

EPCAMR 30-Year Historical Timeline (1996 – 2026)

Bobby Hughes' Speech

A Chronology of Major Projects, Programs, and Leadership throughout NE and NC PA's Coal Regions focused on Abandoned Mine Reclamation, AMD Watershed Restoration, and Environmental Justice/ Advocacy and Education in our Coalfield Communities

1995 - 1996: Foundations and Incorporation

Before I get into my speech, which has been a challenge for me to write last evening, trying to summarize 30 years into 15 minutes is nearly an impossible task for me, for those who know me well and my writing style, I'd like for us all to pause for a minute and have a moment of silence for EPCAMR Board of Trustees that have passed away.

Welcome everyone and THANK YOU for attending this monumental and pivotal celebration of EPCAMR on behalf of myself, our Board, and our Staff. Let me take you back for a moment in time since many of our current Staff and Board might not have heard some of the early history on our formation and mission, goals, and objectives that we set forth.

- While working with the Pennsylvania Environmental Council's NE Office as the Assistant Director in 1995, I was challenged to coordinate the first State-wide Conference on Abandoned Mine Reclamation in 1996, after returning home to the Wyoming Valley just having graduated early from Penn-State at the age of 20, due to having completed 2 internships for enough credits that added up to an entire semester. I had previously worked for the PA DEP Bureau of Abandoned Mine Reclamation in 1993 and later from 1994-1995 with the PA DEP Hawk Run District Mining Office (DMO) in the Phillipsburg Area. I began by coordinating regional gatherings as a volunteer Recording Secretary of interested partners who would go on to become the charter member organizations in the region to formalize EPCAMR.
- **Late 1995 - Early 1996:** Coalition efforts and discussions begin across 16 county

conservation districts in Eastern Pennsylvania to address widespread legacy abandoned mine land (AML) and abandoned mine drainage (AMD) in partnership with the Pocono NE Resource Conservation & Development Council, ARIPPA, PA Anthracite Section-Society of Mining Engineers, PA Anthracite Council, Economic Development Council of NEPA (now the NEPA Alliance), several coal company leaders, Office of Surface Mining Reclamation & Enforcement (OSMRE), PA Department of Environmental Protection's Section 319 Non-Point Source Program, PA Department of Environmental Protection's Pottsville District Mining Office (DMO), PA Department of Environmental Protection's Bureau of Abandoned Mine Reclamation (BAMR), PEC NE Office, and community watershed leaders like Ed Wytovich, Cheryl Brobst, Bernie McGurl, Paul Lohin, and so many more community-minded conservationists that are here in the audience this evening. Many would go on to become Executive Officers in a number of our regional watershed associations to this day and some still remain on our Board as active members.

- In June of 1996, we were able to bring nearly **200** attendees over a **2-day Conference** together at Wilkes University in the Stark Learning Center Building, which looks very different today. WPCAMR, our sister organization in the Bituminous Coalfields joined us to help us get our feet off the ground as a fledgling Coalition. A Watershed Field Tour was given around the Wyoming Valley. We had all of the political leaders come and speak from Congressman Paul Kanjorski to Robert Uram-Director of the US Department of Interior's Office of Surface Mining Reclamation & Enforcement (OSMRE).

On the second day of the Conference we officially chartered EPCAMR and we were off to the races to ensure that funding would begin to start being leveraged and flow into the Anthracite and Northern Bituminous Coalfield Communities.

- **1996:** EPCAMR officially established its core mission, goals, and structural framework under the foundational leadership of its first Executive Board with myself acting as the Recording Secretary while working for PEC NE Office

following the Conference at Wilkes U.; I wrote a PA DEP Section 319 Non-Point Source grant to fund a Regional Coordinator position for a year to get the Coalition up and running regionally and it was awarded and sponsored by Craig Morgan, District Manager for the Schuylkill Conservation District. Interviews were held and I was chosen as EPCAMR's first Regional Coordinator in May of 1997 at the young age of 22, with our Office located in Pottsville, PA. My wife Tara and I moved to St. Clair with our daughter, Hayley, who was 2 at the time. Right away, EPCAMR started working with community leaders who had an interest in becoming formal watershed organizations with a 501 (c)(3) status to be eligible for a variety of funding sources that were available for abandoned mine reclamation and AMD assessment, monitoring, and restoration efforts around the region. Let's just say I had put the miles on my vehicle traveling around 16 counties to evening meetings from Lykens in Dauphin County, all the way north to Blossburg in Tioga County. I'm not entirely sure if I was missed by my wife or not during those days. It could have been a blessing and a curse of what was to come over the next few decades.

