QUITTAPAHILLA WATERSHED ASSOCIATION

Meeting Minutes DRAFT Annville Town Hall and Remotely Via Zoom (Hybrid Meeting) Tuesday, March 19, 2024

Present: Michael Schroeder (President), Alyssa Bellucci, Bob Connell, Joseph Connor, Kent Crawford, Karen Feather, Katie Hollen (LCCD), Kara Lubold, Paul Pyle

The meeting opened at 7:03 p.m.

1. Minutes. With one small correction, the minutes of Feb. 20 were approved by consensus.

2. Monitoring Program Updates

A. PA-DEP Audit. We continue to await the results of the Feb. 22 audit by PA-DEP on water sample collection and multi-parameter sonde calibration and use. Subjects of the audit were Katie Hollen & Lydia Mohn of the LCCD and QWA volunteers Bob Connell, Mike Schroeder, and Gary Zelinske.

B. Equipment Updates & Action Items

- 1) Automatic High-flow samplers. Discussion continued on the decision made at the February meeting to borrow two Isco-brand automatic samplers from the Tobyhanna Creek / Tunkhannock Creek Watershed Association in Pocono Lake, PA, who've had them for many years and have not used them within the last decade. Kara reported that transport of the two units from the Poconos to Annville has been arranged. She will be in touch with Prof. Becky Urban at LVC regarding storing the units there, and if that is not an option, she can temporarily store them in her garage.
- 2) Data Management. Bob reported the following by email before the meeting: "Alyssa and I had a good meeting last week and discussed the progress and direction of the Watershed Association's data management. This began with the Google Drive that Alyssa set up for us. Our field observations and lab results are now going there. The next step was to develop a consistent format for the data from the various sources (notes from our field measurements, lab results and data logger results) to make it easier to look at the results of our efforts and to compare them to data from other sources like PADEP and USGS. It is a work in progress, but we believe that we have the beginnings of such a repository for all the information we gather and would like QWA members to have access to it

and provide feedback on improvements we can make. It can be accessed at http://147.185.239.141/qwa/. Check it out if you have a chance. Please feel free to share the link with QWA members." The site was reviewed at the meeting and Bob and Alyssa were thanked for their excellent work, and encouraged to keep moving forward. In pursuit of that aim, Bob agreed to set up a meeting with Julie Vastine at the Alliance for Aquatic Resource Monitoring (ALLARM) at Dickinson College (see https://www.dickinson.edu/allarm). He also suggested we work to integrate our data with that of the Chesapeake Bay Monitoring Cooperative, at https://www.chesapeakemonitoringcoop.org/

- **C.** Compiled Email Correspondence. See <u>Appendix 1</u> to these minutes for a compilation of email correspondence since our last QWA meeting (covering the period from Feb. 21 to March 19) on various aspects of our Monitoring Program.
- 3. Summer 2024 Student Internship Program. Kent reported that he has distributed our internship announcement to faculty advisors at nearby colleges and universities (including Franklin & Marshall College, Dickinson College, Millersville University, Messiah College, Penn State, and others). Mike has posted the flier on social media and agreed to also post it on the QWA website. The deadline for applications is Friday, March 29.

4. Grant Opportunities

- A. Mike reported continuing conversations with Tali MacArthur of the PA Organization for Watersheds & Rivers (POWR, at https://pawatersheds.org/) on this grant opportunity -- https://www.nfwf.org/programs/chesapeake-bay-stewardship-fund/chesapeake-wild/chesapeake-watershed-investments-landscape-defense-wild-grants-2024-request-proposals (Deadline: April 10). Here is Tali's draft language: "The strategic, action, and/or communication plans will have the potential, when implemented, to lead to improvements in the delivery of outreach and education efforts; more community awareness of and engagement in QWA led activities; additional volunteer commitments; stronger more regionally scaled partnerships; the planning, design, and implementation of more impactful watershed restoration and climate resilience projects such as riparian forested buffers; agricultural, municipal, and homeowner best practices for stormwater management; and floodplain restoration to reconnect streams and their floodplains." Mike expects the proposal to be finalized in the coming days.
- **5. Project Updates.** The only new update beyond those listed in the February 19 meeting minutes concerns the Quittapahilla Mainstem Spruce St. Project Update. Kent reported

that the PA Fish & Boat Commission is requiring a cross-section survey of the section where restoration work was recently completed before disbursing all funds. Aquatic Resource Restoration Company (ARRC, at https://arrc1.com/), which did the work, will undertake the survey.

