

QUITTAPAHILLA WATERSHED ASSOCIATION

Meeting Minutes

Community Room, Annville Free Library, and remotely on Zoom

Tuesday, June 16, 2026

Present: Michael Schroeder (President), Bill Bauersfeld, Alexis Biondi, Bob Connell, Mike Capparell, Karen Feather, Tim Greene, Katie Hollen (LCCD), Kara Lubold (LCCD), Bill Osburn

The meeting opened at 7:00 PM

1. **Minutes.** The minutes of the May 19, 2026, meeting were circulated electronically before the meeting and approved by consensus. They are housed with all other extant QWA meeting minutes on the Meetings & Minutes page of our QWA website, at <https://www.quittiecreek.org/calendar.html>

2. Monitoring Program

A. Fieldwork updates. Katie reported our June routine fieldwork went well; our June 16 fieldworkers were Dyllan Bishop, Bob Connell, Katie Hollen, and Mike Schroeder, and on June 17, Alexis Biondi, Dyllan Bishop, Bob Connell, Katie Hollen, and Gary Zelinske.

B. Equipment updates

- 1) **Solinst Sensors.** Bob reported that the sensor at Q1 had been damaged by water because of a faulty internal seal but is still under warranty and that Solinst will send a new sensor (with a value of around \$1,000) .
- 2) **YSI Sondes.** Katie reported that the pH sensor on our sonde still needs replacing. Again the suggestion was made to ask Doc Fritchey Trout Unlimited for funds for a new pH sensor.
- 3) **Supplies.** No updates.
- 4) **ISCO auto-samplers.** No updates.

C. Data management updates

- 1) **Workshops on using qGIS.** Bob still expects to hold our fifth workshop in the fall, focusing on using qGIS to build a webpage. All study materials for previous workshops are housed at <https://www.quittiedata.org/GIS/> > Training. Please direct any questions to Bob.
- 2) **Macroinvertebrate Sampling Raw Data.** No update.

3. **Special Meeting.** Still pending is a special meeting after the July 4 holiday to discuss Grow Conservation's "General Recommendations," reproduced below in **Appendix 1**.

4. **Projects updates.** See the June 4, 2026 LCCD Watershed Action Team meeting minutes, pasted below in these minutes in **Appendix 2**.
5. **LCCD Watershed Action Team.** See **Appendix 2**, below.
6. **Media & website updates.** Mike reported that he continues to update the website and post on social media focusing on the QWA Monitoring Program.
7. **Lebanon County Stormwater Consortium updates.** See LCCD-WAT meeting minutes of June 4, item no. 5, “Partner Updates,” item from Darren Heisey of the Lebanon Stormwater Consortium, below in **Appendix 2**.
8. **Education, outreach & special events.**
 - A. Bob created a new 8-minute video of the Quittapahilla watershed using Google Earth, titled “Follow the Path of the Quittapahilla Creek,” for use at tabling and outreach events; the URL is <https://drive.google.com/file/d/1yfhPKCsBpiZkGA3wWJwF1Hj3RzWtYrg3/view>
Mike suggested that we feature the video on the homepage of our QWA website.
 - B. Lebanon Valley Clean Water Week, Sept. 12-19, sponsored by TLVC – lots of opportunities to get involved; Mike proposed: (1) a garbage cleanup day in the area excavated upstream of the 22nd St bridge, (2) a guided walking tour of Quittie Creek Nature Park. See the materials in **Appendix 3**, below.
 - C. Possible field trips to the City of Lebanon Authority’s (COLA’s) Wastewater Treatment Plant and the Cleona Pumping Station
9. **Correspondence.** See the correspondence with Prof. Jackson at the Stroud Water Research Center re our Monitoring Program in **Appendix 4**, below.

The meeting adjourned at 7:52 pm.

Respectfully submitted,

Michael Schroeder
Secretary Pro Tem

Appendix 1. Quittapahilla Watershed Association General Recommendations from Grow Conservation, December 2025

1. Liability Protection

With volunteers conducting fieldwork in flowing water and potentially dealing with chemicals in water sampling, there is the potential for a person to become injured while volunteering for QWA. This could expose the organization and/or its leadership to liability.

