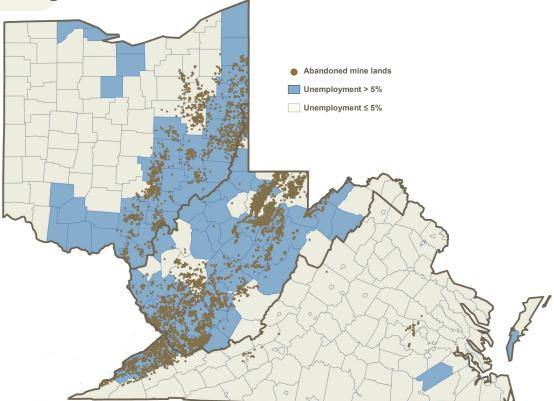
October 5, 2021 Joey James, Dale Shannon, Evan Hansen

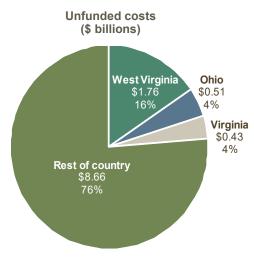


Moving forward at warp speed: Abandoned mine reclamation over the coming years Update including Abandoned Mine Reclamation Fee Reauthorization

A lot of work remains to be done to reclaim abandoned mine lands in West Virginia, Ohio, and Virginia Before passage of the Surface Mining Control and Reclamation Act of 1977, thousands of coal mines had already been abandoned across the country, leaving a legacy of degraded land and polluted water. While numerous abandoned mine lands (AMLs) have been reclaimed since then, billions of dollars of reclamation work remains to be done. These AMLs are found across much of West Virginia, as well as eastern Ohio and southwestern Virginia.



Sources: AMLs from OSMRE (2021a). Unemployment rate from ARC (2021).



According to the official federal database, it will cost another \$11.3 billion to reclaim AMLs across the United States, including \$1.76 billion in West Virginia, \$510 million in Ohio, and \$430 million in Virginia.

But these remaining costs significantly underestimate the scope of the problem, for several reasons. Many costs were estimated years ago and do not account for inflation since the estimates were made. Cost estimates for numerous AMLs are simply omitted from the database. Also, the cost of building and maintaining water treatment systems—many of which will need to treat water in perpetuity—is also not accounted for in these estimates.

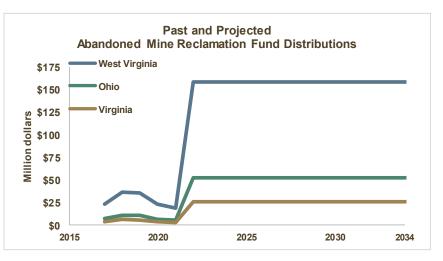
One recent report estimates that \$20.9 billion of reclamation work remains to be done at AMLs—almost twice the amount in the federal database (Dixon, 2021).

Source: OSMRE (2021a).

The federal government has proposed a massive investment in abandoned mine land reclamation Although the bill has not yet passed, Congress is considering authorizing an appropriation of an amount roughly equal to the remaining reclamation costs in the federal database. As currently written, funding will be allocated based on the amount of coal mined before 1977. States and tribes will have 15 years—until 2036—to spend this money. (U.S. Congress, 2021)

In addition, Congress is considering reauthorizing the Abandoned Mine Reclamation Fee through 2034, although at only 80% of the current rate.

While this investment would be very large, it is unlikely to be enough to finish the job. This is because, as mentioned above, the official government estimates are underestimates, and also because inflation over the next 15 years is likely to result in less work getting done in the future for the same dollar amount.



Sources: Past distributions from OSMRE (2021b). Future distributions estimated from U.S. Congress (2021).

This investment will create jobs and economic activity in and around counties suffering from high unemployment

Together, the appropriation and fee renewal represent massive investments in coal country workers. New reclamation jobs and associated economic activities will be focused in areas with large numbers of AMLs. As illustrated above, many of these counties have high levels of unemployment. Many of these counties have also suffered a decline in coal-related jobs as production has fallen and coal mines have gone bankrupt.

In West Virginia, this bill will result in approximately 1,910 jobs that will

continue for 13–15 years, while in Ohio and Virginia It will result in approximately 730 and 330 jobs, respectively. The economic output in these three states associated with this investment to reclaim abandoned mine lands totals almost \$7.5 billion over this time period.

	Economic output (billion \$)	Jobs	Labor income (million \$)
West Virginia	\$4.7	1,910	\$1,580
Ohio	\$1.9	730	\$660
Virginia	\$0.85	330	\$290

Economic benefits of investing in abandoned mine land reclamation

Source: IMPLAN analysis performed for this memo. Note: Total economic output and labor income are for the entire 15-year period. Jobs are created at the start of the period and continue for 15 years for the appropriation and 13 years for the fee renewal.

State agencies will need to staff up and start planning immediately As illustrated above, this new investment will dramatically increase the amount of money distributed for abandoned mine reclamation; annual distributions to West Virginia, Ohio, and Virginia will increase by about 8-10 times. State agencies that manage these funds will need to staff up in order to spend these funds promptly and efficiently.

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