April 2017 Progress Report

**Highlights:**

- Managed EPCAMR staff as they scanned 285 mine maps into TIFF images, georeferenced 134 & digitized 33 maps for the MSI Mine Mapping Grant. QA/QC checked work. Directly georeferenced maps.
- Applied for a $2K convening grant from the **Foundation for PA Watersheds**
- Participated in an **AMR Conference** call and Hill Day with the **Choose Clean Water Coalition**
- Raised brook trout in the **TIC** Tank: continued YouTube live video stream and testing water quality all in the name of EE.
- EPCAMR staff worked on a 3D model for the **Rausch Creek, Schuylkill Co.** and **Mocanaqua Tunnel, Luzerne Co.** mine pool projects. Sampled the **Plainsville Borehole Discharge** in **Luzerne Co.** EPCAMR staff uploaded data to [www.datashed.org](http://www.datashed.org).

**Education, Outreach and Admin.:**

- EPCAMR Management Staff took a trip to DC for Choose Clean Water Hill Day.
- Looked at RECLAIM Act 2.0 vs. 3.0 language that was introduced in the house and provided a synopsis to the AML Campaign.
- EPCAMR Management Staff participated in an AMR Conference Call.
- Updated the We Love Our Stream (WELOS) letter that is a part of the Design a Treatment System Module in the Nature Interrupted Curriculum. The letter only seemed to match one set of chemistry and a low flow that could be taken with a bucket and stopwatch. Made the letter more general and incorporated it back into the curriculum for future use.
- Worked on AML statistics update for the PA AML Campaign with Rachael. Applied for a $2K convening grant from FPW to aide in EPCAMR participation and travel.
- Invoiced and sent the MSI drive for work completed in January and February [MSI].
- Updated [www.treatminewater.com](http://www.treatminewater.com) with newly approved presentations from the AMR conference Committee.
- Created an AMR Conference registration invite flier via MailChimp and sent out to previous attendees and partners. Also created a Film Festival flier with the help of Abbie and submitted to the volunteer list.
- Ordered and received an aluminum test reagent from Forestry Suppliers. The supplies seemed incomplete and I reported it back to Forestry Suppliers who in turn put me in contact with YSI. YSI was going to send me a replacement pack, but discovered that their packaging was updated and both reagents were in one box. Therefore, I did have a complete pack.
• Created last board meeting minutes and a reminder for the upcoming board meeting.
• Drop off and pickup maps from PA DEP BAMR Wilkes-Barre Office [MSI].
• Updated ARIPPA Award Paperwork, posted to www.epcamr.org and shared with WPCAMR.

**Technical Assistance:**

• Taught OSMRE AmeriCorps, Rachael, the 4DVX file generation process in preparation for digitizing cross sections in the Wet End Mine for the Mocanaqua Tunnel Project [SRBC].
• Several EPCAMR staff began an online instructor lead ArcGIS course through OSMRE TIPS. I agreed to help them through the course and troubleshoot issues. ArcGIS was causing Gavin’s computer to crash when accessing ArcGIS online basemap data. Could be a video card issue. Devised a work around.
• Continued tweaking the Donaldson Basin 3D Mine Pool Model in EarthVision. Attempted to generate mine pool volumes, but the data created errant 3D veins. Added in digitized elevation point data and mashed it up with the cross section data to find that the cross section data was flawed especially for the Goodspring #1 mine area. Continued tweaking data and trying to calculate volumes. Finally, after several hours of data processing, the model began calculating volumes. Created a pump drawdown sequence of 20’ at 1’ intervals and sent the data to SRBC [SRBC].
• Georeferenced 4 difficult maps related to the Salem Stackhouse mine in preparation for digitizing cross sections as a part of the Mocanaqua Tunnel Project [SRBC].
• Server was down on the last Monday morning of the month due to an apparent power outage. Windows updates were available. Attempted to turn the Y drive back on, but it was causing DPC Watchdog errors again (whatever that means).
• Received sampling data from Friends of the Nescopeck (FON) and Hawk Mountain Labs. We found that our YSI instruments are actually precise except for the Iron parameter. At low Iron levels, the Iron HR test is not very accurate, but there is another test for lower Iron levels that may be more exact. All other parameters matched the lab data within an acceptable tolerance.
• Sampled the Plainsville AMD Discharge to ascertain water quality and flow results for possible treatment in the future [FPW].
• Instructed Rachel to digitize cross sections for the Salem Stackhouse mine, but there were no lines of section drawn on the maps. Attempted to create lines of section by measuring the distance of the cross section and the interval between them. After this the 4DVX were flipped. Aided Rachael in flipping the files before digitizing.

[ ] - Denotes funding source where applicable.