QUITTAPAHILLA WATERSHED ASSOCIATION

Meeting Minutes DRAFT Annville Town Hall and Remotely Via Zoom (Hybrid Meeting) Tuesday, January 21, 2025

Present: Michael Schroeder (President), Alexis Biondi, Bob Connell, Kent Crawford, Karen Feather, Katie Hollen (LCCD), Kara Lubold (LCCD), Rick O'Leary, and special guest Brent Kaylor (Chairperson, LCCD)

The meeting opened at 7:02 p.m.

1. Minutes. The minutes of the Dec. 17 meeting were circulated electronically before the meeting and approved by consensus.

2. Monitoring Program

A. Fieldwork updates. Katie reported that Erika Arnold of DEP will be our point of contact for QWA's monitoring project moving forward, taking over from Mark Hoger. Any questions, equipment needs, etc., should be addressed to Erika Arnold, Environmental Group Manager, Monitoring Section, Department of Environmental Protection, Rachel Carson State Office Building, Bureau of Clean Water, 400 Market Street, Harrisburg, PA 17101, tel. 717.787.8189, email: erikarnold@pa.gov Katie further reported that in the coming days she will be soliciting volunteers for stream monitoring work in February.

B. Equipment updates.

- 1) ISCO auto-samplers. Testing them out had to be delayed in consequence of inclement weather, so the next date for testing them in Kara's garage is Friday, Feb. 28.
- 2) Alternatives to the Hobo Sensors. Kent and Bob reported on the results of their research into replacements for the Hobo sensors at our five monitoring sites, which keep breaking down. A summary of their findings from conversations with John Jackson at the Stroud Water Research Center (https://stroudcenter.org/) appears below in Appendix 1 to these minutes. Bob and Kent agreed to prepare a funding proposal for consideration by Bryan Hoffman and the Lebanon County Stormwater Consortium, which have been very supportive of our monitoring efforts in the past.
- **C.** Data management & Water Quality Portal updates. Bob suggested that we make and post on our QWA website a series of instructional videos on using QGIS for our Water Quality Portal. Consensus was reached that this would be a very good idea,

- and that it could dovetail with the work to be undertaken by the LVC students in prof. Pettice's digital communications course (see item 5, below).
- D. Biological monitoring update. In response to a Jan. 17 email query from Mike, LVC student Charles Katona reported: "Unfortunately, I am farther away from completing it [the biological monitoring report for 2019-2023] than I had originally assumed I was. With the new samples that came in from the fall, my research professor wants that data included before I put together the final report how she wants it. I apologize for the delay, but it will probably take some more time. Thank you for your patience and I look forward to getting the report to you."
- Report on Second Countywide Strategizing Meeting, Dec. 13, 2024. Mike reported that he and Kara have finalized the minutes of our second countywide strategizing meeting of Dec. 13. Earlier today, the minutes were circulated to those in attendance and appear below in Appendix 2 to these minutes.

4. NFWF Grant

- **A. Scope of Work.** Mike reported that after a bit of back-and-forth with Tali MacArthur at POWR, on Jan. 9 the QWA submitted a scaled-back scope of work for a consultant. That scope of work document is included below in these minutes in **Appendix 3**.
- **B.** Timetable moving forward. Also included in Appendix 3 is an anticipated timeline for our NFWF grant moving forward, courtesy of Tali MacArthur at POWR, sent on Thurs. Jan. 16.
- **5. Digital Communications Course at LVC.** Mike summarized recent email conversations with LVC Professor of Digital Communications Mary Pettice regarding her course that will be spotlighting the work of the QWA. These email conversations are summarized below in these minutes in **Appendix 4**.
- **6. Lebanon Co. Planning Dept.** Mike reported that he intends to reach out to Julie Cheyney at the Leb. Co. Planning Dept. to explore the possibility of collaborating on an updated Comprehensive Plan for Lebanon County, and to see if our efforts to map and document the county's waterways might be fruitfully combined.
- **7. Projects updates.** See the minutes of the Watershed Action Team for Jan. 2, 2025, below in these minutes in **Appendix 5**.
- 8. Education, outreach & special events.

