Dear NAAMLP Membership

It has been a busy winter and spring dealing with the Administration’s FY 2011 budget proposal. I was able to spend some time on Capitol Hill making the case for certified state funding and the importance of continuing the AML emergency program. I believe the comments were well received but we must remain diligent and continue to push on these issues. Capitol Hill is not my normal stomping grounds, so I would like to thank Greg Conrad for all his guidance and help. Our association is fortunate to have Greg as our man on the Hill helping us “fight the good fight” for the AML programs nationwide. I am sure that the budget battles will continue and Greg’s knowledge of the issues and legislative procedures will be invaluable.

The Winter Meeting in Lajitas, Texas was excellent. I feel we accomplished a lot and were able work through many topics and to plan our strategy for the budget issues that will likely continue for the foreseeable future. The people and landscape are a very unique in this part of our country. The Terlingua Mercury Mining tour was particularly fascinating to me. It is a very different type of mining than we have in the East and is testimony to the men and women that managed to make a living in a place with such extreme weather and terrain. I spent a few days after the meeting exploring Big Bend National Park and found it to be one of the most beautiful places that I have seen. The Rio Grande River valley in the Park and Big Bend Ranch being the highlight. I’ve been to Texas many times and always leave there wanting to come back. I would like to thank Mark Rhodes and the entire Texas AML staff for their hospitality and hard work.

The new AMLIS system has had some set backs, but has made great strides in the past few months and is nearly ready for use. The AMLIS core team has completed their user testing and the system is now ready for testing by all users. I am hopeful that by the Fall Conference in Scranton, we will be reminiscing about the old system and extolling the virtues of the new. I would like to thank Mitch Roberts, Missouri AML, for taking on the responsibility as Chair of the AMLIS Committee. He has done and excellent job working with OSM and looking after the interest of the States and Tribes.

In my final “President’s Message”, I would like to thank all the Association Delegates for their help and encouragement. The learning curve has been rather steep but the whole experience has been enjoyable. I would especially like to thank Todd Coffelt and Madeline Roanhorse for all their assistance. My experience as NAAMLP President only reaffirms my belief that the State and Tribal AML Programs are the finest example of government organizations.

I’m looking forward to the Fall Conference in Scranton, PA and would like to express my appreciation to Rod Fletcher and his staff for taking on this enormous job. I know it will be great.

Mike Garner, President
“Their Legacy, Our Heritage, Everyone’s Future” will be held in Scranton, Pennsylvania, September 19-22, 2010. We hope you will come see us. The website www.NAAMLP2010.com is being updated regularly with the latest information on the conference, to include:

CALL FOR PAPERS - deadline May 7.
SIGN UP TO BE A SPONSOR
SIGN UP TO BE AN EXHIBITOR
REGISTER FOR THE CONFERENCE
SIGN UP FOR YOUR FIELD TRIP
SIGN UP FOR SPECIAL EVENTS
REGISTER AT THE HOTEL

Pre-conference field trips are scheduled for Thursday, Sept 16 – Saturday, Sept 18 to 1) Philadelphia/Lancaster/Gettysburg - the Liberty Bell in Philadelphia, PA, Dutch country in Lancaster, and the battlefield at Gettysburg; and 2) to the Pennsylvania Wilds www.pawilds.com - unsurpassed natural beauty, charming towns awash in history, and the biggest elk herd in the Northeast. The more than two million acres of public lands set aside for your enjoyment offer unlimited recreational opportunities. Take home a little piece of the Pennsylvania Wilds to cherish your adventure.

On Sunday, join us with a day tour of 1) the Pennsylvania Anthracite Museum (www.anthracitemuseum.org) and an underground mine tour, and 2) a visit to Steamtown National Historic Site (www.nps.gov/stea/) and the Lackawanna Iron Furnaces, or visit “The Office” (www.nbc.com/The_Office/) and see many of the Scranton sites they talk about on the show.

On Sunday night we will have a “meet and greet” with many of the ethnic foods that Northeast PA is known for, while listening to troubadours Van Wagner (www.vanwagnermusic.com) and the Breaker Boys.

