

**QUITTAPAHILLA WATERSHED ASSOCIATION**  
**Meeting Minutes**  
**Via Zoom in consequence of the global pandemic**  
**August 18, 2020**

Present: Mike Schroeder, Karen Feather, Kent Crawford, Joseph Connor, Russ Collins

The meeting opened at 7:01 p.m.

**1. Countywide Action Plan (CAP).**

- a. Mike provided an update on the Lebanon Countywide Action Plan (CAP) for Phase III of the Watershed Implementation Plan (WIP) for the Chesapeake Bay. On 28 July, Mike LaSala of LandStudies, Inc. emailed Mike and Rocky with the following query:

“Starting to organize BMP scenarios for DEP to run several NPS reduction sequences in the Bay model. I am looking to outline total BMP quantities from the Quitty WIP in the scenarios. However, there are quite a few projects identified in the plan. My assumption is not all of these projects will make it into the ground by 2025. In turn, do you have any inkling of which projects have a reasonable chance to be in the ground by 2025? It does not have to be an exact number, but a general idea is appropriate for the CAP. We want to list which projects they are as well since we will incorporate a list of proposed projects in the CAP. This should help in lining up implementation funding over the long run as well.”

On July 30, Rocky emailed a two-page Word document with one table titled, “QWA WIP TMDL Stream Restoration Projects (Current and Recently Completed),” and a second table titled, “Additional QWA WIP TMDL Stream Restoration Projects (Under Consideration).” These tables are appended to these minutes (Appendix 1).
- b. Mike further reported that the CAP Steering Committee met from 1-3 pm on Tues. Aug. 11. The main agenda items were: (1) BMP scenarios; (2) Conversion of Initiatives to Priority Initiatives; (3) Action Team development; and (4) CAP Document components. Mike LaSala circulated before the meeting a 62-page PDF file (from a PowerPoint presentation) that framed the meeting, which will be housed on the Studies & Documents page of the QWA website (or under a separate tab titled “CAP”).
- c. The QWA is most involved with Priority Initiative 3: Education and Outreach. Members of that Action Team are Mike Schroeder (QWA), Stephanie Harmon (Leb. Co. Conservation District), and Julie Cheyney (Leb. Co. Planning Dept.). Russ Collins serves on the Coordination Action Team (Priority Initiative 5), charged with coordinating all of the various stream restoration and water quality improvement initiatives and projects in the watershed.
- d. It is anticipated that the CAP will be completed by Sept. 30.
- e. Lamentations were expressed that the PA General Assembly is not providing adequate funding for clean water projects, especially for the agricultural community, where the lion’s share of pollutants originate. Russ noted that some grant moneys were released by the EPA for farmers to install Best Management Practices (BMPs) but that it is not enough. Russ volunteered to be in touch with PA House Reps. Russ

Diamond and Frank Ryan and PA Sen. Dave Arnold. Joseph volunteered to speak with Rotary Clubs in Myerstown, Lebanon & Cleona once a presentation has been developed.

2. **Snitz Creek Project 2.** No update.
3. **Snitz Creek Project 3.** No update.
4. **Snitz Creek Project 4.** No update.
5. **Killinger Creek Project 5.** Russ reported that the application he submitted for Killinger Creek Project 5 to the National Fish & Wildlife Foundation was rejected. Mike noted with chagrin that we now have \$130,000 approved by PA-DEP for a project (from a proposal submitted by Bill Wall of Steckbeck Engineering) that substantially underestimated the project's actual total projected cost, which is estimated at \$400,000. Russ suggested that Hershey Co. might cover the cost of this project considering its massive warehouse project currently underway in South Annville Township just west of Killinger Creek. Russ indicated that he would follow up.
6. **Beck Creek Project 6.** No update.
7. **Monitoring.** Kent reported the email he circulated on Aug. 16 comprises his update on monitoring activities. That email is appended to these minutes (Appendix 2, below). Mike noted the series of very informative emails exchanged between Kent and LVC Biology Professor Becky Urban and asked whether we should compile these emails and post them on the QWA website. Kent responded that he would run the compiled emails past Becky to ensure their accuracy, after which we can post them to the website. Kent further reported that he has asked the Alliance for Aquatic Resource Monitoring (ALLARM) at Dickinson College to review his Quality Assurance Project Plan (QAPP) and that they have agreed to do so. Joseph indicated that he has not read the entire QAPP but that he is very impressed with its quality and immensely grateful for the effort in putting it together – a sentiment expressed by everyone at the meeting. Discussion ensued regarding material and logistical needs for the upcoming installation of monitoring equipment; who has a pickup truck; etc.

The meeting adjourned at 7:41 p.m.