6. Countywide Action Plan Watershed Action Team. The minutes of the CAP-WAT meeting of March 7 are included below in **Appendix 2**.

7. Special Events

- **A.** "Annville Goes Green." See the flier below in **Appendix 3**. Especially notable here are two events:
 - 1) Sat. April 20, 9:00 am—12 noon. Quittie Creek Nature Park Annual Day of Caring. Volunteers will meet at the Swingholm Pedestrian Bridge in Quittie Creek Nature Park in Annville and be divided into work crews to spread mulch, clear trails, remove invasive species, pick up trash, and in general spruce up the Nature Park for the coming summer. Work tools and work gloves will be provided. Please bring your own water, and, if desired, snacks. Long pants and sturdy footwear are recommended. DFTU will set up a canopy and serve food to volunteers after around 11:30 am.
 - 2) Tues. April 9, 6:30 pm, Annville Free Library. "Swimming Upstream: The Work of the Quittapahilla Watershed Association, 1997-Present." In this talk, Quittapahilla Watershed Association President and LVC Professor Emeritus of History Michael Schroeder will discuss the QWA's efforts to improve the water quality of Quittapahilla Creek and its tributaries; to raise public awareness about the watershed's importance to the local quality of life and to the Chesapeake Bay watershed; and to encourage citizens, organizations & businesses in Lebanon County to help maintain the health & viability of the watershed's streams & ecosystems.
- **B.** Lebanon Valley College Earth Days 2024. For the full list, see https://www.lvc.edu/about/sustainability-initiatives/earth-day/
- **C.** Friday, April 26, 3-5 pm in South Hills Park in Lebanon Arbor Day event organized by Lebanon County Clean Water Alliance and the Lebanon County Conservation District. Rain date Fri. May 3.
- **D.** Envirothon 2024, from March 20 to May 10. Katie announced that volunteers are needed for this year's Envirothon events with elementary, middle school, and high school students. The full description and event schedule can be found on the LCCD website: https://www.lccd.org/envirothon

- **E.** Sat. June 8, 9 am—2 pm, Historic Old Annville Day in downtown Annville. Mike reported that he will submit the requisite form and payment for a space for the QWA as in past years. The LCCD is warmly invited to join us.
- **8. New Business:** Paul reported on the 1,000-acre pumped-storage hydroelectric facility proposed for Cuffs Run, near the Susquehanna River in York County. Discussion ensued. Consensus was reached that since the Chesapeake Bay Foundation, the Lower Susquehanna Riverkeepers Association, and other conservation and sporting groups are opposed to this project, the QWA should follow their lead.

The meeting adjourned at 7:49 pm.

Respectfully submitted,

Michael Schroeder, Secretary Pro Tem

Appendix 1. QWA Compiled Email Correspondence on Monitoring Program, Feb. 21—March 19, 2024

Compiled by Michael Schroeder, QWA President

SUBJECT: QWA Audit Tomorrow - 2/22 From Katie Hollen

Wed, Feb 21, 8:54 AM

to Gary, Bob, Mike, Lydia

Hi all,

Just some confirmations for our sampling audit tomorrow, 2/22. DEP (Erika, the program supervisor, and Mark - not Mark Hoger, a different Mark) will meet us at Q1 @ Garfield St at 9:00 AM. Gary, Lydia, and I will load equipment at LVC at 8:15 AM, and we'll plan to meet at Q1 around 8:40 AM. That should give us time to label our bottles before DEP arrives.

Below is from Erika. I reminded her that we are not used to doing calibration and field chem processing independently, and we might not have everyone fully audited in both parts. So, we'll discuss with them when we get there.