At a minimum, the Grow Conservation Consulting Team (GrowCon) recommends that QWA develop a liability waiver form that all volunteers must execute before commencing work on behalf of QWA. Ideally, this form would be prepared by or at least reviewed by a licensed attorney. QWA might seek example liability waiver forms from peer organizations.

If QWA eventually decided to become a nonprofit organization, then GrowCon recommends that it purchase an insurance policy to protect against such injury liability and potentially other forms of liability.

GrowCon and its subconsultants are not qualified to give legal or insurance advice, but we believe these are best practices for organizations involved in such volunteerism. QWA should seek the counsel of qualified professionals on this matter.

2. Stimulate Competitive Environment for Project Work

From GrowCon's understanding of the watershed assessment and restoration work being facilitated historically and presently by QWA, it appears that one or a couple consulting firms primarily guide and then execute the work. GrowCon recommends that QWA consider engaging a broader range of consulting professionals to generate an influx of fresh ideas and potential for new approaches. Creation of a competitive work environment for project implementation could result in cost savings, enhanced quality, and more options for the timing of projects. Implementing a competitive bidding process is also typically a requirement of granting entities.

3. Consider Alternatives to In-Stream Focus

The Quittie and its tributaries have impairments due to a variety of stressors, including nutrients, sediment, and pathogens. To date, QWA has largely focused its restoration of the watershed on in-stream or channel restoration projects. Such in-stream projects will primarily act to improve only one of these three stressor categories – that being sediment load. In-stream restoration is not an effective approach to reducing nutrient load or pathogens. In addition, in-stream restoration is an extremely costly form of watershed restoration due to the

very high engineering design, permitting and construction costs.

GrowCon recommends that QWA begin to integrate alternative watershed restoration practices into its initiatives, such as riparian buffer plantings and land use best management practices (BMPs) (e.g., cover crops, nutrient management plans, livestock fencing). For one, riparian buffer plantings and BMPs will more directly affect the nutrient and pathogen loads to the waterways. Additionally, these types of practices are far more cost-effective than in-stream restoration. Lastly, there are a variety of funding and outreach partners available for collaboration on these practices. QWA need only look to its neighbors, the Lancaster Clean Water Partners, to see a successful model of these approaches. A focus on these types of land-based measures should result in measurable improvements in the Quittie watershed, which in-stream restoration alone is unlikely to accomplish.

4. Consider Scalability of Present Business Model

The fifth Strategic Priority identified through the POWR project was Organizational Growth. GrowCon recommends that QWA's Core Team begin to consider the scalability of its present business model and mode of operations. In some respects, the mode of operations has served QWA well to date, but in order to grow its impact, we believe that QWA needs to evolve in several key ways – many of which are laid out in the Strategic Framework. Some key considerations are as follows.

QWA appears to be highly dependent on a single, dynamic, and very dedicated leader. However, leadership activity will need to begin to be distributed for the organization to grow. Administrative functions such as financial tracking, file management, and IT services will need to be accessible to more than one person, both to distribute workload and to plan for succession. A single person should not continue to be the face of the QWA in public settings, such as volunteer recruitment and township meetings.

To grow and diversify the volunteer base, GrowCon believes that QWA needs to diversify the activities it offers to volunteers. Volunteerism with QWA is presently driven by the monitoring program. The Strategic Framework and recommendations above offer a range of other support that volunteers could provide to QWA, and by embarking more strongly in some of these alternative directions, QWA will likely attract a different set of community members.

Goal 5B of the Strategic Framework calls for QWA to “evaluate potentially new organizational structure or relationships.” GrowCon recommends that the Core Team make this a priority in the near term, as there seem to be some significant drawbacks to the QWA not actually existing as an entity. There are several partners and existing nonprofits that might, at least temporarily, consider embracing QWA as a subcommittee or other subpart (e.g., The Lebanon Valley Conservancy, Swatara Watershed Association). We feel that continuing with the status quo will hinder the QWA's ability to grow as it wishes.

Appendix 2. LCCD Watershed Action Team Meeting Minutes, June 4, 2026



Lebanon CAP Watershed Action Team

Thursday, June 4, 2026 at 9:00 a.m.

