



WWW.OSMRE.GOV

FY 2020 ANNUAL REPORT

WIDOW COOPER

126.0 Ac. Deed Area

Consumers Fuel Co To Pgh. Coal Co. 4-19-11

U.S. DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT

WELCOME TO THE
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT'S
FY 2020 ANNUAL REPORT

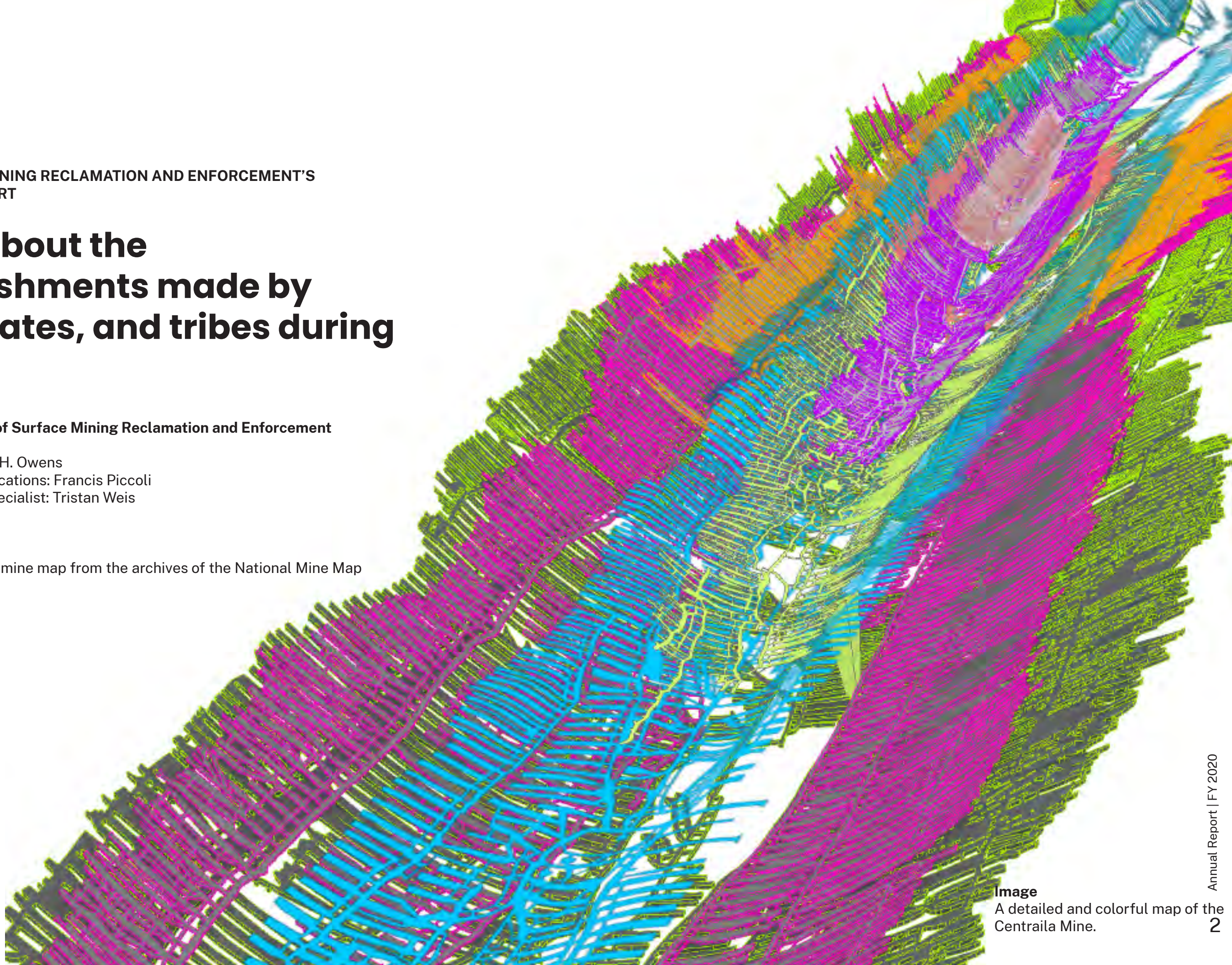
A report about the accomplishments made by OSMRE, states, and tribes during FY 2020.

Published by the Office of Surface Mining Reclamation and Enforcement

Deputy Director: Glenda H. Owens
Chief, Office of Communications: Francis Piccoli
Congressional Affairs Specialist: Tristan Weis

Cover Image

A historical underground mine map from the archives of the National Mine Map Repository.



Image

A detailed and colorful map of the
Centraila Mine.

**Office of Surface Mining
Reclamation and Enforcement**
FY 2020 Annual Report

**About the Office of Surface Mining
Reclamation and Enforcement 6**

Fiscal Year 2020 Featured Stories 14

Celebrating 50 Years of the National Mine Map Repository
PG 15

Navy Mine Fire
PG 21

Abandoned Mine Land Reclamation Awards
PG 35

Excellence in Surface Coal Mining Reclamation Awards
PG 45

Abandoned Mine Land Program 28

Regulatory Program 40

**Technology Development and
Transfer Program 48**

Fiscal Year 2020 Tables 54

TITLE IV – ABANDONED MINE RECLAMATION SECTION 401 – ABANDONED MINE RECLAMATION FUND (a) Establishment; administration; State funds There is created on the books of the Treasury of the United States a trust fund to be known as the Abandoned Mine Reclamation Fund (hereinafter referred to as the "fund") which shall be administered by the Secretary of the Interior. State abandoned mine reclamation funds (State funds) generated by grants from this title shall be established by each State pursuant to an approved State program. (b) Sources of deposits to fund the fund shall consist of amounts deposited in the fund, from time to time derived from— (1) the reclamation fees levied under section 402; (2) any user charge imposed on or for land reclaimed pursuant to this title, after expenditures for maintenance have been deducted;(3) donations by persons, corporations, associations, and foundations for the purposes of this title; (4) recovered moneys as provided for in this title; and (5) interest credited to the fund under subsection (a). (c) Use of moneys Moneys in the fund may be used for the following purposes: (1) reclamation and restoration of land and water resources adversely affected by past coal mining, including but not limited to reclamation and restoration of abandoned surface mine areas, abandoned coal processing areas, and abandoned coal refuse disposal areas; sealing and filling abandoned deep mine entries and voids; planting of land adversely affected by past coal mining to prevent erosion and sedimentation; prevention, abatement, treatment, and control of water pollution created by coal mine drainage including restoration of stream beds, and construction and operation of water treatment plants; prevention, abatement, and control of burning coal refuse disposal areas and burning coal in situ; prevention, abatement, and control of coal mine subsidence, and establishment of self-sustaining, individual State administered programs to insure private property against damages caused by land subsidence resulting from underground coal mining in those States which have reclamation plans approved in accordance with section 503 of this Act: Provided, That funds used for this purpose shall not exceed \$3,000,000 of the funds made available to any State under section 402(g)(1) of this Act; (2) acquisition and filling of voids and sealing of tunnels, shafts, and entryways under section 409; (3) acquisition of land as provided for in this title; (4) enforcement and collection of the reclamation fee provided for in section 402 of this title; (5) restoration, reclamation, abatement, control, or prevention of adverse effects of coal mining which constitutes an emergency as provided for in this title; (6) grants to the States to accomplish the purposes of this title; (7) administrative expenses of the United States and each State to accomplish the purposes of this title; (8) for use under section 411; (9) for the purpose of section 507(o), except that not more than \$10,000,000 shall annually be available for such purpose; (10) for the purpose described in section 402(h); and (11) all other necessary expenses to accomplish the purposes of this title. SECTION 402 – RECLAMATION (a) Payment; rate for all operators of coal mining operations subject to the provisions of this Act shall pay to the Secretary of the Interior, for deposit in the fund, a reclamation fee of 31.5 cents per ton of coal produced by surface coal mining and 13.5 cents per ton of coal produced by underground mining or 10 per centum of the value of the coal at the mine, as determined by the Secretary, whichever is less, except that the reclamation fee for lignite coal shall be at a rate of 2 per centum of the value of the coal at the mine, or 9 cents per ton, whichever is less. SECTION 403 – OBJECTIVES OF FUND (a) Priorities Expenditures of moneys from the fund on lands and water eligible pursuant to section 404 for the purposes of this title, except as provided for under section 411, shall reflect the following priorities in the order stated: (1)(A) the protection of public health, safety, and property from extreme danger of adverse effects of coal mining practices; (B) the restoration of land and water resources and the environment that – (i) have been degraded by the adverse effects of coal mining practices; and (ii) are adjacent to a site that has been or will be remediated under subparagraph (A); (2)(A) the protection of public health and safety from adverse effects of coal mining practices; (B) the restoration of land and water resources and are adjacent to a site that has been or will be remediated under subparagraph (A); and (3) the restoration of land and water resources and the environment previously degraded by adverse effects of (excluding channelization), woodland, fish and wildlife, recreation resources, and eligible for reclamation or drainage abatement expenditures under this title are coal processing, or other coal mining processes, except as provided for under August 3, 1977, and for which there is no continuing reclamation STATE RECLAMATION PROGRAM (a) Promulgation of regulations immediately following August 3, 1977, the Secretary shall covering implementation of an abandoned mine reclamation procedures and requirements for preparation, submission, annual submissions of projects. (h) Grant of funds Upon the surface mine regulatory program pursuant to basis, funds to be expended in such State pursuant implement the State reclamation program as Indian tribes Indian tribes having within their or from which coal is produced, shall be title except for purposes of subsection (c) of and Crow Indian Tribes. 407 – LAND ADVERSELY AFFECTED BY Findings of fact, notice, right of entry if an approved State program, makes a resources have been adversely and (2) the adverse effects are at a action to restore, reclaim, abate, and (3) the owners of the land or made to restore, reclaim, abate, of past coal mining practices are (4) the owners will not give the States, political subdivisions, contractors to enter upon such control, or prevent the adverse then, upon giving notice by mail to by posting notice upon the newspaper of general circulation lies, the Secretary, his agents, State pursuant to an approved enter upon the property adversely and any other property to have necessary or expedient to restore, adverse effects. Such entry shall be power for the protection of public shall not be construed as an act of person. The moneys expended for such premises so entered upon shall be mitigate or offset any claim in or any action premises for any alleged damages by virtue of revision is not intended to create new rights of participation; grants States are encouraged as part abandoned and unreclaimed mined lands within their such lands to the Secretary or the appropriate State regulations. The Secretary is authorized to make grants on appropriate for the purpose of carrying out, the provisions of the cost of acquisition of the lands for which the grant is made. Government under this title, such State shall have a preference right State portion of the original acquisition price. TITLE V – CONTROL OF SECTION 501 – ENVIRONMENTAL PROTECTION STANDARDS (a) Not 1977, the Secretary shall promulgate and publish in the Federal Register reclamation operations setting mining and reclamation performance standards based the Interim regulations shall be deemed not to be a major Federal action within the 4332). Such regulations, which shall be concise and written in plain, understandable language shall in the Federal Register and afforded interested persons and State and local governments a period of not less concurrence of the Administrator of the Environmental Protection Agency with respect to those regulations promulgated Pollution Control Act, as amended (33 U.S.C. 1151-1175), and the Clean Air Act, as amended (42 U.S.C. 1157 et seq.); and (C) held at least one public hearing on the proposed regulations. SECTION 502 – INITIAL REGULATORY PROCEDURES (a) State regulation No person shall open or develop any new or previously mined or abandoned site for surface coal mining operations on lands on which such operations are regulated by a State unless such person has obtained a permit from the State's regulatory authority (b) Interim standards All surface coal mining operations on lands on which such operations are regulated by a State which commence operations pursuant to a permit issued on or after six months from August 3, 1977, shall comply, and such permits shall contain terms requiring compliance. SECTION 503 – STATE PROGRAMS (a) Regulation of surface coal mining and reclamation operations; submission to Secretary, time limit; demonstration of effectiveness Each State in which there are or may be conducted surface coal mining operations on non-Federal lands, and which wishes to assume exclusive jurisdiction over the regulation of surface coal mining and reclamation operations, except as provided in sections 521 and 523 and title IV of this Act, shall submit to the Secretary, by the end of the eighteenth-month12 period beginning on August 3, 1977, a State program which demonstrates that such State has the capability of carrying out the provisions of this Act and meeting its purposes through – (1) a State law which provides for the regulation of surface coal mining and reclamation operations in accordance with the requirements of this Act; (2) a State law which provides sanctions for violations of State laws, regulations, or conditions of permits concerning surface coal mining and reclamation operations, which sanctions shall meet the minimum requirements of this Act, including civil and criminal actions, forfeiture of bonds, suspensions, revocations, and withholding of permits, and the issuance of cease-and-desist orders by the State regulatory authority or its inspectors; (3) a State regulatory authority with sufficient administrative and technical personnel, and sufficient funding to enable the State to regulate surface coal mining and reclamation operations in accordance with the requirements of this Act; (4) a State law which provides for the effective implementation, maintenance, and enforcement of a permit system, meeting the requirements of this title for the regulation of surface coal mining and reclamation operations for coal on lands within the State; (5) establishment of a process for the designation of areas as unsuitable for surface coal mining in accordance with section 522 provided that the designation of Federal lands unsuitable for mining shall be performed exclusively by the Secretary after consultation with the State; (6) establishment for the purposes of avoiding duplication, of a process for coordinating the review and issuance of permits for surface coal mining and reclamation operations with any other Federal or State permit process applicable to the proposed operations; and (7) rules and regulations with regulations issued by the Secretary pursuant to this Act. SECTION 505 – STATE LAWS (a) No State law or regulation in effect on August 3, 1977, or which may become effective thereafter, shall be superseded by any provision of this Act or any regulation issued pursuant thereto, insofar as such State law or regulation is inconsistent with the provisions of this Act. (b) Any provision of any State law or regulation in effect upon August 3, 1977, or which may become effective thereafter, which provides for more stringent land use and environmental controls and regulations of surface coal mining and reclamation operation than do the provisions of this Act or any regulation issued pursuant thereto shall not be construed to be inconsistent with this Act. The Secretary shall set forth any State law or regulation which is construed to be inconsistent with this Act. Any provision of any State law or regulation in effect on August 3, 1977, or which may become effective thereafter, which provides for the control and regulation of surface mining and reclamation operations for which no provision is contained in this Act shall not be construed to be inconsistent with this Act. SECTION 506 – PERMITS (a) Persons engaged in surface coal mining within State; time limit; exception No later than eight months from the date on which a State program is approved by the Secretary, pursuant to section 503 of this Act, or no later than eight months from the date on which the Secretary has promulgated a Federal program pursuant to section 504 of this Act, no person shall engage in or carry out on lands within a State any surface coal mining operations unless such person has first obtained a permit from such State pursuant to an approved State program or by the Secretary pursuant to a Federal program. SECTION 508 – RECLAMATION PLAN REQUIREMENTS (a) Each reclamation plan submitted as part of a permit application pursuant to any approved State program or a Federal program under the provisions of this Act shall include, in the degree of detail necessary to demonstrate that reclamation required by the State or Federal program can be accomplished. SECTION 516 – SURFACE EFFECTS OF UNDERGROUND COAL MINING OPERATIONS (a) Rules and regulations The Secretary shall promulgate rules and regulations directed toward the surface effects of underground coal mining operations, embodying the following requirements and in accordance with the procedures established under section 501 of this Act: Provided, however, That in promulgating any rules and regulations the Secretary shall consider the distinct difference between surface coal mining and underground coal mining. Such rules and regulations shall not conflict with nor supersede any provision of the Federal Coal Mine Health and Safety Act of 1969 nor any regulation issued pursuant thereto, and shall not be promulgated until the Secretary has obtained the written concurrence of the head of the department which administers such Act. SECTION 517 – INSPECTIONS AND MONITORING (a) Inspections of surface coal mining and reclamation operations The Secretary shall cause to be made such inspections of any surface coal mining and reclamation operations as are necessary to evaluate the administration of approved State programs, or to develop or enforce any Federal program, and for such purposes authorized representatives of the Secretary shall have a right of entry to, upon, or through any surface coal mining and reclamation operations. SECTION 523 – FEDERAL LANDS (a) Promulgation and implementation of Federal lands program No later than one year after August 3, 1977, the Secretary shall promulgate and implement a Federal lands program which shall be applicable to all surface coal mining and reclamation operations taking place pursuant to any Federal law on any Federal lands: Provided, That except as provided in section 710 the provisions of this Act shall not be applicable to Indian lands. The Federal lands program shall, at a minimum, incorporate all of the requirements of this Act and shall take into consideration the diverse physical, climatological, and other unique characteristics of the Federal lands in question. Where Federal lands in a State with an approved State program are involved, the Federal lands program shall, at a minimum, include the requirements of the approved State program: Provided, That the Secretary shall retain his duties of the Federal Mineral Leasing Act and shall continue to be responsible for designation of Federal lands as unsuitable for mining in accordance with section 522(b) of this title. SECTION 526 – SURFACE MINING OPERATIONS NOT SUBJECT TO 30 USC §§ 1201 et seq. The provisions of this Act shall not apply to any of the following activities: (1) the extraction of coal by a landowner for his own noncommercial use from land owned or leased by him; and (2) the extraction of coal as an incidental part of Federal, State or local government-financed highway or other construction under regulations established by the regulatory authority.

