

#### Eastern PA Coalition for Abandoned Mine Reclamation

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## **April 2024 Progress Report**

### **Highlights:**

- EPCAMR staff 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, POWR CWO calls, an AMR Conference call, CCRA meeting, and a meeting with LCD, DEP and WVSA; hosted a POWR CWO Survey Virtual Kickoff; presentation for Kings College
- Sampled Askam AMD Treatment System, upstream & downstream on Nanticoke Cr. for EC; 3
   AMD TS, upstream, downstream in Loyalsock Creek Watershed for LCWA & SCD; sampled
   22 discharge and instream sites in Shamokin Cr. for SCRA; investigated a streambed
   subsidence in Toby Creek
- Updated <u>www.TreatMineWater.com</u> and <u>www.EPCAMR.org</u>; administered GobbaDaPile local domain, G Suite for Nonprofits, and social media sites.

### **Education, Outreach and Admin.:**

- Helped Anne Daymut from WPCAMR with polling and whiteboard apps in Zoom in preparation for the Pennsylvania Organization for Watersheds and Rivers (POWR) Community-based Watershed Organization (CWO) Survey Kickoff Meeting. [POWR]
- Presented some practical uses for ArcGIS with Steve Cornia to professor Jayne Klenner's students at Kings college. This will be her last semester as she is leaving to pursue other interests.
- Updated POWR CWO AMD team on the attendee list from Eventbrite. [POWR]
- Helped EPCAMR Bookkeeper, Marianne Beane, with items she needed for QuickBooks until Bobby was able to come in.
- Joined the last POWR CWO check-in before the webinar 1/2 hour late. Anne Daymut was able to cover and explain the tools we plant to use to the rest of the group.
- Created a map showing Disadvantaged Communities and Watersheds in PA for the Foundation for PA Watersheds.
- Traveled to Syracuse, NY on a day off to see the Solar Eclipse.
- Received word that the Foundation for PA Watersheds would be hosting and the Office of Surface Mining Reclamation and Enforcement (OSMRE) staff would be teaching the National Technical Training Program (NTTP) training again this fall. A conference call was set up between partners but there wasn't enough notice given for me to join. Sent out the invite for NTTP Training to several CDWS and nonprofit organizations on the waiting list from 2023.
- Updated POWR CWO AMD team with the most up-to-date attendee list from Eventbrite.
   IPOWR1
- Provided Frank with 2 email lists from MailChimp and asked that the information be kept confidential in Survey Monkey as it is against EPCAMR policy to share contact lists with 3rd