We have a great lineup of exhibitors to visit Sunday night as well as Monday and Wednesday, and we have received a good number of papers, presentations and workshop submittals to our Call for Papers. We look forward to getting the information you need for Monday and Wednesday. Look for updated information on the Conference website at http://NAAMLP2010.com.

Tuesday tours will include 1) Centralia Mine Fire and the Pioneer Tunnel drift mine; 2) Hazleton and Eckley Miners Village; 3) Lansford’s No 9 Mine and Tamaqua; and 4) Wilkes Barre, the Huber Breaker and the 2009 national AML award winning project. See how Independent Power Producers have turned mountains of mine waste into electricity at no cost to the taxpayers, or take a train to Carbondale and visit AML sites along the way. The tours will view active and completed AML sites, AMD discharges and treatment, active anthracite mines, and heritage sites.

Tuesday’s social will feature a local polka band, Stanky and the Coal Miners, and my kind of soul food – hamburgers and hot dogs. (http://www.youtube.com/watch?v=CH5JX2aaHh4)

The 8th Biennial Workshop of the Interstate Technical Group on Abandoned Underground Mines (ITGAUM) will be held in conjunction with the NAAMLP Conference, from September 22-24, also at the Hilton. The NAAMLP Conference and the ITGAUM Workshop will complement one another and will share a joint day of technical presentations on September 22nd. The ITGAUM Workshop will focus on the effects of underground mines on public highway planning, design, construction and maintenance as well as other infrastructure development. Related topics pertaining to subsurface exploration and geophysical testing to identify potential hazards associated with underground mines will also be addressed. For information or questions concerning the ITGAUM Call for Papers, please contact Bill Christensen at: Bill.Christensen@dot.state.oh.us or visit the ITGAUM website at http://www.fhwa.dot.gov/engineering/geotech/hazards/mine/index.cfm.

Mike Korb, PADEP BAMR
Texas Hosts Association Winter Business Meeting

The Texas Railroad Commission hosted the Association’s winter business meeting from February 22-24 in Lajitas, TX. Lajitas is located on the United States/Mexico border on the Rio Grande River just west of Big Bend National Park.

Days one and three of the meeting were devoted to tours of old cinnabar mines in nearby Terlingua, TX. Participants were taken in vans to the old mine pits, entries, and facilities that had been reclaimed by the Texas AML Program. Employees of the Railroad Commission gave the visitors historic information about the development and demise of the cinnabar industry in the area.

The tour also included lunch in Terlingua and a visit to the Terlingua graveyard where many old graves are located.

Sandwiched between the tour days was the full day of the business meeting. Discussions in the meeting centered mostly on the President’s proposed FY 2011 budget and its impacts to certified state and tribal funding and its effects on the operation of the emergency AML program. Other issues discussed included the draft 884 letters that OSM is/was preparing for the states, AMLIS update, new NTTP classes, limited liability protection for certified states, and IMCC information on CCB rules and NPDES permitting.

Mark Rhodes and his staff at the Railroad Commission put together a wonderful home-cooked TexMex barbeque for the participants. The meeting was great success and the Association appreciates all the hard work and planning from Mark and his staff.
The Branch Dale East site is located within the Southern Anthracite Coal Field in Branch and Reilly Townships, Schuylkill County, Pennsylvania. The site had been mined by the Otto Colliery beginning in the early 1900s and continuing up until 1948, using both deep and surface mining techniques.

The project is located north of State Route 209 and homes are located about 900 feet south of the project limits. Prior to reclamation, the area was trespassed by illegal party goers, illegal dumpers, curious local youth, hikers and ATV operators. Existing unblocked access roads traversed the area making it easily accessible to most people.

During the design phase of the project it was determined that reclamation of the strip pits could result in an increase in stormwater discharge from the site. The project is situated on a hillside and all of the runoff was to be channeled towards Muddy Run Creek. There were two existing culvert pipes that conveyed stormwater under State Route 209 that would not be able to handle the increased flow from the project site as originally conceived. In order to decrease the velocity of the runoff and increase the time of concentration, a somewhat innovative solution was developed. The solution was to incorporate multiple terraces in the slope area that would not only slow the water down but also direct the water into a constructed wetland and then into the channel leading to the culverts under SR 209. The terraces were 40 feet wide separated by 25 feet wide areas on a 2.5 to 1 slope.

