



Eastern PA Coalition for Abandoned Mine Reclamation

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March 2016 Progress Report

Highlights:

- EPCAMR staff continued to scan 467 mine maps into TIFF images, georeferenced 116 & digitized 30 maps for the MSI Mine Map Processing Grant. Issues naming Blue Coal Collection
- Submitted a grant extension for the MMG program and prepared paperwork for the ARIPPA Award.
- EPCAMR staff met with **LCD** Watershed Specialist to discuss AML issues and AMD treatment in **Luzerne Co., EC** about mine pools in the lower **Wyoming Valley, MHFS** and **UNC** staff for EE ops in **Luzerne and Lackawanna Cos.**, and participated in an **AMR Conference Committee** Call.
- Provided data to CSI Environmental related to the Mocanaqua Tunnel Discharge to the **Susquehanna River** and a report related to discharges to the **Lower Lackawanna River** and maps to **SRBC** and **SCD** related to the Neumeister Discharge in **Schuylkill Co.**
- Took staff gauge readings and sampled flow/chemistry at Askam Boreholes, **Luzerne Co.**; Reinstalled the transducer at the Old Forge Borehole, **Lackawanna Co.**
- Updated www.huberbreaker.org, www.epcamr.org and www.treatminewater.com. Administered the EPCAMR Facebook and Google Apps for Nonprofits accounts; maintained GobbaDaPile in-house data server.

Education, Outreach and Admin.:

- Updated www.treatminewater.com to include presentations that were approved and added a registration page that places the EPCAMR store in an "iframe" to allow visitors to register for the conference without leaving the site.
- Updated www.huberbreaker.org history page and uploaded the "Death of the Breaker" PDF.
- Found the Lower Lackawanna Watershed Restoration Action Plan (WRAP) Executive Summary and forwarded it off to CSI Environmental. The document was on our website and on the Lackawanna River Conservation Association (LRCA) website, but the links were lost.
- EPCAMR staff participated in a conference call related a proposed project on the Mocanaqua Tunnel with CSI Environmental. CSI Environmental visited with us a few months ago and now has several prospects for using their patented 3D Weave Sediment Bag technology on discharges in the Anthracite Region.
- Worked on two sales order project estimates for the Mocanaqua Tunnel project with CSI. The first phase would be to create the 3D mine pool model and the second phase would deal with monitoring the discharge and any boreholes that would be drilled to define/monitor the mine pool.
- Tested forms on www.epcamr.org. With several updates to WordPress the forms widget was not working properly. Upgraded the widgets and reformatted the forms to fix the issue.