- **A.** The Lebanon Valley Conservancy 25th Anniversary Sustainability Soiree. Scheduled to start at 5:30 PM Thursday, Feb. 20 at the Blue Bird Inn; see their Facebook post at https://www.facebook.com/share/1WfepV9PUX/
- **B.** Historic Old Annville Day 2025. Mike reported that the exact location of HOAD 2025 is still undetermined in light of North Annville Township's denial of Friends of Old Annville's request to reroute traffic onto Clear Spring Rd. Updates are forthcoming.
- C. Farm Show, 2025 and 2026. Alexis reported that the Farm Show is too big for the QWA to have its own booth, and that in any case we are too late to participate in this year's Farm Show but for next year we might want to have a booth at the Lebanon Area Fair and to piggyback on another organization for the Farm Show in 2026. On the 2025 Farm Show, see https://www.pa.gov/agencies/farmshow/pafarm-show.html
- **9. Media & website.** Mike reported that he has added to the QWA website a request by the City of Lebanon Authority (COLA) to the EPA to modify its NPDES permit, because the compilation of documents submitted by the COLA includes a great deal of specific information about the wastewater treatment plant at the confluence of Quittie Creek and Snitz Creek in North Cornwall Township.
- 10. Lebanon County Stormwater Consortium updates. No report.

The meeting adjourned at 8:02 pm.
Respectfully submitted,
Michael Schroeder, Secretary Pro Tem

Appendix 1. Conversations with the Stroud Water Research Center on alternatives to the Hobo sensors

Call with Stroud Water Research Center 1/2/2025

John Jackson, Stroud (610) 268-2153 X1226 Kent Crawford, QWA Bob Connell, QWA Solinst sensors – really tough. Not real time \$725. Need a baro logger to correct for pressure

Description	Price*	Notes
Solinst Levelogger 5 Water Level Logger	\$697.30	
Barologger 5 pressure & temperature logger, air only		Only one needed per local area. Not needed if 4G LTE telemetry is used
Biofoul screen	\$88.00	
Levelogger 5 App Interface for real-time view and data upload	\$425.00	This or the telemetry system.
LevelSender 5 cellular telemetry system, 4G LTE	\$984.00	, ,
L5 direct read cable assembly, 15'	\$100.00	

Mayfly – cheaper & real-time Depth temp, cond. Sensor. Will run for 5 yrs online through monitor my watershed. Don't like to be frozen. Need in moving water. Don't use a stilling well. Conductivity needs cleaning every week. Need to talk to Shannon Hicks @ Stroud (610) 268-2153 X1267 regarding details of purchase and setup of Mayfly

Description	Price*	Notes
EnviroDIY Monitoring Station Kit	\$510.00	
Lithium-ion battery	\$19.95	
CTD sensor	~ \$1,000.00	
Monitor My Watershed Annual Fee	\$100.00	

Follow-up via email

from: Kent Crawford

to: Bob Connell, Michael Schroeder. Katie Hollen. Alyssa Bellucci, Kara Lubold

date: Jan 8, 2025, 2:49 PM

subject: Funding

Bob,

I just talked with Bryan Hoffman and he says we should prepare a proposal for new stream depth-monitoring equipment and he will take it to the Lebanon County Consortiumfor their consideration. No guarantees, but this is the only option that I know about. Sounds hopeful.

Kent

from: Bob Connell

to: Kent Crawford, Michael Schroeder, Katie Hollen, Alyssa Bellucci, Kara Lubold

date: Jan 8, 2025, 3:21 PM

subject: Re: Funding

Kent,

That's great news! Attached you will find my notes from our call with John Jackson at Stroud. Since our call, I've done some reviews of the two options he mentioned, the Solinst sensor and the Mayfly. Below is my best estimate of the costs. Mayfly is only available with telemetry. Solinist can provide the same features as the Mayfly, with an option for telemetry if desired. Based on what I know to date, I'm leaning toward the Solinst system for the following reasons:

- John Jackson's statement about the reliability of the Solinst sensors.
- the ability to start with just the sensor and add telemetry later if needed. We could
 propose a budget with just one sensor with telemetry and add telemetry to other sites
 later.
- Solinst's offer of a biofouling screen. This will reduce the rate of fouling of the conductivity sensor and in turn, the frequency we would need to service the sensor. John said the Mayfly required weekly cleaning for biofouling.
- data from Solinst's telemetry system can go to any website server. Mayfly's will only send it to Monitor My Watershed's server (for a fee).

That's my rationale at this point. However, before we make a final decision, it would be good to talk to Shannon Hicks at Stroud and to a rep from Solinst to be sure we have it all straight.

Bob

Component	Solinst (without telemetry)	Mayfly (with telemetry)	Solinst (with telemetry)
Sensor Base	\$697.30	\$510.00	\$697.30
Sensor	Included in above	\$1,000.00	Included in above
Barometric Pressure Logger	\$364.80	Not needed	Not needed with Telemetry
Biofouling screen	\$88.00		\$88.00
Cable – 15 ft	\$100.00	Included in Base	\$100.00
Lithium-ion battery		\$19.95	
Telemetry annual fee		\$100.00	
Telemetry software			\$425.00
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Total:	\$1,250.10	\$1,629.95	\$2,294.30

Since only one Barometric logger is needed for all of our sensors, the price per sensor goes down the more you buy.

