



Eastern PA Coalition for Abandoned Mine Reclamation

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May 2015 Progress Report

Highlights:

- Managed AMR Conference registration, publicity and website updates
- EPCAMR staff participated in an AMR Conference Call, a Watershed Forum, an EPCAMR staff meeting, conducted cleanup in Centralia and the **Lackawanna** RiverFest.
- Still assessing damages/recovering from server crash; setup a RAID Tower for the new X: drive
- EPCAMR staff took daily gauge readings and sampled flow/chemistry at **Askam** Boreholes as well as snapshot sampling at 2 treatment systems in **Schuylkill**, 2 in **Luzerne** and 1 in **Lackawanna** County for www.datashed.org
- Updated www.epcamr.org and www.treatminewater.com; Administered the EPCAMR Facebook and Google Apps for Nonprofits accounts.

Education and Outreach:

- EPCAMR staff participated in a Community Connections to Our Watershed Forum at Montage Mountain Ski Resort. The forum is organized by PA Department of Conservation and Natural Resources (DCNR) Bureau of State Parks staff from Lackawanna and Nescopeck State park to showcase student work of participating schools over the year.
- EPCAMR staff met together to coordinate efforts for the month.
- Recorded online transactions and replied to registrants of the AMR Conference several times over the month. Also had to fix the website for Internet Explorer (IE) 8 users so they could see a watered down version of the site. The current version of IE is 11, but it is being phased out in Windows 10. Unfortunately, state workers still have to use Internet Explorer 8 on their DEP computers. IE 8 was released in March 19, 2009 and there have been 3 updates since then.
- EPCAMR staff conducted a cleanup at Centralia. This time we concentrated on the northern section of town near the former borough building/fire station. Several volunteers showed up to help and we were able to fill a 40 cubic yard dumpster and collect hundreds of tires again. The town still needs more cleanups and we have collected donations from several sources to continue the effort. Several studies are being done to track the underground mine fire and one in particular is being conducted by a local high school flying drones with heat sensors. It seems as though the mine fire is constrained to only a few of the deeper veins (Buck Mountain, Seven Foot and Skidmore) on the south side of town and is burning west toward Mount Carmel and Marion. As the fire burns downslope and north toward the center of the synclinal basin it seems to be extinguished. The mine pool in the basin is close to 1000' in altitude due to the Centralia Tunnel. The Mammoth Vein seems to be unaffected as it is separated by the Skidmore vein by hundreds of feet of solid rock. There are rock tunnels that connect vein to vein horizontally, but it seems too far of a distance for fire to travel. I feel that the middle to north side of town was never in danger of the underground fire burning under it based on where the fire started.

- Contacted Tom Ogorsolack from Butler Enterprises about the Audenreid Treatment System and possibilities for EPCAMR to sample the site as a part of Stream Restoration Inc.'s Snapshot Sampling event for summer 2015. He passed me on to Peter Williamson from the Natural Lands Trust who was currently managing the 5,560 acre property from Humboldt to Lofty Road worth \$7.7 million (a little less than \$1,400/acre). He was very interested in information about the system, but was only acting like a broker to get the land from private hands to state forest lands. We would still need to get a gate key from the hunting club that has a gate blocking road access to the treatment system, meaning a trip back and forth to Shenandoah the day of the sampling event.
- Contacted Eagle Rock Resort to submit a proposal to sample the Oneida #1 Treatment System. Attempted to follow up a week later and heard nothing. Stopped by the office while we were in the area sampling other treatment systems. At that point we were told by the construction division staff that Eagle Rock sees no benefit to having the treatment system sampled. Contacted Schuylkill Conservation District staff to report. Wayne Lehman, SCD Watershed Specialist was able to get us in contact with Eagle Rock Resort's lawyer to whom we forwarded our sampling proposal. She responded to say the proposal was fine, but asked for a hold harmless agreement and for Eagle Rock Resort to be additionally insured on EPCAMR's general liability policy.
- EPCAMR staff participated in an AMR Conference Committee Call to report on registration progress and to continue to nail down details related to the conference.
- Completed the Program Manager report for March.
- Aided the Lackawanna River Corridor Association (LRCA) with their Canoe-a-thon as a part of their annual Lackawanna River Fest. Registered participants at Blakeley Borough Recreational Park, got them canoes/kayaks if they needed them and assigned them a heat. Once all the heats were launched, worked with LRCA staff to rescue a few boaters that had cracked their canoe and some that "dumped and jumped" leaving their boat behind because the water levels were too low making their float unenjoyable. While the canoe-a-thon seems like a great fundraising idea, it seems to be more of a hassle than it is worth and is very dependent high enough river levels to keep people happily floating along.

