

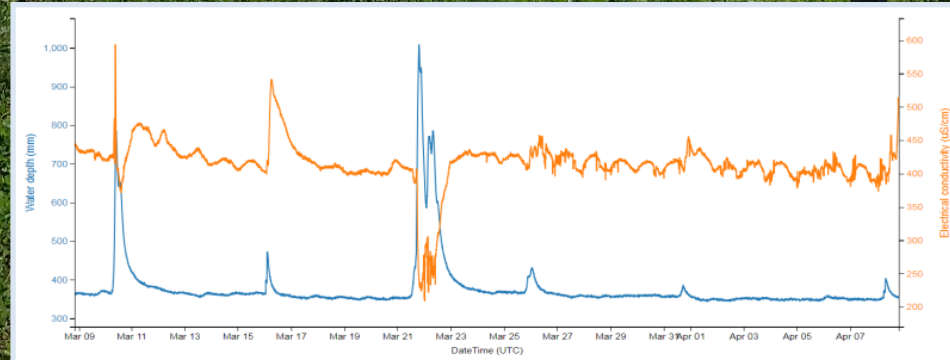
# WELCOME!

## Monthly EnviroDIY-DRWI User Group Meeting

*Online, Thursday January 21, 2021, 2:30-3:30p*



 **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

- Time to check-in
- 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

**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

# 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.)

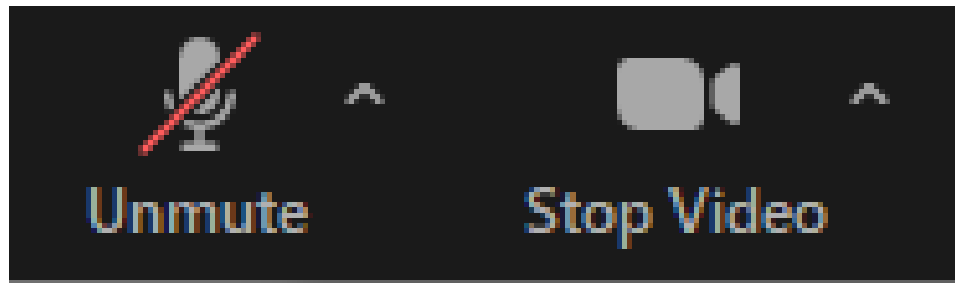




# Zoom Orientation



**\*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 ...



# Monthly Meeting Agenda Format

1. Introduction
2. Stroud Updates
3. Presentation(s)
4. Open discussion
5. Conclusion

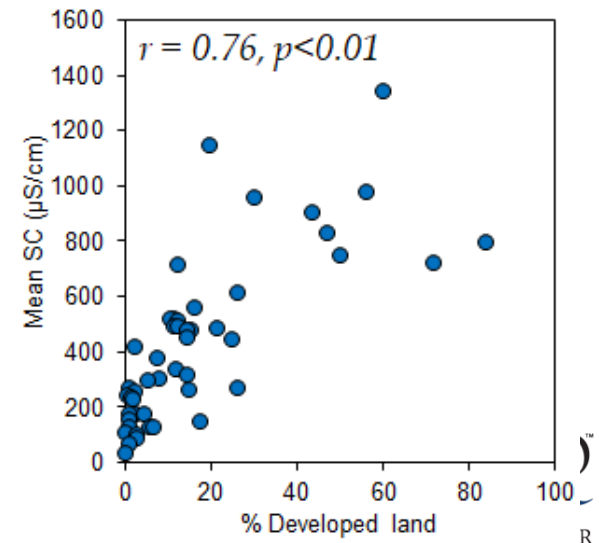
***\*Adjust this format according to natural progression/development/needs of meetings***

# Today's Agenda

1. Introduction, review agenda, updates – 5-10 min
2. Monthly station owner/manager presentation – 30-40 min
  - Using continuous monitoring data to develop an Upper Paulins Kill watershed characterization report for guiding local watershed management and decision-making – Kristine Rogers and Juniper Leifer, Wallkill Watershed Management Group and Lopatcong Creek Initiative
3. Monthly focus topic – NA
4. Open discussion – 10-25 min
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





Any questions before we move on?





