



## Eastern PA Coalition for Abandoned Mine Reclamation

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### March 2026 Progress Report

#### Highlights:

- EPCAMR staff scanned, cataloged, georeferenced, mosaicked & digitized mine maps for the **DEP MSI** MMG program. Continued QA/QC of **HU's** Western Middle Anthracite Mosaic work.
- EPCAMR Management staff participated in weekly **PA AML Campaign** calls, an **AMR Conference** call, PKN-OAK-REP monthly call with **SCD** & a Dogtown Project Call with **LCD**.
- Sampled 3 discharges for the PKN-OAK-REP project on Mill Creek and West Branch Schuylkill River for **SCD**; Desk duty over 3/30.
- Completed a Loyalsock Surface Flow Loss report for **LCWA** and **SCCD**
- Updated [www.AML-Connect.org](http://www.AML-Connect.org); [www.EPCAMR.org](http://www.EPCAMR.org); & [www.treatminewater.com](http://www.treatminewater.com); administered GobbaDaPile local domain, G Suite for Nonprofits, and social media sites.

#### Education, Outreach and Admin.:

- Participated in the Choose Clean Water Coalition (CCWC) Bay Day: PA Team Prep Meeting. Made some edits to the statewide and PA congressional district AML and AMD statistics 2026 handouts as discussed with Deb Nardone at Foundation for PA Watersheds (FPW). Printed the handouts to take to Washington, DC tomorrow.
- Patrick Webb, BAMR Director, called and left a message about some wording on our AML and AMD maps and statistics handouts that was confusing. I wasn't able to change it as we were preparing to get on the road, but was able to make the distinction to legislators that the statistics showed the AML/AMD problem in Pennsylvania alone, while the funding was available to more than 2 dozen coal states and tribes. Traveled to DC and met with CCWC staffers and members to prepare for the next day.
- Participated in Bay Day on the Hill in DC with Frank. Met with both PA senator's staff and 4 congressional staffers to talk about important environmental issues regarding the Chesapeake Bay and AML/AMD issues in general. Traveled home in the early afternoon as we were able to mostly beat the traffic.
- EPCAMR staff (other than me) sampled the pipe discharge on Paddy Run for our Dogtown AML reclamation grant in cooperation with Larson Design Group (LDG) for Luzerne Conservation District (LCD). [PADDY]
- I took a stab at finding and uploading receipts to our Google Drive for our bookkeeper Marianne.
- Updated the AML and AMD maps and statistics handouts to reflect Pat Webb's concern and uploaded them to the Google Drive for AML Campaign partners to use. Notified Anne and Andy about this version 2. Followed up with legislative contacts made the previous day to invite them to our AMR Conference in October.
- Aided Bobby and Ed Wytovich in setting up for the AMR Chronicles podcast.
- Completed Invoice 10 for the MSI program and sent to DEP for reimbursement. [MSI]
- Discussion with Frank and Bobby on the new AML Dashboard on ArcGIS Online. There are many attributes in the stream miles that seem to be the length (some new), but we were told by

DEP BWQ that the "INT-LENGTH" attribute was the correct length in miles. Bobby may follow up with a statewide committee to find out which one is the correct one to use currently.

