



\$30 Million AML Pilot Program

DEP's Plan for Implementing the AML Pilot Program in Pennsylvania

July 14, 2016

Dial-in number for audio: 1-650-479-3208

Access code: 643 855 718

WebEx Technical Support: 866-229-3239

Tom Wolf, Governor

Patrick McDonnell, Acting Secretary

Agenda

- Introductions: Neil Shader, DEP Press Secretary
- Remarks: DEP Acting Secretary Patrick McDonnell
- Overview and Background of AML Pilot Projects: Eric Cavazza, Director, DEP Bureau of Abandoned Mine Reclamation
- Questions

AML Pilot Program Background

- The AML Pilot Program was authorized by Congress under the Consolidated Appropriations Act (signed by President Obama on December 18, 2015) and provides an additional \$30 million of US Treasury Funds to PA's AML Program
- The funds are to be used “for the reclamation of abandoned mine lands in conjunction with economic and community development and reuse goals”

Language from House Report Accompanying the Bill

“State AML programs, in consultation with state economic and community development authorities, shall develop a list of eligible AML projects in Appalachian counties that have a nexus to economic and community development, and select qualifying AML projects that have the potential to create long-term economic benefits.”

AML Pilot Program Purpose

- Explore ways to return legacy coal sites to productive reuse
- Inform Congress of the programmatic impacts of changes to the underlying federal law (SMCRA) such as those included in the proposed RECLAIM Act which would accelerate distributions from the federal AML Trust Fund for similar economic revitalization and community development projects associated with the reclamation of AML sites

Proposed AML Pilot Projects

- At OSMRE's request (February 24), DEP developed a preliminary list of projects
- Since this is a pilot program, PA selected a wide variety of project types with a variety of possible economic or community development benefits and partners
- DEP is targeting 14 proposed AML Pilot Projects (8 Bituminous and 6 Anthracite) which are located in 10 coal field counties
- Additional Pilot Projects may be considered

AML Pilot Program Proposed Projects

- PA submitted the proposed list of 14 AML Pilot Projects to OSMRE on March 18
- OSMRE reviewed the proposed project list and provided feedback along with a request for additional information on March 30
- PA resubmitted the list with the additional information requested by OSMRE on April 14
- OSMRE indicated that the list had been vetted and approved by OSMRE HQ on May 12

AML Pilot Program Guidelines and Grant Application Timelines

- PA submitted its 2016 AML Economic & Community Development Pilot Program Grant Application to OSMRE on March 28 (to make the funding available for projects)
- Final AML Pilot Program Guidance on use of pilot funds was received by DEP from OSMRE on May 2
- Based on OSM feedback, PA resubmitted a revised AML Pilot Program Grant Application on May 16
- PA's AML Pilot Program Grant Application was approved by OSMRE on June 6

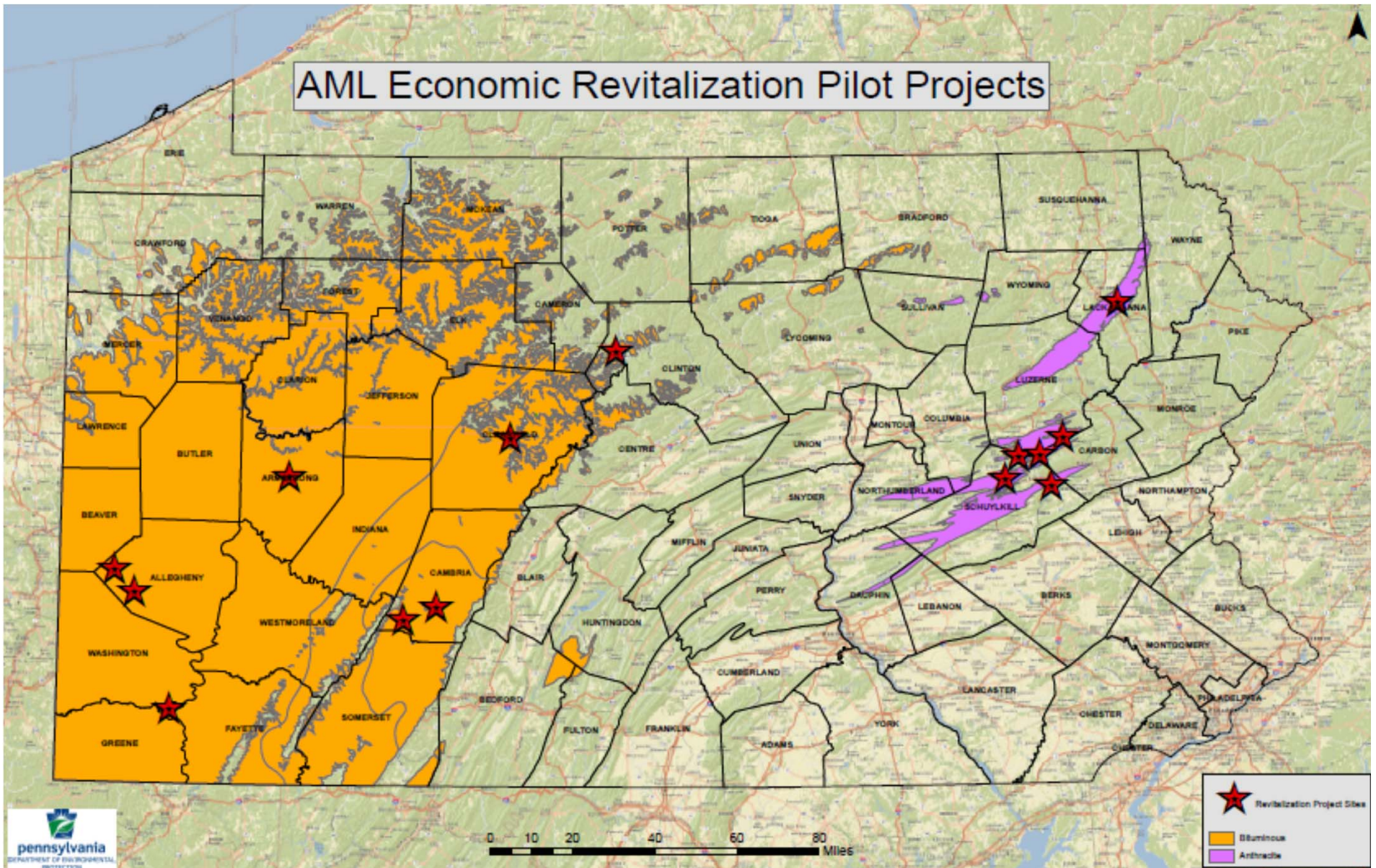
PA's Plan for the AML Pilot Funding

- PADEP-BAMR will allocate all of the AML Pilot Program funds for the construction of Title IV eligible AML & AMD problems
- Project partners will then work to fund and complete non-AML economic development aspects of the projects

