

Eastern PA Coalition for Abandoned Mine Reclamation

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October 2010 Progress Report

Highlights:

- Created 2 maps, georeferenced 5 maps and updated 1 GIS database for EPCAMR partners.
- Completed the AMD Formation publication
- EPCAMR staff attended and setup at Chalk Fest, hosted an AMD Treatment site tour, taught 12 VISTAS to read Topo Maps at ACCWT Training, and sampled 2 in-stream sites & 2 discharges.
- Updated <u>www.orangewaternetwork.org</u>, <u>www.epcamr.org</u> and EPCAMR facebook page.
 Started a facebook page for the Huber Breaker Preservation Society and updated <u>www.huberbreaker.org</u>; added sampling information to <u>www.datashed.org</u>

Education and Outreach:

- Created a new higher resolution "Talking Timbers" graphic and added the Scranton Metropolitan Mine Pool Mapping Program and Anthracite Remediation Strategy with the Susquehanna River Basin Commission (SRBC) to the epcamr.org website. Updated the EPCAMR Quarterly Board Meetings page and posted upcoming meeting materials.
- Posted the ARIPPA 20th Anniversary Reclamation Award article, stating awardees and amounts, to epcamr.org.
- Decided on a data for the 2011 AMR Conference at Genetti Inn and Suites in Hazleton. The dates will be August 4-6 and the EPCAMR 15th Anniversary Dinner will be held on the first evening.
- Created EPCAMR Program Manager Monthly report for the month of September, gathered other staff reports, posted them to www.epcamr.org and sent to PA DEP 319 program.
- Created a Huber Breaker Preservation Society facebook site and linked the photo gallery to the main photo gallery on www.huberbreaker.org using WordPress. Learning WordPress, which is a very easy and expandable web Content Management Service (CMS) and, I think, will be easily teachable.
- Updated EPCAMR's business listing on 6 online "phone book" directories.
- Created a map of the Mine Pools in the Southern Wyoming Valley in preparation for taking
 Dallas High School students to the Dundee Wetlands to show them how the treatment system is
 treating AMD from the Askam Borehole (when pumping). Took them across Dundee Road to
 see the impact that the untreated discharge has on Nanticoke Creek. EPCAMR staff sampled
 water from the treatment system and in Nanticoke Creek for a comparison.
- "Cold Called" several watershed groups in the region that EPCAMR that were on a list and were
 possibly in jeopardy of loosing their non-profit status as new regulations had come out recently
 to "weed out" non-existent groups. Sadly some of these groups could not be contacted due to
 outdated contact information.
- Traveled to the Lackawanna River Corridor (LRCA) office to meet with Executive Director and sign checks for EPCAMR expenses.

- Competed a "Formation of AMD" booklet to go along with WPCAMR's educational video. It was
 formatted to fit in a DVD case for co-distribution. This 8 page booklet describes what coal is,
 why it was mined, how AMD is formed, what type of pollutants can be found in AMD, what
 effects AMD has on streams, the extent of stream damage geographically, briefly touches on
 how AMD is treated and then how people can get involved.
- EPCAMR staff participated in Chalk Fest at the Wilkes-Barre Riverfront Complex. Visitors of the display could create chalk colored with iron oxide harvested from AMD and then take a piece home or they could tie dye a t-shirt with the same iron oxide pigment.
- Sent a board meeting reminder with some draft agenda items to the EPCAMR board to prepare them for the upcoming meeting next month.
- E-mailed EPCAMR Region watershed groups with an offer that was passed on to us from Wilkes University. Wilkes students are interested in service hours to develop websites for nonprofit groups. I also included some tips to getting not only a good informational website, but one that is easily updateable by not-so-technical watershed group members.

Technical Assistance:

