



# OSM

**Striving for improvement**

**99**  
**ANNUAL REPORT**

Office of Surface Mining  
January 2000

The Office of Surface Mining is a small bureau (about 650 employees nationwide) of the U.S. Department of the Interior with responsibility, in cooperation with the states and Indian Tribes, to protect citizens and the environment during coal mining and reclamation, and to reclaim mines abandoned before 1977. Under authority of the Surface Mining Law, the Office of Surface Mining is organized around two principal requirements: regulating active coal mining and reclaiming abandoned mines. It is a field-oriented organization, with headquarters in Washington, D.C., three regional coordinating centers (in Pittsburgh, Pennsylvania; Alton, Illinois; and Denver, Colorado), 10 field offices, and six area offices.

The current annual budget is approximately \$278 million. That sum enables the Office of Surface Mining to support the states' mining programs by granting funds for their regulation and enforcement and providing training and technical support. It also pays 100 percent of the costs for restoring abandoned mines that were left unreclaimed before the Law was passed in 1977. Funds for reclaiming abandoned mines come from tonnage-based reclamation fees paid by America's active coal mine operators.

In addition, the Office of Surface Mining operates programs to: eliminate environmental and economic impacts of acid mine drainage from abandoned coal mines, encourage reforestation of reclaimed mine land, develop techniques that can ensure reclamation of prime farmland soils, and publicly recognize outstanding reclamation by communicating the experience to others.

## HIGHLIGHTS OF 1999

.....

### HIGHLIGHTS

- *\$5.9 million available for Clean Streams projects.* \$125,000 provided to each of the 11 participating states and the remaining amount distributed to participants based on historical coal production. This funding will be used with other money to clean up acid mine drainage pollution in Alabama, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, Ohio, Pennsylvania, Virginia, and West Virginia.
- *Policy Symposium in Washington, D.C. held to address reforestation issues* and to seek ideas on how to encourage reforestation as a post-mining land use on both active and abandoned mine sites. A follow-on technical reforestation forum was held in Kentucky.
- *Statutory-based, site-specific formula for determining "Approximate Original Contour" released.* Under the Surface Mining Law coal operators are required to return mined lands to their approximate original contour as part of the reclamation process. For the first time, since the Law was passed, there is an understandable method based on sound engineering and scientific principles.
- *Monthly West Virginia Mountaintop Mining Reports distributed* to Members of Congress and the public. The reports provide the review status of pending West Virginia surface coal mining permit applications that include valley fills.
- *Work began toward using the Abandoned Mine Land Inventory System to store and process the Bureau of Land Management non-coal abandoned mine land inventory.* This was the first step in getting information on all abandoned mine land hazards in one database.
- *Cooperative agreement for funding Abandoned Mine Lands projects with the National Endowment for the Arts.* Recognized artists and designers with community watershed groups will be funded to develop plans for acid mine drainage remediation projects while integrating the arts and sciences to help build stronger communities in the coal lands of Appalachia.
- *Oversight report on the regulation of mountaintop mines in West Virginia released.* The report raised implications beyond the boundaries of West Virginia and focused on issues for wide-spread review and comment.
- *Interactive forum held on revegetation in the arid and semi-arid west.* The second in a series of five bond release forums, topics included: soil, overburden, micro-climate, site engineering, and other management techniques related to plant materials and culturally and historically significant plants. The week-long session ended with three workshops and a mine tour of the Black Mesa/Kayenta mine complex in Arizona.

## Table of Contents

HIGHLIGHTS OF 1999	1
INTRODUCTION	2
DIRECTOR'S LETTER	3
ABANDONED MINE LAND RECLAMATION	7
REGULATION OF ACTIVE COAL MINES	19
TECHNOLOGY DEVELOPMENT AND TRANSFER	31
FINANCIAL MANAGEMENT AND ADMINISTRATION	39
CONSOLIDATED STATEMENTS	48
NOTES TO FINANCIAL STATEMENTS	53
SUPPLEMENTAL STATEMENTS	68
MANAGEMENT REPRESENTATION LETTER	70
AUDIT OPINION	71
DIRECTORY	74

## INTRODUCTION

**T**his report describes the operations of the Interior Department's Office of Surface Mining (OSM) for the period October 1, 1998, through September 30, 1999 (Fiscal Year 1999)<sup>1</sup>. The report combines the Office of Surface Mining's Annual Report to Congress with its Annual Financial Report, and was compiled to meet the specific requirements of Section 706 of the Surface Mining Control and Reclamation Act of 1977 (the Surface Mining Law) as well as Section 306 of the Chief Financial Officers Act of 1990. This report also includes the first results with measures and cost of accomplishments required by the Government Performance and Results Act.

Included in this report are activities carried out under several parts of the Law: Title IV, Abandoned Mine Reclamation; Title V, Control of the Environmental Impacts of Surface Coal Mining; and Title VII, Administrative and Miscellaneous Provisions. Surface Mining Law responsibilities of other bureaus and agencies have been omitted. Those responsibilities include Title III, State Mining and Mineral Resources and Research Institutes program, which was administered by the now abolished U.S. Bureau of Mines; Titles VIII and IX, the University Coal Research Laboratories and the Energy Resource Graduate Fellowships, which are administered by the Secretary of

Energy; and Section 406, the Rural Abandoned Mine Program (RAMP), which is administered by the Secretary of Agriculture. Programmatic and financial information about those activities is reported directly to Congress by the agencies responsible for them.

This year's Annual Report contains updated tabular data corresponding to that found in Office of Surface Mining annual reports prepared since 1988. This allows comparison of statistics from year to year. Changes to the 1999 report include: reporting some additional tabular information (e.g., acres disturbed by active mining). The report is organized in chapters that correspond to the four principal activities or business lines with a Government Performance and Results Act report at the end of each chapter. The four principal activities are:

1. Abandoned Mine Land reclamation (Environmental Restoration)
2. Regulation of active coal mines (Environmental Protection)
3. Technology development and transfer
4. Financial management and administration

Financial and accounting information is presented in a format similar to a traditional corporate annual report, and is contained in the financial section at the back of the report. The Inspector General's audit statement, which gives the Office of Surface Mining a "clean" audit opinion of its financial reporting for 1999 -- the ninth consecutive year -- is included at the end of the financial section.

Statistics in this report are presented in English units. To convert these numbers into metric units use the following conversion factors:

Miles x 1.609 = Kilometers  
 Acres x 0.40469 = Hectares  
 Feet x 0.30473 = Meters  
 Gallons x 0.37854 = Liters  
 Tons x 0.90718 = Metric Tons

To meet the need for national and state-by-state statistical data and the growing demand for Office of Surface Mining operational and financial information, this report is available in electronic format on the Office of Surface Mining World Wide Web site. Printed copies of the Annual Report will be distributed to the public upon request.

A special companion CD-ROM containing all previous Office of Surface Mining Reports (1978-1998) is also available upon request.

For information about Office of Surface Mining activities, news releases, and publications, and for additional copies of this report, visit the Office of Surface Mining web site at [www.osmre.gov](http://www.osmre.gov) or contact:

Office of Communications  
 Office of Surface Mining  
 1951 Constitution Ave., N.W.  
 Washington, D.C. 20240  
 (202) 208-2719  
 e-mail: [getinfo@osmre.gov](mailto:getinfo@osmre.gov)

1. Throughout this document "1999" refers to Fiscal Year 1999 (10/1/98 - 9/30/99), unless otherwise noted.

## DIRECTOR'S LETTER

Office of Surface Mining  
Director Kathy Karpan  
reviews 1999 and assesses  
the state of the agency

**L**ast year my message to you was one of vision. We were setting out to make the Office of Surface Mining a model agency with *Better* abandoned mine land reclamation, *Better* protection of people and the environment, *Better* service, and *Better* program operations. This year we were striving for real-world improvement on these goals and I'm happy to report we have made significant gains.

Abandoned mine lands  
Additional funding from the  
Abandoned Mine Land Fund is  
critical. It has a direct impact on  
the acreage of reclaimed land and  
miles of clean streams. This year  
Congress appropriated \$2 million  
more for abandoned mine land  
projects than 1998. More impor-

tant, for the first time, we received funding for non-profit groups. Of that \$2 million, \$750,000 was directed to cooperative agreements between the Office of Surface Mining and local watershed organizations. We used this funding to provide local watershed groups with money they combined with other available funding sources, including other federal funds, to proceed with stream clean-up projects.

Environmental and  
community protection  
Much attention has been given to  
litigation regarding the creation of  
valley fills in West Virginia  
mountaintop mining operations.  
While the litigation is still on-going  
at year's end, the Office of Surface  
Mining has been active on several  
fronts. We are at work with other  
federal and state agencies in a  
programmatic environmental  
impact study on the effects of  
mountaintop mining in West  
Virginia. That study is expected to  
be completed at the end of 2000. In  
addition, Office of Surface Mining

personnel from other states have assisted the state of West Virginia in reviewing mining permit applications. The result of these efforts will be a better understanding of the effects of mining operations and, therefore, better environmental protection. Finally, the Office of Surface Mining completed an oversight report on post-mining land use for mountaintop mining operations. We have circulated this draft document and are currently reviewing comments from states and other partners and stakeholders.