ABOUT THE OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation and Enforcement (OSMRE) is a bureau within the United States Department of the Interior. OSMRE is responsible for establishing a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations.

OSMRE was created in 1977 when Congress enacted the Surface Mining Control and Reclamation Act of 1977 (SMCRA). OSMRE works with states and tribes to ensure that citizens and the environment are protected during coal mining and that the land is restored to beneficial use when mining is finished. OSMRE and its partners are also responsible for reclaiming and restoring lands and water degraded by

mining operations before 1977. In its beginning, OSMRE directly enforced mining laws and arranged cleanup of abandoned mine lands. Today, most coal states have developed their own programs to do those jobs themselves, as Congress envisioned. OSMRE focuses on overseeing the state programs and developing new tools to help the states and tribes get the job done.

OSMRE also works with colleges and universities and other state and federal agencies to further the science of reclaiming mined lands and protecting the environment, including initiatives to promote planting more trees and establishing much-needed wildlife habitat.

MISSION

Our mission is to carry out the requirements of the Surface Mining Control and Reclamation Act (SMCRA) in cooperation with States and Tribes. Our primary objectives are to ensure that coal mines are operated in a manner that protects citizens and the environment during mining and assures that the land is restored to beneficial use following mining, and to mitigate the effects of past mining by aggressively pursuing reclamation of abandoned coal mines.

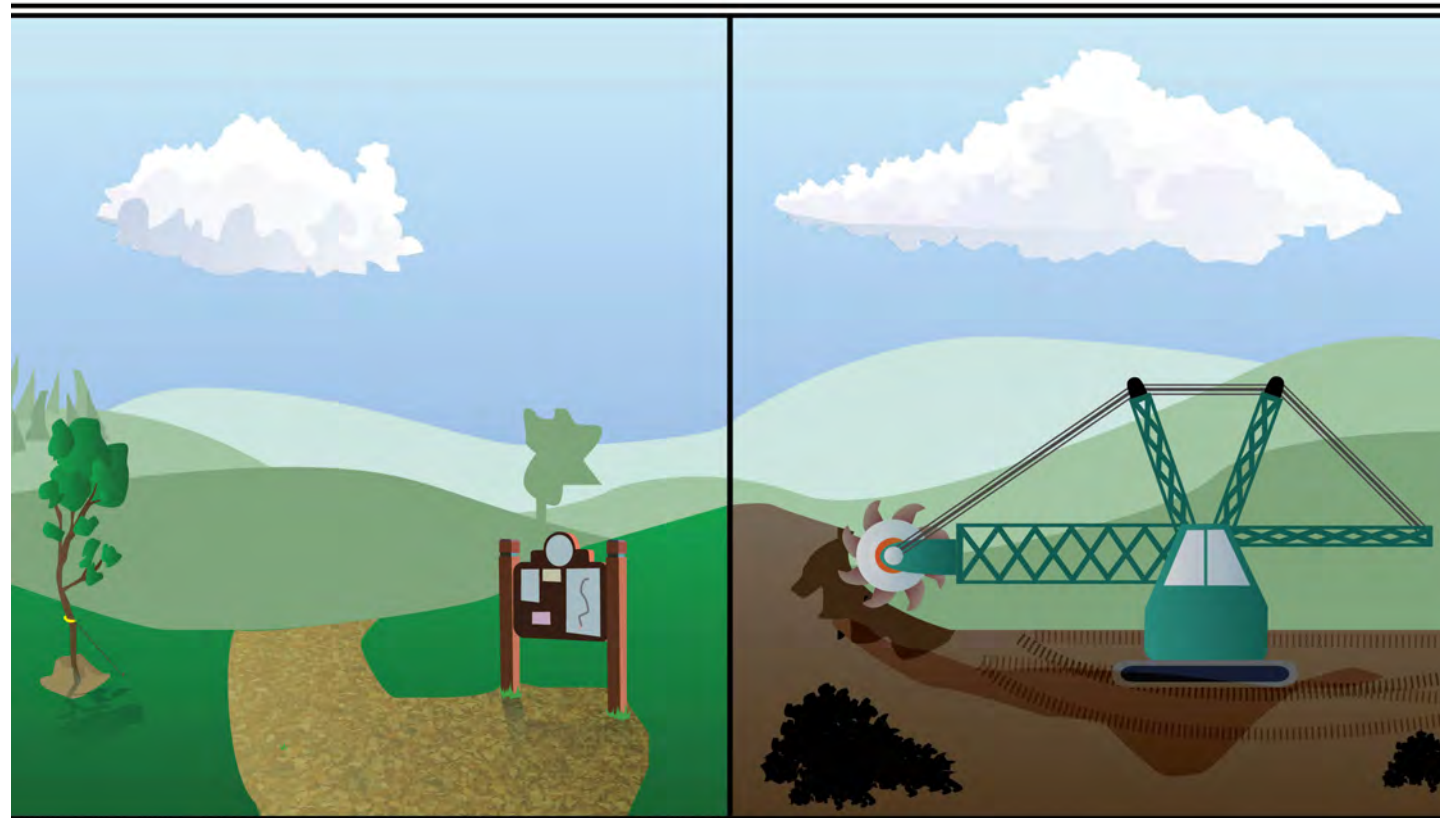
Photo: An OSMRE inspector is examining some vegetation at an abandoned mine land site in Ohio.



Difference Between SMCRA's Title IV & Title V

OSMRE and SMCRA Programs

The Surface Mining Control and Reclamation Act of 1977 is the primary federal law that regulates the environmental effects of coal mining in the United States. SMCRA created two programs: one for reclaiming abandoned mine lands and a second for regulating active coal mines.



Title IV

Restoring the Environment

Title IV of the Surface Mining Control and Reclamation Act of 1977

The history of coal mining in the United States dates back many centuries. As a result, millions of Americans live less than a mile from an abandoned coal mine. The Abandoned Mine Land (AML) Reclamation Program addresses the hazards and environmental degradation posed by these legacy mine sites.

Title V

Protecting the Environment

Title V of the Surface Mining Control and Reclamation Act of 1977

SMCRA requirements ensure that coal mining operations are conducted in an environmentally responsible manner and that the land is adequately reclaimed during and following the mining process. OSMRE is either responsible for regulating active coal operations or providing oversight of the State and Tribal regulatory programs that have obtained primacy.

FISCAL YEAR 2020 BUDGET AND WORKFORCE

- \$257.5 million in discretionary funding.
- \$2.13 billion in mandatory funding¹.
- 354 full-time equivalent employees².
- Headquartered in the Main Interior Building in Washington, DC with three regional offices:
 - Pittsburgh (Regions 1 and 2).
 - Alton, Illinois (Regions 3, 4 and 6).
 - Lakewood, Colorado (Regions 5 and 7-11).

To learn more about OSMRE's current and historical budgets, please visit www.osmre.gov/resources/budget-and-planning.

Conflict of Interest Reporting under the Surface Mining Control and Reclamation Act of 1977

Federal and state employees who perform functions or duties under SMCRA are precluded from having financial interests in underground or surface coal mining operations. During FY 2020, OSMRE did not identify any, nor take any actions for, violations of these or related conflict of interest provisions.

¹ Mandatory grants to states and tribes are subject to sequestration pursuant to the Balanced Budget and Emergency Deficit Control Act. Mandatory distributions were reduced by 5.9% for FY 2020. Actual mandatory funding after sequestration was \$2.12 billion.

² This reflects actual full time equivalency staff numbers.

Office of Surface Mining Reclamation and Enforcement OFFICE LOCATIONS

INTERIOR REGIONS 5, 7-11 REGIONAL OFFICE

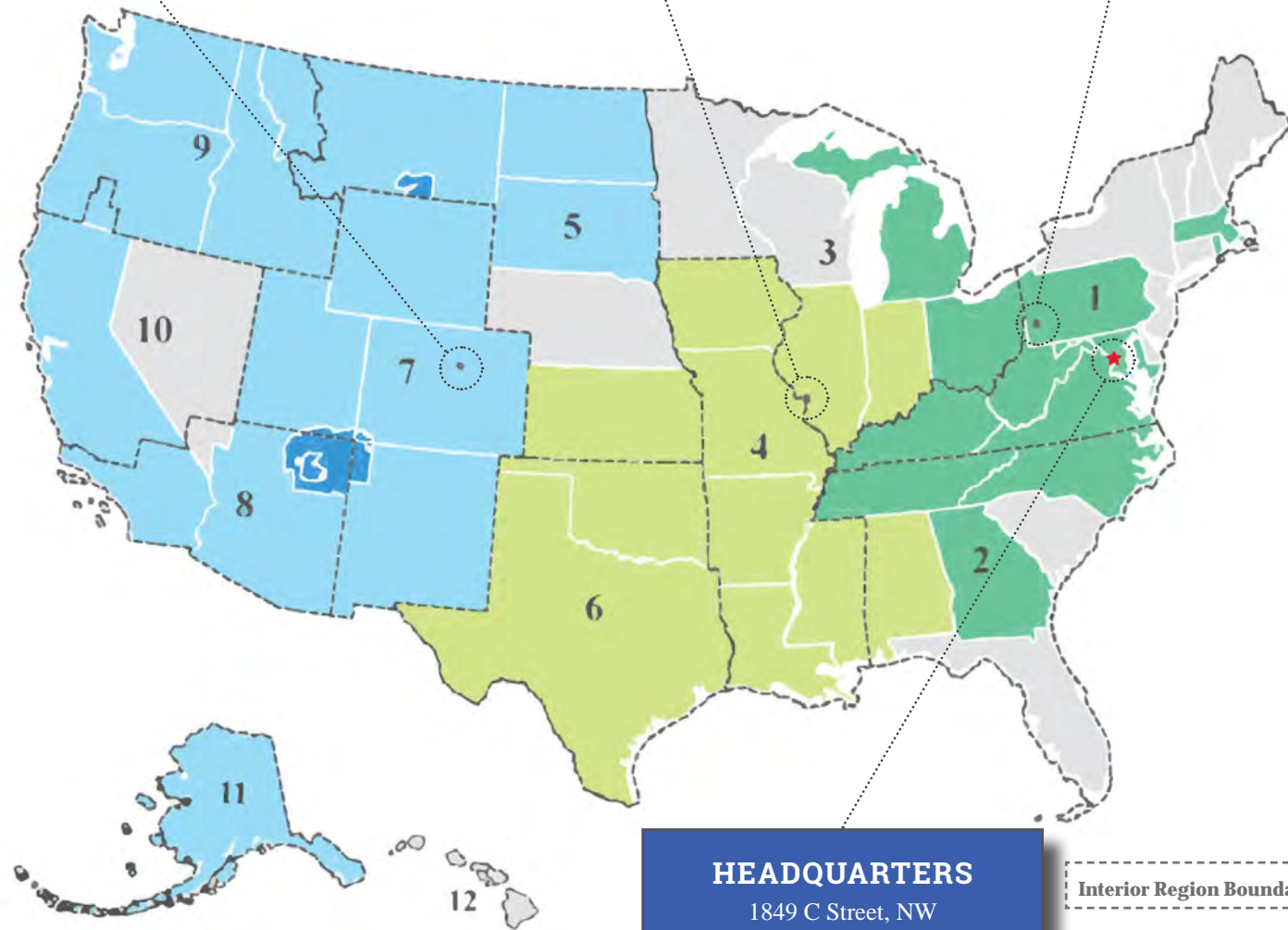
P. O. Box 25065
One Denver Federal Center,
Building 41
Lakewood, CO 80225
(303) 293-5000

