December 2021 Progress Report

Highlights:

- EPCAMR staff scanned, georeferenced, mosaicked & digitized mine maps for the PA DEP MSI MMG program. QA/QC checked work.
- EPCAMR staff participated in a weekly PA AML Campaign call, a site visit with SRBC and LCD, several virtual conference platform demos & press event at OFBH
- EPCAMR staff finished up Aquarius Software Business Plan with Aqua Informatics
- Sampled AMD Treatment System on Nanticoke Cr. for EC, 3 on Loyalsock Cr. for LCWA, NFWF sites and found a new AMD discharge in the Newport Creek Watershed.
- Updated [www.treatminewater.com](http://www.treatminewater.com) and [www.epcamr.org](http://www.epcamr.org); administered G Suite for Nonprofits; maintained GobbaDaPile in-house domain server

Education, Outreach and Admin.:

- EPCAMR Management staff participated in weekly PA AML Campaign calls to find out the status of AML related legislation moving through Congress.
- Noticed the PA DEP Environmental Justice (EJ) online mapper was updated with some mining points after our calls with PA DEP EJ Office, but are they the right ones? These seem to be related to active mining, but we need them to include the abandoned mine features too. Brian Bradley from PA DEP Bureau of Abandoned Mine Reclamation (BAMR) mentioned that the AMLIS Problem Area Polygons were offered up, but they refused them for some reason. Maybe because the polygons would cover the EJ communities and confuse their AGOL map. I suggested BAMR offers up a centroid version of their problem areas and that may better fit the current EJ online mapper.
- Caught up on timesheets and other paperwork that was set aside while we co-hosted the AMR Conference and continued field work before winter really set in.
- Visited Plainsville Borehole site and Packer Shaft discharge with John Levitsky from Luzerne Conservation District (LCD) and Susquehanna River Basin Commission (SRBC) staff to discuss potential projects for their consumptive use mitigation funding. Came up with some simple designs to enhance Plainsville potentially with a flow spreader to add more oxygen to the head of the pond. SRBC came back to evaluate the depth of the pond and found it was much shallower than initially thought. Added a silt dredging aspect to consider. There is also the issue of ownership as the current landowner has expressed interest in selling the property. The Packer Shaft was recently discovered and needs a year’s worth of data collection before making recommendations.
- Traveled around the Mill Creek Watershed in around Wilkes-Barre and Plains to take site photos of recommendations for the Mill Creek Coldwater Heritage Plan. [CHP]
- Registered one attendee post conference to get PDH by watching recorded live sessions. Closed online post conference registration because Whova shut down post conference registration 30 days after the end of the event. I questioned technical support staff about this new policy that was never told us nor is it written anywhere. They also notified me that we only
have a few months to continue to access the Whova Web App. Started looking for alternative virtual conference platforms due to these distrustful moves.

- Filled out an Office of Surface Mining Reclamation and Enforcement (OSMRE) Technical Innovation and Professional Service (TIPS) needs assessment form to continue to use programs like ArcGIS and earthVision and receive staff training.

- Researched Zoom Event as potential alternative for Whova, but it uses the Zoom Client app. We will have to determine if Zoom is an allowable program for government computers. It would be a big cost savings with fewer bells and whistles, but good for a hybrid conference format.

- Evaluated PheedLoop with Anne Daymut from WPCAMR and Cristy Sweeney from ARIPPA as a potential virtual conference platform for our 2022 PA AMR Conference in June. We are hoping for a hybrid and in that case, we may need to hire a film crew to manage the live streams.

- Planned a tour of the Old Forge Borehole with staff from Rep Cartwright’s office. The congressman wanted to see the site and talk about the potential for use of the recently passed Bipartisan Infrastructure Law to treat the discharge, create hydropower energy and spur economic growth.

- Reviewed Growing Greener reporting forms for AMD treatment, AML reclamation and Oil and Gas well Best Management Practices (BMP) at the request of PA DEP 319 staff. Had a few suggestions, but the forms looked good and should collect good data from grantees.

