April 2016 Progress Report

Highlights:
- EPCAMR staff continued to scan 157 mine maps into TIFF images, georeferenced 117 & digitized 39 maps for the MSI Mine Map Processing Grant.
- EPCAMR staff participated in a staff meeting, 2 cleanups near Nanticoke, presented AML issues to Scranton’s Montecello School students and took them on a field trip with MHFS and UNC staff, took a videographer on an AML Tour, and participated in 2 AML Campaign conference calls and 2 AMR Conference Committee calls.
- Provided data/maps to 3 EPCAMR partners, sampled an AMD treatments system near Nanticoke, an AMD discharge to the Susquehanna River near Plains and collected flow data from an AMD discharge to the Lackawanna River.
- Refurbished a USGS gauge station complete with a Stevens Recorder below Askam TS then built a trompe from parts acquired at hardware stores and installed it at Espy Run TS both in the Nanticoke Creek Watershed, Luzerne Co.

Education, Outreach and Admin.:
- EPCAMR Staff participated in 2 AMR Conference calls; Created a Conference Registration page on www.treatminewater.com
- Completed the Program Manager’s monthly report for February then submitted January and February reimbursement to the PA DEP 319 Program. Received feedback from Donna Wagner on what we should do to close out the current 319 Program Grant.
- Calculated time spent on grants and created invoices for Earth Conservancy and Susquehanna River Basin Commission (SRBC) contracts.
- Caught up on time sheets and some general housekeeping around the office.
- EPCAMR Staff 2 AML Campaign Calls to markup HR4456 language with a group from Central Appalachia. Shared district 5, 3, 12, 18 and 17 AML Impact Maps and Statistics with Brian G. from the Western PA Conservancy.
- Met with Dave Edwards, videographer, to show him around some AML related field sites including the Old Forge Borehole discharge to the Lackawanna River and Red Lake in Newport Township.
- Made edits to the registration page on www.treatminewater.com and made sure the items were calculating properly in the EPCAMR online store. Discovered that WordPress CMS which runs the EPCAMR store required an update. This inadvertently scrambled some code requiring fixing of all items and categories. Re-uploaded photos and updated links on pages.
- EPCAMR staff presented on iron oxide recycling and abandoned mine land (AML) issues in general to a class of “at-risk youth” at the Scranton Monticello School then took them on a field
tour to see the Old Forge Borehole. The students are working with United Neighborhood Centers to make pottery using iron oxide, display this pottery at Scranton’s “First Friday” Events, and will donate any sales to EPCAMR. Delivered our pottery wheel to the UNC for use in their pottery program. Gabby may also be helping out part time with UNC to teach them how to use the wheel and incorporate iron oxide into the pottery.

- Filled an iron oxide order
- Rebuilt www.epcamr.org/links page with the “do widget” WordPress plugin. This was a page that we get a lot of feedback from users regarding the vastness of resources available. Certain updates to WordPress had broken the function of other plugins, but this plugin was recently available to fix the page.
- Participated in a Saturday morning cleanup at Nanticoke Community Gardens and near Honeypot Development. Nanticoke Community Gardens and Nanticoke Conservation Club were partners in the effort.
- EPCAMR staff met to discuss inner office issues and plan out projects for the upcoming months.
- Created a Lodging Page on www.treatminewater.com to describe accommodations at IUP and how an attendee could go about securing a room to stay overnight as per our contract.
- Created a PDF Brochure of the conference and registration to alleviate those with older computers and outdated internet browsers. The trifold paper brochure can be used to register for the conference with a check through the mail.

