



Infrastructure Investment and Jobs Act

FLASH REPORT: ABANDONED MINE LANDS PROGRAM THE U.S. DEPARTMENT OF THE INTERIOR PREPARES TO SPEND \$11.3 BILLION

The President signed the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117–58, into law on November 15, 2021. The IIJA provides additional funding for the Office of Surface Mining Reclamation and Enforcement’s (OSMRE’s) Abandoned Mine Reclamation Fund. The fund is for restoration, reclamation, abatement, control, or prevention of adverse effects of past coal mining practices. The Surface Mining Control and Reclamation Act of 1977 (SMCRA), Pub. L. No. 95–87, established both the OSMRE and the fund. The IIJA (§ 40701) authorizes \$11.3 billion in appropriations, specifically \$10.9 billion for fiscal years (FYs) 2022 through 2036, for the U.S. Department of the Interior (DOI) to administer grants to States and tribes that have an approved reclamation program under SMCRA (§ 405) (see Figure 1). We are issuing this flash report to share information and promote transparency. We specifically describe abandoned mine lands (AMLs) program risks, identify how the DOI plans to use the IIJA funding, and report progress that has been made to date.

Figure 1: IIJA Authorized Funds to Address Abandoned Mine Lands



*Funds made available to the Secretary of the Interior to provide States and tribes with the financial and technical assistance necessary to make amendments to the inventory (updates on project estimates and new sites and features) maintained under SMCRA § 403(c).

Definitions

An **abandoned mine** is a mine (opening or excavation in the earth for the purpose of extracting minerals—in this case coal) where mining operations have occurred and (1) the applicable reclamation bond has been released or forfeited or (2) if no reclamation bond or other reclamation assurance has been posted, mining has not occurred in the past 5 years.

An **operator** is any person engaged in coal mining who removes or intends to remove more than 250 tons of coal from the earth or from coal refuse piles by mining within 12 consecutive months in any one location.

Abandoned mine lands are lands, waters, and surrounding watersheds where extraction, beneficiation, or processing of ores and/or minerals have occurred. These lands are **reclaimed** when the land is restored to a postmining land use approved by the regulatory authority.

For a State or tribe’s reclamation program to be approved, it must submit a **reclamation plan** to the OSMRE for approval. The plan generally identifies areas to be reclaimed within State or tribal land and includes a plan for reclaiming such areas.

An applicant seeking to obtain a coal mining permit must post a **reclamation bond** to ensure that the regulatory authority has sufficient funds to reclaim the site if the permittee fails to complete the State’s or tribe’s approved reclamation plan.

A **highwall** is the face of exposed overburden (coal waste, rock, soil, or other material that covers a coal deposit) or coal in an open cut of surface coal mining activity or entry to underground mining.

Subsidence is surface caving or sinking due to underground mining excavations.



Risk Areas

Coal has been mined throughout the United States for nearly 200 years. Before SMCRA was passed in 1977, there was no Federal regulatory oversight of coal operators or remediation of the land after mining stopped. Over time, many mines have been abandoned, and the Federal Mining Dialogue, which is a partnership of Federal environmental and land management agencies, estimated that there are as many as 500,000 abandoned coal mines in the United States. According to the OSMRE, millions of Americans live less than 1 mile from an abandoned coal mine, and many communities are built on top of old mines. Some of these communities may be unaware of this fact.

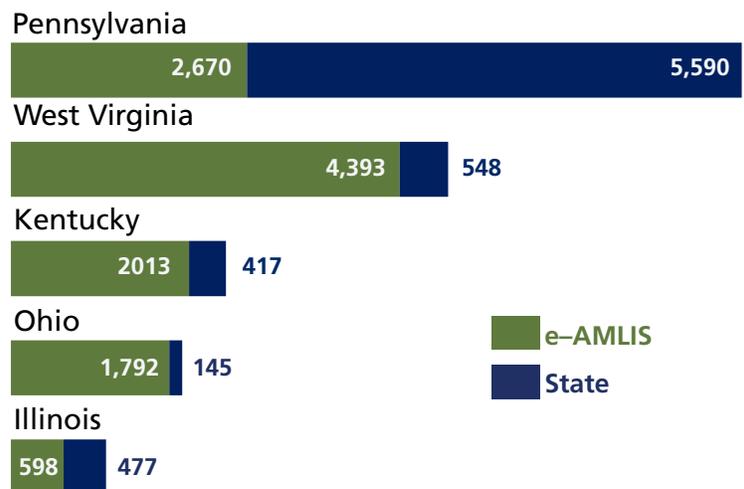
AMLs present serious threats to human health and the environment. Communities built above or near coal mines are at risk for damage to homes and properties due to subsidence that may occur in the mines below them. AMLs pose health risks due to sediment contamination and water and air pollution, and they may also potentially harm nearby threatened and endangered species.