Leveraging of Funds

These 14 Proposed AML Pilot Projects have the potential to leverage up to an additional \$4 for every \$1 of AML Pilot Program funding from other AML/AMD funds and/or economic development funds (Both public and private)

AML Pilot Projects Location Map



Ehrenfeld Coal Refuse Pile Reclamation Project

The AML pilot funding, along with other funding sources, will be used to complete reclamation of the abandoned Ehrenfeld Coal Refuse Pile. The 3.2 million tons of coal refuse material will be excavated, hauled away, blended with alkaline material, and disposed of in accordance with an approved handling and placement plan authorized within the mining permit for an adjacent surface mining site operated by the Rosebud Mining Company

Ehrenfeld Coal Refuse Pile Reclamation Project Newspaper Headline

The Tribune-Democrat[®]

HOCKEYVILLE, USA

Serving Greater Johnstown since 1853

MARCH 8, 2016

TUESDAY

\$1.00 NEWSSTAND

Cleanup to create 40 jobs

\$13.4M project will return miners to work in Ehrenfeld



DAVID HURST/THE TRIBUNE-DEMOCRAT

A large waste coal pile dwarfs homes in Ehrenfeld on Monday. A \$13.4 million project will remove all 3.2 million tons of it and reclaim the site.

BY DAVID HURST

[PHOTO BY DAVID HURST](#)

EHRENFELD - There's a mountain of a waste coal pile above Ehrenfeld that serves as little more than a reminder of the old coal town's heyday.

Back then, Ehrenfeld's streets were busy and its air was dusty.

It all reminded Guy Galosi of days he spent sorting coal for the company that made the pile and nights he and his buddies would cram into cars to go see big band greats like Tommy Dorsey play Carrolltown's Sunset Ballroom.

"Those were good times," Galosi said.

Soon, Ehrenfeld's 32 acre "boney" pile will be a memory, too.

After years of failed attempts, the state

Department of Environmental Protection announced a \$13.4 million project Monday to remove all 3.2 million tons of it and reclaim the site, a move state officials said will provide work for 40 recently laid-off Rosebud Mining Company miners.

It's also a project that will eliminate acidic runoff flowing into an unnamed Little Conemaugh River tributary while developing a small recreational park on one portion of the site alongside the Path of the Flood Trail, DEP Spokesman John Poister said.

"We can finally award a contract to reclaim this unsightly and hazardous abandoned coal refuse pile," DEP Secretary John Quigley said, adding that officials are "doubly happy" that the project will be

a boost for the town, the environment and dozens of mine workers.

Rosebud's \$13,455,319 bid was the lowest qualified one received for the project, Poister said. They'll haul the rocky refuse away by truck to a Rosebud property where it will be used as fill inside an old, shuttered coal mines.

Part of the pile is often smoldering, and Rosebud will be tasked with extinguishing it, he said.

Aside from two years serving in the Navy, Galosi said he's spent of all his 88 years in Ehrenfeld. That waste coal pile has been there that entire time, and then some, he said.

Please see [MINERS, A2](#)

Significant Benefits

- Elimination of 3.2 million ton abandoned coal refuse pile with the following significant environmental or health and safety issues:
 - Severe on-site erosion and off-site sedimentation issues in the Little Conemaugh River Watershed
 - Source of acid mine drainage laden runoff
 - Slope stability/past landslide issues
 - Burning coal refuse material
 - Unauthorized recreational use by ATVs
 - Restoration of 62 acres of barren undevelopable land situated in Ehrenfeld Borough and Croyle Township

Significant Benefits

- Sustained employment of 40 miners who would have been laid off due to slump in the coal market
- Recreational development through construction of a parking area to access the Johnstown Flood Memorial Rails to Trails
- Possible future Industrial and/or Residential development
- Water Quality Improvement /Watershed Restoration
- Land Restoration including re-establishment of the American Chestnut