Number of Sites	r of Sites Solinst Cost/site	
2	\$1,067.70	
3	\$1,006.90	
4	\$976.50	
5	\$958.26	

Appendix 2. Meeting minutes for 2nd Countywide Strategizing Meeting for Watershed Work

Friday, December 13, 2024 in the LCCD conference room Drafted by Michael Schroeder, QWA President January 21, 2025

Present:

- Bethany Canner, Swatara Creek Watershed Assoc
- Russ Collins, Past President, DFTU, and member, QWA
- Bob Connell, member, QWA
- Hannah Hartman, District Manager, LCCD (via Zoom)
- Abigail Harvey, Executive Director, TLVC
- Katie Hollen, Watershed Specialist, LCCD and member, QWA
- Ned Gibble, Board Member, TLVC
- Kara Lubold, Environmental Grant Coordinator, LCCD, and Member, QWA
- Mike Morris, Water Program Specialist, PA-DEP
- Jon Niles, The Nature Conservancy
- Rocky Powell, Owner & Operator, CCC
- Michael Schroeder, President, QWA
- Bryan Seipp, Senior Environmental Scientist and Forester, EPR
- Maranda Smith, Agricultural Project Coordinator, LCCD

- Rich Starr, Vice President & Senior Water Resources Scientist, EPR
- 1. The meeting opened at 9:10 am.
- 2. Michael Schroeder summarized the purpose of the meeting: to develop a process for (1) communication, (2) coordination, and hopefully (3) collaboration among the various stakeholders involved in efforts to improve the quality of the water in Lebanon County's waterways, especially for prioritizing, selecting, and scheduling projects and funding. The problems we seek to avoid: haphazard & uncoordinated projects and competing against ourselves for scarce funding. Michael summarized the points of consensus that came out of the first strategizing meeting on Sept. 6: (1) that the Watershed Action Team (WAT) of the LCCD should serve as umbrella organization for this group, and (2) the need for a process for identifying and prioritizing various types of projects, including agricultural BMPs, urban stormwater BMPs, stream restoration work, and wetland mitigation banking.
- 3. Discussion then turned to the three items listed on the meeting agenda for discussion:
 - a. Developing a process for continuing communication among the people & groups represented here, esp. a digital platform for sharing documents & materials
 - b. The role of the LCCD in coordinating work in Leb Co watersheds
 - c. Documenting the need for proposed projects, esp. the amount of detail needed in the design & permitting phase and the criteria used for identifying and scheduling projects
 - d. The role to be played by this group moving forward
- 4. After discussion, it was agreed that this group will meet at least once a year around November or December to compare notes and update our plans moving forward regarding anticipated projects, funding sources, and timelines.
- 5. Jon Niles noted that the Nature Conservancy commissioned a "decision matrix" for restoration work on the Cocalico Creek that is loosely based on an academic article by Ellen Wohl, "Rediscovering, Reevaluating, and Restoring Lost River-Wetland Corridors," in Frontiers in Earth Science, 29 June 2021, https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2021.653623/full. See also Wohl, "An Integrative Conceptualization of Floodplain Storage," in Review of Geophysics, first published 10 March 2021, accessible at https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020RG000724). Jon indicated that he will be happy to share this decision matrix.
- 6. In response to Rocky's concerns about competition between projects on Hammer Creek and Quittapahilla Creek, Rich Starr suggested that at this group's annual meeting around November or December of each year, interested parties identify and share their priority projects for the next 12-18 months, including funding sources and timelines, to see if there are any conflicts.

- 7. Rocky summarized the main points of a document he circulated before the meeting titled, "Quittapahilla Creek Watershed Project Implementation Strategy Multiple Subwatersheds Annually and Simultaneously" (included below in the appendix to these minutes). The basic idea is to outline priorities and funding sources for three types of projects that can be pursued simultaneously: larger & more complex restoration projects, smaller restoration projects, and agricultural BMP projects.
- 8. Maranda Smith suggested a spreadsheet to keep track of various projects in the two watersheds. She also recommended that this spreadsheet distinguish between agricultural BMPs that deal with the day-to-day operations of farms, and stream restoration projects.
- 9. Kara Lubold suggested a digital platform to which we all have access to keep track of the various projects being undertaken by different groups in the two watersheds, including the work being undertaken by the Lebanon County Stormwater Consortium (made up of the City of Lebanon, the Cleona Borough Authority, and the townships of Annville, North Cornwall, North Lebanon, and South Lebanon).
- 10. Jon Niles suggested that a model for what we are visualizing already exists with the Lancaster Clean Water Partners website, at https://lancastercleanwaterpartners.com/
- 11. Michael Schroeder noted that our timing here is auspicious because the Lebanon County Planning Department is gearing up to produce an updated Comprehensive Plan for the county. He noted that this group would be well advised to combine its efforts with the Planning Department, especially for a digital platform to keep track of watershed projects past, present, and future (the current Lebanon County Comprehensive Plan was completed in 2007 and projected to have a shelf-life of ten years, which means it is nearly a decade out of date).
- 12. Russ Collins noted that the Doc Fritchey Trout Unlimited is facing a kind of succession problem and that it may not be able to administer grant funding for new projects, at least for a while.
- 13. Mike Morris was asked about EPA's and PA-DEP's criteria for funding projects, more specifically, whether an applicant's submission of multiple proposals in a single funding cycle will decrease the prospect of their projects receiving funding for example, if DFTU submits six Growing Greener proposals in a single funding cycle, will their chances of receiving funding for, say, Project No. 1 decrease if they are approved for funding for Project No. 2? Mike said he would check and get back to the group. [See the follow-up below.]
- 14. At this point in the meeting, participants got to work discussing the table of projects Rocky had prepared before the meeting, identifying which projects to prioritize over the next 18-24 months, color-coding them, and so on.