The OSMRE relies on information provided by States and tribes to administer the program to address AMLs; therefore, it is vital that this information is accurate. Pursuant to SMCRA § 403(c), the OSMRE maintains a national inventory of coal-related AML sites in the enhanced Abandoned Mine Land Inventory System (e-AMLIS). In addition to the AML inventory, the electronic database includes all associated public health and safety and environmental hazards related to the unreclaimed sites and the associated reclamation costs. The inventory is based on field surveys that State, tribal, and OSMRE program officials complete.

States and tribes are required to enter all coal-related AML projects into e-AMLIS. The information they enter includes site features (e.g., highwalls, mine openings, subsidence) the project will address. Part of the funding

States and tribes will receive is calculated based on the AML inventory in e-AMLIS. Accordingly, States and tribes will need to update e-AMLIS to ensure all features are recorded so that they can receive funding to address AML concerns. In our evaluation, *Office of Surface Mining Reclamation and Enforcement's Oversight of the Abandoned Mine Lands Program* (Report No. 2016-EAU-007), we reported data accuracy issues with e-AMLIS that the OSMRE is continuing to address. Officials from the five States receiving the most FY 2022 IJA funding for AML projects told us that there are AML site features they have recorded in their State systems that are not recorded within e-AMLIS (see Figure 2). As a result, the e-AMLIS system does not match the States' own inventories of site features, and the States are responsible for updating e-AMLIS.

Figure 2: Total Recorded Features in e-AMLIS Do Not Agree with State Records as of May 2022



Exposed coal seam and sealed deep mine entrance in Bridgeville, PA, that is located directly behind a business.



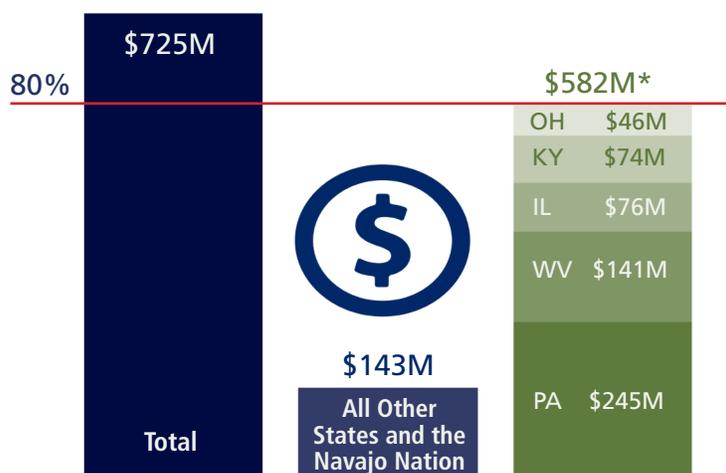
Congress' enactment of SMCRA in 1977 created the OSMRE, which has as its mission carrying out SMCRA requirements in cooperation with States and tribes. The OSMRE's primary objectives are to ensure that coal mines are operated in a manner that protects citizens and the environment during mining, the land is restored to productive use following mining, and the effects of past mining are mitigated.



Distribution of Funds

The IJJA provides significant additional funding to States and tribes for coal-related AML projects through the existing Abandoned Mine Reclamation Fund. The OSMRE will distribute \$10.9 billion of the \$11.3 billion appropriated IJJA funds from the reclamation fund for AML projects through grants to eligible States and tribes on an annual basis. Eligibility for these grants depends on an OSMRE-approved AML program. The OSMRE will distribute approximately \$725 million a year over a 15-year period and made FY 2022 available on August 4, 2022. The top five States receiving FY 2022 IJJA AML grants account for 80 percent of the total FY 2022 funds (see Figure 3).

