The Ohio Coal Transition: Pathways for Community Resilience











THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES





Ohio State University Extension & School of Environment and Natural Resources







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Memorial Coal Miner statue at the Byesville Village Park Photo by: Gwynn Stewart



"Big Muskie" bucket in Morgan County at the ODNR Jesse Owens Park Photo by: Gwynn Stewart

The Ohio Coal Transition: Pathways for Community Resilience

Project Aim

- ➤ A group of faculty, staff and students at The Ohio State University interested in documenting how the coal industry has shaped Ohio's history, culture and economy, and how changes in the coal industry impact Ohio communities
- ➤ A research and arts project that blends social science, fine arts photography, library and archival research, theatre, and Extension to tell the stories and animate community-centered discussion around coal transition







Coal Plant Closures

- ➤ Most coal-fired power plants last about 40 years
- ➤ In 2006, coal generated 87% of Ohio's electricity. Now, it supplies about 1/3
- ➤ Cost pressures from Natural gas production & abundance pressure the coal-fired energy market
- > From 2007-2018, more than 500 U.S. coal-fired generators retired
 - ➤ In the Ohio Valley alone, 34 coal-burning facilities closed from 2009-2017
- ➤ Utilities have also announced 117 more units to close by 2024
- ➤ Coal Plant closures impact coal production in Ohio, production in 2019 was where it was in 1886



Other Work on Coal Plant Closures

> The Univ. of Illinois Extension (in cooperation with The Just Transition Fund)

https://extension.illinois.edu/blogs/building-entrepreneurial-communities/2019-09-04-beyond-coal-illinois-just-getting-started

Colorado State University: Center for the New Energy Economy

micro-documentaries about the energy transition in Craig, Colorado

- The Montana State University: Energy Communities

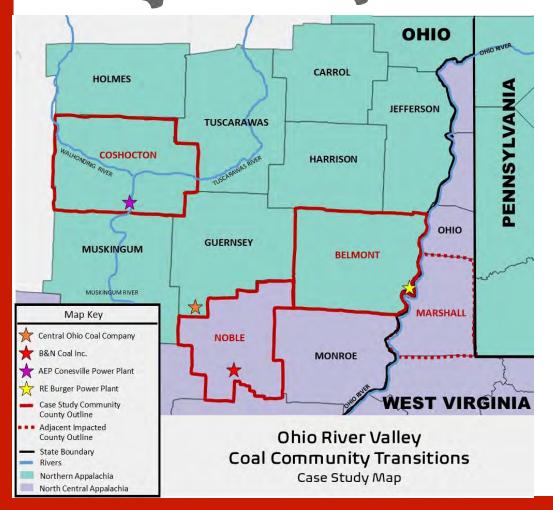
 https://www.montana.edu/energycommunities/documents/Colstrip Status Report-FINAL.pdf
- > The Just Transition Fund

https://www.justtransitionfund.org/where-we-work





Ohio Coal Communities Project



- Belmont County Shadyside, Ohio
 - Loss of Berger (1st Energy) Power Plant
 - History of Surface & Underground Mining
- Noble County Caldwell, Ohio
 - Loss of Central Ohio Coal Company
 - Current Site of B&N Coal Company
- Coshocton County Conesville, Ohio
 - Loss of Conesville (AEP) Power Plant
 - History of Surface & Underground Mining

Methods

- Historical research
- Archival collection: local histories, private archives and collections of textual and visual materials
- Local site documentation through repeated field visits
- Performing key confidential interviews with community leaders, residents, workers and industry representatives in Ohio Communities (N = 49 as of 5/8/22), about the role coal mining, transportation, and use has and will play in communities
- Focus group discussions
- Continuous local engagement: photodocumentary work, collaboration with local high schools, collaboration with local arts advocacy groups

Belmont County

- In the heart of southeastern Appalachian region Ohio
- Located on east-west I-70, one of the nation's busiest interstates
- Belmont County is one of state's highest coal producing counties
- 67,006 Residents
- Historic Ohio River Valley Industrial Center
- The Berger Power Plant along the Ohio River was closed in 2011



RE Burger Power Plant at Dilles Bottom. 7 miles downriver from Shadyside and across the Ohio River from Moundsville, WV Photo: Chuck Mauer