- Researched options to sell our disabled 1998 GMC Suburban before it became a burden when clearing the parking lot of snow. Found a website where we could easily plug in details about the vehicle, get a quote and have a company come to pick up the vehicle all in one day.

- Provided comments to draft “Brookie” video that was filmed over the summer with Inquiring Systems Inc and Centone Films. My comments were mostly technical in nature.

- Evaluated Reservoir Creek tributary to South Branch Newport Creek and suggested sampling locations to find the AMD source for SRBC. Upon investigation of the borehole water levels and waterbodies in the area for the NFWF study, the south side of the Wanamie Colliery may hold a perched mine pool. It would make sense for a discharge in this area near the mouth of Reservoir Creek along the outcrop of the Forge Vein.

- Updated EPCAMR profile on GuideStar to get Silver Transparency status. Will need to upload 990s and financial information to get back to Platinum Transparency status. The logo on our board webpage updates automatically as we progress thru the levels.

- Attended the Congressman Cartwright press event and caught up with stakeholders afterward regarding OFBH.

- Contacted Jenn West at Ramada Inn and Conference Center in State College to ask about hybrid conference options for the PA AMR Conference. She mentioned they will soon purchase cameras and would follow up with details.

**Technical Assistance:**

- Finished Black Duck habitat evaluation of Stearns Wetland with EPCAMR Executive Director, scanned and uploaded the field data sheet to google drive. Organized photos and updated site descriptions in the Newport Center folder based on Abandoned Mine Land Inventory System (AMLIS) sites in the area for the National Fish and Wildlife Foundation (NFWF) grant. Domain installed Lumin PDF and a HEIC image converter to the google drive to help edit the data forms, convert photos to a Microsoft compatible format and eventually gather GPS locations from the photos. [NFWF]

- Discovered a new acidic mine discharge at 614’ from the Stearns Colliery. Separated the Stearns Mine Pool from the Wanamie Mine Pool which discharges at Newport Lake elevation 588’. This Stearns Borehole discharges into the northern half of the riverine wetland along the North Branch of Newport Creek that we named the Stearns Wetland. [NFWF]

- Fixed EPCAMR Online Store payment methods so that credit/debit cards look like the default option. This was an issue that commonly had AMR Conference Registrants clicking on the check option and then canceling the order or confused about the status of their registration.
Also, apparently PayPal allows Venmo payments. It's always something new to keep our donors on their toes.

- EPCAMR management staff joined a call with Tim Finegan at Aqua Informatics to review sampling data to go on Aquarius. Continued assigning locations and adding data from other databases to our main EPCAMR_Sampling_Data(FieldBook) on Google Sheets. Finalized the Business Plan with Aquatic Informatics so their staff could get to work, but continued to add locations and data. Found a map of borehole locations for the northern field at the office.
- Placed scanned PDFs of NFWF sites visited around Wanamie North on the Google drive. Created folders to organize to place photos and added a site description documents to each.
- Replaced ballast for one of the florescent overhead lights in office.
- Worked with Jason Tarnowski at Earth Conservancy to relate flows to gauge stations in Nanticoke Creek watershed. Worked with Able Software to renew license of R2V to process Stevens Recorder Hydrographs. [EC]
- Fixed the Fluval filter for Greater Nantico Area (GNA) High School teacher's Trout in the Classroom (TIC) tank.

- 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 Sullivan Conservation District (SCD) & Loyalsock Creek Watershed Association. [LCWA]
- Continued to gather locations and chemistry of AMD sites for the Aquarius for the Lackawanna River Watershed. I discovered that the Lackawanna River Conservation Association (LRCA) website drastically changed and lots of AMD information was removed. Used the wayback machine and retrieved LRCA website from 2007 and archived them for potential addition to our site.
- Processed DEP edits on several Nanticoke Quadrangle mosaics and marked them complete. Sent Upper Baltimore vein and Forge Vein mosaics to Frank Sindaco, EPCAMR GIS specialist, for Digitizing. [MSI]