Members Present: Bethany Canner, Reid Garner, Darren Heisey, Katie Hollen, Dan Kreiser, Kara Lubold, Mike Schroeder, Maranda Smith and Rich Starr

1. Applications

- Snitz Trib at Ironmaster Rd: Pending funding (2027 CAP funding?)
- TLVC Meadow Conversion Program: \$100,000 (DCNR C2P2 grant (pending), \$15,000 CAP match for 2027)

2. In-Process Projects

- Gingrich Run 1: \$204,325 of CAP funding for streambank restoration and stabilization, concrete dam removal. In permitting phase (2026)
- Sollenberger Meadow Conversion: \$1,285 (2026)
- Musser Ag BMPs (HUA, Animal Walkway, Deep Pit Manure Storage): \$150,000 CAP match
 - o Project will close out 2025 CAP funds

3. Future Projects

- Halteman Ag Project: \$100,000 (2026)
- Blecker Ag Project: \$100,000 (2026)

4. Completed Projects

- Hammer Creek Estates: \$74,678.82 CAP match to close out 2025 funds

5. Partner Updates

- Lebanon Consortium/MS4, Darren Heisey
 - o SQ6: In permitting. Received ACOE approval, waiting for DEP. Grant has been extended.
 - o SQ1: In maintenance. Phase 2 will likely be constructed in 2027.
 - o Still waiting for a new permit from DEP.
- Lebanon Valley Conservancy, Dan Kreiser
 - o Planning for Water Week. Marketing materials will be dispersed soon. TLVC is looking for sponsors.
 - o Submitted Growing Greener application for Killinger.
- Quittapahilla Watershed Association, Mike Schroeder
 - o See Appendix 1.
- Swatara Watershed Association, Bethany Canner
 - o Continuing with creek user outreach and Swatara Watershed Park improvements.
- EPR, Bryan Seipp/Rich Starr



Lebanon CAP Watershed Action Team

- Heisey Farm: The gas company showed a line under the pond. Maranda will check with LCCD's engineer because they mapped lines before building the barn. Maranda also said that the landowner indicated there may be an old tile line under the pond.
- Historic Schaefferstown Farm: The pre-application meeting is done and EPR is working on the design. Bryan is creating illustrations to use for outreach. The Hammer group is undecided on having a table about the project at the June 27 Cherry Festival.
- Hammer Creek Estates: Construction is complete. They are working with the township to fix a pothole that was created.
- Snitz 18 & 19: Working on a Growing Greener proposal for design. DFTU will be the sponsor. It is possible to avoid Lowe's by redirecting the channel if Russ is unable to get the landowner on board.
- Barry Farm: Meeting with DEP tomorrow about how to move the project forward.
- Spring Hill Partners, Reid Garner
 - Hammer Trib on Stoltzfus & Ebling: Working on a design and permitting application to Growing Greener with LCCD.
 - Hoffman Farm and Snitz Trib at Ironmaster Rd: Waiting for funding decisions.

6. Lebanon County Conservation District Update

- CAP 2026 Award
 - Total award: \$624,483 (\$114,269 allocated for projects within the Hammer Creek Watershed. The remaining \$510,214 can be used anywhere in the Chesapeake Bay Watershed.)

7. Other

- August meeting cancelled (will not be rescheduled)
- LCCD Event: 1st Annual Sporting Clay Fundraiser- Friday, September 25, 2026; 9 AM to 1 PM,
 - Registration is open: <https://www.lccd.org/clays>

8. Next Meetings 2026

- July 2 — 9:00 am
- August 6 — 9:00 am- **cancelled**
- September 3 — 9:00 am
- October 1 — 9:00 am
- November 5 — 9:00 am
- December 3 — 9:00 am



Lebanon CAP Watershed Action Team

Appendix 1. Quittapahilla Creek Project Update, provided by Rocky Powell, Clear Creeks Consulting, via email on 6/16/2026.

