February 2012 Progress Report

**Highlights:**

- EPCAMR staff conducted a Teacher Training Workshop, participated in an AMR Conference call and hosted an EPCAMR board meeting. EPCAMR Staff attended a PG course and an informal QuickBooks training.
- EPCAMR staff sampled 14 boreholes in the Lackawanna Valley, 24 in the Wyoming Valley and measured flow on 2 discharges. Updated 2 GIS datasets, finished processing 1 set of cross sections for the southern and structure contours in northern field related to the mine pool mapping initiative. Created 4 maps and shared with EPCAMR partners.

**Education and Outreach:**

- Attended a review course for Practicing Geologists hosted by the Pennsylvania Council of Professional Geologists (PCPG) at the Four Points Sheraton in Pittsburgh. The course was held to prepare individuals for the Fundamentals of Geology Examination.
- Organization of older paperwork, conference materials, EPCAMR meetings and correspondence with interns.
- Created an archive page of the EPCAMR Quarterly Board Meetings, since the page from the old site no longer accessible. This page was split from the current year board meetings for convenience. Updated links to make sure all reports were accessible.
- Updated pages on epcamr.org including the Webhosting for Member Organizations, Catawissa Creek Watershed and Anthracite Strategy pages.
- Sent out a board meeting reminder and a draft agenda to EPCAMR board members. Prepared minutes from the last meeting and post them to the web. Prepared staff highlights for draft agenda that will be handed out at the meeting. Billed down on grants in the EPCAMR Operating Budget Spreadsheets to help executive director create account balance sheets for the meeting.
- Gathered materials needed for the “Nature Interrupted” curriculum and activities in preparation for the teacher training workshop [DEP EE].
- Created EPCAMR Program Manager monthly report for the previous month, 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. Aided executive director in preparing the reimbursement and sent to 319 program staff.
- EPCAMR staff conducted the “Nature Interrupted” environmental education teacher training workshop for Wilkes-Barre Area teachers during their in-service day. Each teacher was
provided a binder, resource CD and background knowledge related to mine drainage and mine land reclamation. Setup and ran through several classroom activities including "Is there mine drainage in the stream?" and "Macro Bingo" [DEP EE].

- EPCAMR staff participated in an AMR Conference Call to work out details associated with conference planning. I had been working on creating a website at [www.treatminewater.com](http://www.treatminewater.com) for the conference with input from the committee. The initial website is a “save the date” with only the essential information. More details will be posted as the information is decided upon by the conference planning committee. Created a header collage image for the 2012 treatminewater.com website from several photos that were submitted to show a progression of resource extraction over time as we are looking at a “new frontier” of gas extraction in PA.

- EPCAMR staff prepared for and hosted the 1st Quarterly 2012 EPCAMR Board Meeting a week later than expected, due to inclement weather.

- Continued to transfer links from the old epcamr.org website CPG Nuke format to the new WordPress format and created a links page. Downloaded a WordPress plug-in for the website that will look for and help repair broken web links.

- Ordered staples for the Gestetner Copier, as we are using that feature on the copier and do not have any replacements. OSM did however give us several toner cartridges, which should last us for a while.

- Spoke with Paul Coyle, Office of Surface Mining (OSM) in Pittsburgh, who runs the National Mine Map Repository. I was recommended to call him from the PA DEP Bureau of Abandoned Mine Reclamation (BAMR) Office in Wilkes-Barre after a question came up about the OSM mine map folios and their status as public information. Paul confirmed that they are in fact public information and he deals with handing out copies to the public as requested. He also confirmed that the Anthracite Maps are being scanned at a higher resolution and will be returned when the process is complete.

- Updated [www.epcamr.org](http://www.epcamr.org) to a newer version of WordPress continued to transfer pages from the old CPG Nuke Format to the New WordPress format.

**Technical Assistance:**

- Devised a way to calculate the top of each coal vein in the western tip of the Southern Anthracite Coal Field (Tremont, Valley View and Lykens area). The bottom of each vein is represented in the coal cross section in the U.S. Geologic Survey’s (USGS) Miscellaneous Investigation 529 (I-529) report, while the coal vein thicknesses are represented in the USGS Professional Paper 602 (PP-602). This information will be used to create a 3D model of the coal veins in the Southern Field [SRBC].

- Sent off 2 maps to Nescopeck State Park for consideration for their exhibit backdrop. The maps were similar to those used by the Friends of the Nescopeck in their Wonders of Our Watershed newspaper inserts.

- Finished I-529 cross section data processing and began running the data through scripts to produce the 3-D grids and structure contours [SRBC].

- Started to line up the OSM folio maps in the vicinity of the Jermyn pool to determine if the bottom vein contours are close to the structure contours produced by 3-D modeling. Also edited the boundaries for the Jermyn Mine Pool from the Bureau of Mines Bulletin 517 (aka Ash Report) Maps, which were improperly distorted in the 1950s when the maps were created. This distortion is probably because the authors were unaware of several geologic features and the boundaries were drawn near the edge of the map. Sent this updated information to SRBC staff [SRBC].

