

Forest City East Abandoned Mine Land Reclamation Project

Bureau of Abandoned Mine Reclamation
9/23/26



Reclaiming Pennsylvania



2022



2023



2025

**Forest City East – Pennsylvania Fish & Boat Commission Access
Abandoned Mine Land Reclamation Project**

Introduction



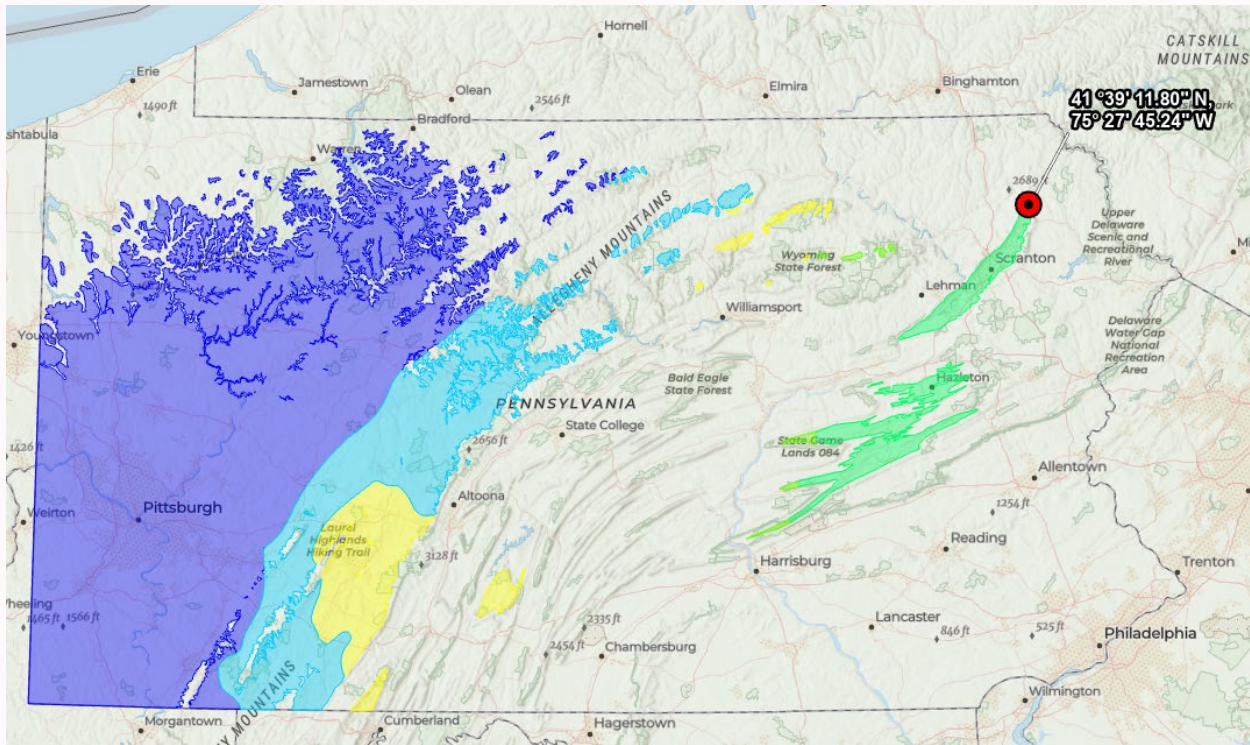
Forest City East Project Area (2025)

- Reclaimed area: 52.3 Acres
- Project Cost: \$3.35M
 - 60% AMLER
 - 40% Title IV
- AMLFs Reclaimed:
 - 4x P2 DPE (16 AC.)
 - 3x P3 GO (35 AC.)
 - 1x P2 HEF (900 S.F. Concrete Building)



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Project Location



PA Coal Distribution

- Northern Anthracite Field
- Forest City Borough, Susquehanna County
- Clinton Township, Wayne County