Beck Creek 6

RRG responsibilities to satisfy LCCD comments:

Armor outfall channel bottom with stone – Completed and Approved

Install goose netting along aquatic bench – Completed and Approved

Raise embankment to design elevation – Completed and Approved

As-Built Survey and Plans – RRG was informed additional survey work required to provide accurate as-built plans – as of June 16, 2026 EPR still waiting for survey data

Final PA DEP 319 Grant Report – Clear Creeks Completed pending As-Built Plans from EPR

PA DEP PracticeKeeper – Clear Creeks Data Input Completed pending As-Built Plans from EPR

Snitz Creek 2

As-Built Survey and Plans – Kinsley/EPR Completed March 2026

Pollutant Reduction Model – EPR Completed March 2026

Final Report – Clear Creeks Completed March 2026

PracticeKeeper – Clear Creeks Data Input Completed March 2026

Project Closed Out with PA DEP

Snitz Creek 3

Pre-Construction Meeting – May 19, 2026

DFTU-PA DEP Contracts for 319 and Growing Greener grants executed

Kinsley Construction Scheduled to Start – Mid June 2026

Killinger Creek – Huber and Burkholder Properties (Permitted 4/06/2024)

TLVC Selected Contractor - Flyway Excavating	March 20, 2026
TLVC submitted NFWF Grant Application	April 2, 2026
GGP Grant Application submitted	June 3, 2026
NFWF Grant Award Notification:	September 2026
GGP Grant Award Notification:	January 2027
Project Start Date:	Summer - Fall 2027
Project Completion Date:	Fall 2027 - Spring 2028

NFWF Grant Request	\$613,087.00
GGP Grant Request	<u>\$262,441.00</u>
Total Grants Requests	\$875,528.00



Lebanon CAP Watershed Action Team

Bachman Run – Gary and Gerald Horst Properties (Permitted 1/27/2026)

DFTU Selected Contractor – Kinsley Construction	May 1, 2026
Construction Cost - \$924,360.00	
Includes \$138,125.00 Cost of Bender Lane Culvert	
LCCD Letter of Support:	May 15, 2026
NRCS Letter of Support:	May 15, 2026
GGP Grant Application submitted	June 4 2026
319 Grant Application submitted	June 4, 2026
GGP Grant Award Notification:	January 2027
319 Grant Award Notification:	October 2027
LCCD ACAP Gerald Horst Cost Share Agreement	February - March 2028
Project Start Date:	Spring – Summer 2028
Project Completion Date:	Fall 2028
319 NPS Grant Request	\$497,572.00
GGP Grant Request	<u>\$510,798.00</u>
Total Grants Requests	\$1,008.100.00

Snitz Creek 4

Meeting with Glen Krall, Adjacent Landowner – May 6, 2026
Preliminary Design to EPR for CAD work – June 8, 2026
Preliminary Design CAD drawings – June 22, 2026
Landowner Meeting Scheduled – June, 29, 2026



Lebanon CAP Watershed Action Team

Appendix 2. QWA Monthly Update for the LCCD Watershed Action Team, provided by Michael Schroeder, QWA President, via email on 6/4/2026.

1. Monitoring Program
 - A. Katie Hollen is coordinating routine fieldwork at our six monitoring sites on June 16 & 17.
 - B. Equipment. Bob Connell continues to monitor, change the batteries, and, as necessary, oversee the repair of the Solinst sensors at five of our monitoring sites.
 - C. Data management: Bob has uploaded all monitoring data from past fieldwork to the Water Quality Portal. Bob will likely schedule a fifth qGIS workshop in the fall. Study materials, downloads, and other helpful items on the first four workshops are accessible at <https://quittiedata.org/GIS/>
2. Stream Restoration Projects. See Rocky's report on plans for EPA 319 & Growing Greener grant proposals for this round, deadline June 22.
3. Education & Outreach
 - A. Choose Clean Water Conference, May 19-20 at the Marriot in downtown Lancaster. Mike presented on the QWA's NFWF capacity-building grant along with Nancy Mannion, another grant recipient. See the conference website, at <https://www.choosecleanwater.org/our-conference>. Thanks to Tali MacArthur at POWR for facilitating our participation.
 - B. Gearing up for Historic Old Annville Day, 9 AM-2 PM Sat June 13. The QWA is in space no. 135, on the south side of E Sheridan Ave.
 - C. The Lebanon Valley Conservancy organizing Lebanon Valley Clean Water Week, Sept. 12-19. The QWA is planning several activities, including a Plastic Garbage Artifact Hunt in collaboration with the Quittapahilla Creek Garbage Museum. On June 3, TLVC Exec. Director Abigail Harvey emailed participants on "Lebanon Valley Clean Water Week Marketing" with (1) a recorded walkthrough of the sample social media schedule; (2) template graphics; and (3) a social media outline document to guide our planning."
4. Strategizing meeting on Grow Conservation's recommendations moving forward postponed till after the 4th of July.
5. The next QWA meeting will be at 7 PM Tues June in the Community Room of the Annville Free Library and on Zoom.

