February 2022 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, 2 PA AMR Conference calls, EC's EWT class, a call with SRI, a call with LCD & EC, a call with DEP BWQ & FPW, and hosted a quarterly EPCAMR board meeting.
- Sampled AMD Treatment System on Nanticoke Cr. for EC and revised the NFWF QAPP.
- Updated www.treatminewater.com and www.epcamr.org; administered G Suite for Nonprofits and social media sites; maintained GobbaDaPile in-house domain server.

Education, Outreach and Admin.:  

- Continued revisions to the Quality Assurance Project Plan (QAPP) for our Southern Wyoming Valley Black Duck and Brook Trout Habitat National Fish and Wildlife Foundation (NFWF) grant. NFWF staff had feedback that had to be addressed with our first QAPP. Sent this second draft to John Levitsky, Luzerne Conservation District (LCD) Watershed Specialist, and consulting biologist on the project for comments before sending to NFWF again.
- EPCAMR staff participated in the first day of the Environmental Workforce Training hosted by Earth Conservancy. EPCAMR staff lead a tour of reclaimed and abandoned mine sites in the morning and a practical use of GIS training in the afternoon.
- Renewed EPCAMR's System for Award Management (SAM) and registered a new Unique Entity Identification (UEI) for the account to accept federal government grant contracts. There are a lot of misinformation and scams dealing with SAM accounts, so we took extra care.
- EPCAMR Management staff participated in the weekly PA AML Campaign Call to keep up to date with the Infrastructure Investment and Jobs Act (IIJA) aka Bipartisan Infrastructure Law (BIL) funding and “AMD fix” conversations.
- Followed up with a call from Vince Guarana from Fox Coal Company about Commissioner's Lake, a 5.6 million cubic yard Priority 1 water filled strip pit (hazardous water body), that they would like to fill. PA Department of Environmental Protection (DEP) Bureau of Abandoned Mine Reclamation (BAMR) Wilkes-Barre Office is leery of filling the pit within the timeframe of one AML grant and what it would do to the mine pool. EPCAMR had been in contact with them previously for Solar on AML project that could span the water with floating panels and traditional panels on land.
- Finalized 2020 and 2021 PA AMR Conference budgets to bill down funding in our PA AMR Conference account in QuickBooks. Posted recorded live session videos to https://2021.treatminewater.com. Notified Cliff Denholm at Stream Restoration Inc. (SRI) so he could produce Datashed educational videos from them. Also, setup a 2021 AMR Conference Playlist on EPCAMR's YouTube Channel.
• Updated board meeting pages on epcamr.org in preparation for our upcoming quarterly board meeting.

• EPCAMR management staff were copied on an email regarding Babb Creek Qualified Hydrologic Unit Plan (QHUP) from Amy Wolfe of Trout Unlimited to PA DEP which was referred to the BAMR Office in Wilkes-Barre. This QHUP is mainly related to Operation and Maintenance (O&M) costs for the existing systems. Updated partners on BIL funding that could be used, but we are waiting on rule promulgation from the Office of Surface Mining (OSMRE) and PA DEP. Former OSMRE Director, Joe Pizarchik, believes that OSMRE can interpret the law in such a way to allow for O&M of existing treatment systems.

• Collected spring water from the Corby Road artesian well but it froze over the weekend in my truck. Received word that the trout eggs from PA Fish and Boat Commission (PFBC) had arrived. Took water to office to thaw, added water to the Trout in the Classroom (TIC) tank and placed trout eggs in reds the following day.

• Hosted a Zoom with Cliff Denholm at SRI, Denise, Steve, and Laura to discuss Datashed 4 budget and work to be completed by the end of the year and potential for another funding source that would require completion by end of June 2022. Cliff organized the project review work with a Google Sheets table. [DSHD4]

• Reviewed the Mill Creek Coldwater Heritage Plan (CHP) document, formatted headings, and created the table of contents, maps, tables, and figures tables with hotlinks to pages at the beginning of the document. Microsoft Word will generate these tables based on formatting, but it is not automatic without proper formatting also some captions needed to be shortened to fit in these tables. The extra text was added into the paragraph near the photo instead. [CHP]

• Worked with EPCAMR Executive Director to find the next CHP in the valley. They must contain cold water fisheries (CWF) and have public lands. Looked at Shickshinny Watershed and add Paddy Run and Rocky Run to add in an AML impacted watershed component. Also looked at doing Turtle and Black Creek together.

• Received a “cold-call” from Sandvik in Waverly, producers of stainless-steel tube co-located with Pex Co. looking to purchase renewable energy credits. Their plant manager saw our Solar on AML project updates on Facebook. We put them in contact with AC Power to potentially broker a deal.

• Created a Meta Business account and setup HTTPS on epcamr.org trying to get Facebook events to post on events page. Still doesn't work... This is really frustrating, because it used to work prior to Facebook’s switch to Meta and EPCAMR had been using Facebook to post events and organize volunteers.