Bids for the project were opened March 4, 2009 with work beginning May 31, 2009. This project was made possible using federal funds from Pennsylvania’s 2006 AML Grant and from Pennsylvania’s Growing Greener Program. The project reclaimed 72 acres of abandoned mine lands consisting of four hazardous water bodies, seven stripping pits containing three dangerous highwalls totaling 2,700 feet in length and a .29 acre wetland. Reclamation was accomplished by utilizing 900,000 yards of on site material and a Category 2 exclusion waiver that allowed the filling of the water filled pits and creating 2.5 acres of wetlands. Once constructed, the terraced slope area functioned as anticipated, controlling the storm runoff so as not to overwhelm the existing culverts.

A new technique was also employed for the tree planting. Brush barriers were constructed using cleared materials in select areas of the site. A dozer equipped with a ripper was then used to loosen the soil around the brush barriers to prepare the area for the tree seed. The dozer would start adjacent to the brush barrier and continue around the brush barrier in ever widening concentric circles for a distance of about 50 feet away from the brush piles, taking care not to disturb previously ripped areas. This prepared area was given the standard lime, fertilizer and mulch treatment, but only tree seed was sown in the area to reduce competition from the usual grass seed mix. Ordinarily, trees are very hard to establish but early indications at this site are that the soil ripping method is producing good results.
The Carbonate Hill Mine Safeguard Project is located on public land in the San Simon Mining District of southwestern New Mexico. Lead and zinc were mined and milled at the Carbonate Hill site from 1916 to 1952. Site elevations range from 4,500 to 5,300 feet, with varying slopes of 2% to 35%. Steep mountains give way to small rolling hills and canyons draining into arroyos and gullies.

The New Mexico Abandoned Mine Land Program (NMAMLP) received a $225,000 grant from the Bureau of Land Management (BLM) New Mexico Office for the Carbonate Hill Mine Safeguard Project. The BLM grant covered almost all of the construction costs for the project. NMAMLP provided staff time for project development, environmental assessment and construction monitoring using Office of Surface Mining grant monies.

The mine area is now frequented by recreational users: rock hounds and amateur prospectors are joined by hikers, hunters and off-road vehicle enthusiasts. After mining activities ended, the use of the underground mine workings by wild animals increased. The extensive underground cavities created by mining provide excellent bat habitat. Townsend’s big-eared bats (Corynorhinus townsendii) and western small-footed bats (Myotis ciliolabrum) use many of the mine features for night roosting, hibernation and maternity activity. The majority of maternity and hibernating colonies of Townsend’s big-eared bats in New Mexico are located in abandoned mines. The Gila monster (Heloderma suspectum), an endangered species in New Mexico, is the only venomous lizard native to the United States and uses areas under the vacant mine and mill buildings as habitat.

The Carbonate Hill Project safeguarded 21 abandoned mine openings. Fifteen shafts, four adits, one stope and one pit were safeguarded. Safeguarding techniques included backfilling features using mine waste material, constructing a polyurethane foam plug closure and installing fences. The project also included eight bat-compatible cupola, gates and grate structures that allow bats and owls to continue to access their underground mine habitats while protecting the bat colonies from human disturbance. The construction schedule was coordinated with local bat biologists to minimize the possibility that resident bat species would be trapped inside the mine features. Installation of bat-compatible closures was timed to minimize disturbance of resident bats during warm, maternity, and hibernation seasons. Features to be backfilled were smoke-bombed and inspected to avoid entombing mine inhabitants.

Historic structures and artifacts at Carbonate Hill were avoided during construction. Structures at the site include an ore-processing mill, hoist shack, headframe, tramway, ore bins, water pumping plant and mining camp residences.


