

# Former Mine Land Restoration in West Virginia

July 2024

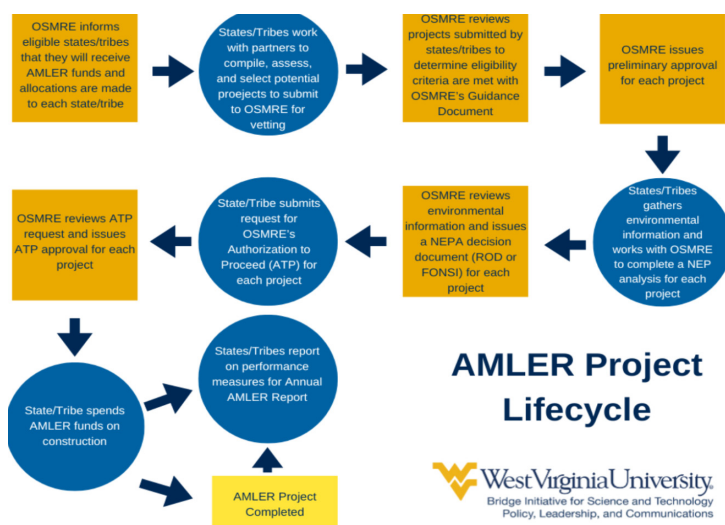
Nearly one in three West Virginians [live within one mile of an abandoned mine site](#). Under the Surface Mining Control and Reclamation Act of 1977 (SMCRA), there are two main federal programs to reclaim abandoned mine lands: the Abandoned Mine Land (AML) program and Abandoned Mine Land Economic Revitalization (AMLER) program. The AML program funds efforts to address environmental and safety hazards posed by abandoned mine lands, while AMLER seeks to transform these lands into areas beneficial for the community and local economy. Both the AML and AMLER programs provide funding for pre-SMCRA (before 1977) abandoned mines.

Each year, West Virginia receives millions of dollars in AMLER funding to support restoration and development projects. This Science and Technology Note addresses the status of project efforts in West Virginia and considers possible policy options.

## SMCRA Mine Land Restoration Programs

Abandoned mine lands (AML) are defined as lands mined for coal or minerals that were abandoned and inadequately reclaimed, with no individual or company responsible for remediation. SMCRA established the AML program to fund voluntary cleanup of abandoned mine lands via a coal tax, and created a bonding system

### AMLER Project Life Cycle



## Research Highlights

- Since 2016, the Abandoned Mine Land Economic Revitalization (AMLER) program has seen millions of dollars in federal investment to reduce environmental liabilities and support projects like apple orchards, ATV trails, and manufacturing facilities in West Virginia.
- Due to challenges in the AMLER project life cycle, including inconsistent federal requirements and long waiting periods for state project review, West Virginia has spent only \$40 million of the \$155 million it has been awarded on AMLER projects. Inflation is reducing the value of this unspent award money.
- West Virginia could seek to reduce the time projects spend in state review by providing more resources and assistance at the project application phase, adding economic development expertise to the project review panel, and prioritizing smaller projects.

to prevent future mine abandonment (see this note for more detail). Financial challenges to the post-SMCRA bonding system are considered in this note. Since its inception, the AML program has restored 27% of abandoned mine lands in the United States. Over 20% of all remaining unreclaimed land is in West Virginia, with an [estimated 2020 reclamation cost of \\$5.1 billion](#).

Since its inception in 2016, the AMLER program has committed \$211 million in grant funding to projects in West Virginia, [including](#) apple orchards, ATV trails, and industrial parks, to help repair environmental damage and revitalize the economy. West Virginia has earned funding for [72 AMLER projects](#)—the third most in the United States behind Kentucky and Pennsylvania. However, between 2016 and 2021, West Virginia spent only [\\$40 million of the \\$155 million](#) in AMLER funds it was allocated. Reducing this discrepancy is in the interest of West Virginians, as local communities and economies benefit only once funds are spent. Further, AMLER is not a permanent federal program (like the AML program).

