



## Eastern PA Coalition for Abandoned Mine Reclamation

**Michael A. Hewitt, GISP**  
**Program Manager**  
101 South Main Street  
Ashley, PA 18706  
Main Line: (570) 371-3522  
E-mail: [hardcoal@epcamr.org](mailto:hardcoal@epcamr.org)

### February 2018 Progress Report

#### Highlights:

- Managed EPCAMR staff as they scanned 5 mine maps into TIFF images, georeferenced 68 & digitized mosaic maps for the **PA DEP** MSI MMG program. QA/QC checked work.
- Submitted a \$485K proposal to continue Mine Mapping Program with **PA DEP DMO** until 2020.
- EPCAMR staff participated in 3 AMR Campaign & 1 AMR Conference calls; Taught **PSU** EWT students with **EC**; Raised brook trout in TIC tank all in the name of EE.
- Met with **SCRA** and **NCPC** to talk about subsidence potential at **SEDCO** industrial park. EPCAMR staff with **SRBC** staff to review & strategize 2 Mine Pool Mapping projects; Met with **WVSA** and **HRG** regarding AMD and stormwater; Hosted an EPCAMR Board Meeting
- Created mine pool maps under the Harry E. Culm Pile in **Swoyersville** for **Olympus Power**
- Updated [www.epcamr.org](http://www.epcamr.org). Administered the EPCAMR Facebook and G Suite for Nonprofit accounts. Maintained GobbaDaPile in-house domain server and workstations.

#### Education, Outreach and Admin.:

- EPCAMR staff and Elizabeth Hughes from Earth Conservancy (EC) taught an Introduction to Brownfields Course for students in the Environmental Work Force Training (EWT) program at Penn State University (PSU). EPCAMR lead a tour following the indoor class.
- Follow up with RECLAIM Resolutions from Huber Breaker Preservation Society (HBPS) and Schuylkill Headwaters Association (SHA). Both groups passed the resolution at their most recent meeting.
- Organizing notes and files on my desk and computer. Stuff had been piling up as I was working on different projects.
- Drop off and organized maps from the PA DEP Franklin Warehouse at the Wilkes-Barre BAMR Office as requested by the office director, Kim Snyder. The maps we were scanning from the Franklin Warehouse were ones that we could identify that were not copies already at the Wilkes-Barre BAMR office. We will take copies back to the Franklin Warehouse [MSI].
- Attended a meeting at the Northumberland County Planning Commission (NCPC) setup by and attended by members from the Shamokin Creek Restoration Alliance (SCRA) to talk about mines under the SEDCO industrial park. The SEDCO industrial park has been plagued in the past with mine subsidences, but have no maps of the underground mines. Don Alexander, head of the planning commission, asked that EPCAMR review the maps and identify potential subsidence areas. We agreed to make a "red, yellow & green light" map of mines that were <50 feet, <100 feet and >100 feet from the surface, respectively.
- Finished the Mine Subsidence Insurance (MSI) Mine Mapping Grant (MMG) proposal for approximately \$485K with staff and submitted it to the DEP District Mining Office (DMO) in Harrisburg.
- Created an agenda, treasurer's report and minutes from the last meeting for the upcoming board meeting.

- EPCAMR staff hosted the 1<sup>st</sup> quarter EPCAMR board meeting.
- EPCAMR staff met with Wyoming Valley Sanitary Authority (WVSA) staff and consultant Herbert, Rowland & Grubic, Inc. (HRG) to talk about mapping regarding stormwater and specifically AMD infiltrating stormwater systems. Delivered AMD discharge locations to HRG. EPCAMR to setup a memorandum of understanding (MOU) with WVSA to continue work.
- Followed up with tasks that our board assigned to staff at the board meeting.
- Corresponded with Patrick about remaining MSI MMG work. He said that we have ~8,000 map scans, ~450 maps to georeference and 120 maps to digitize left in the current contract [MSI].
- Packaged and sent an iron oxide order to University of Scranton.
- Participated in an AML Campaign call. Followed up with Congressman Marino's staff to send Sullivan County's and Sullivan County Conservation District's RECLAIM Act resolutions their way. Sent Luzerne County, EPCAMR and HBPS resolutions to Congressman Cartwright's office.
- Pick up maps at the PA DEP Pottsville District Mining Office (DMO) to scan for the MSI MMG [MSI].

### **Technical Assistance:**

- Reinstalled Windows Server 2012R2 to a Solid State Drive (SSD) on the GobbaDaPile Domain Server. It seems that the defragmentation program scrambled the OS on the drive. Unfortunately there was no way for the workstation computers to properly "leave the domain" which caused issues and reset several of them to local profiles (locking personal files).
- Reconnect 6 workstation computers to the server. Used Profile Wizard to regain files like I had done in the past, but had to undo everything on several of the computers. There were several installed program error issues because of Profile Wizard incompatible with the Anniversary Edition of Windows 10. Brought files over from the server manually instead.
- Backed up X to Y Drive and connected 3 more computer to server. Manually imported personal files from the server. The X drive went down again, got it working again
- SRBC staff asked for coordinates for a potential sludge injection borehole that we identified in an isolated section of Markson Independent underground mines at our last face-to-face meeting. Send the coordinates to Tom Clark [SRBC].
- Mapped mine pools under Harry E. Culm Pile project area and sent map to project partners. Olympus Power Co-gen Company will be removing culm under a government financed construction contract (GFCC) which is a type of mining permit. The applicant needs to record mine pool elevations in a mine permit so they know how far down they can dig before hitting it. They also do not want to disturb the mine pool and make the resulting mine drainage worse.
- Prepared maps for an onsite meeting at the Mocanaqua Tunnel Project. Redrew tunnels and mine pools 1, 2 and 3 based on actual mine maps as opposed to the boundaries estimated in S. H. Ash reports [SRBC].
- Met at the Pinchot State Forest property with SRBC to look at locations to drill and get coordinates for optimal borehole placement for the Mocanaqua AMD Tunnel Consumptive Use Feasibility Project. We needed the locations for paperwork and eventual approval of PA Department of Conservation and Natural Resources (DCNR) [SRBC].
- Traveled to Askam and pulled paper from Steven's Recorder. Scanned the hydrograph and attempted to digitize the data then relate it to previous stages / flows. The hydrograph was not matching up and I determined that the pen must have "bounced" on the bottom inverting the hydrograph when the flow was below 2,000 gallons per minute (GPM). I adjusted the graph bottom to 2,000 GPM and the data seemed to line up better. The data should be inverted for that time period to show actual lows [EC].
- Cleaned up iron oxide processing station and processed several ounces of Silverbrook Purple pigment.
- Georeference Frank Lucas Coal Company No. 4 Vein maps related to potential dry isolated area in the underground mines and found more maps to cover the Markson Independent area. SRBC Hydrologist, Pierre MaCoy, suggested that I try a 3D modeling exercise in ArcGIS to create extruded multipatch layers from TIN grids, which in theory can produce layers with an estimated volume in native ESRI format. Learned the decades old technique from online ESRI

tutorials and created the data needed to run the process, but ended up with flawed 3D layers. Spent many hours learning about the intricacies of the process from ESRI support and attempted to fix the files with no success. I attempted to reach out for help to colleagues but was met with opposition. Abandoned the endeavor, which was beyond the scope of the project. I will continue to use earthVision for estimating mine pool volumes [SRBC].

- Both X and M drives went down within minutes of each other. Strange now that they are separated on 2 different computers. Add this to the RAID drive mystery files.

[ ] - Denotes funding source where applicable.