- Began working on the MSI Extension paperwork due mid-March. [MSI]
- Continued to work on the MSI Extension Paperwork and shared a draft with Bobby. [MSI]
- Finished up and submitted MSI Extension Paperwork to Patrick a little early to see if he can provide some guidance. If not, it was reviewed by Bobby and ready to go a little earlier than mid-March. [MSI]
- Reported on CCWC Bay Day on the Hill legislative visits to the AML Campaign call.
- Ordered Aluminum and Nitrate reagents for our YSI Photometer from Frondriest Environmental. Desktop recon regarding a greenhouse in Carbon County that is looking for water for geothermal heating and possibly irrigation.
- Finished the Loyalsock Surface Flow Loss report with appendix and sent it to Loyalsock Creek Watershed Association (LCWA) and Sullivan County Conservation District (SCCD). [LCWA]
- Met virtually with LCD and LDG to discuss moving the lab sampling point for the "Paddy Run" project. Paddy Run was the wrong Problem Area for the grant, which we did not know initially. Also initial visits with BAMR identified this "discharge" as the one to sample. Instead, we came to a consensus to sample Stackhouse Tunnel #4 as it has the potential to do the most good (if treated) for Rocky Run (potential native trout stream). [PADDY]
- Reviewed AML-connect.org now that Frank has it live. I am impressed with the possibilities. Added a post to the forum general discussion to convey my thoughts of how it could be used to collaborate with AML partners. Worked on with Frank and submitted Letter of Intent to the Foundation for PA Watersheds (FPW) a few days early. The total project will cost ~63K and EPCAMR has some committed funding for Frank from June 2026-May 2027 therefore, the total grant will need to be approximately ~\$50K. The FPW grant portal states the average award is 20-25K. Hopefully, that can be expanded, or we may need to find an additional grant source.
- Created a proposal for Verdantis regarding some mine pool mapping work.
- EPCAMR Management Staff participated in an AMR Conference call to talk about 2027 joint conference and 2026 conference in Grantville.
- EPCAMR Management Staff participated in weekly AML Campaign Calls.
- Signed the contract for the AMR Conference venue at the Holiday Inn and Conference Center in Grantville and sent it down to them. Bobby is to send down the credit card form. Attempted to work on treatminewater website to begin to develop the 2026 conference page, but there's a new code requirement on WPCAMR's web server. Will need to coordinate with Andy to get in. He wasn't available this afternoon, so I completed a draft of the 2026 AMR Conference Budget instead.
- Connected with Andy and made the changes in WPCAMR's webhost to get treatminewater.com running.
- Discussion with WPCAMR on insurance needs now that POWR Liability Insurance coverage is ending next month. Generated some AI-driven content with Google Gemini. Asked what types of insurance non-profit organizations should have if they have staff or are all volunteer? What if they treat AMD? Shared these suggestions with Frank for an AML-connect topic as well.
- Prepped sample bottles and paperwork for PKN-OAK-REP sampling next week. [P-O-R]
- EPCAMR Management Staff participated in a Lost Creek Project update call. [LOST]
- An X-ray from the Foot Doctor showed my foot was completely healed and I got the "all clear" signal to begin field work again.
- PKN-OAK-REP sampling of 3 discharges to the Mill Creek and West Branch Schuylkill River for SCD. [P-O-R]

### **Technical Assistance:**

- Sorted out a lab sampling sheet problem for the PKN-OAK-REP project with Brandon Zimmerman at BAMR, as 1 result came back from the lab for the January sampling event. Hoping more will follow soon. [P-O-R]

- Worked on identifying the correct sampling location for the Dogtown AML Reclamation grant with LCD and Larson Design Group. We found a discharge from a pipe on Paddy Run while doing field work for the CHP and assumed this was the site we needed to sample in Problem Area 7100 Shickshinny Southeast. We found out today, after a conversation with LDG, that a different set of problem areas (1746 Dogtown, 3000 Dogtown/Rocky, & 4188 Shickshinny South) were approved for the sampling and design work. The discharge indicated in the contract was AMLF 4188-01. When we investigated this site for the CHP the discharge was dry, but an unmarked discharge was found about 160 ft southeast (we call this one Stackhouse Mine Dogtown #1 Tunnel). This could be the actual discharge and just improperly located. We wrote up an email explaining the issue, discussed the background and suggested 2 plans going forward (sample Tunnel #1 or Tunnel #4 closer to a refuse pile approved for cleanup in PA 1746). [PADDY]
- Noticed a bunch of Web apps in our ArcGIS Online Gallery were retired. Was able to find the web map for RAMLIS and update to an Instant app then replace the gallery item. Asked Frank to look into upgrading the others. Why do these big companies retire apps that were working perfectly fine and waste our time researching and updating? Couldn't there have been an easy upgrade process?
- Trained Maria on QA/QC of Western Middle Anthracite Coal Field mosaics. Prepped an APRX file for us to use by removing maps and mosaics from the other fields. Correspondence with Patrick and updates to PHUMMIS records. Added BMSA\_2487 in the Orchard and Primrose Southern Anthracite Mosaics. This map was particularly difficult to georeference. Initially geoded by EPCAMR in 2018, then re-geoded by HU in 2019 for the mosaics (75 feet off) and re-geoded again by EPCAMR in October 2025 with the help of surface maps for the PKN-OAK-REP Project. Railroads now line up with county parcels. Asked Patrick if he wanted the updated mosaics since the official "final" mosaics were already submitted. [MSI]
- Added PKN-OAK-REP data to Google spreadsheet after results from the lab were sent. Uploaded the results in PDF format to the shared Google Drive for partners to view. [P-O-R]
- Worked on Loyalsock Infiltration Map by adding geotagged photos from 3/31/2025 and 5/9/2025 (a rainy day). Also pulled photos from two 3/31/2025 KML files Morgan exported from Avenza. Started adding points to show possible infiltration spots and streams (flowing and not flowing). [LCWA]
- Worked on Loyalsock Infiltration Map by adding more points and lines showing drainage during rain vs dry days. [LCWA]
- Finished up QC of Forest City Mosaics and found the most recent digitizing geodatabase for Shawnese to edit. Wrote up notes in the purple notebook to keep track. [MSI]
- Taught Maria how to georeference an underground mine map (UMM) to a surface map. Some SIDs downloaded from PASDA were corrupt (WBDO\_053-01... could not georeference even after removing the aux.xml files and restarting ArcGIS). Found the originals and they georeferenced fine. Uploaded these to a MMG bi-weekly work folder for Maria. Suggested she start keeping her timesheets here now that she is full-time. [MSI]
- Used FileZilla to connect to treatminwater.com and add a 2026 website. Had to go back to my old computer for the login information in FireFTP. Transferred a few other FTP sites from FireFTP to FileZilla as well, since FireFTP was discontinued. Downloaded the newest version of WordPress and uploaded it to treatminwater.com via FileZilla in preparation for a 2026 website.
- Maria could not geo the WBDO\_053-01 maps uploaded to the google drive either, but we decided to stop trying. These maps were patched together NMMR maps, but the original NMMR maps are much better quality. Worked on a process to teach Maria to analyze, photomerge, and georeference NMMR maps instead. It's a good skill to learn. Unfortunately, we don't have access to Photoshop, but it can be done in other programs. Started to research Hugin. [MSI]
- Testing Hugin and looking at tutorials. Attempting to write a procedure to stitch NMMR maps, but having problems, but getting closer to a good product. [MSI]
- Completed the stitching NMMR maps procedure document and sent it to Maria. [MSI]

