

Eastern PA Coalition for Abandoned Mine Reclamation Program August 2008 Progress Report

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Highlights:

- Created more than ½ of the raw GIS contour data related to the Mine Pool Mapping Project
- Created 2 GIS maps, 1 RAMLIS investigation and upgraded to ArcGIS 9.3 (with problems)
- Attended the ESRI Conference, a Hicks Creek NSCD Meeting and coordinated the AMR and Coal History Conference
- Updated <u>www.orangewaternetwork.org</u>

Education and Outreach:

- Traveled to San Diego, CA with EPCAMR Executive Director to attend the ESRI conference as a member of the Office of Surface Mining's National Geo-Spatial Data Task Force Committee. Presented RAMLIS and some of the Mine Pool Mapping work that EPCAMR has been involved in creating. Approximately 50 attended the presentation. Please see this article on EPCAMR's Website for more.
- Attended and coordinated the 2008 Pennsylvania Abandoned Mine Reclamation and Coal History Conference held at the Ramada Inn in State College with EPCAMR and WPCAMR staff. There were over 200 attendees and 45 presentations in 3 tracks. The conference lasted 3 days.
 ½ was dedicated to AMR and the other ½ was dedicated to coal mining heritage and history. Visit www.TreatMinewater.com for more.
- Printed several Iron Oxide Resource Recovery brochures that EPCAMR VISTA had made.
- Worked on a draft "Volunteer" page with EPCAMR VISTA for the EPCAMR Website. Also
 discovered a problem with our website which had exceeded the quota for space. Contacted
 webhost and fixed the problem that was not allowing me to post net content.
- Created a Final Report for the 319 Fiscal Year 2007-2008 grant, consisting of a checklist of deliverables related to work items in the scope of work. Created a table of "groups EPCAMR assisted", forwarded along suggested stream segments for reassessment and the 2007 EPCAMR Year in Review.
- Found an article related to a blood cancer cluster found south of Hazleton. Investigators and
 doctors believe it was related to dumping toxic chemicals on abandoned mine lands in the
 1970's and is the first case in the US. Forwarded this information to Ann Lieu, Johns Hopkins
 Graduate, who is studying the effects of AML on Health for Geisinger Environmental Health
 Institute.

Technical Assistance:

 EPCAMR Staff sat in on a Mine Pool Mapping conference call to discuss details about the project.

- Investigated the probability of mine voids under a residence near Pardeesville. EPCAMR
 Executive Director wrote a response to say that the resident should consider mine subsidence
 insurance for the home since there was a good probability of voids under the home. AMLIS did
 not specifically report a historical occurrence, but mine pool extents were present under the
 neighborhood.
- Georeferenced the C-48, C-19 and C-13 maps to prepare them for auto-vectorization. Created
 a scatter-plot of the elevation data for each in EarthVision and a contour line shapefiles in
 ArcGlobe. Interpolated more data points and created a 3D grid of the bottom layer of coal. This
 represents over 50% (7 of 12) of the work that will need to be done for the Western Middle
 Anthracite Field.
- Answered questions via about the BAMR boreholes shapefile supplied to the USGS. Many of
 the points were missing geographic and elevation coordinates. Created an excel spreadsheet
 comparing borehole water quality and locations present in a USGS Water Investigations Report
 (WRIR85-4038) and the BAMR Boreholes data which was valuable in finding the missing geocoordinates.
- Created a map of the Conservation Coalition boundaries for Luzerne County Watershed Specialist, Shawn Rybka. Map also contained urban areas, state game, forest and parks, streams, roads and towns within the 4 county area.
- Learned of national GIS data that was provided by ESRI with their ArcGIS Desktop 9.3 Install Packet. Extracted cities, urban areas, congressional districts (109 and 110), zip code boundaries, block group and census data, water bodies, summits, parks, landmarks and federal lands for Pennsylvania.
- Followed up with Mahanoy Creek Watershed Association members to nail down locations of the 2 AMD Treatment Systems in their watershed and obtain water quality information.
- Installed Microsoft Office 2007 on EPCAMR Executive Director's desktop and ESRI ArcGIS Desktop on the EPCAMR Outreach Coordinator's laptop.
- Created a General Soils Map for the Catawissa Creek Rivers Conservation Plan by clipping STATGO soils information from USDA's Soil Mart website to the Catawissa Creek Watershed Boundaries. *
- Commented on OSM's SMCRA Title 4 rulemaking definitions with the help of WPCAMR staff and the AML Campaign. I was asked to help detail definitions for hydrologic units and hydrologic adjacency. A final decision by the AML Campaign excluded the extraneous definition of the hydrologic unit since the group already asked to be left up to the states discretion.
- EPCAMR Staff met with PA DEP BAMR, Borton-Lawson Engineering and Skelly & Loy Inc. staff to discuss design criteria for the Hicks Creek Natural Stream Channel Design Project.
- Discovered problems with ArcGIS 9.3 and PASDA's Internet Mapping Service layers.
 Apparently the default transformation was changed from ArcGIS 9.2 to 9.3 and had a shift effect on the data layers. Solved the problem after researching the bug on the ESRI Website discussion boards.
- Suggested of affordable GIS Software and grants available for computer software to Habitat for Wildlife. They also recently received a computer through EPCAMR's computer recycling program.