1997 - 2002: Early Infrastructure and Watershed Mobilization

- **1997:** We achieved our official non-profit status and began having our first monthly and quarterly Board Reporting structure to track regional environmental milestones and activities across the region. We completed a Rivers Conservation Plan for the Wiconisco Creek funded by the PA Department of Conservation and Natural Resources (DCNR) in partnership with the Dauphin County Conservation District, Dauphin County Planning Commission, Wiconisco Cree Restoration Alliance, Schuylkill Conservation District, and the SRBC
- **1997:** We launched the **Regional Watershed Support Initiative (RWSI)** supported by a **\$200,000** mini-grant program from the Pennsylvania Department of Environmental Protection (PA DEP) based after the West Virginia Stream Partners Program to support early watershed group organizational capacity efforts, outreach, projects, educational program, and monitoring

- **1998:** Publication of EPCAMR's first major watershed assessment in partnership with the Bowman's Creek Watershed Association that we assisted with forming, the Wyoming County, and Luzerne Conservation Districts was completed focusing heavily on **Bowman's Creek**, that was impacted by acid deposition from coal fired plants in Western PA and the Ohio River Valley, establishing a technical assessment blueprint for the region, funded by the PATU Coldwater Conservation Heritage Planning Grant Program.
- **2002:** We hired Mike Hewitt, full-time to become our Program Manager after he had served two years with us through the OSMRE's Summer Watershed Internship Program, which went on to become the Appalachian Coal Country Watershed Team, then the OSMRE/AmeriCorps VISTA Team. Today, we still have OSMRE VISTAs volunteering with us through a partnership with Conservation Legacy and Stewards Individual Placement Program (SIPP), thanks to the leadership of April Elkins Badtke, who has been a champion of EPCAMR's since she was a VISTA, under Dr. Allen Comp, who used to work for the OSMRE. We can't thank her enough for her continued support of EPCAMR and ensuring that we receive support from the OSMRE AmeriCorps VISTA Program
- Over a **5 year** run, the RWSI initiative successfully completed **75** community-led watershed projects, leveraging over **\$2 million in matching funds** for AMD and AML projects in our region

2003 - 2012: The Digital GIS Mine Mapping Revolution, Advocating for Increased Reclamation by Co-Gen Plants and Continued Regional Community Watershed Support

- **2004:** We began to implement the use of advanced geographic information systems (GIS) to map regional mine hazards. EPCAMR begins advocating heavily for the reclamation of massive coal refuse (culm) piles across the Anthracite Region and remediation and assessment of AMD discharges throughout the region and developed the Reclaimed Abandoned Mine Land Inventory System (RAMLIS) Community GIS Tool created by Mike that we still use today and is available online.

It's a powerful planning tool that helped watershed groups prioritize problem areas and features on the landscape in their watersheds that they wanted to seek funding for to reclaim and or remediate sites

- **2008:** We initiated conversations with the Appalachian Regional Independent Power Producers Association (ARIPPA) to target prominent hazardous refuse sites for reclamation, channeling waste coal to Co-Generation energy plants
- **2010:** EPCAMR launches its pioneering **3D Mine Pool Mapping Project**. Staff begin scanning and digitizing over **20,000 historic, paper coal maps** using EarthVision, Global Mapper, R2V, and eventually ESRI's ArcGIS Pro software to map the vast, interconnected underground mine pools for the first time since the 1950s. This effort is being funded by the PA DEP's Mine Subsidence Insurance Program that Shawnese, Maria, Steve, Mike, and myself are partially supported by financially. Shawnese has been scanning private collections by the thousands it seems in just the last few months including a large Industrial Archives set and a Susquehanna Coal Company collection. Just check the Mine Map Atlas to see the sheer volume of maps and work that we've completed
- **2012:** We reached a milestone of supporting over **45 distinct local watershed groups**, providing technical expertise, water chemistry testing equipment, and organizational backing and we produced a Mine Water Resources Report that provide a regional update on AMD, mine pools, and recommendations on how to to create more localized mine pool mapping and alternative clean energy projects