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Project Location

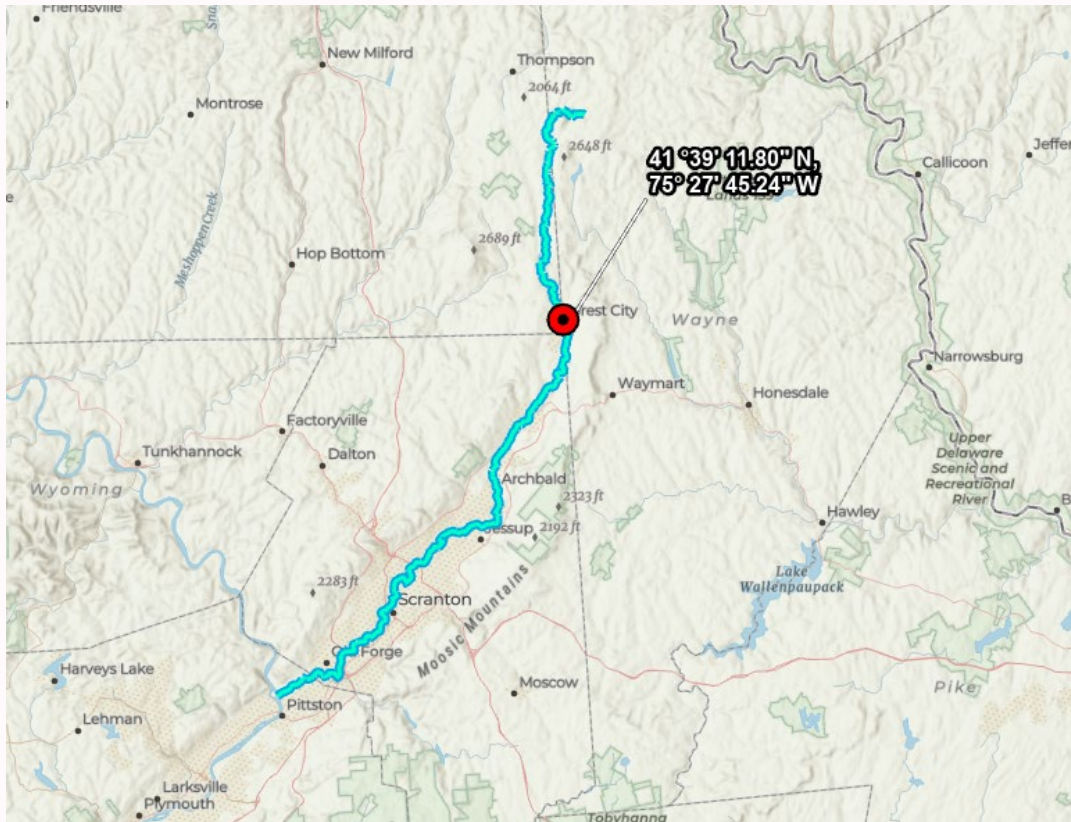


- Lackawanna River frontage
- Delaware and Hudson Rail Trail
- Residential adjoiners



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General Hydrology



- Lackawanna River
 - 12 miles into 42-mile-long span
 - Watershed Area – 348 sq. mi.
- Tributary to Susquehanna River (North Branch)
- Ultimately tributary to Chesapeake Bay
 - Significant nutrient & siltation impairments



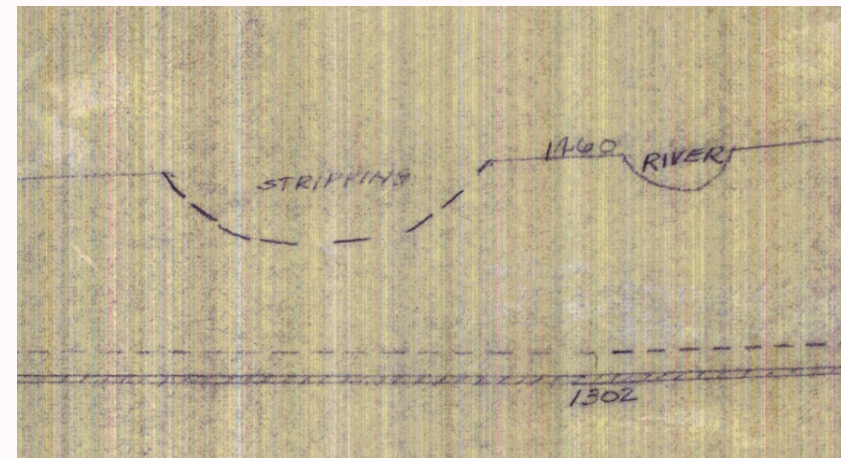
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Mining History



No. 3 Dunmore Vein

- Underground coal mining through 1935
- Surface mined 1940-50s
- All mining complete by 1960