This year we pursued several programmatic objectives. We are promulgating, after 21 years, a comprehensive rule on valid existing rights under the Surface Mining Law. We are finalizing our new Ownership and Control Rule which will be responsive to the National Mining Association lawsuit and provide a more streamlined process. During 1999 we also made progress on data base services that we provide to the public. We are coordinating a multi-agency

► Office of Surface Mining Director, Kathy Karpan (left) receives a "Stream Club T-shirt" from Robert Youngblood, Agriscience Technology Instructor at Oakman High School, Oakman, Alabama. Under the leadership of Mr. Youngblood, the Stream Club is a high school organization that has been active in cleaning up acid mine drainage on Cane Creek -- site of the first Appalachian Clean Streams Initiative project in Alabama. The \$325,000 originally allocated to the project, plus \$77,000 in Clean Streams funding resulted in construction of limestone drains that eliminate acidity caused by drainage from abandoned underground coal mine portals and a 20-acre gob pile. A settling pond and man-made wetland were also constructed to clean up polluted water coming from the mine site. As participants in this successful project, the Stream Club students planted aquatic plants in the constructed wetland and monitored water quality. This outstanding partnership has resulted in on-the-ground improvement and today acidity in the stream is dramatically reduced.



effort to include all abandoned mine sites (coal and non-coal) in a unified inventory with the U.S. Geological Survey, National Park Service, Bureau of Land Management, Forest Service, and the Environmental Protection Agency. When completed, information about all abandoned mine hazards will reside in one inventory.

#### Customer Service

This year we expanded our electronic permitting program that is reducing the paperwork and bringing the permitting process into the 21st century. We are offering additional education and technical transfer opportunities to the states and tribes, reducing "red tape," and ensuring that grants and funds are dispersed within 60 days of receipt of a complete and approved application. With monies available more quickly, streams and lands will be reclaimed faster.

In order to provide users with better information to understand and implement the Surface Mining Law, we are improving our web service. Every day it becomes more certain that the Internet will join the other great mass media (e.g., radio and television). It's already reshaping how we work, how we shop, how we learn, and most important to us, how people interact with their government. We see this as an opportunity for a new and exciting open exchange of ideas between *ALL* of those involved with implementation of the Surface Mining Law. Two years ago we provided information, statistics, and opened the inventory of abandoned mine problems to Internet access. Last year we began accepting electronic citizen requests for mine inspections and Freedom of Information Act requests, greatly expanded the information available (e.g., jobs, directives or policy documents, and COALEX research reports), and started an "Immediate Mail

Delivery Service" so the public could receive important information by e-mail. Next year we hope to begin an interactive, more open, regulatory process where electronic comments can be submitted and seen by everyone as they are received. We expect web site access to the comments will result in everyone being better informed and more capable of providing substantive suggestions. This will enable us to formulate better regulations through a more open process.

#### Internal operations

We have actively pursued effective and efficient management of our human and fiscal resources. Since 20 percent of our employees are eligible to retire in the next 5 years and 50 percent are eligible in the next 10 years, we have begun a succession planning effort to make sure we can identify vacancies and resource needs in advance, and plan accordingly. In addition, instead of using the previous year's budget as a template for the next year and then adding or subtracting initiatives, we now build our yearly budgets from the bottom up by reprioritizing our projects each year. In addition, we are continuing to reinvent and encourage positive federal, state, and tribal partnerships. As the coal mining and reclamation regulatory programs mature, our role is changing to focus on providing services that are uniquely federal, or are more effective than developing individual programs in each state.

#### High priority issues

This year we identified high priority issues through a process of internal feedback from field office staff. While we are continuing to work on the issues that were identified, the Management Council has selected the following high priority issues that we are currently addressing.

**Hydrology**--The preparation of a list of national hydrology/acid mine drainage initiatives, planned and ongoing, is underway. This effort will provide a comprehensive framework for current and future Office of Surface Mining actions and activities concerning water-related issues in the regulatory program, including hydrology, acid mine drainage and acid mine drainage bonding and bond forfeiture. The activities include revising draft guidance on Probable Hydrologic Consequences determinations and Cumulative Hydrologic Impact Analysis; establishing and implementing a number of policy and oversight initiatives; developing options for financial assurance mechanisms to fund long-term perpetual treatment of pollutional discharges; developing a new technical training course for permit findings; and coordinating and cooperating with other federal agencies on water-related and acid mine drainage issues.

**Bonding**--The Handbook for Calculation of Reclamation Bond Amounts is the guidance used by Office of Surface Mining staff to determine the amount of bond needed for each permitted site in cases where the Office of Surface Mining is the regulatory authority. The Handbook also serves as the instruction manual in the Office of Surface Mining's technical training course on bond calculations, and as a reference guide for states, industry and other agencies. An Office of Surface Mining team comprised of individuals from each region and the headquarters office is revising the Handbook to, among other things, update information to address the adequacy of bond amounts (in the event of bond forfeiture).

**Blasting**--The Office of Surface Mining initiated the National Blasting Workgroup to develop policies on all aspects of blasting.

Currently, the workgroup is collecting data to categorize blasting complaints nationwide to identify trends in complaints that may help both the Office of Surface Mining and states resolve the numerous complaints received. They should be completing their work and reporting their findings to the Management Council for action in 2000.

**Policy/Regulations**—We are reviewing a number of our national rules and policies, and are initiating efforts to revise many of them. The issues designated for review or revision included supporting the Environmental Protection Agency effort to address remining, long-term temporary cessation, contemporaneous reclamation, grant review and tribal primacy. In addition, we have begun work on revisions to the subsidence regulations to replace provisions invalidated by the D.C. Circuit Court and to address implementation issues raised by the states and citizen groups.

#### New Initiative

Reforesting mined lands can play an important role in enhancing environmental protection. There are multiple benefits to reforestation, including restoration of clean water and air resources, erosion prevention, wildlife habitat, recreational opportunities, commercial forestry, and other economic opportunities based on forest use and products.

To encourage reforestation, the Office of Surface Mining developed an initiative on reforestation in 1998, and brought these plans to fruition in 1999 through a series of events. These events included a January 1999 policy outreach symposium which encouraged discussion by industry, landowners, citizens, the states, tribes, and the Office of Surface Mining of current regulations and policies related to forestry including erosion control, soil compaction, revegetation, and post-mining land use trends. In March 1999, the Office of Surface Mining sponsored a technical interactive forum to highlight successful reforestation efforts and technologies and to promote additional effective technologies. Nearly 300 participants attended these events. Proceedings for the technical forum were published and are available to the public. Additional plans for encouraging reforestation include providing technical assistance through teaming with requesting states and tribes to further reforestation, publishing state success stories on reforestation efforts, and developing educational activities and materials detailing the technical aspects of reforesting mined lands.

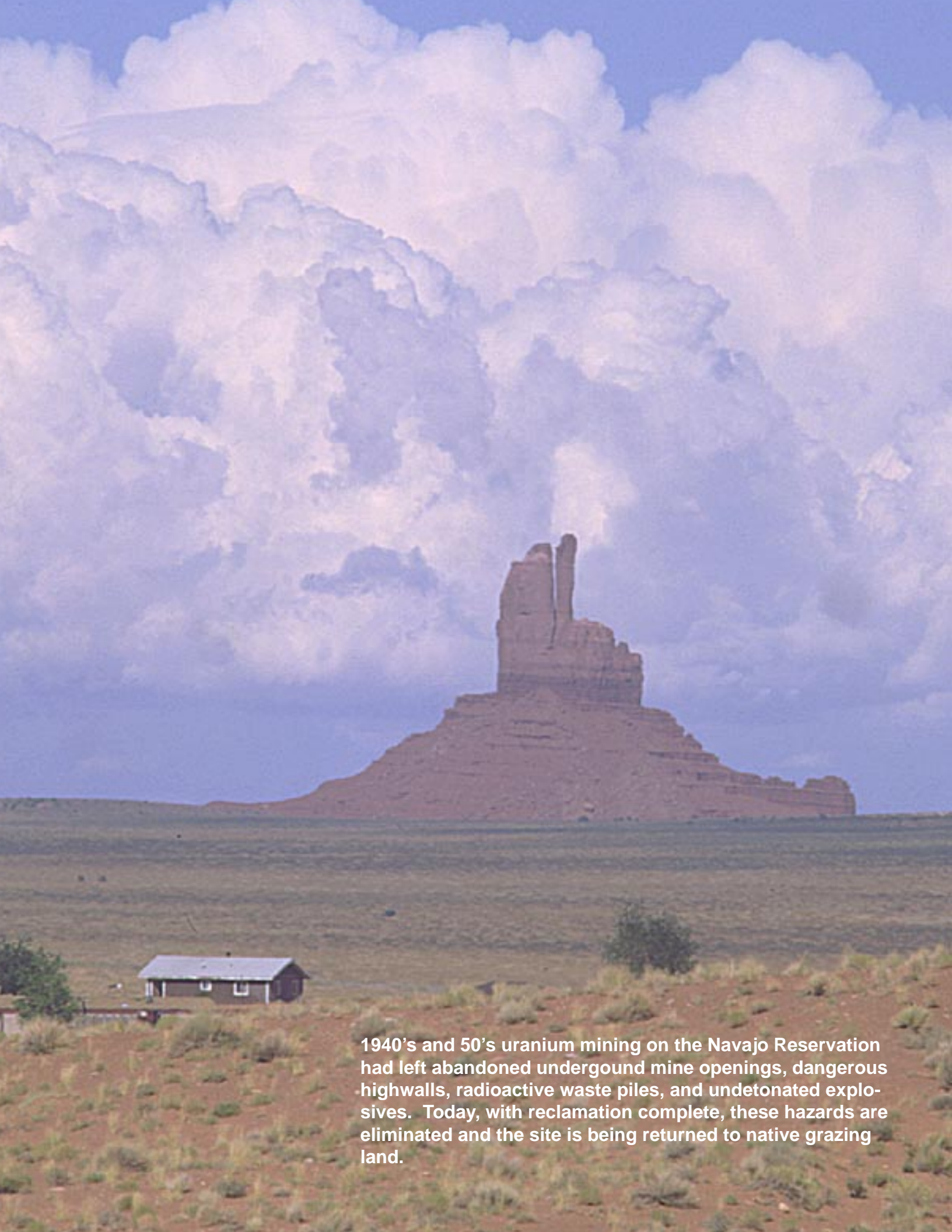
#### Award

The Office of Surface Mining, Headquarters Office was selected to receive an honorable mention

citation for the 1999 Office of Personnel Management Director's Award for Outstanding Work/Life Programs. Nominations were open to all federal governmental agencies. The Office of Surface Mining was one of only six organizations to receive an award. The award was given to recognize organizations that are providing innovative and effective work/life programs, encouraging the establishment and improvement of highly effective work/life programs throughout government, and publicizing exemplary work/life programs that can serve as models for other federal agencies. The Office of Surface Mining Headquarters Office was publically recognized at an awards ceremony on November 10, 1999, where we received a plaque and congratulatory letter from the Director of the Office of Personnel Management.

