



Eastern PA Coalition for Abandoned Mine Reclamation

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February 2017 Progress Report

Highlights:

- Managed EPCAMR staff as they scanned 434 mine maps into TIFF images, georeferenced 106 & digitized 57 maps for the MSI Mine Mapping Grant. QA/QC checked work. Attempted to fix a scanner. Directly georeferenced maps.
- Participated in an **AMR Conference** call, a conference call and a meeting with **SRBC**, hosted an EPCAMR Board Meeting,
- Raised brook trout in the **TIC** Tank, battled an infestation of ick, continued YouTube live video stream and testing water quality all in the name of EE.
- EPCAMR staff worked on GIS layers for the **Rausch Creek, Schuylkill Co.** mine pool project. Sampled the **Plainsville Borehole Discharge** all in **Luzerne Co.**, the **Lackawanna** and **Wyoming Valley** Boreholes. EPCAMR staff uploaded data to www.datashed.org.
- Updated www.epcamr.org and www.treatminewater.com. Administered the EPCAMR Facebook and G Suite for Nonprofit accounts. Maintained GobbaDaPile in-house domain server.

Education, Outreach and Admin.:

- Drop off and pickup maps from PA DEP BAMR Wilkes-Barre Office two times this month [MSI].
- Meeting on Mocanaqua Tunnel with AES, a contractor who plans to help remediate the mine drainage [SRBC].
- Picked up spring water from Sam's Club to replace the water in the Trout in the Classroom tank, because frankly we cannot get a bacterial community established that will control the Ammonia, Nitrite and Nitrate levels in the tank. It has to be some sort of chemical factor in the tap water that is blocking the Nitrogen Cycle. Several calls to the water supplier did not give an indication and a general water conditioner did not solve the problem. After several days of aging the water, it still smells of chlorine. Chlorine should bubble out of the water within 24-48 hours. The wildly fluctuating chemical parameters were likely causing stress on the trout fingerlings and made them susceptible to ick. Researched a cure, and began treating ick in the tank. Used a copper treatment upon recommendation of a tropical fish supplier. The treatment seemed less invasive than giving them all up for dead (something a fish owner faces when ick takes hold) and the copper was still deemed safe if the fish were ever to be eaten 2-3 years down the road. After a week the of the spring water, the water chemistry stabilized but several fish were still dying in the tank due to the ick infestation. I started a 1% salt treatment, which almost immediately had an impact on the number of ick spots. Five fish survived the ordeal. It was a learning experience in dealing with a pollution susceptible species. They are truly the "canary in the coal mine" of stream pollution.
- Prepared a proposal to the Earth Conservancy to sample the Askam Treatment System.

- Prepared a treasurer's report for the upcoming EPCAMR board meeting. This requires creating Current Jobs list, Grants Applied for list, Balance Sheet and Open Sales Order report. Setup credit memos on advance payments which is treated differently from reimbursements grant and contract work in QuickBooks. Prepared an agenda in collaboration with Executive Director and suggestions from board members.
- EPCAMR staff prepared for and hosted the EPCAMR 1st Quarter Board Meeting.
- EPCAMR staff participated in an AMR Conference call to iron out details of the upcoming conference in June.
- Participated on a conference call with SRBC regarding the Rausch Creek Treatment Plant and prepared for a meeting at the plant the next day with PA DEP and OSMRE staff. Required bringing several maps on my laptop and finding a way to get internet service at the treatment plant to run ArcGIS. Found out how to tether my phone to my laptop to share my internet data plan with my laptop [SRBC].
- Sampled Plainsville to ascertain water quality and flow results for possible treatment in the future. After several months of sampling, it looks like the pond retains a majority of the iron from the discharge, but it could possibly be dredged to store more iron and/or an oxidization mechanism added to drop out the iron. There are approximately 17 years of iron sediment buildup and most likely flood mud in the ponds.

Technical Assistance:

- Sampled the water level in several mine pool boreholes in the Lackawanna Valley.
- Created a PDF binder of the Hicks Creek Natural Stream Channel Design project overlain on mine maps.
- Experienced issues with the server rebooting, and taking a long time to respond. Researched the issue and found that the Symantec Antivirus was also not updating properly. Logged out of the Dnine user account and in to the Administrator account that was used to setup the server as recommended by Symantec. Not sure this fixed anything because the Antivirus still shows an out of date status on occasion and has to be redone periodically. The response time did improve.
- Issues with 56" colortrak map scanner. The lights go out, but the scanner continues to scan a map. Staff switched to the 42" scanner while I was troubleshooting the issue. Called tech support, ordered some LED replacement panels and an adjustable power supply to test the LED panels in the scanner [MSI].
- Met PA DEP BAMR at their Franklin Warehouse to see a set of maps that they would like us to scan as a part of our MSI work. The maps are very dusty and will need to be cleaned before bringing them to our office [MSI].
- Researched transducers for the Mocanaqua Tunnel Project. Looked at Solinst and InSitu vented vs. unvented styles for price and feature comparison [SRBC].
- Pulled apart the 56" scanner to see which LED panel might be "dim". They all seemed to be functioning properly. Put the scanner back together and had staff begin using it again to see if we can find a pattern to the blackouts [MSI].
- Sampled the water level in several mine pool boreholes in the Wyoming Valley Boreholes over 1.5 days.
- Added several USGS Coal Investigation Series (529 and 529) cross sectional data to the Donaldson Basin 3D mine pool model. This allowed for Markson and Goodspring #1 mines to be considered in the volume calculations. Added vein thicknesses from stratigraphic borehole logs in Technical Paper 727 for all the veins in the area [SRBC].
- Georeferenced several difficult maps for the Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG) program [MSI].

[] - Denotes funding source where applicable.