**Technical Assistance:**

- Printed OSM Folio 2XX at 1”=100’ scale for HBPS so they could measure distances to place markers to show where demolished structures were located on the park property.
- Updated EPCAMR intern computer to the latest software so that it could be used to scan maps.
- Spoke to Arielle Avashai, Office of Surface Mining Reclamation and Enforcement (OSMRE) Appalachian Regional Office, about our Reclaimed Abandoned Mine Land Inventory System (RAMLIS) GIS Tool symbology. The OSMRE Geospatial Task Force had tasked her with creating symbology for their eAMLIS GIS system. Robert is also a member of the Geospatial Task Force and offered up our work as an example when helping them create data standards. I also spoke to Arielle about sponsoring the AMR conference again. She agreed to work on sponsoring the bus for the field tour.
- Purchase parts for 2" trompe based on Biomost designs and began to build it with Intern, Gavin Pellitteri.
- Aided in georeferencing about 2 dozen difficult maps for the Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG) from Langcliffe Colliery, Moffat Colliery, Dunmore, Olyphant Colliery, Glen Lyon, Mocanaqua, Newport Township and the West End Colliery areas.
- Installed Symantec Antivirus on 3 computers, ordered 7 more licenses and setup Symantec Cloud for remote monitoring of antivirus scans and updates on computers in the office. Sorted out firewall and access issues that arose with the new software with the help of Symantec technical support.
- Traveled to Espy Run Treatment System to open the U.S. Geologic Survey (USGS) gauge station and take measurements of the weirs. The trompe needed to be custom built to fit over the weir to provide for about 3-4 feet of length difference between the “uppie” up-flow pipe and “downie” down-flow pipe. Also removed the waterboxxes from the trees, most of the trees were dead (deer browsing or improper planting), but measurements at this site were complete.
- Solved issue with Pennsylvania Spatial Data Access (PASDA) Cycle 1 PA MAP aerial photos not loading in ArcGIS. PASDA severs were updated which broke the link. Unfortunately, PASDA does not notify users of server updates, but the service is free and very reliable otherwise. Re-added the link in ArcGIS via a layer file available on their website.
- Attempted to access the Pennsylvania Historic Underground Mine Map Inventory System (PHUMMIS) for the MSI MMG with one of the Windows 7 computers on which Symantec AntiVirus was recently installed. One login seemed to work after some troubleshooting and
deep scans with the new antivirus software, but we could not get into Robert’s account. It may require another password reset.

- Painstakingly glued the trompe together outside as the PVC glue was very noxious.
- Cleaned, scraped and painted the USGS gauging station we rescued from Nanticoke Creek. Drilled holes in a corrugated black plastic pipe that will serve as the stilling well and base for the gauge station to be reinstalled in Nanticoke Creek below the Askam Treatment System.
- Downloaded transducer data from the Old Forge Borehole on a trip to meet with EPCAMR President Bernie McGurl of the Lackawanna River Conservation Association (LRCA).
- Ordered parts for one of the Type A Stevens Water Level Recorders that were given to us by the Susquehanna River Basin Commission (SRBC) for continuous flow monitoring in the Anthracite Region. The float, beaded cable, hooks, counterweight and paper roll cost approximately $200 from Rickly Hydrological. Of that list, the paper roll is the only supply that will need to be purchased multiple times at $28 apiece. A much less expensive approach to continuous flow monitoring than a transducer since we can re-use decommissioned equipment from USGS and SRBC. Digitizing the data may pose a challenge.
- Installed the trompe at the Espy Run Treatment System and to our surprise it built up air pressure immediately. There were no leaks in the PVC. Returned with 200+ feet of PEX tubing to supply air to the diffuse bubbler near the input of the settling pond.
- Sampled Espy Run Treatment System a few days after installing the trompe, especially to ascertain if the added aeration had an effect on dissolved oxygen (DO) levels. Sadly, there was not a large enough increase in DO levels to attribute to the installation of the trompe. Perhaps a second trompe is needed to supply more air pressure to the diffuse bubbler or the oxidation of metals in the pond eats up so much of the oxygen that it overshadows the effect. Sent results to EC.
- Sampled the Plainsville Borehole after meeting with Luzerne Conservation District (LCD0 Watershed Specialist and the Landowner. Hand delivered sampling results to the landowner and copied LCD Watershed Specialist. The area has been a hot bed of contention lately in that area of Plains Township as a top soil mine was proposed by Stell Environmental. Citizens are concerned that the pit will impact the O’Mallia’s farm and possibly indian burial grounds. The Plainsville Borehole currently discharges into former topsoil pits and would most definitely expand into a proposed neighboring topsoil pit. The issue was being debated in the local papers and went before the township zoning hearing board. Fortunately for the residents and indian council representatives, Stell Environmental agreed to sell the property to O’Mallia’s Farm at the price they paid for it and the property will continue to be managed as a farm.
- Created an invoice and prepared the travel drive to send to the PA DEP MSI program. Corresponded with Patrick on 2 corrupt SID files. They were working fine from his servers, so he will copy them to the return drive.

[ ] - Denotes funding source where applicable.