Cross-Section



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Pre-Post Surface Mining



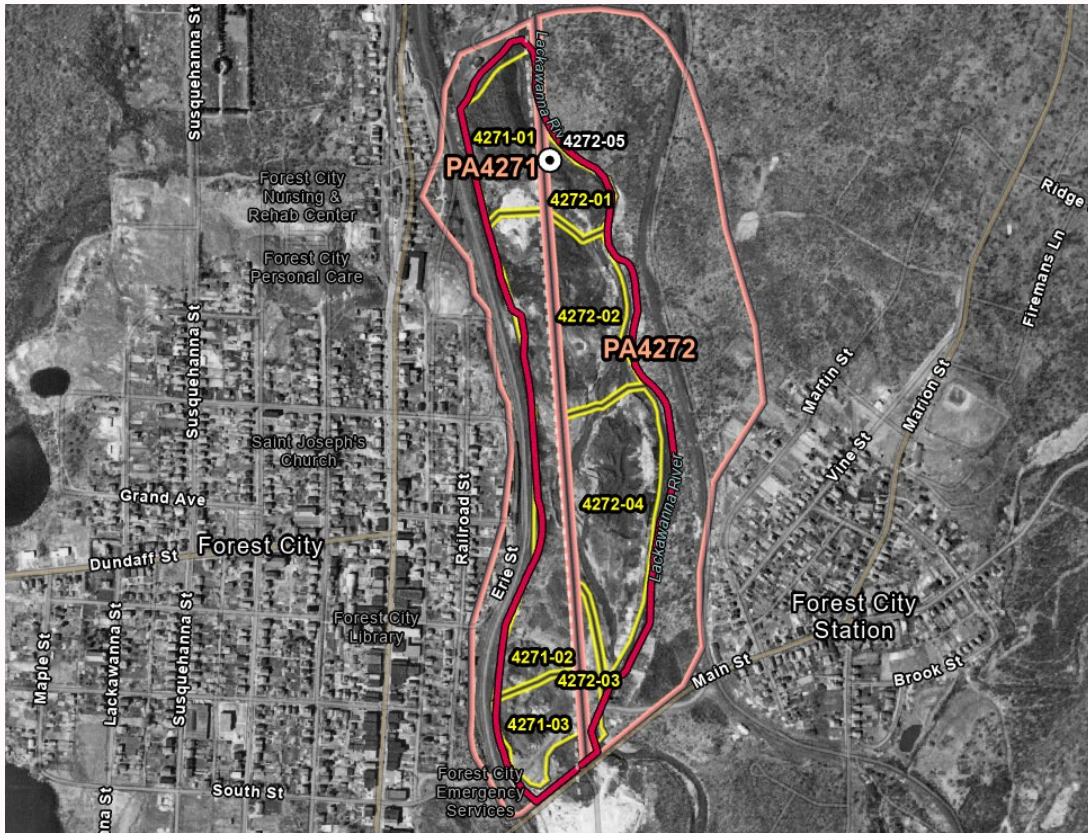
1939 Aerial



1959 Aerial



Pre-Reclamation



1959 Aerial

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Erosion Channel



- Erosion channel formed through site
- River flowed directly through mine refuse
- Project eliminated unnatural meander

Invasive Vegetation & Trespassing



- Japanese Knot Weed
- Frequent trespassing
- Littering/Dumping

Development & NEPA



- Single Property Owner
- AML Inventory Updated
- EA Prepared
 - All structures cleared by SHPO
 - PNDI Environmental Review
- ATP received 8/29/19

Design & Permitting

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ABANDONED MINE RECLAMATION PROJECT
FOREST CITY EAST - PFBC ACCESS

FOREST CITY BOROUGH AND CLINTON TOWNSHIP
SUSQUEHANNA AND WAYNE COUNTIES
CONTRACT NO. OSM 64(4272,4271)102.1

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TOM WOLF
GOVERNOR

PATRICK MCDONNELL
SECRETARY
DEPARTMENT OF ENVIRONMENTAL PROTECTION



TIMOTHY R. STAHL, P.E.
PROJECT DESIGNER
WILKES-BARRE DISTRICT OFFICE

JOHN J. CURLEY, P.E.
CHIEF - DESIGN SECTION
WILKES-BARRE DISTRICT OFFICE

KIM B. SAYDER, P.E.
ENVIRONMENTAL PROGRAM MANAGER
WILKES-BARRE DISTRICT OFFICE

- Designed in-house
 - Project Drawings
 - Permits
 - Site Surveying
 - Technical Specs & Contract Documents
- Competitively bid
- Notice-to-Proceed issued on 11/9/22