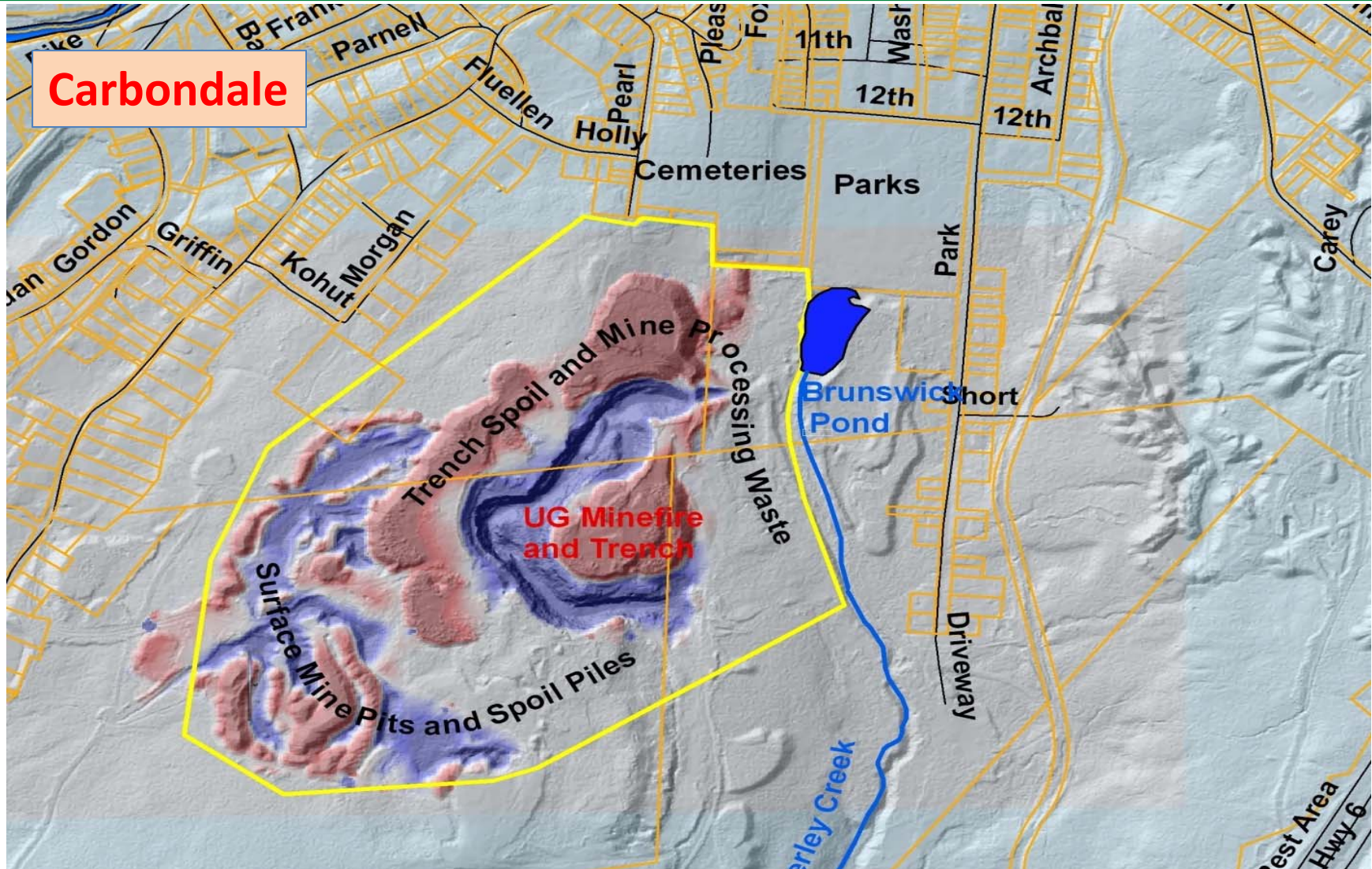
Powderly Creek NE Underground Mine Fire and Economic Development Project

The AML pilot funding will be used in combination with other funding to undertake a reclamation project to extinguish the Powderly Creek underground mine fire just outside the City of Carbondale. Additional AML features adjacent to the mine fire area will also be reclaimed in order to create site conditions suitable for future industrial development. The total acreage of AML being reclaimed (including the mine fire area) is 82 acres.