- EPCAMR staff met with my sister, Kelly Hewitt, at Perkins to receive some free training on QuickBooks. Kelly is an accountant in Binghamton that works with QuickBooks and Peachtree on a day-to-day basis. EPCAMR staff, not being accountants, did not know some of the basic terms, but sitting down an expert helped us figure out. Started a sales order, similar to a grant budget and submitted an invoice, which is similar to a reimbursement [Pagnotti]. The program
automatically calculates how much is left per category. Eventually we would like to program all of the grant budgets into QuickBooks, but it will take a while to switch over.

- EPCAMR staff met with SRBC and LRCA staff at the Old Forge borehole to determine a plan of action to measure flows from the discharge. George Lazorchik in Wade Cope recommended cutting and access strip into the top of the culvert [LRCA].
- Contacted Central Clay Products in Wilkes-Barre to get a quote on a casting riser to raise the borehole caps to the road surface. Ran to be Stanton Street borehole to measure several parameters and see if there was a product number written anywhere [SRBC].
- EPCAMR staff traveled around the Lackawanna Valley to conduct water level monitoring of 14 boreholes related to the Scranton Metropolitan Mine Pool [LRCA]. Met with Bernie to locate and mark the Jermyn Borehole. Drilled through the pavement to determine the thickness of riser needed [SRBC].
- Prepared maps of the sampling locations related to the Askam Borehole and Espy Run treatment system projects. Created an invoice for the work completed in the third and fourth quarter of 2011[EC].
- Ordered a 2" and 2 1/2" collar riser from Central Clay Products in preparation to open up to boreholes in the Lackawanna Valley [SRBC].
- Created a CD of all of the known reports related to mine pools and mine drainage in the Lackawanna River watershed for LRCA executive director, to aide with the preparation of a qualified hydrologic unit plan for that watershed [LRCA].
- Successfully transferred the HuberBreaker.org domain to EPCAMR’s GoDaddy.com domain server but not before Jumpline.com got their last $35 renewal fee. It was quite a struggle to "wrangle away" the domain from Jumpline.com. The transfer process was started over a month prior, but Jumplin.com staff were unresponsive in the matter. It took several interactions over the phone and via e-mail to get them moving. They were using their company policy and a cumbersome ticket response system as an excuse for the delay, miscommunication and rudeness. As a result I reported them to the Better Business Bureau.
- Merged EPCAMR’s Insightly contact database into Outlook in preparation to merge with QuickBooks. QuickBooks accepted 305 vendors, 174 customers and 3417 contacts were not matched. These “non-linkers” will probably have to be typed in manually. For a mainstream business program, one would think it would be easier to use and compatible with more software.
- Stumbled upon the “Ashburner Maps”, a set of 2nd Geologic Survey maps for the Northern Anthracite Coal Fields as I was reading an excerpt from the 62nd Pennsylvania Geologists Field Conference to the Wyoming and Lackawanna Valleys. The paper read that no structural geology investigations were completed since the late 1890s, since the “Ashburner Maps” were so thorough. After digging through maps and datasets, I found the complete set which will be a great help by filling in data gaps when making 3-D models of the northern field. Also, downloaded Statewide Folds Map dataset from the Pennsylvania Topographic and Geographic Survey website which had been recently completed by retired geologist Roger T. Faill. The dataset was very similar, if not duplicative, in areas where I had already completed similar fault and anticlinal features work for the mine pool mapping initiative. This will be a time saver for future work [SRBC].
- Traveled to Jermyn with Tom Clark, SRBC, to determine a flow on the Jermyn Slope Discharge. Tom calculated the flow of the Lackawanna River below the discharge with a Flow Tracker Meter and I calculated the flow above the discharge with our Swoffer Flow Meter. The flows were subtracted from each other and the difference was the discharge flow [SRBC].
- Ordered a more robust flow sampling probe to plug into our Swoffer Flow Meter to measure flows at the Old Forge Borehole. Had a conversation with Bob Swoffer, the owner of Swoffer Instruments, who recommended we purchase a customized piece that will clamp onto a ¾" galvanized steel pipe which can be lowered into the flow.
- Returned the original 4" diameter Kemmerer Bottle and purchased a smaller diameter that is specific to sampling 2" diameter wells. This sampling device will allow us to grab a sample from...
any depth in a borehole in order to determine the stratification of mine water chemistry in a mine pool. As I learned in an unrelated conversation with a former Wilkes University professor, there may be another piece of equipment, called a bomb sampler, which may be more efficient. Unfortunately, this conversation happened after the equipment order was placed.

- Received correspondence from Stream Restoration Incorporated (SRI) that they will be completing another round of treatment system sampling in May and they were looking for volunteers to take samples for their region. I volunteered to take samples in Luzerne and the Catawissa Creek Watershed. The samples will be sent to Mahaffey Labs in Curwensville at a rate of $35 if a closer lab cannot be determined. I called Wilkes University and Hawk Mountain Labs (HML) to see if they would run the samples at a reasonable price. Wilkes U. no longer provides water testing services. When last checked, HML was charging ~$80 per sample, but I asked for an updated quote.

- EPCAMR Staff traveled around the Wyoming Valley to monitor water levels in 24 boreholes in the Wyoming Valley. The Glen Lyon Discharge was not flowing, but we were able to take pipe full measurements on the Askam Borehole Discharge to calculate the amount of mine water flowing [SRBC].

- Picked up the borehole collar risers from Central Clay Products and delivered them to LRCA [SRBC].

[ ] - Denotes funding source where applicable.