"We will split you folks up into groups. Half will go with me to complete the field meter audit and half will go with Mark Brickner to complete the field chem audit. Each person will be evaluated individually. Once the groups are finished the groups will switch. Mark and I will both be documenting/taking notes on folks and may ask specific protocol related questions to gage your understanding of the protocol. Once protocols are performed we will offer feedback/corrections verbally. Once the audit is complete Mark and I will write-up your audit and recommendations, provide the write-up back to you folks for review and signature, DEP will sign and date, file a copy of the audit and provide back to you a copy for your filing.

"Some FYIs for the day. Please bring your own equipment and supplies so DEP can check those items and ensure they are adequate for protocols. Also please be prepared with boots, waders, safety equipment, etc. There will be some standing around for folks as others are being audited please be patient with the process. For the field meter portion of the audit, folks will be able to use DEP standards; I don't want folks to use up what you would otherwise need for your project. To make the field chem portion go faster please label all bottleware prior to the audit. Each collector will need their own bottleware labeled. We will have extra supplies to replenish you all as we will not be submitting samples and I don't want you folks being out your own bottleware."

So, that's that. Seems intimidating but I'm sure we'll be fine. Also, a weather check - it's looking... chilly. No rain expected until the afternoon so let's cross our fingers while we can still feel them.

See you all tomorrow! As always, give me a call if you have any questions.

Thanks, Katie

Katie Hollen
Watershed Specialist
Lebanon County Conservation District
717-277-5275 ext. 114
www.lccd.org

SUBJECT: Automatic Samplers

Kent Crawford Attachments 7:29 AM, Thursday, Feb. 29, 2024

to Alyssa, Katie, Kara, Mike, Bob, paulpyle, Joseph, Karen

I am proud of our water-quality sampling efforts to date. We are getting good quality samples at all our sites and covering the low-flow regime very nicely. But, we know that many contaminants are transmitted at higher concentrations during high flow. So, one way to cover the high-flow periods would be to use an automatic sampler to collect the high-flow samples. This would avoid sending our volunteers into the stream during potentially dangerous high-flow periods. At our WQA meeting a week ago (February 20, 2024) we discussed the use of an automatic sampler (or samplers) for collecting high-flow samples. An auto-sampler is capable of collecting a lot of samples in a short time period. So, I have concerns that DEP will not want to analyze all the samples we could collect. My concerns stem from previous discussions with Mark Hoger and with an email exchange with Erika Arnold at DEP. At our February 20 meeting, we decided to first make sure DEP will analyze our samples prior to proceeding with obtaining, maintaining, and deploying the sampler(s). So, we need to suggest a plan to DEP to get their prior approval. Then, we can proceed with our sampling efforts.

I would love to ask for lots of samples to be analyzed, but I think DEP would reject that approach. Instead, I suggest a modest approach that does not over tax our volunteer crew and does not break the bank at DEP. Unfortunately, I do not have a specific number of samples that DEP has suggested they could support.

Here is a draft of the note I would like to propose to Ms. Arnold to get prior approval for having the DEP lab do the sample analyses. Please review the note and let me know if you think this is a logical plan. For example:

- Is this too ambitious for our volunteers to tackle?
- Should we propose submitting more samples per storm? Fewer samples per storm?
- One sample per year rather than two?
- Include metals in the analytical request?
- Include major ions (Ca, Na, K, Mg, SO4, Cl) in the analytical request?

- Sample in the tributaries as well?
- Sample the tribs instead of the main stem?
- Q1 and Q2 or elsewhere? At the mouth? Upstream from Lebanon?
- Upstream from Lebanon and Downstream from Lebanon?