Powderly Creek NE Underground Mine Fire and Economic Development Project



Powderly Creek NE Underground Mine Fire and Economic Development Project



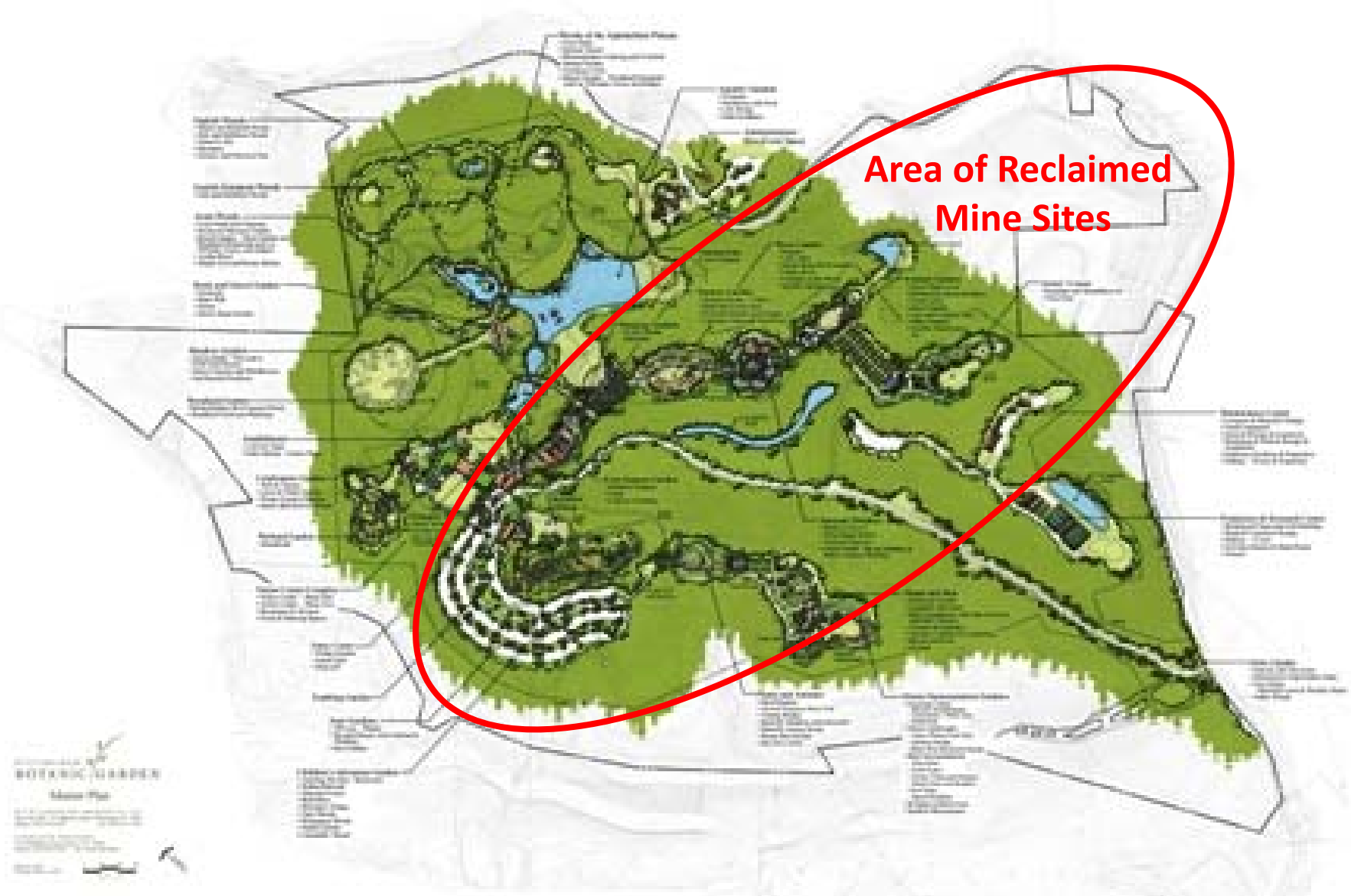
Significant Benefits

- Improved air quality for nearby residents due to extinguishment of the underground mine fire
- Restoration of 82 acres of abandoned mine land back to pre-mining conditions
- Potential for industrial/commercial development of the land following extinguishment of the mine fire and reclamation of adjacent AML features
- The four-lane Robert P. Casey Memorial Highway (U.S. Route 6) runs from Interstate 81 near Scranton north past Carbondale adjacent to the project site

Pittsburgh Botanic Garden

The AML Pilot funding, in combination with other funding, will be used to help complete Phase 1 of the remaining/reclamation work and/or facilitate the phase 2 abandoned mine reclamation work at the Pittsburgh Botanic Garden. Phase 1 involves daylighting old underground mine workings and reclaiming pre-act surface mine cuts on approximately 100 acres of the site while phase 2 will address a dangerous highwall, mine subsidence and AMD on 50 additional acres of the property.

Pittsburgh Botanic Garden Master Plan



Significant Benefits

- The Pittsburgh Botanic Garden will one day be a world-class botanic garden, including:
 - 18 distinct gardens
 - five diverse woodland experiences
 - a visitor's center
 - an amphitheater for outdoor concerts and performances
 - a celebration center to accommodate large outdoor or indoor weddings & corporate events
 - a center for botanic research

Significant Benefits

- The Garden is expected to attract millions of visitors and eventually become an economic engine for the region
- Research suggests it will add 1,200 new jobs and as much as \$88,000,000 in revenue within 10 years of operation
- Serve as a national Gold Standard in reclamation
- Restored Public Lands

Allegheny County Airport Authority World Trade Center Business Park

The AML pilot funding will facilitate the reclamation of an abandoned surface mine with two dangerous highwalls. Once the dangerous AML condition is removed, the ACAA plans to develop the “Pittsburgh International Airport World Trade Center.” This proposed international trade center will include office space, research and development facilities, and a 400 room hotel/convention center immediately adjacent to the Pittsburgh International Airport.

Pittsburgh International Airport World Trade Center (Existing and Proposed)



Pittsburgh International Airport World Trade Center Rendering

World Trade Center



Significant Benefits

- The project is projected to generate \$250 million in private investment and will lead to the creation of 7,000 direct and indirect permanent positions
- The development of the site will also employ over 1,200 construction workers
- The redevelopment of the site will provide for:
 - over one million square feet of Class A office space
 - 90,000 square feet for research and development
 - a 400 room hotel with convention space
 - up to six corporate airplane hangers which will allow corporate tenants to locate their headquarters in office space at the site

Significant Benefits

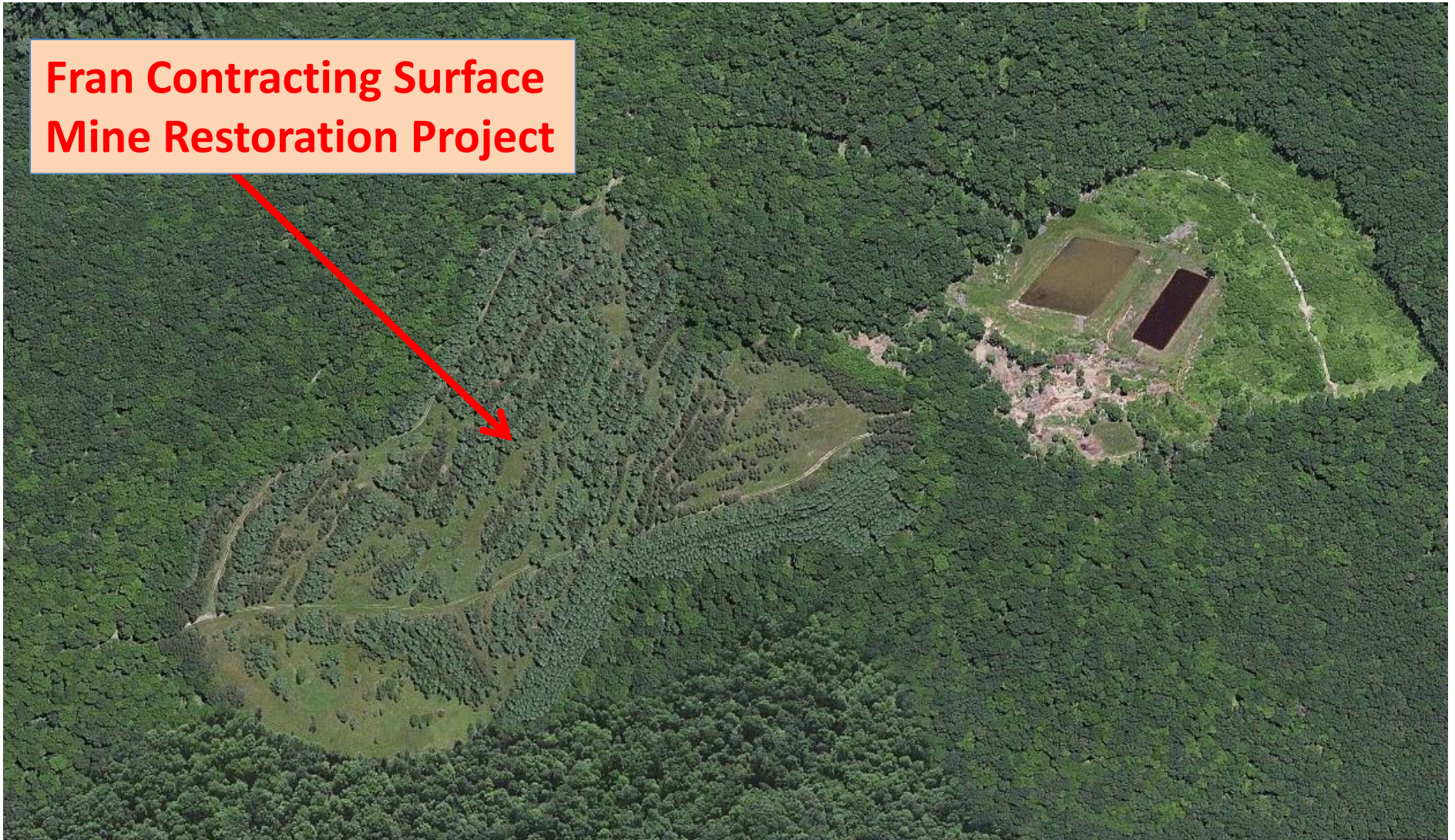
- Over 54 acres of abandoned mine land with dangerous highwalls and spoil areas will be reclaimed and repurposed as part of the proposed 195 acre business park development site
- The Montour recreational bike and walking trail will be relocated and expanded to connect the proposed business park with the existing airport facilities