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- Parties. AMD Team (SRI, WPCAMR & EPCAMR) hosted the POWR CWO Survey Kickoff Webinar in the evening with 55 participants. Sent chat text for the webinar to the AMD team.
- Updated EPCAMR SharePoint communication site and documents site to help staff find the files they and colleagues worked on most recently.
- Finished MSI Reimbursement for 3rd Quarter 2023. [MSI]
- A subsidence opened up under Toby's Creek in Luzerne at outcrop of Red Ash Vein on Sunday.
   DEP Bureau of Abandoned Mine Reclamation (BAMR) was quick to respond and began backfilling with rock. Took my dog, Hazle, for a walk on Main Street above the subsidence, but the trail was blocked by police. Went to Buttonwood shaft discharge instead and took photos.
- The next day, I asked DEP BAMR contact John Green, if he was going to take flow, but he said he wasn't tasked with it. Investigated with Bobby by measuring stream flows above and below the breach. Calculated a flow of 132.48 CFS above the 309 bridge and 43.65 CFS downstream above the Kelly Street bridge. Equated to a loss of 88.83 CFS or 3,9870 gpm which is approximately 2/3 of the upstream flow. Proceeded to Buttonwood Shaft to take photos and compare them to protos taken yesterday. The photos do show a few inches of water rise on the concrete structure. Calculated the total loss of water on Toby Creek as DEP was repairing the breach (~30 hours) to be ~170 million gallons of clean water into the mine pool.
- Following the developing story on Facebook as subsidences and mine drainage seem to be popping up all around Swoyersville, Forty-Fort, and Kingston. EPCAMR Board created a Spokesperson policy just for these events. They feel it is important to listen to the public via social media and help answer their questions (rather than potentially having them come up with their own opinions and government conspiracies). It lends credence to the job being done by the state. Bobby was out exploring the sites mentioned in the morning and went out again in the afternoon with Steve Cornia to take water quality samples. I stayed back to study the maps including Kingston and Pittston Quad mosaics, an OSM mine pool study map from 1968, and a mine fire map for Swoyersville that showed an anticlinal ridge parallel to the valley which separates the Northwestern Minepool into a lower and upper basin with discharges at Buttonwood and Plainsville respectively. Confirming that the subsidence on Hughes Street and the discharges on Tripp Street, Simpson Street, and the Woodward borehole are likely tied to the added water in the minepool. Local news stations are doing a great job covering the event and pushing folks to consider mine subsidence insurance. As usual, fear is a great motivator, but it is truly hard to predict where subsidence will pop up in a heavily undermined populated area. WNEP's Chelsea Strub was also following reports from the public and covering the "possibly related" sites. She caught up with Bobby and Steve for an interview.
- Created a PowerPoint Presentation and spreadsheet of information related to Toby Creek Subsidence and Northwest Lower Mine Pool overflows in preparation for a meeting with EPCAMR board members, DEP, and WVSA. Participated in Catawissa Creek evening meeting over Zoom.
- Created a google map of sites related to subsidence and overflows. Converted to KMZ file and sent to EPCAMR Board Members as requested.
- Participated in a Catawissa Creek Restoration Association Zoom meeting in the evening.
- Took levels of 3 monitoring boreholes over the Wyoming Valley Northwest Lower mine pool.
   The Loree borehole was paved over since we last read the water level. These boreholes should really be on PA One Call.
- Received confirmation from SRBC to post the Northern and Southern Field Mine Pool Report to EPCAMR website. It was their intellectual property.
- In the office and working from home this week as I likely pulled a muscle in my back by lifting up the heavy plates over the boreholes.
- Updated Toby Creek Subsidence and Northwest Lower Mine Pool Google map KMZ and notified Joe Simons, John Levitsky, and Bobby.
- Worked up statistics for AML and AMD issues in PA for Foundation for PA Watersheds (FPW).
   2024 PA AML Features 216,849.2 acres Statewide (conservative estimate based on feature polygons only). Compared to 2022 PA AML Features 216,278.7 acres Statewide (same as above, but the numbers are growing).
   2024 PA AML Features 92,006.2 acres in Chesapeake Bay Watershed. Compared to 2022 PA AML Features 91,791.7 acres in Chesapeake Bay

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Watershed. 2024 PA AMD Impaired Streams 5626.8 miles Statewide. Compared to 2023 PA AMD Impaired Streams 5537.0 miles Statewide (This surprised me. 89.8 miles less? It looks like DEP recently removed the West Branch of the Susquehanna in Clinton County and I saw some stuff in Clarion County). 2024 PA AMD Impaired Streams 1,968.4 miles in Chesapeake Bay Watershed. Compared to 2023 PA AMD Impaired Streams 1,874.1 miles in Chesapeake Bay Watershed (bigger difference than statewide hmmm). 2024 Active Treatment Systems 16 Statewide (on Datashed) and 2024 Passive Treatment Systems 352 Statewide (on Datashed).

 Participated in an AMR Conference call to work out details with the venue for the conference in October. Invited Elizabeth Hughes from Earth Conservancy to present their Espy Run Stream Restoration Project. Asked Arielle Avashai, OSMRE Pittsburgh Office, if they would be willing to sponsor the program booklets for this year's conference. Last year we asked a little too late for them to consider the request.