Finally, a word about deploying the automatic sampler(s). Ideally, in the lab, we would prepare the sampler(s) for deployment. This would involve learning how to program them, cleaning the bottles and hoses, ordering any needed parts to make them workable (suction tubing and batteries for sure), and doing a dry run in the lab to make sure they work properly. In the field, we would need to prepare a site for their deployment. This would involve:

- 1. Finding a suitable location to place the sampler.
- 2. Preparing a platform so that the sampler could sit level and high enough above the water that the sampler would not be inundated by high flow.
- 3. Determining the position for the intake tube (ideally in the middle of the stream near the bottom. On the downstream side of a bridge piling would be ideal, but hard to find in our watershed.
- 4. Planning for the security of the sampler (lock and chain? hide the sampler?)

The platform for the sampler need not be anything elaborate. It could be something as simple as digging out a level area in the streambank. Or, it could be a cinder block platform on the bank (see attached picture for an example) or a wooden structure attached to the bridge. It would need to be high enough above the stream so that it would not be inundated during a high-flow event, but low enough so that the intake tube is not so long that the sampler cannot pull water from the creek up to elevation of the sampler.

Then, once we are ready, we watch the weather forecast and the day before a significant rain is called for, we pre-program the sampler(s), take them to the field, and deploy them. Typically, the weather forecasts are not spot on and maybe all our plans have been for naught because the predicted rainfall did not materialize. So, we wait for the next predicted rainfall and hope that one is "perfect."

What I am trying to communicate is that using an automatic sampler is a challenge, and frequently, not everything goes perfectly. Just be ready for that possibility.

So, here is a draft plan. Your critique will be appreciated. Thanks,

Kent

Dr. J. Kent Crawford Environmental Scientist Hummelstown, PA 17036

[in a Word document attachment]

To Erika Arnold, PA-DEP February 28, 2024

Ms. Arnold,

Our email exchange of January 26 indicated that the Quittapahilla Watershed Association (along with the Doc Fritchey Chapter of Trout Unlimited and the Lebanon County Conservation District) would like to expand our water-quality monitoring to include high-flow sampling. We have arranged to borrow two automatic samplers to assist us with this effort. But, prior to proceeding, we need to be assured that the DEP will support the laboratory analysis of these samples. So, here is our proposal for your consideration. We have tried to limit the number of samples as much as possible, while still providing important information about the movement of contaminants in the Quittapahilla Creek Watershed.

Please evaluate our proposal and indicate to us whether we may proceed with the assurance that our samples will be analyzed by DEP.

Our Proposal:

Sample two sites only (we are attempting to limit the number of samples):

- Q1 Quittapahilla Creek at Garfield Street (This is an upstream location, a little over two
 miles downstream from the City of Lebanon. The location has been selected to capture
 contaminants moving downstream from Lebanon.)
- Q2 -- Quittapahilla Creek at Palmyra-Bellegrove Road (This is a downstream location, downstream from all the urban and suburban inputs and downstream from almost all of the agricultural inputs. This site also is the location of a USGS streamflow monitoring station.)

Using the automatic sampler, collect samples over the duration of two high-flow events per year – one in the spring, and one in the fall. So, two events at two stations for 2024.

As an example, on January 28, 2024, there was a rainfall event that delivered 1.09 inches of precipitation to the Quittapahilla Creek Watershed. (Data from the National Weather Service, https://www.weather.gov/wrh/Climate?wfo=ctp). This rainfall event caused a spike in the streamflow of the Quittapahilla Creek that started on January 28 at 2:15 a.m. and peaked on January 28 at 1:00 p.m. At that time, the water began to recede and the rescission continued through at least noon on January 30 (Source: USGS Current Conditions web address -- https://waterdata.usgs.gov/monitoring-

<u>location/01573160/#parameterCode=00065&showMedian=false&startDT=2024-01-26&endDT=2024-01-30</u>). During the event, the streamflow went from 118 cfs to 387 cfs. By January 29 at 2:15 a.m. the streamflow was back down to 253 cfs. So, the bulk of the event lasted just 24 hours.

Of course, each rainfall event is different. But, if we use this January 2024 event as "typical," we could cover the bulk of the high flow in a 24-hour sampling period.