Fran Contracting Surface Mine Restoration Project (Rock and Camp Runs)

The AML pilot funding will be used to fund the reclamation of the Camp Run No. 2 AML site in Sproul State Forest to restore water quality in the Rock and Camp Run tributaries of Cooks Run. The site will be reclaimed by excavating and removing or treating the acid forming materials on site by mixing them with alkaline material to neutralize acidity. The reclaimed site will be reforested to bring the land & water back to pre-mining conditions.

Fran Contracting Surface Mine Restoration Project (Rock and Camp Runs)

**Fran Contracting Surface
Mine Restoration Project**



Significant Benefits

- Improved/restored water quality in Camp Run, Rock Run, and Cooks Run
- Restored Public Lands
- Reforestation including reintroduction of hybrid American Chestnut Trees
- Restoration of the land and water back to its pre-mining condition will allow for citizens that enjoy hunting, fishing, hiking, ATV riding and sightseeing to utilize the area
- Increased tourism to the area

Bowman's Shaft - Pioneer Tunnel Mine Headframe & Hoist Preservation Project

The AML pilot funding will be used to paint and erect a salvaged headframe and hoisting drum as exhibits at the Pioneer Tunnel tourist coal mine in Ashland Borough, Schuylkill County. The mining artifacts were recovered from the North Mahanoy Colliery, Park No. 1 Shaft. The shaft, which was located near several homes in Mahanoy Township, was backfilled in 2015. During the project, the headframe and hoist were carefully disassembled and preserved.

Bowman's Shaft - Pioneer Tunnel Mine Headframe & Hoist Preservation Project



Significant Benefits

- Increased tourism and Preservation of Anthracite Mining Heritage
- The Pioneer Tunnel provides employment opportunities for the people of the Anthracite Region, as well as being a regional tourist attraction
- The tourist mine and museum are listed among the top ten tourist attractions in Pennsylvania
- It accommodates about 30,000 guests each season (April 1 to October 31) with 30% of the guests being school groups from elementary through college
- The addition of the headframe will provide additional educational opportunities

Spaces Corners South/Rayburn Township Waterline Extension Project

The AML pilot funding will be granted to the Rayburn Township Joint Municipal Authority to be used in combination with Pennvest funding to extend a waterline 47,000 L.F. to service 160 homes and businesses in Rayburn Township, Armstrong County. Of the 160 dwellings being serviced, 118 of the homes currently have wells/water supplies that are impacted/degraded by pre-act underground coal mining operations.

Significant Benefits

- The project will provide potable water to 160 total residences/businesses
- Increased potential for industrial development due to a potable water supply in this rural area
- Potential for construction of new single family dwellings and small business development
- Without project funding for the waterline extension project, there remains a high potential that residents may relocate which would impact the local tax base and property values of the occupied dwellings with impacted water supplies

Point Stadium Discharge Stonycreek/ Conemaugh River Watershed

The AML pilot funding will be used to help fund one of two options to treat or eliminate the Point Stadium Discharge which enters the Stonycreek just upstream of its confluence with the Little Conemaugh River near the Point Stadium in downtown Johnstown. One option would provide only for treatment of the discharge while the second option would use the treated water and/or the mine pool as an industrial water supply or as a geothermal energy source.

▶ Point Stadium Discharge - Two Options

- Option 1:
 - Pump and treat (construct an AMD treatment plant) mine pool from a shaft or borehole on opposite side of river
 - Lower pool elevation to a level where the AMD would no longer discharge at its current outfall
 - Potential to convert a mine pool into a resource, as the treated water could be used as an industrial water supply, and/or for geothermal heating in the downtown Johnstown area
- Option 2:
 - Pipe discharge to existing Dornick Point wastewater treatment system collection system
 - Treat the combined AMD & wastewater at the existing wastewater treatment facility

Point Stadium Discharge Stony Creek/Conemaugh River Watershed



Significant Benefits

- Potential to demonstrate geothermal energy potential from underground mine pools
- Potential to provide geothermal energy for various public facilities in Johnstown
- Cost savings from entities utilizing the geothermal energy will be used to support a trust fund to pay for the continued operation and maintenance of the AMD treatment facility
- Two miles of stream improvement
- Treated AMD could potentially be used as an industrial water source