Figure 3: FY 2022 IJJA AML Grant Amounts for Top Five States



*Top 5 States are Pennsylvania (PA), West Virginia (WV), Illinois (IL), Kentucky (KY), and Ohio (OH).

The IJJA also makes \$25 million available to the Secretary of the Interior through the OSMRE to provide financial and technical assistance to ensure that States and tribes can update their respective AML inventories in e-AMLIS. The OSMRE has not yet issued guidance on implementation or developed plans to distribute these funds.

States and tribes will also continue to receive AML project funding from the reclamation fund through fee-based grants. Eligibility for fee-based AML grants is limited to States and tribes with an approved AML program. Additionally, based upon annual appropriations acts, Appalachian States and tribes receive grants from the Abandoned Mine Land Economic Revitalization Program (AMLER), which is described in more detail below.

The OSMRE encourages States and tribes to prioritize IJJA AML projects that deliver benefits to disadvantaged communities, including the reduction of environmental burdens on such communities in alignment with the overall objectives of the *Justice40 Initiative*. In accordance with Executive Order No. 14008, *Tackling the Climate Change Crisis at Home and Abroad*, issued on January 27, 2021, States and tribes are encouraged to prioritize projects that equitably provide funding under the *Justice40 Initiative* (Executive Order No. 14008 § 223) toward meeting the goal that 40 percent of the overall benefits flow to disadvantaged communities. The Office of Management and Budget issued guidance for implementing the *Justice40 Initiative* in Memorandum M-21-28, *Interim Implementation Guidance for the Justice40 Initiative*, issued July 20, 2021.

IJJA AML Grants

On May 23, 2022, the DOI released draft guidance for eligible States and the Navajo Nation on applying for the first \$725 million of available funding. The distribution amounts are based on the inventory of AML sites in e-AMLIS and the number of tons of coal historically produced in each State or applicable Indian lands before August 3, 1977. The OSMRE relied on a March 1980 final environmental impact statement (OSM-EIS-2) to ascertain these amounts and calculate each State's or tribe's percentage of total historic coal production. Over the 15-year period, each State or tribe will receive funding amounts relative to the cost of addressing the sites in its AML inventory. As State and tribe AML inventories are updated, future distributions may change.

The IJJA funds provided through the Abandoned Mine Reclamation Fund are subject to the terms of SMCRA (§§ 403(a)(1-3), 403(b), 410) on eligible lands and water (§§ 404). The OSMRE used these terms to create the guidance to the States and the Navajo Nation.