Appendix 3. “Clean Water Week” Materials from The Lebanon Valley Conservancy (Sept. 12-19, 2026)

Lebanon Valley Clean Water Week – Partner Overview	
PRESENTED BY THE LEBANON VALLEY CONSERVANCY	770 CUMBERLAND ST, LEBANON, PA
About Lebanon Valley Clean Water Week Lebanon Valley Clean Water Week is a new county-wide initiative designed to deepen public understanding of clean water, watershed health, and the interconnected nature of our local waterways. Taking place September 12-19, 2026, the week features hands-on educational experiences hosted by environmental organizations, schools, municipalities, and community groups across Lebanon County. By uniting partners under a shared identity and coordinated outreach effort, the week strengthens community stewardship, expands environmental literacy, and inspires long-term engagement in conservation. Why Clean Water Week? Local waterways face increasing pressures from pollution, development, and climate-related impacts. Clean Water Week provides: ● A shared platform for education and engagement ● County-wide visibility for partners ● Collaborative opportunities that strengthen relationships ● Accessible learning experiences for youth, families, and community members Goals ● Increase public understanding of watershed systems ● Highlight local conservation partners ● Provide diverse, place-based educational opportunities ● Encourage long-term stewardship behaviors Evaluation & Impact TLVC will track program reach through: ● Attendance at kickoff, closing, and partner events ● Participant surveys measuring knowledge gained and satisfaction ● Partner feedback on collaboration and delivery	What TLVC Provides ● Event organization & scheduling support ● Kickoff and closing celebration events ● Reusable bags for participants ● Printed schedules and event maps ● Shared marketing materials (graphics, templates, messaging) ● Promotion through TLVC channels ● Partner T-shirts ● Participant surveys Community Partner Role ● Plan, staff, and host their own event(s) ● Manage event registration ● Secure required permits ● Hold liability insurance ● Provide event-specific liability waivers (template available) ● Coordinate with TLVC on scheduling and marketing deadlines Event types may include: <i>Walks • Workshops • Cleanups • Demonstrations • Tours • Educational programs • Art activities • Water-focused experiences</i> Next Steps Informational Sessions In-Person at TLVC Office – February 25 at 5:00 PM – March 3 at 5:00 PM Virtual Session – March 5 at 12:00 PM (Zoom link upon RSVP) Contact Abigail Harvey, Executive Director The Lebanon Valley Conservancy abigail.harvey@tlvc.org 717-273-6400

Lebanon Valley Clean Water Week Partner FAQ

What is Lebanon Water Week?

Lebanon Water Week is a county-wide celebration taking place September 12th - 19th, 2026. It brings together environmental organizations, schools, municipalities, and community groups to offer hands-on educational experiences focused on watershed health, and the interconnected nature of our local waterways.

Why should my organization participate?

Participating gives your organization the opportunity to:

- Reach new audiences
- Highlight your programs, mission, and expertise
- Strengthen partnerships with other conservation groups
- Contribute to a unified, county-wide initiative
- Benefit from shared marketing, materials, and visibility

Water Week is designed to amplify your work, not add unnecessary burden.

What kinds of events can partners host?

Events can be as simple or creative as you'd like. Examples include:

- Stream walks or watershed tours
- Cleanups or restoration activities
- Demonstrations (stormwater, soil health, native plants)
- School or youth programs
- Art, photography, or nature-based workshops
- Community science activities
- Paddles, hikes, or guided nature experiences

Indoor, outdoor, small-scale, or large-scale events are all welcome.

What support does TLVC provide?

TLVC will offer:

- Event organization and scheduling support
- Kickoff and closing celebration events
- Reusable bags for participants
- Printed schedules and county-wide event maps
- Shared marketing materials and templates
- Promotion through TLVC channels
- Branded T-shirts for partners
- Participant surveys and evaluation tools

Our goal is to make participation easy and cohesive.

What are partner responsibilities?