# Monthly station owner/manager presentation

**Using continuous monitoring data to develop an Upper Paulins Kill watershed characterization report for guiding local watershed management and decision-making**



**Kristine Rogers, Wallkill Watershed Management Group, [krogers@scmua.org](mailto:krogers@scmua.org)  
Juniper Leifer, Lopatcong Creek Initiative, [junipernjhc@gmail.com](mailto:junipernjhc@gmail.com)**

# Surveys

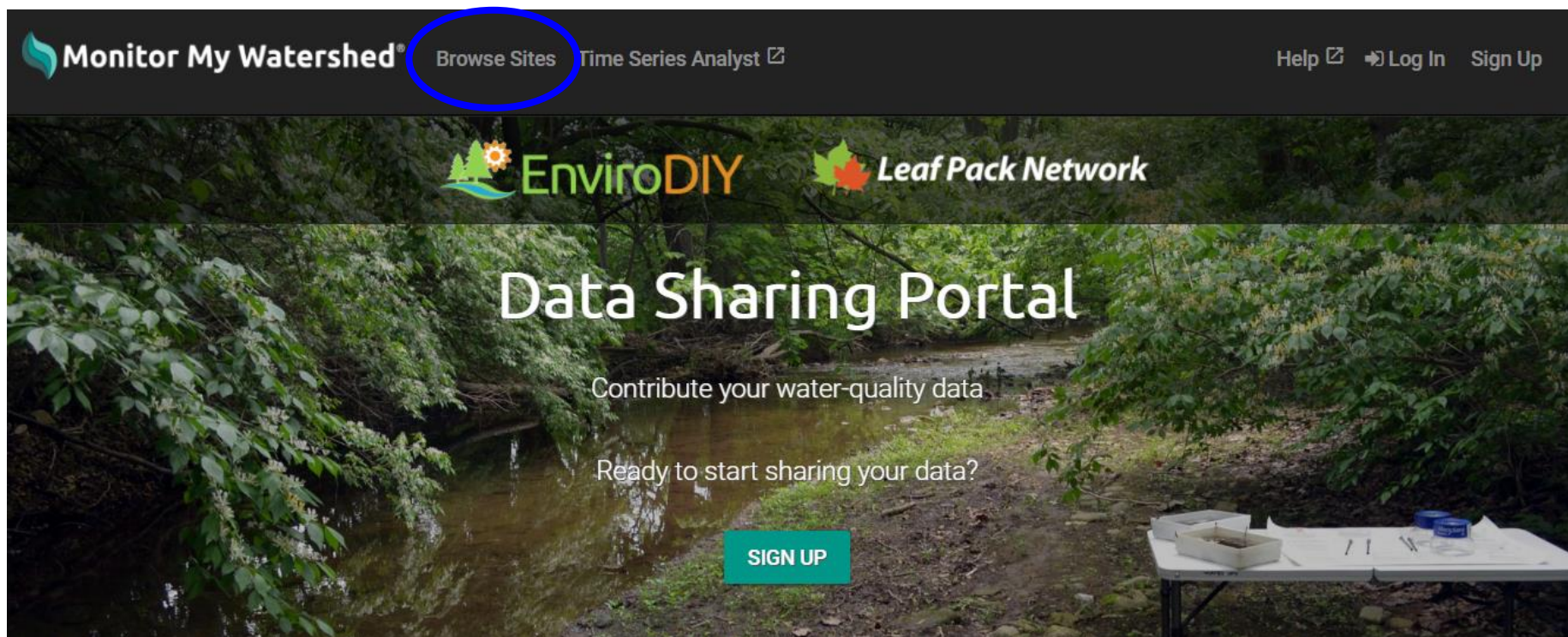
- Two questions in Zoom polls



# Stroud Center Updates

## Review – Understanding why a station has gone offline

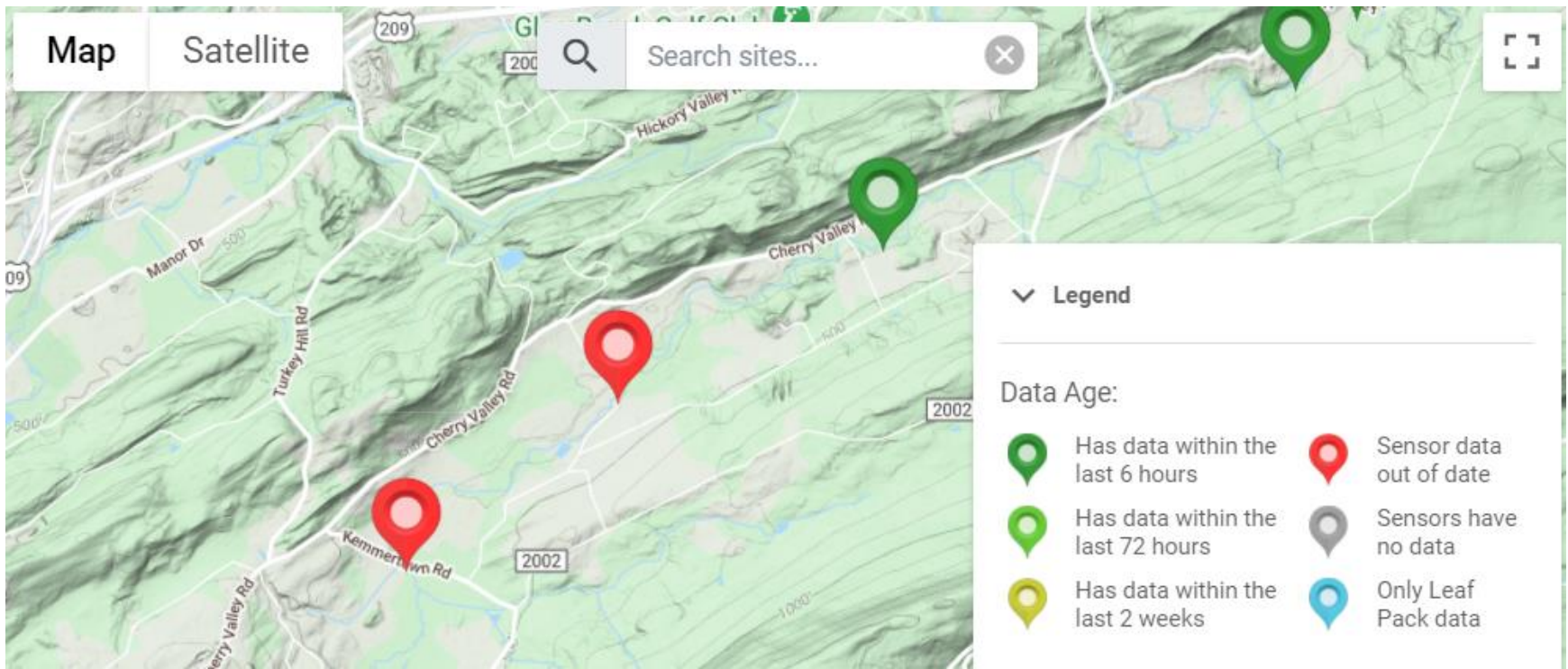
Check Monitor My Watershed – Browse Sites



# Stroud Center Updates

## Review – Understanding why a station has gone offline

On MonitorMW – What color is the station?