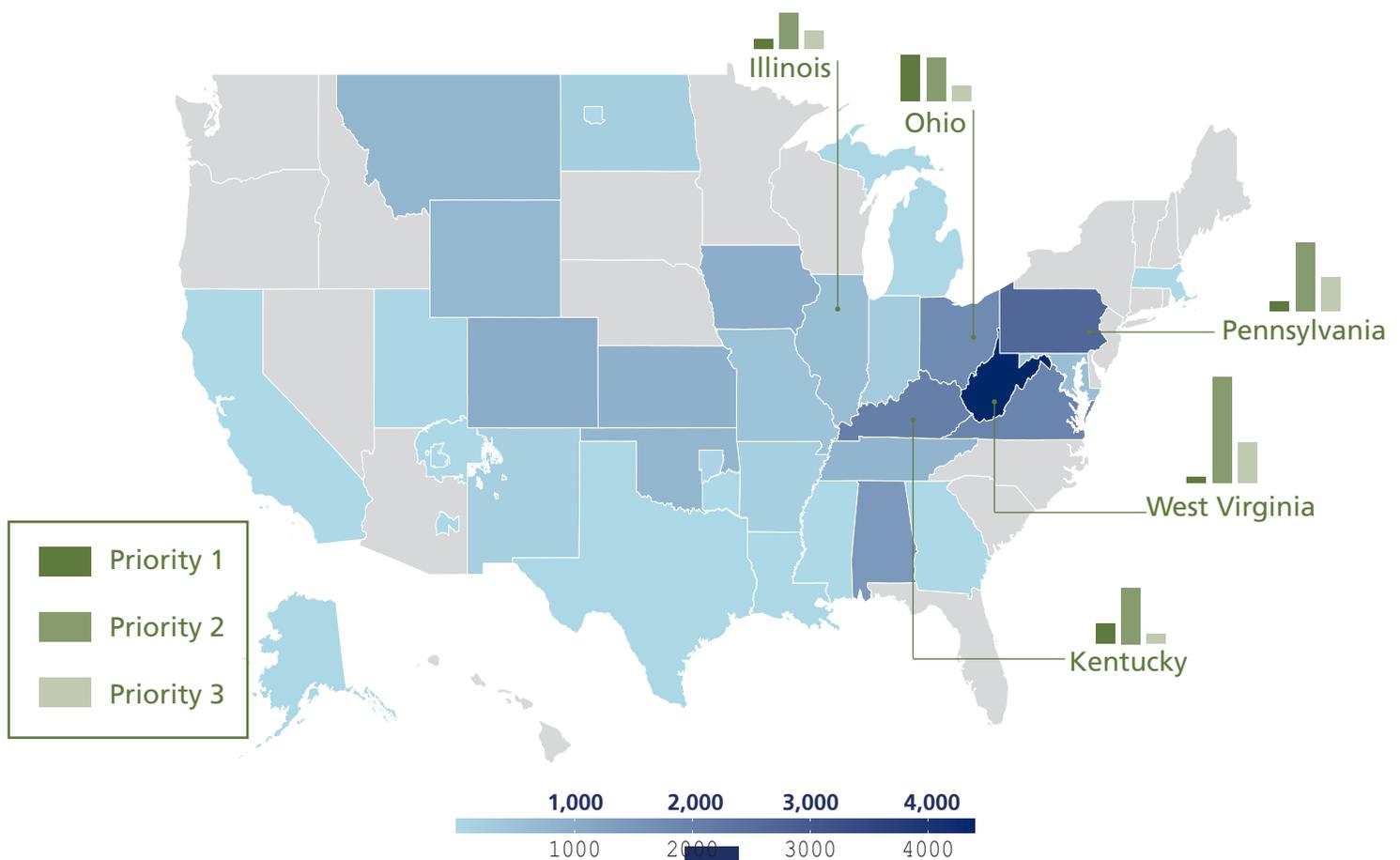
Distribution of Funds

The guidance states that these grants may be used only for projects that address:

- **Sites with Priority 1 features:** These projects protect public health and safety from extreme effects of coal mining practices, including restoring adjacent land and water resources and the environment.
- **Sites with Priority 2 features:** These projects protect public health and safety from adverse effects of coal mining practices, including restoring adjacent land and water resources and the environment.
- **Sites with Priority 3 features:** These projects restore land and water resources and environments previously degraded by adverse effects of coal mining practices—which may include designing, constructing, operating, maintaining, and rehabilitating acid mine drainage and treatment facilities regardless of whether they are part of a qualified hydrologic unit.
- **Water supply restoration:** These projects protect, repair, replace, construct, or enhance facilities—including water distribution facilities and treatment plants—to replace water supplies adversely affected by coal mining practices.
- **AML emergencies:** These projects restore, reclaim, abate, control, or prevent adverse effects of coal mining practices on eligible lands when an emergency condition constitutes a danger to public health, safety, or general welfare and no other person or agency will act expeditiously to restore, reclaim, abate, control, or prevent adverse effects of coal mining.

According to e-AMLIS, there are 22,989 Priority 1 through 3 features within the United States as of May 2022. The top five States receiving IJJA funding account for 50 percent of the projects addressing those features (see Figure 4).

Figure 4: Number of AML Features in e-AMLIS Including Breakdown of Priorities for Top Five States





