



## Eastern PA Coalition for Abandoned Mine Reclamation

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### September 2016 Progress Report

#### Highlights:

- EPCAMR staff continued to scan 230 mine maps into TIFF images, georeferenced 169 & digitized 33 maps for the MSI Mine Mapping Grant.
- EPCAMR staff participated in a **AML Conference** call, **Bear Creek Charter School** EE Day, a **Centralia** cleanup and a staff meeting. Aided **FON** and students from **Lehigh University** and **Keystone College** with AMD related studies. Continued setup of the **TIC** Tank and YouTube live video stream showing the monarch butterfly life cycle all in the name of EE.
- Worked on GIS layers for the **Rausch Creek, Schuylkill Co.** Mine Pool project. Researched maps near the **Knox Mine Disaster** for a documentary. Setup a water level gauge at **Plainsville Borehole, Luzerne Co.**
- EPCAMR staff setup an office for and got 2 **OSMRE AmeriCorps Members** started on projects.
- Updated [www.epcamr.org](http://www.epcamr.org) and [www.treatminewater.com](http://www.treatminewater.com). Updated several computers in the office and connected to the domain. Administered the EPCAMR Facebook and G Suite for Nonprofit accounts; Maintained GobbaDaPile in-house domain server.

#### Education, Outreach and Admin.:

- EPCAMR staff participated in an AMR Conference call to present the information on possible venues in the anthracite region. The committee would like to see budgetary information before making a decision.
- Wrote May, June and July progress reports and posted them to [www.epcamr.org](http://www.epcamr.org).
- EPCAMR staff participated in a monthly staff meeting to coordinate efforts.
- Received the TIC tank chiller and tested it. It has a strange squeal. Troubleshoot the issue and found a good place to locate the chiller to reduce the noise in the office.
- Tested chemistry in the Trout in the Classroom (TIC) tank for the first time as ordered supplies begin arriving, some supplies were on backorder.
- Updated WordPress and plugins on [www.epcamr.org](http://www.epcamr.org) and online store. Updated the EPCAMR board meetings page.
- EPCAMR staff participated in the Bear Creek Charter School Environmental Education day. The elementary school aged kids had the opportunity to play macro-bingo and see bugs through a magnifying glass and 3D cards of micron scanned images. The middle school aged kids actually went into the nearby stream to kick for macros and identify them. Due to rain in the afternoon, however, the second group of middle school kids had to stay inside and do the elementary school activities (not the best situation, but it worked).
- Updated and reorganized the AMD Games tote that an intern put together from the Saint Vincent College "Nature Interrupted" school curriculum guide. Decided to prepare better for

situations were inclement weather keeps us from doing age appropriate activities as what happened with the Bear Creek Charter School. We had these games that day, but the tote was in a state of disrepair and basically unusable.

- Actual monarch butterfly larvae delivered were delivered via USPS. These larvae needed milkweed to feed on instead of the hummus looking paste that the Painted Lady butterfly larvae ate. They also had to be watched and placed in cups when they got a certain size for pupation. Setup a YouTube live webcam again to show the larvae growing on the milkweed. Initially they were so small that you could not see them on the camera.
- Researched mine maps near the Knox Mine Disaster for David Barocca, videographer producing a film related to the Knox Mine Disaster. The maps from the Office of Surface Mining Folios may be featured in the documentary.
- Billed down several grants at a time by going through timesheets and calendars in preparation for invoicing the grant sources for reimbursement.
- Found and uploaded 1997 and 2000 AMR Conference programs to [www.treatminewater.com](http://www.treatminewater.com) for their historical value. Stream Restoration Inc. later found and forwarded the program from the 2001 conference, which I also posted.
- Aided EPCAMR Executive Director and new AmeriCorps member, Rachael Grube, as they cleaned up and painted a cubicle in the large room outside our office in the Earth Conservancy building. Obtained, repaired and cleaned up vintage metal desks and purchased a carpet remnant from Ollies to place in the room.
- Installed the final piece of equipment in the TIC tank, a power head that would direct water flow horizontally along the bottom of the tank.
- Spoke with a student from Lehigh University that was using non-thermal plasma technology to raise pH and sterilize liquids and gasses in a lab environment and was in the process of writing a scientific report detailing his findings. He was able to clean up mine water in the lab and is working on the design of a pilot scale system, about the size of a trash can, that could potentially be placed in the field to cleanup mine water in the field. He was looking for more information about the range of parameters that he could expect for anthracite coal mine drainage.
- Met with Friends of the Nescopeck (FON) representative, Tim Ference, to learn about their sampling program with Hazleton Area STEM School students and continued by their membership. They had purchased multi-parameter flow and chemistry sampling equipment to monitor 5 sites within the Nescopeck Watershed. They were looking for a place to store the data and wanted to see if we could do any sampling in their watershed in the near future to compare data obtained by their equipment with data obtained by ours.
- EPCAMR staff participated in an illegal dump cleanup around the borough of Centralia.
- Involved EPCAMR AmeriCorps Member, Abbie Keefe, in creating and photographing holiday cards and EPCAMR's Believe It or Not cards for sale on the EPCAMR online store. Uploaded these image along with some pottery created by students and created items for purchase.
- Invoiced SRBC for work completed on the Rausch Creek project between the 3<sup>rd</sup> quarter 2015 and 2<sup>nd</sup> quarter 2016 [SRBC].
- Spoke with a student from Keystone College who was studying the Old Forge Borehole mine discharge to the Lackawanna River and provided him with data that we collected with the permission of the SRBC.
- Caught up with some administrative work including time and travel sheets.

