



## Eastern PA Coalition for Abandoned Mine Reclamation

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### October 2017 Progress Report

#### Highlights:

- Managed EPCAMR staff as they scanned 82 mine maps into TIFF images, georeferenced 83 & digitized 2 maps for the MSI Mine Mapping Grant. QA/QC checked work. Picked up / dropped off maps at the **PA DEP** Franklin Warehouse.
- EPCAMR staff hosted 4 EE tours for **WBASD Plains Solomon School**. Participated in an AMR Conference call, **PASDA** user feedback session and 2 meetings related to the Harry E Banks project in **Swoyersville**. Cleaned up TIC tank and picked up brook trout from **PAFBC** all in the name of EE.
- EPCAMR staff worked on a 3D model for the **Mocanaqua Tunnel, Luzerne Co.** mine pool projects. Attended a training at **PA DEP California DMO**. Sampled the **Plainsville Borehole Discharge** in **Luzerne Co.**
- Updated [www.epcamr.org](http://www.epcamr.org). Administered the EPCAMR Facebook and G Suite for Nonprofit accounts. Maintained GobbaDaPile in-house domain server.

#### Education, Outreach and Admin.:

- Received word that Kelsey Biondo, EPCAMR GIS Program Coordinator, was leaving for another position and was giving her 2 weeks' notice.
- Compiled a list of PA Abandoned Mine Reclamation (AMR) Conference attendees from 2015 to 2017 and sent it to Anne Daymut at the Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR) so she could analyze the makeup of the attendees over the past few years.
- EPCAMR staff sampled a borehole in Newport Township that was being permanently backfilled. The borehole was actually a pump shaft and was not on any borehole database that we were aware. Placed the information and location on a GIS file of borehole elevations we keep updated.
- EPCAMR management staff traveled to Tunkhannock participate in a screening of Centralia: Pennsylvania's Lost Town and a panel question and answer session.
- EPCAMR management staff participated in an AMR Conference Call to discuss the 2018 conference. This conference will be the 20<sup>th</sup> Anniversary.
- Found a set of mine maps related to the Knox Mine Disaster where someone attempted to calculate the amount of water that flooded several veins. The total equaled ~6.5 Billion gallons of water in the Top Checker, Pittston, Marcy, Bottom Clark and Red Ash veins. The maps only covered a portion of the Wyoming Valley. Sent this information to David Brocca, a film maker in California who is making a documentary on the Knox Mine Disaster.
- EPCAMR staff met with several stakeholders and DEP staff at the PA DEP Pottsville District Mining Office (DMO) to discuss the project to remove the Harry E. Culm Banks in Swoyersville. The material would be hauled to an Olympus Power owned co-generation plant in the Panther Valley, but trucking would need to be subsidized by state/federal funds known as Pilot Funding. This project has been in negotiations after submitting a proposal to the PA DEP Bureau of

Abandoned Mine Reclamation (BAMR). Much of the discussion surrounds the issue of permitting, how to complete such a large project within the 3 year expedited timeline and what the end use of the site will be to meet a community / economic benefit.

- EPCAMR staff hosted an Environmental Education event at the Planisville Borehole for Wilkes-Barre Area School District (WBASD) Plains Solomon school. The field trip took a class through 4 different stations to talk about specifics related to the Planisville boreholes, where the water comes from, what is underneath the ground, how the pond treats the water, what the land used to be, the function of floodplains, invasive species, wildlife that inhabit wetlands and riparian areas and many more scientific and historical topics. There were 5 classes total and 4 of the classes were able to complete the 3-hour event in October.
- Cleaned up the Trout in the Classroom (TIC) tank in preparation for the trout eggs from PA Fish and Boat Commission (PAFBC). Released the fish which were sustaining the tank over the summer back into Solomon's Creek.
- Started EPCAMR intern, Llewellyn Westrick, on the task of scanning slides from Game Commission photographer, Gerald Zedler. Other interns had started this work a few years ago, but it was time to get moving on scanning several large boxes, and organizing the photos.
- Took the Suburban to Sam's Club for new tires and a new battery. Continued pumping up flat tires and jumpstarting the vehicle had finally been enough.
- EPCAMR staff attended another meeting with several DEP staff and representatives from Olympus Power to discuss more specifics related to a proposal for the Harry E Banks reclamation project in Swoyersville.
- Heard that the RECLAIM Act was reported out of the House Natural Resources Committee and that the bill was marked up again. Looked at the language to make sure it was something the AML Campaign could support. There were only minor changes which did not amount to any real differences from previous mark ups. Hopefully soon it will go for a house vote.
- EPCAMR staff rented a van and drove to the PA DEP California DMO for a training. Mine Subsidence Insurance (MSI) program staffer Patrick Jaquay lead a training to show how we could make mine map mosaics in ArcGIS. Eventually these maps would replace the mine maps currently shown on minemaps.psu.edu and would represent the best of the best maps in any particular area. The mosaics will be created per vein in a topographic area. We learned it could take up to 300 hours per vein to create these jigsaw maps which will be a part of the work going forward in the next grant round. [MSI]
- Attended a PA Spatial Data Access (PASDA) User Feedback session at the Penn Stater in State College to help PASDA staff evaluate their services to the general public. I learned a lot about little known PASDA services and really gained some insight as to how the data is stored (which could be applied to our server possibly).
- Arranged pickup of our brook trout eggs from the Benner Springs Hatchery. A majority of the eggs had hatched. PAFBC staff said the fry were on schedule to begin feeding by the week of Thanksgiving. Not so great for the schools who will be on break. Last year we began feeding the first week of December.