Partner organizations are responsible for:

- Planning, staffing, and hosting their event(s)
- Securing any required permits
- Holding liability insurance for their event
- Providing event-specific liability waivers as needed
- Communicating with TLVC about event details and deadlines

You maintain full ownership and control of your event.

Does my event need to be free to the public?

We strongly encourage free or low-cost (\$10 - \$15) events to ensure accessibility. If your event requires a fee to cover materials or staffing, please discuss this with TLVC so we can communicate it clearly in the schedule.

Can multiple organizations collaborate on a single event?

Absolutely. Co-hosted events are encouraged and can help share staffing, expertise, and resources.

How will events be promoted?

TLVC will promote Water Week through:

- Social media campaigns
- Email newsletters
- Printed schedules and maps
- Press releases and media outreach
- Partner networks and community channels

Partners are encouraged to promote their own events as well.

How will attendance and impact be measured?

TLVC will track:

- Attendance at kickoff, closing, and partner events
- Participant surveys (knowledge gained, satisfaction, interest in future engagement)
- Partner feedback

A summary report will be shared with all partners after the event.

What if my organization has limited capacity?

Every contribution strengthens the initiative. Options include:

- Providing volunteers
- Offering space or equipment
- Sharing expertise or educational materials
- Helping promote Water Week

How to Plan a Water Week Event

A Guide for Lebanon Valley Clean Water Week Partners

The Lebanon Valley Conservancy

1. Start With Your Strengths

Think about what your organization already does well. Your program or event should highlight your mission, expertise, and connection to local waterways.

Questions to consider:

- What programs or activities do we already offer that could be adapted for Water Week?
- What topics or skills do we want to share with the community?
- What locations or facilities do we have access to?

Examples:

- A nature center might host a stream ecology walk.
- A municipality could offer a stormwater demonstration.
- A school group might lead a student art exhibit about water.
- A nonprofit could run a cleanup or restoration activity.

2. What Do You Want To Achieve With Your Event?

Think about the impact you want your event to have after water week.

Questions to consider:

- What do we want attendees to know after they leave our event?
- Is there a program we offer that we want to highlight?
- Is there a fundraiser or event we are looking for donors or volunteers for?

3. Choose Your Event Type

Water Week events can be educational, hands-on, recreational, artistic, or scientific. Pick a format that fits your capacity and audience.

Popular event formats:

- Guided walks or hikes
- Paddles or boating activities
- Cleanups or volunteer projects
- Workshops or demonstrations
- Youth or family programs
- Art, photography, or storytelling activities
- Community science (macroinvertebrate sampling, water testing, bird counts)
- Open houses or facility tours

4. Select a Location

Choose a site that supports your event goals and is safe and accessible for participants.

Consider:

- Parking and accessibility
- Safety and supervision needs
- Restrooms or nearby facilities
- Shade, seating, or shelter
- Proximity to water features
- Whether permits are required

If you're unsure about permitting, TLVC can help point you in the right direction.

5. Determine Your Audience

Who is this event for? Tailoring your program to a specific audience helps with planning and promotion. Who are you trying to reach?

Possible audiences:

- Families with children
- Teens or school groups
- Adults or lifelong learners
- Volunteers
- Outdoor recreation enthusiasts
- Local residents or neighborhood groups

6. Plan the Logistics

Key logistics to finalize:

- Date and time (during Water Week)
- Event duration
- Maximum capacity
- Staffing and volunteer needs
- Materials or equipment required
- Safety considerations
- Accessibility accommodations
- Registration requirements (if any) Please Provide links to TLVC for promotion

7. Address Permits & Liability

Partners are responsible for securing any necessary permits and ensuring proper liability coverage.

You will need to:

- Confirm whether your location requires a permit
- Hold liability insurance for your event
- Provide event-specific waivers if needed
- Ensure staff/volunteers are trained for safety

TLVC can help answer questions but cannot secure permits on your behalf.

8. Submit Your Event Information to TLVC

Once your event is planned, TLVC will collect details for the county-wide schedule.

You'll be asked to provide:

- Event title
- Host organization
- Date, time, and location
- Short description
- Registration link (if applicable)
- Accessibility notes
- Contact information
- Any fees or materials participants should bring

This ensures your event is included in all promotional materials.

