Planning and Implementation of the 2017 AML Pilot Program in Pennsylvania

Tom Wolf, Governor

Patrick McDonnell, Secretary
The 2017 AML Pilot Program was authorized by Congress under the Consolidated Appropriations Act, 2017 (Public Law 115-31) and provides an additional $25 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 revitalization and community development and reuse goals”
• This is the second year that Pennsylvania has received funding from the AML Pilot Program

• Pennsylvania, along with Kentucky and West Virginia, each received $30 million of AML Pilot Funding in FY2016
“State AML programs, in consultation with state and local economic and community development authorities, must develop a list of eligible projects in Appalachian counties that demonstrate a nexus with AML cleanup and economic and community development.”
“This AML Pilot is an opportunity for local communities and states to return impacted areas to productive reuse, which should be defined by the state in cooperation with local communities, to achieve the economic and community development goals identified for the community and/or region.”
AML Pilot Program Purpose

• Explore ways to return legacy coal sites to productive reuse

• Inform Congress of programmatic impacts of changes to the underlying federal law (SMCRA) such as those included in the proposed RECLAIM Act of 2017 which would accelerate distributions from the AML Trust Fund for similar economic revitalization and community development projects associated with the reclamation of AML sites
Proposed AML Pilot Projects

• PA DEP solicited proposals for AML Pilot projects from other states agencies, county and local governments, NGOs, Watershed Groups, and other AML advocacy groups.

• PA DEP received 26 proposals which were evaluated using the OSMRE AML Pilot Program Guidance and also for project costs and benefits.
• From the proposals PA selected a wide variety of project types with a variety of possible economic or community development benefits and partners

• DEP is targeting 12 proposed AML Pilot Projects (4 Bituminous and 8 Anthracite) which are located in 8 coal field counties

• Additional Pilot Projects may be considered
AML Pilot Program Proposed Projects

- Vetting documents were submitted to OSMRE for all 12 of the proposed 2017 AML Pilot Projects by November 28, 2017.
- OSMRE reviewed the proposed projects during December of 2017 and provided feedback along with requests for additional information for a few of the projects during January of 2018.
- OSMRE indicated that the list had been fully vetted and approved by OSMRE Headquarters on March 2, 2018.
AML Pilot Program Guidelines and Grant Application Timelines

- AML Pilot Program Guidance for the 2017 AML Pilot funding was issued by OSMRE on August 11, 2017
- PA submitted its 2017 AML Economic & Community Development Pilot Program Grant Application to OSMRE on October 5, 2017 (to make the funding available for projects)
- PA’s AML Pilot Program Grant Application was approved by OSMRE on November 15, 2017 with a period of performance of November 1, 2017 to October 31, 2020
PA’s Plan for the AML Pilot Funding

• PADEP-BAMR will allocate the majority of the AML Pilot Program funds for the reclamation of Title IV eligible AML & AMD problems

• Project partners will then work to fund and complete non-AML economic development aspects of the projects
The 12 AML Pilot Projects include:

- 4 surface mine reclamation projects
- 2 acid mine drainage treatment projects
- 5 coal refuse pile/culm bank removal or remediation projects
- 1 project to remediate a potential subsidence prone area on a college campus
In addition to eliminating a number high-priority AML/AMD features, benefits of the projects include:

• development of a youth sports complex
• creation or expansion of several industrial and/or business parks
• a new housing development
• protection of college campus buildings and surrounding grounds from future mine subsidence issues
• expansion of a regional airport including development of a new jet center
• reforestation and restoration of public lands
• improved groundwater quality
• significant stream water quality improvement including restored fisheries
• increased tourism through public trail development
These 12 Proposed AML Pilot Projects have the potential to leverage up to an additional $2 for every $1 of AML Pilot Program funding from other AML/AMD funds and/or economic development funds (Both public and private)
# Pennsylvania’s 2017 AML Pilot Projects