Susan A. Lucas Kamat, Geologist
New Mexico Mining and Minerals Division

Dr. J. Scott Altenbach, a retired Professor of Biology at the University of New Mexico, performs an internal bat survey of the underground workings.
Acid Mine Drainage Workshop

The Office of Surface Mining Reclamation and Enforcement, Mid-Continent Region Technology Transfer Team, sponsored an Acid Mine Drainage (AMD) Workshop, which was hosted by the Indiana Abandoned Mine Lands (AML) Program in Evansville, Indiana on April 13th and 14th, 2010. The Workshop’s theme was bioreactors, and its fifty-one attendees represented a wide range of state AML and natural resource programs, as well as federal agencies, private organizations, and universities. A list of the represented organizations is shown below. Presentations were held at the Sugar Ridge Fish and Wildlife Area, a property which is managed by Nate Levitte of Indiana’s Department of Natural Resources. The diverse affiliations and AMD-related experiences of the workshop attendees and presenters led to lively interaction and discussion, as well as the transfer of knowledge and information about current and historical AMD treatment technologies from chemical, biological, and logistical perspectives.

Participants also visited AMD-affected sites in Southwest Indiana that were in varying stages of reclamation, including Log Creek Church, Augusta Lake, and Midwestern (all completed Passive Treatment Systems), Enos (a Passive Treatment System that received maintenance in 2009), Firepit (a pre-construction site for a planned Passive Treatment System), and Sunlight (a completed Sulfate Reducing Bioreator). These site visits allowed attendees to experience the implementation of AMD treatment technologies in real-world settings, as well as better understand the complexities, challenges, and opportunities involved in AMD remediation.
Two permanent subsidence monitoring stations were installed in Sugarcreek, Ohio by the Division of Mineral Resources Management (DMRM) Abandoned Mine Land Geotechnical Services. The stations will detect the upward progression of rock collapse that can lead to mine subsidence. The Village of Sugarcreek experienced a subsidence problem in May 2009 that extensively damaged two homes in one of its neighborhoods.

Last fall, the DMRM conducted an exploratory drilling program to evaluate the subsidence risk for the area. Two locations were discovered where rock fractures had progressed well above the coal elevation. The monitoring stations will detect if renewed ground movement is progressing toward a new subsidence event.

The monitoring stations consist of a heavy 7/8” diameter aluminum coaxial cable grouted into a borehole drilled through the rock strata that overlies the mine. As rock collapse progresses upward, the cable is bent and distorted by the rock movement. These defects in the coaxial cable can be located from the ground surface with an electronic instrument called a TDR.

The TDR is a standard electronic tool used by cable television repair personnel to locate breaks and defects in a coaxial cable that can degrade the television signal. When this equipment is used to monitor ground movement it is referred to as Geo-TDR.

The monitoring site installation was used as an opportunity to train the DMRM staff in the technology and to share information on Geo-TDR with other Ohio Department of Natural Resources staff. The same methods used here to monitor subsidence can similarly detect ground movement associated with landslides. The DMRM AML Emergency Program plans to use Geo-TDR to monitor other high-risk subsidence and landslide prone areas.
For a marginal increase in the cost of drilling a borehole to investigate a subsidence complaint, it is now possible to install a monitoring station that can detect the ground movement long into the future. Since it is common to receive repeat complaints following a negative subsidence determination, this will save the cost of drilling new boreholes to evaluate a subsequent complaint.

On February 1, 2010 the DMRM drill crew completed the boreholes. On February 3rd the cables were grouted into the holes drilled by Mullet Drilling of Millersburg. The grout hardened overnight and the initial readings were taken early on February 4th. Dr. Kevin O’Connor of GCI Consultants in Columbus, Ohio was on site to oversee the installation and train the staff. He conducted an interactive presentation on GEO-TDR for 17 staff members of the DMRM, the Division of Geological Survey and BBC&M Engineering.

Dr. O’Connor has extensive background in the technology. He helped develop the current methods when he worked for the US Bureau of Mines about 30 years ago. He has worked with the Ohio Department of Transportation (ODOT) to install a continuous reading monitoring station under Interstate 70 and Interstate 77 when they were grouting mine voids under the highway. In that application, the device was configured to dial a pager or send an e-mail if ground movement was detected that exceeded a minimum threshold value. If movement was verified, ODOT was prepared to shut the interstate highway down and route the traffic on secondary roads.