Tamaqua City Revitalization and Improvement Zone

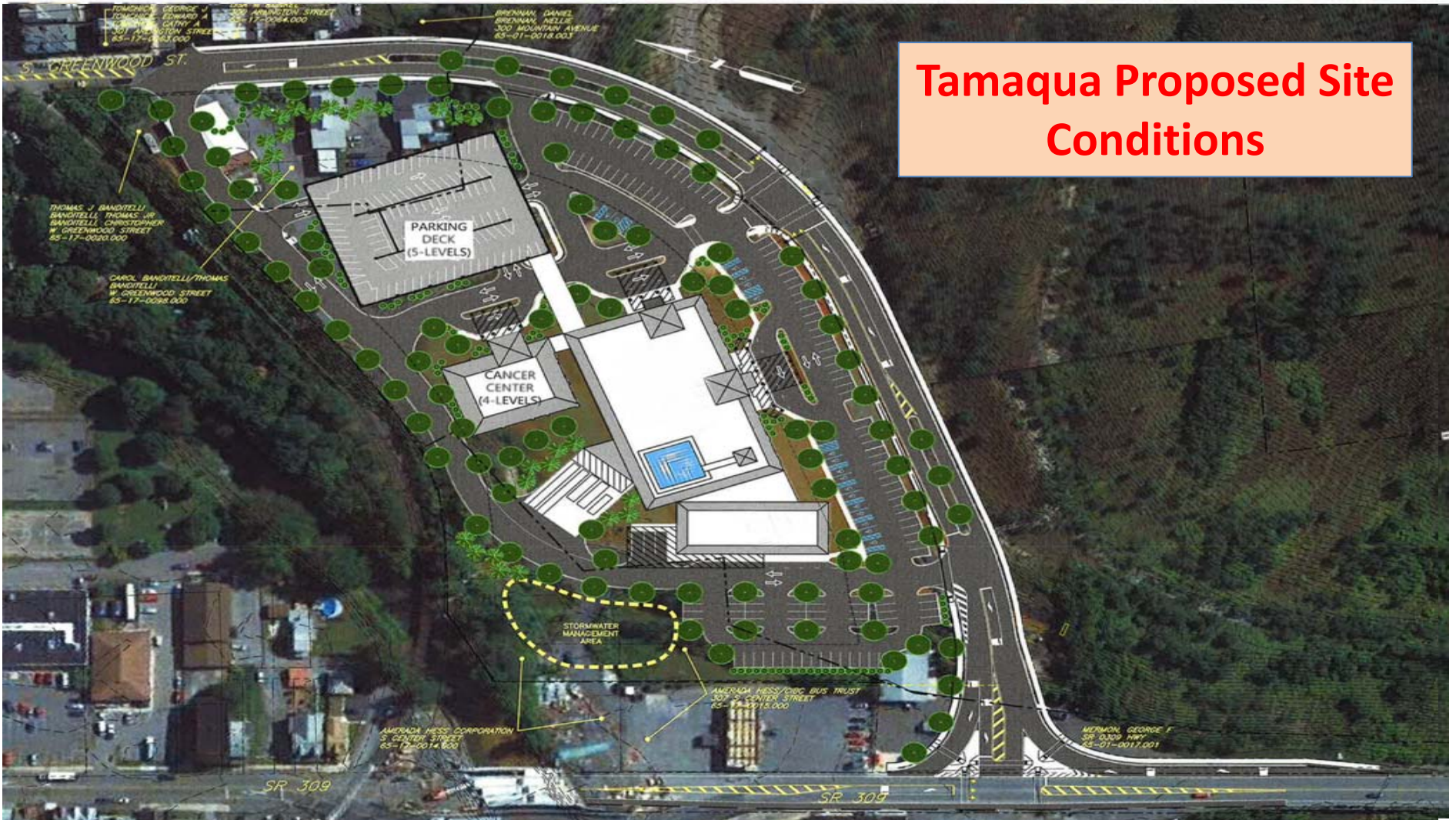
The AML pilot funding will be used to remove legacy AML piles in the area of Slum Creek, regrading about 19 acres to a riparian/ park setting, including grading for a future fork of the proposed Panther Valley rail-trail system. Thirteen acres of legacy crop falls will be backfilled using the material from the Slum Creek project. An existing haul road will be improved so that in later phases it can become a segment of the planned Tamaqua Bypass.