I would like to leave you with one last thought. I believe in the motto "Think Globally, Act Locally." As you read this report, I ask each of you to identify areas where you can join us in making things happen locally. We need to work together every day to improve on-the-ground conditions in the coalfields.





1940's and 50's uranium mining on the Navajo Reservation had left abandoned underground mine openings, dangerous highwalls, radioactive waste piles, and undetonated explosives. Today, with reclamation complete, these hazards are eliminated and the site is being returned to native grazing land.



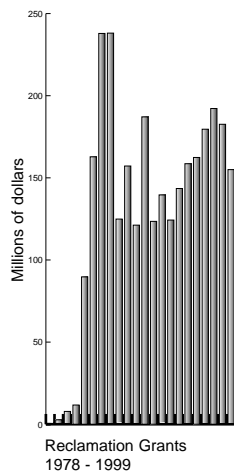
## Abandoned Mine Reclamation (Environmental Restoration)

Reclamation of abandoned mine land affected by mining that took place before the Surface mining Law was passed in 1977

**T**itle IV of the Surface Mining Law - the Abandoned Mine Land Reclamation Program -- provides for the restoration of lands mined and abandoned or left inadequately restored before August 3, 1977. Implementation is accomplished through an Emergency Program (for problems having a sudden danger that present a high probability of substantial harm to the health, safety, or general welfare of people before the danger can be abated under normal program operating procedures), and a non-emergency program. States and tribes with approved programs carry out these responsibilities.

### Grants to States and Tribes

Beginning with Texas in 1980, the Office of Surface Mining began approving state reclamation programs. Currently, all primacy states except Mississippi have approved abandoned mine land reclamation programs. In addition, the Crow, Hopi, and Navajo Indian Tribes have approved programs. In 1999, the states and the tribes received grants totaling \$155,083,275 to carry out the Emergency and non-emergency Abandoned Mine Land programs.



Since 1979, when the states began receiving abandoned mine land administrative grants to operate their programs and construction grants to complete reclamation projects, \$2,770,824,573 has been distributed from the fund. Grant amounts for 1999 are shown in Table 1. On-the-ground abandoned mine reclamation accomplishments resulting from grant funding through 1999 are included in Table 4.

Simplified grant funding of state abandoned mine land programs started in 1994. This grant application process eliminates the requirement for separate advance approval of each reclamation

project before a grant is awarded to the state. States now receive amounts based on appropriated spending levels and are held accountable for using those funds in accordance with their approved abandoned mine land reclamation plans. The Office of Surface Mining is no longer involved in cumbersome and detailed pre-award scrutiny of state grant applications.

### Minimum Program

The minimum-level program was established by Congress in 1988 to ensure funding of existing high priority projects in states where the annual distribution is too small for the state to administer a program.

During 1999, Alaska, Arkansas, Iowa, Kansas, Maryland, Missouri, North Dakota, and Oklahoma were eligible for minimum-level program funding and received such grants during the year. Minimum-level program funding remained at \$1,500,000 for 1999. The eight eligible programs received a total of \$7,844,825 in 1999. This funding supplements the formula-based grant and brings those eight states to the minimum-program level. Once minimum-program states and tribes complete their high priority projects listed in the National Inventory of Abandoned Mine Land Problems, their annual grants are limited to state-share funds.

### State Set-Aside

Beginning in 1987, Public Law 100-34 authorized states to set aside up to 10 percent of the state-share portion of their annual abandoned mine land reclamation grants. Set-aside money was deposited into special trust funds and became available, along with interest earned, for use by the state for reclaiming abandoned mine land problems after August 3, 1992, the original expiration date for the collection of abandoned mine land reclamation fees.

TABLE 1: 1999 ABANDONED MINE LAND GRANTS\* TO PRIMACY STATES AND INDIAN TRIBES

State/Tribe	Subsidence Insurance	10% Program Set-Aside	Administration <sup>3</sup>	Project Costs <sup>4</sup>	Emergency <sup>5</sup>	1999 Total	1998 Total
Alabama	\$0	\$0	\$711,480	\$2,932,344	\$425,000	\$4,068,824	\$3,820,485
Alaska	0	0	495,270	1,437,771	25,000	1,958,041	1,689,241
Arkansas	0	0	320,504	1,179,496	13,500	1,513,500	1,513,000
Colorado	0	227,376	676,000	1,949,000	0	2,852,376	2,315,108
Illinois	0	829,065	1,224,298	6,876,521	621,000	9,550,884	9,115,235
Indiana	0	476,229	1,117,107	3,861,366	293,344	5,748,046	5,555,316
Iowa	0	0	236,252	1,433,335	0	1,669,587	1,530,149
Kansas	0	0	208,681	1,291,319	460,000	1,960,000	2,410,410
Kentucky	0	0	6,519,135	9,810,941	0	16,330,076	20,945,743
Louisiana	0	0	100,301	30,000	0	130,301	170,097
Maryland <sup>1</sup>	0	500,000	562,998	631,056	0	1,694,054	2,559,572
Missouri	0	61,773	576,467	1,319,765	49,771	2,007,776	2,075,421
Montana	0	0	461,834	3,050,406	125,000	3,637,240	3,742,599
New Mexico	0	160,412	1,020,262	1,520,000	0	2,700,674	1,656,009
North Dakota	0	114,673	229,456	1,233,282	50,000	1,627,411	1,620,539
Ohio	0	0	3,214,405	3,896,023	2,067,897	9,178,325	10,649,616
Oklahoma	0	0	341,991	1,158,009	89,629	1,589,629	1,795,398
Pennsylvania <sup>1</sup>	0	2,204,386	4,591,552	18,655,400	0	25,451,338	29,632,995
Texas	0	0	403,088	0	0	403,088	415,305
Utah	0	0	302,478	1,724,066	0	2,026,544	1,750,000
Virginia <sup>2</sup>	0	380,000	1,616,370	2,702,460	1,500,000	6,198,830	6,144,099
West Virginia	0	0	6,458,043	16,006,983	3,680,807	26,145,833	36,358,602
Wyoming	0	0	376,072	23,819,395	0	24,195,467	23,064,346
Crow Tribe	0	0	128,888	394,943	0	523,831	1,826,343
Hopi Tribe	0	0	914,202	0	0	914,202	887,948
Navajo Tribe	0	0	459,606	547,792	0	1,007,398	9,437,565
<b>Total</b>	<b>\$0</b>	<b>\$4,953,914</b>	<b>\$33,266,740</b>	<b>\$107,461,673</b>	<b>\$9,400,948</b>	<b>\$155,083,275</b>	<b>\$182,681,141</b>

\*Funding for these grants is derived from the 1999 Distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals.

1. These 10% set-aside amounts are for Acid Mine Drainage set-aside funding rather than Future set-aside funding.

2. Administrative amount for Virginia includes \$172,916 for coalbed mapping grant.

3. Administrative amounts for most states/tribes contain non-emergency indirect costs which are applicable to their entire AML program. These costs cannot be broken down into separate cost categories.

4. The term "Project Costs" is now used instead of Construction. AML simplified grants do not contain specific construction cost breakdowns, but rather list all costs associated with a construction project as a project cost. This category contains both non-water supply and water supply project costs, and includes \$5,900,000 in funding for Appalachian Clean Streams Initiatives projects.

5. This category contains emergency project, administrative, and indirect costs. Indirect costs are not directly attributable to emergency project or administrative costs.

(Subsequent legislation has extended that date to September 30, 2004.) Statutory amendments contained in Public Law 101-508 created a new set-aside program that does not supersede the transfer of funds deposited under the original 1987 program. The funds set aside under the new program were available for use beginning in 1996, and only to reclaim eligible priority 1 and 2 abandoned coal mine land problems. In 1999, nine states set aside \$4,953,914.

► Located within the scenic Monument Valley and surrounded by a landscape of dramatic and colorful monoliths, this Navajo reclamation project eliminated 30 mine portals, seven vertical shafts, back-filled and covered two radioactive mine pits and one water retention pond, and eliminated 65 acres of radioactive mine waste. Native plants have been established on the regraded site, and when fully established, should provide a landscape similar to the surrounding area.



### Subsidence Insurance

Public Law 98-473 authorized states and tribes with approved reclamation programs to use abandoned mine land funds to establish self-sustaining, individually administered programs to ensure private property against damage caused by land subsidence resulting from abandoned underground coal mines. Implementing rules were promulgated in February 1986. Under those rules, states can receive a subsidence insurance grant of up to \$3,000,000, awarded from the state's share of the Abandoned Mine Land Fund. In 1999, no subsidence insurance grants were issued. Through 1999, the Office of Surface Mining has granted a total of \$11,563,281 to Colorado, Indiana, Kentucky, Ohio, West Virginia, and Wyoming for this purpose.

### Emergency Program

Emergency reclamation projects are those involving abandoned mine land problems that present a danger to public health, safety, or general welfare and which require immediate action to eliminate the problem.