Joe Noonan, PE
Ohio Abandoned Mine Land Emergency Program
The abandoned Evan Jones Coal Mine site was once the home of several hundred people. The coal spoils from the mine’s washplant covered about fifty-seven acres and had been burning near the surface and down to the native ground level (up to 70 feet) for decades. Forest fires around the periphery of the piles had been started from this ignition source in the past as well as recreational users encountering noxious fumes emanating from fissures in the surface. As a Minimum Program State, Alaska did the mitigation in phases consistent with grant support amounts through the Office of Surface Mining.

The first phase took on the area nearest Slipper Lake. This was the initial effort in Alaska of doing surface burning mitigation and we drew on ideas from several other states to plan the work. Many lessons were learned - and some mistakes were made. Perhaps the biggest problem that was created during this phase was a large pile of material left covering the area adjacent to the Lake where people had traditionally camped. This was a sore point with both the local community and recreational users visiting the site.

Phase II involved the most substantial depths encountered in the overall project area. The approach to the original phase was to specify the method of mitigation. However, the contract for Phase II was designed around results. The contractor determined how to achieve the results mandated in the contract. This saved substantial costs and allowed for a much speedier project. The local community and recreational users alike benefited from the compressed time of disruption of use, not to mention the lower odor intrusion for surrounding homeowners! The problems encountered during Phase I as identified by the local community were all taken into consideration during the planning and implementation of this contract phase.

In Phase I there had been no attempts at revegetation so in Phase II the organic material was salvaged prior to the start of the project and used to cover steeper areas of the final grades. Those areas were seeded with a grass mixture designed specifically for the site by the Alaska Division of Agriculture’s Plant Materials Center using native species.

Because the Sutton Fire Department had a stand pipe on Slipper Lake that they were unable to use during part of the project, the contractor fabricated a platform around the stand pipe to benefit their future use. Before the platform, the fire department personnel were forced to stand on the bank of the lake and hold their suction hose up as high as they could reach to attach it to the stand pipe. Now they can walk straight out from the roadway and plug it in. As an extra touch of community benefit the area on either side of the stand pipe was made wide enough for wheelchair accessibility, and individuals using wheelchairs could get out to a spot where they could fish or just enjoy the scenery. Rainbow trout have reportedly been caught from Slipper Lake that are in the 36-inch class.

The offending pile was subsequently removed from the area and fire rings were placed on rock pads near the lake edge to prevent campfires from igniting the surface coal spoils and to discourage fire building near the forested areas adjacent to the site.

Erosion control was needed on the steeper sections of the Phase I project. We used inmate labor from the nearby Palmer Correctional Facility to gather and plant the willows. The Plant Materials Center stored the cuttings until ground conditions allowed planting. The area was “trenched” using a small dozer with modified ripper teeth to create trenches for the cuttings to be laid in and the inmate crew did the planting. This provided a low cost, high value addition to the overall project. An additional side benefit of this form of erosion control is that the entire project area is within the Matanuska Valley Moose Range – and a favorite food for moose is willows!

One access road leading to the project area was partially rebuilt in conjunction with Phase II and the other was rebuilt as a stand-alone maintenance project in 2009. Even though many measures have been taken to protect the water clarity of Slipper Lake, there remains sediment potential from the flat that was left after the pile was removed from the Phase I area. To eliminate this once and for all, the area will receive a one foot layer of rock applied in two lifts and compacted in place that will keep the water that does migrate off-site...
into the lake as clean as the lake itself. This is scheduled for early summer 2010 using a state-owned gravel source that will allow us to do the rocking without having the loaded rock trucks come through the Sutton Community.

The Sutton Community Council and the Sutton Library staff have been instrumental in helping us design the projects around Slipper Lake to keep the short-term negative impacts of our mitigation efforts to an absolute minimum, while allowing us to implement strategies and features that increase future beneficial uses of the area—without increasing our mitigation costs. Actively involving the community and site users early in the project planning stage pays big dividends in both end results and AML Program support.

