March 2017 Progress Report

Education & Outreach

- Promoted the new launch of ARIPPA’s brand new website at [www.arippa.org](http://www.arippa.org) which includes changes to navigation, with dropdown menus for both mobile and desktop applications; The primary goal for the new website is to provide easy, public access to information regarding the coal refuse to energy industry and the ARIPPA organization; The site conveys to our members and the general public useful information about our industry, including our comprehensive environmental and economic impact report, detailed whitepaper on coal refuse, and before and after photos of the reclamation projects undertaken by our plant members

- Sent out the meeting notes and other documents from the Choose Clean Water Coalition to all the attendees from the AMD Sub-Group of the Choose Clean Water Coalition regional meeting hosted by EPCAMR and PennFuture after making editorial changes to the draft document with corrections provided by Ezra Thrush, PennFuture; Provided Ezra with the Widener University School of Law’s Environmental & Natural Resources Law Clinic Citizen’s Guide to Article I, Section 27 of the PA Constitution; Provided the notes to Paul Golias for an upcoming article in the Citizens Voice

- Provided some background information on AMD and reclamation projects of EPCAMR related to economic redevelopment of abandoned mines for an upcoming interview with James Cox, Blogger and Financial Advisor for Devon Financial Partners, Wayne, PA

- Directed Abbie Keefe-EPCAMR OSMRE/AmeriCorps Volunteer to pass along information to our EPCAMR Volunteers to see if they wanted to assist with tree seedling plantings on Avondale Hill on April 21st with PEC on PA DCNR Pinchot State Forest Lands

- Received a Movie Poster from Joe Sapienza II, Director of the Centralia: PA’s Lost Town Documentary advertising it’s release this Summer 2017; [http://www.centraliapa.org/screening-dates-centralia-pennsylvanias-lost-town/](http://www.centraliapa.org/screening-dates-centralia-pennsylvanias-lost-town/)

- Convened an EE Capacity Leadership Team conference call to discuss presentations and the agenda for the Workshop at the PAEE Conference; Provided reference powerpoint presentations to the Leadership Team for their review; Provided the Leadership Team with the PA State Consortia Model Project Summary
**Education & Outreach**

- Travelled to State College, PA to make a presentation before several faculty and The Environmental Resource Management Society students at the Forest Resources Building on EPCAMR, AMD, Internships, and Volunteer Opportunities across the Region; **20** students and **2** faculty attended

- Signed on to several letters to Congress that will be submitted by the Choose Clean Water Coalition on key funding requests for the Chesapeake Bay watershed and EPA Programs for clean water; EPCAMR has contacted our regional legislators about the EPA funds for Non-Point Source Pollution grants to the States as well since funding for EPCAMR comes from the Section 319 Program funds Clean Water Act

- Worked with Abbie to create an Volunteer Action template and some infographics related to AMD and AML on Growing Greener III for the March EPCAMR Newsletter that would encourage them to contact their legislators to support clean water and the work of EPCAMR through the funds from the Federal Programs and State Programs that are often used to leverage other funding sources to complete reclamation and watershed restoration projects throughout the Coal Region; [http://www.legis.state.pa.us/cfdocs/legis/home/findyourlegislator/](http://www.legis.state.pa.us/cfdocs/legis/home/findyourlegislator/)

- Suggested to Amy Sovocool, Vice-President of Conservation Legacy that the quarterly reports that our AmeriCorps are turning in should be marketed as successes to State legislators and put into a format that would allow for them to be easily read and highlight the work that they are doing; The numbers tell stories and can be used as infographics or marketing pieces for both AmeriCorps, EPCAMR, and the other States; Asked her if other States with AmeriCorps were writing to their legislators in support of the OSMRE/AmeriCorps Program like EPCAMR has been doing

- Scott Herring, Coordinator for the Anthracite 250TH Anniversary in 2018 provided EPCAMR with materials to help distribute and promote around the region to celebrate the history, heritage, and identity that makes around coalfields and the people who live within it unique