15. Next steps: Jon said he will circulate the decision matrix he had mentioned, including the applicants and funding sources, and Rocky said he would populate it with the projects he anticipates and send it back to Jon for review.

The meeting adjourned around 11:10 AN	The	e meeting	adiourned	around	11:10 AN
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Respectfully submitted,

Michael Schroeder, QWA President

Follow-ups to the Second Countywide Strategizing Meeting

- 1. On Sunday, Dec. 15, Rocky circulated among the group a revised table on "Project Status for Quittapahilla and Hammer Creek" that included the changes made during and after the meeting. That (oversize) table is included as a separate document.
- 2. On Mon. Dec. 16, Mike Morris emailed the group as follows:

"I just spoke to DEP's 319 Section. It sounds like it would not be a problem for the same organization (such as DFTU) to submit multiple 319 grants in the same round for different watersheds. Other applicants have received multiple 319 grants during the same cycle. They have a ranking procedure to follow, and how the projects rank relative to eachother is key. If the same applicant has multiple applications that score high, it is very possible that they could get multiple grants in the same round. That being said, it does sound like they may avoid spending most of their money on a single watershed; for instance, they probably wouldn't want fund three big projects and thus spend most of their money in just Hammer Creek during the same grant round.

3. On the "ranking matrix," Jon Niles wrote to Kara Lubold on Fri. Jan. 17, "We don't have the ranking matrix yet from our contractor who was developing it. Deadline is end of February so we will have it then."

Appendix: Quittapahilla Creek Watershed Project Implementation Strategy - Multiple Subwatersheds Annually and Simultaneously

Rocky Powell October 27, 2024

Track 1 – WIP Prioritized Subwatersheds: Larger & More Complex Projects

1. Priorities

- a. Snitz Creek
- b. Killinger Creek and Gingrich Run
- c. Beck Creek
- d. Bachman Run
- 2. Highest Priority and Order of Implementation
 - a. Larger/More Complex Projects in Single Watershed Start at the upper reaches and work downstream to the lower reaches
 - 1) Snitz Creek 2
 - 2) Snitz Creek 3
 - 3) Snitz Creek 4
 - b. Design and Permitting Phase
 - c. Construction Phase
- 3. Funding Sources
 - a. Growing Greener Plus Grants
 - b. 319 Non-Point Source Management Grants
 - c. Community and Economic Development Watershed Restoration and Protection Grants
 - d. National Fish and Wildlife Foundation (NFWF) Innovative Nutrient and Sediment Reduction Grants
 - e. LCCD Agricultural Conservation Assistance Program (ACAP) Stormwater Grants

Track 2 - WIP Prioritized Subwatersheds: Less than 500 linear feet

- 1. Priorities
 - a. Snitz Creek
 - b. Killinger Creek and Gingrich Run
 - c. Beck Creek
 - d. Bachman Run
- 2. Highest Priority and Order of Implementation
 - a. Smaller (<500 LF)/Less Complex Projects in Alternating Subwatersheds Top Down (Flexible)
 - 1) Gingrich Run 1 (Gully Stabilization 390 LF)
 - 2) Beck Creek 1 (Breached dam with active head-cuts and incised channel 150 LF)
 - b. Design-Build Competitively Bid On-Call Contracts
- 3. Funding Sources
 - a. LCCD Countywide Action Plan (CAP) Grants
 - b. PA Fish and Boat Commission Grants

