

# Eastern PA Coalition for Abandoned Mine Reclamation

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## May 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, a 2-day Section 319 Virtual meeting, POWR CWO calls, hosted several POWR CWO interviews over Zoom, call with Columbia U prof., separate calls with Kleinfelder and Benesch for mine pool mapping; Hosted a quarterly EPCAMR Board Meeting
- Updated RAMLIS 2024 and AML statistics for partners
- Started registrations for NTTP AMD PTS training in Sept. and AMR Conference in Oct.
- Sampled Askam AMD Treatment System, upstream & downstream on Nanticoke Cr. for EC; 3 AMD TS, upstream, downstream in Loyalsock Creek Watershed for LCWA & SCD; observed and sampled AMD in the Wyoming Valley with USGS
- 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.:**

- Invoiced Earth Conservancy (EC) in Quickbooks Online (QBO) for a technical write-up and 2024 1st quarter monitoring of the Askam Treatment System and Nanticoke Creek. Added corresponding sampling data to Google Sheets and notified EC it was available.
- EPCAMR Management Staff participated in weekly AML Campaign Calls.
- Met with Marianne Beane, EPCAMR's Bookkeper, to organize and supply receipts and invoices for the past few months.
- Discussion with Branden from Foundation for Pennsylvania Watersheds (FPW) on eAMLIS vs PA Abandoned Mine Land Inventory System (AMLIS) inventory. There was a big jump from ~220,000 total acres (sum of all feature polygons) to ~450,000 total acres of AML in PA. Unfunded costs are now \$5.1 Billion from \$1.4 Billion. We came to the conclusion that the jump in numbers likely has to do with the GPRA calculation of acreage based on feature type used by the Office of Surface Mining Reclamation and Enforcement (OSMRE) for all the mining states and reflects the uptick in projects related to Abandoned Mine Land Economic Revitalization (AMLER) and Bipartisan Infrastructure Law (BIL) funding.
- Had the opportunity to observe USGS sampling methods for the Nanticoke Creek Watershed. It was very informative and as compared to our sampling methods much more exact, but USGS staff said that for field samples we have excellent methods.
- Led USGS water quality staff to several AMD discharges and took flow in the Southern Wyoming Valley. They gathered samples to test for a majority of the periodic table similar to the sampling that was completed in the mid-1990s for the USGS 100 Greatest Anthracite Discharges Report.

- Updated EPCAMR Board Meeting Page with progress reports from Robert. Added Estimates in QBO from Sales Orders in QuickBooks Desktop (QBDT) for current jobs. Cut certain multiyear projects to show funds remaining. The transition from QBDT to QBO has been troublesome. Created treasurer's report and sent to EPCAMR Treasurer along with some notes prior to the board meeting. Added 3 new board members to Mailchimp list.
- Reviewed EPCAMR Treasurer's questions and answered them to her satisfaction. With the new bookkeeper and accounting software there were some anomalies popping up in the Statement of Financial Position (formerly Balance Sheet). Worked with the bookkeeper to address these incorrect balances.
- Worked on a Scope of Work for the Commissioner's Lake project as a potential subcontractor to Kleinfelder for mine pool mapping expertise. Filling Commissioner's Lake will displace the water. We will attempt to answer the question of where the water will be displaced and monitor the quality and quantity as the pit is being filled.
- Caught up with Columbia University professor Sean Kinney and grad students to explain the results of the second round of acid mine drainage testing. Lithium seems to be the only REE constituent with any abundance. Discussed coming out to sample a 3rd time and modifying locations. [COLU]
- EPCAMR staff hosted the 2nd Quarter EPCAMR Board Meeting to fill in the board about ongoing work and coordination of projects.
- EPCAMR Management Staff participated in a discussion with Kleinfelder about the time needed for the Commissioner's Lake Project which helped us put together a proposal and budget for the project.
- Checked in with the AMD team team to review results of the Community Watershed Organization (CWO) survey. [POWR]
- Posted the Northern and Southern Field Mine Pool Report and Appendices to EPCAMR website after it was approved by the Susquehanna River Basin Commission (SRBC) as it is their intellectual property (IP). Notified Executive Director so he could push it out on social media as a new resource for the general public.
- Finished EPCAMR Program Manager Report for February and started March 2024 report.
- Updated the treatminewater.com website with recently approved AMR Conference presentations and the updated Request for Presentations Form.
- Revised registration items on EPCAMR store and updated the registration page on www.treatminewater.com. Drafted and sent an email campaign via MailChimp to notify watershed groups and board members that the PA AMR Conference Registration is open and the committee is requesting presentations.
- Finished EPCAMR Program Manager Report for March and started April 2024 report.
- Got our first AMR Conference Registration from Lackawanna River Conservation Association (LRCA).
- Responded to an update about the NTTP training in September. They are ready to open registration. Revised that registration item on EPCAMR store and sent the hidden item link to Anne Daymut at WPCAMR for distribution to Conservation Districts now and Watershed Groups in the future. It is a hidden item in the store because the course is invite only.
- Finished EPCAMR Program Manager Report for April 2024.
- Completed a review of CWO Survey results and how they could be represented in a report. [POWR]
- Submitted a Program Status Report for 1st Quarter 2024 to the 319 Program as we are still in the 10% withholding period for reimbursements.
- Participated in a 2-day Section 319 Virtual Watershed Planning and Implementation Meeting.
- Interviewed Ed Wytovich over Zoom for POWR CWO project. He had a lot of insight to lend as he founded and continued to work in many watershed groups in Schuylkill and Columbia Counties as well as experience on the EPCAMR board and past president.
- EPCAMR management staff participated in a call regarding Northpoint Hazleton Mine Water Use call with Benesch. There is a potential for mine mapping work in this area.