### **Technical Assistance:**

- Contacted the Office of Surface Mining Reclamation and Enforcement (OSMRE) Technical Innovation and Professional Service (TIPS) program to inquire into the slowness that I had been experiencing in ArcGIS 10.5.1. They accepted my information, but basically said that no one else was having an issue that they knew. Since the slowness is not completely crippling, I decided not to have them contact ESRI support for me. I am under the assumption that my computer is to slow to run this version of ArcGIS. It meets most of the minimum specifications except the processor speed. Continued to look for solutions and post questions to the GeoNet forum.
- Tweaking of the Stackhouse section 4DVX files of the Mocanaqua Mine Pool Model. [SRBC]
- Several maps from the PA DEP Franklin Warehouse were in pretty bad condition. Aided the MSI program staff in patching the maps and cataloging to determine if they were not copies of previously scanned maps (and worthy of scanning). [MSI]

- Took the catalog boxes and the last few maps back to the PA DEP BAMR Wilkes-Barre Office. [MSI]
- Researched and discussed findings with Executive Director related to storage of mine map images on our server. The TIFF files take up the most room and are really never used by staff once they are converted to the compressed SID image format. Perhaps the TIFF files could be cataloged and “dark stored” on hard drives disconnected from the server. This way the SID files, which are used more often to georeference and digitize, will be the only things left on the RAID towers and should be a lighter burden for the server and network. [MSI]
- Uninstalled, cleaned up any folder that dealt with ArcGIS and reinstalled ArcGIS 10.5.1 as suggested by folks on the GeoNet forums. Sometimes there are issues with upgrading from one version of ArcGIS to another, which is what I did going from 10.3.1 to 10.5.1. Tested out the new install and reported to OSMRE TIPS. This really had no effect. Removed a malfunctioning PASDA Image Mapping Service (IMS) layer from the map document and that seemed to speed up things up more with respect to opening that particular map document.
- Adjusting the lines of section in the Stackhouse Colliery of the Mocanaqua Mine Pool Mapping project, but discovered that I was adjusting the wrong set about ½ way through. Discovered an issue with the 4DVX files from the first adjustment. Fixed both these issues and handed the dataset over to Rachael Grube, EPCAMR AmeriCorps, to redo the 4DVX files and start tracing the lines again. [SRBC]
- Georeferenced some difficult maps. [MSI]
- SyncBack Server Edition began crashing immediately upon backing up the RAID towers. Purchased and installed version 8 in which this bug was fixed for the low price of \$18. Server was able to back up the X drive to the Y drive and M drive to the N drive again. Researched regular type of scans that should be done on servers to keep them in good working order. Made up a little cheat sheet of scans and repairs that can be done periodically. Read up on the specifications of RAID towers and the RocketRaid cards. Worked on the server to install over 20 windows updates that had amassed since I was on vacation.
- Corresponded with Cliff Denholm, Stream Restoration Inc. (SRI), about an aerobic wetland treatment system in the Mahanoy Creek Watershed. The treatment system on Datashed.org is known as Ed’s Swamp. He was wondering about its condition. Contacted Ed Wytovich and relayed the information to Cliff. It seems the swamp intake was blocked several years by a flood. It now functions as a wetland area for wildlife.
- Dropped off and picked up maps at PA DEP Franklin Warehouse for the MSI Program. [MSI]
- Georeferenced more difficult maps and digitized grids for the Pottsville Area. This area was particularly difficult to georeference maps since the area was so heavily mined, the grids should help with initially lining things up. [MSI]
- Quality assurance and quality control (QA/QC) checked the work on the MSI program and compared to what was entered in PA Historic Underground Mine Map Inventory System (PHUMMIS) for August and September. Fixed the errors before the drive was sent to PA DEP California DMO. [MSI]
- Sampled the Plainsville Borehole in Plains to ascertain water quality and quantity discharging from the boreholes and leaving the pond. [FPW]

[ ] - Denotes funding source where applicable.