October 2016 Progress Report

Highlights:
- EPCAMR staff continued to scan 138 mine maps into TIFF images, georeferenced 145 & digitized 21 maps for the MSI Mine Mapping Grant.
- EPCAMR staff participated in a AML Conference call, a Harry E Spoil Banks meeting at the Pottsville DMO and a staff meeting.
- Continued setup of the TIC Tank and YouTube live video stream showing the monarch butterfly life cycle all in the name of EE.
- Worked on GIS layers for the Rausch Creek, Schuylkill Co. Mine Pool project. Field investigated AML features and stream channels on the West End Colliery grounds related to the Mocanaqua Tunnel discharge, Luzerne Co. Monitored mine pool water levels in 16 boreholes and downloaded OFBH transducer data in the Lackawanna Valley.
- Updated www.epcamr.org. Updated several more computers in the office and connected to the domain. Administered the EPCAMR Facebook and G Suite for Nonprofit accounts; Maintained GobbaDaPile in-house domain server.

Education, Outreach and Admin.: 
- Staff meeting for October and officially welcomed the Office of Surface Mining Reclamation Enforcement (OSMRE) Americorps, Abbie and Rachael.
- Added OSMRE Americorps emails. Update staff and calendar page on epcamr.org to add them.
- EPCAMR staff hosted a Monarchs and Minelands tour to release the butterflies raised at Wilkes-Barre Area School District at 3 different reclaimed abandoned mine land (AML) sites.
- Invoice to Stanley Cooper Trout Unlimited for the Trout in the Classroom tank supplies.
- Cleaned desk in an attempt to find AMR Conference notes on budget before vacation, but they were nowhere to be found. Created a 2017 budget estimate and 2016 final budget for the AMR Conference Planning Committee via the pyritebad listserv.
- EPCAMR staff participated in an AMR Conference call to present a budget and make a decision on the venue for the 2017 AMR Conference.
- Worked on invoices (reimbursements) and sales orders (grant budgets) QuickBooks with EPCAMR bookkeeper.
- Looked up material safety data sheets (MSDS) on metals and compounds in anthracite mine drainage / AMD pigment. A potential buyer on Etsy asked if the pigment was safe for human consumption. Unfortunately, certain compounds and metals in our AMD pigment can cause irritation when ingested or inhaled, but is safe for skin contact (will not absorb through skin). The iron will stain your skin or hair slightly, but nothing a good washing with soap and water
won’t handle. Worked up a document and uploaded the findings to our Etsy store and our online store at www.EPCAMR.org.

- Filled three iron oxide orders.
- Met with Bernie to sign checks and download readings from the Old Forge Borehole transducer.
- Installed carpet in the Americorps office once the hole in the floor was repaired by Earth Conservancy.
- EPCAMR staff participated in a meeting at Pottsville District Mining Office (DMO) about the Harry E Spoil Banks with Olympus Power and Northampton Fuel Supply. The meeting was to talk about permits that would be needed to remove the spoil and what kind of structures would be needed on site to control the runoff.
- Supplied Foundation for PA Watersheds (FPW) with statistics on AML in the Susquehanna River Basin. I had the data already calculated from several years ago. They did not want an update.

### Technical Assistance:

- Received the “MSI travel drive” back from the California DMO. Downloaded SIDs to the X drive and cleared it to transfer another set of maps.
- Met with Susquehanna River Basin Commission (SRBC) about the Rausch Creek Mine Pool mapping project. SRBC staff had made some discoveries about the Brookside Mine that made it less attractive to water storage than the Markson and Good Spring mines and they wanted to direct our mapping efforts to concentrate on the latter [SRBC].
- Redrew “Mark Man” mines in the Lykens Valley veins in the Markson Colliery area.
- Clipped and sent mine pool information on the West End and Glen Lyon Mines to SRBC related to our proposed Mocanaqua Tunnel Mine Pool Mapping project [SRBC].
- Continued organizing georeferenced maps and digitizing mine pools and tunnels for the rausch creek area. Created a vector grid system based on the maps since some of these maps had no real surface features that could be georeferenced. Georeferenced some difficult maps [SRBC].
- Internet had been acting slow for several days. Called into Service Electric and they said we were going over our allotted upload speed. So the internet wasn’t down per se, but they suggested that I find a bandwidth meter to see which computer(s) were uploading that much. Initially I thought it could have been the live stream of the butterflies, but I found out that it was only using a very small percentage. Searched for and tested out a few bandwidth monitors and landed on PRTG network monitor by Paesseler. The issue subsided shortly without any changes. I think the issue was on the cable company’s end after all.
- Worked on transferring several more local computer accounts to domain accounts attached to the server. This broke the SQL database connection which allows these accounts to edit the MSI digitizing geodatabase, but was easily fixed.
- Repurposed one of Executive Director’s really old 32-bit laptop to run the live stream video to YouTube. It had Windows 7 on it, so I upgraded it to Windows 10. It had problems shutting down arbitrarily and I could never find the cause (so we got him a new computer). Surprisingly enough it actually ran relatively well and was no longer shutting down by itself.
- Researched as to why Executive Director’s new laptop was not connecting to the server. Found out that it was because of a home edition of Windows. Ordered a professional edition from techsoup.org.
- Sent a shapefile of proposed borehole locations for the Rausch Creek mine pool study to SRBC [SRBC].
- EPCAMR staff met with SRBC staff to field investigate the West End Colliery lands and find which water features may be affecting drainage to the Mocanaqua Tunnel. Hiked up over the mountain from Lee Road the first day and confirmed the location of several strip pits which may funnel water into the mine pool. Found a few water filled strip pits that may be the manifestation of the mine pool on the surface. We also found a road to drive in to these sites. On the second
day we found a sediment basin (which on aerial photos looked like a treatment system), walked/drove much of the Black Creek and Turtle Creek stream channels (which were not attaining use as labeled on the integrated list) and sampled the Mocanaqua Tunnel discharge [SRBC].

- Sampled 16 boreholes in the Lackawanna Valley from Duryea to Jermyn. EPCAMR will start to do this quarterly as approved by the 319 program.

[ ] - Denotes funding source where applicable.