<table>
<thead>
<tr>
<th>No.</th>
<th>AML Pilot Project Name</th>
<th>Project Type</th>
<th>Municipality</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Zelienople Municipal Airport Expansion - AML Reclamation</td>
<td>Reclaim 3,470 feet of P2 Dangerous Highwall (DH) and 4 acres of P3 associated Spoil Area. (SA)</td>
<td>Franklin Township</td>
<td>Beaver</td>
</tr>
<tr>
<td>2</td>
<td>Stineman Refuse Pile - Path of the Flood Trail</td>
<td>Reclaim 20 acres of P2 Dangerous Pile and Embankment (DPE).</td>
<td>South Fork Borough and Adams Township</td>
<td>Cambria</td>
</tr>
<tr>
<td>3</td>
<td>Quakake Tunnel AMD Treatment - Black Creek Trail</td>
<td>Actively treat 6,000 GPM of P3 AMD improving 8 miles of stream</td>
<td>Packer Township and Weatherly Borough</td>
<td>Carbon</td>
</tr>
<tr>
<td>4</td>
<td>Potts Run Passive AMD Treatment System</td>
<td>Passively treat 500 GPM of P3 AMD improving 2.7 miles of stream</td>
<td>Knox Township</td>
<td>Clearfield</td>
</tr>
<tr>
<td>5</td>
<td>Lackawanna College Subsidence Abatement</td>
<td>The project will stabilize 0.5 acres of P2 Subsidence Prone Area</td>
<td>City of Scranton</td>
<td>Lackawanna</td>
</tr>
<tr>
<td>6</td>
<td>Can Do – North Park Drive Business Park</td>
<td>The project will eliminate 1,100 feet of Dangerous Highwall, a Hazardous Waterbody, and 56 acres of unproductive spoil material.</td>
<td>Hazle Township</td>
<td>Luzerne</td>
</tr>
</tbody>
</table>
## Pennsylvania’s 2017 AML Pilot Projects

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<thead>
<tr>
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<tbody>
<tr>
<td>7</td>
<td>Hollars Hill South AML - Cranberry Creek Gateway Project</td>
<td>The project will reclaim multiple AML problems: 650 feet of P1 Dangerous Highwall; 14 acres of P2 Dangerous Pile or Embankment; 6 P2 Hazardous Equipment and Facilities; a P2 Vertical Opening; 1.5 acres of P2 Industrial or Residential Waste; and 42 acres of P3 Spoil Area</td>
<td>Hazle Township</td>
<td>Luzerne</td>
</tr>
<tr>
<td>8</td>
<td>Earth Conservancy Bliss Bank 3 Business Area</td>
<td>Reclamation of 1200 feet of Dangerous Highwall (P2) and 6 acres of Spoil Area (P3)</td>
<td>Hanover Twp and Newport Twp</td>
<td>Luzerne</td>
</tr>
<tr>
<td>9</td>
<td>Swoyersville Refuse Pile - Community Athletic Area</td>
<td>The project will remove coal refuse material and reclaim 14.3 acres of Dangerous Pile and Embankment</td>
<td>Swoyersville Borough</td>
<td>Luzerne</td>
</tr>
<tr>
<td>10</td>
<td>The Porter Floodplain Restoration Project</td>
<td>Remove and reclaim 90,000 cubic yards of P2 Clogged Stream Land, Remove 2 - P3 Equipment/Facilities</td>
<td>West Brunswick Township</td>
<td>Schuylkill</td>
</tr>
<tr>
<td>11</td>
<td>Donaldson Culm Bank Stream Restoration Project</td>
<td>Reclaim 600,000 CY of P2 Clogged Stream Land, restore 4,600 LF of P2 Clogged Stream, backfill 4,500 LF of P2 Dangerous Highwall</td>
<td>Frailey Township</td>
<td>Schuylkill</td>
</tr>
<tr>
<td>12</td>
<td>TASA Refuse Piles - South Sandy Creek Restoration</td>
<td>The project will reclaim multiple AML problems: 5- P2 hazardous equipment &amp; facilities; 8 acres of P2 dangerous pile or embankment; 2-P2 polluted water human consumption; 6 acres of P3 slurry; 6 acres of P3 spoil area; and 7 acres of P3 gob</td>
<td>Irwin Township</td>
<td>Venango</td>
</tr>
</tbody>
</table>
Zelienople Municipal Airport Expansion
The AML Pilot funding, in combination with other funding, will be used to help complete a runway extension and other safety improvements at the Zelienople Airport. As part of the project, an adjacent roadway will be lowered to eliminate several safety concerns. The lowering of the roadway will generate a significant amount of cut material that will be used to reclaim a high-priority dangerous highwall located on airport property. An AMD impaired tributary of the Connoquenessing Creek will also be relocated.
The project will involve the reclamation of a 44 acre abandoned surface mine with 3,470 linear feet of dangerous highwall, having an average height of 70 feet, by backfilling and grading with on-site spoil material and supplemental waste material from the adjacent aviation safety project. The project will also include relocating a portion of an AMD impaired unnamed tributary of the Connoquenessing Creek with 2,730 feet of conveyance channel. The project will facilitate an extension of the airport runway, regain 24 hour airport operations and improve water quality.
Zelienople Municipal Airport Expansion