## Benefits for West Virginians

AMLER projects bring tremendous benefits to West Virginians. They can improve community health through remediation of liabilities and improved infrastructure, and provide employment in areas negatively impacted by the decline of the coal mining industry. AMLER projects can increase tourism, recreation, and local industry. Economic benefits of AMLER projects can also extend beyond individual projects to the surrounding community. Currently, every dollar of AMLER funds spent results in an additional \$1.66 in sales, and for every two jobs created directly by AMLER funds, an additional job is created to support those workers.

## Other State Comparison and Challenges

States solicit AMLER project proposals and select those to submit to OSMRE for preliminary approval. In West Virginia, projects are reviewed, approved, and sent to OSMRE by an [inter-agency advisory committee](#). Between the preliminary approval and the authorization to proceed (ATP) is the planning phase, which requires both environmental and project plan review on the part of states and OSMRE (see figure on the first page). A 2024 Government Accountability Office report found [inconsistent administration of the AMLER program by OSMRE](#). For example, determinations of whether a lein is required are [made on a case-by-case basis](#). At times, input from multiple federal agencies is needed, slowing the process further.

Despite these challenges, minimizing time spend in the state planning phase could improve project timelines. AMLER projects spend an [average](#) of 400 days in the state review phase compared to 85 in OSMRE review. Besides Kentucky, West Virginia projects [spent the most time in the state planning phase](#) between 2016 and 2022. In addition, West Virginia had the [largest range of times spent](#) in state review across all project types (besides educational facilities). Delays may cause projects to lose investors, and decreases the impact of each dollar invested due to inflation. Of the 36 approved West Virginia [AMLER projects](#) since 2019, 22 are under action from the state while ten have received ATPs. For comparison, of 20 approved projects, Ohio has 14 in state review and 7 with ATPs. Pennsylvania has been especially successful in moving AMLER projects through review. Of 33 projects approved since 2019, only three are in state review, and 25 have received an ATP.

## Policy Options for Improving AMLER Spending Efficiency

Several policy options have been proposed. To reduce the length of time spend in the state planning phase, [DownStream Strategies suggests the following](#):

- **Put additional effort into the application phase to minimize unexpected delays.**

The planning phase will be shorter if there are fewer unexpected delays. While some delays (like those stemming from COVID-19) are unavoidable, others can be minimized by putting additional resources into the application phase.
- **Have state agency staff play a more active role in the planning phase.**

In Ohio, state agency staff play an active role in the planning phase, which may have reduced the time it takes to complete this phase.
- **Prioritize smaller projects.**

Larger AMLER grants have taken longer to pass through the planning phase than smaller grants. In addition, a greater number of smaller grants can benefit more communities in need of AML reclamation investments.
- **Help applicants anticipate potential NEPA delays due to seasonality.**

Sometimes, the National Environmental Policy Act (NEPA) process requires waiting until a certain season to address the potential presence of threatened or endangered species. Agency staff can proactively provide information to subrecipients to help them anticipate these delays and, where possible, complete the NEPA process during the current cycle rather than waiting for the next cycle.

Additional policy options include adding economic development expertise to the inter-agency committee that reviews project applications, using a transparent selection process, and carefully documenting both primary and secondary economic benefits from AMLER projects. Policy options at the federal level include modifying funding requirements to make post-SMCRA mine-lands, which [tend to be larger and more suitable for economic development](#), eligible for AMLER funding.

This Science & Technology Note was written by Colin Dunn, JD, WVU, Ryan Nesselrodt, PhD and Dr. Deborah Stine on behalf of West Virginia University's Bridge Initiative for Science and Technology Policy, Leadership, and Communications with financial support from the US Department of Commerce's Economic Development Agency, Federal Award ID Number: 01-79-15295. Please see <https://scitechpolicy.wvu.edu/> or contact [scitechpolicy@mail.wvu.edu](mailto:scitechpolicy@mail.wvu.edu) for more information.