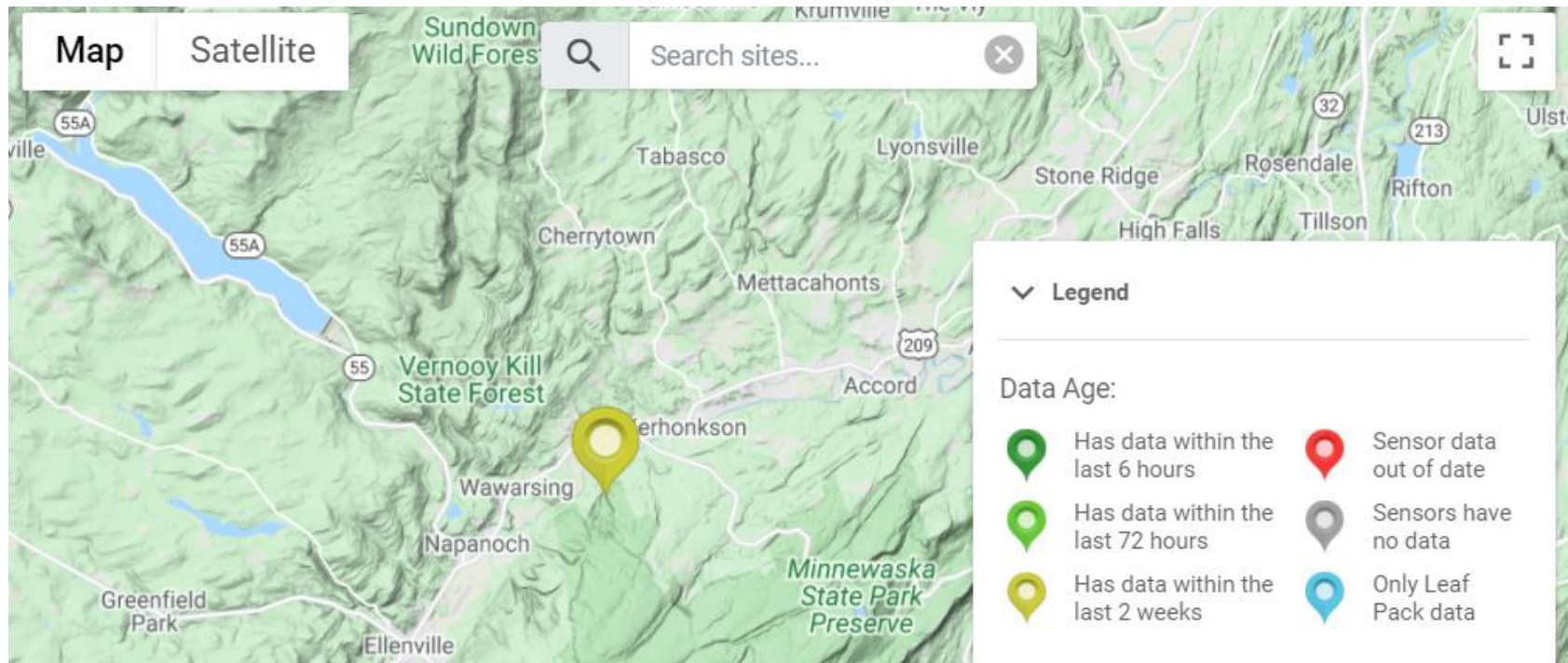




# Stroud Center Updates

## Review – Understanding why a station has gone offline

On MonitorMW – What color is the station?





## Review – Understanding why a station has gone offline

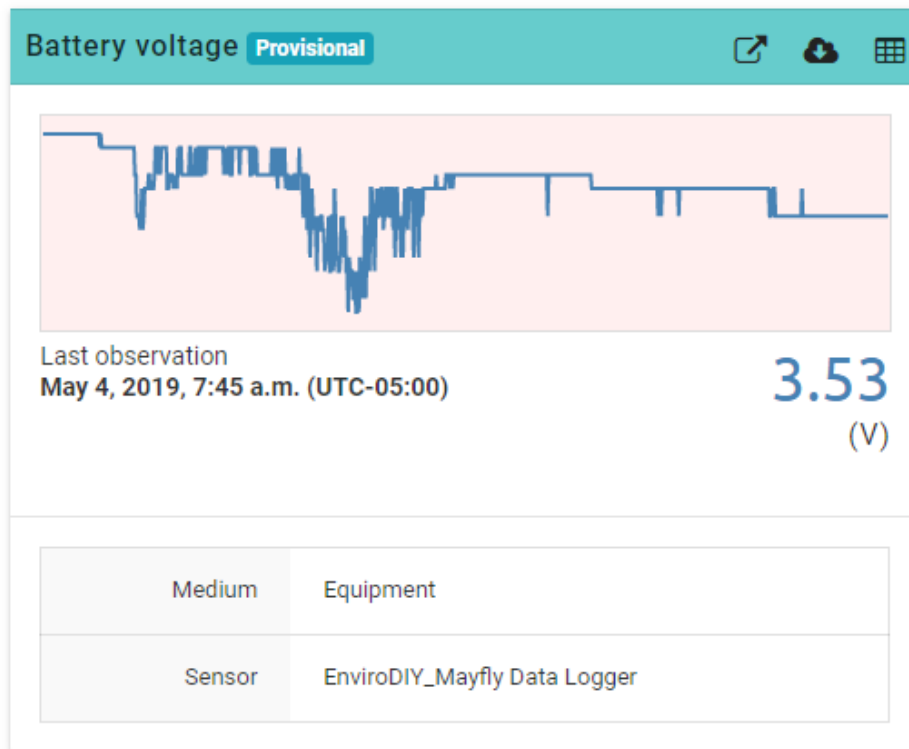
**If >3.5v, then likely cell board malfunction**

-

# Stroud Center Updates

## Review – Understanding why a station has gone offline

On MonitorMW – What was battery level when it went offline?