- The City of Wilkes-Barre’s Special Events Coordinator, Patty Hughes, requested that EPCAMR participate in the annual Cherry Blossom Festival in Kirby Park on April 22 and 23rd to conduct an AMD Tie Dye Workshop; The City of Wilkes-Barre was able to secure a donation for **7** dozen t-shirts to provide to families and children for free as a part of the Festival if EPCAMR could staff the tent and setup an Exhibit and Tie Dye Station; EPCAMR agreed to assist and set up

- Submitted the final new EPCAMR Brochure targeting outreach to Dauphin and Tioga Counties, and receipts for paper, ink, cardstock, funded by Dominion/Western PA Conservancy through their mini-grant program that allowed EPCAMR to conduct more outreach and awareness of our work across the region to those two targeted counties that are in the Dominion service area

- Bear Creek Charter School, Luzerne County, requested that EPCAMR assist with an education event and program along 10 Mile Run, behind their school on September 15, 2017 and wanted to get us on their agenda; EPCAMR committed to putting together a program as we have done for many years

- Set up EPCAMR Exhibit at the Keystone College Creekwalkers Expo in LaPlume, PA on March 25th
Education & Outreach

- EPCAMR presented to Diane Madl’s PA DCNR “Community Connections to Our Watershed Program” at the EPCAMR Office to around 60 students from Luzerne County schools on AMD before taking them on a tour of pollution sources in the Wyoming Valley and the Askam AMD Treatment site owned and operated by Earth Conservancy; EC also presented at the educational program; Created an activity for the students on how to determine the type of AMD Treatment System is needed based on specific chemistry and flow of several types of AMD discharges used from the St. Vincent College Journey of AMD Curriculum

- John Welsh’s “Scorched: PA Coal Mine Fires” short documentary has been selected for some film festivals and has been submitted to many more across the country; Features EPCAMR and John has recently written a blog about it; https://www.johnwelshphotography.com/scorched-pennsylvanias-coal-mine-fires-documentary/

- EPCAMR Executive Director prepared a $25,000 PPL Grant with Winnie Black-Center for Schools and Communities Project Accelerate Coordinator, entitled, “What’s In Your Watershed?: Reconnecting Youth from Urban Streets to Valley Streams” in partnership with the PA After School Youth Development Network (PSAYDN); Funding will be utilized to support the EPCAMR Staff dedicating the necessary time, transportation for buses, and funding for equipment and and resources to teach underserved after school program youth from the John B. McGlynn Learning Center, located in the Wilkes-Barre Boulevard Townhomes, Wilkes-Barre, and the Mineral Springs Learning Center, located in the Mineral Springs Housing Complex, Plains Township, PA about what is in their watershed, in terms of the locations of streams within the City and Township and the impacts the surrounding communities and environment are having on them

Approximately 50 youth will be exposed to outdoor environmental education learning experiences, a watershed tour of the local trout streams, mining impacted streams, and urban stormwater impacts, the creation of art from abandoned mine drainage (AMD), a focused effort to improve their local environmental literacy and sense of place within their communities, STEM-centered outdoor field stations on bugs (macros), water sampling, fish identification, and an opportunity to present a collection of their work and shared experiences at the 2018 PA Abandoned Mine Reclamation Conference via a wireless technology webinar hosted by our partner PSAYDN, who would like to follow the efforts of the students and their activities and conduct a proper evaluation of EPCAMR's Program implementation and to evaluate their environmental literacy and understanding of their place and environmental responsibility in the watershed, as well as their enthusiasm to become future environmental stewards within their community; The Program will also offer professional development training for the adult volunteers who work at the John B. McGlynn Learning Center and the Mineral Springs Housing Complex

- Worked on the draft press release on the anticipated announcement of the RECLAIM Act; Provided Jan Jarrett, with a quote on behalf of EPCAMR

- Reviewed Abbie’s March 2017 EPCAMR Newsletter that went out to our volunteers
Technical Assistance