2013 - 2020: "Yellow Boy" Pigments Recycled and STEM Education

- **2014:** To address "Yellow Boy" (iron oxide sediment), Mike and I designed a net zero solar kiln, powered by a 45-watt solar panel, a recycled computer fan, a motor cycle battery, T-111, and some old storm windows from my house and deployed an award-winning, mobile, **solar-powered kiln** to dry harvested iron oxide from treatment systems and some AMD discharges into 3, commercial-grade art pigments that we used in our educational programs and STEM Camps

- **2015:** We launched our formal **AMD Tie-Dye and STEM Education Curriculum**. EPCAMR began hosting hands-on workshops in regional school districts, turning mine runoff into an interactive educational art mediums.
- Over a 10 year period, we conducted numerous cleanups in Centralia, PA to remove the historic illegally dumped trash piles, tires, and discarded spray paint cans all over the town and on the Graffiti Highway; It culminated in an Appalachian Tree Planting Project at the height of the pandemic that was coordinated by Laura Rinehimer with help from Shawnese in laying out the plots for **150** dwarf apple trees that were planted in our Growboxxes from Inquiring Systems Incorporated with over **150** volunteers that showed up to participate
- **2020:** EPCAMR adapted community outreach programs during global restrictions, establishing a robust online storefront to sell recycled iron oxide pigments, pottery glazes, and apparel to directly fund stream, stripping pits, and roadside cleanups. We also developed 3D Visualization programs using Meta Quest headsets to set up VR environments related to AMD. We also developed an educational landing page thanks to Laura called our Streamside Hub and I saw my vision of two trout puppets (Brooky and Rainbow) come to fruition to be used in our educational programs with youth and in our YouTube videos

2021 - 2025: Strategic Alliances and Expanding Fields

- **2021:** We formalized alignment with **Keep Pennsylvania Beautiful**, expanding the scope of volunteer-led cleanups targeting illegal dumping in regional forests, abandoned mine lands, gamelands, and local waterways impacted by AMD. Maria is leading up our coordination with KPB today since we are now a formal Affiliate of theirs.
- **2023:** We scaled up our borehole and water quality monitoring programs. Regular tracking at major discharge zones, including the **Old Forge Borehole**, provided critical data to municipal and state conservation agencies

- **2024:** We initiated an additional Coldwater Conservation Plan for the Shickshinny Creek watershed and several tributaries in the former Stackhouse Colliery and on State Game Lands 260, at the southern tip of the Northern Coalfields pairing historical data logging with modern water-quality testing to mitigate AMD threats; We've completed 7 other CHPs over the years setting the stage for future implementation projects for our partners, municipalities, and ourselves to be able to pursue future funding opportunities
- **2025:** We introduced a custom **Solar Site Suitability GIS Tool** created by Steve Cornia with the help of Staff to begin mapping abandoned mine lands for potential renewable solar field development; We also completed the surface reclamation of the **Harry E. Breaker Waste Coal Site** in Swoyersville in a Phase I effort, in partnership with Olympus Power, Northampton Generating Co, and Keystone Reclamation Fuels Management, with Hank Zielinski, Sean Lane, and Matt Cochran, leading the way on the on-site reclamation and fuels management side of of the project. **500,000 tons** of silt and refuse was successfully cleared, hauled away to Co-Gen Plants, used to generate electricity, and the local land was transformed from a public health and safety hazard into a modern, **7.5 acre** community green space donated by Pagnotti Enterprises to Swoyersville Borough for future recreational opportunities
- Let's not forget our partnership with Coal Creative and Groove Brewing, which started out as an April Fool's joke. A beer made with coal dust and AMD? Go on!! That's what Gerard Durling said! You'll have to watch the two videos on their website for a good laugh. But he wasn't joking! You've seen the Coal Dust Blond Stout that was on tap and in the can with EPCAMR logo on it. We have an EPCAMR beer! How cool is that? Be sure to purchase some and take it home with you following the event.

