



## Eastern PA Coalition for Abandoned Mine Reclamation

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### May 2020 Progress Report

#### Highlights:

- Managed EPCAMR staff as they worked from home to georeference 63 & digitize mosaic maps for the **PA DEP** MSI MMG program. No scanning was allowed. QA/QC checked work.
- EPCAMR staff participated in a weekly **PA AML Campaign** call, a **PA AMR Conference** call, a video presentation with **Luzerne Fdn. YAC**, a call with **ACOE**, a video call with **Teichos**, and a video call with **Downstream Strategies**.
- All field work was postponed.
- Updated [www.treatminewater.com](http://www.treatminewater.com) and [www.epcamr.org](http://www.epcamr.org); administered the EPCAMR Facebook and G Suite for Nonprofit accounts (for NAAMLPA as well); maintained GobbaDaPile in-house domain server and workstation.

#### Education, Outreach and Admin.:

- Updated EPCAMR Brochure from the one Abbie, EPCAMR's Office of Surface Mining Reclamation and Enforcement (OSMRE) AmeriCorps VISTA, made in 2018 and uploaded it to our website.
- Completed the EPCAMR Program Manager Progress Report for January. Completed reimbursement paperwork for the 319 program.
- EPCAMR management staff participated in a weekly AMR Conference call.
- EPCAMR staff participated in an AMR Conference Call to plan for the upcoming conference.
- EPCAMR staff participated in a conference call with the Army Corps of Engineers (ACOE) to talk about their grant programs and how EPCAMR could help with stormwater and habitat improvement in AMD impacted watersheds.
- Received an Iron Oxide order over the weekend (return customer). Asked Denise to fulfill it as she was going into the office periodically to maintain QuickBooks. Fixed EPCAMR online store to remove ability to purchase products, only RAMLIS download (updated to 19).
- Conference call with Teichos about industrial scale solar on AML in PA.
- Went in office after a doctor appointment and downloaded TIFF scans from X Drive, uploaded georeferenced maps to SID folder on X Drive, downloaded more NMMR northern field maps. Got Endicia stamp printing program working again. Updated QuickBooks to 2019 on the intern computer (as Robert was using this computer to access it and approve Denise's work). Gained remote access to the router. Checked chemistry of the trout tank, fed, and added snails.
- EPCAMR staff participated in a conference call with Downstream Strategies to talk about the Solar on AML GIS Tool.
- Participated in the Luzerne Foundation Youth Advisory Council (YAC) presentation via Zoom to thank them for selecting our Drones over AML Project.
- Replaced Cat5 network panel with Cat6 infrastructure in the office in an attempt to make our network transfer speeds faster while others were working from home.

- Changed water in trout tank, got the live streaming “trout cam” working again so we could keep track of the trout remotely, created a video on cleaning, and posted it to Daily Motion.
- Distributed webcams to Denise (via Robert), Steve and Frank so we could hop on to video chat services and work through problems together.
- Created and submitted an EPCAMR 2020 Prospectus in regard to Solar on AML with staff skills and hourly rates for Teichos.