- **Provided Leigh Ann T. Henry**, EPCAMR Board Member with several books on the Agnes Flood for her to review the maps that might be contained within several of them that show the extent of the flooding throughout the Wyoming Valley; The old FEMA FIRM flood maps were based off of Agnes and then updated; [ftp://www.pasda.psu.edu/pub/pasda/fema/FEMA_Historic_Flood_Map_data/Luzerne/](ftp://www.pasda.psu.edu/pub/pasda/fema/FEMA_Historic_Flood_Map_data/Luzerne/)

- **Dan Summa**, Keystone Pure Water Tech, Inc. informed EPCAMR that his company received a small AMD grant for the Scranton LaceWorks AMD Geothermal Scranton-Metro Mine Pool Project and there was an inclusion for an educational component in the grant where EPCAMR would be able to help them create materials on the effort; Requested that we look at two parcels of land in Lackawanna County to research the underground workings and information related to the coal-bearing strata and mine pool characteristics in the area; Requested that he provide us with some coordinates so that we can further investigate the area in question

- **Andrea Nerozzi**, Professor at Wyoming Seminary Upper School requested that EPCAMR obtain a few samples of the filamentous algae, if present from the Askam AMD discharge and the Solomon Creek AMD Boreholes discharge in Hanover Township at some point this Spring; Andrea is also an artist who is going to work with our iron oxide pigment to create a piece of art for our Silent Auction at the PA AMR Conference in June 2017

- Reviewed the **Title IV and Title V Data ASTM GIS Standards for Coal Mining** and provided comments back to **Arielle Avishai**, OSMRE

- Informed Haoling Wu, University of Michigan that EPCAMR will soon be collecting the AMD from the Solomon Creek discharge and shipping it once the 30 gallon containers come in from Amazon and a delivery truck pickup/shipment carrier is selected and paid for; EPCAMR is excited about the opportunity to become involved in the **Bendable Concrete Research Project** in partnership with the University of Michigan by supplying the AMD for the lab analyses; **Mike** researched the shipping carriers and set up a pickup date once the other remaining 30 gallon containers were delivered

- Provided **Daniel Snowden**, PA DEP Bureau of Mining Programs, with links to resources on illegal dumping on abandoned mine lands throughout PA upon his request; [http://pecpa.org/program/community-illegal-dumpsite-clean-up-program/](http://pecpa.org/program/community-illegal-dumpsite-clean-up-program/) (PEC’s Program) and [http://www.keeppabeautiful.org/keep-pennsylvania-beautiful-illegal-dump-surveys/](http://www.keeppabeautiful.org/keep-pennsylvania-beautiful-illegal-dump-surveys/) (Keep PA Beautiful Program); EPCAMR is a partner with both the KPB and PEC on many of these cleanup efforts

- Provided **Jessica Wykoff**, OSMRE/VISTA for the Greater Hazleton Area Civic Partnership an EPCAMR Letter of Support for the 2017 DCNR C2P2 grant that will fund the extension of the Greater Hazleton Rails to Trails into Eckley Miners’ Village

- Registered for an Urban Environmental Education online course through Cornell University to discuss EPCAMR’s work to environmental education professional across the country and the world through the course
Technical Assistance

- Conducted AMD field monitoring and flow monitoring at several stations, including the Jeddo Mine Tunnel, in Drums, PA, at the request of the **Friends of the Nescopeck Creek**, in the Conyngham and Sugarloaf Valleys, outside of Hazleton, PA with two of their monitors, **Tim Ference & Gary Leander**

- Informed **Emily Krafjack, Mehoopany Creek Watershed Association**, that we could print maps for watershed associations at discounted rates if they were member organizations to EPCAMR; She passed along their monthly newsletter to the EPCAMR Staff

- **ARIPPA** announced that it will be providing EPCAMR and WPCAMR another **$5000** per organization to administer our mini-grant program within our respective regions to support watershed groups in their efforts to reclaim abandoned mine lands and restore AMD impacted watersheds; EPCAMR will make an announcement of the grant program once the application process is revised in May 2017