Roadway to be Lowered

Highwall to be Backfilled

Area to be Relocated

AMD Impaired Unnamed Tributary to Connoquessing Creek
Significant Benefits

• Elimination of 3,470 feet of dangerous highwall
• 24-hour airport operations will be restored by eliminating a 12-acre, 60-foot hillside obstruction currently restricting night operations
• SR 288 will be lowered and realigned to increase safety
• Creation of more than 25 jobs at the Airport
• Increased use of Airport resulting in economic growth for the Cranberry Area
Project Partners

- Landowner, Zelienople Airport Authority
- PA Fish & Boat Commission
- PennDOT Bureau of Aviation
- PennDOT Engineering District 11-0
- USACE – Pittsburgh District
- PADEP – Southwest Regional Office
- Beaver County Conservation District
- Widmer Engineering Pennsylvania
- Department of Environmental Protection
- Office of Surface Mining Reclamation and Enforcement
Stineman Refuse Pile Reclamation – Path of the Flood Trail Extension
The AML pilot funding will be used to remove coal refuse with fuel value for use in electricity generation at a cogeneration facility and to regrade any remaining refuse material onsite. Alkaline material will be added to neutralize acidity, and the site will be revegetated resulting in improved water quality in the South Fork Little Conemaugh River. The project will also facilitate a 3 mile extension of the Path of the Flood Trail to connect the existing trail in Ehrenfeld Borough to the Johnstown Flood National Memorial.
Path of the Flood Trail

- Stineman Refuse Pile
- Potential Trail Routes
- Connect to the Johnstown Flood National Memorial
- Existing Path of the Flood Trail in Ehrenfeld Borough
Reclamation of a 20 acre refuse pile

Improved water quality of the South Fork Little Conemaugh River

Extension of the Path of the Flood Trail

This 3 mile extension will connect the Johnstown Flood National Memorial at the South Fork Dam to the Johnstown Flood Museum in Johnstown following the flood’s path in its entirety

Potential for trail head and parking lot construction
• Path of the Flood race participation is expected to increase (held annually)
• Walking tours of the Path of the Flood
• Interpretative signage planned to be installed along the trail to educate tourists of the history
• Increased tourism to the area
• Local businesses in South Fork will benefit from the sale of soft and hard goods
• Improved opportunities for hiking, biking, kayaking, and sightseeing
Project Partners

- Cambria County Conservation & Recreation Authority (CCCRA)
- Robindale Energy Services
- Al Penn En, Inc (Landowner)
- Cambria County
- Foundation for PA Watersheds
- Pennsylvania Department of Environmental Protection
- Office of Surface Mining Reclamation and Enforcement
The AML Pilot funding, in combination with other funding, will be used to design and construct an active treatment system to treat the Quakake Tunnel discharge. Approximately 8 miles of wild trout stream (Quakake and Black Creeks) will be restored upon the completion and initiation of operation of the treatment system. Funding will also be used to create approximately 5 miles of new trail beginning at the existing Weatherly Borough building and extending into the Lehigh Gorge State Park. The new trail will traverse in close proximity to the restored stream.
Quakake Tunnel & Weatherly Borough Trail