### **Technical Assistance:**

- Corresponded with Patrick Jaquay, PA DEP California District Mining Office (DMO) on notes from the June drive data delivery and engaged Mine Mapping Grant staff in some fixes.

- Server still having issues with 3 RAID Towers (2 on one card). Kept the Y Drive tower shut down to stop it from shutting down the server unexpectedly, but the server was also not backing up the X to the Y drive weekly. Not a permanent situation, only a work-around until I get time.
- Installed water level gauge at Plainsville Borehole discharge pond. Took chemistry and flow in and out. Took out aggression on knotweed, of which I am allergic. Recorded data in EPCAMR water quality sampling database.
- Switched the name on the old desktop server computer to SiltRock and converted it to a domain computer. Also something was wrong with the installation of Windows 10 which was fixed with a windows operating system refresh. This uninstalled programs which had to be reinstalled. Neat Receipts and Microsoft Office 2016 were particularly difficult to reinstall.
- Modified the language on the RAMLIS Digital Download to explain how to get the actual digital download. The customer now has to log on to the My Account page as opposed to being sent the download link in an email. Seems inconvenient, so I suggested that PremiumPress figure a way to switch it back in the next update.
- Began georeferencing several maps from the Rauch Creek Lands map collection in an attempt to find the location of the maps with respect to the mine pools in the area. Involved Executive Director and Outreach staff in helping to organize the database into usable maps, cross section and water quality data [SRBC].
- Server had not updated since the end of July. Attempted to fix a “DPC\_WATCHDOG\_VIOLATION” error with a BIOS update to the server computer. This seemed to work all the drives (M, N, X & Y) were backing up and functioning.
- Began digitizing mine features from several georeferenced underground mine maps from the Rauch Creek Lands map collection including faults, anticlines and other mine pool features. Sent a draft of this information to SRBC Hydrogeologist [SRBC].
- Continued to digitize mine features from several georeferenced underground mine maps from the Rauch Creek Lands map collection. Updated tunnels, geobasins and mine pool boundaries for the Markson, Good Spring and Valley View mines specifically. Scanned in a sampling map produced by the SRBC to patch their sampling points to features on the mine maps [SRBC].
- Fixed up 2 laptops and purchased office chairs for incoming AmeriCorps Members who will be working with EPCAMR.
- Involved EPCAMR AmeriCorps Member, Rachael Grube, in helping to organize the Rausch Creek Lands map collection into usable maps, cross section and water quality data [SRBC].
- Converted my computer over to a domain computer. This is the second or third computer that had run smoothly with the transition from workgroup to domain network environment. Created a method and will continue to transition machines over as time allows.
- Taught AmeriCorps Member, Rachel Grube, to georeference maps in the Rausch Creek Lands collection. Specifically, several maps were location maps showing mine entrances on a topographical map. Other underground mine maps prove to be a bit difficult, but she is learning the process and may be able to go back and do them when she has perfected her technique.

[ ] - Denotes funding source where applicable.