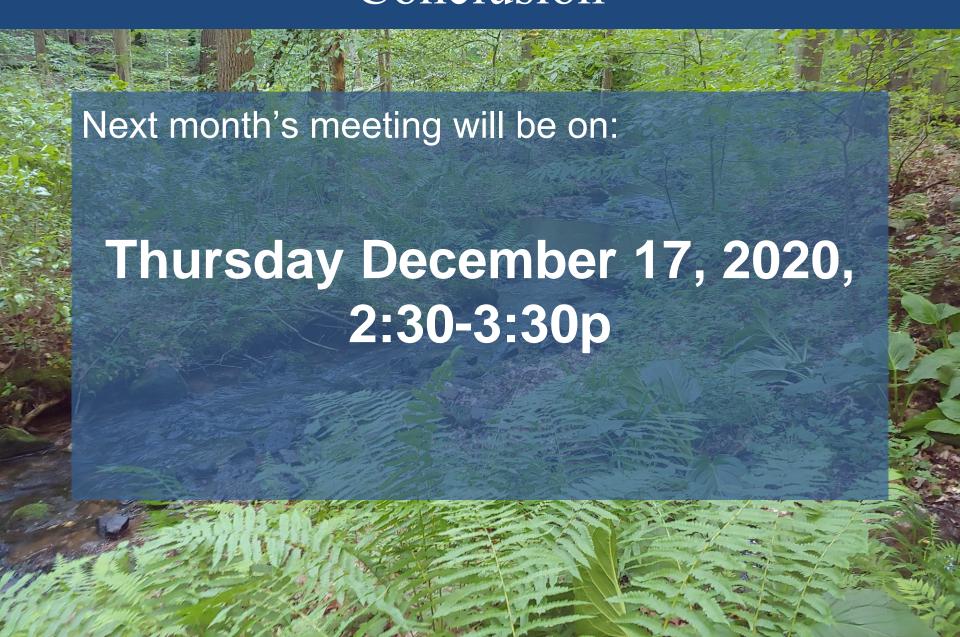


Trib to Pickering Creek (near SHPK6S near Phoenixville YMCA) – unidentified Crayfish (not Rusty), Carol Armstrong





Conclusion



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



Future meeting presenters

- Monthly station owner/manager presentations
 - Dec 17 Francis Collins, Primrose Creek Watershed Assoc.
 - Jan 21 Juniper Leifer and Kristine Rogers, Lopatcong Creek Initiative and Wallkill River Watershed Management Group
 - Feb 18 Dr. Paul Wilson(?), East Stroudsburg University
- Monthly focus topics
 - Dec 17 Conductivity Part 1
 - Jan 21 Conductivity Part 2
 - Feb 18 Connecting the dots on the landscape, Patty Haug

*Please be in touch if you'd like to do an owner/manager presentation or a focus topic 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), <u>rjohnson@stroudcenter.org</u>, 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

https://wikiwatershed.org/drwi/

Delaware River Watershed Initiative Resources

General Resources

- EnviroDIY Field Visit Data
- → EnviroDIY Monitoring Station Help Resources
- Data and Data Visualization Resources
- Project Updates and Station User Monthly Meetings
- Volunteer Management Guidance Materials
- WikiWatershed Toolkit

Workshop Resources

- Delaware Watershed Research Conference
- ▼ EnviroDIY Monitoring Station Management Workshop
- EnviroDIY Monitoring Station User Group Gatherings
- Master Watershed Steward Workshops
- Teacher Workshops
- Watershed 101, 102, and 201



Resources to Support the Work

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



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



Onward!

