July 2016 Progress Report

Highlights:
- EPCAMR staff continued to scan 333 mine maps into TIFF images, georeferenced 175 & digitized 65 maps for the MSI Mine Mapping Grant. Updated vein nomenclature for PHUMMIS.
- EPCAMR staff participated in a wrapup AMR Conference Committee calls, a DEP Webinar and a staff meeting.
- Sampled the Espy Run AMD Treatment System near Nanticoke, and conducted a fishery survey of Laurel Run, both in Luzerne Co.
- Modified a stream gauge at Askam TS in the Nanticoke Creek Watershed, Luzerne Co.

Education, Outreach and Admin.: 
- Finished the 319 close out report and submitted a final reimbursement to PA DEP. Suggested Espy Run to be removed from impaired waters list as a part of our scope of work deliverables.
- Continued gathering information for Annual Reports using an excel spreadsheet created to aide in report generation. Gleaned information from EPCAMR staff reports for 2015-2016 and www.epcamr.org articles to add to the spreadsheet.
- Filled an iron oxide order for Canaan Valley Institute.
- EPCAMR staff participated in a monthly staff meeting to coordinate efforts.
- EPCAMR staff conducted a week long (5 hours each day) environmental education program for students at the Hazleton One Center. Daily themes initially were Macro Mayhem Monday, Tie Dye Tuesday, Watershed Wednesday, and etc. Some last minute decisions by coordinators at the center upset lesson plans, but being flexible, EPCAMR staff were able to recover nicely. I participated in on Wednesday by teaching each of the 2 classes about pollution runoff to streams via the Enviroscape, in addition to the Mystery Stream game and Fossil Tracing.
- Updated EPCAMR asset inventory to include newly purchased items and remove items that are no longer being used.
- Participated in a webinar hosted by PA DEP Bureau of Abandoned Mine Reclamation (BAMR) staff to explain their AML Pilot Program. Wrote up notes and sent them to Ed Wytovich and the EPCAMR Board, who were unable to attend. Also sent notes to Branden Diehl, Foundation for PA Watersheds (FPW) as he was developing notes to send out to the AML Campaign Members.
- Participated in a wrap up conference call to discuss the pros and cons to the AMR Conference. Unfortunately, there wasn’t enough time to organize and record the survey results.
- Patched a hole in the ceiling around the drain pipe in Robert’s office that was letting bugs and cold air in. Also organized boots and other equipment in the storage area.
- Sent a reminder to the EPCAMR Board about the meeting next month.
- Updated EPCAMR staff timesheet template to begin using the timesheet function in QuickBooks.

**Technical Assistance:**
- Updated a map of the Askam Treatment System and Nanticoke Creek and created a spreadsheet to display iron sampling results over time at the request of Earth Conservancy [EC].
- Drilled holes in gauge station downstream of the Askam Treatment System on Nanticoke Creek to allow low flows in and out of the stilling well pipe.
- Helped scan difficult maps and georeferenced 10 difficult maps for Mine Map Processing program [MSI].
- Troubleshooted computer issues with no sound on the laptops and server issues with the RAID towers shutting down [MSI].
- Discovered that the DEP District Mining Office (DMO) program staff purposely switched how the formal and local coal seam names were entered into the PA Historic Underground Mine Map Information System (PHUMMIS). This switch caused confusion with EPCAMR staff because it is backward to the way the information was being entered. After the change, the formal name had to be entered and PHUMMIS would choose the local name. This seemed to work better for bituminous map sets, but the local name is what is found on anthracite maps. Had a discussion with our project manager at DEP to express our concern of how this would make the catalog process less accurate and much more difficult. This spurred an idea to correct the vein nomenclature for the anthracite maps which had initially been done by staff at the Pottsville DMO and was incorporated into PHUMMIS. While the names were relatively similar in the southern, western middle and eastern middle anthracite coal fields, the names in the northern coal field varied greatly. There were 240 names of veins in the nomenclature database in the northern field alone. Several of these were duplicates or variations from one coal company to another. Having looked at tens of thousands of northern coal field maps and specifically ones from Blue Coal Corp. (formerly Glen Alden), EPCAMR staff took a stab at weeding out duplicates and outright mistakes. Blue Coal Corp. was a conglomerate that bought up several smaller coal companies in the northern field over the decades and found ways themselves to decipher vein nomenclature. We found several of their ciphers which helped in the updating process. For example, Lance and Checker veins were used differently by coal companies. We made a notation in certain cases of the coal company when relating that specific local name to the formal name. Forwarded this information to Keith Previc, Harrisburg DEP, to incorporate the changes into PHUMMIS. Keith responded with another database for me to update which would help with the process on his end.
- Dropped off and picked up more mine maps at the Wilkes-Barre BAMR office.
- EPCAMR and Trout Unlimited staff conducted a full day fishery survey of Laurel Run.
- Purchased a new laptop and parts for Robert’s old laptop once it was recovered by police. Thieves broke into Robert’s house earlier in the month and took many personal belongings including Robert’s work laptop (which was hidden). Chances are in these cases that the stolen stuff is never recovered, so we purchased another computer. We reported the stolen computer to dell.com, but had to rescind the request. Luckily, the robbers were identified and police were able to get the laptop back, minus the battery pack and charger.
- Tore out a beaver dam at the Espy Run Treatment System in preparation for sampling a few days later. Took down the trail camera to download the photos to see if there were any visitors. We did catch deer crossing through the site.
- Returned to sample the Espy Run Treatment System to find that the beavers had rebuilt their dam and another one up further which was clogging the trompe. We tore out both of these dams again which were at the end of the system. We began sampling the treatment system and by the time we got to the end a few hours had passed, which is not ideal since retention
time had been altered which could have affected the water quality, but it was the reality of the day. We noted the difficulty in the results and reported to Earth Conservancy.

- Recorded Askam, Espy, and Solomon discharge data to EPCAMR Sampling Database.
- Found a paper on digitizing paper hydrologic graphs Steven’s recorders.

[ ] - Denotes funding source where applicable.