Track 3 - WIP Prioritized Subwatersheds: BMPs

- 1. Priorities
 - a. Snitz Creek
 - b. Killinger Creek and Gingrich Run

- c. Beck Creek
- d. Bachman Run
- 2. Highest Priority and Type of BMP to be Implemented
 - a. Agricultural BMPs Farms where stream reaches are being impacted by agricultural activities, and a determination has been made that channel restoration is not necessary because natural recovery process has a high potential for success if BMPs are implemented.
 - 1) BMPs in and along Cultivated Fields
 - a) Grassed Waterways
 - b) Stream Buffers
 - c) Constructed Wetland WQ Basins
 - 2) BMPs in and along Livestock Grazing Areas
 - a) Exclusion Fencing
 - b) Stabilized Livestock Crossings
 - c) Stream Buffers
 - d) Watering Facilities
 - b. Projects identified during Summer Field Reconnaissance Surveys will be referred to LCCD for BMP Funding and Implementation
- 3. Funding Sources
 - a. LCCD Funding Programs

Appendix 3. NFWF Grant: (1) Scope of work and (2) Important dates to keep in mind for consultant project

1. Scaled Scope of Work for NFWF Grant (Jan. 9 email to Tali MacArthur)

Scope of Work for the Quittapahilla Watershed Association

The Quittapahilla Watershed Association is seeking professional guidance and support to build their capacity as an all-volunteer, non-profit community-based watershed organization. The volunteer leaders of the organization have identified the following deliverable for this project:

An Organizational Strategic Plan that includes the following elements:

- 1. A manageable volunteer recruitment, management, and retention strategy;
- 2. An action-oriented outreach and communication program that serves to raise awareness and build meaningful community relationships
- 3. A more robust and effective community education program, including a college student internship program focused on Lebanon Valley College.

4. A workable approach to cultivation and strengthening of new and existing alliances with key local actors involved in watershed-related work and with other watershed associations and stakeholders in the region and state

Organization Background

The Quittapahilla Watershed Association (https://www.quittiecreek.org/) is a small, non-profit organization whose mission is to protect and improve the water quality in the watershed. The group, which includes conservationists and other local activists, has undertaken dozens of projects funded by state and federal grants to improve the watershed and educate its citizens, including an extensive long-term water quality monitoring program. Their efforts help ensure healthy local waterways and a positive future for the Chesapeake Bay. They work with other partners in the watershed such as the county conservation district, the local chapter of Trout Unlimited, and the Swatara Watershed Association.

Watershed Description

The Quittapahilla Creek Watershed is situated in the Ridge and Valley physiographic region in Lebanon County, Pennsylvania. Quittapahilla Creek is a tributary to Swatara Creek and is part of the Susquehanna River Basin. Its headwaters begin just southeast of Lebanon, Pennsylvania and it enters the Swatara Creek near North Annville, Pennsylvania. From its headwaters south of the City of Lebanon (elevation 500 feet) Quittapahilla Creek flows approximately 22 stream miles to its confluence with Swatara Creek in the North Annville Township (elevation 350 feet). Additional details about the watershed can be found on the QWA website.

2. Email from Tali MacArthur to Mike, Kent, Bob, Katie, Kara & Alyssa Subject: Important dates to keep in mind for Consultant Project Thurs. Jan. 16, 2025

Hi gang,

I am preparing to release the RFP for the project we are working on. I want to provide you some of the important dates:

- Release of RFP: January 22, 2025
- Submission Deadline: Friday, February 28, 2025, at 5:00 PM
- Virtual Information Session for all Bidders: Monday February 3, 2025, at 10:00 AM If one
 or more of you can attend this, it would be helpful in case bidders have specific
 questions for your Scope of Work
- Interviews with bidders, as needed: No later than March 21, 2025 This is for YOU in case you want to ask follow up questions with any of the bidders who responded to your Scope!
- Notification to successful and non-successful bidders: No later than March 31, 2025

Note that bidders should not reach out to you directly until after they are officially selected and notified. Please let me know ASAP if anyone contacts you prior to March 31.

I hope that we will be able to finalize contracts by middle of April and y'all get really get going by May. Plans must be complete by Nov 30 and there will be a virtual project showcase in Dec.

After we release the RFP, I will send it your way to distribute, post, etc. I may or may not be issuing a press release, I need to check if there is a "policy" for this.

I think that's it for now. Please reach out with any questions.

Tali MacArthur
Program Manager for Watershed Outreach
PEC/POWR

Appendix 4. Digital Communications Course at LVC with Prof. Mary Pettice: Focus on QWA's work

Pasted below is an email Mike sent on Jan. 11 to "active contributors to the QWA's work":

"I have some pretty amazing news: my friend & colleague, LVC Professor of Digital Communications Mary Pettice, is teaching a course this spring semester that focuses on digital content production. She is designing the course such that students' semesterlong projects will focus on the work of the Quittapahilla Watershed Association -- the people involved in it, its history and place in the community, its ongoing work -- including our Monitoring Program, stream restoration work, education & public engagement work -- whatever we want to emphasize.