Tamaqua City Revitalization and Improvement Zone



**Unreclaimed AML Site
(Slum Creek Area)
near Tamaqua**

Tamaqua City Revitalization and Improvement Zone



Tamaqua Proposed Site Conditions

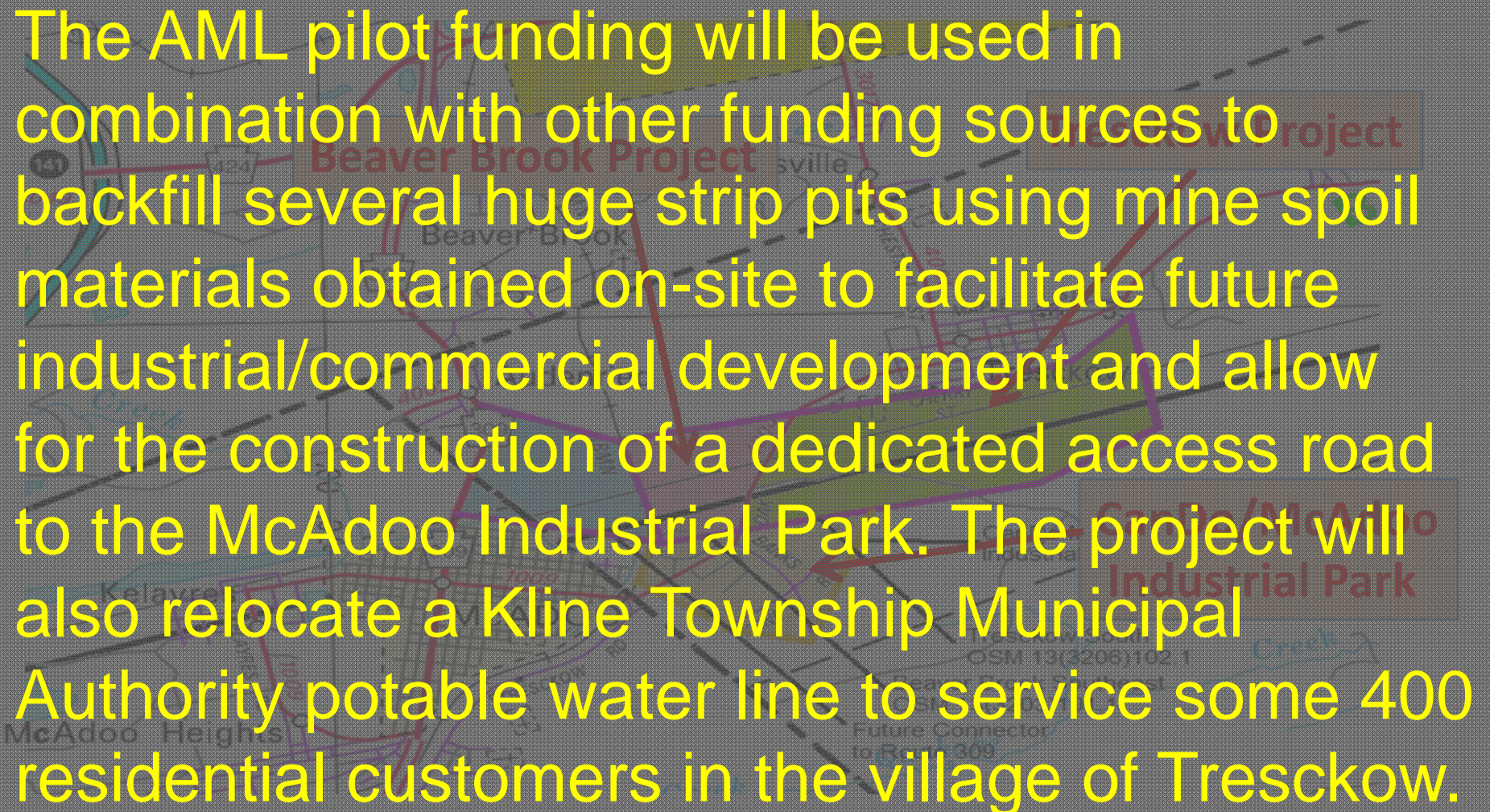
Significant Benefits

- Reclamation of 32 acres of AML which will serve as a catalyst for the large scale economic development to follow in and around Tamaqua's existing City Revitalization and Improvement Zone (CRIZ) parcels
- The new gateway feature (to be constructed in a later project phase) will serve as a future traffic bypass linking Routes 309 and 209 directly alleviating traffic congestion in downtown Tamaqua
- Redirecting vehicular traffic to the bypass route will restore charm and character to the existing downtown, improve pedestrian and vehicular safety, improve local travel efficiency, and improve emergency response times in the local area

Significant Benefits

- St. Luke's Miners Hospital is currently evaluating the feasibility of constructing a Cancer Treatment Campus within the Tamaqua Area Mine Reclamation/Economic Development project area, which will provide life-saving treatment for cancer patients in and around the Tamaqua area
- Other community revitalization/development under consideration after the reclamation project and bypass construction are completed include meeting and conference space and geothermal infrastructure

Tresckow/Beaver Brook Surface Mine Restoration Project



The AML pilot funding will be used in combination with other funding sources to backfill several huge strip pits using mine spoil materials obtained on-site to facilitate future industrial/commercial development and allow for the construction of a dedicated access road to the McAdoo Industrial Park. The project will also relocate a Kline Township Municipal Authority potable water line to service some 400 residential customers in the village of Tresckow.

Tresckow Pit



Beaver Brook Pit



Significant Benefits (Surface Reclamation)

- Beaver Brook Project will reclaim 96 acres of AML for possible commercial development
- Tresckow South Project will reclaim 202 acres of AML for possible commercial development
- Benefits of potential development of the reclaimed site for commercial/industrial uses:
 - Expansion of the McAdoo Industrial Park
 - Industrial Park has many development sites which are also Keystone Opportunity Zones
 - After all surface mines are reclaimed, PennDot can consider construction of a dedicated highway from Rt. 309 to service the Industrial Park

Significant Benefits (Waterline Relocation)

- Waterline replacement for Tresckow Village
- Economic benefits of providing a public water supply including:
 - Increased capacity to better serve the current industrial and residential customers (At least one factory in the area is looking to expand)
 - Expansion to new customers including future factories in the existing CanDo McAdoo industrial park
 - Potential for residential expansion in the Village of Tresckow

Significant Benefits (Waterline Relocation)

- Economic benefits of providing a public water supply including:
 - Potential new industrial park on either or both reclamation sites with reliable water, electric & sanitary sewerage infrastructure on-site
 - Improved reliability of water in Tresckow for firefighting
 - Improved flow rate and volume can open doors to many small businesses which rely upon significant water (car wash, landscaping business, laundromat, restaurant, grocery store, etc.)

Black Dog Hollow/Fredericktown Coal Refuse Pile Reclamation Project

The AML pilot funding, along with other funding sources, will be used to complete reclamation of the abandoned Fredericktown Coal Refuse Pile which is located within 500 feet of sixty homes. The 45 acre coal refuse pile, which is 90 feet high with steep, unstable slopes and severely eroded channels, will be regraded to create more stable slopes, compacted, and capped with clean alkaline fill to allow for successful revegetation and future development of the site.

Black Dog Hollow/Fredericktown Coal Refuse Pile Reclamation Project



Significant Benefits

- Elimination of the health and safety hazards and environmental impacts of this coal refuse pile including:
 - Severe on-site erosion and off-site sedimentation issues in the Village of Fredericktown and the Monongahela River Watershed
 - Reduced acid mine drainage laden runoff
 - Slope stability and hazardous erosion gullies
 - Unauthorized recreational use by ATVs
 - Elimination of several hazardous facilities situated on the refuse pile