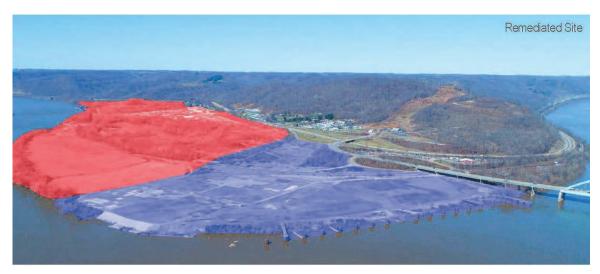
RE Burger Power Plant Demolition

Photo taken by Joe Lovell at The Times Leader (Junkins, 2016)



Belmont County

- Power plant Site is the potential location for the PTT Daelim Cracker Plant
- JobsOhio has invested \$30M in Site Redevelopment



PTT Proposed Site along Ohio River in Belmont County

- Air & Water Permits have been approved
- Tax Agreements for Schools & Township Set
 - \$47.5m over 15 yrs. for education
 - \$20m in sales tax revenue during construction



WV Impact

- Moundsville, WV, just across Ohio River in Marshall Co.
- Mitchell Plant 1,636MW plant life recently extended to 2040, although uncertainty remains
- WV highest coal producing state in Appalachia, Marshall Co highest producing county in WV



Mitchell Power Plant in Moundsville, WV across the River from Belmont County

Photo Taken by Matt Sell

Coshocton County

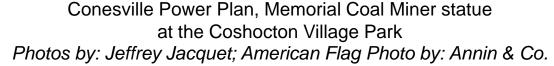


- Important Native American trading site
- Located along historic water canals / tourism center today
- 24% loss in Natural Resources & Mining since 2013
- 1,191 farms (average size of 153 acres)











Coshocton County

- The AEP Conesville Power Plant operating since 1957, shuttered in 2020 (62 years with 600 employees at height)
- 6 coal-fired boilers generated over 2,000 megawatts of power



AEP Conesville Power Plant in the Background of a Dollar General Store Photo: William Sharp, OCCT Project Photographer



AEP Conesville Smoke Stack Demolition

Photo by Erich Skelley, Conesville Industrial Park Consultant

Noble County

- Last County created in Ohio, located in the heart of southeastern designated Appalachian region
- Bisected by north-south I-77 & 30 min. north is east-west I-70



- The Ohio River is 25 miles to the south of the county
- 31.3% loss in Natural Resources & Mining since 2013
- AEP's Central Ohio Coal Co. operated a surface mining operation in Noble County until 1991. They employed nearly 1,000 producing up to 1.7 million tons of coal annually



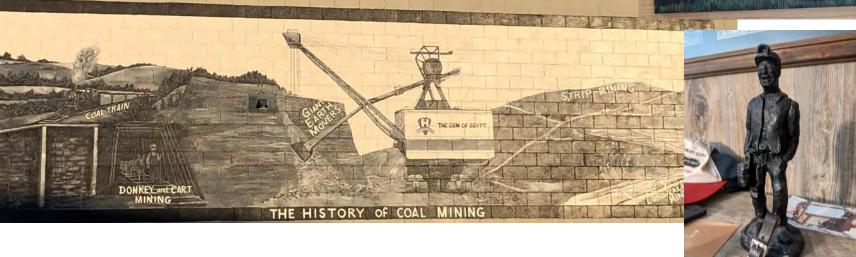
CFAES

 Current surface coal mining at B&N Coal company's Whigville mine; production began on the most recent coal seam in 2017

Current Study State

- ➤ Completing Key interviews
- ➤ Compiled data and literature review
- ➤ Cataloging stories & art-related items
- ➤ Continuing to build community partnerships