Our automatic samplers hold 24 bottles. An automatic sampler can be pre-programmed to collect samples on any desired time schedule. So, if we were to set the sampler to sample every hour, we could cover the "typical" high-flow hydrograph. Then, we could select the most critical samples to be sent to the lab for analysis. These samples would be weighted toward the rising limb of the hydrograph and the peak, with fewer samples for the recession. From these 24 samples, we are suggesting that we send only five samples to the lab from each high-flow event that we sample. That would mean we send a total of 20 samples (2 stations X 2 events X 5 samples per event = 20 samples total) to the lab for calendar year 2024.

We suggest that each of these 20 samples be analyzed for nutrients (both filtered and unfiltered) and total suspended solids. We are not proposing analyzing for metals, major ions, bacteria, or organic compounds.

We would be sure to follow accepted protocols for sample collection including collection-tube cleaning and bottle cleaning. Our volunteers would not be able to preserve the samples immediately upon collection, but would filter the samples (0.45 μ pore size), preserve the samples (H2SO4), and deliver them to the lab on ice within 24 hours of ending the deployment.



SUBJECT: Automatic Samplers

Bob Connell Attachment Mar 3, 2024, 3:00 PM

to Kent, Alyssa, Katie, Kara, Mike, paulpyle, Joseph, Karen

Hi Kent,

Thanks for putting together this proposal to PA DEP. Your approach looks sound to me.

Is this too ambitious for our volunteers to tackle?

Each time that I've joined our monitoring team for sampling, I've been impressed with the dedication and the "professional" approach that our monitoring team has toward the sampling. Katie has continued to provide the strong leadership that you gave to get us off the ground. I

believe that Erica and Mark saw that during our audit. So I am confident that our team can handle stormwater sampling.

I also agree with Mike (and I think Katie as well) that we not get too much on our plate a once. Could we view 2024 as a time to get the equipment, get familiar with it, establish how it will be deployed, and get additional information on the storm flow characteristics at the site(s) we will use? Then plan for actual stormwater monitoring in 2025. I feel that is a realistic goal while maintaining the routine, quarterly monitoring that began in 2023.

Should we propose submitting more samples per storm? Fewer samples per storm? One sample per year rather than two?

My feeling is that even just one sample during high flow conditions would enhance our understanding of the nutrient/sediment loads at our sites. The trick is knowing at what point in the rising hydrograph the first flush occurs? This will differ from urban to rural sites. So if we are limited by DEP's lab capability, could we consider compositing multiple samples from the rising part of the hydrograph? Maybe flow-weight the samples based on water level? Does that sound feasible? Could storm condition deployments of our sondes in 2024 give us useful information on the changes in water quality during the hydrograph that could help us plan stormwater sampling in 2025? (the attached file shows how water level responded at Q1 to a 3/4" rain event on 8/13/23)

Include metals in the analytical request? Include major ions (Ca, Na, K, Mg, SO4, Cl) in the analytical request?

Dropping the metals from the stormwater analyses makes sense since, based on our sampling last year, over 70% of the metals samples analyzed were non-detect. Correct me if I'm wrong, but I don't believe that the Quittie is listed as impaired for metals (same for the major ions). Your proposal's focus on nutrients and sediment are in line with DEP's listed impairments for the Quittie.

Sample in the tributaries as well? Sample the tribs instead of the main stem? Q1 and Q2 or elsewhere? At the mouth? Upstream from Lebanon? Upstream from Lebanon and Downstream from Lebanon?

To me, it makes sense to start with the mainstem of the Quittie. The only reason not to do this would be if stormwater loads had already been established by someone else. Many samples have been collected by USGS and PA DEP at Q2 so they have given that site a lot of attention.

Did that also include stormwater monitoring? If not, then we should definitely include Q2 given the wealth of other data at that site, including flow data. Our experience with the mainstem could inform the need for additional stormwater monitoring in the tributaries in the future.