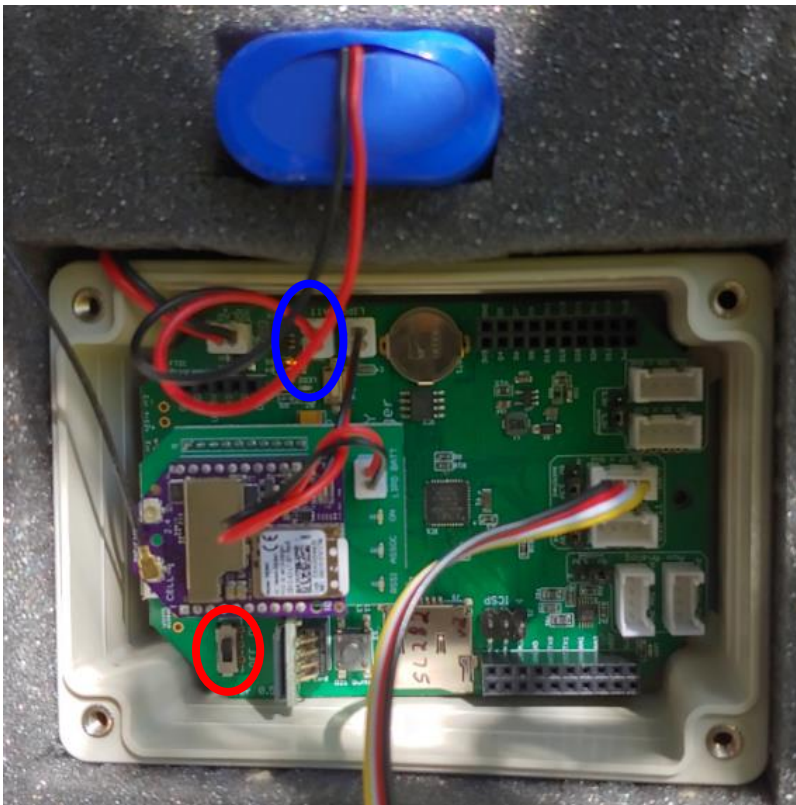
**If 3.5v or less, then likely a power issue (programming tells Mayfly to stop trying to send data when <3.5v, so that power not drained entirely)**