Under Section 401(a) of the Surface Mining Law, the Secretary of the Interior is authorized to

spend money from the Abandoned Mine Reclamation Fund for emergency restoration, reclamation, abatement, control, or prevention of the effects of coal mining practices. Investigations of potential emergency problems (called "complaint" investigations) are undertaken by state reclamation agencies as part of their approved Abandoned Mine Land Program or by the Office of Surface Mining in other states. Complaint investigations are

referred to the Office of Surface Mining from a variety of sources including affected citizens, municipalities, emergency response agencies, and state non-emergency reclamation agencies. The Office of Surface Mining then confirms the emergency assessment, performs technical investigations, and obtains funds for declared emergencies. Of the 180 potential emergencies referred to the Office of Surface Mining in 1999, 136 became emergency projects; 20 were determined to be not of an emergency nature, not related to coal mining, or were reclaimed by the landowner; and 24 were still under investigation

on September 30, 1999. Those projects which were not emergencies; but, were otherwise eligible for reclamation were referred to the states for consideration as high priority projects.

In 1999, the states and the Office of Surface Mining declared 318 Abandoned Mine Land emergencies in 16 states (see Table 2). As usual, most emergencies occurred in Pennsylvania, followed by Kansas, West Virginia, Kentucky, and Ohio. Relatively dry conditions in the eastern U.S. reduced the numbers of projects in most states compared to prior years.

TABLE 2: EMERGENCY RECLAMATION PROJECTS

	1999 Projects		1978-1998 Projects		Total
	Federal	State	Federal	State	
Alabama	0	13	10	35	58
Alaska	0	0	0	0	0
Arkansas	0	2	1	12	15
California	0	0	4	0	4
Colorado	3	0	92	0	95
Illinois	0	13	51	198	262
Indiana	0	15	94	65	174
Iowa	0	0	18	0	18
Kansas	0	59	270	449	778
Kentucky	31	0	743	0	774
Louisiana	0	0	0	0	0
Maryland	0	0	14	0	14
Michigan	1	0	10	0	11
Mississippi	0	0	0	0	0
Missouri	0	0	6	0	6
Montana	0	1	7	12	20
Navajo Nation	0	0	6	0	6
New Mexico	0	0	15	0	15
North Dakota	0	1	15	7	23
Northern Cheyenne	0	0	2	0	2
Ohio	0	30	190	146	366
Oklahoma	0	5	47	3	55
Pennsylvania	96	0	1,779	0	1,875
Rhode Island	0	0	2	0	2
Southern Ute Tribe	0	0	1	0	1
Tennessee	0	0	12	0	12
Texas	0	0	5	0	5
Utah	0	0	0	0	0
Virginia	0	7	30	72	109
Washington	1	0	42	0	43
West Virginia	0	40	179	493	712
Wyoming	0	0	38	0	38
<b>Total</b>	<b>132</b>	<b>186</b>	<b>3,683</b>	<b>1,492</b>	<b>5,493</b>

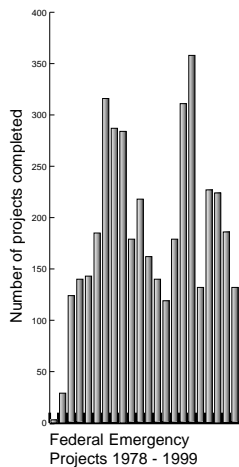


TABLE 3: 1999 FEDERAL RECLAMATION PROJECT OBLIGATIONS

During 1999, states obligated \$9.4 million on emergency abatement, while the Office of Surface Mining obligated \$8.0 million on emergency projects. The greatest expenditure of Office of Surface Mining emergency funds was in Kentucky (see Table 3). The \$5.2 million spent in Kentucky exceeded the Congressionally-imposed "cap" of \$4.5 million to be expended in each state per year, and received additional funding from "carryover" of unexpended Abandoned Mine Reclamation Funds from previous years.

Following passage of the Surface Mining Law, the Office of Surface Mining did all emergency reclamation; however, as state programs were approved, many took over emergency programs as well. In 1999, the following states were implementing emergency programs: Alabama, Alaska, Arkansas, Illinois, Indiana, Kansas, Missouri, Montana, North Dakota, Ohio, Oklahoma, Virginia, and West Virginia. The Office of Surface Mining funds the states with emergency programs using federal share funds (in addition to formula-based allocations) to complete the projects. The Office of Surface Mining continues to operate the emergency programs in California, Colorado, Iowa, Kentucky,

State or Tribe	Emergency	High Priority	Total 1978-99*
Alabama	\$0	\$0	\$13,934,015
Alaska	0	0	194,638
Arkansas	0	0	84,904
California	14,283	121,550	1,839,384
Colorado	32,516	0	1,947,899
Georgia	0	45,774	3,627,478
Illinois	0	0	5,376,749
Indiana	0	0	4,032,023
Iowa	0	0	1,339,759
Kansas	0	0	5,094,172
Kentucky	5,274,053	0	101,359,484
Maryland	0	0	2,806,888
Michigan	36,825	168,844	2,942,118
Missouri	0	0	8,015,909
Montana	0	0	729,058
New Mexico	0	0	2,364,696
North Carolina	0	0	205,407
North Dakota	0	0	1,723,933
Ohio	0	0	18,295,299
Oklahoma	0	0	1,232,159
Oregon	0	0	42,275
Pennsylvania	2,528,932	0	105,987,051
Rhode Island	0	0	556,229
South Dakota	0	0	27,255
Tennessee	1,216	927,349	21,960,552
Texas	0	0	289,849
Utah	0	0	123,791
Virginia	0	0	10,139,469
Washington	61,470	149,378	6,768,157
West Virginia	0	0	29,023,226
Wyoming	0	0	1,067,101
Cheyenne River Sioux Tribe	0	0	2,812,372
Crow Tribe	0	0	1,097,895
Fort Berthold Tribe	0	0	69,972
Fort Peck Tribe	0	0	147,991
Hopi Tribe	0	0	1,263,409
Jacarillo Apache Tribe	0	9,000	59,998
Navajo Tribe	0	0	2,222,792
Northern Cheyenne Tribe	0	0	585,044
Southern Ute Tribe	0	0	94,206
Rocky Boy Tribe	0	0	60,188
Uintah/Ouray Tribe	0	0	138,738
Ute Mountain Tribe	0	0	14,300
White Mountain Apache Tribe	0	0	1,838
Wind River Tribe	0	0	73,267
Zuni Tribe	0	0	125,009
Undistributed	0	0	105
<b>Total</b>	<b>\$7,949,295</b>	<b>\$1,421,895</b>	<b>\$361,898,051</b>

\* Includes prior year contract deobligations and upward adjustments.



◀ The Oklahoma Partnership approach to reclamation of abandoned mine land is a joint effort of the Oklahoma Abandoned Mine Land Reclamation Program and the Agriculture Department's Natural Resources Conservation Service. By sharing resources, both people and money, the two agencies reduced costs, eliminated duplication of services, and achieved outstanding abandoned mine reclamation. Here at this reclaimed site in Rogers County, the combined effort resulted in the elimination of three hazardous highwalls and a significant source of acid mine drainage that was flowing into the Claremore municipal water supply.



▲ Members of the Oklahoma Partnership have proven that there is less administrative overhead *by combining several jobs into one*, reduced construction costs *since only one contractor was used instead of many*, less technical support costs *local staff are used with reduced travel needed*, and more timely construction *many small projects are funded at once rather than doing one or two each year*. Members of the Izett and Hendrix project team are (from left to right): Mike Kastl, Oklahoma Abandoned Mine Land Reclamation Program Coordinator; Kevin Norton, Natural Resources Conservation Service; Charlotte Stieber, Abandoned Mine Land Program; Arnold Hamilton, Natural Resources Conservation Service; Bob Heidlage, Abandoned Mine Land Program; Gene Bollinger, Abandoned Mine Land Program; and Lyle Shingleton, Abandoned Mine Land Program.

Maryland, Michigan, New Mexico, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Washington, and Wyoming as well as on all tribal lands.

### Non-Emergency Program

Under Sections 402 and 407 of the Surface Mining Law, the Secretary of the Interior is authorized to

expend Abandoned Mine Reclamation Fund monies for non-emergency reclamation of high priority problems that present an extreme danger to the public. A non-emergency is defined in the Surface Mining Law regulations (30 CFR 870.5) as "a condition that could reasonably be expected to cause substantial harm to persons, property, or the environment." Until 1980, when states and Indian tribes began to receive approval for their Abandoned Mine Land programs, all non-emergency reclamation was administered by the Office of Surface Mining. However, since that time, state and tribal programs have assumed responsibility for correcting abandoned mine land problems and currently expend 98 percent of non-emergency reclamation funds. During 1999 the Office of Surface Mining

initiated 9 non-emergency projects in California, Georgia, Michigan, Tennessee, Washington, and Jicarilla Apache lands in New Mexico.

The Office of Surface Mining sometimes enters into agreements with other state and federal agencies to cooperate in the reclamation of abandoned mine land problems. In 1999, the Office of Surface Mining entered into an agreement with the National Park Service to close a mine portal in the New River Gorge of West Virginia.

Table 4 summarizes both emergency and non-emergency abandoned coal mine reclamation project accomplishments through 1999. The Abandoned Mine Reclamation Fund also is used to reclaim problems created by non-coal mines. To be eligible for funding, a non-coal project must be a priority 1 (threat to health and safety), or the state or Indian tribe must certify it has addressed all known coal-related problems. Non-coal reclamation project accomplishments are included in Table 4.

### Post-Surface Mining Law Reclamation

As authorized by the 1999 appropriations, federal civil penalties collected under Section 518 of the Surface Mining Law were used to reclaim lands mined and abandoned after August 3, 1977. In 1999, the Office of Surface Mining funded two civil penalty reclamation projects, one in Colorado and one in Kentucky, costing a total of \$80,242. An additional \$296,332 in unobligated funds will be carried over for use in year 2000 reclamation projects.