Respectfully submitted,

Michael Schroeder, Secretary Pro Tem

## Appendix 1

Tables prepared by Rocky Powell, Clear Creek Consulting, July 2020

### QWA WIP TMDL Stream Restoration Projects (Current and Recently Completed)

<b>Bachman Run</b>								
<b>WIP Project ID#</b>	<b>Location</b>	<b>Project Type</b>	<b>Length (feet)</b>	<b>Design Permitting</b>	<b>Construction</b>	<b>Nitrogen Reduction (lbs/yr)</b>	<b>Phosphorus Reduction (lbs/yr)</b>	<b>Sediment Reduction (lbs/yr)</b>
10-Upper 11	Bachman - Horst Properties	Stream Restoration; Streambank Fencing; Livestock Crossings	2,781	2021	2022	208.58	189.1	124,811.28
<b>Beck Creek</b>								
6	Weaver – Brummel Properties	Stream Restoration and Wetland Creation	2,100	2019 - 2020	2021	150	136	89,760
<b>Killinger Creek</b>								
5 - Upper 6	Musser Burkholder Properties	Stream Restoration and Wetland Creation; Streambank Fencing; Livestock Crossing	1,430	2021	2022	107.25	97.24	64,178.4
Lower 6 - 7	Kreider Farm	Stream Restoration and Wetland Creation; Streambank Fencing; Livestock Crossing	1,714	2022	2023	128.55	116.55	76,924.32
<b>Snitz Creek</b>								
24	Hershey Property	Stream Restoration; Streambank Fencing;	1,300	2017 - 2018	2019	97.5	88.4	58,344

		Livestock Crossing						
2	9 Landowners Lebanon Valley Rail Trail to Culvert St	Stream Restoration and Wetland Creation	2,300	2019 - 2021	2022	172.5	156.4	103,224
3	Stoner Property Culvert St to Cornwall Rd	Stream Restoration and Wetland Creation	1,000	2021	2022	75.0	68.0	44,880.0
4	20 Landowners Cornwall Rd to confluence with mainstem Snitz	Stream Restoration	3,018	2022	2023	226.35	205.22	135,447.84

### Additional QWA WIP TMDL Stream Restoration Projects (Under Consideration)

Snitz Creek								
WIP Project ID#	Location	Project Type	Length (feet)	Design Permitting	Construction	Nitrogen Reduction (lbs/yr)	Phosphorus Reduction (lbs/yr)	Sediment Reduction (lbs/yr)
7	Cornwall-Lebanon School District Cornwall Borough	Stream Restoration	1,650	ND	ND	123.75	112.2	74,052
8	Trustee for Alice Freeman Cornwall Borough	Stream Restoration	2,930	ND	ND	219.75	199.24	131,498.4
18	Stefanides Property	Stream Restoration and Partial Dam Removal to Provide Fish Passage	1,320	ND	ND	99.0	89.76	59,241.6
19	7 Landowners UPS of	Stream Restoration	2,900	ND	ND	217.5	197.2	130,152

	Colebrook Rd							
<b>Quittapahilla Creek Mainstem</b>								
8	15 Landowners DS of Mill St.	Stream Restoration	1,500	ND	ND	112.5	102	67,320

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## Appendix 2

### Email from Kent Crawford to Volunteer Monitors, 16 Aug. 2020

From: Kent Crawford <k9kentc@gmail.com>  
 To: [volunteer monitors]  
 Date: Aug 16, 2020, 6:56 PM  
 Subject: Update on Water-Quality Monitoring

Hello Volunteers,

It has been too long since I have communicated with our volunteer monitoring team. But during that time, some important progress has been made. To be sure, major challenges still lie ahead. But, I am more confident than ever that our monitoring program will be one that we can be proud of and one that will produce quality information. This email provides an update on where things stand as of now and the next steps we need to take.

What we have accomplished:

- We have written permission from five of the six bridge owners to install our streamflow-monitoring equipment on their bridges. (We don't need any permissions for the sixth bridge (station Q2 -- Quittapahilla Creek at Palmyra-Bellegrave Road) because the USGS already has a streamflow monitoring station at this site and we will be able to use their data. So, we don't need to install our equipment there.
- We have written permission from all six landowners for ingress and egress through their property for our water-quality, biological, and geomorphic evaluations. See the next bullet for details regarding access for the site on Killinger Creek at Killinger Road (station K1).
- We have requested permission from The Hershey Company to access station K1 on Killinger Creek through their property on Killinger Road. This is the land immediately east and north of the bridge. The Hershey Company recently purchased this property from MFS Inc. MFS Inc. is a land development company. Our request to MFS Inc. to cross their property for our work was not granted. Now, perhaps the Hershey Company will be more supportive. But,

The Hershey Company is building a large warehouse facility on the property and they are concerned about liability issues if we access this property through the construction project. Stay tuned. ... But, when I visited this site for one last recon, the landowner that owns the property on the northwest side of the bridge was in his yard. His name is Matt Biondi. I could not reach him previously because I could not find a phone number for him. I talked with him and he was most cooperative. So, I will offer him a chance to sign a written agreement for us to access the creek through his property. He has verbally agreed to all our stipulations. If Mr. Biondi agrees, we will be able to do our geomorphic, biological, and water quality work from his property.