- Noticed the PA Mine Map Atlas was down. Contacted Patrick and Maurie from PASDA. The outage was quickly remedied.
- Sampled Askam Boreholes, Treatment System, upstream and downstream on Nanticoke Creek, and 2 flow sites. [EC]
- Continued filling in NFWF Black Duck and Brook Trout Habitat Data spreadsheet from handwritten field datasheets. [NFWF]
- Hosted CWO Interview over Zoom with Bobby and Bill Reichert. [POWR]

### **Technical Assistance:**

- Sent instructions to have Frank to complete RAMLIS investigations for the National Fish and Wildlife Foundation (NFWF) Black Duck and Brook Trout Habitat in the Southern Wyoming Valley project report. [NFWF]
- Added April Lab results to the Shamokin Sampling Fieldbook spreadsheet on EPCAMR's SharePoint for Katie Wood at Tetra Tech to review as they create conceptual treatment system designs for more than half of the AMD sites monitored. This is the last set of data needed for the project and we have completed sampling the Shamokin Watershed. Bobby is in contact with SCRA who are looking for funding to do some more sampling of sites we were not able to monitor this past year. [SCRA]
- Looking into comments from our project manager at DEP for the Mine Mapping Grant (MMG) on our last reimbursement that KAGE\_UP058-0069 and KAGE\_UP058-0076 were counted as georeferenced, but the auxiliary (AUX) file size was only 2KB. This usually means that the image was brought into ArcGIS to be georeferenced, but was not completed. These were supplied by Shawnese as work products from November 2023. I went back into PHUMMIS and removed the georeferenced status. [MSI]
- In an attempt to finish up Quality Control (QC) of Southern Field Mine Map Mosaics created by Harrisburg University (HU) by the end of the State Fiscal Year (SFY) a lot of EPCAMR staff time was dedicated to fixing the mosaics in May and June. Added BMSA\_5104-001, IUPASG\_01025, and BMSA\_6813-001 to Southern Field surface mosaic. Georeferenced WBDO\_00D-17-05, BMSA\_2295-001, and BMSA\_4688 then added them to Surface mosaic as well. Attempted to georeference BMSA\_4684 (Middle Creek Colliery) but I couldn't find many control points to match to aerial photos or other surface maps. [MSI]
- Georeferenced BMSA\_6451 and WBDO\_00F-15-02, then re-georeferenced geor\_BMSA\_5292 and geor\_BMSA\_3036 which were lined up with property boundaries. We have learned from experience that one should not line up surface maps with property boundaries from other surface and underground mine maps especially if they are not from the same colliery. One should look at roads, railroads, old bridges, and homes first. Added these 4 maps to Southern Field surface mosaic. Re-georeferenced geor\_BMSA\_5333 which was off by one city block. [MSI]
- Georeferenced WBDO\_00F-14-09-02, BMSA\_2731, BMSA\_5930-003, and BMSA\_2852 A&B, re-georeferenced geor\_BMSA\_5333 and WBDO\_00F-12-52-02 then added them and geor\_BMSA\_2696, BMSA\_3168-002, BMSA\_2907, BMSA\_2145-001, BMSA\_2012-001, WBDO\_00E-08-24-08, and WBDO\_00E-11-15 to the Southern Field surface mosaic. [MSI]
- Sampled Loyalsock Upstream, Downstream, & in/out of 3 treatment systems (Connell B Vein, Connell C Vein and Gutten Drift) with Steve, and Frank. [LCWA]
- Reviewed Frank's 1st attempt at Statewide AML statistics and by Congressional District in the EPCAMR Region. These statistics didn't have the correct acreage. I noticed that he wasn't using the 2024 datasets. Sent the correct datasets from PASDA.
- Reviewed Frank's 2nd attempt at Statewide AML statistics and by Congressional District in the EPCAMR Region. These statistics didn't have the correct acreages and AMD stream miles. Explained that the stream miles needed to be queried to remove pollution causes other than AMD and the ~1,700 miles which include Mercury as the source (near impossibility). The acres are still off. Converting from Square Meters to Acres does not give you the correct acreage. You need to project the AML Feature Polygon layer from GCS North American 1983 to USA

Contiguous Albers Equal Area Conic and then calculate a new acreage attribute. The Albers projection preserves area.

- Reviewed Frank's 3rd attempt at Statewide AML statistics and by Congressional District in the EPCAMR Region. These statistics were correct and ready to be sent to FPW and other partners on the PA AML calls.
- Reviewed Steve's Solar on AML Study that he was asked to do for Commissioner's Lake.
- Added to RAMLIS 2024 and recreated maps for ARIPPA depicting CoGen Plants, AML Problem Areas, PA Senate, PA House, and PA Congressional Districts. Added status (closed and open), year closed (if closed), and assigned legislative districts to the layer to make a table on the informational map.
- Added a 2024 land owned and managed by state government agencies (includes state parks, state forests, game lands, Historic & Museum Commission properties, and Fish & Boat Commission properties) from WeConservePA to update the 20-year-old layer in the Conservation Fund's Protected Land Inventory to RAMLIS. Created statistics to show AML sites/features and AMD-impaired streams on state lands for FPW. 718 miles of streams Impaired by AMD on State Lands. 771 total AML Problem Areas, 746 Unreclaimed, 22 Reclaimed, and 3 Active on State Lands. 1,862 AML Problem Features and 22,349 total acres, 1,441 Features and 18,172 acres Unreclaimed, and 421 Features and 4,177 acres Reclaimed on State Lands (Calculated from the Problem Features Polygon, not OSMRE's GPRA acres).

[] - Denotes funding source where applicable.