- Ordered a Dissolved Oxygen test kit and thermometer from HACH.com to replace equipment
 that was missing (either broken, lost or damaged). Added these and other test kits to assets
 inventory for better tracking abilities. From time to time EPCAMR lends this equipment to
 partnering organizations. Polled Anthracite Heritage Area VISTAS to make sure that equipment
 they borrowed was properly documented, and if not being used, was returned.
- Setup a GoDaddy.com account for EPCAMR to receive the orangewaternetwork.org domain from Elite Hosting Service. Setup orangewaternetwork.org as an add-on domain to epcamr.org.
- Added recent borehole sampling data from 9/22/10, 7/22/10 and 8/11/10 to the Northern Field sampling database. Designed and printed a Scranton Metropolitan Mine Pool borehole location and accessibility status map for use in the field.
- Worked on and presented a "Reading a Topographic Map" presentation for the Appalachian Coal Country Watershed Team (ACCWT) trainees at the fall training at Twin Falls State Park near Mullens, WV. The presentation focused on the basics uses of a topographic map: like reading location, fining elevations and judging land use by knowing to basic symbology. One goal of the presentation was to show what people used before GPS units. A majority of the VISTA trainees are just out of college, will be working with state Department of Environmental Protection (DEP) equivalents and had stated that GIS will be a major part of their work. A survey of the participants resulted in gained knowledge and a better understanding the use of topographic maps.
- Georeferenced maps from Bureau of Mines Bulletin 526 and a PA Bureau of Forests and Waters Report both detailing mine pools in the Southern Anthracite Coal Field. These maps were georeferenced before, but the coordinates were lost. These maps were requested by U.S. Geologic Survey staff in the PA Water Science Center by e-mail since the files were small enough. Also attempted to send the world files and auxiliary files, which contain georeferenced information, for the I-Series maps via e-mail. In theory, if the files were placed in the same directory and named the same as the large images files it should display properly georeferenced in ArcMap, but for some reason had to burn the image and files to a CD and send them via snail mail. Also georeferenced I-Series 809 and 529 1-3 maps and sent along.
- Conducted pre-assessment of 2 different places along Nanticoke Creek and the Askam Borehole Discharge to establish a baseline of water quality and quantity before the Earth Conservancy builds the Askam Borehole Treatment System. The 2 in-stream sampling locations were: one upstream point has a low flow of 73.6 gpm (mostly from the base flow being lost to the underground mines) but relatively good water quality with a pH of 6 and total iron levels at 3 mg/l and one downstream of the proposed treatment system but above the USGS gaging station and above the second (Loomis) discharge which had a flow of 973.7 gpm, total iron levels at 19.5 and a slightly higher pH at 7.5. The new Askam Borehole discharges directly

- into Nanticoke Creek at 896.8 gpm with total iron levels at 22.8 mg/l and a pH of 6.5. The Loomis Discharge was not extensively sampled but a pH of 4 was recorded.
- Received maps on a CD from PA DEP Bureau of Abandoned Mine Reclamation Wilkes-Barre
 Office staff that noted the location of boreholes in the northern anthracite field.
- Received a request for information about a discharge in the Mahanoy Creek Watershed that is on the surface but disappears back underground near a proposed ATV park in Northumberland County. Shamokin Creek Restoration Alliance members completed a site investigation, drew a site map and tested the water in several locations. From this map I was able to link it to several features through aerial photos (these features did not exist on the AMLIS inventory) and mine pool mapping layers. In summary, the discharge emanates from the North Franklin Colliery and discharges on the surface over a barrier pillar that is intact. The water then flows to a shaft or cropfall into the Bear Valley Colliery where it becomes part of the mine pool that may feed the Carbon Run Discharge (Site 42) or the Sterling Discharge, creating an inter basin transfer from the Mahanoy Creek Watershed to the Shamokin Creek Watershed. The flow is estimated to be less than 1,000 gpm and looks to be impacted with iron and mildly acidic (pH above 6). If intercepted at the surface, it may be redirected away from the infiltration point and sent to Zerbe Run (wetland treatment, which already exists, could be expanded to clear up the water and remove some more of the iron).
- Aided Executive Director with a clarification of the reimbursement sent to PA DEP Pottsville
 District Mining Office who have oversight on EPCAMR's Growing Greener Grant related to the
 Mine Pool Mapping Initiative.
- Added EPCAMR VISTA, Wren Dugan, as a user on the BPN.gov website to allow her to search through federal grant opportunities for EPCAMR.
- Updated the EPCAMR VISTA Time Sheet with new knowledge of time keeping policies related to her position from the ACCWT. Also updated Executive Director and Program Manager Time Sheets to lock certain sections to preserve formulas that automatically calculate.
- Organized several printed display maps in tubes based on their geographic location. EPCAMR staff typically make presentations to groups that focus on a certain geographic area. With this level of organization, all the maps for that area will be together and easily accessible.
- EPCAMR staff received several draft marketing posters from graphic arts students at Marywood University. Staff collectively critiqued these posters and sent back comments and high resolution images of our logo to the students since the ones they had were a little fuzzy. Over all, the quality of work and marketing messages were very good.
- EPCAMR staff collaborated to put together a proposal to the Earth Conservancy to monitor the Askam Borehole Pre and Post Installation of an AMD Treatment System. The proposal included monthly flow and chemistry monitoring of an upstream and downstream site as well as influent and effluent (once the treatment system is constructed). Met with Earth Conservancy staff to discuss what the long term and short term goals should be for the treatment system as required by the EPA.
- Aided EPCAMR VISTA with gathering paperwork necessary to submit a grant proposal to an Office Max charity.
- Added different flow gathering methods to the Flow Calculator excel sheet to help calculate flow for the head rod method, flows coming out of a pipe, and flows over standard weirs (box and v notch). Calculated Nanticoke Creek and Askam Borehole flows using this new spreadsheet. Posted this flow information with the chemistry to www.datashed.org.
- Found the EPCAMR staff evaluation paperwork and forwarded it off to EPCAMR Executive Director for use I the upcoming EPCAMR staff evaluations.