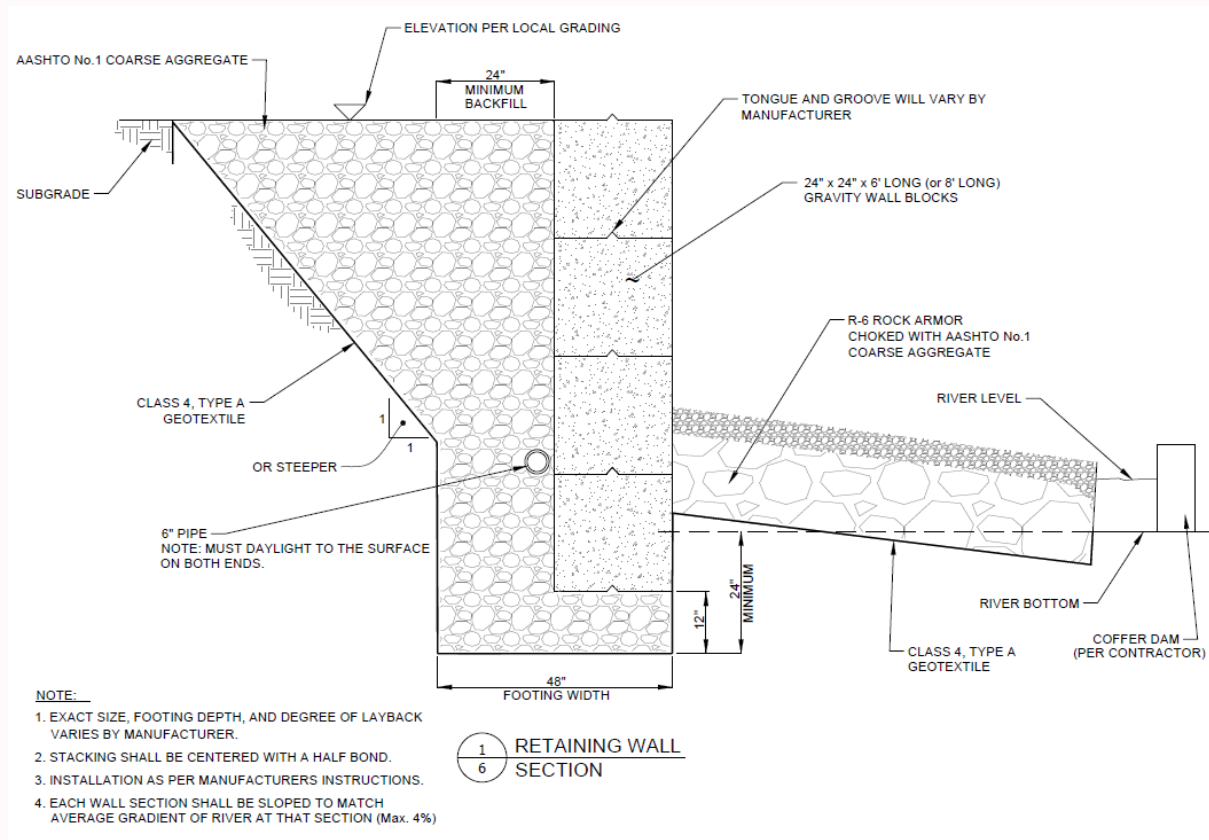
Wetland & Forest Preservation



- Preserved ~4AC of forested wetlands
 - Utilized in SWM design
- Protected from disturbance through life of project
- Identified through “Surgical” grading limits



Stream Armoring



- 1,183 LF of stream armoring
 - Pre-cast block retaining wall
 - Riprap armoring
- Combined aggregates near waterway
 - R-6 Base for armoring
 - AASHTO #1 Stone surface course for enhanced access/walkability

Existing Municipal Stormwater



- Multiple stormwater discharges into site
- Historic stone culvert below D&H Trail
 - Preserved by project
- Project incorporated all existing runoff into site design

Sequenced BMPs



- Multiple aprons, raingardens, & channels
 - Capture existing discharges across site
- Flows routed to preserved wetland
- Outlet Control Structure placed to retain wetland & control release



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Construction



- In-house construction engineering
- In-house construction inspection
- Actual Start Date – 12/14/22
- End Date – 4/3/24 (16 months)
- Final Cost – \$3.35M

Construction



- Clear & Grub
 - Scrape & Remove Invasive Vegetation
- Remove & Landfill waste
- Install E&S Controls
- Bulk Earthwork
 - Reverse grading away from river



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Draining Site & Fish Salvage



- Armored block retaining wall
 - To block river inflow to site
- PFBC Fish Salvage
 - Electrofishing to return trapped fish to main river channel
- Site dewatered quickly

Unexpected Occurrences



- Weather impacts
 - Site drained very well
 - Tote bags in river toppled
- Addition of stone drainage channel
- Adjustments needed for cut/fill balance



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Final Improvements



- 38 acres of revegetation
 - Includes 2,100 tree saplings
 - Black Cherry, Locust, White/Red Oaks, Norway Spruce
- 6,500 SF Wetland plantings
 - Incorporated wild blueberries
- Gravel access road & parking area



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Post-Reclamation

- Land opened to public
- Fish stocking from site
- Public support
- PFBC coordinating long-term lease

“...Everybody's been really respectful, driving really slow, they appreciate it. There hasn't been a mess, people clean up. I think the community really enjoys it and respects it.”



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Transferability



- Preserve established native vegetation
- Preserve historic structures
- Utilize sequenced BMPs
- Secure public access through supporting agencies

A Final Look



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Get In Touch

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The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).