# **Technical Assistance:**

- Finished review of georeferenced maps to PHUMMIS and uploaded files to MSI's SharePoint.
   [MSI]
- Sampled Loyalsock Upstream, Downstream, & in/out of 3 treatment systems (Connell B Vein, Connell C Vein and Gutten Drift) with Steve, Frank, Bobby, and new Sullivan Conservation District Watershed Specialist (CDWS), Jollie Coates. Recorded data in a database for reporting to the SCD & Loyalsock Creek Watershed Association. [LCWA]
- Bobby and Steve completed Day 1 of Shamokin Sampling. [SCRA]
- Completed Second day of Shamokin Sampling with Frank. Uploaded field data to a spreadsheet on EPCAMR's SharePoint so partners can access the data. [SCRA]
- Fixed an error in the EPCAMR Online store related to a plugin and updated NTTP training registration item.
- Downloaded updated AMLIS GIS layers in preparation for a new version of RAMLIS and provided 2024 statewide statistics to the Foundation for PA Watersheds.
- Setup a Stripe account for Cheryl Brobst so Catawissa Creek Restoration Association (CCRA)
  can accept donations through Zeffy online. It was a very secure process that required her
  identification and AI reviewed information about CCRA. Since their website wasn't complete, I
  had to follow up with a Stripe representative to provide the password to see their draft website.
- Continued working on QA/QC of Southern Field mosaics. Uploaded to MMG Sharepoint and requested several Rausch Creek Lands maps to be SIDded.
- Georeferenced WBDO\_00E-01-02 and BMSA\_0873 (ReGeoed) then added to Southern Field Surface Mosaic.
- Edited footprints on Pittston Lo Skidmore. Removed EPCAMR\_012945-02 from Pittston Lo Skidmore and added to Up Ross as elevations were 60 feet lower. [MSI]
- Added BMSA\_1520 to Pittston Lo Skidmore and continued drawing footprints. Regeoreferenced WBDO\_026-0A-06, WBDO\_011-17-02 & 01, removed and re-added to Pittston Lo Skidmore mosaic.
- Re-georeferenced WBDO\_026-0A-07-02, removed and re-added it to Pittston Lo Skidmore mosaic. Removed WBDO\_005-0A-03, a duplicate map.
- Responded to Andrea Nerozzi, Wyoming Seminary teacher and EPCAMR Board Member, about mine maps under her home. She had researched the Mine Map Atlas and found some that were not in the Pittston Lo Skidmore mosaic. Added BMSA\_2107 to Pittston Lo Skidmore mosaic. Added BMSA\_2109 to Pittston Lo Red Ash mosaic. Georeferenced and added EPCAMR\_1700 - 1702 S to PHUMMIS and notified Patrick of their name change. These are maps from the RCL collection that are being used to supplement missing maps in the Southern Field Mosaics. [MSI]
- Downloaded EPCAMR\_1703 from MMG SharePoint and proceeded to georeference it, add it to PHUMMIS, and add all 4 to mosaics. Downloaded, georeferenced and added BMSA\_1294-001 and BMSA\_6239-001 to SF Surface Mosaic. Removed BMSA\_0873 (previsouly re-geoed, but found BMSA\_1294-001 was a better map). Georeferenced IUPASG\_01025, BMSA\_5104-001, and downloaded geor\_BMSA\_6813-001 to add later. Patrick completed his review of our 2023

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4th quarter work so a reimbursement for that should be coming soon. Provided an update to Patrick about Southern Field Mosaic QA/QC progress. I belive I can complete all 8 Lykens Valley veins, Little Buck, Buck Mountain and potentially Seven Foot and Skidmore veins by the July 1st deadline. I believe Steve has completed review of 8 mosaics which should bring him to the Tracy vein at this point. He should be able to complete several more mosaic reviews by July 1st as there is less area to concentrate on with the upper veins. I said the Mammoth Veins may take more time and where we will "meet in the middle" is still to be determined. I promised to double down my efforts and will remind Steve to get as many completed as possible. Patrick suggested we complete surface mosaics for the SF and WMF so he can have PASDA serve them up to aide in georeferencing. [MSI]

- Sampled Askam Boreholes, Treatment System, upstream and downstream on Nanticoke Creek, and 2 flow sites. [EC]
- Working from home mostly this week. In the office for a short time after sampling Askam over lunch to download OSM Folios 200 DPI to a transfer drive from the M Drive. Picked up the drive when I completed Nanticoke Headwaters and Espy Run flows.
- Prepared a technical write-up, gathered photos and created a google map regarding Earth Conservancy's Nanticoke Creek Stream Restoration AMD Abatement project. [EC]

[] - Denotes funding source where applicable.

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