Typical flow: 13 CFS (6,000 GPM)
Low pH and Elevated Metals
– Primarily Aluminum
Black Creek Downstream of Weatherly Borough
The Quakake Tunnel & Weatherly Borough Trail will have significant benefits, including:

- 8 miles of wild trout stream restored
- Improved water quality within the Black Creek watershed
- Newly created trail will connect Weatherly Borough to the Lehigh Gorge State Park
- Increased tourism to the area
- Improved opportunities for fishing, hiking, and sightseeing
Project Partners

• Weatherly Borough
• Carbon County Commissioners
• Wildlands Conservancy
• United States Geological Survey (USGS)
• Department of Community & Economic Development (DCED)
• PA Department of Conservation and Natural Resources (DCNR)
The AML pilot funding will construct a passive AMD treatment system that will treat 620 gpm of AMD emanating from the Potts Run No. 3 deep mine which closed in the mid to late 1950s. This deep mine drainage was identified as the major source of AMD pollution to Potts Run introducing high loadings of acid, aluminum and iron into the lower 0.4 mile of the Oak Ridge tributary which then enters and pollutes the final 2.7 miles of the Potts Run main stem. Twenty-five acres of abandoned surface mine will also be reclaimed including alkaline addition and reforested using the FRA.
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Potts Run Restoration

Potts Run No.3 Deep Mine Discharge
500 gpm
Potts Run Restoration

Oak Twin Deep Mine Discharge
120 gpm
# Potts Run Restoration

## Quality and Flow Characteristics of the Potts Run Discharges

<table>
<thead>
<tr>
<th>Discharge Description</th>
<th>Flow (gpm)</th>
<th>pH (units)</th>
<th>Acidity (mg/l)</th>
<th>Alkalinity (mg/l)</th>
<th>Fe (mg/l)</th>
<th>Al (mg/l)</th>
<th>Mn (mg/l)</th>
<th>Sulfate (mg/l)</th>
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</thead>
<tbody>
<tr>
<td>Potts Run No.3 Discharge</td>
<td>510</td>
<td>3</td>
<td>107</td>
<td>0</td>
<td>5.6</td>
<td>8.5</td>
<td>2.7</td>
<td>240</td>
</tr>
<tr>
<td>Oak Twin Discharge</td>
<td>104</td>
<td>3.5</td>
<td>65</td>
<td>0</td>
<td>0.7</td>
<td>6.4</td>
<td>7.2</td>
<td>306</td>
</tr>
</tbody>
</table>
Potts Run Restoration

Potts Run Refuse Pile and Highwall
Potts Run Restoration

Unreclaimed Contour Surface Mine
Potts Run Treatment Concept

Refuse Pile
Wetland
Flow Distribution Structure

No. 3 Mine Collection
Flow Limiting Structure

VFP
Oak Twin Collection

1" = 200'
Potts Run has a Cold Water Fishery designated use but is listed as impaired due to AMD on the Commonwealth’s 303(d) list of impaired waters.

Treatment of the Potts Run No. 3 deep mine drainage should result in the removal of Potts Run from the impaired waters list.
• Increased property values, tourism and recreational use for the area.

• The project will recoup a recreational use loss valued at $102,393 annually that is presently being experienced by these same waters by creating a projected 14 full-time temporary jobs and 5 full-time permanent jobs.
Primary Project Partners

- Trout Unlimited
- Landowners
- Foundation for PA Watersheds
- Pennsylvania Department of Environmental Protection
- Office of Surface Mining Reclamation and Enforcement
Lackawanna College Subsidence Abatement

PA 1786 Tech High School
Scranton Quad
City of Scranton
Lackawanna County

Coordinate System: North America Albers Equal Area Conic
Projection: Albers
Datum: North American 1983