### Appalachian Clean Streams Initiative

The Appalachian Clean Streams Initiative was started in the fall of 1994 by the Office of Surface Mining. The Initiative supports

TABLE 4: 1978-1999 ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS

Priority 1 and 2 (Protection of Public Health, Safety and General Welfare) and State Emergency Projects

	Clogged Streams <sup>1</sup>	Clogged Stream Lands <sup>2</sup>	Dangerous Highwalls <sup>3</sup>	Dangerous Impoundments <sup>4</sup>	Dangerous Piles & Embankments <sup>2</sup>	Dangerous Slides <sup>2</sup>	Dangerous Gases <sup>4</sup>	Hazardous Equipment and Facilities <sup>4</sup>	Hazardous Water Bodies <sup>4</sup>	Industrial/Residential Waste <sup>2</sup>	Portals <sup>4</sup>	Polluted Water: Agricultural & Industrial <sup>4</sup>	Polluted Water: Human Consumption <sup>4</sup>	Subsidence <sup>2</sup>	Surface Burning <sup>2</sup>	Underground Mine Fires <sup>2</sup>	Vertical Opening <sup>4</sup>
Alabama	2.4	135.5	179,960.0	1.0	40.0	20.1	0.0	453.0	58.0	22.8	915.0	1.0	13.0	33.4	62.9	0.0	363.0
Alaska	0.0	0.0	6,120.0	4.0	3.5	0.0	0.0	58.0	2.0	4.0	6.0	0.0	0.0	0.0	0.0	0.0	3.0
Arkansas	0.5	0.0	48,526.0	1.0	608.0	0.0	0.0	2.0	56.0	19.0	20.0	0.0	0.0	4.0	4.0	0.0	77.0
California	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.5	0.0	0.0	39.0
CERT *	0.1	0.0	7,170.0	0.0	474.8	0.0	0.0	6.0	30.0	9.0	72.0	0.0	0.0	34.0	0.0	0.0	18.0
Colorado	0.0	0.0	51,492.0	0.0	18.6	0.0	0.0	1.0	0.0	2.0	496.0	3.0	0.0	45.5	35.0	78.5	276.0
Crow Tribe	0.0	1.0	1,915.0	1.0	54.6	22.0	0.0	32.0	1.0	0.0	14.0	3.0	0.0	16.0	0.0	0.0	5.0
Georgia	0.0	0.0	6,950.0	3.0	2.5	0.0	0.0	0.0	0.0	0.0	112.0	0.0	1.0	0.1	0.0	0.0	11.0
Hopi Tribe	0.0	0.0	14,302.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	1.7	2.0
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	0.0	0.0	0.0
Illinois	19.6	1,242.2	21,011.0	7.0	191.2	2.5	19.1	271.0	2.0	71.4	139.0	11.0	1.0	49.1	36.0	0.0	656.3
Indiana	14.1	109.0	102,665.4	6.0	638.3	1.0	3.0	89.0	7.0	22.0	48.0	6.0	6.0	92.0	8.5	0.0	308.0
Iowa	5.9	556.0	52,490.0	1.0	811.9	0.0	0.0	4.0	22.0	10.0	1.0	12.0	2.0	2.0	0.0	0.0	20.0
Kansas	0.8	8.5	105,147.0	1.0	107.5	1.0	0.0	2.0	1.0	20.8	0.0	3.0	0.0	22.1	4.0	0.0	574.0
Kentucky	42.9	8,428.7	20,872.0	98.7	299.7	1,871.2	0.0	194.0	28.0	54.0	1,443.0	6.0	3,910.0	49.9	214.8	82.8	105.0
Maryland	3.2	41.0	29,680.0	0.0	98.8	22.5	0.0	12.0	11.0	14.5	17.0	3.0	1.0	8.5	1.0	0.0	2.0
Michigan	0.0	0.0	950.0	0.0	0.0	0.0	0.0	7.0	2.0	0.0	0.0	0.0	1.0	0.3	8.0	0.0	33.0
Missouri	10.8	1,407.8	63,502.0	6.0	478.9	0.0	0.0	27.0	10.0	70.5	26.0	32.0	15.0	2.6	19.0	2.0	116.0
Montana	3.3	9.9	6,910.0	3.0	81.8	0.9	0.0	195.0	0.0	73.6	723.0	17.0	12.0	473.0	301.9	68.9	434.0
Navajo Nation	0.0	0.0	0.0	1.0	1.0	7.0	0.0	4.0	0.0	0.3	152.0	0.0	0.0	5.0	3.0	0.0	7.0
New Mexico	0.0	0.0	0.0	0.0	2.5	0.0	0.0	16.0	0.0	0.0	237.0	1.0	1.0	30.3	35.0	32.0	80.0
North Carolina	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	0.0	0.0	5.0
North Dakota	0.0	0.0	47,049.0	4.0	303.0	35.0	0.0	14.0	18.0	2.0	13.0	6.0	0.0	1,189.5	1.0	0.0	88.0
Ohio	29.1	4,783.5	35,784.0	6.0	96.0	330.9	2.0	38.0	6.0	34.0	178.1	1.0	10.0	55.5	80.5	0.3	152.0
Oklahoma	11.8	0.0	191,694.0	0.0	0.0	0.0	0.0	13.0	163.0	5.5	101.0	3.0	2.0	4.8	0.0	0.0	75.0
Oregon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	12.0	0.0	0.0	0.1	0.0	0.0	3.0
Pennsylvania	49.6	129.7	567,346.0	42.0	539.7	25.9	0.0	296.0	103.0	17.0	233.0	1.0	28.0	2,326.5	122.2	914.8	445.0
Rhode Island	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	6.0	0.0	0.0	0.0
South Dakota	0.0	0.0	135.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	5.0	0.0	0.0	0.6	0.0	0.0	1.0
Tennessee	0.0	147.0	16,655.0	0.0	200.0	55.8	0.0	31.0	9.0	11.0	192.0	0.0	5.0	6.0	27.5	0.0	10.0
Texas	0.0	0.0	3,285.0	0.0	987.0	0.0	0.0	0.0	5.0	0.0	6.0	0.0	0.0	6.0	0.0	0.0	21.0
Utah	13.6	9.0	3,425.0	1.0	134.5	0.0	19.0	150.0	0.0	2.0	500.0	2.0	0.0	5.0	42.8	29.0	23.0
Virginia	68.0	819.5	16,253.5	19.0	252.7	208.6	0.0	207.0	2.0	2.0	809.0	0.0	420.0	7.4	27.3	0.0	96.0
Washington	0.0	0.1	0.0	0.0	3.0	0.0	0.0	7.0	0.0	0.0	30.0	0.0	0.0	6.3	15.0	0.0	74.0
West Virginia	38.2	148.8	178,977.0	295.0	3,200.1	414.5	4.3	368.0	5.0	33.8	1,641.0	28.0	1,032.0	227.0	398.4	18.3	116.3
Wyoming	0.5	0.0	9,011.0	1.0	500.0	0.0	0.0	15.0	0.0	1.0	186.0	0.0	0.0	277.5	9.0	92.1	187.0
<b>Total</b>	<b>314.4</b>	<b>17,977.2</b>	<b>1,789,276.9</b>	<b>501.7</b>	<b>10,129.6</b>	<b>3,018.9</b>	<b>47.4</b>	<b>2,527.0</b>	<b>541.0</b>	<b>502.2</b>	<b>8,364.1</b>	<b>139.0</b>	<b>5,460.0</b>	<b>4,986.5</b>	<b>1,456.8</b>	<b>1,320.4</b>	<b>4,425.6</b>

TABLE 4: 1978-1999 ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS, CONTINUED

Priority 3 (Environmental Restoration)

	Bench <sup>2</sup>	Equipment & Facilities <sup>4</sup>	Gob <sup>2</sup>	Haul Road <sup>2</sup>	Highwall <sup>2</sup>	Industrial/Residential Waste <sup>2</sup>	Mine Opening <sup>2</sup>	Pit <sup>2</sup>	Slump <sup>2</sup>	Slurry <sup>2</sup>	Spoil Area <sup>2</sup>	Water <sup>5</sup>
Alaska	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	9.0	47.0	0.0
Alabama	22.5	8.0	213.1	1.5	26,475.0	14.0	48.0	0.3	10.3	5.1	9,031.1	380.0
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
California	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CERT*	0.0	2.0	4.0	0.0	1,500.0	0.0	1.0	7.0	0.0	0.0	80.0	0.0
Colorado	3.0	7.0	101.5	0.0	2,027.5	5.0	18.0	82.9	0.0	0.0	829.0	1.0
Crow Tribe	5.6	0.0	26.8	12.7	1,995.0	0.0	2.0	12.5	3.6	0.1	23.0	0.0
Georgia	8.0	0.0	2.5	0.0	550.0	0.0	0.0	3.0	0.0	0.0	7.0	0.0
Hopi Tribe	0.0	0.0	24.9	14.7	551.0	0.0	0.0	9.7	0.0	0.0	10.1	0.0
Iowa	0.0	0.0	1.0	5.0	0.0	1.0	1.0	18.5	0.0	0.0	439.5	0.0
Illinois	1.0	136.0	2,364.7	168.0	10,010.0	6.0	45.0	566.1	1.4	1,107.0	1,871.6	765.4
Indiana	0.0	169.0	1,246.4	63.0	6,590.0	72.1	18.0	57.3	2.0	654.5	2,150.9	109.3
Kansas	0.0	1.0	89.0	0.0	3,200.0	0.0	0.0	23.4	0.0	10.0	273.6	0.0
Kentucky	624.2	50.0	231.9	0.4	2,000.0	0.0	69.0	4.0	5.0	58.0	1,030.1	0.0
Maryland	0.0	1.0	21.0	1.0	3,650.0	0.0	3.0	0.0	0.5	0.0	212.0	73.0
Michigan	0.0	1.0	26.5	0.6	0.0	0.0	0.0	1.0	11.0	0.0	10.0	0.0
Missouri	0.0	4.0	142.4	1.4	18,169.0	2.9	0.0	88.9	0.3	69.0	1,309.8	86.0
Montana	0.8	58.0	146.2	0.5	1,170.0	75.8	42.0	17.8	18.5	0.0	842.1	240.5
Navajo Nation	0.8	2.0	111.6	10.2	0.0	1.0	43.0	17.4	0.0	0.0	163.5	0.0
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	3.0	11.0	53.0	6.0	0.0	0.0	4.0	2.0	0.0	2.0	2.0	0.0
Ohio	0.0	3.0	101.3	0.0	9,220.0	0.0	19.0	17.0	0.0	0.0	447.3	0.0
Oklahoma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Pennsylvania	0.0	21.0	51.7	0.0	13,328.0	0.0	19.0	77.9	25.6	1.0	1,748.4	90,308.0
Tennessee	76.0	15.0	67.0	8.0	130.0	0.0	0.0	47.0	3.0	0.0	325.0	360.0
Texas	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152.0	0.0
Utah	4.0	64.0	255.0	3.0	550.0	7.0	0.0	8.0	16.0	1.0	55.0	20.3
Virginia	0.0	24.0	14.3	1.3	13,000.0	1.0	22.0	0.0	0.0	0.0	3.0	120.0
Washington	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West Virginia	0.0	0.0	19.5	0.0	19,540.0	0.0	4.0	5.0	0.0	0.0	152.6	622.0
Wyoming	0.0	3.0	30.4	1.0	1,300.0	11.0	4.0	10.0	0.0	0.0	385.6	400,002.0
Total	748.9	580.0	5,360.2	298.3	134,955.5	196.8	363.0	1,076.7	97.2	1,916.7	21,601.2	493,087.5