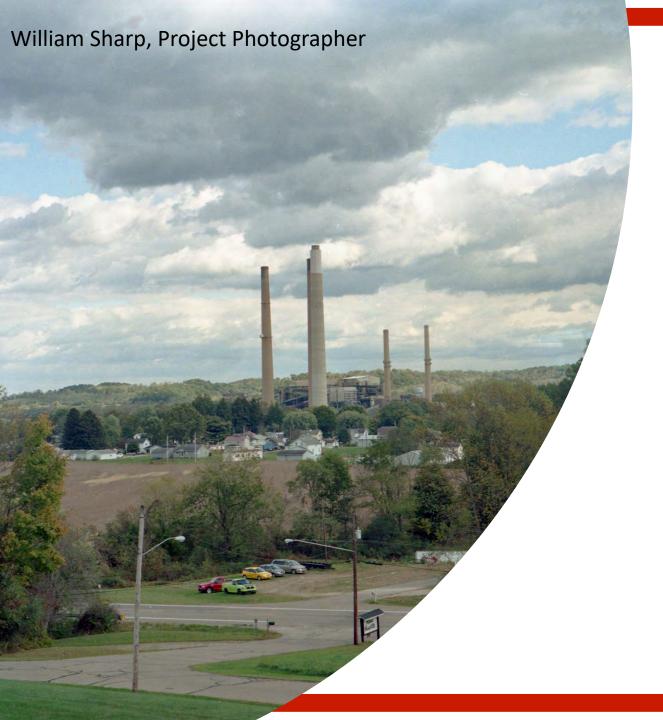




Photos by Team members

Artwork by Elizabeth Halves Walsher

- ➤ Coal community experiences are diverse, with a range of different issues depending on <u>above ground mining</u>, <u>below ground mining</u>, <u>power plants</u>, <u>coal transport options</u>, <u>historical trends</u> and <u>proximity to urban areas</u>.
 - ➤ There are many different coal transitions happening simultaneously, and yet some coal infrastructure will remain indefinitely.
- ➤ Coal losses most directly impact community tax bases (esp. schools and levy services) and local workforces without easy replacement options.
- ➤ Many Coal industry workers were highly paid but with niche, industry specific skills, many are older workers with long careers in the industry.



The Symbolism is Important

- Rural landscapes and industrial labor play important and complex real and symbolic roles in how residents interpret coal transition
- Power plants (and mines to lesser extent) are important symbolic community features. It's not just jobs and tax revenue.
- Strong cultural attachments to coal as way of life
- Surprisingly, almost everyone we talked to is resigned to coal's fate; a change from even 2-3 years ago.

Trauma-informed findings on the coal transition:

Recognition: Despite benefits (real and perceived) of the coal industry's presence and now absence on these communities – recognizing the traumatic impacts of that presence/absence is important to processing the transition

Processing: Honoring the need for communities to process transition on their own terms -> that while climate change demands swift action, whiplash from this transition on communities will have both internal and external consequences if not properly addressed

Transparency: The historical lack of transparency within the presence of the coal industry and now around its closure has been a large contributor to the way community trauma presents itself -> bolstering transparency around the closure process at all levels can be used not only for harm reduction, but also helps a community properly prepare

Space to Grieve: Upon initial closure of a facility, when community wounds are the most heightened -> curating a space – physical and metaphorical - to be able to grieve the loss of the coal industry is key





Trauma Informed Coal Transitions:

The Importance of Peer Support

- Community events, memorials and online support groups
- Puts folks in community with one another who understand these experiences on a personal level -> who understand their psychological, social, cultural and political implications
- Helps communities process these transitions together: why it happened, why the symbolism is so important – why the loss of that symbolism cuts so deeply
- Curates storytelling and co-reflection -> engages not just the negative present experiences around loss and grief, but also help pull positive memories from the past



Laying a Power Plant to Rest

Power plant funeral, or a 'Celebration of Life' that coalesces alongside the demolition process

Creates an opportunity for the community to process grief



Online Memorial Forums

Accessible to those who stay in the community after closure as well as those who leave. Inclusive for those who miss out on community events due to work schedules, bodymind limitations or global pandemic

"A place to remember"



7,000,000

Topics

Files

About

Please feel free to invite your friends and family to share pictures or stories of AEP Conesville power plant so everyone can see the pictures and read the stories. A place to remember.

Material and Creative Community-Led Memorial Projects

Built monument and dedication sites, historical markers, art installations



Conesville
Power Plant by
local resident,
Elizabeth
Halves Walser



oto: William Sharp



CFAES

Emerging sectors include Ecotourism

- Paradoxically, coal sites now emerging as tourism and recreation opportunities
- Noble/Morgan/Muskingum The Wilds & ODNR ReCreation Lands
- Coshocton AEP Conesville Coal Lands, Tri-Valley & Woodbury Wildlife
- Belmont Egypt Valley Wildlife Area is 14,300 acres of wildlife County has \$246M in Visitor Spending

Top Appalachian Horizontal Shale Rig Bottom: Natural Gas Plant Const. (on I-70) Photos by Gwynn Stewart

Competing sectors include **Natural Gas**

Over \$86.4 Billion Has Been Invested since 2011 in the Ohio Appalachian Shale Gas Play