INTERIOR REGIONS 3, 4, AND 6 REGIONAL OFFICE

501 Belle Street, Room 216
Alton, IL 62002
(618) 463-6460

INTERIOR REGIONS 1 AND 2 REGIONAL OFFICE

Three Parkway Center
Pittsburgh, PA 15220
(412) 937-2828



HEADQUARTERS

1849 C Street, NW
Washington, DC 20240
(202) 208-2565
www.osmre.gov

Interior Region Boundary Lines

ADDITIONAL INTERIOR REGIONAL OFFICES

Interior Regions 1 and 2

PITTSBURGH FIELD OFFICE
(Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, Rhode Island)
Three Parkway Center
Pittsburgh, PA 15220
(412) 937-2828

NEW CUMBERLAND OFFICE
215 Limekiln Rd.
New Cumberland, PA 17070
(717) 730-6985

CHARLESTON FIELD OFFICE
(West Virginia, Virginia)
1027 Virginia St., East
Charleston, WV 25301
(304) 347-7158

BECKLEY OFFICE
313 Harper Park Dr.
Beckley, WV 25801
(304) 255-5265

LEXINGTON FIELD OFFICE
(Kentucky, Georgia, North Carolina, Tennessee)
2675 Regency Rd.
Lexington, KY 40503-2922
(859) 260-3902

KNOXVILLE OFFICE
710 Locust St., 2nd Floor
Knoxville, TN 37902
(865) 545-4103

LONDON OFFICE
421 West Highway 80
P.O. Box 1048
London, KY 40741
(606) 878-6440

Interior Regions 3, 4, and 6

ALTON FIELD DIVISION
(Illinois, Indiana, Iowa, Missouri)
501 Belle St., Room 216
Alton, IL 62002
(618) 463-6460

BIRMINGHAM FIELD OFFICE
(Alabama, Louisiana, Mississippi)
135 Gemini Ci., Suite 215
Homewood, AL 35209
(205) 290-7282

TULSA FIELD OFFICE
(Arkansas, Kansas, Oklahoma, Texas)
1645 South 101st East Ave.
Suite 145
Tulsa, OK 74135-6548
(918) 581-6430

Interior Regions 5, 7-11

DENVER FIELD DIVISION
(Alaska, California, Colorado, New Mexico, Oregon, Utah)
P.O. Box 25065
One Denver Federal Center,
Building 41
Lakewood, CO 80225
(303) 293-5026

CASPER FIELD OFFICE
(Idaho, Montana, North Dakota, South Dakota, Wyoming, Crow Tribe, Northern Cheyenne Tribe, Cheyenne River Sioux Tribe)
150 East B St., Room 4100
Casper, WY 82601-1018
(301) 261-6550

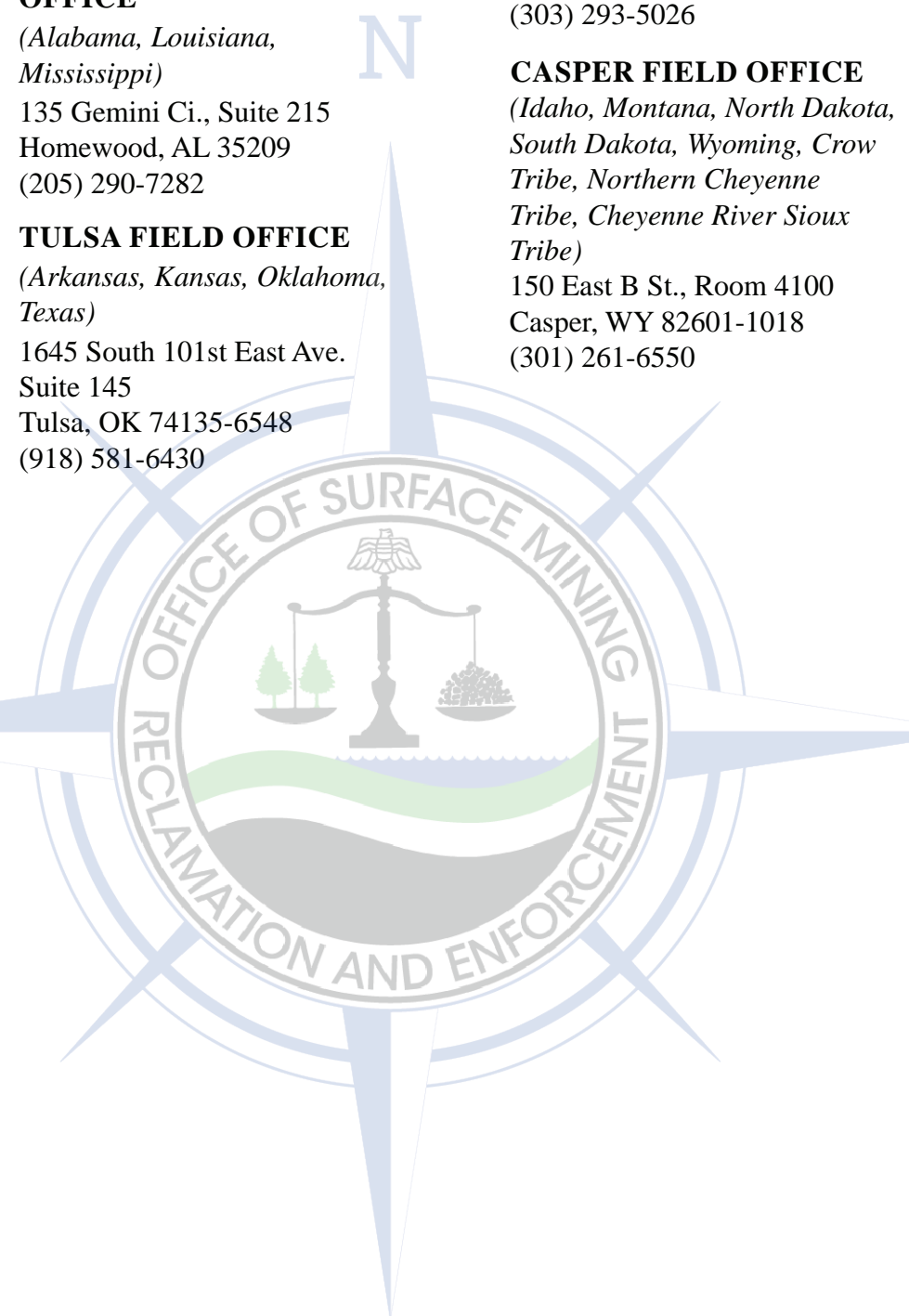
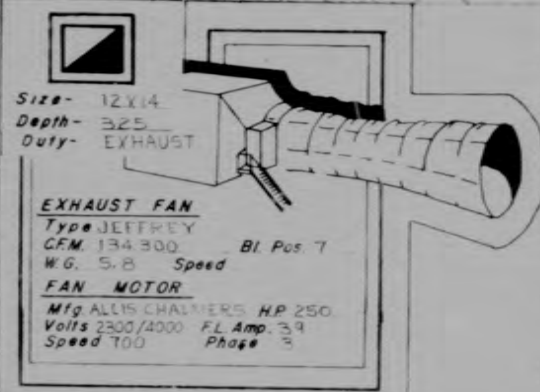
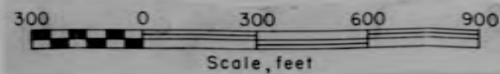


IMAGE: THIS IS A MAP THAT IS INCLUDED AS PART OF THE DIGITAL COLLECTION OF MINE MAPS IN THE NATIONAL MINE MAP REPOSITORY.



FY 2020

FEATURED STORIES

4th RIGHT off 1st NORTH
023
1-JOY 14B110
1-JOY 16RE
1-JOY 185C
1-GALIS 300
SILPAK 300KW-250DC
1-S&S BATTERY
1-MSA TRICKLE DUSTER
1-BANTAM 400 ROCK DUSTER
1-ENSIGN DISTRIBUTION BOX
41"
Quantity reaching section 26,000 CFM

25,000 CFM
25,000 CFM
31,000 CFM
50' FPM
0.10%

POCA 4 SEAM
POCA 3 SEAM
45° SLOPE
Length - 190FT
SIZE - 8X14
CFM - 134,300
Duty - EXHAUST

24X

373621

CELEBRATING 50 YEARS OF THE NATIONAL MINE MAP REPOSITORY

00869-5_1959L_19591128
00869-5
 00869-4_1959M_19591118
00869-4
 03208-1_1959M_19590218
03208-1
 00479-2_1959M_19591111
00479-2



The National Mine Map Repository (NMMR), located in Greentree, Pennsylvania, celebrated its 50th anniversary in 2020. The NMMR's anniversary is important because the NMMR's service can be used not only for coal mining applications but other types of mining. As the only mine map repository of its kind in the United States, the NMMR has a variety of maps. Their mission is to collect and keep mine maps for the future. The NMMR has maps from 88 commodity mines, like gold and a gemstone called garnet, among other minerals found in the United States. In the 1990s, the NMMR consolidated mine map repositories from around the country to create a single national mine map repository.

The signing of the Federal Coal Mine Health and Safety Act on December 30, 1969, by President Richard Nixon created the NMMR. The Department of the Interior incorporated the NMMR into OSMRE in 1982. The establishment of NMMR helped better inform regulators ensuring the improved safety of miners, the environment, and communities.

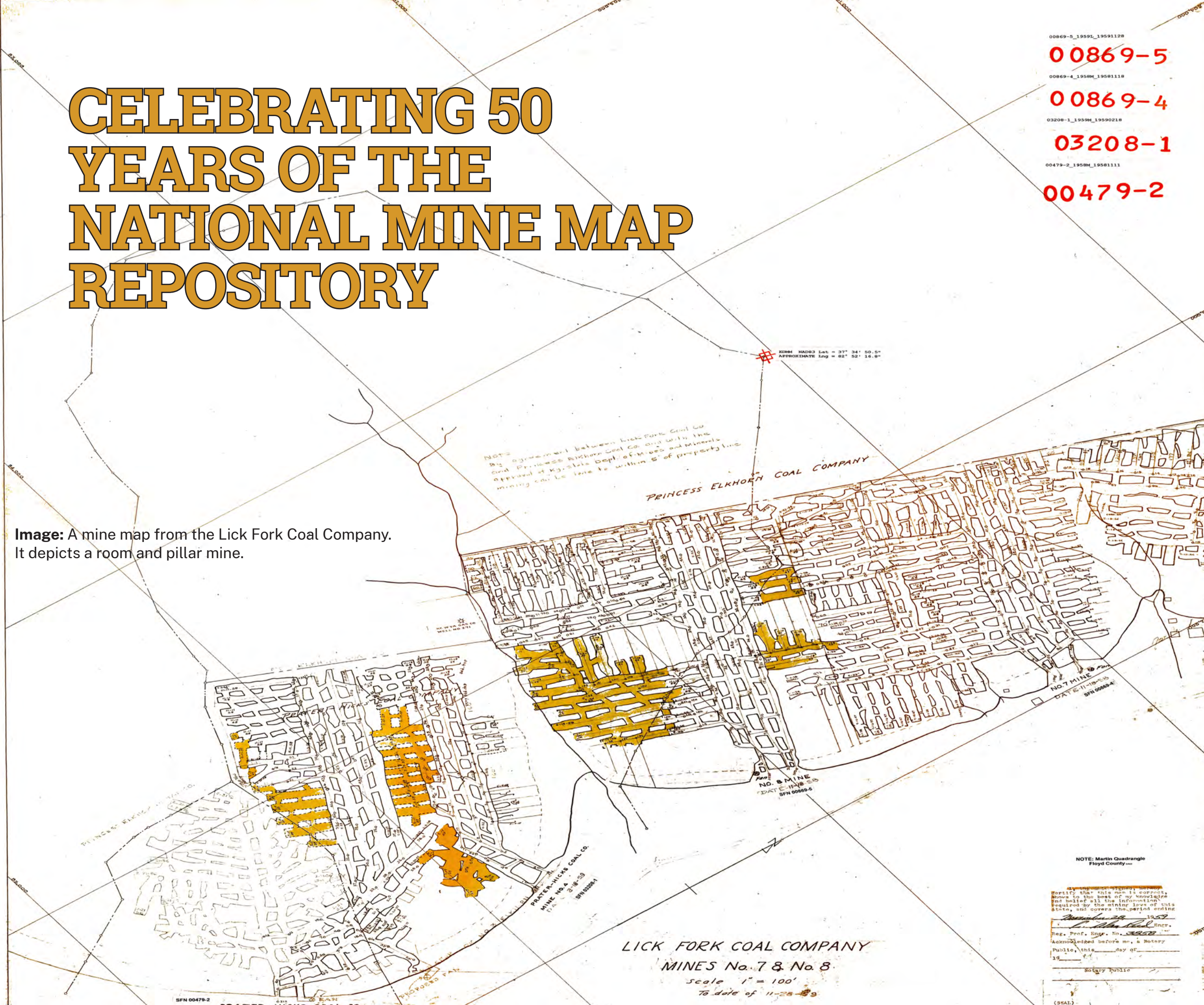


Image: A mine map from the Lick Fork Coal Company. It depicts a room and pillar mine.



Image: A grayscale drawing of an underground mine map.

Just before the establishment of the NMMR, a tragedy struck in 1968 near Hominy Falls, West Virginia. Miners in the Hominy mine unknowingly were approaching an abandoned mine while digging. When the miners breached the adjacent wall, trapped water caused significant flooding and stranded the workers. Some miners were rescued almost a week later, others after ten

days, and others perished. A local mine map repository was created that began collecting, archiving, and making mine maps available in the local area to prevent problems like this in the future.