- Looked into Bevy in a TechSoup blog article as an alternative to Whova at the request of one of our AMR Conference Committee members. Compared to Whova in G2.com and looked into Socio as well. Requested demos of both virtual conference platforms.
- Replaced BMSA_0249-001 and BMSA_0254-001 georeferenced by HACC with BLUE_TRU-09-06 and 13-06 georeferenced by EPCAMR in the Nanticoke Quadrangle Cooper Vein Mosaic. Georeferenced and added BLUE_WAN-0B-05-02 to Nanticoke Hillman. Georeferenced BMSA-0331-001 and 003 to replace geor_WBDO_133-01-11 in the Wilkes-Barre West Quadrangle Hillman Vein Mosaic. Added more faults in Wilkes-Barre West Quadrangle based on BMSA_6472-001. Replaced EPCAMR_010895-01, 03 & 04 with geor_WBDO_138-04, added BLUE_TRU-13-04, and regeoed BLUE_WAN-0B-04-02 for Nanticoke Quadrangle Mills Vein Mosaic. Added EPCAMR_010896-03, EPCAMR_010897-05, BLUE_TRU-12-04 and 16-02 to the Wilkes-Barre West Quadrangle Kidney Vein mosaic. [MSI]
- Added more faults in Wilkes-Barre West Quadrangle based on BMSA_4887-012. Added BLUE_HUB-20-07 nd 07-01 to Wilkes-Barre West Hillman Vein Mosaic to replace 1:400 scale maps in the South Wilkes-Barre colliery. Georeferenced BLUE_LOO-03-04-02, 03 (Buttonwood and Inman collieries) for Wilkes-Barre West Quadrangle Kidney Vein Mosaic. [MSI]
- Participated in a call with EPCAMR Executive Director, Anne Daymut from WPCAMR and a sales representative for the Socio Virtual Conference Platform. It was about 3X the price of Whova.
- Georeferenced WBDO_015-17-02 and BLUE_TRU-14-04 then added BLUE_LOO-03-04-02, 03, and 04 (Buttonwood and Inman collieries), BMSA_6751-001 (Loree Colliery), BMSA_3861-001, WBDO_047-02 and 08 (Woodward Colliery), BLUE_NOT-12-04, 09-04 (Lance Colliery), BLUE_HUB-12-04, 22-04-01, 03, 32-04, and 04-01 (South Wilkes-Barre) to Wilkes-Barre West Quadrangle Kidney Vein Mosaic to cover 1:400 scale maps. Added NOT-07, 08, 09, 10, 11, 12 to the Blue Coal Grid shapefile to help find maps in the Nottingham, Buttonwood and Lance Collieries. [MSI]
- Sent 5 mosaic footprints to Mara Evans at PA DEP California District Mining Office (DMO): Nanticoke Quadrangle Cooper & Hillman veins, Wilkes-Barre West Quadrangle Stanton, Top Stanton, & Hillman veins. Wrote a "read me" note related to collieries that do not have AMSL as...
their datum but need to add or subtract 500 feet in the valley: Baltimore, Hollenback, Franklin (subtract 500') and Stackhouse (add 500'). Added BMSA_1881-005 to fill a small gap in Wilkes-Barre West Quadrangle Kidney Vein Mosaic. Removed BLUE_TRU-16-02-01 from Wilkes-Barre West Snake Island Vein Mosaic because the Warrior Run Colliery map said it was George Vein, but based on the Glen Alden “cipher” in the Warrior Run Colliery it is actually the Abbott vein. Georeferenced BLUE_LOO-02-03-01 and identified several maps to add to Wilkes-Barre West Abbott Vein Mosaic to cover 1:400 scale maps. [MSI]

- Sampled Askam Boreholes, Treatment System, upstream and downstream on Nanticoke Creek and 2 flow sites in the Nanticoke Creek Watershed. Recorded data into sampling spreadsheet and delivered to Earth Conservancy. Also downloaded transducer data and created a regression line for upstream and downstream transducer data. [EC]

[ ] - Denotes funding source where applicable.