8. Promote Your Event

TLVC will provide:

- Shared branding and graphics
- Social media templates for week before and week of.
- Printed schedules and yard signs
- Reusable bags and partner tee shirts

Partners are encouraged to promote their events through:

- Social media
- Email newsletters
- Website calendars
- Community bulletin boards
- Local schools, libraries, and municipal offices

The more visibility, the better the turnout.

Need Help?

TLVC is here to support you throughout the planning process.

Contact us anytime to brainstorm ideas, discuss logistics, or explore collaboration opportunities

Appendix 4: Correspondence with Dr. John Jackson, Stroud Water Research Center, re Monitoring Program

From: John Jackson <jk.jackson@stroudcenter.org>
to: Kent Crawford, Michael Schroeder
date: Jun 14, 2026, 2:55 PM
subject: Proposal for volunteer monitoring in support of PADEP priority monitoring

Hi Kent - I hope this email finds you well. Stroud is working on a PADEP proposal to help volunteers collect Tier III data for PADEP. It is coming through the 319 RFP, but can address other TMDLs and impaired waterways.

It seems to me that your monitoring with the Quittapahilla Watershed Association would qualify as a target of this program. The team has people that want good data and are not put off by technical details.

This program will function as a mini-grant program, and is more than a year away from even accepting applications. However, in our proposal they would like a list of groups that might be interested in generating Tier III data that PADEP can officially use.

Do you think your monitoring team at the Quittapahilla Watershed Association would be interesting? They can request up to \$15,000 for lab analyses (water chemistry, macroinvertebrates to genus) and field/lab equipment. Only minor equipment - no GC Mass Specs. The volunteers would have to go through training (PADEP methods) and be certified by PADEP. Stroud is proposing to conduct the training for partner organizations in Central PA (basically the Chesapeake). It will not help for a couple of years, but it might then help you do things you cannot do right now.

Please let me know if your group might be interested. I only have a week until this is due, so sorry in advance about the late notice.

Thanks,

John

John K. Jackson, PhD
Senior Research Scientist

from: Kent Crawford
to: John Jackson
cc: Michael Schroeder, Katie Hollen, Bob Connell, Kara Lubold

date: Jun 14, 2026, 5:45 PM
subject: Re: Proposal for volunteer monitoring in support of PADEP priority monitoring

Hi John,

Thanks for your note. Sounds like a very worthwhile project. I can't speak for the Quittapahilla Watershed Association (QWA), but my guess is that they (we) would be very interested. I use the word "they" because I have opted out of active membership in the Association (it's an age thing). But I still keep up with their happenings and I still support their goals and their work.

The existing monitoring program for the QWA is pretty rigorous. Our monitoring team is led by Katie Hollen who is the Watershed Specialist for the Lebanon County Conservation District. She has great support from a small number of other Association members including Bob Connell, Kara Lubold, and of course, Mick Schroeder and a few others. Mike is the president of the Association. Bob is our data analyst and looks after the stream gauges, Kara is our equipment manager. It is a knowledgeable and dedicated group.

If interested, you can take a look at the data we have collected so far at: <https://quittiedata.org>

Bob is the driver behind storing the data in an accessible and logical format. For an eye-opening look at the data, look at the NO₂+NO₃ data for most any of the tributaries. Several values are larger than 10 mg/L.

Also, the team uses DEP protocols, gets field supplies (filters, buffers, etc.) from DEP, and has already been through a DEP field audit. I am not sure if DEP uses these data for their Tier III database.

I am copying Katie and Bob and Kara on this note. They, along with Mike, will need to make a decision on whether to join your proposal. I certainly hope they do. ...

Best regards, Kent

From: John Jackson
Date: June 15, 2026

Kent - thanks for the quick reply. ... And thanks for the connections. I could tell from the earlier email that there was a solid team focused on this monitoring.

What DEP is doing with the QWA is very interesting - seems similar to what they are trying to support with this RFP. I wonder if PADEP would use QWA as an example, or an instant success story?

At this point there is nothing to join. I am just building a list of watershed associations that might participate. There is no formal commitment for either the watershed association, conservation district, or PADEP at this point in time. I think that I should list QWA at this point as it keeps open the option for additional resources coming to help support your monitoring effort. It might take the form of additional chemical or macroinvertebrate sample analyses, habitat assessments, replacement field meters, or replacement sensors.