\* CERT is the Council of Energy Resources Tribes which includes: Blackfeet; Cheyenne River Sioux; Fort Berthold (Mandan, Hidatsa, and Arikara); Fort Peck (Assiniboin 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).

UNITS OF MEASURE: 1. Miles, 2. Acres, 3. Feet, 4. Count, 5. Gallons/minute

SOURCE: Abandoned Mine Land Inventory System (AMLIS) as submitted by the States/Indian tribes for their Abandoned Mine Land programs and the Office of Surface Mining Regional Coordinating Centers for the Federal Reclamation Program.

local efforts to eliminate environmental and economic impacts of acid mine drainage from abandoned coal mines. The mission of the Initiative is to facilitate the efforts of citizen groups, university researchers, the coal industry, corporations, the environmental community, and local, state, and federal government agencies in cleaning streams polluted by mine drainage. During 1999, \$5.9 million was distributed to 11 states



▲ The Blackwater River Limestone Drum Station has eliminated acid mine drainage in this West Virginia river. Much of the coal mining along this stream occurred during the 1960's, before passage of the Surface Mining Law and when there was very little mine reclamation completed. The station provides treatment with a rotary drum system that uses six water-powered cylinders to grind limestone aggregate into a slurry. As the river's flow changes the drums automatically adjust their slurry output.

(Alabama, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, Ohio, Pennsylvania, Virginia, and West Virginia) for 20 acid mine drainage clean-up projects. This funding provided the incentive for other sources to contribute to the projects, and during 1999 this funding grew to over \$14 million. There are currently 50 Clean Streams Initiative projects that have been funded by the Office of Surface Mining. During 2000, projects in Oklahoma will also be eligible for Clean Streams funding.

**Watershed Projects**  
As part of the Appalachian Clean Streams Initiative in 1999, \$750,000 was included in the budget to fund acid mine drainage watershed projects with local organizations that undertake acid mine drainage reclamation projects. These funds provide money to complete projects designed to improve water quality. The watershed projects were funded through cooperative agreements ranging between \$5,000 - \$80,000, in order to assist as many groups as possible in beginning actual construction projects to clean streams impacted by acid mine drainage. In 1999, 11 watershed cooperative agreements were awarded as follows:

Organization and Project	Amount
Headwaters Charitable Trust Mill Creek Watershed, Clarion River Pennsylvania	\$80,000
Headwaters Charitable Trust Little Toby Creek Watershed, Clarion River Pennsylvania	\$80,000
The Conservation Fund Mill Run Watershed Maryland	\$65,000
The Nature Conservancy Everhart Seep Maryland	\$80,000
Shamokin Creek Restoration Alliance Carbon Run Site 42 Pennsylvania	\$22,000
Black Diamond Resource Conservation and Development, Inc. Upper Guest River Virginia	\$80,000
Rural Action, Inc. Rock Run 24 Project Ohio	\$80,000
Four Rivers Resource Conservation and Development Area, Inc. Enos Runway Project, Patoka South Fork Indiana	\$44,762
AMD & ART, Inc. Blacklick Creek/Vintondale Discharge Pennsylvania	\$68,000
Friends of the Cheat, Inc. McCarty Highwall Project West Virginia	\$77,915
Lower Paint Creek Association Johnson Knob Refuse West Virginia	\$72,323

Progress on these projects was wide-spread. For example, two Indiana projects, Wheeler Creek and Lick Creek were completed and the water quality once again restored. At another project Boy

Scouts supported by volunteers, started neutralization of a 52-acre acid-ravaged lake. Using soda ash and other chemicals to neutralize the acid mine drainage, the lifeless lake and over two miles of creek are being reclaimed.

**Summer Watershed Internship Program**

Ten summer interns working in five different states began the first summer season for a new watershed assistance initiative. Each intern was sponsored and hosted by a local watershed group working on acid mine drainage. The Office of Surface Mining signed ten \$2,500 cooperative agreements with non-profit watershed organizations, providing stipend dollars and some expenses for each intern. The Office of Surface Mining set standards for interns and then worked with each watershed group to develop and define individual summer projects that would leave the watershed group stronger, the water cleaner, and the intern better educated.

Results of this first summer program were remarkable. There were four interns working with their watershed groups in West Virginia, three in Pennsylvania and one each in Tennessee, Indiana and Ohio. Watersheds were monitored for acid mine drainage contaminants. Comprehensive Watershed Plans, the first step in the funding process for cleanup in many states, were drafted. Local citizens were organized, energized, and put to work in their own back yards, many promising to carry on the work long after the intern returned to school. In several locations, an end-of-summer watershed festival (often the first ever held) crowned the effort and gave several interns experience in event organizing and local fund-raising as well.



While the Office of Surface Mining set the standards for interns and reviewed applications, most interns selected were nearby residents, many without experience in acid mine drainage, in spite of their science majors and previous experience. Most were college seniors and, in virtually every case their presence in the watershed attracted a host of new and supportive partnerships. Several state agencies provided training, supervisory oversight, equipment, and often covered the cost of laboratory analysis for stream samples. Other federal agencies also provided training and mapping services; loaned valuable testing equipment; and, in one case, provided housing for interns. Private sector firms sometimes paid the cost of lab analysis; and provided training, transportation, and support for the local watershed celebrations. Most important, many local citizens turned out to help and remain at work today after interns have finished their summer work.

For interns, the experience was significant. Every one of these students took back to their respective schools a new awareness of and respect for the challenges of dealing with acid mine drainage. One intern, initially headed for a pharmacol-

ogy job, decided that microbiology and acid mine drainage remediation were more challenging. Another is now completing an acid mine drainage senior thesis and planning graduate work that will keep her in the field.

For 2000, the Office of Surface Mining is committed to expanding this successful program and will be seeking additional partnerships to carry this opportunity even further. Assistance will include recruiting candidates, and working to make sure the projects selected are the best that can be offered. By linking solid academic content, real watershed achievement, local leadership, and federal agency support, the Office of Surface Mining Summer Watershed Internship will continue to bring effective assistance to the groups that are leading the way for cooperative elimination of acid mine drainage in Appalachia.

### Inventory of Abandoned Mine Land Problems

The Surface Mining Law, as amended by the Abandoned Mine Reclamation Act of 1990 (Public Law 101-508), requires the Office of Surface Mining to maintain an inventory of eligible abandoned coal mine lands that meet the public health, safety, and general welfare criteria of Section 403(a)(1) and (2). This inventory is maintained and updated to reflect reclamation accomplishments as required by Section 403(c).

◀ A second method of treatment at the Blackwater River Station is a doser which uses powdered limestone stored in a 50-ton silo. This is a backup system for high river flow events. As the slurried limestone enters the water (shown here), it dissolves and provides alkalinity to neutralize water passing through the drum station. Since the station began operation in 1994, the pH downstream increased to nearly 6.0 for the first time in 35 years. Almost overnight this treatment facility turned a formerly dead section of the Blackwater River into a high quality trout fishery.



The Office of Surface Mining maintains its inventory on the Abandoned Mine Land Inventory System (AMLIS), a computer system that creates reports on abandoned mine land accomplishments and problems that still require reclamation. 1999 was the fifth year the states and Indian tribes managed their own data, entering it electronically into the Office of Surface Mining's inventory system. This process resulted in 585 records added, 890 modified, and 100 deleted.

As of September 30, 1999, the system contained information for over 15,168 problem areas, mostly related to abandoned coal mines. A problem area is a geographic area, such as a watershed, that contains one or more abandoned mine problems. Problem area boundaries are delineated by the extent of their effect on surrounding land and water, not just the abandoned mine sites.

The Surface Mining Law requires the Abandoned Mine Land Program to concentrate its efforts on high priority coal sites (those affecting health, safety, and general welfare, Priority 1 and 2). Although the Abandoned Mine Land Program is one of the nation's most successful environmental restoration programs, with over \$1.2 billion worth of coal-related high priority problems reclaimed, many projects have yet to be funded. The inventory of unfunded coal-related problems is reduced each year by state, Indian tribe, and federal reclamation projects. Unfortunately, new problems are discovered as development expands into old coal mining areas. As of September 30, 1999, a breakdown of (Priority 1, 2, and 3) costs from the Abandoned Mine Land Inventory System is as follows:

Completed	\$1.5 billion	16.0 percent
Funded	\$0.3 billion	3.0 percent
Unfunded	\$7.9 billion	81.0 percent
Total	\$9.7 billion	100.0 percent

During 1999, the Bureau of Land Management decided to store its abandoned mine inventory in a specially modified version of the Office of Surface Mining inventory system. People accessing either the Office of Surface Mining or Bureau of Land Management



▲ The Socorro West Mine Safeguard project outside Socorro, New Mexico reclaimed abandoned mine shafts, adits, and stope openings. Because the mine workings were home to a large population of bats, gates were constructed that allow ventilation and bat entry; but, keep people safely out.