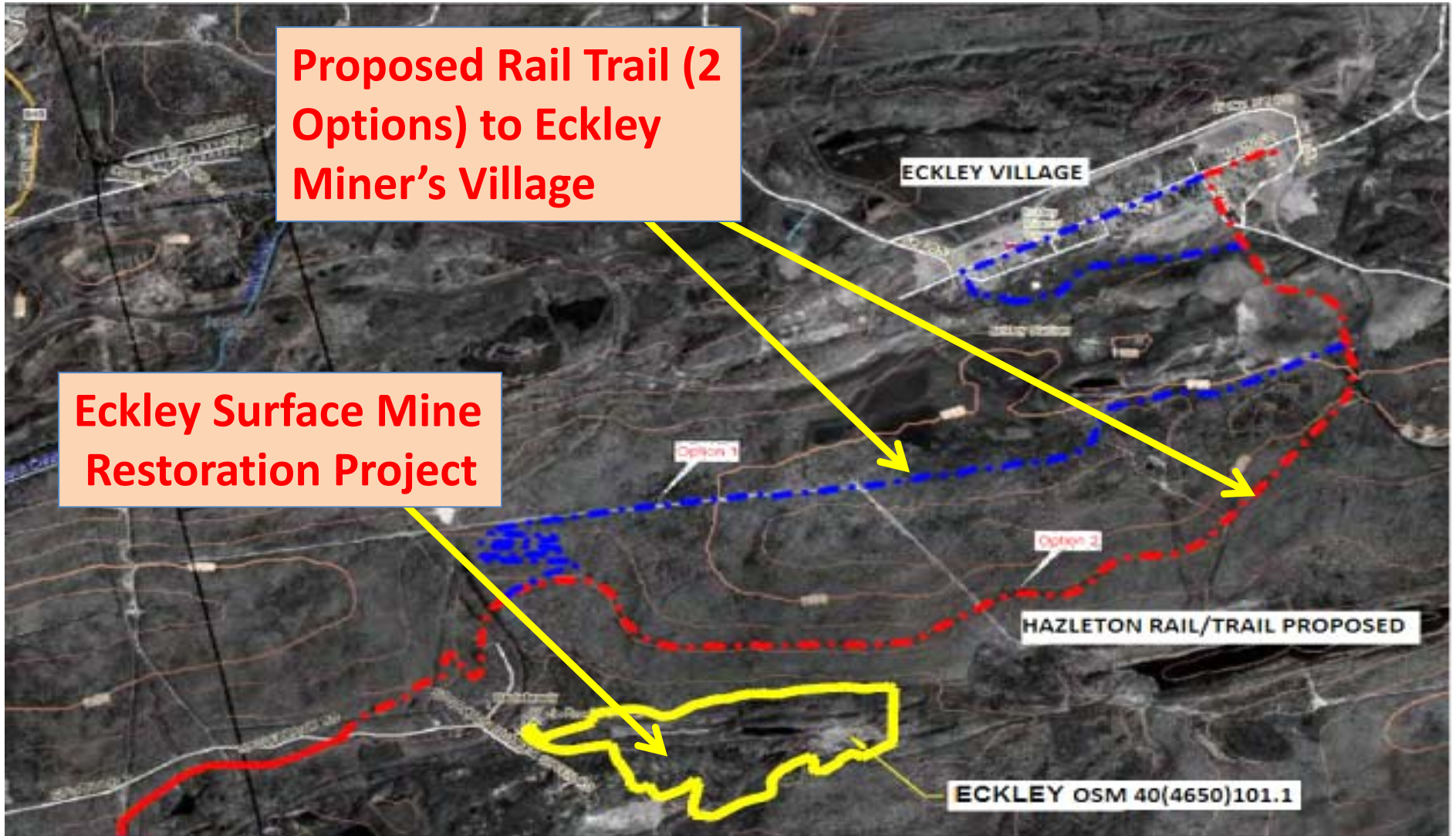
Significant Benefits

- Restoration of 45 acres of barren undevelopable land situated in the Village of Fredericktown in East Bethlehem Township
- Recreational development through construction of recreational and greenspace public park
- Improved quality of life for local residents
- Improved recreational opportunities
- Increased tourism
- Possible future industrial development
- Water quality improvement

Eckley/Hazleton Rail Trail/Hazel Creek Cleanup

The AML pilot funding will be used to reclaim a 70 acre abandoned surface mine with 2,500 linear feet of dangerous highwall ranging in height from 40 to 50 feet by backfilling and grading with on-site spoil material, including construction of wetlands, and reconstructing 3,200 feet of stream. The project will facilitate an extension of the Greater Hazleton Rails to Trails to connect with the Eckley Miner's Village and improve water quality in Hazel/Black Creeks.

Eckley/Hazleton Rail Trail/Hazel Creek Cleanup



Significant Benefits

- Reclamation of 70 acres of AML facilitating the extension of the Greater Hazleton Rails to Trails to connect with the Eckley Miner's Village tourist site and to eventually connect with the larger Delaware Lehigh National Heritage Corridor Trail system
- Improved/restored water quality in Hazel Creek and the Black Creek Watershed
- Increased tourism to the area
- Improved opportunities for fishing, hiking, and sightseeing

Pine Grove North/Lawrence Township Waterline Extension Project

The AML pilot funding will be used to construct Phase 1 of 3 of a waterline extension in cooperation with the Clearfield Municipal Authority to service approximately 153 homes and businesses in Lawrence Township, Clearfield County. Phase 1 will service 96 of the 153 homes and businesses which currently have wells/water supplies that are impacted/degraded by pre-act surface and underground coal mining operations.

Significant Benefits

- The project (Phase 1 of 3) will provide potable water to 96 total residences/businesses
- Increased potential for industrial development due to a potable water supply in this rural area
- Potential for construction of new single family dwellings and small business development
- Without project funding for the waterline extension project, there remains a high potential that residents may relocate which would impact the local tax base and property values of the occupied dwellings with impacted water supplies

Green Mountain Discharge/Audenreid Tunnel Discharge

The AML pilot funding will be used to treat the mine water discharge from the Green Mountain Tunnel and to improve the treatment of water from the Audenreid Tunnel. The project will result in the delivery of finished potable water to the Hazleton City Authority (HCA) that will increase the available safe yield of the area's water supply. Also, geothermal energy will be recovered from the raw water for cooling and heating the water treatment buildings.

Green Mountain Discharge/Audenried Discharge



**Audenreid
Tunnel
Discharge**

Significant Benefits

- Treat the Green Mountain Tunnel discharge
- Improve treatment of the Audenreid Tunnel discharge
- Deliver finished potable water to the Hazleton City Authority that will increase the available safe yield of the area's water supply
- Facilitate the sustainable recovery of the upper Catawissa Creek Watershed while developing the water and energy assets to provide a source of revenue to fund the ongoing AMD treatment cost
 - Microhydro for electricity
 - Geothermal for heating and cooling



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Active and Abandoned Mine Operations

Questions?

Contact Information:

ecavazza@pa.gov

814-472-1800

Tom Wolf, Governor

Patrick McDonnell, Acting Secretary