What is next in the vicinity? The area around Coyote Lake saw AML Program highwall mitigation efforts over a decade ago. This enabled a wide variety of recreational users to enjoy the area. The access road to this project was never rebuilt to support the construction equipment moving to the site. As a result the only access to the area presently is by ATV on a deeply rutted and eroding roadway. This generates sediment flows into the anadromous stream, Eska Creek, just down slope from the lake. During the summer of 2010 we plan on working with the Sutton Community Council, the Matanuska-Susitna Borough (landowner at Coyote Lake), Cook Inlet Region Incorporated (the native group who owns the land where the majority of the offending roadway is located), and the Alaska Department of Transportation to try to find some cost-effective way to mitigate this unintended consequence of a past project and once again allow a wide spectrum of recreational users to access the lake.
For more than five years, AML projects in the Sutton area have made a drastic improvement to our area. The work at Slipper Lake is an example of one of those projects. Working closely with and listening to the needs and desires of the Sutton community, the Slipper Lake project has helped transform an area of subsurface burning coal into a camping and recreation area. This was not an easy task but worth the endeavor.

The 21 new camping sites helped bring in more family oriented campers. The presence of outdoor enthusiasts has created a watchful eye on the reclaimed Slipper Lake recreation area. The planting of thousands of willow cuttings will guard against future erosion and improve the speed of re-vegetation and recovery. We especially liked the fact that the DNR was able to work with the State Department of Corrections to facilitate the planting of these cuttings.

Additionally, the Sutton Fire Department was in need of a better access to the precariously located draft pipe at the lake. Improving the situation with a platform around the draft pipe while widening and solidifying the approach and turnaround surface for heavy fire trucks was greatly appreciated by the fire department.

AML projects in the Sutton area have helped give meaning and purpose to an area previously defined by decades of exposed coal mine tailings.

Sincerely,
George Rauscher
Sutton Community Council President
Thursday, March 14, 2010

I am discouraged by President Obama’s initiative to cut millions of dollars in Abandoned Mine Land money to the Navajo Nation, as highlighted in the Fiscal Year 2011 budget. For the second time in less than five years, the federal government is attempting to end our program without acknowledging the importance of our government-to-government relationship and its trust responsibility to the Navajo Nation.

It was dispiriting to learn that funds are expected to be eliminated for certified states and tribes. In accordance with the 2006 Surface Mining Control and Reclamation Act, the Navajo AML Program is mandated to continue receiving payments from fees collected from current and past coal production on the Navajo Nation. If the proposal to cut funding is approved by Congress, the Navajo AML Program will end, triggering an injustice to the Navajo people and our lands.

Funds were collected from Navajo Nation coal resources and are not public tax money. Since 1988, the Navajo AML Program abided by the provisions set forth under SMCRA of 1977 and its 2006 amendments to perform reclamation of AML problems and to fund Public Facility Projects. With our successful work in coal reclamation, Navajo AML is now certified. The Obama Administration and U.S. Office of Management and Budgets (OMB) have proposed penalizing the certified AML programs, including the Navajo Nation. Rather than eliminate a program that is successful, the Administration should spotlight the Navajo AML Program as an example of a successful program with a record of accomplishment, and reiterate effectiveness in natural resources stewardship. Because of SMCRA funds, reclamation and public facility projects create jobs, help keep earned income in Navajo communities, and protect the public health and safety of Navajo people and our environment, while developing infrastructure to enhance our quality of life.

Environmental clean-up problems on the Navajo Nation are not just from coal mines. The legacy of mining goes back to the Cold War when there was an urgent need for uranium. The federal government came to the Navajo Nation for its minerals. Upon numerous years of mining, the lands were left distressed with no reclamation efforts performed by the previous owner/company. AML funds have been useful in reclamation work performed on these mines. These affected communities were environmentally and emotionally scarred from past uranium mining.