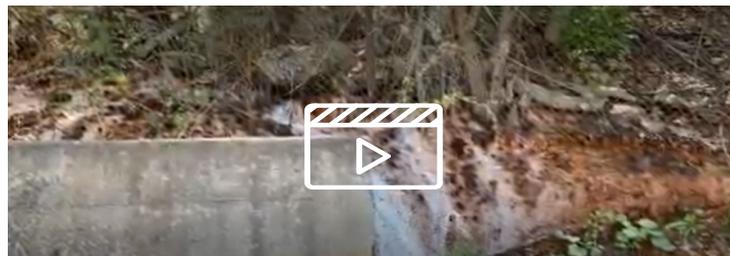
Distribution of Funds

Fee-Based AML Grants

Title IV of SMCRA, "Abandoned Mine Reclamation," authorizes the collection of coal production fees. The fees are credited to the Abandoned Mine Reclamation Fund and distributed via AML grants to eligible States and tribes to reclaim coal mining sites that were abandoned or unreclaimed as of August 3, 1977, prior to the enactment of SMCRA. The OSMRE collects the fees and then annually distributes grants to States and tribes for reclamation activities based on a statutorily prescribed formula. The unobligated balance of the Abandoned Mine Reclamation Fund was \$2.1 billion as of November 30, 2021. The IIJA (§§ 40702, 40703) extends the OSMRE's fee collection authority through September 30, 2034, reduces reclamation fee rates by 20 percent, and extends the current annual AML fee-based grant distributions to eligible States and tribes through 2035.

AMLER Grants

AMLER explores and implements strategies to return legacy coal mining sites to productive uses through economic and community development. AMLER supports AMLs that are anticipated to lead to economic development and revitalization opportunities. FY 2022 AMLER funding will provide grants to the six Appalachian States with the highest numbers of unfunded sites with Priority 1 and Priority 2 features based on e-AMLIS as of September 30, 2021, and to the three tribes with AML programs: the Navajo Nation, the Hopi Tribe, and the Crow Tribe.



This acid mine drainage (water with a pH of less than 6.0 discharged from an active, inactive, or abandoned surface coal mine) is flowing from the abandoned Mansfield Mine in Allegheny County, PA. The Pennsylvania Department of Environmental Protection first classified this drainage as a Priority 3 feature because it was considered minor but has now updated the drainage to Priority 2 due to unknown changes within the mine that have caused a major drainage problem. The video includes orange iron pollution, which is within yards of businesses and is flowing down to a loading dock.

We recorded this video on May 10, 2022.

AMLER funds can be used to reclaim:

- Sites with Priority 1, Priority 2, and Priority 3 features listed in e-AMLIS.
- Previously reclaimed AML sites and polluted waters.
- Land adjacent to unreclaimed or previously reclaimed AML sites and polluted waters as justified by the State, tribe, or the communities affected by the historic coal production.



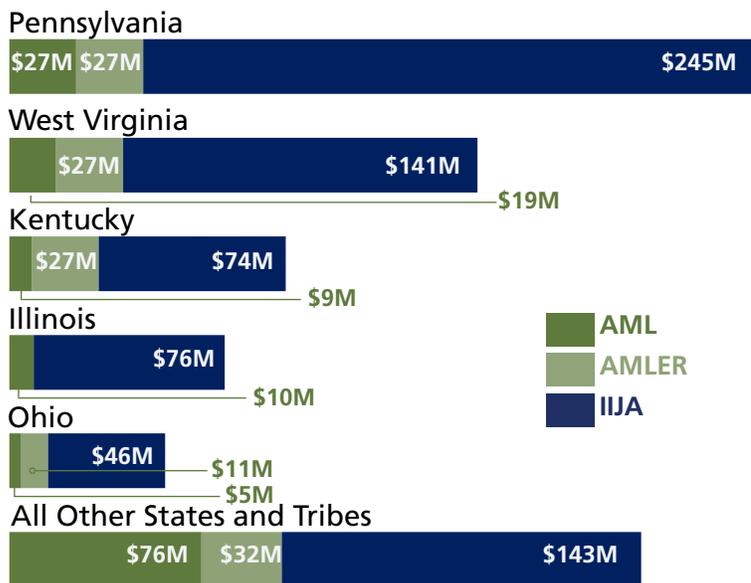
Highwall and collapsed entrances in Morgantown, WV. This site includes approximately 4,725 linear feet of highwall ranging in height from 15 to 40 feet, 13 open entrances, at least 10 collapsed entrances, and approximately 2,100 feet of clogged stream.



Oversight of Funds

The IIJA provides the DOI with \$28.1 billion, \$11.3 billion of which is for AML reclamation, representing a significant increase compared to the fee-based AML grants and AMLER grants the eligible States and tribes receive (see Figure 5). For example, this increases by more than eight-fold the total FY 2022 AML funds that the five States eligible for the most funds will receive as compared to the FY 2022 fee-based AML grants. With the significant increase in funds, it is vital that both the OSMRE and grant recipients ensure appropriate oversight.