Legend
— Project_Limit
Lackawanna College acquired several vacant buildings in downtown Scranton to expand the campus as part of their Cornerstone Commons Project. It was subsequently determined that the buildings were undermined and required abatement work to prevent mine subsidence. The College completed a project to address mine voids under a 2-story building and a central courtyard area at 409 Adams Avenue. The AML Pilot Funding will be used for a second phase of the project to address mine voids under a 6-story building at 401 Adams Avenue by drilling and injecting grout into the abandoned underground mine voids.
Lackawanna College Subsidence Abatement

Building and Courtyard Area Stabilized under Phase 1 of the Subsidence Control Project
Lackawanna College Subsidence Abatement

Six Story Building Located at 401 Adams Avenue
Welcome to Lackawanna College

Our main campus, located in downtown Scranton, is home to the Seeley Memorial Library, the College's three student dormitories, the Student Union, and much more. The surrounding attractions in the city offer a wide variety of cultural experiences for our students to enjoy.

Start your college career at Lackawanna and find your future today. Email questions@lackawanna.edu for details.

Map key

A: ANGELI HALL
501 VINE ST., SCRANTON
Ground floor
- Admissions
- Bookstore
- Community Concerts
- Forensic classroom

First floor
- Administrative offices
- Business office
- Developmental Education
- Learning Disability Services

Maintenance
- Public Safety
- Theater offices
- Falcons' Nest

Second floor
- Boardroom
- Classrooms
- Third floor
- Allied Health
- Cafeteria / Recepiton Hall
- Classrooms
- Computer lab

B: SEELEY HALL
406 N. WASHINGTON AVE., SCRANTON
Lower level
- Seeley Memorial Library
- Computer lab

First floor
- Resident Director
- Student Health Services

Second to Fourth floors
- Dorm
- Fifth floor
- Laundry room
- Police Academy

C: HEALEY HALL
415 N. WASHINGTON AVE., SCRANTON
Lower level
- Classrooms
- EMS Academy

First floor
- First floor
- Classrooms
- Culinary Arts Kitchen

Second floor
- Academic Affairs
- Career Services

D: MCKINNIE HALL
440 WYOMING AVE., SCRANTON
- Residence Life
- Director's office

E: STUDENT UNION
500 JEFFERSON AVE., SCRANTON
- Athletics offices
- Lycceum
- Fitness center
- Student lounge
- Gym
- Training room

F: TOBIN HALL
VINE ST. AND MADISON AVE., SCRANTON
First floor
- Housing
- Advisor's office

Second floor
- Wright Center for Graduate Medical Education
- Rear of building
- Student parking

G: CORNERSTONE COMMONS
401 ADAMS AVE., SCRANTON
- Coming soon!
- Conestoga Pavilion
- Alumni Courtyard

H: CULINARY COMPLEX
109 ADAMS AVE., SCRANTON
- Coming soon!
- Student dining
- New Culinary Arts program home
<table>
<thead>
<tr>
<th>Students to be Served Annually in New 401 Complex</th>
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</thead>
<tbody>
<tr>
<td>Main Dining Hall</td>
</tr>
<tr>
<td>School of Culinary and Hospitality</td>
</tr>
<tr>
<td>School of Engineering Technology</td>
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<tr>
<td>Degree Programs Related to</td>
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<tr>
<td>Ancillary Industry Growth</td>
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<tr>
<td>Vocational Technology &amp; Certificates</td>
</tr>
<tr>
<td>Information Technology &amp; Other Related Programs</td>
</tr>
<tr>
<td>Petroleum &amp; Natural Gas</td>
</tr>
<tr>
<td>Continuing Education Institute</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
This overall expansion by Lackawanna College will create:

- Permanent Full-Time jobs - 69
- Permanent Part-Time jobs - 21
- Non-permanent construction jobs - 110
- Indirect positions will also be created - 265
- Increasing State Tax base
- Increase student population
Project Partners

• Lackawanna College

• Pennsylvania Department of Environmental Protection

• Office of Surface Mining Reclamation and Enforcement
The AML pilot funding will be used to regrade an area previously impacted by both coal and non-coal mining. A total of 129 acres of previously disturbed area will be regraded to its approximate pre-mining condition for the creation of 7 property parcels to be developed in the CAN DO Industrial Park. It is anticipated that 70-140 permanent full time positions will be created.
CAN DO – North Park Drive Business Park