- **Not enough sun**
- **Poor or dropped cell signal**

# Stroud Center Updates

## Review – Understanding why a station has gone offline

Check the station in person



**Swap batteries (if power appeared to be an issue)**

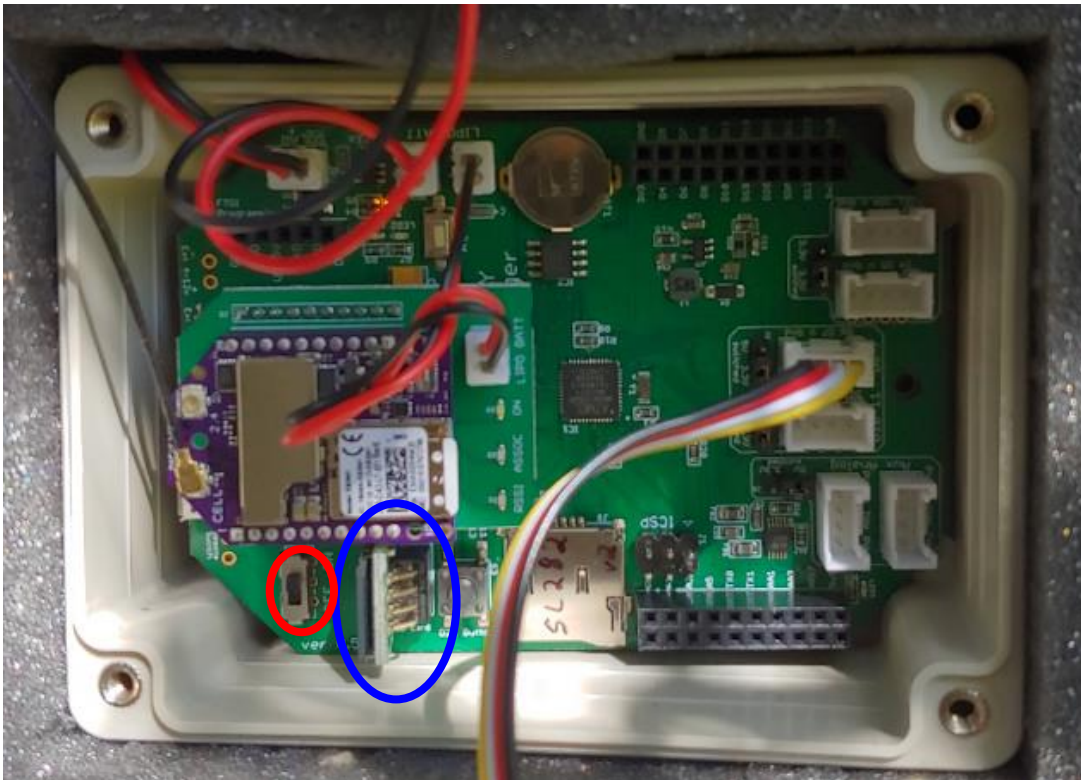
- **Make sure station is turned off**



# Stroud Center Updates

## Review – Understanding why a station has gone offline

Check the station in person



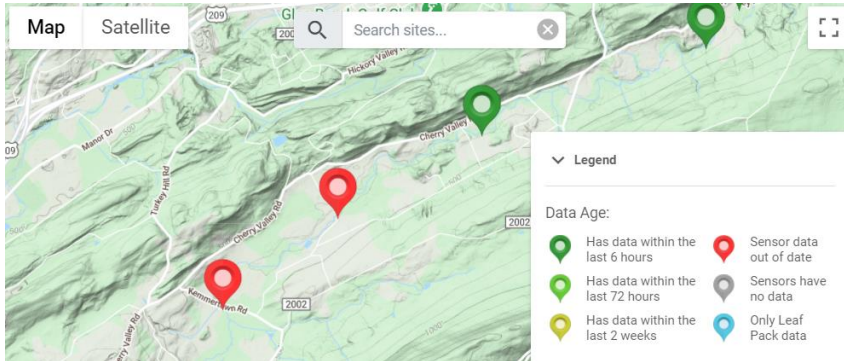
**Swap SD cards and review the data, feel free email file to Stroud Center (Hicks, Johnson, Bressler) to review**

- **Make sure station is turned off**
- **If data still recording to SD card then station functional**
- **If data not recording to SD card then Mayfly or sensor problem**

# Stroud Center Updates

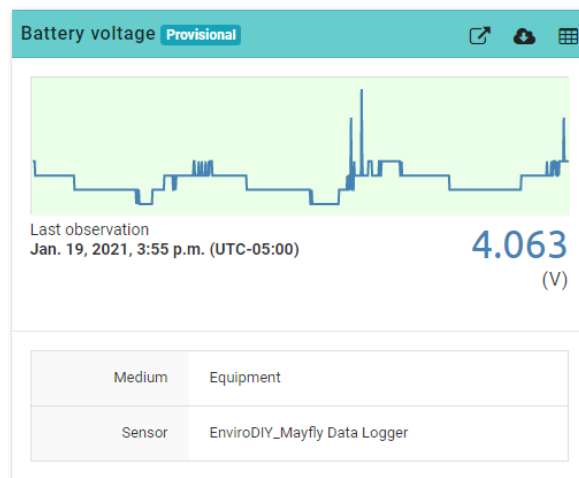
## Review – Understanding why a station has gone offline

On MonitorMW – Check station transmission



**If power was the issue, station should be transmitting (green) and battery should be >3.5v (likely ~4.0v with charged battery)**

**If cell board failure was the issue, station will likely still not be online, BUT re-powering sometimes does fix the problem**



# 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

# 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
- Storms
  - 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



# Conclusion

Next month's meeting will be on:

**Thursday February 18, 2021  
2:30-3:30p**



# Future meeting presenters

- Feb 18 – Scott Ensign, Stroud Center, Turbidity data across the Delaware Basin, Part 1
- Mar 18 – Sara Damiano, Stroud Center, Turbidity data across the Delaware Basin, Part 2

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

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



# 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

- **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



# 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



Rachel Becker-Klein  
2:24 PM (20 minutes ago)  
to me, Mary

Dave, so the deal is that you have to create the Zoom polls within your own Zoom account (or whichever will be the host). You should have the info you need to do so with (1) and (2) below...

- (1) How was the depth of information provided?  
Too deep, Just right, Not deep enough
- (2) How useful was the presentation?  
Not very useful, Somewhat useful, Quite useful, Very useful

For the two open-ended/word cloud questions through Poll Everywhere (or another platform if you have a preference):

- Please describe the most useful things you learned from this meeting
- What other resources/information would you need in order to apply what you learned in this meeting?

You provide a link (I created this one that you can use: **[PollEv.com/rachelbecker341](https://poll-ev.com/rachelbecker341)**) in the chat window and when people navigate to that, they get those two questions. As they respond, a Word Cloud is generated and you can share that word cloud with the group, and then we can download their responses to do more analysis if we want.

I should be able to join the monthly meeting for the last 1/2 hour (if that's not too disruptive), but I have an Advisory meeting for an NSF grant from 1-3 that day.

I do have some time next Tuesday, Dec 15 (anytime except for 2-3 pm) if you want to try any of this out...

Rachel