Technical Assistance:

- Sampled chemistry and flow at Askam Treatment System for Earth Conservancy four times, read the flow gauge 14 times and sampled flow two additional times in conjunction with two water residency time tests this month. The rhodamine and probe were supplied by the Susquehanna River Basin Commission and EPCAMR staff conducted the tests [EC].
- Going off the advice of a friend who manages servers and builds websites for a living, I ordered a 4 bay RAID Tower to install drives and transfer files from the malfunctioning Microsoft Storage Space. The plan is to setup this RAID Tower as a RAID 0 (with no resiliency) and purchase another RAID Tower to back up the first tower. RAID technology has been used and tested for decades, as opposed to Microsoft Storage Spaces which just came out in 2012. Although Microsoft Storage Space technology seems to be more cost effective for the home user, it seems to be less reliable for important data. Also just because data storage was setup as a mirror, that does not mean that you don't have to have a backup. Judging from blogs that I have been reading to tackle this issue, the Internet Technician (IT) community has not adopted and would not recommend the use of Microsoft Storage Space technology [MSI].
- Continued to scan the X Drive with ReclaiMe software. The scans take over 20 hours to complete and have been failing prematurely. After including the malfunctioning drive in these scans, I decided to outright remove it and allow the files to be rebuilt by the shadow copies as suggested by a forum on storage spaces. The scan completed and files started showing up, but several months of data was missing (particularly from February, March and April). Transferred 1.5TB of 5.7TB of TIFF files found to the travel drive. These (approximately 1,000) image files were missing their directory structure and/or name and could be the missing files. Placed them

in a folder called “orphaned files” for comparison to descriptions of maps that we recorded during those months and instructed EPCAMR Mine Mapping staff to review them [MSI].

- Sent 2 hard drives to the PA DEP California District Mining Office (DMO) to have them save the completed Wilkes-Barre Bureau of Abandoned Mine Reclamation (BAMR) map collection files and send them back to us. This is a precautionary measure in case the data from the EPCAMR server is unrecoverable [MSI].
- EPCAMR Mine Mapping Program staff began assessing missing data and what maps might need to be re-scanned and re-georeferenced [MSI].
- Updated WordPress in www.epcamr.org and sponsors page on www.treatminewater.com.
- EPCAMR staff spent a few hours at the Askam Treatment System measuring depths of the ponds and openings in the baffles via kayak to help determine the flow of water and current capacity of the pond now that it is about a year old. It seems as though about 1 foot of sludge has accumulated on the bottom of the pond and the baffles are in a down-up-down flow configuration [EC].
- Added drives to the RAID Towers after they arrived in the mail. Set them up to accept data and began transferring files from the old X Drive via ReclaiMe. The transfer took approximately 3 days. Opening files from the RAID Tower was slow. Troubleshoot this issue and in the process uninstalled/reinstalled Symantec Endpoint Protection Small Business Edition and downgraded a driver for the RAID Tower to find out that it was only folder permissions were hampering the transfer speed. Removed the restrictions and the drive began to function better [MSI].
- Took depth readings and deep water samples at several boreholes in the Lackawanna Valley with PA Tectonics. Used our Kemmerer Bottle to collect water samples at depths near the bottom of each borehole, which we found out, do not reach the bottom of the basin. Most of the boreholes only go a few hundred feet below the water level.
- EPCAMR staff conducted snapshot sampling for the Audenreid and Oneida #3 Treatment Systems. Unfortunately we could only complete 2 treatment systems this day because we had to travel to a lawyer’s office in Shenandoah to get a gate key for Blue Knob Rod and Gun Club gate then return the key when we were finished. We also stopped at Eagle Rock Resort in hopes that we could sample Oneida #1, but were denied permission to enter the premises.
- EPCAMR staff conducted a second day of snapshot sampling at Aylesworth, Askam and Espy Run Treatment Systems. Once completed I rushed to the Pittston Industrial Park to have FedEx “overnight” deliver the cooler to Mahaffey Labs.

[] - Denotes funding source where applicable.