"I am pasting below some key moments in my email correspondence with Mary, who writes:

"The areas I want the students to cover are:

- Monitoring activities
- Restoration activities
- The people you'd like for us to interview
- Interviews of volunteers—people who volunteer in any capacity
- A big focus: The five main issues (Urban Stormwater Contamination, etc.)

"Please let me know what you think and what we can do to help your messaging efforts! We're going to be keeping in mind the different audiences for our work: donors, volunteers, students, community members, state and local leaders.

"I have 18 students and they will all be involved in these projects. The projects will range from articles, videos, photo essays, data visualizations, and social media promotion plans. By the end of the semester, they will be able to hand off all of their best materials to you and your webmaster. The videos can include interviews, event coverage, and educational material; please let us know what you'd like to see. The last week of classes begins on 4/28. Ideally, the event [live event at the Allen Theater] will be held that week if possible. Yes, please share the interview contacts and your thoughts on topics and themes. . . .

"Every student will be exploring ways to create digital media messaging for the QWA. I'm making this syllabus extremely flexible, so specific assignments may change. We're trying to tell good stories, and sometimes you have to dig for them.

"Assignment list (for now):

- Existing content report 25 pts
- Long-form written article 50 pts
- Audience personas and content goals 25 pts
- Photo essay 50 pts
- First interview video 50 pts
- Second interview video 50 pts
- Data visualization project 50 pts
- Final project storyboard and script 25 pts
- QWA portfolio website 25 pts
- Social media content calendar 25 pts
- Analytics report 25 pts
- Final video project 100 pts

"Some of the assignments are not media to promote the QWA but assignments to teach the ins and outs of creating a website, scheduling social media communications, and analyzing web traffic. But the videos, articles, photo essays, and data visualizations are going to be handed off to you when we're done."

So that should give you a sense of the remarkable opportunity we're looking at here.

Mary is asking us for two things to get started:

- 1. A list of people to interview about our work, with contact info, and
- 2. A list of the top five topics we'd like student projects to focus on.
- **For No. 1:** Please let me know if you are willing to participate in this project.

For No. 2: Please think about your Top Five Topics. I will refrain from including my Top Five for now because this email is already too long and I want to leave plenty of room for your voices.

Thanks!

Mike

Michael Schroeder QWA President

As of Jan. 19, the following people have responded that they will be happy to participate:

- Prof. Becky Urban
- Willy Bixler
- Bob Connell
- Rocky Powell
- Katie Hollen
- Gary Zelinske
- with more to come!

Top 5 Topics:

Becky Urban

- 1. Water Quality Degradation (Eutrophication, Sedimentation & Erosion, pesticide & herbicide runoff, urban runoff, heavy metal contamination)
- 2. Stormwater Management (increased impervious surfaces & runoff, leading to increased erosion, flooding, pollution)
- 3. Land Use Change & Habitat Destruction
- 4. Climate Change
- 5. Riparian Buffers & Restoration Efforts

Bob Connell

- 1. How can we reach out to the residents of our area to help them feel that this wonderful feature of our area that QWA is working to protect is THEIR watershed and creek to make them feel a sense of ownership and a desire to be engaged?
- 2. How do we provide the information that QWA generates (and there's a lot of it) to the different stakeholders (teachers and students at local schools, fishermen, the public in general, local researchers and county planning offices) in a way that is most meaningful and useful to each group?
- 3. How can we better recruit and retain new volunteers?

Gary Zelinske:

Provide testimonials from those whose properties the streams run through. Michael gets permission from those residents and who better to engage with and provide a personal touch to these natural resources. Those individuals experience these streams year round and can testify to their value from various perspectives. A well planned and casual discussion audio and visual developed by students may help to promote these areas in a non-technical manner.

From Prof. Pettice: Course Syllabus DCOM 283 Spring 2025

Dr. Mary Pettice (she, her)

DCOM 283: Storytelling for Digital Media II

9 a.m. MWF, Lynch Memorial 118 My office: 285-i, Lynch Memorial

My phone: 717-867-6243; email: pettice@lvc.edu My office hours: MWF 10 a.m.-noon and MW 1-2 p.m.

Course description

This semester, we'll be applying our storytelling skills to feature the work of the Quittapahilla Watershed Association. They are our client, and we are volunteer workers creating content. This content will primarily be for recruiting volunteers, encouraging donors, and demonstrating the organization's vale to the community. At the beginning of the semester, we'll spend a great deal of time learning about nonprofit agencies. As the semester progresses, we'll create a plan for identifying the organization's media challenges, framing the problem, proposing solutions, and creating prototypes (and finished products) that meet those challenges.

Texts

Storyfind by Kristin Sukraw, PageTwo Publishing, 2023

Course Goals and Measurable Student Learning Objectives

Student learning objectives will be assessed through written work, video creations, and other web- or platform-ready content.