- Submitted paperwork related to a 2 year extension of the Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG). [MSI]
- EPCAMR staff met with John Levitsky, Luzerne Conservation District (LCD) Watershed Specialist, to talk about current projects in Luzerne County and strategize other potential projects.
- Reviewed a strategic planning document started by EPCAMR part time staff in an attempt to comment on and update the 2011 EPCAMR Strategic Plan. EPCAMR management staff explained that the EPCAMR Board was responsible for making the strategic plan and generally guide the work of the coalition. The board is supposed to review the plan annually and update it every 5 years (which would be this year). The part time staff insisted that the document they put together go to the board for consideration as a strategic plan update. It was a big learning curve to explain the inner workings of a non-profit organization. The comments back and forth became heated and inappropriate in some cases as EPCAMR management staff, who had participated in the last strategic planning session, tried to explain the wishes of the board laid out in the strategic plan. EPCAMR management staff have placed the strategic plan update on the EPCAMR Board Meeting agenda for several meetings now and the board is currently looking for volunteer board members to set on the strategic planning committee. Once that committee is formed parts of this document may be shared with the committee.
- Created an invoice for January and February related to work completed for the MSI Mine Map Processing Grant. Sent a drive containing processed maps and data layers to the PA DEP California District Mining Office (DMO). [MSI]
- Traveled to PA DEP BAMR Wilkes-Barre Office to drop off and pickup mine maps 2x this month. We have approximately 300 maps to scan from this office in the Mine Map Processing Grant scope of work. [MSI]
- Followed up with John Levitsky, LCD Watershed Specialist, by creating and sending a RAMLIS CD, and requested a share of Wyoming Valley mine pool layers approved by Tom Clark, Susquehanna River Basin Commission (SRBC). Updated barrier pillars around the Delaware Pool with some information learned while researching mine pool boundaries for EC.
- EPCAMR staff traveled to Juniata College for a meeting of the AML Campaign. The major topic of discussion was on the RECLAIM Bill proposed in congress and gaining support. We learned a “pilot” of the program was passed in a December OMNIBUS bill where PA received \$30 Million to help with AMD Remediation. DEP will be submitting a list of projects for OSMRE to approve. Relayed this information to our EPCAMR Board.
- EPCAMR staff participated in the filming of a video documentary related to the history of coal. Documentarian Dave Edwards has been traveling around the area gathering footage from underground mines to above ground mines to the pollution and aftermath once the industry leaves. More information on Dave can be found at www.daveedwardstv.com.
- EPCAMR and Earth Conservancy staff met with Todd Wood from PA DEP Bureau of Abandoned Mine Reclamation (BAMR) to discuss were the perceived extra water feeding the Askam Discharge is coming from. Presented graphs of discharge vs. precipitation data, but this data does not really show a correlation for or against it being due to more precipitation. Todd recommended that we install a transducer on Nanticoke Creek to get a more complete view. Also, if it was coming from another mine pool, we would need to monitor the mine pool and neighboring mine pools.
- EPCAMR staff met with Nick Sufrinko, Maternal Health and Family Services and Kaylee Dunning from United Neighborhood Centers of Northeastern PA to discuss a collaboration to make pottery from Iron Oxide to possibly sell for donations. MHFS and UNC work with “at risk youth” to involve them in community projects. Their research shows that these type of collaborations instill community pride and boost self-esteem.
- Completed a trial of the new Foundation for Pennsylvania Watersheds (FPW) online grant portal. I found a few things that did not seem to work as expected and sent that information off to Branden Diehl.

- Worked on a budget for the upcoming AMR Conference now with a better contract with IUP and distributed the draft budget to the AMR Conference Committee.
- EPCAMR management staff participated in an AMR Conference Committee Call to plan the 2016 Conference.
- Took a trip to Name Brand Liquidators in Plains Township to pick up some supplies for the office. Purchased for example a desk chair worth \$150 for \$70 and a roll of Dymo Stamps for \$8.50 (typically \$21 from Dymo' website).

Technical Assistance:

