Eastern PA Coalition for Abandoned Mine Reclamation

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January 2018 Progress Report

Highlights:

- Managed EPCAMR staff as they scanned 249 mine maps into TIFF images, georeferenced 109 & digitized mosaic maps for the MSI Mine Mapping Grant. QA/QC checked work.
- Submitted a *5K* proposal to the **LCWA** & began working on a *$300K+* proposal to continue the Mine Mapping Program with **PA DEP DMO** for the next 3 years.
- EPCAMR staff participated in 3 AMR Campaign & 2 AMR Conference calls; Worked with EC to prepare for a training; Raised brook trout in TIC tank and participated in a related forum in the name of EE.
- Met with **SRBC** staff to review & strategize 2 Mine Pool Mapping projects; Completed an **ESRI** certificate training;
- Updated 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.:

- After weeks of black lines coming up on prints and periodic cleaning of the drums, I came to the conclusion that our Cannon Printer had a defective toner cartridge. Called GEI WideFormat and returned the cartridge and purchased new ones to replace stock that was used. Their recycled toner cartridges are half the cost of other office supply stores and they replace damaged ones quickly for free.
- Did a quality control and quality assurance (QA/QC) check on QuickBooks to prepare for the upcoming EPCAMR quarterly board meeting.
- Sent correspondence information regarding the Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act with Senator Casey's office to EPCAMR President, Bernie McGurl. Bernie plans to meet with the senator soon.
- Participated in weekly AML Campaign conference calls to stay apprised on political happenings.
- Prepared reimbursement paperwork to the PA DEP 319 program for EPCAMR expenses in November and December 2017.
- Retrieved spring water from Courtdale and changed water in the Trout in the Classroom (TIC) tank twice this month. Working with Daily Motion to get a live stream video of the tank back online. Submitted a request for a key code.
- EPCAMR staff participated in 2 AMR Conference calls to coordinate efforts in planning for the 2018 and 2019 conference.
- Corresponded with the Shamokin Creek Restoration Alliance (SCRA) and Northumberland County Planning Commission to deliver maps that were recently completed for the western portion of the Western Middle Anthracite Coal fields. Their interest is in the area of the Quaker Run watershed between Shamokin and Kulpmont which encompasses the SeedCo Industrial Park. The county official involved was very inquisitive and requested a meeting to explain the information on the maps. SCRA coordinated setting up a meeting for next month.

- Prepared a request letter to Dynamic Graphic Inc. (DGI), the makers of EarthVision geologic modeling software, to ask that they consider allowing their 3D models to be exported to SketchUp (SKP) format. They had recently allowed the models to be converted to Standard Tessellation Language (STL) format for 3D printing, but the SKP format will preserve the real world coordinates for transfer to other programs such as ArcGIS and Global Mapper. Submitted the letter to Office of Surface Mining Reclamation and Enforcement (OSMRE) Technical Innovation and Professional Service (TIPS) staff from the Appalachian Regional Office (ARC).
- EPCAMR management staff lead a staff meeting to coordinate efforts going forward in to the spring now that the holidays are over.
- Completed November and December 2017 EPCAMR Program Manager board reports. Posted them to the EPCAMR Board portion of www.epcamr.org and sent them to the PA DEP 319 Program. Submitted reimbursement paperwork to the 319 program staff.
- Updated 2018-2020 estimated billable rates for staff time in preparation for upcoming grant proposals.
- Downloaded and began working on the Mine Mapping Grant proposal for 2018-2021. [MSI]
- Renewed our credentials on grants.gov and sam.gov in preparation of submitting an Environmental Protection Agency (EPA) grant. Authorized Denise Hernandez, EPCAMR Urban Outreach Specialist, as an eBiz point of contact.
- Met with Susquehanna River Basin Commission (SRBC) staff to review and strategize work on the Rausch Creek and Mocanaqua Tunnel projects. Visited the Mocanaqua Tunnel site on the second day.
- EPCAMR Management Staff participated in a public meeting at the American Legion regarding the Harry E Banks project in Swoyersville.
- EPCAMR staff participated in a webinar related to the creation and use of LiDAR data.
- Prepared a proposal with Gavin Pellitteri, EPCAMR Watershed Outreach Specialist, to sample the Connell's B and C Tunnel treatment systems to the Loyalsock Creek Watershed Association (LCWA). The proposal is to sample the inflow and outflow of each system as well as upstream and downstream on the Loyalsock Creek.
- Prepared the minutes from the last EPCAMR board meeting and sent a reminder to the board regarding the upcoming meeting next month. Edited the EPCAMR conflict of interest and financial management policies based on what was presented at the last board meeting. Sent the updated documents to the corresponding EPCAMR committees for review and hopefully approval at the upcoming meeting.
- Participated in an online ESRI certificate training to create 3D data in ArcGIS to continue my education related to my GISP title.