Assessment

Student learning will be assessed according to the Design, Media, & Technology department's assessment goals and objectives.

Program goals

- 1. Frame the problem
- 2. Research
- 3. Brainstorm/ideate, generating feasible, desirable and viable solutions
- 4. Prototype (the iterative process of designing and building a well-executed, feasible, viable, and desirable solution to a problem)

Program objectives assessed in this course indicated by *

- 1.1 Analyze data: Analyze data, applying and integrating relevant human centered design and/or disciplinary principles and methods, to draw appropriate conclusions.
- 1.2 Describe and prioritize problems: Describe and prioritize problems to be solved (e.g. design, organizational, and strategic problems, which could include, setting specifications and defining organizational objectives/purpose, audience need and workflows, and accounting for context of use, etc.)
- 2.1 Choose appropriately reliable and valid methods or methodology: Choose appropriately reliable and valid methods or methodology to answer specific research questions. *
- 2.2. Answer research questions. Effectively execute valid and reliable methods to answer research questions. (for example, usability testing, contextual observation, interviews, focus groups, secondary research, industry standard analytics, etc.)
- 3.1 Generate solutions: Demonstrate the ability to generate a wide number of solutions based on specific problems/specifications *
- 3.2 Generate innovative/creative solutions: Demonstrate the ability to generate innovative/creative/integrative solutions to solve a specific problem *
- 4.1 Solve problems by creating solutions: Solve specific problem/s by creating feasible, viable, and desirable solutions (evaluating how effectively the solution solves the problem)
- 4.2 Create a well-executed solution: Create a well-executed solution (evaluating the quality of execution of the solution) *

By the end of this course:

- Students will demonstrate advanced skills for creating visual stories for a nonprofit. (2.2)
- Students will create strategies to bring targeted audiences to their content. (4.1)
- Students will explain the opportunities and challenges of creating media for a nonprofit (1.2)

• Students will create refined, detailed, and impactful stories that fulfill the needs of a selected audience on digital platforms and conform to industry standards for style and accuracy. (4.2)

Assignments and grading

Individual Projects

- Existing content report 25 pts
- Long-form written article 50 pts
- Audience personas and content goals 25 pts
- Photo essay 50 pts
- First interview video 50 pts
- Second interview video 50 pts
- Data visualization project 50 pts
- Final project storyboard and script 25 pts
- QWA portfolio website 25 pts
- Social media content calendar 25 pts
- Analytics report 25 pts
- Final video project 100 pts

Appendix 5. Projects Updates: Minutes of the Jan. 2, 2025 Watershed Action Team, courtesy of Kara Lubold at the Lebanon County Conservation District



Lebanon CAP Watershed Action Team

January 2, 2025, 9:00 a.m. - Minutes

Members Present: Bethany Canner, Russ Collins, Hannah Hartman, Darren Heisey, Katie Hollen, Kara Lubold, Rocky Powell, Mike Schroeder, & Rich Starr

1. Introductions

 Introduced new CAP Watershed Action Team participant: Rich Starr with Ecosystem Planning & Restoration (EPR).

2. In-Process Projects

- Hammer Creek Estates: \$250,000 of CAP funding for construction-related expenses. Permit package submitted last month.
- Gerald Horst bridge replacement: \$23,600 of ACAP funding for design and permitting.
- Syner Rd. Phase II: \$213,950.00 of CAP funding. Permit package submitted earlier this week.

3. Partner Updates

- Clear Creeks Consulting, Rocky Powell
 - o See updates in Appendix 1.
- Lebanon Consortium/MS4, Darren Heisey
 - SQ6 Floodplain Restoration: Still in discussion with the remaining farm property. The
 landowners are concerned with the loss of ongoing revenue they may face with a
 one-time sale of the property. The landowners are interested in the possibility of
 having the Consortium and North Cornwall Twp assist them in buying land
 elsewhere as an exchange for the land needed for the project. The existing grant will
 be extended.
 - Regarding SQ6, Russ asked if, based on the reception to SQ1, this is an appropriate
 type of restoration. Darren answered that there has been some pushback, but
 landowners are on board and LandStudies has indicated a hybrid approach could be
 used as needed. The Consortium would like to go ahead with the floodplain
 restoration approach because it is a cost-effective way to meet permit requirements.
- Quittapahilla Watershed Association, Mike Schroeder
 - The monitoring program completed water-quality sampling in December with the next round taking place in February.
 - NFWF grant through POWR- submitted updated QAPP and goals/objectives for consultant.
 - Updating Water Quality Portal. Working on getting reaches and photos from the summer intern reports accessible through the map.
 - o Also see Appendix 2.

