Eastern PA Coalition for Abandoned Mine Reclamation
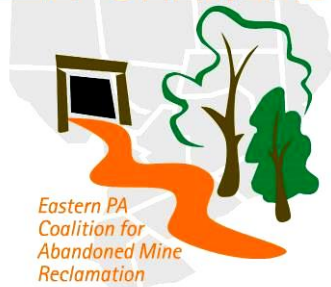
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March 2014 Progress Report

Highlights:
- Monitored the Espy Run Treatment System near Nanticoke and water level at the Huber Shaft in Ashley, both in the **Wyoming Valley**
- Continued processing maps for the MSI Mine Map Processing Grant: Techs Scanned 698, rescanned 5 from previous months & Georeferenced 301 maps and re-georeference 5.
- Updated/installed computer software and hardware to keep the office running efficiently
- Continued work toward a 3D Mine Pool Model in the **Wyoming Valley, Northern Coal Fields**
- Printed a map and several posters for the PAEE conference, spoke to Kings College GIS Class, PSU Landscape Architecture Class and participated in an AMR Conference Call.
- Updated www.epcamr.org, www.treatminewater.com, www.huberbreaker.org and administered the EPCAMR facebook and Google Apps for Nonprofits accounts.

Education and Outreach:
- Taught both GIS Technicians to Georeference Mine Maps on separate days. It is a hands-on type of training in which the trainee needs to be sitting in front of the program and work through matching the mine map to the base map. [MSI]
- Created EPCAMR Program Manager monthly report for the previous months, gathered other staff reports, posted them to www.epcamr.org and sent to PA Department of Environmental Protection (DEP) 319 Nonpoint source (NPS) program staff for reimbursement.
- EPCAMR staff participated in a conference call with the AMR Conference Committee to coordinate efforts. Created a 2014 Sponsor Letter and sent to listserve to aide in donations in general and specifically for the silent auction. Updated pages on www.treatminewater.com website.
- Found, georeference and emailed maps of the "Glen Lyon Ice Caves" to PA Game Commission (PGC) staff that are evaluating bat populations in this particular hibernacula. EPCAMR staff were invited to go and help with the survey and explain the maps to gain a better idea on where the bats are roosting. This is very interesting for me as my degree is in Environmental Biology and Ecology from Lock Haven University and it is tied to species living in abandoned underground mines. My independent study as an intern was on species living on surface reclaimed and un-reclaimed abandoned mine lands.
- Fixed dark text font on www.epcamr.org website, again. One of the recent updates to WordPress must have deleted my "Game Daddy" theme cascading style sheet (CSS) customization. This time it was a quick fix, since I had already researched the problem a few years ago when it first arose.
- Printed a map and posters for the PA Environmental Education (PAEE) Conference brainstorming activity for Akima Price of Price Consulting. Decided to experiment with the gloss photo paper that was given to us by the Office of Surface Mining (OSM) Wilkes-Barre Office

when it closed. The gloss paper takes special ink and this ink is not available for our particular HP DesignJet plotter. Gave the paper to Earth Conservancy to see if they can use it.
- Met with First National Bank to talk about updates to our Traditional IRA's.
- Spoke to EPCAMR Intern's GIS class at Kings College about EPCAMR's Reclaimed Abandoned Mine Land Inventory System (RAMLIS) Tool and how we are making 3D models of the underground mine workings with EarthVision. The students seemed impressed and several expressed interest in an internship. Professor Jayne Kleiner is interested in bringing the students to our office to show us how they can use the GPS abilities in their smart phones to gather data and map on the fly. I suggested a plan to monitor our water boxes.
- EPCAMR staff met with Eric Bella, his fellow students and professor in Landscape Design from Penn State University.
- Checked and updated dead links on www.huberbreaker.org spearheaded by another community group that was updating their links.
- Created an EPCAMR Volunteer emailing list in MailChimp and attempted to send out a request for volunteers for upcoming cleanups and tree plantings. Interns created a spreadsheet of the handwritten and digital printouts of the volunteer registration PDF form on www.epcamr.org which was easily imported into the program.

