April 2018 Progress Report

Highlights:
- Managed EPCAMR staff as they scanned 78 mine maps into TIFF images, georeferenced 17 & digitized mosaic maps for the PA DEP MSI MMG program. QA/QC checked work.
- EPCAMR staff hosted a Take Me Fishing Program at Frances Slocum State Park; Live streamed and raised brook trout in TIC tank all in the name of EE.
- Setup and collected registration info for the AMR Conference database; Tweaked the Mocanaqua 3D Mine Pool Model; Digitized mines under the SEDCO Industrial Park for the Northumberland County Planning Commission.
- Planted trees along Wapwallopen Creek for the Luzerne Conservation District; Installed and sampled monitoring stations near Mocanaqua for the SRBC; Sampled 2 AMD treatment systems along the Loyalsock Creek for the Sullivan Conservation District.
- Updated www.epcamr.org; Setup a new online store platform; Administered the EPCAMR Facebook and G Suite for Nonprofit accounts; Maintained GobbaDaPile in-house domain server and workstations.

Education, Outreach and Admin.:
- Created an AMR Conference registration database to start collecting information from the online store.
- EPCAMR management staff participated in a conference call for the Mocanaqua Tunnel Project with SRBC. Order Solinst App Reader and Adapter to read Solinst transducers and barometer in the field. The reader works wirelessly through Bluetooth with a smartphone. [SRBC]
- EPCAMR staff participated in the PA DCNR Community Connections to Your Watershed program. Staff presented and hosted a tour of abandoned mine lands and drainage.
- Gabby gave her 2 weeks’ notice to tell us she was leaving for another job. We made preparations to move other staff into the PA MSI MMG. [MSI]
- Updates to the AMR Conference website to open registration and add presentation details.
- Created the AMR Conference budget and sent it off to the AMR Conference Committee for review and approval.
- Updated the 3D Mine Pool Mapping page, RAMLIS page, and updated the navigation menu structure on the EPCAMR.org website.
- Got the camera on the Trout in the Classroom tank live streaming on DailyMotion.com. This is the first time since November since YouTube banned us because of an alleged community guideline violation.
- Hosted a Take Me Fishing Program at Frances Slocum State Park for several underserved children and parents on a Saturday. Practiced casting in hula-hoops with plugs and then progressed to baiting and casting hooks into the lake. Didn’t catch much, but had a fun day.
- Added items to the new EPCAMR online store from the old dysfunctional ShopperPress store. Once the transfer was done, I disabled the old ShopperPress store.
• EPCAMR staff planted trees in a riparian zone along the Wapwallopen Creek at the request of the Luzerne Conservation District Watershed Specialist, John Levitsky.
• Emailed the EPCAMR board to cancel the 2nd quarter EPCAMR Board meeting. There were few actions to be taken by the board.
• Worked on transferring AMR Conference registrations from the EPCAMR online store to the registration database.

**Technical Assistance:**
• More issues with M and X Drive. Spoke with tech support on Sans Digital and HighPoint (company that makes the software to run the Sans Digital equipment). Both were pointing the finger at each other with respect to why the units were malfunctioning. The one “good” piece of information that I finally got (5 years later) from tech support regarding RAID tower setup is that they were not made to work in a network environment. Basically, the drives are supposed to be hooked up to one computer and accessed by that same computer. Began looking at NAS (network attached storage) Drives which are built specifically to function in a network environment. In essence, NAS drives are their own computer attached to the drives to sort out network traffic.
• Troubleshoot EPCAMR Online Store via Magento with the help of the AMR Conference Committee before opening registration. Wanted to make sure the store was going to email invoices and show things were paid in PayPal.
• Continued to tweak Mocanaqua 3D Mine Pool Model in earthVision since the Stackhouse Mine elevations were fixed. Began editing individual points for Bottom Ross. [SRBC]
• Digitized coal vein elevations of the Baltimore vein for the Mocanaqua 3D Mine Pool Model. Used a map that was marked Top Ross, which was actually the same vein, but another company had called it a different name. That is very common in the Anthracite Region for neighboring companies to name the same vein a different name. It makes it difficult to sort out a stratigraphic sequence for a basin. [SRBC]
• Redrew a part of the Bottom Red Ash vein that was missed when digitizing coal vein elevations in the Stackhouse Mine. Converted the points from UTM to State Plane projection. [SRBC]
• Digitized faults that were identified on surface and underground mine maps and attempted to make them 3D for the Mocanaqua Mine Pool Model. Unfortunately, there is not much to work with and I had to make a lot of assumptions on the pitch. Added/removed faults, adjusted smoothing/extrapolation factors and ran the model several times to see the results. [SRBC]
• QA/QC checking Wilkes-Barre East quadrangle mosaics to see which ones could be sent to DEP. Several were missing the Mineral Springs and Baltimore maps. Searched PHUMMIS which brought up 10 pages of results. Sorted maps by vein name (very time consuming process) and found a few more maps to fill in gaps in the mosaics. Spoke with Patrick Jaquay, our project manager, and added the Dombroski Collection to the MSI map collections. The 20 Mineral Springs Colliery maps were scanned but need to be converted to SID format to add into the mosaics.
• Discovered a “Hawk Basin” (4th basin) in some maps from the MSI collections and digitized those coal elevation points. The points caused a droop in the east end of the model because the area is highly faulted which hoists the basin up to a higher level in the middle of the model. Ended up having to digitize more points in several vein to the east in the Glen Lyon mine to compensate. [SRBC]
• Went shopping for parts to construct monitoring stations and stilling wells for the Solinst transducers. Installed 4 transducers plus a barometer in the field to monitor water levels for the Mocanaqua Mine Pool Project. [SRBC]
• Sampled field flow and chemistry at the Mocanaqua Mine Pool Project. Collected water samples at the tunnel discharge and sent them to Hawk Mountain Labs for analysis. Took transduced readings wirelessly with the app reader to my smart phone. Recorded all this in a google spreadsheet. [SRBC]
• Graduated a 5 gallon bucket with gallon lines in preparation for estimating water flows coming out of the White Ash Land Association’s (WALA) Connel B Tunnel abandoned mine drainage
(AMD) treatment system outlet pipes. This was suggested by Hedin Environmental, the firm that upgraded the system.

- Sampled flow and chemistry on 2 treatment systems (WALA Connel B and C Tunnel AMD treatment systems), upstream and downstream on the Loyalsock Creek to judge the effectiveness of the upgrades to the Connel B Tunnel AMD treatment system. Used the graduated 5-gallon bucket on the 3 outlets of the system and took flow with the Swoffer flow probe downstream and discovered that the readings were within a few dozen gallons per minute (very small margin of error).

- Attempted to connect MailChimp to Magento online store to bring customer info into MailChimp. The process erred out and would not complete. Will have to manually add customers to MailChimp, luckily we don’t send sales fliers to our customers.

- Began to digitize underground mine map boundaries under the SEDCO Industrial Park for Northumberland County Planning Commission. Segregated sections of mines by their depth from the surface. Color-coded the shapes to represent places that were subsidence prone: red represented less than 50 feet of cover, yellow was 50-100 feet of cover and green was more than 100 feet of cover.

[] - Denotes funding source where applicable.