Figure 5: FY 2022 Funding from AML, AMLER, and IIJA AML for Top 5 States



Photos of pre- and post-construction of Three Forks South AML Project in Tuscaloosa, AL, provided by the OSMRE. While preconstruction shows a green landscape, the OSMRE reported that the site required abatement of 3,400 linear feet of dangerous highwalls averaging 60 feet high. The OSMRE also identified several primary residences with small children were within 300 feet of the top of the highwall. Finally, the Alabama Department of Labor in a report on the project, explained that site had associated sediment, slurry, or other liquid or semiliquid holding structures and depressions. The OSMRE explained that the post-construction photo demonstrates the significant effort that was undertaken to address these dangers and reclaim the land.

In response to the IIJA, the OSMRE developed specific terms and conditions for IIJA-funded grants, issued guidance on IIJA AML grant implementation, and is planning to increase the number of grant specialists on its staff. Due to the influx of funds, recipients of IIJA AML grants will also need to increase capacity to ensure compliance with the OSMRE's guidance; representatives from the top five States receiving AML grants reported plans to increase their own staff or to use consultants to meet the demands of the increased funding.





Oversight of Funds

Based on our prior work in other grant programs, we believe that one area in which agency oversight will be key relates to grant subawards. IJJA AML funds will be provided via grants to eligible States and tribes, making them “prime recipients.” As the prime recipients of the grant funds, the States and tribes will distribute most of the money to subrecipients via subawards to complete AML-related projects. Also, tracking subaward spending presents its own challenges, including identifying subaward recipients, ensuring necessary terms and conditions for subawards, and monitoring allowability of expenses.

The Federal Government has a responsibility to promote transparency and ensure accountability over financial assistance spending. The Office of Management and Budget’s (OMB’s) Memorandum M-21-03, *Improvements in Federal Spending Transparency for Financial Assistance*, issued on November 12, 2020, sets forth requirements for agencies to develop plainly written award descriptions that include the purpose of the award along with specific performance goals, indicators, milestones, or expected outcomes and the intended beneficiary or recipient of the funds. In addition, based on a recommendation made in *Lessons Learned in Oversight of Pandemic Relief Funds* from the Pandemic Response Accountability Committee (Report No. PRAC-2022-06), the OMB is exploring better ways to track and report subrecipient spending.



Richard Mine drainage pollution of Deckers Creek in Richard, WV, by aluminum (white coloration) and iron (orange coloration), which will be remediated by an ongoing project by the West Virginia Office of Abandoned Mine Lands and Reclamation.



AML Actions and IJA Milestones

The OSMRE's and DOI's AML-Related Actions Since Enactment of IJA

- **December 13, 2021–January 12, 2022:** The OSMRE conducted separate IJA listening sessions, which were available to the Hopi Tribe, the Crow Tribe, the Navajo Nation, and States. These listening sessions enabled consultation and engagement regarding how to implement the IJA.
- **January 13, 2022:** The DOI announced that the OSMRE extended the Abandoned Mine Reclamation Fund program through 2035 and is making other changes to the program, as directed by the IJA.
- **February 7, 2022:** The DOI announced that approximately \$725 million would be available as part of the IJA to 22 States and the Navajo Nation in FY 2022 to reclaim abandoned mine lands.
- **March 4, 2022:** The DOI announced more than \$144 million in fee-based AML grants would be available to States and tribes for AML reclamation efforts in FY 2022.
- **May 17, 2022:** The OSMRE announced \$122.5 million in FY 2022 funding for AMLER grants.
- **May 23–June 13, 2022:** The OSMRE solicited and received comments on the DOI draft IJA guidance issued on May 23, 2022, for eligible States and the Navajo Nation.
- **July 21, 2022:** The DOI released final guidance for eligible States and the Navajo Nation to apply for the first \$725 million in funding available as part of the IJA for reclaiming AMLs.
- **August 4, 2022:** The DOI made IJA funds available to the States and tribes, which are responsible for completing grant applications to receive funding.

