



## Eastern PA Coalition for Abandoned Mine Reclamation

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### November 2023 Progress Report

#### Highlights:

- EPCAMR staff scanned, georeferenced, mosaicked & digitized mine maps for the **DEP MSI** MMG program. Continue QA/QC of **HU's** Southern Anthracite Mosaic work.
- EPCAMR Management staff participated in weekly **PA AML Campaign** calls.
- Sampled Askam AMD Treatment System, upstream & downstream on **Nanticoke Cr.** for **EC**; 3 AMD TS, upstream, downstream and several headwater sites in **Loyalsock Creek Watershed** for **LCWA & SCD**, sent headwaters sampling report; sampled 22 discharge and instream sites in **Shamokin Cr.** for **SCRA**; Evaluated 3 discharges in the **Wyoming Valley** for monitoring with **Columbia U.**
- Updated [www.PaSolarMinedLands.org](http://www.PaSolarMinedLands.org), [www.TreatMineWater.com](http://www.TreatMineWater.com) and [www.EPCAMR.org](http://www.EPCAMR.org); administered GobbaDaPile local domain, G Suite for Nonprofits, and social media sites.

#### Education, Outreach and Admin.:

- Sampling site evaluation of South Wilkes-Barre Boreholes, Buttonwood Shaft, and Newport Lake discharges with Sean Kinney and students from Columbia University. Worked up a parts list and sent to Sean for purchasing.
- EPCAMR Education Hub was released at [education.epcamr.org](http://education.epcamr.org). Updated the navigation menu on [epcamr.org](http://epcamr.org) and updated/created several web pages including: Current board meetings, Education Hub, Fact Sheets, Write Your Legislator, Virtual Reality (VR) Tours, and Environmental Education and Outreach Programs. Uploaded STEM Camp video to EPCAMR's YouTube and provided the link to the company updating our education website.
- Began to clip AMR Conference videos and post them to EPCAMR's YouTube and eventually [treatminewater.com](http://treatminewater.com).
- Researched possibility of submitting a Coldwater Heritage Plan (CHP) grant to evaluate Little Shickshinny Creek, Paddy Run and Rocky Run streams that come from State Game Lands 260 and have AML problem areas at the request of Luzerne Conservation District (LCD). LCD plans to submit a grant to reclaim Salem/Stackhouse AML areas in the near future on behalf of the PA Game Commission (PGC). A CHP could inform the designs for the open mine portals on the site whether dry (bat habitat) or with AMD flows (potential treatment).
- Continued trimming AMR Conference Presentation recordings and posting them or PDF of the presentation to [treatminewater.com](http://treatminewater.com).
- Answered questions from SCRA regarding location of monitoring boreholes in the Shamokin Watershed and a question about stormwater infiltration ponds in the coal regions. Infiltration is a statewide mandate for new construction, but there should be an exception in underground mined areas to keep clean water on the surface and not contribute to mine pool flows. The groundwater table in coal mined areas is mined through and polluted. EPCAMR has commented on many state reports, but it seems to fall on deaf ears.
- Completed EPCAMR Program Manager August report and timesheets. Started September report and timesheets.

- Finalized the Loyalsock Headwaters report by incorporating comments from peers and creating a map to show the water chemistry and stream classifications. Researched and used pie charts to visualize the chemistry for each site on the map. Sent report to LCWA and SCD.
- Finished September report and timesheets. Started October Report and timesheets.
- Finished October report and posted August to October reports to website for postponed board meeting.
- Finalized AMR Conference Budget and billed down in QuickBooks. Calculated transfer from PayPal and sent it to checking account. Started 2024 EPCAMR Budget in QB. Copied to Excel template to aid in the process. Started by verifying expenses. Started income with 2023 Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG) Budget.
- Worked on 2024 budget with Bobby to complete for the board meeting which was postponed to next month.