Technical Assistance:
- Performed QA/QC on PHUMMIS database for the Mine Mapping Grant (MMG) [MSI].
- Corresponded with Patrick Jacquay, PA DEP California District Mining Office (DMO), to relay information about the amount of maps in private collections that should be scanned to fill in gaps in the Anthracite Region. We will be submitting these numbers to be scanned in the next grant round.
- Aided Earth Conservancy (EC) with conversion of some ArcGIS data to AutoCAD format.
- Evaluated work that had been done on the Mocanaqua Tunnel project and sent an update to the Susquehanna River Basin Commission (SRBC). Attempted to create mosaics of the West End and Stackhouse Colliery underground mine maps, however they were in a color mapping format that theoretically works. The resulting mosaics were converted to grayscale. Kept original TIFF files in a map document in preparation for an upcoming meeting with project managers [SRBC].
- Finished a PHUMMIS / Drive jive for the months of October and November to compare mine mapping work that will be delivered and what was recorded on the PHUMMIS database [MSI].
- Someone purchased a RAMLIS Data Tool download from the EPCAMR Online Store, but the automatic digital delivery mechanism was broken in ShopperPress. This is "the straw that broke the camel's back" for me with this program. With little help from the makers by the way of updates, solutions require a lot of custom coding. Began researching other methods to setup

an online store that is easier to manage with low overhead cost. Several out-of-the-box solutions require a monthly subscription (ex. WooCommerce and Shopify). Found Magento which is a free online store database with potential plugins to WordPress or inexpensive content management system (CMS) themed storefront style websites. Magento is recommended by PayPal.

- Purchased a Dell Precision M7720 laptop to cycle into the MSI program as some of the laptops in the program are aging. Setup this computer for Rachael Grube who was recently hired as a GIS Technician for the MMG [MSI].
- Update the server with windows updates in hopes it would stabilize the RAID drives. Also researched updates on Dell.com to see which ones are available and suggested for the computer. Found and installed a few including driver updates for the drives and a BIOS update.
- Organized and repaired maps from the PA DEP Franklin Warehouse that will be going to the Wilkes-Barre Office. [MSI]
- Performed quality assurance and quality control (QA/QC) duties on scanned and georeferenced maps [MSI].
- Dealt with a Windows update on my computer all afternoon. Windows 10 is one of the most annoying operating systems in that it does not allow the user to decide when it will update itself. Regardless of your workload, it will update when it downloads the updates. It's insufferable.
- Attempted to back up the X to the Y drive using SyncBackSE, but the drives and or server continues to crash after running the sync for 5 minutes. [MSI]
- Downgraded ArcGIS back to 10.3.1 since 10.5.1 was running extremely slow on my computer. Unfortunately, I could only find a 32bit version of it. Contacted OSMRE TIPS staff to obtain the proper version of ArcGIS. Installed ArcGIS Pro 2.0 in the meantime. Saved ArcGIS 10.5.1 map documents into 10.4.1 format via another computer. Received the install files for 10.4.1 from OSMRE TIPS instead and installed it. Attempted to update ArcGIS Pro to 2.1 but the update fails.
- Came in Monday morning and the server was down, but in a weird way. After rebooting, the server was only recognizing my computer and had no connection to the server. Discovered that when disconnecting my computer on Friday to take it home, I accidentally unplugged a network cord that ran behind my desk. Plugged the cord back into the socket and duct taped it to the wall. The server came right back.
- Georeferenced the No. 3 vein (the closest to the surface) under the Hanover 9 site for an upcoming EC training on how to read maps related to planning a reclamation project. EPCAMR was included in an EPA grant they received to train students to reclaim abandoned mine sites in cooperation with Penn State University (PSU). Sent the map to Elizabeth Hughes in several formats for printing. Unbeknownst to us, we were only included in grant for $800 worth of work. Reviewed the maps afterward and unfortunately, you cannot read numbers on the 200 dpi OSMRE Folios especially at the print scale that was desired. Continued to work with Elizabeth on preparation for the meeting. The extra work will inevitably turn into in-kind match.
- Researched updates to the Dell PowerEdge server on dell.com. Found a BIOS 14A update and some updated drivers related to hard drives. Installed these updates in hopes they would stabilize things with the RAID drives. Prepared the old MSI travel drive to store TIFF files. Ran some drive scans and discovered that the C drive, where the operating system (OS) is installed, was 66% fragmented. This is the highest drive fragmentation that I have ever seen and could be a cause for the instability of the server. Started a defragmentation which ran over the weekend and was only partially complete. The defragmentation program ran for an additional 3 days the next week and was on "pass 8". Stopped the defragmentation to reboot the server after the X drive failed. After rebooting, the C drive was not recognized. Automatic repair and all attempts to repair the drive failed. It seems that the defragmentation program scrambled the OS on the drive.

[ ] - Denotes funding source where applicable.