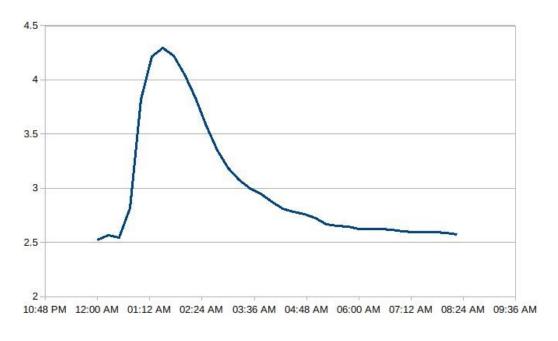
Deploying the autosamplers at our sites

According to ISCO, their samplers can be placed up to 25 ft above the level of the water being sampled. For Q1, I'm sure we could find a spot on the bridge or the bridge abutment to place the sampler. Q2 may be more of a challenge, so we'd need to take a closer look there at options. If we could spend 2024 getting familiar with the samplers and design our use of them for "rapid response", we may be able to minimize the false starts. Forecasts within 24 hrs tend to be reasonable. With the ability to deploy quickly, we could use weather radar 1 hour prior to trigger a deployment. Weather radar is often more reliable than the forecast.

We must also consider that rain events happen on a 24/7 basis. The probability of a storm event during a normal 9-5 work day is about 24%. If we limit ourselves to sample only during work hours, we will likely have only 1-2 opportunities/year, if that. If instead we are collecting samples after hours or on the weekend, will the DEP accept them within the holding time necessary for the samples? This should be part of our discussion with DEP.

So my feeling is that knowing the nutrient and sediment loads during storm conditions is important enough to work our way through the challenges of stormwater sampling. It will take a lot of planning to be workable, so I suggest we give ourselves a year (2024) to get a plan in place.

Bob



SUBJECT: Automatic Samplers

Katie Hollen Attachments Wed, Mar 6, 11:18 AM to Bob, Kent, Alyssa, Kara, Mike, paulpyle@comcast.net, Joseph, Karen

Thanks for the proposal, Kent. Definitely a lot to process. Should we wait to approach DEP until we get the green light from our audit to continue sampling?

I think the proposal is solid. My comments, building off of Bob's, are below:

Is this too ambitious for our volunteers to tackle?

No way of knowing unless we try. Starting high-flow monitoring in 2025 seems realistic. It could be overwhelming, so let's give ourselves time to ensure we know what we are doing and are utilizing the equipment effectively. It could be tricky volunteer work – keeping an eye on the weather, then mobilizing folks in a short timeframe to deploy and collect samples. But, once we have a good understanding of our process it should be doable.

Should we propose submitting more samples per storm? Fewer samples per storm? One sample per year rather than two?

I think Kent's approach is reasonable. I like the two sampling occasions per year. If DEP wants fewer samples, they'll let us know. I agree with Bob that even one sample would be useful – it's better than what we have now! Finding a way to combine multiple samples would be great, but it also sounds complicated.

Include metals in the analytical request? Include major ions (Ca, Na, K, Mg, SO4, Cl) in the analytical request?

Makes sense to me to limit analysis to nutrients since that is what we are most concerned about.

Sample in the tributaries as well? Sample the tribs instead of the main stem? Q1 and Q2 or elsewhere? At the mouth? Upstream from Lebanon? Upstream from Lebanon and Downstream from Lebanon?

A quick eMapPA search shows existing stormwater samples for Q2. For example, there was a sampling event on September 2, 2021, when the gage height was 7.30ft (those results are attached in case anyone is curious). I believe there is more recent data but it would take some sifting through. On one hand, perhaps we use our limited resources elsewhere to avoid duplicating efforts. If that data already exists, why recreate it? On the other hand, the availability of flow data at Q2 is great, and it could be good to compare our own data from Q1 and Q2, for example.

I do think starting with the mainstem is a good idea.

Deploying the autosamplers at our sites

We've got some very handy volunteers so I'm sure we'll be able to figure out deployment. It will take some scoping out at Q2.

Bob makes a good point about when we can collect samples. Definitely a question for DEP. We can submit to the lab Monday – Thursday before 4pm, excluding holidays. Kent's proposal does also note that samples won't be preserved at the time of collection. It will be good to clarify with DEP exactly what their timeframes are.