Three decades later, in 2002, another mine disaster happened in Somerset County, Pennsylvania, at Quecreek Mining Inc. Nine miners became trapped when they accidentally dug

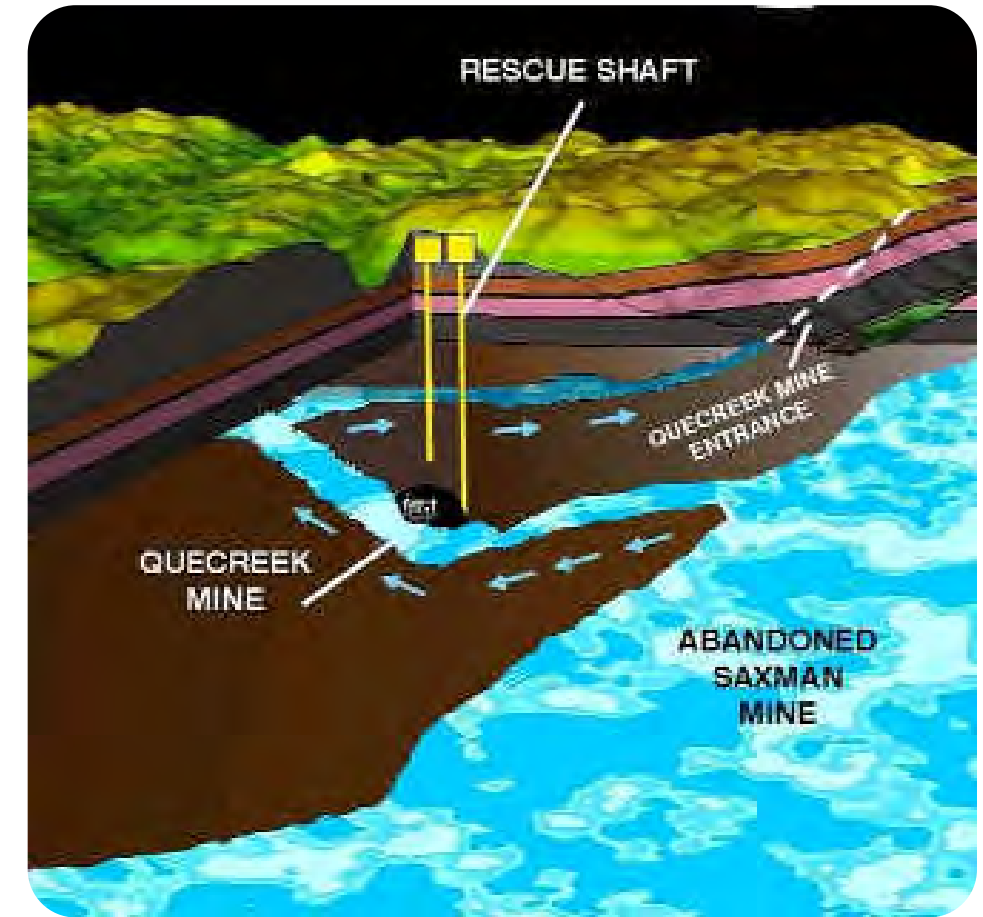
into a flooded shaft from the abandoned Saxman mine. The miners were stuck in a four-foot-high chamber 240 feet underground. For the next few days, the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection, Bureau of Abandoned Mine Reclamation (BAMR), worked together to help free the miners. At BAMR offices, staff digitized the Quecreek and abandoned

Saxman mine boundaries from available mine maps from the NMMR. That work created a map showing where the miners were trapped in combination with the mine boundaries, roads, and towns, superimposed on a U.S. Geological Survey base map. This graphic, along with another one illustrating where the miners were trapped, were distributed to rescue officials, the public, and the media.

The NMMR's extensive collection of mine maps is pivotal in preventing disasters, even during one, like Quecreek Mine. The NMMR houses nearly 150,000 scanned maps and 230,000 mines recorded in its online database. There are records of mines dating back to the 18th century, but the oldest available map is from the 19th century. Donated maps are scanned into a digital format and made available for the public to view on request. Physical copies of the maps are returned to local historical societies or the individuals that own them after the completion of scanning.

Maps come in all sizes and an array of conditions. While many maps have a year attached, many do not. For decades, maps were not required to include the year they were made. It is difficult to know for sure what period a map is from if it does not have a date. Occasionally, received maps are unfinished

Illustration: An illustration of the Quecreek and Saxman Mine. The illustration shows how water was thought to enter the mine and where the rescue shafts needed to be constructed.



or buildings and towns used as landmarks are no longer standing.

Most of the mine maps archived by the NMMR are hand drawn. The NMMR uses Geographic Information Systems to illustrate where these mine maps correlate with the surface of the Earth. It is possible, using a computer, to layer mine maps on top of each other to see where the mines are in relation to landmarks and other mines.

The NMMR has one of the largest scanners in the world, the CS 360 ST-P Cruse. The surface area of the scanner table measures 80 inches wide and 120 inches long, which

is about the size of a billiard table. Adding customized extensions on the scanner further extends the surface area when space is needed. These scanners pick up everything on the map and show fine details. It is crucial to ensure that older maps are as smooth as they can be and free of debris like lint and dust to provide the best-captured image. Microfilm was the archival material of choice before digital scanners became more popular and widespread. New technologies are changing map preservation standards. Now the maps that the NMMR collects and archives are high-quality digital images and are easily transferable. In addition to the

scanners, the NMMR also has an online database where the public can locate mines near them and view or request maps in almost any region.

The NMMR has adopted many changes over the years to keep up with emerging technology. However, they still keep copies of maps stored on microfilm. The first scans of maps were scans of those microfilms made in the late 1990s. The NMMR acquired its first large format table scanner in 2006. Then beginning in the 2010s, several projects started: the process of upgrading the NMMR's database, data, and image standards. Since that time, the NMMR's database has experienced major renovations and continues to have ongoing improvement updates.

The National Mine Map Repository's 50th anniversary is a significant milestone for the NMMR and OSMRE. For more information about the NMMR, please visit www.osmre.gov/programs/national-mine-map-repository.

Photo: A photo of a person's hand holding an index card with an archived microfilm of a map in the NMMR collection as part of a more extensive index of maps.



This photo shows improperly stored maps, at least under currently accepted archival standards, in a vault at Lehigh Anthracite. The vault is part of the oldest mining company in the U.S. and is where NMMR rescued the map of the oldest mine in the NMMR archive, dating back to 1792. These maps have since been digitized, and the originals returned to the vault's owner for them to archive and properly store.

NAVY MINE

FIRE

Protecting People and the Environment



Photo: A photo of heavy equipment moving brush and spoil near a small fire at the abandoned Navy Mine.

The OSMRE's Federal Reclamation Program (FRP), plays a pivotal role in the restoration and protection of the environment from historic coal mining, while improving public safety. During 2019, OSMRE responded to an emergency fire at the historic Navy Mine Site in Cumberland, Washington. The first spark of the fire ignition may have come from slides within the 140 foot long by 70 foot wide, tailings pile allowing pathways for oxygen flow that fed the fire, or from an illegal campfire burning in

the wrong place at the wrong time. The fire left plumes of black smoke billowing into the air with thick smoke and heat at the ground surface igniting small trees and shrubs on the hillside above the old mine. The homes below were in harm's way, creating a threat to public health, safety, and property. The fire needed to be extinguished expediently to prevent it from leaving the historic mine site, igniting the wildland interface, and moving toward the residences, less than a quarter mile away!

Multiple factors contributed to this mine fire becoming one of the most challenging and complex problems OSMRE's FRP has faced in Washington state.

- The proximity of the burning tailings to the urban interface.
- The historic mine site consists of unmapped features and potential openings at the surface which could allow for the fire to enter the underground mine workings if not contained.
- The burning tailings pile is adjacent to wildlands and the limited site access is via a narrow wildlife trail/footpath from the main road.
- Temperatures deep in the tailings pile exceeded 700 degrees Fahrenheit and greater than 300 degrees Fahrenheit just below the ground surface.
- The lateral extent of the smoldering tailings pile was difficult to delineate due to reduced visibility from smoke and heat generated from the fire when coupled with the steep slopes and dense vegetation of the wildland interface.
- The property encompassing the Navy Mine is privately owned, remote, riddled with wildlife trails/footpaths and does not have a perimeter fence to secure the site from trespass, creating a potential danger to contractors working on the site, trespasser(s) and preventing theft or vandalism of equipment and supplies during operations.

The reclamation consisted of clearing vegetation from the perimeter of the

Photo: A photo showing smoke rising above a tree line at the Navy Mine fire location.

burning tailings pile to create a fire break, clearing vegetation from inside the burning tailings pile, removing hot coal tailings from the burning pile, mixing the hot tailings with native soil and coal mine firefighting foam in the mixing area, then spreading the mix out in the designated repository area in 6 inch lifts. The lifts were separated by native soil taken from the project area to keep those extinguished coal tailings at temperatures less than 100 degrees Fahrenheit, significantly reducing their ability to reignite.

The contractor's careful monitoring of wind conditions, site air quality conditions, coal tailings pile temperatures, coal repository temperatures, diligence with site security, and detailed communications of real time site conditions allowed OSMRE to mitigate the potential catastrophe and make the area safe again. The successful reclamation work was accomplished through thorough planning, constant communication with contractors via daily meetings, careful monitoring during coal quenching and placement operations, and sound judgment and decisive action in the field during construction.

Photo: Heavy equipment at the Navy Mine location working with top soil and spoil grading the reclaimed area.



Photo: A photo showing a bulldozer and a dumptruck clearing brush and debris from the hillside at the Navy Mine location.



A photograph of a worker in a dark mine tunnel, silhouetted against a bright opening. The worker is positioned in the center, leaning over a wooden structure that appears to be a batgate. The tunnel walls are made of rough, reddish-brown rock. The lighting is dramatic, with the worker and the structure in shadow and the opening in the background brightly lit.

RESTORING THE ENVIRONMENT

Abandoned Mine Land Program

RECLAIMING ABANDONED MINE LANDS

Title IV of the Surface Mining Control and Reclamation Act of 1977

Restoring the Environment

Coal mining has been common in the United States for nearly two centuries. Prior to the passage of the Surface Mining Control and Reclamation Act (SMCRA) of 1977, there was no federal regulatory oversight of coal operators or what happened to mines after mining stopped. As a result, millions of Americans live less than a mile from an abandoned coal mine.

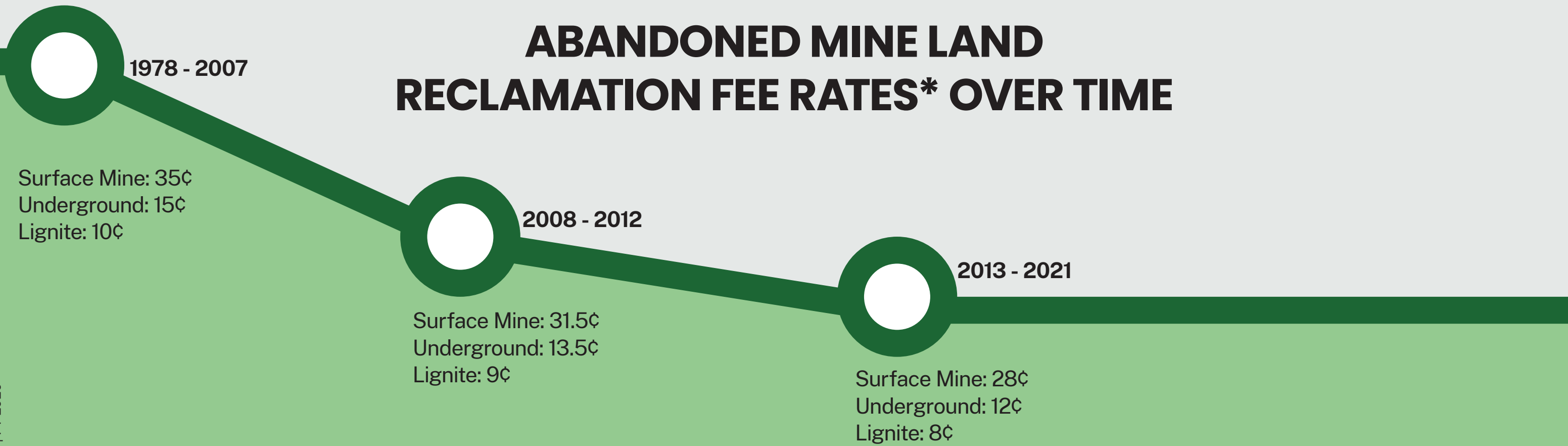
Abandoned Mine Land Program

The OSMRE Abandoned Mine Land (AML) Reclamation Program addresses the hazards and environmental degradation posed by coal mines that were unreclaimed or inadequately reclaimed before SMCRA. While AML can be dangerous and unwelcoming, through reclamation, this land can find a new purpose.

AML Fee Collection

Title IV of SMCRA created the AML reclamation program, which is funded by a reclamation fee assessed on each ton of coal produced. As originally enacted, SMCRA authorized collection of reclamation fees for 15 years following the date of enactment (August 3, 1977).

ABANDONED MINE LAND RECLAMATION FEE RATES* OVER TIME



Fee per ton of coal produced

*Change in fee rates was a result of Congress amending the Surface Mining Control and Reclamation Act of 1977. Congress again reduced the fee rate in 2021.

FY 2019 AML GRANTS TO STATES AND TRIBES

State/Tribe	Amount Allocated
Alabama	\$3,356,714
Alaska	\$2,823,000
Arkansas	\$2,823,000
Colorado	\$2,823,000
Illinois	\$11,681,218
Indiana	\$5,731,158
Iowa	\$2,823,000
Kansas	\$2,823,000
Kentucky	\$11,314,447
Louisiana	\$54,775
Maryland	\$2,823,000
Mississippi	\$113,406
Missouri	\$2,823,000
Montana	\$3,326,000
New Mexico	\$2,823,000
North Dakota	\$2,823,000
Ohio	\$6,048,847
Oklahoma	\$2,823,000
Pennsylvania	\$32,171,975
Tennessee	\$2,823,000
Texas	\$1,048,744
Utah	\$813,312
Virginia	\$3,563,263
West Virginia	\$22,865,581
Wyoming	\$35,801,324
Crow Tribe	\$457,853
Hopi Tribe	\$361,073
Navajo Nation	\$1,096,930
National Total	\$180,859,620

State and Tribal allocations are rounded to the nearest dollar.

Each year, OSMRE calculates the specific proportion of AML grant funding to be awarded to each state and tribe. The 2006 SMCRA Amendments mandated this AML grant distribution process.

The distribution is determined using a pre-set formula authorized by SMCRA.

This formula takes into account AML fee collections, historic coal production, the various shares within the AML Fund (i.e. state/Tribal Share, Federal Expense Share, Historic Coal Share), the minimum program supplemental adjustments, the AML inventory and, any other special Appropriations Act provisions (e.g. sequestration).