- Meeting with Earth Conservancy to talk about mine pools connected to the Askam Boreholes and Solomon Creek Boreholes. The Wyoming Valley Southeast Upper and Lower mine pools are connected. The lower (connected to the Solomon Creek Boreholes) overflows to the upper mine pool (associated with the Askam Boreholes) when precipitation is high. The Scarlift report shows the pools connected and displays a chart showing what happened when the state cut down the Solomon Creek borehole pipes.
- Created graphs to show Askam Borehole flow versus precipitation data from the National Oceanic and Atmospheric Administration (NOAA) for 2014, 2015, 2016 and 1999 in preparation for meeting with Todd Wood from PA Department of Environmental Protection (DEP) Bureau of Abandoned Mine Reclamation (BAMR) Wilkes-Barre Office.
- Organized historical chemistry and flow data for Wyoming Valley AMD Discharges. Originally several discharges were on one tab in the EPCAMR Monitoring Data Spreadsheet. Gave the Buttonwood Shaft, Solomon Creek Boreholes and Plainsville Boreholes their own tabs. Discovered data in other spreadsheets and combined them into this document in preparation for a proposed Growing Greener Grant EPCAMR submitted last round.
- Updated ARIPPA Award paperwork for this year, sent to WPCAMR and posted it on www.epcamr.org for watershed groups to submit proposals.
- EPCAMR staff sampled the inflow and the outflow (only) chemistry and flow of the Askam Borehole Treatment System. Also, took stream gauge readings several times during the month at Askam and Solomon Creek Boreholes to calculate flow. Sent results to EC. [EC].
- Cleaned up and took stock of the stream monitoring equipment in an attempt to get it ready for the spring/summer monitoring season.
- X and M Drives on the server continue to not backup. Seems that the data cord is really loose so I tied a rubber band around it and stretched it around the RAID Tower to keep it in place. Did this for the other 2 towers as well. This didn't really solve the problem, so I switched out the Rocket RAID PCI card with a spare that came with one of the RAID Towers. Formatted each of the Rocket RAID Cards with the correct drivers and firmware separately again. This seemed to work and it has been stable for a while now. The M Drive would not backup to the N Drive, but that was due to a space issue related to the Windows Storage Space setup of the N Drive. It wasn't recognizing one of the drives again. Ran some diagnostic tools on the Storage Space removed and re-added the drives then the problem went away. IT is not easy on a server.
- Got our hands on several Stevens Type A and Type F water level recorders. Began to research how to refurbish them and how to use them. Many of the units are run by a wind up spring while the others are run on battery power. Researched log vs. linear rating curves for stream stage flow charts and applied findings to the Askam and Solomon Creek Boreholes discharge rating curves related to the staff gauges.
- Reinstalled the transducer at the Old Forge Borehole. Set it to take readings every 15 minutes.
- Mapped the Neumeister Discharge and related mine pool including the elevation of different related seeps and forwarded the info to Tom Clark, Susquehanna River Basin Commission (SRBC) and Wayne Lehman, Schuylkill Conservation District (SCD). Initially it seemed that the discharge could be cleaned up and routed to the Susquehanna River Watershed as opposed to dripping back into mines and discharging to the Schuylkill River. After some more mapping and using the 3D mine pool model for the area the better recommendation was probably to

encourage land reclamation to restore water to the surface instead of dropping down to the mines below.

- Discussion about retro fitting the Plainsville Borehole topsoil pits to enhance treatment with John Levitsky, LCD. We know the pits currently hold back a lot of iron, but some iron still makes it to the Susquehanna River. Adding an oxidizer to the front end and a way to collect the iron could go a long way to improving the resulting water quality.
- EPCAMR staff and intern rescued a USGS Gauge Station that fell into Nanticoke Creek. We brought the housing unit back to the office to cleanup and possibly reuse. Obtained permission from USGS to re-purpose the former government property. Once the study was complete the equipment reverted to the property owner, Earth Conservancy.
- Created a Project area map for the Mocanaqua Tunnel Project for representatives from CSI Environmental's application to do research on state forest land.
- Began researching how to build a trompe and a trompe hammer online with EPCAMR Intern, Gavin Pellitteri. Contacted Tim Danehy, Biomost, to see what he could tell us. He sent along a report for the OSMRE which has designs and parts lists for several sized trompes.
- Reviewed January and February mistakes with Patrick Jacquay from PA DEP California DMO. There were 12 different mistakes related to naming of files. I worked with Kelsey and Dave to correct the file names and reported back to Patrick. I cannot be sure of who is continuing to proliferate the mistakes. I asked that Kelsey review the procedure of checking the X Drive before giving the maps a local ID. I have been attempting to run through the names as well to look for duplicates before sending. It is difficult since the files are delivered in separate folders organized by month.
- Spoke with Arielle Avashai about RAMILS symbology. She is developing symbology at the national level for their geospatial taskforce. EPCAMR Executive Director is also a member of that OSMRE committee. I also spoke to her about sponsoring this year's conference. She said that they would be willing to sponsor at the same level as last year. I notified Anne Daymut to follow up with her.
- Continued reviewing Rausch Creek Lands Maps after discovering that the TIFF images were multiple pages to ascertain if they are mine maps, have cross section, or water data [SRBC].

[] - Denotes funding source where applicable.