➤ Ohio Shale Region is "home" to 12 Natural Gas Power Plant Projects (\$10 Billion in Investments)









Brownfield Solar Possibilities: Surface Mines

Noble County

- Recreation Solar, LLC, 49.5MW solar project
- Located on a reclaimed coal strip mine
- Power delivered into the AEP South Cumberland substation through the PJM interconnection process
- Begin construction in early 2023
- 200 construction jobs & 15 full-time operations jobs
- Expected to add \$350,000 annually to tax base

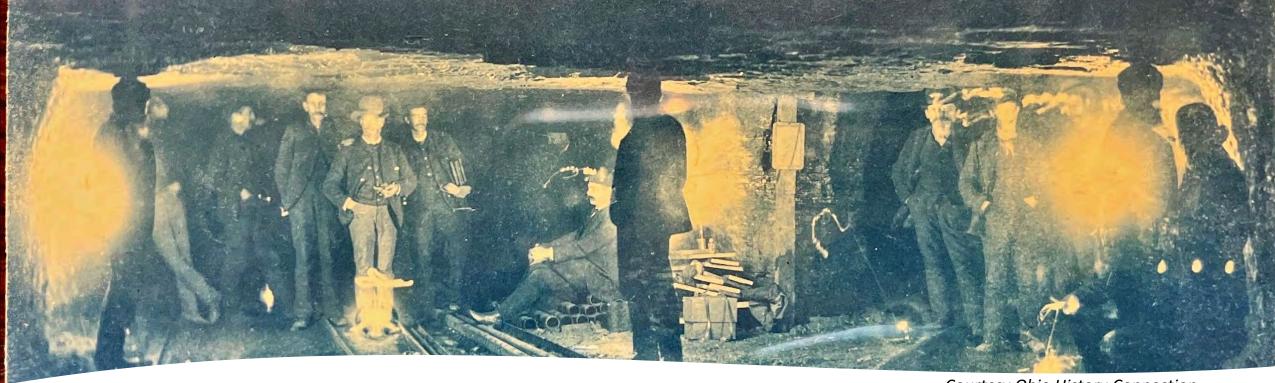


Brownfield Solar Possibilities - Powerplants

Coshocton County

- Conesville Green Energy solar farm 68 megawatt solar array on Conesville Plant site
- Designed for areas otherwise not developable, and to attract new "green" businesses to the industrial park

Conesville Plant Construction 1950s, Courtesy Johnson-Humrick House



Outputs & Next Steps

Master's and Honor's theses

- Extension case study reports, fact sheets, and transition guides
- Summary and peer-review journal publications
- Photography, fine arts and archival exhibition from August 22nd Sept. 15th, 2022, simultaneously at Hopkins Hall Hybrid Arts Gallery and Thompson Library Special Collections on OSU Campus in Columbus.
- Travelling exhibitions in 3 case study locations this fall/winter.
- Local audio-visual collaboration (Conesville/Cochocton) OSU Theater Dept.
- Theatrical performance that utilizes interview data and community connections
- Co-authored book (Jacquet, Woodworth, and team) focused on "transition"

Courtesy Ohio History Connection









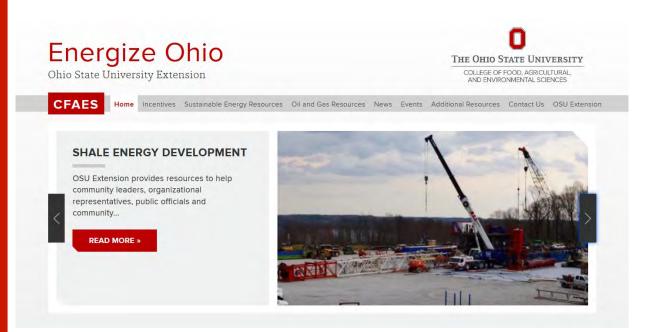
\$12 for 12 Months

Coshocton Tribune



COSHOCTON – Many who worked at or lived near the former American Electric Power plant just outside Conesville might refer to its closing akin to a death in the

Ohio State Univ. Extension Energy Outreach Program www.energizeohio.osu.edu



- ➤ The energy library with a wide variety of energy programs and resources including fact sheets, bulletins and videos
- > Searchable database of energy efficiency and renewable energy incentives can also be filtered to meet individual needs