The only other thing I can think to add is that we will need DEP to commit to providing the DI water, acids, etc. that we need for cleaning the autosamplers and processing our samples. This is a cost in addition to the extra laboratory costs.

Katie Hollen Watershed Specialist Lebanon County Conservation District 717-277-5275 ext. 114 www.lccd.org

SUBJECT: Possible agenda item for Tuesday's meeting

Bob Connell Sun, Mar 17, 7:12 PM to Mike, Alyssa

Hi Mike,

I was wondering if we could add an item to the meeting agenda for Tuesday evening. Alyssa and I had a good meeting last week and discussed the progress and direction of the Watershed Association's data management. This began with the Google Drive that Alyssa set up for us. Our field observations and lab results are now going there. The next step was to develop a consistent format for the data from the various sources (notes from our field measurements, lab results and data logger results) to make it easier to look at the results of our efforts and to compare them to data from other sources like PADEP and USGS. It is a work in progress, but we believe that we have the beginnings of such a repository for all the information we gather and would like QWA members to have access to it and provide feedback on improvements we can make. It can be accessed at http://147.185.239.141/qwa/. Check it out if you have a chance. Please feel free to share the link with QWA members.

Bob		
END OF COMPILED EMAILS.		

Appendix 2. Countywide Action Plan Watershed Action Team Meeting Minutes, March 7, 2024.



Lebanon CAP Watershed Action Team March 7, 2024

Members Present: Bethany Canner, Katie Doster, Darren Heisey, Katie Hollen, Rocky Powell

1. Applications

- Not applied yet- Katie D. and Russ discussed a Syner Rd Phase 2 project. Russ will prepare an application.
- Not applied yet- Swatara Township contacted Katie D. and may be interested in a project. No details yet.
- Not applied yet- Bridge replacement on Bachman Run. Rocky received the budget yesterday
 for design and permit. It was a little over \$23,000, but suggested they consider a culvert
 instead of a bridge. Will request construction funds for culvert with stream construction.

2. In-Process Projects

- Quittapahilla Creek- Syner Road Phase 1: \$259,200 of CAP funding. Close to completion.
- Hammer Creek Estates: \$250,000 of CAP funding for construction-related expenses.

3. Completed Projects

Quittapahilla Creek- Spruce Street: \$27,300 of CAP funding.

4. Partner Updates

- Clear Creeks Consulting, Rocky Powell
 - Beck Creek 6 Stream and Floodplain Restoration Project. Doc Fritchey Trout
 Unlimited was approached by PA-DEP regarding rolling the \$271,572 requested from
 Community and Economic Development into the 319 grant, increasing the 319 grant
 request to \$766,021. Received verbal confirmation from DEP that the project will be
 funded through 319. The money will not be distributed until Winter 2024 or Spring
 2025. Construction anticipated to start Summer 2025.
 - Snitz Creek 2 & 3 All permits and approvals have been obtained. Site showing for pre-qualified contractors in late March. Will be applying for construction funding in May 2024 with implementation planned for 2025.
 - Snitz Creek 4 DFTU received its contract with PADEP on October 10, 2023. Work
 got underway on December 4, 2023 with the site walk with our survey crew and
 representatives of the pipeline companies. Topographic survey complete, base maps
 in progress.
 - Killinger Creek The Pre-Application Site Visit with PADEP, USACOE and LCCD was completed. LCCD Erosion and Sediment Control approval and Army Corps 404 permit obtained. PADEP 105 permit anticipated within two weeks.
 - Bachman Run The new landowner, G. Horst, agreed to a 15-foot buffer and signed the Landowner-Grantee Agreement. Finalization of the Preliminary Design is in progress. Obtained budget from Steckbeck Engineering for geotechnical



Lebanon CAP Watershed Action Team

investigations, design and permitting for replacement of the undersized existing bridge on Bender Lane (\$23,600). They recommend we investigate a box culvert which would be less expensive.