OSM 40(0263) 102.1 Can Do North Park Drive
2017 Pilot Project
Hazle Township, Luzerne County

Project Area
198 Acres

Fill Area
Approx. 53 acres

Borrow Area
Approx. 76 acres
CAN DO – North Park Drive Business Park

Project Location
Significant Benefits

• Development of 7 property parcels on currently unproductive land.
• Creation of up to 140 permanent full time positions.
• Reduction of hazards associated with previous mining.
• Expansion of industrial development to an economically depressed region in the anthracite coal fields.
• Pennsylvania Department of Environmental Protection.
• CAN DO Inc.
• Office of Surface Mining Reclamation and Enforcement.
• Private Landowner.
Hollars Hill South AML – Cranberry Creek Gateway Project
The AML pilot funding and Title IV AML funding, will be used to reclaim 150 acres, with 650 feet of dangerous highwall acres of dangerous mine spoil pile acres of industrial/residential waste, a mine shaft, and five (5) hazardous structures. A 30-acre portion of the overall project lies within CAN DO, Inc.’s future Cranberry Creek Gateway Project. On this 30-acre portion, the shaft will be backfilled and the hazardous structures will be demolished. Clean fill debris from the demolition work will be placed in a former coal silt basin and covered with mine spoil and topsoil to prepare for the future development of a community ballfield complex.
Hollars Hill South AML-Cranberry Creek Gateway Project

Wash House

Concrete Structures

Future Cranberry Creek Gateway Park
Hollars Hill South AML – Cranberry Creek Gateway Project
Hollars Hill South AML-Cranberry Creek Gateway Project

Dangerous Highwall with Unauthorized Dumping

Dangerous Pile & Embankment
Hollars Hill South AML-Cranberry Creek Gateway Project

Cranberry Creek Gateway Project Portion

Hollars Hill South AML Portion
Hollars Hill South AML-Cranberry Creek Gateway Project
Significant Benefits

- Reclamation of 150 acres of Abandoned Mine Land (AML).
- Elimination of dangerous AML features
- The future community ballfield complex
- Creating job and housing opportunities with the development of the remainder of the proposed 366-acre Cranberry Creek Gateway
Project Partners

• Greater Hazleton CAN DO, Inc.
• Pagnotti Enterprises Inc.
• Office of Surface Mining Reclamation and Enforcement
• Pennsylvania Department of Environmental Protection
Project Partners

- Greater Hazleton CAN DO, Inc.
- Office of Surface Mining Reclamation and Enforcement
- Pennsylvania Department of Environmental Protection
The AML Pilot Funding, in combination with other funding, will be used to complete the Bliss Bank 3 Project (55 acres) and will bring natural gas, water, and sanitary sewer services to the entire Earth Conservancy Bliss Bank Development (+220 acres). Bliss Bank 3 will abate 1,200’ of dangerous highwalls and spoil areas. NorthPoint Development is working with Earth Conservancy to market the site and estimate this project will result in over 1,000 permanent full time positions.
Earth Conservancy Bliss Bank 3 Business Park
Earth Conservancy Bliss Bank 3 Business Park