- Provided **Christopher Lyche**, Geoscientist, MS from University of PA, with documents on geothermal use of underground mine pools; [http://powersource.post-gazette.com/powersource/policy-powersource/2014/09/23/Finding-value-in-mine-water/stories/201409160015](http://powersource.post-gazette.com/powersource/policy-powersource/2014/09/23/Finding-value-in-mine-water/stories/201409160015) and [http://www.wpcamr.org/organization/meetings/2008Aug/MineWater25_1-14(Watzlaf-Ackman).pdf](http://www.wpcamr.org/organization/meetings/2008Aug/MineWater25_1-14(Watzlaf-Ackman).pdf); He is interested in a capstone project, however, is in need of funding some pilot work in the region; EPCAMR suggested some partnerships and funding resources and that we would be interested in partnering should he research the sources and decide which direction he might like to go with his project; He’s meeting with his academic advisor and will get back to EPCAMR


Project Coordination

- **Mocanaqua Tunnel AMD Mine Pool Consumptive Use Feasibility Study** update was provided to **Brad Domitrovitsch**, AES, LLC for him to forward along to **Greg Czarnecki-PA DCNR** and to **Tom Clark** and **Pierre MaCoy** at SRBC; **Gavin and Rachel** have geo-referenced all coal vein maps from the OSM Folio Grids for the Bottom Red Ash, Top Red Ash, Red Ash, Top Baltimore, Baltimore, Top Ross, and Bottom Ross; The Bottom Red Ash being the most extensively mined workings in the southern tip of the northern coalfields near Mocanaqua, PA; This vein has taken the longest because there are hundreds of elevations points that were taken and digitized as well as entrances, rock tunnels, slopes, gangways, etc. that could offer insight into connections that could hydrogeologically connected to the multi-colliery hydrologic units that EPCAMR is developing for the 3D Model;

  The digitizing remains to be done for the other veins mentioned above, excluding the Bottom Red Ash; Once all of the veins are digitized, it will allow EPCAMR to begin the development of the 3D Model of the mine pool (s) that are within the project area; Once the pools have been identified and enough elevation points are established, we will then work with SRBC to identify the most suitable place (s) to drill boreholes of a diameter that is yet to determined to be able to obtain readings from within the mine pool (s) for both water quality and static and dynamic elevation of the mine pool (s) that will be monitored through the establishment and installation of simple pressure transducers; We will also be setting up with SRBC's assistance of data loggers and a few stilling wells at several surface stripping pits that are water-filled and have noticeable fluctuating elevations within them due to visible water lines, debris lines, and leaf litter lines on the bottom rock of the stripping pits that can be seen
Project Coordination

12 OSM Folio Grids were used so far on the surface to map the surface features for the project. Within those 12 Folio Grids are found each of the various coal vein maps and geologic cross-section maps that were also geo-referenced and are now being digitized. With the 7 coal veins being mapped, geo-referenced, and now digitized, an estimated 84 maps have been reviewed, researched, and will be included within the larger data set that will be completed once the 3D Model is built by EPCAMR in Earth Vision; Drilling will not take place until we have made a determination of the most suitable locations that we can get into the mine pool(s), once the 3D Model is constructed and discussed and evaluated by SRBC, EPCAMR, and AES.

- Sampled the *Plainsville AMD Borehole* with *Gavin* and *Mike* for chemistry and flow

- *Jessica Wykoff*, OSMRE/VISTA for the Greater Hazleton Area Civic Partnership, requested that EPCAMR keep them in mind for additional Waterboxxes for the Spring of 2017 since 8 of theirs cracked last year as a part of the *Phase III Waterboxx Research Project*; Made an official request from *Dr. Cole* for an advancement of $4750 to plan for and purchase needed seedlings, supplies, and materials, along with an allocation of Staff time to begin implementing the 2017-2018 distribution of the Waterboxxes across the EPCAMR Region; Informed *Dr. Cole* that we would let him know if we needed any additional Waterboxxes, should our demand exceed our supply with our expected Spring Announcement in late April, early May 2017