• In office to verify that 18 trout fry hatched in TIC tank over weekend and recorded a video clip to post on Facebook.

• Wrote January EPCAMR Program Manager Progress Report and posted to epcamr.org.

• Prepared for the upcoming EPCAMR board meeting by creating a treasurer’s report, minutes from last meeting, and gathered board reports. Also, revised Strategic Planning 2020-2025 document to Version 2 with Committee comments. Provided all to EPCAMR Executive Director and posted to epcamr.org.

• Sent Bear Creek Contract with the Susquehanna River Basin Commission (SRBC) Revision 1 to EPCAMR President for signature via HelloSign.

• EPCAMR staff hosted the EPCAMR 2022 1st Quarter Board Meeting over Zoom. Took meeting minutes during the call. Posted to web storage in prep for next meeting.

• EPCAMR management staff participated in a PA AMR Conference Committee Call. Sent out a survey monkey poll to ask past attendees from 2021, 2020 and 2018 conferences their opinion about attending a virtual vs. in-person conference. Setup SSL for 2022.treatminewater.com on WPCAMR's Ionons account and manually installed WordPress to start the 2022 conference website.

• EPCAMR management staff participated in a conference call with John Levitsky and Josh Longmore from the LCD, and Terry Ostrowski from EC regarding the IIJA money and how it could be used in Luzerne County AML impacted areas. The focus was the Nanticoke Watershed especially in the area of the Askam Treatment System which has a leaky Wyoming
Valley Sanitary Authority (WVSA) nearby. The Espy Run Treatment System is also in need of repair due to beaver activity.

- Participated in a call with Dustin Shull of the PA DEP Bureau of Water Quality (BWQ) and Branden Diehl from the Foundation for PA Watersheds (FPW) regarding ~1,700 stream miles added to AMD impaired list in one watershed: Clarion River. The data in question was all from AMD sourced Mercury cause discovered in a fish consumption study. Initially I thought this was a mistake and Atmospheric Deposition should have been the source, an easy to correct. Dustin relayed that their biologist determined the Mercury in the fish tissue samples was coming from AMD and related the fish consumption advisory to all river, stream and trib. miles in the watershed. The reasoning was that fish can openly travel anywhere in the watershed. Branden and I formulated a response and submitted it for official comment. In the response we asked for scientific studies to support mercury leaching from coal mines or actual samples of mercury in AMD discharges. This could only be the tip of the iceberg with this type of study and we may have to adapt the way AMD segments are calculated in RAMLIS to subtract these fish consumption stream miles from the map and counts.

- Regretfully paid for Survey Monkey and downloaded results that went above the free responses. Calculated statistics and sent to PA AMR Conference Committee. Researched alternatives to Survey Monkey. Google Forms and Zoho Surveys floated to the top as good free options.

- Researched a potential new mine fire in Glen Lyon as evidenced with video from a local resident’s Facebook post shared with EPCAMR Executive Director.

**Technical Assistance:**

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

- Provided Christine Haldeman, engineer at Benesch, with Western Middle Field Mine Pool boundaries and discharges from our Western Middle and Southern Coal Field Mine Pool report completed with US Geologic Survey (USGS) and PA DEP.

- Compared the 2019 Integrated list Non-Attaining Streams queried to AMD source with 2022 dataset and found a difference of an additional ~1,800 stream miles. This confirms the increase from ~5,500 to ~7,300 AMD stream miles statewide seen in the PA DEP BWQ draft 2022 Integrated List story map and report. Began to investigate as to why this number jumped so high in a short amount of time.

- Attempted to repair Trout Cam Computer as the Windows 10 version was going to be out of service soon. Tried many fixes including DISM and SFC. Nothing worked. Will try again with more research.

- Researched mine maps as I began QA/QC of mosaics in the Nanticoke Quadrangle for the MSI program and found that the small borehole discharge discovered along Clarks Cross Road in November is likely from the No. 4 vein or stripping in the No. 3 & No. 2 vein. Its small, less than 50 gpm, in comparison to the New Askam Boreholes drilled to the west in the No. 4 vein. [EC]

- Started working on the Bear Creek Mine Pool Mapping project by adding and organizing Harrisburg University (HU) digitized Southern Anthracite Underground Mined Areas, Coal Elevation Points and Mine Entry Points to the Mine Pool Monster Landscape project in ArcGIS. Lykens Valley 3-6, Skidmore, Mammoth Top Split, and Primrose veins were mosaicked and digitized in the Short Mountain - Lykens Colliery. Additionally, Lykens Valley 1, Buck Mountain, Seven Foot, and Four Foot veins were mosaicked and digitized in the Big Lick - Williamstown Colliery. Started an alternate veins names table for the Williamstown and Short Mountain collieries. Started searching for more maps on PHUMMIS, but there was an outage. [BEAR]

[ ] - Denotes funding source where applicable.