### **Technical Assistance:**

- Converted Black Diamond, East Boston, Loree, and Pettebone colliery National Mine Map Repository (NMMR) maps to 24bit RGB color JPEG to georeference and place in the Kingston Mosaic. Eventually these will be replaced by SID images. [MSI]
- Created an excel table to sort out differences in Northern Field colliery names between the GIS layer and NMMR folders. Used northernfield.info to find location info. Found Forty Fort Colliery was potentially in Kingston Quad. Converted TIFFs to JPEG and sent to Steve. Discovered we could not export the control points from the JPEG and import them into a SID. Tested other image formats as suggested by Patrick. Compressed TIFF files work, but the file size is so large and not conducive to transferring over Google Drive. [MSI]
- Worked with staff to transfer work as we worked remotely. Explained how to zip geodatabases and send over email. Could also share as a layer package from ArcGIS Pro contents window, but the manual zip is much easier to deal with on the receiving end. [MSI]
- Worked with Frank on digitizing mosaics. Answered questions about specific symbology on maps. There wasn't much standardization. Explained that map interpretation is more of an art form than a science because each company drew their symbology a little differently. [MSI]
- Reviewed Steve's updated mosaic geodatabases for Kingston Quad: Abbot, Kidney, Hillman, and Lance. [MSI]
- Took pictures of Swoyersville Mine Fire Map when I was in the office for Steve to explain the anticline that runs parallel to the valley in the area of the Harry E and Maltby collieries. He was searching for maps of these areas and was not finding them. The map showed the outcrop of veins that wrapped around this prominent geologic feature, so maps of underground coal mines in these areas will not exist. [MSI]
- Helped MSI staff troubleshoot their work method as they work from home. Started to review the Nanticoke Mosaics that were transferred to me via email. [MSI]
- Checked Frank's digitizing work and provided comments. Found a potential mine drainage point for Priscilla Lee West basin. Mapped out paths to gain access. Began adding to Cooper and Forge Vein mosaics completed by Shawnese in Nanticoke Quadrangle. [MSI]
- Found a bug where ArcGIS Pro crashes when moving geodatabases in their built-in catalog program, reported it 2x through their automatic reporting tool (which I feel goes nowhere). Researched the topic on my own to find that it's better to move GIS data using the ArcGIS (desktop) Catalog or export tools. I typically don't deal with ESRI's proprietary geodatabase format, if I can help it, but there are no alternatives when working with mosaic datasets. [MSI]
- Reviewed Cooper, Forge, Upper and Lower Baltimore Vein mosaics in the Nanticoke Quadrangle completed by Shawnese as a group. Removed geor\_BMSA-0252-004 (Upper Baltimore) and replaced with BLUE\_TRU-09-07 (Upper Baltimore) because it was a better map. Reminded staff that the “BLUE” maps are from the Earth Conservancy's Blue Coal Corporation Map Collection and typically these were the original maps on linen which produce a better full color map image when scanned as opposed to a copy in the state's BMSA collection. Re-georeferenced BLUE\_TRU-13-01 (Surface), BLUE\_WAN-08-09 (Lower Baltimore), geor\_BMSA\_0044 (Upper Baltimore), and geor\_BMSA\_0250 (Forge). These maps were hundreds of feet off when compared to surrounding maps. The map names that are prefaced with “geor” were not scanned or georeferenced by EPCAMR staff. Typically, we report these maps to DEP so they can have the other grantee fix it, but that process was becoming cumbersome in the mosaic making process. If maps are off by less than 50-100 feet we don't re-georeference them, but these ones were bad. [MSI]
- Heads-up digitized faults in Bliss, Alden and Wanamie Collieries to aide in determining the vein names by elevation points on either side of the fault as the local names are confusing. [MSI]

- Georeferenced EPCAMR\_010904 and EPCAMR\_010905. Added EPCAMR\_010905 to Nanticoke Upper Baltimore mosaic. Re-georeferenced BLUE\_WAN-08-08-01 (Upper Baltimore) and geor\_BMSA\_0252-002 (Forge) to fit better (off over 100 ft). Drew another fault in the Susquehanna into the Glen Nan Colliery. Removed BMSA\_6862, WBDO\_059-04-05 and WBDO\_059-04-04 from the Forge Mosaic as they were repeats of maps used in Lower Baltimore Mosaic. Following the Cooper, Forge, Upper and Lower Baltimore veins further west into Wanamie and Glen Lyon is difficult because the 4-5 mined veins merge into 2-3 mined veins. [MSI]
- Began georeferencing NMMRs for Glen Lyon starting at EPCAMR\_10364 (Bottom Ross which is actually Lower Red Ash for the surrounding collieries) and discovered that the surface maps were off. BLUE\_WAN-0B-01-01 and BLUE\_WAN-0B-01-05 were used in the Nanticoke Surface mosaic, but they were off. These maps were already re-georeferenced months ago and sent to DEP but the re-georeferenced maps were not used in the mosaic. Downloaded geor\_BLUE\_WAN-0B-01-01 from www.minemaps.psu.edu which show the .sid.aux.xml file was fixed at a later time. Added these versions of the maps to the mosaic as should have been done back when the surface mosaic was completed. Sent a reminder to the staff. Re-georeferenced BLUE\_WAN-0B-01-04 and BLUE\_WAN-0B-01-03 additional surface maps in the mosaic that were off. [MSI]
- Re-georeferenced BLUE\_WAN-0C-01, a West End Colliery map in the Nanticoke Surface mosaic because it was off where it met up with Glen Lyon. West End maps used in mosaics were also re-georeferenced: BMSA\_4931-010 (Lower Red Ash), geor\_BLUE\_WAN-0C-05 (Lower Red Ash), BMSA\_4931-011 (Upper Red Ash), and BMSA\_4931-006 (Upper Red Ash). [MSI]
- Re-georeferenced BMSA\_6854, BMSA\_6852, BMSA\_1080-001, WBDO\_095-10-0S-01 and WBDO\_095-10-0S-02. These were more Bottom Ross to Lower Red Ash vein maps in mosaics that were off because they were georeferenced to surface maps that were off. Now they match EPCAMR\_10364 and EPCAMR\_10365 from the NMMR collection (where this whole QA/QC investigation started). Drew a north and middle Glen Lyon fault to aide in determining the veins by elevation points as the local names are confusing. [MSI]
- Geo EPCAMR\_10355, EPCAMR\_10362 and EPCAMR\_10363 from the NMMR collection. These maps are of the Ross Rider which is a vein only in the northern section of Glen Lyon Colliery which matches up with the Chauncey vein of surrounding mines. [MSI]

[ ] - Denotes funding source where applicable.