- *Gabby* provided *Gavin* some background research on the Abrahams Creek from Wikipedia (https://en.wikipedia.org/wiki/Abrahams_Creek) and PennPilot (http://www.pennpilot.psu.edu/) that contained a lot of great resources and reports on the watershed that we can use and reference in the development of the *Abrahams Creek Coldwater Conservation Plan*; Followed up with *Mayor Chris Concert*, Swoyersville Borough to see if we could utilize their Borough Building for the first public informational meeting and inquired whether or not they had internet or wifi, which is a must have for us to properly facilitate the meeting and review aerial photography of the watershed to take notes; Turns out that they don’t have internet or wifi publicly available, therefore, EPCAMR decided to request the use of the Forty-Fort Borough Building instead, another municipality and partner within the watershed

- **Solomon Creek Dam Removal and Trout Habitat Restoration**

- Received a Letter of Support from *Scott Brady*, President, of the *Stanley Cooper Chapter of Trout Unlimited*, for our mini-grant application for $500 to PA Council of Trout Unlimited for resources and supplies to use at our release day event and a few chemical testing supplies for our *Trout in the Classroom Project*; Informed *Amidae Daniel*, TIC Coordinator that our tank ended up getting “ich” killing all but 5 of our trout fingerlings; She got permission to ship us an additional 40+ trout

- The *Nanticoke Conservation Club* requested $500 in grant funds to support paying for two dumpsters and cleanup supplies for an upcoming April 29th *IP Illegal Dump Site Cleanup* in Newport Township and the City of Nanticoke along the Industrial Park (IP) Road; EPCAMR approved of the request and will present it at an upcoming monthly meeting and is a partner along with the Newport Township Crimewatch Organization, City of Nanticoke, Newport Township Police and a few other community organizations
Community Volunteer Coordination

- **Jessica Britten**, student at King’s College, Wilkes-Barre, PA signed up to become an EPCAMR Volunteer

- **Molly McCarthy** and **Joshua Brown**, Wilkes-Barre, PA signed up to become an EPCAMR Volunteer for cleanups

- **Shannon Healey**, Scranton, PA signed up to become an EPCAMR Volunteer

- **Matt Osmulski**, Shickshinny, PA and student at Bloomsburg University, signed up to become an EPCAMR Volunteer

- **Sean Bieski**, Forty-Fort, PA signed up to become an EPCAMR Volunteer

- **Spencer Zuraski**, Downingtown, PA and Mansfield University student, sought information on internships from EPCAMR; Informed him of the necessary steps to take to apply for an EPCAMR Internship; He submitted his cover letter and resume and scheduled for an interview in late April 2017

- **Raymond McConnel**, a photography student from County College of Morris, in Morris County, NJ is interested in photographing AMD for his project and is willing to donate digital images of his to EPCAMR for our use to increase our outreach and awareness of our work

- Followed up with **Betty Rozelle**, Assistant Director of The Gerard R. Roche Center for Career Development at the University of Scranton, who passed along information to their Volunteer Office and Sustainability Club about EPCAMR’s volunteer opportunities for students and for them to seek possible internships; The students are vetted like everyone else applying for a job and internship, whether it be a paid position or unpaid; They must go through an interview selection process by the Executive Director before being considered for an internship; It is our hope that they will have done their homework on our organization to see what our mission and goals are as a regional non-profit and then will be well-prepared for an interview with EPCAMR; They are encouraged to send a cover letter and resume

- **Brianna Bonshock**, Paxinos, PA and Penn-State student in Environmental Resource Management, signed up to become an EPCAMR Volunteer; Forwarded her information to **John Welsh**, EPCAMR Board member since she is familiar with the mine fire on Glen Burnie; [https://www.facebook.com/minefires/](https://www.facebook.com/minefires/)