HANOVER RIDGE // Masterplan
- LEASED: 2,000,000 SF
- JOBS: 2,100 - 2,600

Under Negotiation with Large National Companies
Significant Benefits

- Reclamation of 55 acres of AML, of the overall 220-acre Bliss Bank project, which allows the site to be developed
- Nationwide companies potentially coming to the area
- Creation of over 1,000 permanent full-time positions
- Provides reclamation for a section of Espy Creek.
• Earth Conservancy (Land owner, Non-profit)
• NorthPoint Development Real Estate
• Office of Surface Mining Reclamation and Enforcement
• Pennsylvania Department of Environmental Protection
Highwall to be backfilled as part of the Bliss Bank 3 Project
One of the spoil areas to be used to reclaim the dangerous highwall
The Swoyersville coal refuse pile is an abandoned coal refuse pile and associated coal silt basins from the long-abandoned Harry E colliery and coal breaker. The entire Swoyersville refuse site encompasses approximately 55 acres containing approximately 4 million +/- cubic yards of coal refuse and waste rock material. Approximately 2.8 million +/- cubic yards of the refuse material is anticipated to be usable as fuel for electric cogeneration facilities that utilize waste coal. The project proposed for funding with AML Pilot Program funding will result in the complete reclamation of 7.5 acres of AML at the Swoyersville refuse pile site. 7.5 acres will be transferred to Swoyersville Borough for the development of community recreational facilities.
Swoyersville Refuse Pile – Community Athletic Area
Keystone Reclamation Fuel Management LLC has long range plans to reclaim the entire Swoyersville coal refuse pile which would ultimately restore 55 acres of AML which could all be used for industrial/commercial/recreational development within Swoyersville Borough. The coal material will be removed from the site using a Government Financed Construction Contract (GFCC). The overall project will also help to improve water quality in the Abrahams Creek Watershed and reduce flooding by restoring/improving areas of floodplain along Abrahams Creek. The community recreational facilities will provide for recreational opportunities for all residents of Swoyersville and the surrounding area.
Swoyersville Refuse Pile – Future Reclamation and Development Area
Significant Benefits

- 7.5 acres of developable recreation property for Swoyersville Borough
- Reclamation of high priority AML features
- Removal of the coal material may decrease Acid Mine Water Drainage from onsite
- Development of the sports complex will draw more people to the Borough and surrounding area to positively impact the community
- Ability for the Borough to host multiple sports activities for different organizations at the same time
Project Partners

- Keystone Reclamation Fuel Management LLC (Olympus Power/Northampton Fuel)
- Swoyersville Borough
- Pagnotti Enterprises Inc.
- Foundation for PA Watersheds
- Office of Surface Mining Reclamation and Enforcement
- PA. Department of Environmental Protection
Porter Floodplain Restoration Project
The AML Pilot funding, in combination with other funding, will be used to remove 90,000 cubic yards of coal silt on approximately 10 acres clogged stream land. The coal silt material will be transported to Stoudt's Ferry Preparation Company's Auburn facility where it will be processed and sold. Funding will also be used to create a missing portion of trail within the Schuylkill River Trail Network involving the reconditioning of an abandoned railroad bridge and the conversion of access roads into trails.
Porter Floodplain Restoration Project Location
• The Schuylkill River Trail (SRT) attracts over 2.0 million hikers, bikers, and other pedestrians every year to southeastern Pennsylvania for recreational and commuting purposes.

• Approximately 65,000 people annually use the SRT in Schuylkill County.
Abandoned Railroad Bridge to be Restored
Abandoned Railroad Bridge to be Restored
The Porter Floodplain Project will have significant benefits, including:

- Reclamation of 10 acres of AML facilitating the extension of the Schuylkill River Trail Network by creating the missing section of trail between the Auburn and Hamburg Trail heads
- Improved/restored water quality in the Schuylkill River
- Improved opportunities for fishing, hiking, and sightseeing
- Increased tourism to the area
Economic Benefits

• According to an independent study, the Schuylkill River Greenway generates $589.9 million in economic impact, supports 6,154 jobs, and generates $37.7 million in tax revenue, mostly through tourism.

• The 2009 annual economic benefit of the entire Schuylkill River Trail was $7,313,000 million, the year following the Great Recession's beginning.

• SRT expansion will continue to increase this economic benefit.
Economic Benefits

• Economic studies show that properties values adjacent to and in the vicinity of trails significantly increase once a trail is installed, and especially when that trail is connected to a greater trail system.