### **Technical Assistance:**

- Sampled Askam Boreholes, Treatment System, upstream and downstream on Nanticoke Creek, and 2 flow sites. Downloaded data from transducers and pulled them from the field for firmware updates. [EC]
- Sampled Loyalsock Upstream, Downstream, & in/out of 3 treatment systems (Connell B Vein, Connell C Vein and Gutten Drift). Recorded data in a database for reporting to the SCD & Loyalsock Creek Watershed Association. First of new contract. [LCWA]
- Continued updating firmware on the 5 transducers pulled from Nanticoke Creek Watershed. One did not take. Spoke with Solinst (the makers of the equipment) and Fondriest (where we purchased the equipment) to find out that it is 1 month out of warranty. Solinst has a \$47.50 bench fee. Notified EC. Followed up to request RMA form from Solinst in case EC decides to move forward. Equalized stage height data with barometer on the data with the Solinst software and converted to CSV files for post processing. Calculated a linear regression line equation to relate the transducer data to sampled flow data. Created some draft hydrographs and sent to EC. [EC]
- Added Askam and Loyalsock Sampling Data to Google Sheets. Added Skamokin field samples to Excel on EPCAMR's SharePoint.
- Converted scanned deed maps from TIFF to JPEG and handed over to Shawnese to georeference. Graphed Nanticoke Transducer data. Extracted precipitation data from Agrible Emails combined in a Google Sheet. Received word from Solinst that they were going to replace the malfunctioning transducer with a refurbished one for free because of our nonprofit status. [EC]
- Bobby and Steve sampled first day Shamokin sites. Skipped the first 3 sites due to access concerns in winter months. [SCRA]
- Second day Shamokin Sampling: Big Mountain discharge to one Cameron discharge. Skipped the last 2 sites due to access concerns in winter months. [SCRA]
- Met with Jason at EC about transferring ArcGIS georeferenced maps and digitize their own data. Setup a property layer and relate to an excel table on their server showing property details. Showed him how to add new polygons and fill-in attribute information. Had some trouble relating the excel table. Researched the issue. [EC]
- Followed up with Jason about relating the Excel database. It had to do with adding the spreadsheet with Arc Catalog (not simply dragging the file from a folder in windows). We could also use the Join function, but EC preferred to make changes in Excel. In this case, the Relate function would be better. In both cases, the updated information would show up on the map after a reboot of ArcGIS. Received replacement Solinst LevelLogger 5 LT M5 probe, and upgrade from the Junior model they had. [EC]
- Reviewed comments from EC regarding negative flow values on some of the continuous flow hydrographs. Tried the regression line equation from last year and it helped. Reviewed the USGS Gauge Station Manual for help. Some of the stream monitoring sites are just not ideal trapezoidal channels and because of this the low range data can be skewed. The only way to make it better would be to actually set up and maintain weirs on the streams to measure flow.

This is not a big concern when you understand that the charts are an estimate of flow and have a few hundred gallon per minute error. [EC]

- Uploaded lab results for Shamokin Sampling to EPCAMR's SharePoint and transcribed the results in the Excel spreadsheet to share with Tetra Tech. [SCRA]
- Gave Steve access and instructions on how to upload videos to the EPCAMR Creator Studio as he had several AMR Conference presentation recordings on his computer. He ended up coming in the office and giving them to me on a thumb drive for processing and posting.
- Disabled OTP authentication on Zoom so it can be used when I am not present. When I was on vacation the first week of the month there was a committee meeting where Bobby tried to host the Zoom call but it required my phone to authorize. My phone was in airplane mode for the week as I was in Mexico and did not want to pay international fees for using my data plan. There was WiFi on the resort, but the authorization did not come through.
- Sampled Askam Boreholes, Treatment System, upstream and downstream on Nanticoke Creek, and 2 flow sites. Replaced transducers that were pulled from the field earlier this month. [EC]

[ ] - Denotes funding source where applicable.