To the QWA - are you ok with me listing QWA as a potential participant in the future mini-grant program? Next steps appear to be more than a year away so we will know more about what PADEP is looking for by then, and how it fits with what you are doing right now.

Thanks,
John

John K. Jackson, PhD
Senior Research Scientist

. . . .

I was also looking at your data. Was PADEP analyzing some or all of your samples, or at least paying to have them sent to a certified lab? Those results are not just field meters and Hach kits.

From Kent Crawford
June 15, 2026

Yes, the DEP lab is doing all the lab analyses for our work. Our field meters are calibrated to certified standards on the day we sample. Filtration is done in the field using 0.45 micron sterile filters. Samples are not depth integrated, but our streams are shallow so we take the sample in the thalweg at mid depth.

I am pretty sure that Katie has been in the field to oversee every sample we have ever collected, so that lends a solid quality component and means that all our samples are collected using the same protocol.

If there is a weakness in our sampling it is that high-flow samples are under-weighted. This critique applies to most periodic-sampling programs. The small streams are up and down quickly and are rarely high when our samples are scheduled. To rectify this, we have two ISCO auto-samplers and we hope to use them to collect some high-flow samples.

We do not collect samples for organic compounds or bacteria. But we get the full set of nutrients, several metals, major ions, and suspended solids. ...

One other thing. We have stream-flow stations with continuous gage height and specific conductance at all our sampling locations. And, we do a manual streamflow measurement that accompanies each sample. Unfortunately, we do not have streamflow measurements at high flows and are not capable of high-flow measurements. We don't have the equipment to do it safely. ...

WRONG! Not continuous specific conductance, but continuous temperature. Sorry.

Kent

From Bob Connell
to Kent, John, Mike, Katie, Bob, Kara
June 15, 2026

John and Kent,

Sorry for the delay in responding to this thread. To answer your question, yes - I think we would be ok with you listing QWA as a POTENTIAL participant in the future mini-grant program. As I am just one member of the QWA team, I hope that Mike and Katie would weigh in as well with their thoughts.

About a month ago, QWA was contacted by Tali MacArthur of POWR about the potential for us to receive 319H funds. After discussing among our team leaders, we let Tali know that we felt that it may not be the best fit for our needs at this time. A number of our volunteers are already certified by PADEP as Tier III capable. Up to this point, PADEP has provided us with lab services and supplies for our sampling. What we mainly need is funds for maintenance of our field equipment and possibly for the purchase of new equipment. What we have is old and is starting to show its age. As you mentioned, some of this grant money could be used for equipment, but it is our understanding that it would be limited to $\leq 5\%$ of a maximum grant amount of \$15,000. So, a maximum amount of \$750 for equipment. While any amount is helpful, our equipment needs far exceed this amount. If we are wrong about these amounts, please let us know and we'd reconsider.

We have two ISCO autosamplers that are cleaned, prepped and ready to go when an appropriate storm event comes along (preferably around 2" forecast). It will probably take a few events before we have all the kinks worked out, but we hope to soon start filling the gap in our sampling that Kent described. We have one fully functional YSI data sonde and are working at getting a second one running as well. These could also be deployed during storm events to get storm profiles of temperature, conductivity, pH and DO. One has a turbidity sensor that could provide useful data as well.

It is possible that this grant could be a good fit for something like E. coli testing, which we don't currently do, but have started to consider. However, there are other pieces besides funding that we need to consider first before jumping into that (e.g. more volunteers to do sampling for bacteria and lab space for the equipment). We were successful at recruiting new volunteers at our booth at Old Annville Days (a local street fair) and a significant portion of the queries from the public at this event were regarding whether the waters were swimmable. We are also in discussions with Lebanon Valley College about the possibility of some bench space for the equipment to run the Colilert test for E. coli. We plan to model our effort on that performed by the Lower Susquehanna Riverkeeper Association and have discussed some collaboration with them.

As Kent mentioned, we have tremendous leadership of sampling efforts in Katie Hollen, our Field Operations Lead. She has overseen regular, bi-monthly sampling since 2023. The consistency and quality of that data is evident in our data portal and Katie deserves a lot of the credit for that.

So that is a snapshot of where we are as an organization with regard to monitoring. We welcome and greatly appreciate any funding opportunities that will support QWA's objectives. Thanks!

Bob Connell