ABANDONED MINE LAND ECONOMIC REVITALIZATION PROGRAM

Since FY 2016, Congress has appropriated funding for the Abandoned Mine Land Economic Revitalization (AMLER) Program (also known as the AML Pilot Program). In FY 2020, the AMLER program made \$115 million in funding available to three Tribal AML Programs (Crow Tribe, Hopi Tribe, and Navajo Nation) and the six Appalachian states with the highest amount of unfunded high-priority

coal problems (Alabama, Kentucky, Ohio, Pennsylvania, Virginia, and West Virginia).

Additional information on the AMLER Program can be found in OSMRE's AMLER Program Report. To read the report, please visit www.osmre.gov/programs/reclaiming-abandoned-mine-lands.

ABANDONED MINE LAND ECONOMIC REVITALIZATION PROGRAM FISCAL YEAR'S 2016 - 2020 TOTALS IN MILLIONS

	2016	2017	2018	2019	2020	Cumulative Total
Alabama		\$10	\$10	\$10	\$10	\$40
Kentucky	\$30	\$25	\$25	\$25	\$25	\$130
Ohio		\$10	\$10	\$10	\$10	\$40
Pennsylvania	\$30	\$25	\$25	\$25	\$25	\$130
Virginia		\$10	\$10	\$10	\$10	\$40
West Virginia	\$30	\$25	\$25	\$25	\$25	\$130
Crow Tribe			\$3.33	\$3.33	\$3.33	\$10
Hopi Tribe			\$3.33	\$3.33	\$3.33	\$10
Navajo Nation			\$3.33	\$3.33	\$3.33	\$10
Annual Total	\$90	\$105	\$115	\$115	\$115	\$540

During FY 2016, only the three Appalachian states with the highest unfunded AML inventories were eligible for the \$90 million grant program. In FY 2017, Congress provided an additional \$25 million (\$105 million total) and incorporated six Appalachian states with the highest unfunded AML inventories. In 2018, Congress expanded the program again by including three Tribes and provided an additional \$10 million (\$115 million total).

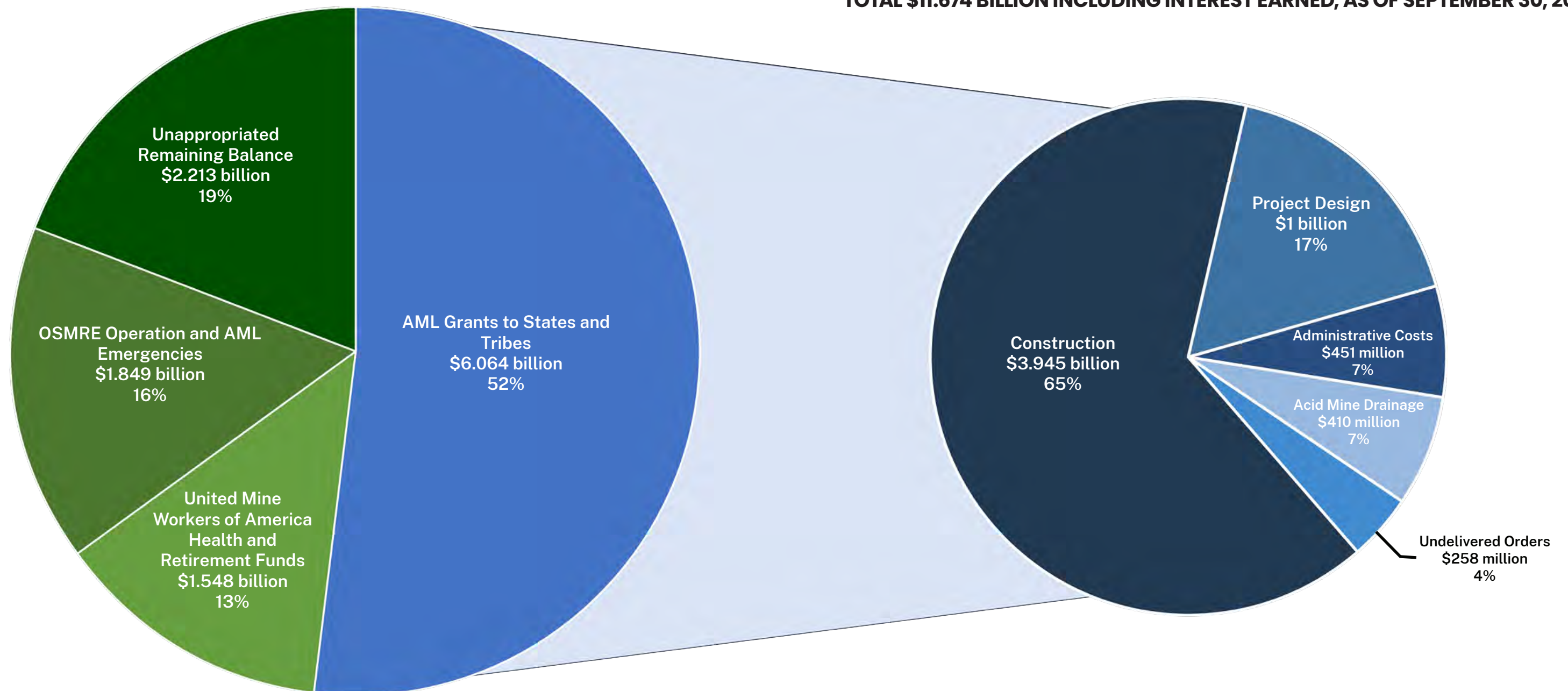
Status of the AML Fund

The AML Fund amount was approximately \$11.674 billion as of September 30, 2020 (\$9.980 billion collected in AML fees and \$1.694 billion in interest earned). This amount is broken down as follows:

- \$9.461 billion or 81% represents the appropriated or awarded amount that OSMRE has been authorized to distribute in accordance with SMCRA.
- \$2.213 billion or 19% remains unappropriated in the AML Fund which is not yet available for disbursement. Interest earned on the unappropriated balance is transferred to three health care plans administered by the United Mine Workers of America (UMWA) Health and Retirement Funds.

To read more about the status of the AML Fund, please visit OSMRE's *Reclaiming Abandoned Mine Lands* page at www.osmre.gov/programs/reclaiming-abandoned-mine-lands.

**ABANDONED MINE LAND RECLAMATION FUND
FY 1977 – FY 2020
TOTAL \$11.674 BILLION INCLUDING INTEREST EARNED, AS OF SEPTEMBER 30, 2020**



OSMRE first recognized outstanding abandoned mine land reclamation and exemplary reclamation techniques in 1992, when it started the annual AML Reclamation Awards Program. The program mirrors one of the objectives of SMCRA to ensure that land mined for coal would be restored to beneficial use as part of the mining process and that lands abandoned without reclamation before the law would be reclaimed.



AWARD ELIGIBILITY

AML projects funded wholly or in part and completed by approved state or tribal programs are eligible for an award, including coal, non-coal, high-priority, and emergency projects. Abandoned mine reclamation completed by citizen groups or other non-state/non-tribal organizations are not eligible for these awards. One project may be submitted by each state or tribal program each year.

AWARD WINNERS

Winning projects represent the nation's highest achievements in AML reclamation, demonstrating innovative reclamation techniques and completing reclamation that results in outstanding on-the-ground performance.

OSMRE has traditionally given five awards:

- One national award.
- One award for small projects (restricted to projects receiving less than \$1 million in a state or tribe that receives less than \$6 million annually in AML funding).
- Three regional awards.

Any entry is eligible for the national award. A list of eligible voters and organizations able to submit nominations is located at www.osmre.gov/programs/abandoned-mine-land-awards-program.

2020 NATIONAL AWARD WINNER

Ehrenfeld AML Pilot Reclamation/Recreation & Watershed Improvement Project, Penn.

Approximately 70 acres of coal refuse piles located along the “Johnstown Path of the Flood Trail,” posed multiple environmental threats to the area. Frequent erosion clogged an unnamed tributary to the Little Conemaugh River, as a result, highly

acidic water leached into and subsequently impaired local streams, burning areas of refuse piles and degrading air quality for the residents. To address these hazards, Pennsylvania’s AML Program removed the refuse piles, eliminated the

surface burning conditions and improved the Little Conemaugh watershed. The reclamation project has resulted in new opportunities for recreation and tourism with the addition of a community park and safer walking trails.



Photo: An aerial view of the reclaimed abandoned mine land area.

RIDGEWAY DRIVE (FERRELL & MCDANIEL) LANDSLIDE EMERGENCIES, WEST VIRGINIA



In 2018, West Virginia received two different reports of landslides within the same neighborhood. Calls from concerned residents regarding these slides, and the subsequent investigations by West Virginia's AML program, revealed that more than 10 homes were threatened, while another home had slid partially downhill. With the threat to people's lives and property imminent, West Virginia's quick response abated the threats to the residents and helped to stabilize their properties, preventing further damage and economic loss.

BUTTERMILK HIGHWALLS, AML SITE 1820, INDIANA



Two large and dangerous highwalls located near a public road posed a danger to anyone driving, hiking, hunting or fishing near the Sugar Ridge Fish and Wildlife Area. Indiana's AML program worked with one of its sister agencies in the Indiana DNR to address the hazards. This collaborative effort eliminated 1,615 linear feet of dangerous highwalls while mitigating future acid mine drainage (AMD) problems, improving wetland areas, and providing better wildlife habitat, all of which improved recreational opportunities at the site.

THE CARRICK MINE AML PROJECT, NORTH DAKOTA



A 20-acre abandoned mine site located near two popular recreation areas contained dangerous highwalls and a large, water-filled pit. The site not only posed a hazard to the public, but also raised liability concerns for private landowners who used the property as horse pasture and a hunting area. North Dakota's AML program addressed these issues by eliminating approximately 1,300 feet of dangerous highwalls, creating a pond that recharges fresh water, and preserving a prehistoric, petrified tree stump, estimated to be between 55 and 60 million years old.

RUFFNER MOUNTAIN PORTALS AML PROJECT, ALABAMA

Open mine portals in a nature preserve adjacent to several popular hiking trails posed a danger not only to the public, but also to the over 600 Tricolor bats that

called the portals home. When a bat study confirmed the presence of White-nose syndrome within the bat population, the urgency to limit human entry to the

portals was heightened. Alabama's AML program reclaimed the site, resolving public safety concerns while minimizing the ecological impact to the local area.



Illustration: A silhouette image of a large dumptruck in the background with two people wearing hardhats in the foreground.

PROTECTING THE ENVIRONMENT

Regulatory Program

REGULATORY PROGRAM

Title IV of the Surface Mining Control and Reclamation Act of 1977

One of the purposes of SMCRA is to establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations. The law directs the Bureau to establish, maintain, and update federal standards that a state or tribe must meet to administer its coal mining regulatory program. The Bureau also provides states and tribes with assistance and consultation needed for them to assume primary responsibility — or “primacy” — for regulatory activities under SMCRA. When a state or tribe assumes primacy, OSMRE transitions to an oversight role, ensuring that the state or tribal agency properly implements its regulatory programs. The Bureau retains the ability to review regulatory actions and take direct action, including enforcement, where authorized and necessary to ensure the state or tribe is appropriately implementing its programs. OSMRE is the regulatory authority for Federal Program states as well as on Indian lands. To date, no Indian Tribe has assumed primacy.

For more information on the array of programs, initiatives, projects, and actions under OSMRE’s Regulatory Program, please visit www.osmre.gov/programs/regulating-active-coal-mines.

State Programs

Since May 3, 1978, all surface coal mines have been required to have permits and to comply with either OSMRE regulations or corresponding approved stated program provisions (in states that have primacy. An effective relationship between OSMRE and the states is fundamental to the successful implementation of SMCRA. This shared federal-state commitment to carry out the requirements of the SMCRA is based on common goals and principles that form the basis for the relationship.

Oversight of State Programs

Section 517(a) of SMCRA requires OSMRE to make inspections as necessary to evaluation the administration of approved state programs. Most state programs were approved in the early 1980s, and OSMRE’s oversight of the programs focused on the

(continued on page 43)



OSMRE provides matching funding in the form of regulatory grants to primacy states up to 50% of the cost of their regulatory programs. Indian Tribes can receive 100% of the funds necessary to develop a regulatory program.

FISCAL YEAR 2020 REGULATORY GRANT DISTRIBUTION

State/Tribe	FY 2020 Allocation
Alabama	\$1,420,234
Alaska	\$373,008
Colorado	\$2,323,844
Illinois	\$3,339,928
Indiana	\$1,602,801
Iowa	\$46,557
Kansas	\$63,737
Kentucky	\$13,497,278
Louisiana	\$266,092
Maryland	\$901,705
Mississippi	\$265,256
Missouri	\$210,341
Montana	\$2,137,656
North Dakota	\$1,016,025
Ohio	\$1,449,935
Oklahoma	\$1,326,932
Pennsylvania	\$13,174,069
Texas	\$2,575,034
Utah	\$2,544,453
Virginia	\$3,670,097
West Virginia	\$10,488,404
Wyoming	\$2,467,784
Crow Tribe	\$575,002
Hopi Tribe	\$390,615
Navajo Nation	\$1,500,000
Totals*	\$68,590,000

*Final distribution does not include the \$2.3 million that was distributed to Tennessee in Program Development Funds for Fiscal Years 2020-2021.

implementation of the many procedural and process requirements such as permitting, inspection, enforcement, and penalties, each with numerous mandated requirements. These are prescribed to achieve the environmental protection performance standards and the overall purposes of SMCRA.

Federal Programs

Section 5094(a) of SMCRA requires OSMRE to regulate surface coal mining and reclamation activities on non-federal and non-Indian lands in any state if:

- The state's proposal for a permanent program has not been approved by the Secretary of the Interior.
- The state does not submit its own permanent regulatory program.
- The state does not implement, enforce, or maintain its approved state program.

Although OSMRE encourages and supports state primacy in the regulation of coal mining and reclamation operations, some states with coal reserves have elected not to submit or maintain regulatory programs. Those states are called federal program states, and their coal mining and reclamation operations are regulated by OSMRE. Federal programs are in effect in 12 states: Arizona, California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington.