2026: The 30th Anniversary and The Next Frontier

- **Present Day:** Today, we are focusing on building our organizational capacity to provide additional and continued support to our watershed, professional consultants, and conservation district community. We are looking forward to:
 - Evaluating underground mine pool water for regional **geothermal heating** and cooling systems along with completing studies on combining AMD discharges through mine pools to consider combined treatment
 - Investigating AMD for **rare earth element recovery** to support the clean energy economy
 - Mapping the underground mines in 3D to determining volumetrics of available mine pool water and or storage capacity that might be able to be utilized in the future
 - We have a podcast series that is going into it's second year, called the *PA Abandoned Mine Reclamation Chronicles* with WPCAMR, on the first Friday of every month at Noon on YouTube or Facebook Live. We interview conservation heroes, volunteers, and, corporate community leaders like all of you to get to know who the real people are doing the dirty work and hard work behind the scenes to reclaim our abandoned mine lands and restore or legacy mining impacted rivers and streams.
 - Continuing to co-chair and coordinate the State-wide Conference on Abandoned Mine Reclamation in it's 28th year
 - Since 2010, ARIPPA has collectively donated **\$108,000** to various deserving volunteer watershed and conservation groups actively battling Pennsylvania's mine legacy problem through EPCAMR and WPCAMR's Mini-Grant Program and will be continuing that program.
 - This year we are rolling out *AML-Connect.org* that is a platform created by Frank Sindaco and funded by the Foundation for PA Watersheds to bring our PA Abandoned Mine Reclamation Community together in one online space where they can learn about all things AMD/AML. Get your account!

- **2026:** Finally, I know. Are we near the end? Well, here we are. Small, but mighty, as Mark likes to say! Committed. Passionate about our work, and friends to any and all coalfield community partners and volunteers who share our same mission and goals. I believe that we are some of the leading experts in abandoned mine land reclamation and grassroots organizing, nationally, not just here in PA. We've been called upon by many community watershed organizations, agencies, foundations, and national organizations for our Staff's expertise and institutional knowledge, as well as our professional services and technical assistance that we provide to so many, in need. Political leaders and their Staff call on us too an on occasion, we've been called to appear before Congress and have hosted many national leaders in our region. Our efforts surely haven't gone unnoticed. Our regional Board of Trustees, our current Staff, VISTAs, and regional community volunteers are vital to our future success moving forward. I'm very proud of the Staff and their hard work behind the scenes where some of them like to be and for the others who don't mind getting in selfies with me for social media. We can have fun too and enjoy the beautiful landscapes that surround us here in PA, despite the legacy mining impacts, as we go on our adventures around the Coal Region highlighting projects, educational projects with tens of thousands of youth with smiles on their faces after their first AMD Tie-Dye t-shirt or piece of iron oxide chalk in their hands, or just showing our followers and those who support us places that they might not otherwise get to see and understand, because we are the small team that is on the ground doing the work that needs to be done.

Ultimately, we all want clean water, greener landscapes, more productive land use and economic development that will pay living wages, more recreational opportunities for our families and better educational experiences for our youth to give them some future hope.

I reflected back to our 15th Anniversary theme and I think it remains the same to this day, Partnerships, Place, and Pride are what sets us apart from many other organizations. We could never have gotten this far alone, by ourselves without our partnerships within our Coalition. We value our sense of Place in the coalfields and what it means to live through the legacy of past mining and still value deeply where we are from, in our hearts and minds. We do whatever it takes to see the reclamation and restoration of our land and waterways at all costs. We have proven that we don't have to accept the legacy of past mining as our permanent identity. We deserve clean water and healthy communities, good paying jobs, and recreational opportunities that we can enjoy with our families. By combining hard science, community muscle and volunteerism, and creative thinking, we've been turning our region's environmental liabilities into incredible community assets.

Finally, our sense of pride in always remembering where we come from and what it means to be from Appalachia. We're all Appalachian, and we most likely don't say it or realize it but, geographically, we're in Northern Appalachia, and the largest most unique area of Anthracite Coal Fields in the world. I for one, am proud to be Appalachian and call it home. I think EPCAMR, for the last 30 years, has instilled *Hope and Hard Work* in all of our projects and minds of conservation partners and youth across our region. We look forward to the next frontier ahead of us as we still stick to our motto of "reclaiming AML today, for greener landscapes and a brighter future, tomorrow!" THANK YOU for bearing with me. I'm honored and humbled to be the Executive Director of EPCAMR, which has been for my entire career and a dream job for me growing up in Coal Country as a coal town kid with aspirations to make my part of the world a little bit cleaner for your kids, my kids and grandkids, as my legacy to them.