Technical Assistance:
- Continued transferring shared "company" files over to the server where they can be easily accessed from all networked workstations in the office. Transferred EPCAMR documents and photos from several workstation computers over to the Company Drive on the server and set them up to SyncBack with my computer (as an alternative to mirroring). We will be backing up QuickBooks now every time the program is closed to local computers or a thumb drive.
- Responded to a question about the sampling points at the Espy Run Treatment System from Cliff at Stream Restoration Inc. (SRI), in regards to the most recent snapshot sampling event by EPCAMR. He is incorporating the data into www.datashed.org for analysis and public access.
- Contacted PA Spatial Data Access (PASDA), on behalf or Rick from Earth Conservancy, to see why a specific set of 2ft LiDAR contour data was not working for him when it was transferred over to AutoCAD format. They reloaded the dataset in case it had become corrupt, but that did not solve the problem. Rick finally discovered that it had a "neat line" border that once removed worked OK. Reported this information back to PASDA.
- Reconciled scans and georeferenced SID files for the previous month, recorded in the inventory control spreadsheet, prepared an invoice and sent the hard drive to the PA DEP California District Mining Office (DMO) for the Mine Subsidence Insurance Mine Map Processing Program. Checked SID files georeferenced in February following training of GIS Technicians. Reviewed 23 rescan requests from January in which 2 were OK: one map was a heavy folded crease in the map which caused a line, the second maps was not an underground mine map so it was placed in the "other" folder which contain things like cross sections and borehole logs. Picked up and dropped off maps 2 times this month and aided with scanning and georeferencing [MSI].
- Ordered, downloaded and installed Symantec Endpoint Protection from TechSoup.org for EPCAMR server as recommended by Stillwater Computer Services. Even though Microsoft Server 2012 R2 is supposedly virus proof, it is always prudent to have an antivirus software as hackers are always trying to attack the most used programs and Microsoft might not catch the virus as quickly as a 3rd party. The install was really complicated since it was downloaded and no clear instructions were available. There are options to install and monitor the antivirus software on "client" computers over the network which was confusing. A call to Symantec tech support was worthless. Decided to only install it on the server and updated AVG Free Antivirus and Advanced System Care Anti-spyware software on the other computers manually.
- Sampled Espy Run Treatment System after the snow pack on the rail road grade and haul roads melted down (was supposed to be done last month). Compiled results into EPCAMR Sampling Data open spreadsheet and into an e-mail to Mike Dziak. Meeting with EC staff to

explain results and possible ways to tweak the system even more to get better iron retention and acid neutralization. [EC]

- Continued digitizing raw coal vein data from USGS I Series Coal Investigation Cross Sections in preparation for a 3D Mine Pool Model of the Wyoming Valley. Completed faults in I-838 A-E and I-753 A-D. Completed veins in I-838 A-E and I-753 A-D. Dealt with EarthVision acting up and tried to troubleshoot. My computer was also freezing and crashing. Used a restore point to attempt to fix the problem thinking it was Windows Updates or a driver that caused the problem. Somehow files were corrupted, but I made backups as not to lose work (learned this in working with ArcGIS). Contacted Mike Dunn, OSM Pittsburg Office, to help and uploaded working files to him. Removed and updated these corrupt files in EarthVision and the problem went away. [SRBC]

- Reported several printed OSM Aperture Cards showing up in a shelf in the DEP Wilkes-Barre BAMR Mine Map Collection to Zach, our MSI Mine Map Processing project manager. His direction was to scan the 52 that were taped together (to save on post processing stitching later) and leave out the single ones (since those are being scanned by the OSM National Mine Map Repository in Pittsburgh and being sent to EPCAMR). [MSI]

- Installed ArcGIS 10.2 concurrent license on GIS Specialist and Technician computers. Attempted to install ArcSDE on Server for multi-editor functionality on an enterprise geodatabase, but a separate program ArcGIS for Server is actually needed. ArcSDE is only a SQL database manager to manage personal databases that stand up to several users at one time, but still one editor at a time [MSI]

- In an effort to save over $100 a year, EPCAMR staff decided to switch our Internet Service and Phone Provider to Verizon. As promised by Verizon Representative over the phone, the DSL internet upload would be 700KB/s instead of 1MB/s, but download would be the same as the current broadband cable service. One phone would have free long distance and caller ID, while the other phone line would be the same 5₵ per minute long distance fee. So far the service has been not as expected. The combination DSL modem/router interfered with our network enough to shut it down and the phone lines were been down for several days due to a local outage. It took several hours to research how to shut down the router functions of the modem. The technician that installed it did not know how, it was nowhere to be found on the technical help portion of the Verizon website, but I found it on a general broadband router forum through a google search.

- Received word from the PA DEP California DMO that the PA Historic Underground Mine Map Inventory System (PHUMMIS) would be down for upgrades. They informed us of the new features which included tracking of the maps through the several steps of scanning, georeferencing and digitizing. The inventory control number was now also required to be input into the system. Also "scenes" of maps, maps that are too large for the scanner and need to be folded to be scanned and stitched together through image post-processing, are now recorded differently in PHUMMIS. [MSI]

- EPCAMR staff coordinated with Huber Breaker Preservation Society (HBPS) and the Pasello's, owners of the Huber Colliery Property, to get a water level reading at the Huber Shaft. This 6 elevator shaft is one of the largest in the region and was eerie to peer down into. The water level was 98.2' which puts the mine pool at ~537', a similar level to the monitoring borehole in the Stanton mine. It is at a different level than the Sugar Notch borehole (the mine pool that flows to the Askam Boreholes), which is closer than the Stanton, but the water seems to be tied to the mine pool that flows to the South Wilkes-Barre Boreholes. [SRBC]

- Received the Hard Drive on return from the DMO office in the mail and started to review the return files. This month only no files needed to be rescanned out of 881 that were sent for approval. That is a 100% approval rating. Only 4 of the 38 had to be georeferenced again (90% approval rating) [MSI].

[ ] - Denotes funding source where applicable.