- PKN-OAK-REP meeting and follow up with Chuck Cravotta regarding the placement of a borehole in the Lytle Mine Pool. PA DEP was unable to clear up access issues with the first site picked. Was asked to find borehole location on the fire company property. [P-O-R]
- Aided Maria with stitching NMMRs and georeferencing them. [MSI]
- Reviewing 3 sources of precipitation data for the PKN-OAK-REP project. First is [Global Historical Climatology Network - Daily](#) (GHCN-Daily), which is not user-friendly and limits the amount of data one can download, but combines searchable 12 sources. Potentially limit data amount by selecting one parameter at a time, download precipitation data and ambient temperature data separately (if available), then combine. Second is [AgACIS](#), which is a little easier to use, and searched stations are displayed on a map; there are several sources that show up on the maps, but unsure of how many total. There is only one option to download daily data, and you can only get 1 month at a time. So download several and patch together. Last but not least is CoCoRaHS this is a community-sourced website, but only displays stations in the CoCoRaHS network. Luckily, the Pottsville 0.6 NNE, PA station was in the CoCoRaHS network. A question remains about where to get ambient temperature data along with the precipitation data. It seems the CoCoRaHS data does not contain temperature data. [P-O-R]
- Used Gemini to find PRISM, a USDA/Oregon State partnership. The PRISM (Parameter-elevation Regressions on Independent Slopes Model) is a USDA-sponsored dataset that uses weather station data and sophisticated interpolation to create a continuous grid across the U.S. Enter a location or lat/lon into the PRISM Data Explorer, select "Daily," and download a time series as a .csv. Continue looking for Lytle borehole drilling location on Forestville Citizens Fire Company property by looking at maps and cross sections. Created a PowerPoint and exported as a PDF to share with project partners. Removed BMSA\_3825-001 from the SF Orchard Mosaic in the Lytle Colliery that was actually the Four Foot Vein and considered adding a map from Primrose Mosaic that had part of the Orchard vein in orange. I would charge this time to MSI, but we have completed QA/QC review of the Southern Field Mosaics. I will keep these updates and ask Patrick if he wants them at a later time. [P-O-R]
- Received lab results of 2 of the 3 February samples PKN-OAK-REP. Organized in google drive and copied over to google spreadsheet. [P-O-R]
- Working on Bear Creek 3D modeling again. LV6 interpolation raster and adjustments mainly to heads-up digitize elevation points from maps and keep the surface under the LV5 multipatch that was already created. Reworking method steps to get a better product. Created cloud points from the interpolation raster and created a TIN surface for the bottom of the vein. [BEAR]
- Continued working on Bear Creek 3D modeling. Created cloud points from the interpolation raster and created a TIN surface for the top of the vein. Viewed these raster surfaces in ArcGIS Pro Scene and they looked ready for 3D modeling. Realized I was looking at the old southern field mosaics from HU. Began loading the QA/QC edited mosaics from EPCAMR, but was having problems with some of them loading checkered. Troubleshooted the issue. Mostly NMMR attempted to repair Mosaic Dataset Paths using the geoprocessing tool to isolate only those maps with a query definition and by highlighting them. Did not work. Cleared cache. Still did not work. These maps were the ones that showed up Cyan so we had to apply a raster filter in the mosaic, perhaps that is causing the problem? Hopefully I won't need those maps right away and I could load the original SID files as a work around. Continued Bear Creek by editing the LV6 mined out areas to remove lollypop sticks and simplify shapes in preparation for 3D multipatch making. [BEAR]

[ ] - Denotes funding source where applicable.