▼ The dangerous open vertical shafts have been covered with bat gates and people who visit the site no longer have to fear they will fall into an open mine shaft. With public ownership and good rock-climbing opportunities in the area, the land around the mine site is used for both cattle grazing and recreation.



version of the system will have access to both agencies' abandoned mine land inventories. Using the geographic information system capabilities, it will be possible to query both databases. Future plans also include access to the U.S. Forest Service abandoned mine inventory. The ability to create maps showing the locations of other federal agencies' abandoned mine problems along with the Office of Surface Mining inventory was demonstrated at the Interior Department's 1999 Conference on the Environment.

### Reclamation Awards

After more than 20 years of abandoned mine land reclamation funded under the Surface Mining Law, thousands of dangerous health and safety problems throughout the country have been eliminated. To enhance communication about achievements in abandoned mine land reclamation, the Office of Surface Mining has presented awards to those individuals responsible for completion of the most outstanding reclamation. This year, 55 individuals responsible for four award-winning projects received recognition for their work. Awards for the following projects were presented at the 1999 annual meeting of the National Association of Abandoned Mine Land Programs.

#### National award

■ Navajo Abandoned Mine Land Reclamation Department's Monument Valley 2 AML Reclamation Project on the Navajo reservation, near the Arizona/Utah border. This project reclaimed a highly toxic radioactive open-pit uranium mine site which endangered the local Navajos and their livestock, and posed a general threat to wildlife and water resources in the surrounding area. Today, after reclamation, the site is free of sources of water pollution, soil erosion,

sedimentation, and radiation emission, and is once again open to the community for livestock grazing.

#### Regional awards

■ West Virginia Division of Environmental Protection's Blackwater River Limestone Drum Reclamation Project near the town of Davis (Appalachian Region). This project eliminated one of the major sources of acid mine drainage in the state, and reestablished the Blackwater River as one of West Virginia's premier trout fishing areas. The project also improved water quality in other downstream rivers, including the Cheat and the Ohio.

■ Oklahoma Abandoned Mine Land Reclamation Program in partnership with the Natural Resources Conservation Service, Rural Abandoned Mine Program (Mid-Continent Region) for developing the Oklahoma Partnership Approach to Reclamation of Abandoned Mine lands. The two agencies pooled personnel and resources to complete a joint project that reclaimed 26 acres of abandoned mine land on five separate sites in Rogers County, including one site where acid mine drainage was polluting the Claremore city water supply.

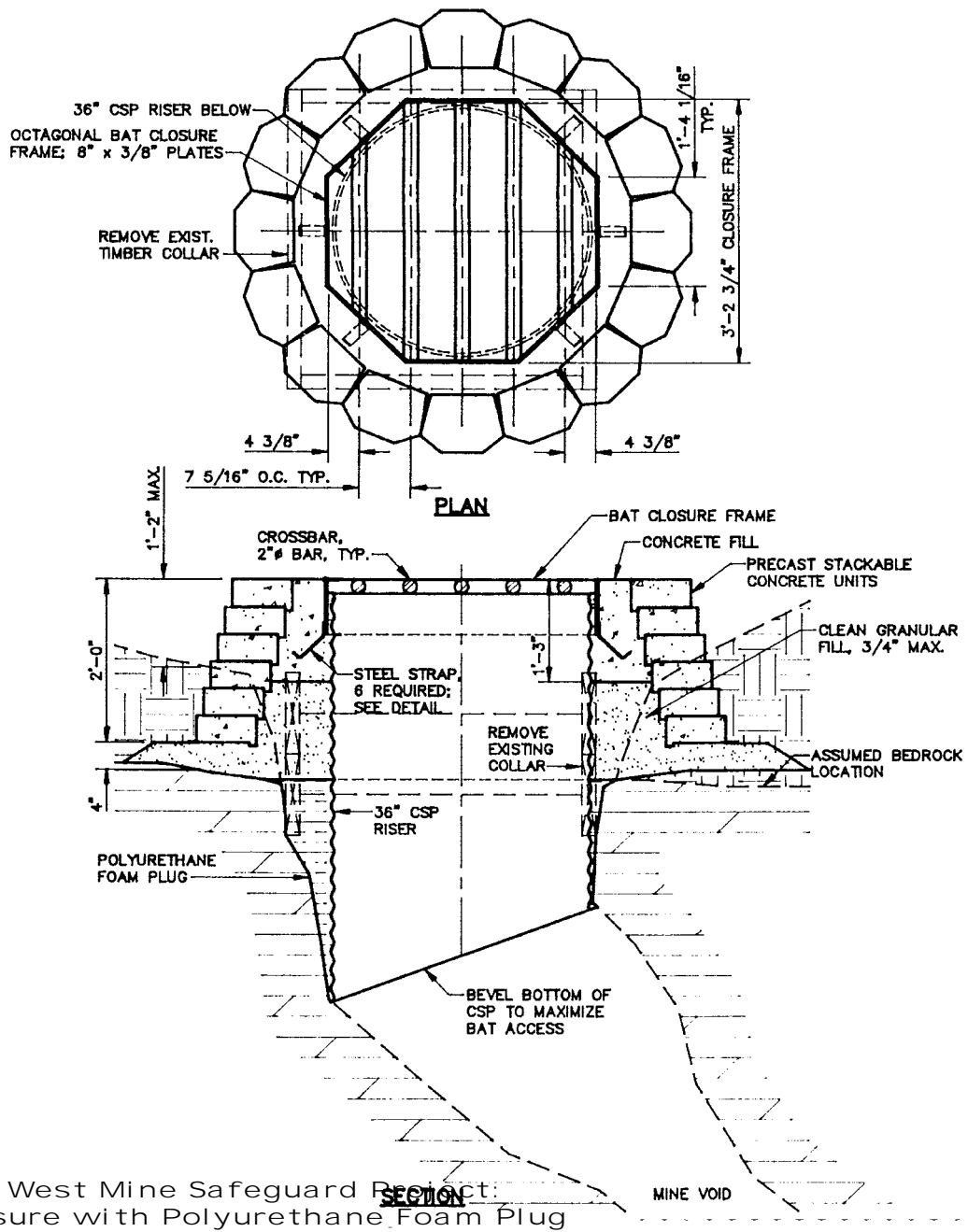
■ The New Mexico Abandoned Mine Land Bureau's Socorro West Mine Safeguard Project, (Western Region) for reclaiming 24 underground mine shafts, adits, and other dangerous openings at the abandoned Nancy and Black Canyon manganese mine sites. The reclamation included installing bat gates which help to preserve the habitat for one of the country's largest populations of Townsend's big-eared bats.

**Goal 1. Better Abandoned Mine Land Reclamation:** Repair, reclaim and restore as much land and water as possible that was degraded by past mining in order to provide America with cleaner and safer land and water and to provide employment and economic opportunities in depressed coal regions.

Performance Measure	1998 Actual	1999 Plan	1999 Actual
Number of acres reclaimed annually by the Abandoned Mine Land Program	7,201 acres	7,400 acres	10,949* acres

Measuring the final results of the Abandoned Mine Land Program is a difficult task. The intermediate measure of "acres reclaimed" is used as an indicator of success and a safe and clean environment. Over 130,000 acres of health and safety coal-related problems such as underground fires, subsidence, highwalls, landslides, and open shafts have been reclaimed under this program. In 1999, 10,949 acres were reclaimed, a continuation of an upward annual trend in addressing the remaining inventory of problems.

\* This accomplishment includes all acres reported reclaimed in 1999. Actual reclamation reported by states and tribes for 1999 may have occurred in prior years. Due to the length of time it takes to complete these projects, it is common for completion to occur one to three years after initiation.



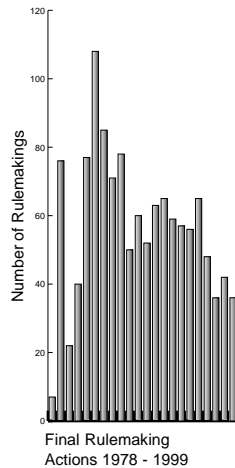


During the life of this Washington coal mine over 14 thousand acres of land will be disturbed and restored. Following mining and reclamation of the land, forests are being replanted using native species of trees. A special benefit of the reclamation is the development of diverse wildlife habitats that range from upland forests to wetlands.

## REGULATION OF ACTIVE COAL MINES

(Environmental Protection)

Shared federal-state-indian active surface and underground coal mining and reclamation regulatory program



Under the Surface Mining Law, the Office of Surface Mining is responsible for publishing the rules and regulations necessary to carry out the Law. The permanent regulatory program and related rules provide the fundamental mechanism for ensuring that the goals of the Surface Mining Law are achieved. A major objective is to maintain a stable regulatory program by improving the regulation development process and obtaining a broad spectrum of viewpoints on rulemaking activities.

### Rulemaking and State Program Amendments

The 1999 rulemaking process included discussions with coal industry representatives, citizen groups, and state regulators to obtain their input and suggestions.

During the year, the Office of Surface Mining published three proposed permanent program rules in the *Federal Register*: the Ownership and Control Rule (RIN 1029-AB94), the Indiana Cooperative Agreement Rule (IN-142-FOR), and the Indian and Federal Lands Rule (RIN 1029-AB83). In addition, two final permanent program rules were published: the Kentucky Cooperative Agreement Rule (KY-214-FOR) and the Enhancing AML Reclamation Rule (RIN 1029-AB89). Subject to Office of Surface Mining approval, states have the right to amend their programs at any time for appropriate reasons.