Regulation of Surface Mining on Federal and Indian Lands

Section 523(a) of SMCRA requires the Secretary of the Interior to establish and implement a federal regulatory program that applies to all surface coal mining operations that take place on federal lands. OSMRE enacted the current Federal Lands Program on February 16, 1983. The federal lands program is important because the federal government owns significant coal reserves, primarily in the West. Of the identified coal reserves in the western United States, 60% is federal owned. The leasing of federal coal reserves is administered by the Federal Coal Management Program of the Department of the Interior's Bureau of Land Management. OSMRE plays a role in development with the mining plans.

In addition, Section 710 of SMCRA requires that the Secretary establish and implement a Federal program for the regulation of surface coal mining on Indian lands (unless a Tribe assumes primacy). Thus, OSMRE provides directly regulates coal mining and reclamation operations on Indian lands through its Indian lands program.



EXCELLENCE IN SURFACE COAL MINING AWARDS

RECOGNIZING EXEMPLARY RECLAMATION

The *Excellence in Surface Coal Mining Reclamation Awards* are presented to coal mining companies that achieve the most exemplary coal mine reclamation in the nation. Past winners have demonstrated a commitment to sound mining practices and effective reclamation plans that enhanced beneficial postmining use of the land. OSMRE has honored high-quality coal mine reclamation since 1986.



AWARD ELIGIBILITY

Surface coal mining and reclamation operations conducted under a Title V permit (1978 - present) are eligible for nomination. Also, non-permitted mining and reclamation completed using Government Financial Reclamation Contracts under the Enhanced Abandoned Mine Land (AML) regulations are also eligible for nomination. AML reclamation projects carried out exclusive of active mining are not included in this program. AML projects integrated with Title V permitted operations are eligible for an award.

AWARD WINNERS

Innovative reclamation techniques or have completed reclamation that resulted in outstanding on-the-ground performance. The awards program is designed to help state and federal regulators transfer exceptional reclamation methods and techniques from award-winning operations to other coal mine operators who work under SMCRA nationwide.

2020 NATIONAL AWARD WINNER

Navajo Transitional Energy Company, North American Coal Company
Bisti Fuels Navajo Mine San Juan County, New Mexico

The judges cited this effort for going well beyond the requirements, spirit, and intent of the Surface Mining Control and Reclamation Act. The size, scope, and sense

of obligation is why the judges chose this nomination for the 2020 National Award, given to the Navajo Transitional Energy Company, and North American Coal/Bisti Fuels.



GOOD NEIGHBOR AWARD

WOLF RUN MINING, LLC LEER SOUTH MINE COMPLEX

GRAFTON, WEST VIRGINIA



The company's ongoing commitment to charity, transparency, and ensuring that mine operations continue safely is why the judges cited Wolf Run mine, and Leer South Complex as the Good Neighbor Award Winner for 2020.

TECHNOLOGY DEVELOPMENT and TRANSFER PROGRAM



4.40 .23

- /Administration
- /Human Resources
- /Legal
- /Accounting
- /Finance
- /Marketing
- /Publicity
- /Promotion
- /Research
- /Business
- /Development
- /Engineering
- /Manufacturing
- /Planning

789.51

971.91



536.85

301.58

43.67

555.74

818.71

559.83

454.87

826.04

06

215.79

993.28

53.95

284.55

73.79



As part of OSMRE's mandate under SMCRA, the Bureau provides technical support, assistance, and training to state and tribal surface coal mining programs. The Technology Development and Transfer Program covers a range of activities that promote and utilize technological innovations that better protect the environment during mining and in reclaiming active and abandoned mines.

OSMRE also provides training that ensures that states, tribes, and the Bureau's other partners continue to administer their surface mining programs efficiently and effectively. In FY 2020, the Technology Development and Transfer Program received \$14.765 million.

For more information on OSMRE's Technology Development and Transfer Program, visit www.osmre.gov/programs/technology-and-transfer-program.

Appalachian Regional Reforestation Initiative



The Appalachian Regional Reforestation Initiative (ARRI) is a coalition of groups, including citizens, the coal industry, and the government dedicated to restoring forests on coal mined lands in the Eastern United States. ARRI was established in early 2004 with the formation of the Core Team that includes OSMRE and state Personnel. The Core Team's responsibilities include outreach, training, event planning, and monthly meetings to discuss progress reports and new strategies. A Science Team was also developed to conduct mine land reforestation research and to provide credibility. Most of the major research universities in

Appalachia are represented on the ARRI Science Team. ARRI promotes a set of best management practices coined the Forestry Reclamation Approach (FRA), to plant trees on reclaimed coal mined lands. Highly productive forestland can be created on reclaimed mine lands under existing laws and regulations by using the Forestry Reclamation Approach.

ARRI works on three different categories of reforestation projects: Active Mining Operations, Abandoned Mine Land Projects, and Legacy Site Projects.

[Continues on page 60.]



The FRA is the best technology currently available for mine land reforestation and consists of five simple steps:

- Step 1: Create the best possible growth medium with material on the permit area
- Step 2: Loosely place this material to prevent compaction
- Step 3: Use a tree compatible ground cover
- Step 4: Plant native tree species with emphasis on later successional species
- Step 5: Use proper tree planting techniques

Active mining operations are bonded, and the coal operator is responsible for planting trees as part of the reclamation process when required. ARRI provides guidance to the coal industry through rules, policy, training, research, and on-site visits to provide technical assistance. From 2004 to 2020, approximately 150 million trees have been planted on about 200,000 acres of reclaimed mine land in Appalachia.

ARRI guides AML programs through training, technical assistance on contract preparation, job showings, and on-site visits to offer technical support. From 2004 to 2020, approximately 1 million trees were planted on about 1,500 acres of AML sites in Appalachia.

Legacy sites are defined as previously reclaimed coal mining operations where reforestation opportunities exist. ARRI provides guidance on legacy site projects to all partner organizations by showcasing proper mine land reforestation, encouraging projects, and by providing an umbrella organization for this work to occur. Funding for legacy site reforestation projects comes from philanthropic organizations, government agencies such as USDA, NRCS and USFS, and others. Fiduciaries such as Green Forests Work, the PA Environmental Council, Foundation for Pennsylvania Watersheds, the Susquehanna River Basin Commission, and the National Park Foundation make this work possible. From 2004 to 2020, ARRI and partners have organized 390 planting events

across Appalachia, covering 4,984.6 acres with 3,059,655 trees. Over 21,00 participants, most of whom were volunteers, logged 121,336 hours planting these trees. High profile projects include reforestation of the Flight 93 National Memorial and red spruce restoration on the Monongahela National Forest.

A recent study by the University of Kentucky shows over 1 million acres of forestland in Appalachia have been converted, by coal mining, from a mixed mesophytic forest to a grassland or shrub/scrubland dominated by non-native invasive species. Most of this land is sitting idle and has little economic value because of its remote locations. This is prime land for reforestation. Site preparation is crucial to the survival of the planted seedlings. Proper site preparation (removal of nonnative species and ripping to mitigate compaction) also encourages the natural colonization of native species and increases a site's long-term productivity.

For more information about ARRI, including a list of volunteer planting events, Reforestation Advisories, contacts for partner organizations, and other mine land reforestation information can be found at ARRI's website at www.osmre.gov/programs/arri.



More information about OSMRE budget's and performance information is available online at www.osmre.gov/resources/budget-and-planning.

**Table 1:
FY 2020 Abandoned Mine Land Funding (Cash Basis)**

State/Tribe	AML Collections ¹	State Share Distribution	Historic Coal Distribution	Minimum Program Distribution	Certified In Lieu Distribution ²	Total Mandatory Distribution	Emergency Distribution ³
Alabama	\$2,031,983	\$956,048	\$2,400,666	\$0	\$0	\$3,356,714	\$0
Alaska	\$279,226	\$131,376	\$25,905	\$2,665,719	\$0	\$2,823,000	\$0
Arkansas	\$0	\$0	\$199,595	\$2,623,405	\$0	\$2,823,000	\$0
Colorado	\$2,077,684	\$977,550	\$1,169,962	\$675,488	\$0	\$2,823,000	\$0
Illinois	\$5,924,761	\$2,787,600	\$8,893,618	\$0	\$0	\$11,681,218	\$0
Indiana	\$6,026,941	\$2,835,675	\$2,895,483	\$0	\$0	\$5,731,158	\$0
Iowa	\$0	\$0	\$702,970	\$2,120,030	\$0	\$2,823,000	\$0
Kansas	\$0	\$0	\$569,871	\$2,253,129	\$0	\$2,823,000	\$0
Kentucky	\$5,522,079	\$2,598,139	\$8,716,308	\$0	\$0	\$11,314,447	\$0
Louisiana	\$116,419	\$0	\$0	\$0	\$54,775	\$54,775	\$0
Maryland	\$309,263	\$145,508	\$564,815	\$2,112,677	\$0	\$2,823,000	\$0
Mississippi	\$241,033	\$0	\$0	\$0	\$113,406	\$113,406	\$0
Missouri	\$59,893	\$28,180	\$688,080	\$2,106,740	\$0	\$2,823,000	\$0
Montana	\$7,069,076	\$0	\$0	\$0	\$3,326,000	\$3,326,000	\$0
New Mexico	\$1,790,462	\$842,412	\$284,432	\$1,696,156	\$0	\$2,823,000	\$0
North Dakota	\$2,189,472	\$1,030,147	\$364,099	\$1,428,754	\$0	\$2,823,000	\$0
Ohio	\$1,268,745	\$596,944	\$5,451,903	\$0	\$0	\$6,048,847	\$0
Oklahoma	\$84,696	\$39,849	\$409,872	\$2,373,279	\$0	\$2,823,000	\$0
Pennsylvania	\$7,276,067	\$3,423,390	\$28,748,585	\$0	\$0	\$32,171,975	\$0
Tennessee	\$43,711	\$20,566	\$1,006,979	\$1,795,455	\$0	\$2,823,000	\$0
Texas	\$2,228,997	\$0	\$0	\$0	\$1,048,744	\$1,048,744	\$0
Utah	\$1,728,612	\$813,312	\$0	\$0	\$0	\$813,312	\$0
Virginia	\$1,887,259	\$887,955	\$2,675,308	\$0	\$0	\$3,563,263	\$0
Washington	\$0	\$0	\$0	\$0	\$0	\$0	\$0
West Virginia	\$13,481,766	\$6,343,171	\$16,522,410	\$0	\$0	\$22,865,581	\$0
Wyoming	\$76,092,080	\$0	\$0	\$0	\$35,801,324	\$35,801,324	\$0
Crow Tribe	\$973,120	\$0	\$0	\$0	\$457,853	\$457,853	\$0
Hopi Tribe	\$767,425	\$0	\$0	\$0	\$361,073	\$361,073	\$0
Navajo Tribe	\$2,331,414	\$0	\$0	\$0	\$1,096,930	\$1,096,930	\$0
TOTAL	\$141,802,185	\$24,457,822	\$82,290,861	\$21,850,832	\$42,260,105	\$170,859,620	\$0

Total figures above have been adjusted for rounding.

AML Fee Collections in Table 1 are reported on a cash basis (recognition of revenue when received) and may not tie to OSMRE's financial statement as these include other amounts.

AML fees are allocated to "pools" upon collection for later distribution. Annual distributions are calculated based on SMCRA. The distribution above is after sequestration.

¹This column represents AML fees collected during the AML FY 2019 (Dec. 1 to Nov. 30) regardless of when they were reported to OSMRE. These amounts are the basis for the FY 2020 distribution.

²The Certified in Lieu Distribution is also funded by the U.S. Treasury for the certified states "state share balance."

³The Emergency Distribution amounts are distributed from discretionary AML appropriated funds and therefore not included as part of the Total Mandatory Distribution.

Data Source: Financial Business Management System and the grant distribution.

**Table 2:
FY 2020 Abandoned Mine Reclamation Fund Status
Cash Basis (Includes Investments)**

(Dollars in thousands)	FY 2020	FY 2019
Balance, Start of Year	\$3,021,001	\$2,971,842
AML Appropriated Pilot Funds	\$115,000	\$115,000
Fees, debts, and interest collected	\$123,418	\$147,513
Net Investment Activity	\$55,180	\$59,335
Total Earnings	\$293,598	\$321,849
Less:		
Disbursements/Rescission	\$223,429	\$218,369
Transfers to the Combined Benefit Fund	\$37,132	\$54,321
Total Disbursements and Transfers	\$260,561	\$272,690
Balance, End of the Year	\$3,054,038	\$3,021,001

Total figures above have been adjusted for rounding.

Note: The information presented in this table is on a cash basis and therefore will not reconcile to accrual based financial data presented elsewhere in this report.

Data Source: Financial Business Management System

**Table 3:
Abandoned Mine Land Inventory Costs as of FY 2020**

AML Inventory Status	Cumulative Amount Through FY 2020	Cumulative Percent through FY 2020
Completed	\$5,151,704,999	31%
Funded	\$584,619,767	4%
Unfunded	\$10,859,460,158	65%
TOTAL	\$16,595,784,023	100%

This table includes all coal and non-coal problems (Priority 1, 2, 3, 4, 5, B, F, and H) as well as non-mining activities. It does not include AMLER Program projects.