• Trail users spend an average $273 per year on hard goods (bikes, shoes, clothes) plus an additional $16.30 on food and drinks per visit.
Connecting the Schuylkill River Trail between Schuylkill County and Berks County will generate considerable revenue for the local economy, providing economic benefit to a region still trying to recover from the loss of its major manufacturers, a 24.3% unemployment rate for ages 20-24, and a decrease in the use of the County's native product, coal.
## Project Partners

- Kenneth & Jeanne Porter (Landowners)
- Schuylkill River Headwaters Association
- Schuylkill River Greenways National Heritage Area
- County of Schuylkill
- Foundation for PA Watersheds
- Stoudt’s Ferry Preparation Company
- Reading Blue Mountain & Northern Railroad
- William Penn Foundation
- Exelon Corporation
- PA DCNR
Donaldson Culm Bank Stream Restoration
The AML Pilot funding, in combination with other funding, will be used to remove coal waste along Good Spring Creek that is designated as a clogged stream land. This restoration project will create a more natural, sinuous 4,600 feet long stream channel and constructing nearly 18 acres of floodplain and wetlands. Usable coal material will be transported to a local power generation plant. Poor quality material will be placed into nearby AML mining pits. The restored site will be utilized as an environmental park by the local township.
Donaldson Culm Bank along Good Spring Creek
Donaldson Culm Bank Stream Restoration

Donaldson Culm Bank Project Limits

Village of Donaldson

Good Spring Creek
The Donaldson Culm Bank Stream Restoration project will have significant benefits, including:

- Improved water quality in Good Spring Creek
- The filled strip pits can be utilized for future commercial businesses
- Higher quality coal will be used as a source of energy at a local power generation plant
- Nature trails will be implemented after construction is finished
- Significantly reduce the potential of downstream flooding during high water events
Project Partners

- Schuylkill County Conservation District
- Frailey Township
- Natural Coal Company
- YZ-05, Inc.
- Schuylkill Economic Development Corporation
- Foundation for PA Watersheds
- Rausch Creek Lands LP
- Rausch Creek Generation
- Williams Companies, Inc.
- PA Department of Community and Economic Development
- PA DEP and OSMRE
The AML Pilot funding will be used for a pass-through grant to South Sandy Creek Watershed Association to excavate 200,000 tons of acid forming material consisting of coal refuse & coal fines. The excavated material will be transported to Scrubgrass Generating Plant, an 85-megawatt generating facility fueled by bituminous waste coal. A portion of the resulting alkaline flyash byproduct will be returned to the site, blended with existing on-site soil & used to remediate the site.
TASA Refuse Piles - South Sandy Creek Restoration

**Scrubgrass Generating Station**

- 87 megawatt generating facility
- Fueled by bituminous waste coal
- Electricity sold to Pennsylvania Electric Co. (Penelec)
- Generating plant employs over 50 people
- Contributes more than $6.5 million per year to the local economy through payroll and purchases of local goods and services
- Entered commercial service in June 1993
TASA Refuse Piles (Venango #1) Reclamation Plan

- Acid forming material to be removed
- UNT Williams Run
- Limestone drain
- UNT South
- Sandy Creek
• A major source of AMD pollution to unnamed tributaries to South Sandy Creek & Williams Run will be eliminated, resulting in approximately 13 miles of stream improvement.

• Scrubgrass Generating Plant will receive an economic boost that will enable the company to employ over 100 individuals & continue to reclaim additional refuse piles in Pennsylvania.
Significant Benefits

- Landowners will be able to lease reclaimed land for agricultural use.
- 5 hazardous abandoned mine structures will be removed from the site.
- Long-term improvement of the regional groundwater table will improve the water chemistry for two residential drinking water wells.
Project Partners

- South Sandy Creek Watershed Association
- Scrubgrass Generating Plant
- Tom Anderton, landowner
- Leftover Fuels, Inc., landowner
- Pennsylvania Department of Environmental Protection
- Office of Surface Mining Reclamation and Enforcement
<table>
<thead>
<tr>
<th>AML Pilot Project Name</th>
<th>Municipality</th>
<th>County</th>
<th>Total Estimated Project Cost</th>
<th>Proposed AML Pilot Funding Amount</th>
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<td>Zelienople Municipal Airport Expansion - AML Reclamation</td>
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Questions?

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717-787-9958