January 2017 Progress Report

**Highlights:**

- Managed EPCAMR staff as they scanned 384 mine maps into TIFF images, georeferenced 133 & digitized 78 maps for the MSI Mine Mapping Grant. QA/QC checked work. Directly scanned and georeferenced maps.

- Participated in an AMR Conference call, two AML Campaign calls, participated in the Lackawanna ShiverFest, conducted an in-house WordPress web training.

- Raised brook trout in the TIC Tank, continued YouTube live video stream and testing water quality all in the name of EE.

- Submitted a Growing Greener Grant for $390K and an EITC request letter to a local business.

- Created a method to digitize Stevens Recorder paper charts into digital data.

- EPCAMR staff worked on GIS layers for the Rausch Creek, Schuylkill Co. mine pool project. Sampled Askam and Espy Run Treatment Systems and the Plainsville Borehole Discharge all in Luzerne Co. EPCAMR staff uploaded data to www.datashed.org.


**Education, Outreach and Admin.:**

- Received RECLAIM 2.0 text and provided an analysis to the AML Campaign via email. The new language seems to be consistent with the changes the AML Campaign was seeking.

- Cleaned the Trout in the Classroom (TIC) tank and added baking soda to buffer and Nite Out II and Special Blend to the water as recommended by research into the Nitrogen Cycle. Unfortunately, this merely raised the pH above 8 while the Nitrites and Nitrates continued to rise indicating that the bacteria is not taking hold. Performed another 20% water change in an attempt to keep the Nitrate and Nitrite levels down. Added another over the side charcoal filter to the tank to see if this would help. Posted several issues to the TIC Facebook Group. They suggested adding plants and using spring water instead of tap water.

- Invoiced the Datashed project for worked completed in December in an attempt to close out the contract for 2016. Updated the staff billable rates based on raises, healthcare and taxes.

- Tackled an issue with the www.treatminewater.com theme that would not allow a sidebar to show up on pages. Had to custom write a script within a child theme to prevent updates to re-write the fix. Updated registration, tour and sponsor pages.

- Created a letter of request to Benco Dental for computer supplies, volunteers and explained the Educational Institution Tax Credit (EITC) program.

- Participated in two Abandoned Mine Land (AML) campaign calls regarding the RECLAIM Act.
- Worked on an application to the Growing Greener Grant Program for the 319 program for $390K over 3 years. Created maps and statistics for the application. Reviewed the information written by Executive Director and created paper copies to send to the PA DEP Grant Office.
- Participated in the Lackawanna ShiverFest as a spotter and later I staffed the door at the Thaw Party as a volunteer for the Lackawanna River Conservation Association (LCRA).
- Invoiced several EPCAMR industry, individual and conservation district membership renewals through QuickBooks and sent them via snail mail as directed by the board.
- EPCAMR staff participated in a AMR Conference call.
- Looked into purchasing the GMC Suburban from EC for sampling and local travel on AML lands. Contacted our insurance agent for a quote and contacted EPCAMR President for approval.
- Created an invoice for MSI MMG work and sent completed files on the travel drive for the month of November.
- Received word that all EPA funding was frozen and staff were under a gag order to talk about it by the Trump Administration. This was very disconcerting news especially in the wake of submitting a grant to the DEP for EPA funding. The freeze was eventually lifted.
- Updated the current board meetings page on www.epcamr.org. Updated minutes and draft agenda and posted them to the web. Sent a reminder to the EPCAMR board about the upcoming board meeting.
- Invoiced EC for work completed sampling the Askam and Espy Run Treatment systems.
- Conducted a WordPress Website training for Abbie Keefe – AmeriCorps and Nate Haffer – Schuylkill Headwaters Association (SHA) Volunteer in Service to America (VISTA).

**Technical Assistance:**
- Moved router for a better WiFi signal to the AmeriCorps office and re-evaluated the network cords hooked to the router and different network hubs to maximize the connections of the different computers to the server.
- Georeferenced several difficult maps in the Moosic/Avoca area for the Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG) program.
- Helped Rachael Grube – AmeriCorps with georeferencing maps from the National Mine Map Repository (NMMR). Began digitizing the grids from the maps to aide in georeferencing. There are not many roads or buildings in this Rausch Creek area making it difficult to georeference maps to aerial photos. Re-georeferenced a few maps and adjusted digitized files to fit the newer georeferenced maps. [SRBC]
- Calibrated the pH parameter in the YSI meter with 3 different buffer solutions at 4, 7 and 10.
- EPCAMR staff sampled chemistry and flow at the Askam Treatment System and provided results to the Earth Conservancy. Discovered that the paper in the Stevens Recorder had run out. Returned the next day to replace the paper with a new roll. [EC]
- Scanned the paper from the Stevens Recorder on the roll scanner. The line on the paper represents stream stage data from May to November 2016. Created a TIFF file to digitize in R2V. At one point, when winding the spring, I inadvertently locked the Stevens Recorder for a few days in July. Split the image at this point in order to digitize the datasets separately. Ran into an issue with R2V where it would no longer open since the update to Windows 10. Contacted R2V support and found out that the issue was related to the domain account. Needed to use a local account instead. The program accepted the registration information and opened properly. Easily digitized the smaller image in R2V, but had to reduce the DPI in the larger image so R2V could read it. R2V must have a limit around 1 GB for image sizes. Used one of the perl scripts from the "conversion of coal elevation contours" methodology to convert the digitized data to scattered data, but discovered that the line needed to be drawn right to left (as opposed to left to right in the original methodology) for the stream stage elevations to line up properly with date and time. Opened the scattered data in excel for further processing and
graphing. Attempted to relate gauge station data to the stream gauge above the treatment system. This provided a link to flow, but there seemed to be a lot of error. Provided the data to EC with a 500 gpm error range. Only setting up another staff gauge closer to the gauge station and relating flow will lower that error range. [EC]

- Replaced memory in a laptop running the TIC camera YouTube live feed in an attempt to remedy the daily crashes. Applied several updates to drivers and programs to stabilize the system.
- EPCAMR staff sampled chemistry and flow at the Espy Run Treatment System and provided results to the EC. Removed a beaver dam at the outflow to the system and downstream on Espy Run after EC reported the beavers were trapped out. [EC]
- Provided Mike Korb – EPCAMR board member with minepool elevation information under Luzerne County Community College (LCCC), State Correctional Institution (SCI) Retreat and SCI Frackville.
- Helped MSI program staff with scanning in an attempt to figure out why the scanner was kicking out maps more frequently. Found a great map and listing of anthracite companies, mines and collieries that will aide in cataloging.
- Finally received a report from Hedin Environmental related to the revamp of the Connell’s B Tunnel Treatment System after it was delivered to Trout Unlimited (TU) about a month ago.
- EPCAMR staff sampled the Plainsville Borehole Abandoned Mine Discharge (AMD) with John Levitsky – Luzerne Conservation District (LCD) Watershed Specialist. Researched a borehole cap as measured at 4.5". Contacted Central Clay Products in Wilkes-Barre who said that a regular 4” threaded cleanout plug would work. Also contacted Todd Wood – PA DEP Bureau of Abandoned Mine Reclamation (BAMR) to see if they have replacement borehole equipment at their warehouse. [FPW]

[ ] - Denotes funding source where applicable.