Data Source: eAMLIS

Table 4:
FY 2020 Abandoned Mine Land Grants¹ to Primacy States and Indian Tribes

State/Tribe	Administration ²	Project Costs ³	AMD Set-Aside ^{4,5}	Non-Reclamation Activity Costs ⁶	2020 Total	2019 Total
Alabama	\$1,003,941	\$4,429,231	\$1,007,014	\$0	\$6,440,186	\$5,448,244
Alaska	\$606,593	\$2,650,619	\$0	\$0	\$3,257,212	\$2,824,979
Arkansas	\$266,493	\$0	\$0	\$0	\$266,493	\$4,785,810
Colorado	\$1,399,112	\$2,776,912	\$0	\$0	\$4,176,024	\$3,117,101
Illinois	\$1,144,685	\$5,859,314	\$3,500,000	\$0	\$10,503,999	\$42,774,305
Indiana	\$855,096	\$3,865,418	\$1,719,347	\$0	\$6,439,862	\$10,670,732
Iowa	\$311,347	\$2,511,653	\$0	\$0	\$2,823,000	\$2,814,000
Kansas	\$253,141	\$4,176,453	\$0	\$0	\$4,429,594	\$2,814,000
Kentucky	\$3,610,743	\$8,738,321	\$0	\$0	\$12,349,064	\$18,364,758
Louisiana	\$147,243	\$0	\$0	\$50,000	\$197,243	\$177,258
Maryland	\$657,164	\$1,682,408	\$922,454	\$0	\$3,262,026	\$2,993,955
Mississippi	\$0	\$0	\$0	\$0	\$0	\$444,917
Missouri	\$217,486	\$2,581,176	\$71,626	\$0	\$2,870,288	\$2,978,818
Montana	\$646,852	\$2,830,293	\$0	\$0	\$3,477,145	\$7,972,068
New Mexico	\$1,919,109	\$1,957,150	\$0	\$0	\$3,876,259	\$9,556,991
North Dakota	\$407,757	\$2,641,468	\$0	\$0	\$3,049,225	\$2,814,000
Ohio	\$3,005,566	\$4,373,096	\$0	\$0	\$7,378,662	\$11,309,333
Oklahoma	\$384,900	\$2,175,297	\$0	\$0	\$2,560,197	\$3,409,293
Pennsylvania	\$1,721,804	\$40,178,607	\$0	\$0	\$41,900,411	\$62,809,286
Tennessee	\$424,746	\$2,516,886	\$308,263	\$0	\$3,249,895	\$2,970,428
Texas	\$293,402	\$13,655,570	\$0	\$0	\$13,948,972	\$3,315,463
Utah	\$608,302	\$405,010	\$0	\$0	\$1,013,312	\$1,362,163
Virginia	\$792,480	\$3,823,782	\$0	\$0	\$4,616,262	\$5,982,633
West Virginia	\$6,644,825	\$27,961,311	\$0	\$0	\$34,606,136	\$35,754,311
Wyoming	\$2,055,803	\$38,299,101	\$0	\$0	\$40,354,904	\$89,984,528
Crow Tribe	\$251,412	\$206,441	\$0	\$0	\$457,853	\$1,211,505
Hopi Tribe	\$217,822	\$143,251	\$0	\$0	\$361,073	\$588,522
Navajo Tribe	\$534,525	\$562,406	\$0	\$0	\$1,096,931	\$2,817,229
TOTAL	\$30,382,349	\$181,001,173	\$7,528,704	\$50,000	\$218,962,226	\$342,066,630

The figures above have been adjusted for rounding. No states or tribes received emergency funding or subsidence insurance funding during FY 2020.

¹Grants awarded were funded using the FY 2020 Distribution, carryover and/or funds recovered from prior years. Decreases of prior year awards are not included. Therefore, will not tie to the FY2020 Mandatory Distribution in Table 1.

²Included in this category are costs for program support (personnel, budgeting, procurement, etc.), AML inventory management, and program policy development. Indirect costs associated with the administration of the program may also be included.

³The term "Project Costs" is now used instead of Construction. This category contains non-water supply, water supply and non-coal projects.

⁴This category contains emergency project, administrative, and indirect costs.

⁵Acid Mine Drainage set-aside are funds set aside in a trust account for use towards Acid Mine Drainage abatement and treatment.

⁶This category contains non-reclamation activity costs that certified states can use from U.S. Treasury funds. Information about Louisiana's non-reclamation activity costs can be found in OSMRE's *Annual Evaluation Report for the Regulatory and Abandoned Mine Land Programs FY 2020* report on www.odocs.osmre.gov.

Table 5:
Significant Court Decisions in FY 2020

Case Name	Citation	Summary of Decision
Justice v. Office of Surface Mining Reclamation and Enforcement	No. 7:19CV00381, 2020 WL 2549701 (W.D. Va. May 19, 2020)	On May 17, 2019, various coal companies and James C. Justice, III (collectively Mine Operators) filed this lawsuit against the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) in the U.S. District Court for the Western District of Virginia. Plaintiffs filed an amended complaint on August 23, 2019. Plaintiffs alleged in their complaint that the Mine Operators had settled several million dollars in civil penalty debt for \$250,000 and sued to enforce that purported settlement after the Department of the Interior referred the entire debt to the Department of Justice for collection. The Mine Operators asserted that they entered into a valid settlement agreement with an OSMRE Field Office Director. The government denied the existence of the purported settlement agreement and averred that the Field Office Director lacked the authority to enter into a settlement agreement with the Mine Operators under the facts of this case. On May 19, 2020, the court granted the government's motion to dismiss the amended complaint. The court explained that, under the Tucker Act, 28 U.S.C. § 1491, and the Little Tucker Act, 28 U.S.C. § 1346, certain breach-of-contract claims can be brought against the United States. In general, the U.S. Court of Federal Claims has jurisdiction over certain breach-of-contract claims against the United States, while district courts have concurrent jurisdiction over such claims that do not exceed \$10,000. Because the purported contract at issue had a value well over \$10,000, the district court held that it lacked jurisdiction. In addition, the court held that it did not have jurisdiction over the Mine Operators' contract claim under the Administrative Procedure Act. Finally, the court rejected the Mine Operators' alternative request to transfer the action to the U.S. Court of Federal Claims, finding that that court would not have jurisdiction because the OSMRE representative involved in the matter did not have actual authority to enter into the purported settlement agreement. Plaintiffs did not appeal the district court's decision.

Data source: U.S. Department of the Interior, Office of the Solicitor

Table 6a: Abandoned Mine Land Reclamation (1978–2020)

State/Indian Lands	Priority 1 and 2 (Protection of Public Health and Safety) and Emergency Projects																	Elevated Priority 3 Projects ¹										
	Clogged Streams	Clogged Stream Lands	Dangerous Highwalls	Dangerous Impoundments	Dangerous Piles & Embankments	Dangerous Slides	Dangerous Gases	Hazardous Equipment & Facilities	Hazardous Water Bodies	Industrial/Residential Waste	Portals	Polluted Water: Agriculture & Industrial	Polluted Water: Human Consumption	Subsidence	Surface Burning	Underground Mine Fires	Vertical Openings	Bench*	Equipment / Facility*	Gobs*	Highwall*	Haul Road*	Mine Opening*	Pits*	Slump*	Slurry*	Spoil Area*	Water Problems*
Alabama	2	198	375,898	1	139	22	1	491	91	26	1,094	11	15	105	149	0	430	0	0	28	7,919	10	4	88	0	0	2,126	51
Alaska	0	0	15,070	4	8	0	0	1,655	2	4	8	0	0	1	67	0	18	0	0	0	0	0	0	0	0	0	0	0
Arkansas	2	0	79,333	1	434	0	0	3	95	45	25	2	0	25	4	0	97	0	0	0	0	0	0	0	0	0	87	0
California	0	0	0	0	0	0	0	0	0	0	34	0	0	1	0	0	42	0	0	0	0	0	0	0	0	0	0	0
CERT Tribes ²	0	0	7,675	0	519	0	0	5	32	9	74	0	0	39	0	3	18	0	0	0	0	0	0	0	0	0	22	0
Colorado	600	0	58,881	0	238	20	1	3	700	31	583	6	0	968	22	306	432	0	0	1,318	0	1	2	12	0	0	4	8
Crow Tribe	0	1	1,915	1	55	22	0	32	1	0	15	3	0	16	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	13,200	2	0	0	0	0	0	0	112	0	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0
Hopi Tribe	0	0	11,662	0	0	0	0	8	0	0	9	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	28	1,879	96,326	8	726	5	32	503	17	79	182	49	58	271	123	1	1,451	0	6	408	4,210	36	3	46	3	155	35	262
Indiana	11	39	219,949	8	377	5	5	111	2	42	66	14	45	151	15	0	1,475	0	3	453	0	44	0	10	0	253	381	571
Iowa	1,315	25	118,503	10	1,172	1	0	5	46	531	1	20	4	44	0	0	26	0	1	0	17,538	4	0	35	0	0	167	747
Kansas	29	1	247,311	3	111	8	0	2	1	31	0	3	0	67	13	0	2,368	0	0	0	0	0	0	0	0	0	536	0
Kentucky	51	8,156	40,209	127	784	2,675	1	289	61	27	3,080	6	19,388	66	252	63	232	0	0	0	0	0	0	0	0	0	0	0
Maryland	264	72	46,880	7	274	115	1	27	21	35	53	140	127	15	1	2	9	0	0	0	0	0	0	0	0	0	0	442
Michigan	0	0	950	0	0	0	0	7	2	0	0	0	1	0	7	0	89	0	1	0	0	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Missouri	11	1,567	108,876	6	902	0	0	28	60	75	36	68	15	6	19	7	139	2	9	152	22,644	2	1	79	0	69	1,067	73
Montana	10	12	7,910	3	83	1	0	198	0	205	729	19	291	877	307	82	435	0	0	0	0	0	0	0	0	0	0	0
Navajo Nation	0	0	5,155	1	1	7	0	4	0	0	198	0	0	14	4	7	8	0	0	0	0	0	0	0	0	0	0	0
New Mexico	2	2	0	0	46	0	0	16	0	0	264	3	1	71	35	32	85	0	1	43	0	28	9	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
North Dakota	0	0	197,383	4	317	35	0	14	18	2	13	6	0	1,369	21	0	71	0	0	0	0	0	0	0	0	0	0	0
Ohio	38	5,650	111,000	15	123	586	5	86	34	34	493	53	342	234	173	3	313	0	0	0	1,330	0	1	3	0	0	17	0
Oklahoma	15	1	325,953	0	0	0	0	18	264	27	200	6	3	30	4	0	189	0	11	0	0	0	1	2	0	0	732	0
Oregon	0	0	0	0	0	0	0	3	0	0	16	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Pennsylvania	769	300	1,407,200	24	1,070	173	8	420	142	42	397	29	3,340	2,862	216	8,396	1,439	0	0	0	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	135	0	0	0	0	4	0	0	5	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Tennessee	2	147	133,730	3	534	50	0	31	145	17	193	7	210	6	28	0	12	0	0	0	15,329	0	0	19	0	0	198	1
Texas	0	0	3,285	0	1,074	0	0	0	10	0	6	0	0	25	0	0	10	0	0	0	0	0	0	0	0	0	0	0
Utah	14	10	3,425	1	147	3	19	163	0	2	543	3	0	7	44	23	24	0	1	18	0	0	3	0	0	0	0	0
Virginia	76	913	34,871	87	272	436	1	287	2	3	1,376	0	7,554	21	58	0	163	0	3	35	4,000	0	9	0	3	0	0	1
Washington	0	0	0	0	3	0	0	7	0	0	37	0	0	23	15	0	208	0	0	0	0	0	0	0	0	0	0	0
West Virginia	548	173	393,206	1,999	5,561	727	11	754	33	46	3,560	88	26,272	624	565	39	222	39	1	30	11,678	0	17	1	24	0	64	481
Wyoming	14	458	36,909	6	870	25	0	143	3	12	494	3	0	1,468	39	156	289	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3,799	19,603	4,102,799	2,321	15,837	4,915	85	5,316	1,782	1,324	13,897	540	57,666	9,411	2,179	9,120	10,324	41	37	2,485	84,648	124	50	294	31	477	5,436	2,637

¹Denotes Priority 3 AML problems (restoration of land and water resources and the environment) that were treated as higher priorities because of associations with Priority 1 or 2 problems areas.

²CERT is the Council of Energy Resources Tribes: Blackfeet, Cheyenne River Sioux, Fort Berthold (Mandan, Hidatsa, Arikira), Fort Peck (Assiniboine and Sioux), Northern Cheyenne, Jicarilla Apache, Laguna Pueblo, Rocky Boys (Chippewa and Cree), San Carlos Apache, Southern Ute, Uintah and Ouray, Ute Mountain Ute, White Mountain Apache, and Wind River (Arapaho and Shoshone).

Statistics include state, but not OSMRE, emergency AML project accomplishments.

Table includes AML projects funded through Coal Interim Site Funding, Clean Streams Initiatives, Coal Insolvent Surety Site Funding, Federal Reclamation Program Funding, Non-Coal, Pre-SMCRA Grants Funding, State Acid Mine Drainage Set-Aside, State Emergencies, State Future Reclamation Set-Aside Funding, and Watershed Cooperative Agreements projects.

Data Source: eAMLIS

Table 6b: Abandoned Mine Land Reclamation Accomplishments (1978-2020)

State/Indian Lands	Priority 3 Coal and Non-Coal Problems (Environmental Restoration)											
	Bench	Equipment/Facility	Gobs	Haul Road	Highwalls	Industrial/Residential Waste	Mine Openings	Pits	Slump	Slurry	Spoil Area	Water Problems
Alabama	23	8	219	2	30,235	15	50	0	9	9	8,220	328
Alaska	0	2	2	0	0	0	0	3	25	0	51	0
Arkansas	0	0	0	0	0	0	22	8	0	0	202	165
California	0	0	2	0	0	0	0	0	0	0	0	50
CERT Tribes ¹	0	2	4	0	1,500	0	1	7	0	0	80	0
Colorado	3	7	116	0	850	34	12	83	0	0	58	0
Crow	6	0	37	12	2,245	0	2	38	4	0	55,199	0
Georgia	3	0	3	0	1,400	0	0	5	0	0	7	0
Hopi Tribe	0	0	25	15	51	0	0	10	0	0	10	0
Illinois	1	171	2,333	210	7,620	6	75	586	2	963	1,940	2,690
Indiana	0	253	1,599	284	8,646	67	10	563	238	1,122	1,929	461
Iowa	0	0	1	6	6,022	2	2	42	0	0	511	5
Kansas	0	1	89	0	3,200	0	0	23	0	10	79	0
Kentucky	562	61	251	0	2,240	0	71	4	5	66	836	60
Maryland	10	2	46	2	6,085	3	19	22	1	0	254	205
Michigan	0	1	23	1	0	1	0	13	0	0	10	0
Missouri	0	0	1	0	900	0	0	17	0	0	604	13
Montana	1	58	165	1	1,170	106	230	34	19	0	869	2,741
Navajo Nation	42	4	148	203	890	1	81	150	0	0	265	31
New Mexico	3	26	62	15	0	0	29	2	0	2	335	0
North Dakota	0	0	0	0	0	0	0	0	0	0	1,402	0
Ohio	2	3	206	0	14,220	0	19	43	0	0	447	150
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	1	0	0	0	0	0
Pennsylvania	0	38	215	0	22,176	0	50	441	52	4	9,283	10,543
Tennessee	76	15	67	8	32,557	3	3	172	4	0	977	360
Texas	0	0	8	0	1,825	0	0	0	0	0	153	0
Utah	4	64	255	3	550	7	0	8	16	1	55	20
Virginia	1	35	26	1	14,031	2	132	3	4	0	12	125
West Virginia	6	19	104	11	36,285	7	6	5	0	2	347	760
Wyoming	0	34	88	423	670	0	419	7,305	359	199	8,930	76
TOTAL	741	803	6,091	1,196	195,369	253	1,234	9,586	737	2,377	93,061	18,782

¹CERT is the Council of Energy Resources Tribes: Blackfeet, Cheyenne River Sioux, Fort Berthold (Mandan, Hidatsa, Arikara), Fort Peck (Assiniboine and Sioux), Northern Cheyenne, Jicarilla Apache, Laguna Pueblo, Rocky Boys (Chippewa and Cree), San Carlos Apache, Southern Ute, Ute Mountain Ute, White Mountain Apache, and Wind River (Arapaho and Shoshone).