The Navajo Nation hopes to continue to educate Navajos about the vast benefits that our Nation has received. However, this is contingent upon Congress amending the 2006 SMCRA to allow certified states and tribes to continue to receive AML trust fund balances from the U.S. Treasury Fund Account. Contrary to the misconception of the U.S. OMB which implies wasteful spending of AML funds, it is our position that the Navajo AML Program has been cost-effective in funding projects that have, and continue to, significantly benefit our people in reclamation of abandoned coal, uranium and copper mines and community projects.

AML funds cannot and should not be eliminated as proposed by U.S. OMB, for the certified states and tribes. There is an immeasurable need for these funds to continue to improve the quality of life for our people.

Navajo Nation President, Joe Shirley, Jr.
Extensive surface and underground mining has impacted the aquifers across the coalfields of West Virginia in terms of both water source quantity and quality. The West Virginia Abandoned Mine Lands (WVML) program first addressed this problem when it completed a waterline extension project in 1991. There has been nearly $70 million spent on waterline projects from that point until the passage of the 2006 Amendment to SMRCA. WVML had a quickly growing back log of $58 million in waterline projects when the 2006 Amendment removed the 30 percent cap on waterline project spending and West Virginia Gov. Joe Manchin directed WVML to elevate waterline projects to the highest priority.

West Virginia utilizes an open process to ensure that all potential waterline projects are considered. The WVML program accepts Applications for Assistance from individuals and all levels of government including city, county and local public service districts. WVML procures consulting services to perform a feasibility study on the area outlined in the application to determine if pre-law mining has affected the quantity or quality of the wells or springs utilized as the drinking water source. Maps of the area are developed, which include potential customers, pre- and post-law mining activity, geological structures and coal seam outcrops. Pre-treatment water samples are obtained from the water source and taken to a lab for analysis. Interviews are conducted at each sample point that inquires about the quality, quantity, well depth and location, and the citizen’s knowledge of past mining. The sample points are evenly distributed across the study area to obtain an accurate assessment of the water in the area.

The lab results are used to develop data that is plotted on a Piper Diagram. In addition, an ambient (non-mining affected) water sample point is obtained from USGS data and plotted on the Piper Diagram for comparison. The Piper Diagram plots are used to determine the percentage of the samples affected by pre-law mining. This translates to the percentage of construction costs that the WVML program will provide. Two other factors considered include poor quantity of water in relation to mine subsidence activity and what, if any, role post-law mining played if it is present.

The local entity is notified of the study results and is advised of its local responsibility in the project. The local entity is required to obtain the matching construction funding, in addition to the project soft costs that include design, rights of way, legal, Public Service Commission submittals, bidding and construction oversight. WVML participates in the design and construction oversight if the project is 100 percent affected.

Upon design completion, the local project sponsor must coordinate with our Sub-Grant Team in order to obtain the final financial arrangements to allow the project to be bid. The Sub-Grant Team reviews the local sponsor’s audit reports, financial controls, managing structure and past board minutes. Upon review and approval of these submittals, the Sub-Grant Team provides the local entity with an authorization to bid.

WVML was able to participate in five projects in 2007 with an AML share of $6 million. WVML participated in eight projects in 2008 with an AML share of $15 million and in 2009 there were eight projects at an AML share of $25 million. There are currently $30 million worth of AML participation in waterline projects under construction. Despite this large commitment to waterlines, the balance of approved waterlines to be constructed currently stands at $75 million. This is due to the Governor’s announcement and the WVML focus on waterlines resulting in a high volume of new applications received and eligible projects approved.

WVML historically has averaged participating in over 80 percent of waterline construction costs. The remaining 20 percent of the funding has been provided by grants and loans from USDA Rural Utilities Services, Small Cities Block Grants, WV Infrastructure and Jobs Development Council and other local sources. A new trend developing is that the most recently approved projects are averaging closer to 60 percent affected, which will result in the need for more leveraged funds. Without the substantial participation of WVML, these other funding sources would not have been able to fund the majority of these projects, resulting in significant delays, if not the absence of service to deserving citizens. WVML estimates that since 2005 water service has been extended or upgraded to 5,300 customers. This has substantially improved the quality of life for those citizens, whose water had been affected by pre-law mining.