- Last October, Joe Connor and I visited each of our monitoring sites for a reconnaissance. We took some pictures and measurements in preparation for our streamflow monitoring installations. Joe, I revisited these sites recently, just to get more precise measurements. The pressure transducers we will be getting will have custom length cables and so I needed exact measurements for these lengths. You know the saying, “Measure twice, cut once.” I am now confident in our measurements and the pressure transducers with the custom cable lengths have been ordered.
- We have almost all of the equipment (velocity meters, wading rods, taglines) on hand for making manual streamflow measurements. The equipment that is not on hand (one wading rod) has been ordered.
- All five pressure transducers with data loggers have been ordered. Delivery is expected about the end of August. These instruments comprise the most expensive part of our needed equipment – about \$4,000. Funds from our grant from the Lebanon County Stormwater Consortium were used to pay for these instruments.
- Staff plates have been ordered.
- We have much of the needed water-quality monitoring equipment on hand, compliments of the Pennsylvania Department of Environmental Protection. Thank you, Josh Lookenbill and Mark Hoger.
- We have an agreement in place for the Pennsylvania Department of Environmental Protection to conduct the laboratory analyses for our water-quality samples. This is HUGE! The analyses will be quite costly, but the PaDEP will cover the costs. In addition, we can be confident that a quality lab will be doing our analytical work.
- We have settled (at least for now) on a list of water-quality constituents for our monitoring. The list to be analyzed by the lab is quite long. Most importantly, the list includes nutrients and sediment, which are our main targeted constituents. But, it also includes major ions and several metals. See the attached QAPP for the complete list.
- A draft version of our Quality Assurance Project Plan (QAPP) is complete. This document will guide our monitoring activities and lay out all the quality assurance and quality control measures that we will use throughout the monitoring effort. A copy of the draft QAPP is attached. I suggest that each of our volunteers read the draft QAPP. It will give you a good overview of our water-quality monitoring program and the importance of collecting good quality-assured data.
- The draft QAPP has been sent to the Alliance for Aquatic Resource Monitoring (ALLARM) at Dickinson College for their review.

There are several important activities coming in the near future.

1. Classroom training for our volunteers on “Streamflow Basics.” This will be a virtual meeting (not in person) using Zoom as our platform. (Don’t worry if you have never used Zoom. It is pretty easy and we will help you with any issues you may have.) I hope we can schedule this training session within a week.
2. Classroom training for our volunteers on how to conduct water-quality sampling. (This will be another Zoom meeting.)
3. Field training for our volunteers on how to measure streamflow. In-person instruction and practice in the field. Our volunteers will have an opportunity to demonstrate their proficiency. We will all wear masks and maintain social distancing.
4. Field training for our volunteers on how to conduct water-quality sampling. In-person instruction and practice in the field. We will all wear masks and maintain social distancing.
5. Classroom training from the Pa DEP on how to use our water-quality sampling equipment and how to submit water-quality samples to the laboratory. (Virtual meeting using Zoom or perhaps Skype)
6. I need to communicate with DEP to get a few additional water-quality monitoring items.
7. Installation of streamflow monitoring equipment. We will assemble a small group of individuals (3 or 4 people should be adequate) to install the streamflow monitoring equipment (staff plates, stilling wells, pressure transducers and data loggers). We will all wear masks and maintain social distancing. Hopefully, these installations will happen near the end of August.
8. A major development for the overall monitoring program has occurred. Last year, the Quittapahilla Watershed biological monitoring was done entirely by Dr. Rebecca Urban and her students at Lebanon Valley College. This year, because of COVID-19 pandemic, they will not be able to do the field collections. So we (our volunteers) will do the field collections. Dr. Urban and her students will handle the laboratory identifications, the data analysis and write-up. Our collections will be done in the fall, probably late October or early November. I will provide more information as we approach the sampling time. But please understand that this activity will mean that a team of two or three individuals will make a one-time trip to each of our six monitoring stations to collect macroinvertebrate samples. We will “pick” the samples in the field (separate the invertebrates from the sand, gravel, and debris) and preserve them. Then we will deliver them to Dr. Urban and her students.
9. Start the monitoring.

So, starting now, our volunteers will be more actively involved in our monitoring program. The next immediate issue is to schedule the classroom-style training for how to measure streamflow. This will be a virtual meeting (using Zoom) and should last about one hour (Item 1 above).

Once again, I am including lots of individuals on the cc list for this e-mail. Just trying to keep everyone informed.

#### **Action items for our volunteers:**

1. Read the draft QAPP which is attached to this email. I am not asking for your review comments because we are getting a formal review from ALLARM. But any suggestions you have would be greatly appreciated.

2. Let me know what date works best for you to attend the virtual training session on “Streamflow Basics.” You can reply to this email or give me a call if that is more convenient. Remember, this will be a “virtual” meeting done through the computer. Please respond with your preferences for a training date and time. Indicate whether a suggested date would be:
- Best
  - Possible but not my preference
  - Not good at all
- Wednesday, August 19 at 7:00 p.m.  
Wednesday, August 19 at 8:00 p.m.  
Thursday, August 20 at 7:00 p.m.  
Friday, August 21 at 7:00 p.m.

My best to everyone. Be safe.

Kent

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