Table includes AML projects funded by the Federal Reclamation Program, Non-Coal project funding, and Pre-SMCRA Grants.

Data Source: eAMLIS

Table 7: Regulatory Grant Funding FY 2020 Obligations

State/Tribe	FY 2020 Federal Funding	Total FY 2019 Federal Funding	Cumulative Through FY 2020 Federal Funding ¹
Alabama	\$1,420,234	\$1,330,276	\$46,469,693
Alaska	373,008	373,008	\$10,384,101
Arkansas	119,920	112,652	\$5,796,771
Colorado	2,323,844	2,323,844	\$69,001,796
Illinois	3,339,928	3,327,409	\$102,691,384
Indiana	1,602,801	1,607,189	\$62,703,335
Iowa	46,557	43,875	\$3,868,678
Kansas	63,737	77,542	\$4,345,887
Kentucky	13,497,278	13,497,278	\$467,847,248
Louisiana	266,092	186,586	\$6,201,401
Maryland	948,701	901,705	\$24,358,020
Michigan	0	0	\$135,458
Mississippi	265,256	220,324	\$3,718,441
Missouri	210,341	202,855	\$11,449,282
Montana	2,137,656	2,037,656	\$43,555,468
New Mexico	843,293	850,109	\$26,575,902
North Dakota	1,016,025	996,442	\$24,568,898
Ohio	1,449,935	1,776,000	\$96,623,061
Oklahoma	1,326,932	1,187,009	\$36,824,391
Pennsylvania	13,174,069	13,174,069	\$415,683,159
Rhode Island	0	0	\$158,453
Tennessee	2,111,494	0	\$7,451,579
Texas	2,575,034	2,915,349	\$55,019,485
Utah	2,544,453	2,544,453	\$61,229,981
Virginia	3,670,097	3,670,097	\$127,000,511
Washington	0	0	\$4,893
West Virginia	10,488,404	10,476,486	\$318,900,987
Wyoming	2,467,784	2,267,784	\$70,037,774
Crow Tribe	575,002	575,002	\$6,547,379
Hopi Tribe	390,615	403,382	\$7,262,237
Navajo Tribe	1,500,000	1,800,000	\$20,015,464
N. Cheyenne Tribe	0	0	\$86,888
TOTAL	\$70,748,490	\$68,878,381	\$2,136,518,007

Figures shown above have been adjusted for rounding.

Regulatory grants are used to fund OSMRE regulatory activities. This may include the Applicant Violator System, Technical Innovation and Professional Services, Kentucky Settlement, and other Title V cooperative agreements.

¹Cumulative figures are net of all prior-year adjustments.

Data source: Financial Business Management System

**Table 8:
FY 2020 Regulatory Program Statistics**

State/Tribe	Regulatory Staffing ¹	New Permits	New Acreage Permitted ²	Total Acreage Permitted	Inspectible Units	Complete Inspections	Partial Inspections	Notices of Violation	Failure-To-Abate CO's	Imminent Harm CO's	Bond Forfeitures	Acreage of Phase I Bond Released	Acreage of Phase II Bond Released	Acreage of Phase III Bond Released
Alaska	5	0	0	12,365	12	28	43	2	0	0	0	0	42	0
Alabama	22	4	502	74,226	162	1,700	9	78	7	0	1	294	806	2,684
Arkansas	5	0	0	1,601	5	20	46	1	4	0	0	0	0	48
Colorado	17	0	0	164,259	29	110	176	0	0	1	0	386	547	339
Crow Tribe	5	0	0	9,787	2	6	18	1	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hopi Tribe	4	0	0	3,127	1	1	0	0	0	0	0	0	0	0
Iowa	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	42	6	1,638	82,664	107	326	574	39	1	0	0	1,831	1,729	2,172
Indiana	26	2	251	160,291	73	331	569	32	4	0	0	1,885	2,168	2,934
Kansas	1	0	0	2,721	6	24	48	0	0	0	0	0	0	0
Kentucky	207	17	8,756	1,297,960	1,390	5,882	11,415	1,820	1,105	29	8	7,226	7,399	7,731
Louisiana	3	0	0	37,598	3	11	18	1	0	0	0	0	0	13
Maryland	12	0	0	4,393	48	256	447	4	0	0	0	89	261	263
Missouri	4	0	0	2,211	9	28	48	0	0	0	0	650	758	746
Mississippi	3	1	4,143	16,042	3	10	19	0	0	0	0	0	0	0
Montana	18	0	0	75,455	13	65	76	2	0	0	0	784	4,166	1,026
North Dakota	10	0	0	133,859	24	96	427	1	0	0	0	0	0	309
New Mexico	9	0	0	79,748	6	24	24	1	0	0	0	0	0	0
Navajo Nation	8	0	0	93,496	6	13	39	0	0	0	0	2,314	2,261	0
Ohio	21	2	686	54,648	151	606	1,120	9	1	2	0	2,335	1,341	2,983
Oklahoma	19	0	0	16,670	49	216	258	29	0	0	0	1,098	1,861	1,480
Pennsylvania	177	11	1,580	278,999	1,105	3,956	5,627	545	33	21	0	2,001	2,845	3,378
Tennessee	16	1	434	21,541	96	181	456	101	78	9	0	0	0	231
Texas	38	0	0	340,078	28	130	263	3	0	0	0	3,107	1,885	10,304
Ute Tribe	3	0	0	2,062	1	0	0	0	0	0	0	0	0	0
Utah	13	0	0	2,950	28	101	139	5	0	0	0	0	4	38
Virginia	53	3	566	72,823	304	1,300	1,976	274	82	4	1	237	159	497
Washington	5	0	0	13,993	2	5	20	2	0	0	0	153	106	23
West Virginia	193	22	4,449	341,915	1,965	7,735	14,323	1,095	445	4	3	2,401	2,868	7,643
Wyoming	19	0	0	415,695	27	112	191	3	0	0	0	2,848	480	6,731
TOTAL	955	69	23,005	3,813,177	5,655	23,273	38,369	4,048	1,760	70	13	29,639	31,686	51,573

¹ Staffing rounded to nearest whole number.

² New acreage includes acreage for new permits, incidental boundary revisions, and any other permit revisions that add acreage.

State statistics based on 2020 State Program evaluation year (July 1, 2019 to June 30, 2020); Federal statistics, for Federal Program States and Indian Tribes, based on 2020 Federal fiscal year (October 1, 2019 to September 30, 2020).

Data source: 2020 Data for States and Tribes.

**Table 9:
Watershed Assistance: OSMRE/VISTAs¹ and Interns**

	Year-Long Positions (OSMRE/VISTA)	Year-Long Positions (OSMRE/AmeriCorps)	Short-Term Positions (Interns)	Short-Term Positions (OSMRE/VISTA)
Alabama				
Alaska				
Arizona				
California				
Colorado	17			
District of Columbia			1	
Florida				
Georgia				
Illinois				
Indiana				
Iowa				
Kentucky	1			
Maryland				
Missouri				
Montana				
New Mexico	2			
New York				
North Carolina				
Ohio	1			
Oklahoma	1			
Oregon	1			
Pennsylvania	2		4	
South Carolina				
Tennessee	5			
Texas				
Virginia	3			
West Virginia				
Wyoming				
TOTALS	33	0	5	0

¹Volunteers in Service to America. You can learn more about the AmeriCorps VISTA program at www.AmeriCorps.gov.

**Table 10:
Federal Reclamation Program Projects FY 2020 Obligations**

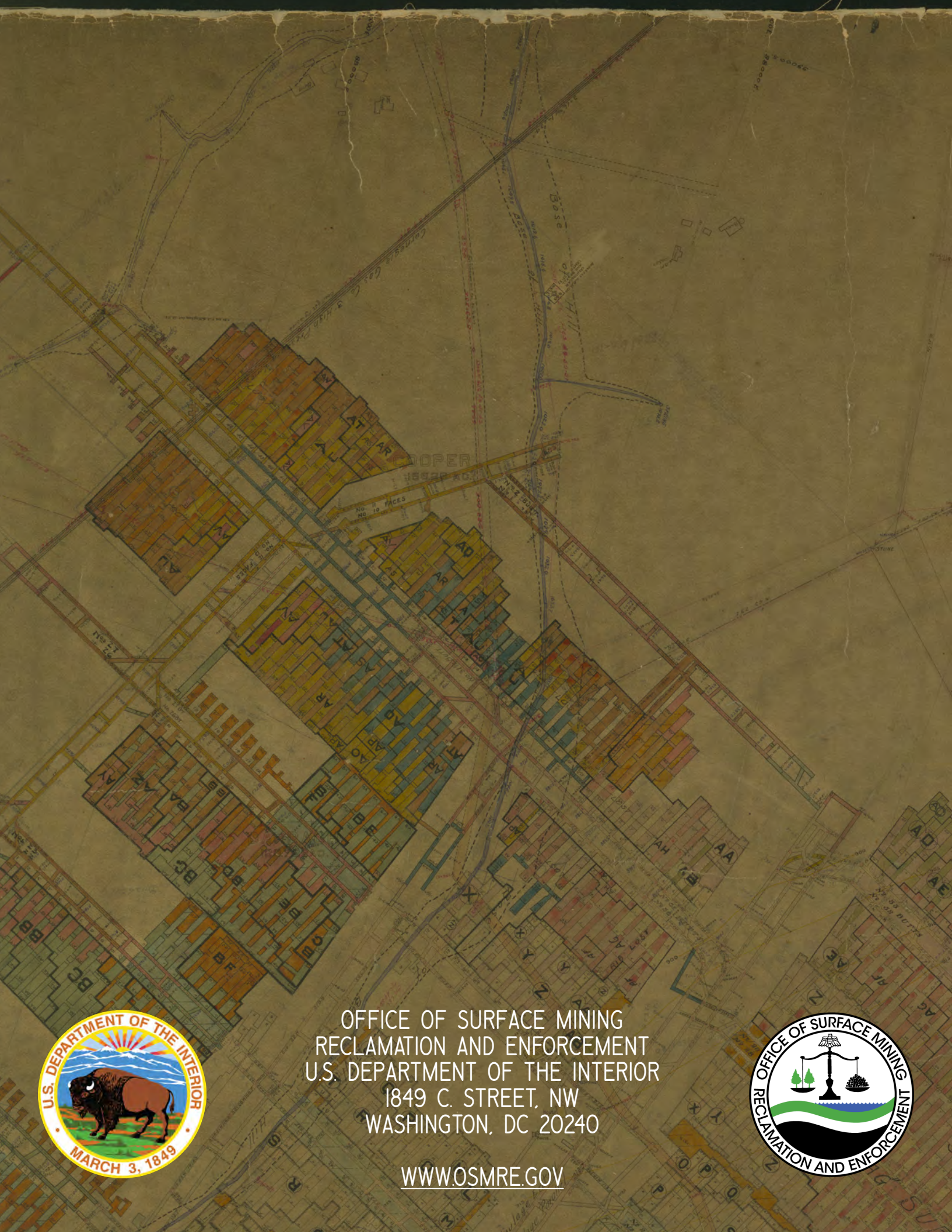
State or Tribe	Emergency	High Priority	Total 1978-2020 ¹
Alabama			\$13,934,015
Alaska			\$194,638
Arkansas			\$84,904
California			\$2,763,065
Colorado			\$3,717,304
Georgia			\$4,742,252
Idaho			\$0
Illinois			\$5,376,749
Indiana			\$4,032,023
Iowa			\$1,438,442
Kansas			\$5,094,172
Kentucky			\$145,769,394
Maryland			\$4,159,630
Michigan			\$6,824,684
Missouri			\$8,015,909
Montana			\$2,700,926
New Mexico			\$2,366,041
North Carolina			\$205,407
North Dakota			\$1,723,933
Ohio			\$18,307,899
Oklahoma			\$1,331,329
Oregon			\$367,156
Pennsylvania			\$135,404,330
Rhode Island			\$567,259
S Dakota			\$226,368
Tennessee			\$27,944,129
Texas			\$289,849
Utah			\$123,791
Virginia			\$10,139,469
Washington	\$1,529,465	\$171,663	\$14,918,782
West Virginia			\$29,023,226
Wyoming			\$1,067,101
Cherokee Nation			\$2,375,211
Cheyenne Rive Sioux Tribe			\$2,803,165
Crow Tribe			\$1,097,895
Fort Berthold Tribe			\$69,972
Fort Peck Tribe			\$147,991
Hopi Tribe			\$1,263,409
Jacarillo Apache Tribe			\$59,998
Navajo Tribe			\$2,222,792
Northern Cheyenne Tribe			\$591,834
Southern Ute Tribe			\$94,206
Rocky Boy Tribe			\$60,188
Uintah/Ouray Tribe			\$138,738
Ute Mountain Tribe			\$14,300
White Mountain Apache Tribe			\$1,838
Wind River Tribe			\$73,267
Zuni Tribe			\$125,009
Undistributed ²			(\$782)
Total	\$1,529,465	\$171,663	\$463,993,207

Figures in Table 12 have been adjusted for rounding.

¹Includes prior-year contract adjustments.

² Refers to funds that OSMRE awarded in previous fiscal years that were subsequently returned to the Department of the Interior.

Data source: Financial Business Management System



OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
U.S. DEPARTMENT OF THE INTERIOR
1849 C. STREET, NW
WASHINGTON, DC 20240



WWW.OSMRE.GOV