Infrastructure Investment and Jobs Act Future Milestones



The IJA set the following milestones for the DOI:

- By 2028, the Secretary of the Interior shall submit to Congress a report that describes any progress made in addressing outstanding reclamation needs under SMCRA § 403(a), "Priorities"; § 403(b), "Water Supply Restoration"; or § 410, "Emergency Powers."
- By 2041, the Secretary of the Interior shall evaluate grant payments to States and tribes. On completion of the evaluation, States and tribes shall return any unused funds to the Abandoned Mine Reclamation Fund.



Photo of a vertical shaft next to an off-highway vehicle trail in Nevada.

Photo courtesy of the BLM.



Abandoned Hardrock Mines

Abandoned Hardrock Mine Reclamation on Federal, State, and Tribal Land Does Not Qualify for IJA Funding

Hardrock mines, which are primarily ore or metal mines, are hazardous because they could include unsecured tunnels and toxic waste piles. The U.S. Government Accountability Office estimates that approximately 140,000 remnants of hardrock mines exist on Federal lands and that more than 67,000 of them may pose physical safety hazards and more than 22,500 of them may pose environmental hazards (Report No. GAO-20-238, Abandoned Hardrock Mines: Information on Number of Mines, Expenditures, and Factors That Limit Efforts to Address Hazards, issued March 2020). The DOI bureaus that manage land with hardrock mines—the Bureau of Land Management (BLM), the National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), the Bureau of Reclamation (BOR), and the Bureau of Indian Affairs (BIA)—have approximately 62,000 abandoned hardrock mine land features on Federal land (see Figure 6).

The IJA states that no later than 90 days after its enactment, the Secretary of the Interior “shall establish a program to inventory, assess, decommission, reclaim, respond to hazardous substance releases on, and remediate abandoned hardrock mine land based on conditions including need, public health and safety, potential environmental harm, and other land use priorities” on Federal, State, tribal, local, and private land (§ 40704(a)). However, hardrock mine reclamation on these lands did not receive IJA funding. The IJA authorized \$3 billion for the DOI to address hardrock mines and provided the DOI with terms and conditions under which to operate, but this funding was not appropriated for the DOI’s use. Subsequently, however, the Consolidated Appropriations Act, 2022 (Pub. L. No. 117-103) provided \$5 million to the DOI to inventory, assess, decommission, reclaim, respond to hazardous substance releases, remediate lands pursuant to § 40704 of the IJA, and carry out the purposes of the Energy Policy Act of 2005 § 349. The DOI Office of Environmental Policy and Compliance is using the funding to build a database and determine the approach to inventory abandoned hardrock mines on Federal, State, and tribal lands.

Figure 6: Abandoned Hardrock Mine Land Sites on Federal Land by Bureau



Photo of an abandoned hardrock mine tunnel.

Photo courtesy of the FWS.





Scope and Methodology

Scope and Methodology

We conducted our inspection in accordance with the *Quality Standards for Inspection and Evaluation* as put forth by the Council of the Inspectors General on Integrity and Efficiency. To accomplish our objectives, we identified the IJJA's AML requirements; obtained prior and current work related to abandoned mines; gathered data about Federal, State, and tribal abandoned mine lands; discussed program details with DOI management to determine how funds will be spent and how data will be managed; and obtained an understanding of Federal, State, and tribal AML programs.



Photo of a bobcat stuck in an abandoned mine shaft, courtesy of the NPS. The NPS staff were able to rescue the bobcat.





LOOKING AHEAD

Given the large amount of funding that is being quickly distributed, there is an increased risk of fraud and misuse. Our current and planned oversight efforts of the OSMRE's AML program include the following:

Current Oversight Efforts

- We are reviewing the status of recommendations in an evaluation titled *Office of Surface Mining Reclamation and Enforcement's Oversight of the Abandoned Mine Lands Program* (Report No. 2016-EAU-007). In that report, we made 11 recommendations to help the OSMRE improve its oversight and data management for the AML program and ensure that coal-related hazards are given reclamation priority.

Planned Oversight Efforts

- We will review contract and grant cost oversight and compliance with Federal regulations, award terms, and the IJA.

To prevent fraud, waste, and abuse, our office anticipates that we will regularly:

- Host discussions and provide training to DOI employees, grant recipients, and contractors.
- Enhance detection through data analysis and the development of sources of investigative information.
- Improve oversight through focused training of investigators, auditors, and inspectors.
- Coordinate oversight efforts throughout the Inspector General community and share results, trends, and best practices.