Conferences, Training, Tours, & Workshops

- Participated in a conference call with members of the PA AMR Conference Planning Committee to continue to flush out details for the upcoming **June 2017 19th Annual Conference** at the Best Western Plus, Genetti’s Hotel, Wilkes-Barre, PA; [www.treatminewater.com](http://www.treatminewater.com); Contacted **Lisa VanHouten** to see if Hy-Tech Mushrooms, LLC was interested in becoming an Exhibitor or Sponsor of the Conference and she confirmed that her company would exhibit; ARIPPA confirmed that they will be a Silver Sponsor and Exhibitor for the Conference; Followed up with **Mike Dziak** and **Elizabeth Hughes** from Earth Conservancy to see if they were still going to submit an abstract for the PA AMR Conference; **Elizabeth** confirmed that they were going to make a presentation and submitted the abstract that was forwarded to WPCAMR; Finalized the menu for food for the Conference
Conferences, Training, Tours, & Workshops

- EPCAMR will be incorporating the Miner’s Tribute area into the walking tour of the Downtown as a part of the Conference; [http://citizensvoice.com/arts-living/a-miners-tribute-1.2165713](http://citizensvoice.com/arts-living/a-miners-tribute-1.2165713); Tony Brooks-Wilkes-Barre City Councilman, provided EPCAMR with his walking tour route around the City; Requested and was granted permission from Pagnotti Enterprises to access the Harry E. Reclamation Banks site in Swoyersville to discuss future reclamation of the site on the AMD/AML Tour; Benny Brewing Company provided EPCAMR with their logo; Secured a new pottery artist for the Mayfly Award—Mark Chuck, who worked with EPCAMR several years ago on an AMD Art Exhibit in Wilkes-Barre, PA ([https://www.markchuck.com](https://www.markchuck.com)); $5000 grant was awarded by the PA DEP to support the Conference; Liz Rosser-PSU Master Watershed Stewardship Program requested a non-profit Exhibitor space at the Conference; Hank Zelinski, agreed to speak on the success of the Loomis Bank Reclamation Project on behalf of ARIPPA

- Participated in a 2 hr Webinar from Stroud Water Research Center on “*Model My Watershed: A Tool for Water Resource Management*” that is a part of the WikiWatershed ToolKit

- EPCAMR received a Thank You Letter from the PA Anthracite Heritage Museum and Scranton Iron Furnace’s Historic Site Administrator—Dr. Bode J. Morin, for becoming a co-sponsor of *the Anthracite Heritage Conference* in May 2017

EPCAMR Program Administration

- Reconciled EPCAMR’s Checking Accounts and PA Invest Accounts; Completed bi-weekly Payroll Reporting and submitted to RJ Zagrapan and filed reports; Balanced EPCAMR Checking Register; Informed RJ Zagrapan that EPCAMR will be going with OneSource for Payroll in April 2017 for Direct Deposit services following a Board decision at our February Mtg.; Met with Leanne Niedzwicki, Payroll Department-OneSource and provided her with administrative information on EPCAMR and Staff for future reports, including Residency Certifications for all Staff, EFTPS, and EPCAMR’s Non-Profit Letter of Determination; Received signed contract agreement from OneSource on March 9, 2017 that will take effect on April 1, 2017

- Reviewed minutes & agenda for the PAEE Board Mtg. for March 12th; Attended PAEE Board Mtg.

- Met up with Tim Ference, EPCAMR Board Member, in Dorrance, PA to sign checks

- Discussed with Bernie McGurl, EPCAMR President, coming up with a social media decorum policy or note at an upcoming quarterly meeting for all Board Members that would like to comment on our Facebook site when we post articles, events, programs, and national news items related to AMD, AML, watershed restoration, and abandoned mine reclamation or coal mining related topics

- Held our monthly EPCAMR Staff Meeting to review projects and coordinate regional efforts, grants, reimbursements, and to discuss new projects and timelines for the Spring 2017

- Provided Friends of the Cheat, West Virginia with a large order of Iron Oxide for their Cheat River Festival

- Completed Abbie and Rachel’s Quarterly Evaluations and submitting them to Conservation Legacy