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Lebanon CAP Watershed Action Team

- o Next meeting is on Tuesday, January 21.
- Swatara Watershed Association, Bethany Canner
 - NFWF grant through POWR- submitted goals/objectives for consultant.
 - Sales agreement signed for 5.5-acre property that borders Swatara Watershed Park.
 Planning to settle by the end of January.
- Trout Unlimited, Russ Collins
 - EPR (Rich) is working on an SRBC Consumptive Use grant application for a project in the Hammer.

4. Other

- 2025 CAP Grant
 - LCCD was awarded about \$670,000. Approximately half of the awarded amount must be allocated to projects within a Most Effective Basin Disadvantaged Community (MEBDC) area.
 - A new application for projects seeking CAP funding will be made available on Monday, January 6, 2025. Interested applicants may find the application at www.lccd.org or contact Kara.
- 2nd Watershed Strategizing Meeting: Friday, December 13th update
 - Rich said that there was clarification from DEP (via Mike Morris) that in 319 funding decisions, it is not a problem for the same organization to submit multiple applications in the same round for different watersheds.
- Rocky noted issues with the timeline of 319 funding, particularly emphasizing the risk of losing out on awarded ACAP funds for Snitz 2 and Snitz 3 because it takes about 18 months from application to be awarded 319 funding. He expressed interest in a meeting with partners, including the DEP and EPA, to discuss the situation.

5. Next Meeting

- Thursday, February 6, at 9:00 a.m.



Lebanon CAP Watershed Action Team

Appendix 1. Rocky Powell updates, Clear Creeks Consulting, January 2, 2025

Killinger Creek

- 1. Construction cost estimate and schedule received from ARRC 10/11/2024.
- NFWF Grant for Phase 1 Construction and Phase 2 Design and Permitting Materials and Application completed and submitted 11/04/2024.
 - a. Phase 1 Construction Grant Request \$936,024
 - Phase 2 Design and Permitting Grant Request \$266,966

Bachman Run

- CCC completed layout of proposed grading contours 11/22/2024
- 2. Draft Final Grading Plans CAD drawings completed.
- 3. CCC/EPR initiating Materials Quantity Estimates, Final Design Report and Permit Applications.
- 4. Steckbeck recommended switching from bridge to box culvert due to cost Approved.
- 5. Steckbeck Additional survey needed for culvert design Completed.
- 6. Steckbeck Draft Culvert Design Completed 12/20/2024
- EPR will complete the Final Grading Plans and initiate the Final Hydraulic Analysis after Steckbeck forwards their final culvert drawings.
- Steckbeck Estimated Cost of Culvert Installation \$144,764

Snitz Creek 4

- 1. CCC developed Design Criteria
- CCC working with full size base maps conducted a site walk to lay out preliminary plan view and cross-sections design
- 3. EPR completed Existing H&H.
- 4. EPR conducted a site walk to lay out preliminary plans for SWM Pond.

2025 CAP Projects Grant Applications

Supporting Documentation (Project Descriptions, Stabilization Concepts, Contractor Budgets) for Proposed Projects submitted to LCCD 10/29/2024

Additional Documentation (Existing Sediment Loadings and Loading Reductions Calculations) for Proposed Projects submitted to LCCD 12/18/2024

Project 1 - Gingrich Run 1 – Reiner Property Gully Restoration – 390'

Project 1 - Beck Creek 1 – Formanek Property Breached Dam Stabilization – 50'

3



Lebanon CAP Watershed Action Team

Eroding Channel - 150'

Summer Intern Field Reconnaissance Survey 2024 Final Report Final Report completed and submitted to LCCD 11/11/2024

Edited Final Report submitted 12/12/2024

Beck Creek 6

Doc Fritchey Trout Unlimited notified by PADEP that 319 Grant Request for Construction Funding was approved – October 26, 2024. Per PADEP on 12/27/2024 the PADEP-DFTU Contract is being processed.

Snitz Creek 2

Construction Grants Requests submitted in June 2024

Snitz Creek 3

Construction Grants Requests submitted in June 2024.

Appendix 2. Michael Schroeder updates, Quittapahilla Watershed Association, January 2, 2025

- Monitoring program continues streamflow & water sampling Dec 11 & 18. Next fieldwork in February.
- NFWF Small Watershed Planning and Technical Assistance Grant for capacity-building submitted to POWR updated QAPP and outline of goals & objectives for consultant – in POWR's hands
- Water Quality Portal updates -- http://147.185.239.141/qwa-new/#12/40.3093/-76.4788 -- working to get reaches & photos from 2023-2024 summer interns accessible on the site -- thanks to Bob Connell!
- 4. Second strategizing meeting, Fri Dec 13 in LCCD office meeting minutes forthcoming
- 5. Next QWA meeting Tues Jan 21