- Lebanon Consortium/MS4, Darren Heisey
 - DEP has not yet released the next permit term requirements. Term is likely to be delayed again. Consortium is hearing that the next permit will focus on volume reduction, not sediment reduction. The Consortium's current PRP focuses on sediment reduction projects.
 - o SQ6 Floodplain restoration. Getting agreements from property owners.
 - o Lions Lake Bank Stabilization On hold until they receive the joint permit.
 - To achieve volume reduction goals, Rocky recommended looking at the original Quittapahilla Creek Watershed Assessment – Restoration and Management Plan (2006), which included ten regional facilities designed to address water quantity and quality. Rocky will send a copy of the plan to Darren.
- Quittapahilla Watershed Association, Mike Schroeder (updates provided via email)
 - Monitoring Program Five volunteer monitors were audited by DEP for sample collection and sonde use. Initial feedback from DEP was positive but the final report has not been received. A plan to use an automatic water sampler to collect samples during high-flow events is being developed. Pressure transducers are being serviced.
 - April 9, 6:30 PM Presentation by Mike at the Annville Free Library, "Swimming Upstream: The Work of the Quittapahilla Watershed Association"
 - o April 20, 9 AM 12 PM Day of Caring work day at Quittie Creek Nature Park
 - o June 8, 9 AM 2 PM Table at Historic Old Annville Day
- Swatara Watershed Association, Bethany Canner
 - o May 4 Swatara Sojourn (in Dauphin County this year)
 - o April 20, 9 AM 12 PM Day of Caring cleanup at Swatara Watershed Park

5. QWA Summer Internship Program

A 2024 summer internship will be offered. Like last year, Rocky will provide training and the
final report, and LCCD will provide funding for two summer interns and Rocky's work. The
announcement has been sent to local colleges. Applications are open through March 29.

6. Next Meeting

April 4, 2024 at 9:00am

Appendix 3. "Annville Goes Green" Events Flier.

ANNVILLE GOES GREEN!



Greater Annville "Clean Up the Streets Day" - Part 1

Saturday, March 16 - 11 am

This Celebrate! Annville event kicks off an initiative to keep Annville clean and green! Meet at the fountain by Subway. Bring aluminum cans to recycle. Pick up trash around town. Bags provided. Wear sturdy shoes, gloves. Bring water and snacks, if desired. Donations to Celebrate! Annville appreciated.

A Walk in the Park: Spring Flowers

Tuesdays at 9 am: March 19, April 2, April 16

Meet at Swingholm Walking Bridge, Quittie Creek Nature Park. Free.

Tours guided by Kathy Moe, member of the Quitte Creek Nature Park Committee

"Green" Storytimes with Miss Cindy

Annville Free Library - Free - Contact Library for more information

Tue 10:15, Wed 1:15, Thu 10:15

April 2, 3, 4 Gardeners - April 9, 10, 11 Bugs! - April 16, 17, 18 Paleontology

Swimming Upstream: The Work of the Quittapahilla Watershed Association Tuesday, April 9, 6:30 pm, Annville Free Library Community Room. Free.

Presented by Michael Schroeder, President, Quittapahilla Watershed Association

Work Day at Quittie Creek Nature Park + Garlic Mustard Treats!

Saturday, April 20, 9 am - 12 pm, Quittie Creek Nature Park

Wear sturdy shoes, long pants/sleeves. If you have them, bring wheelbarrows, hay rakes, and ground rakes (label with your name). Adventurous eaters may taste garlic mustard soup and pesto! Part of Lebanon County's Day of Caring.

Greater Annville "Clean Up the Streets Day" - Part 2

Saturday, April 27 - 10 am - 2 pm

Meet at the fountain by Subway. Pick up trash around town. Bags, gloves, safety vests, maps provided. Bring water and snacks, if desired. Wear long pants, sturdy footwear. Organized by Quittapahilla Garbage museum in partnership with Quittapahilla Watershed Association, the Quittie Creek Nature Park Committee, and Lebanon Valley College.

For more details, visit www.fooa.org/celebrate-annville