Whenever the Surface Mining Law or its implementing regulations are revised, the Office of Surface Mining is required to notify the states of the changes needed to make sure that the state programs continue to meet federal requirements. As a result, the states have submitted a large number of complex amendments. The Office of Surface Mining has taken several steps to process states submissions more efficiently. For example, the amendment review process within the Office of Surface Mining has been decentralized, and standard format and content guidelines for state program submissions have been issued to the states. In 1999, the Office of Surface Mining published 46 proposed and 34 final state program amendments in the *Federal Register*.

### State Programs

Since May 3, 1978, all surface coal mines have been required to have permits and to comply with either Office of Surface Mining regulations or corresponding approved state program provisions (in states that have primacy). Currently there are 24 primacy states that administer and enforce approved programs for regulating surface coal mining and reclamation under the Surface Mining Law. An effective relationship between the Office of Surface Mining and the states is fundamental to the successful implementation of the Surface Mining Law. This shared federal-state commitment to carry out the requirements of the Surface Mining Law is based on

TABLE 5: FINAL RULES PUBLISHED DURING 1999

**Federal Lands Cooperative Agreement for the Commonwealth of Kentucky (KY-214-FOR)**  
63 FR 53252      30 CFR 917      10/2/98

This rule authorized Kentucky to regulate surface coal mining and reclamation operations on federal lands in Kentucky under the permanent regulatory program.

**Enhancing AML Reclamation (RIN 1029-AB89)**  
64 FR 7470      30 CFR 707 and 874      2/12/99

This rule amends the regulations governing the financing of Abandoned Mine Land (AML) reclamation projects that involve the incidental extraction of coal. The rule establishes an innovative way for AML agencies, working with contractors, to maximize available funds to increase AML reclamation.

**TAKINGS****Rith Energy, Inc. v. United States**, No. 92-480-L (Fed. Cl.)

In a June 25, 1999, decision, the United States Court of Federal Claims granted summary judgment in favor of the Government, holding that no compensable taking had occurred when OSM suspended the company's mining permit because the company did not have a toxic materials handling plan adequate to prevent acid mine drainage (AMD). *Rith Energy, Inc. v. United States*, 44 Fed. Cl.108. In reaching its decision, the court noted that the production of AMD by Rith had been determined to be highly likely if Rith continued mining and that the AMD would have constituted a nuisance under Tennessee's Water Quality Control Act of 1977, Tenn. Code Ann. §§ 69-3-102 - 69-3-131. Consequently, according to the court, OSM's denial of the permit "represented an exercise of regulatory authority indistinguishable in purpose and result from that to which plaintiff was always subject under Tennessee nuisance law." 44 Fed. Cl. at 115. Citing *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992), the court then concluded that no compensable taking had occurred. *Id.* On September 10, plaintiff noted its appeal.

**RULE CHALLENGES****National Mining Ass'n (NMA) v. Babbitt**, 98-5320 (D.C. Cir.) [Subsidence]

On April 27, 1999, the United States Court of Appeals for the District of Columbia Circuit struck down two OSM regulations on coal mine subsidence and upheld two others. *NMA v. Babbitt*, 172 F.3d 906. The four regulations on appeal were among those issued on March 31, 1995, at 60 Fed. Reg. 16722-51, pursuant to SMCRA and section 2504 of the Energy Policy Act of 1992 (the EPAct) which added a new section 720 to SMCRA. Section 720 requires underground mine operators to repair or to compensate for material damage to residential structures and noncommercial buildings, and to replace residential water supplies adversely affected by underground mining. The Court of Appeals struck down the rebuttable presumption that, when subsidence damage occurs within the so-called "angle of draw," damage has been caused by the related underground mine (30 C.F.R. § 817.121(c)(4)). The Court also vacated the agency's regulation requiring coal operators to conduct presubsidence structural condition surveys (30 C.F.R. § 784.20(a)(3)), as that regulation was interconnected with the angle of draw regulation. The Court upheld the requirement that operators must ensure damage minimization when they engage in planned subsidence (30 C.F.R. §784.20(b) and 817.121(a)). Finally, the Court upheld the regulation requiring operators to repair or compensate for subsidence-related damage to structures and water supplies. (30 C.F.R. § 817.121(c)(2)).

**OWNERSHIP AND CONTROL****National Mining Ass'n v. Department of Interior**, No. 98-5248 (D.C. Cir.) [Interim Final Ownership & Control Rules]

On May 28, 1999, the United States Court of Appeals for the District of Columbia Circuit reversed and remanded portions of the district court's grant of summary judgment in favor of the government. In its challenge to OSM's interim final ownership and control and related rules ("IFR"), the National Mining Association ("NMA") argued, inter alia, that the IFR are inconsistent with § 510(c) of SMCRA, violate common law principles of limited corporate liability, and violate state primacy. The district court upheld the IFR on all grounds. The D.C. Circuit upheld: (1) the provisions of the rule which allow permit blocking based on limitless downstream violations; (2) two rebuttable presumptions of ownership or control; (3) the ability to block permits based on violations more than five years old; (4) the ability to collect permit information beyond the specific information requirements enumerated in SMCRA; and (5) the ability to rescind improvidently issued permits. However, the court also held that: (1) OSM cannot block permits based on violations of operations no longer controlled by the applicant; (2) certain of OSM's presumptions of control are invalid; (3) the IFR impermissibly allow retroactive permit blocking; and (4) the provisions allowing OSM to issue Notice Of Violations and Cessation Orders with regard to improvidently-issued state permits violate state primacy to the extent that the IFR do not require OSM to follow the procedural steps specified in SMCRA. On July 12, 1999, NMA petitioned for panel rehearing and rehearing en banc on the sole issue of whether the improvidently-issued permits provisions of the IFR violate state primacy even if OSM follows the procedural steps identified by the court. NMA's petitions for panel rehearing and rehearing en banc were denied on August 23, 1999. The court's mandate was issued on September 2, 1999.

common goals and principles that form the basis for the relationship.

**Oversight of State Programs**

Section 517(a) of the Surface Mining law requires the Office of Surface Mining to make inspections as necessary to evaluate the administration of approved state programs. Most state programs were approved in the early 1980s, and the Office of Surface Mining's oversight of the programs focused on the 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 the Surface Mining Law. In accordance with the National Performance Review recommen-

dations regarding the regulatory and abandoned mine land reclamation programs, the Office of Surface Mining, in consultation with the states, devised a new results-oriented oversight strategy that emphasized cooperative problem-solving, tailoring evaluations to state-specific conditions, and the development of performance agreements between each state and its Office of Surface Mining field office. The primary focus of this strategy is on measuring whether state programs are successfully achieving the purposes of the Surface Mining Law with respect to public participation, environmental protection, and reclamation of mined lands. This focus is consistent with the Government Performance and Results Act, which requires that federal agencies develop ways to objectively measure how a program is accomplishing its

mission through delivery of products or services. The strategy also allows the Office of Surface Mining to focus its limited resources on those program aspects that present the best opportunity for environmental improvement and the best means of preventing adverse impacts on society and the environment.

Specifically, to further reporting of end results and on-the-ground success, the oversight now evaluates and reports state-specific and national findings for off-site impacts and reclamation success. The purpose of measuring offsite impacts is to protect the public, property and the environment outside of areas authorized for mining and reclamation activities. This measurement is intended to identify and report the number and degree of off-site impacts; determine causes of the impacts;

and identify where improvements may be made to lessen the number and degree of impacts. Success will be determined based on the percentage of mines that achieve the goal of having no offsite impacts and on the number of acres that meet the bond release requirements for the various phases of reclamation.

Since 1996 the Office of Surface Mining has completed two internal reviews of the implementation of the oversight policy and an overall review of program issues with the field staff. Although there are a few exceptions, the three reviews showed that generally the Office of Surface Mining staff has positively received the oversight strategy and acknowledges that the cooperative approach provides a better atmosphere for resolving problems with states. Also, the oversight strategy has resulted in improvements to state program implementation and in resolution of some long-standing issues.

Table 7 provides the Office of Surface Mining's oversight inspection and enforcement activities during 1999.

▼ In 1999 U.S. coal production was over one billion tons. More than 75 percent was used by electric utilities to generate power. At this Montana power plant, coal is mined on adjacent lands and transported by conveyor from the mine to the plant.



State	Site Visits	Violations Cited by the Office of Surface Mining		
		Notice of Violations	Failure-To-Abate Cessation Orders	Imminent Harm Cessation Orders
Alabama	130	1	1	0
Alaska	3	0	0	0
Arkansas	13	0	1	0
Colorado	19	0	0	0
Illinois	133	0	0	0
Indiana	145	0	0	0
Iowa	33	0	0	0
Kansas	17	0	0	0
Kentucky	724	4	2	1
Louisiana	2	0	0	0
Maryland	29	0	0	0
Mississippi	4	0	0	0
Missouri	50	0	0	0
Montana	15	0	0	0
New Mexico	9	0	0	0
North Dakota	16	0	0	0
Ohio	167	0	0	0
Oklahoma	40	0	0	0
Pennsylvania	493	6	7	0
Texas	16	0	0	0
Utah	9	0	0	0
Virginia	233	0	0	0
West Virginia	232	21	9	0
Wyoming	10	2	0	0
Total	2,542	34	20	1

Note: 29 Notice of Violations and 16 Failure-To-Abate Cessation Order violations are related to Abandoned Mine land Reclamation Fees. Statistics in this table exclude any violations that have been vacated.

**Federal Programs**

Section 504(a) of the Surface Mining Law requires the Office of Surface Mining to regulate surface coal mining and reclamation activities on non-federal and non-Indian lands in any state if:

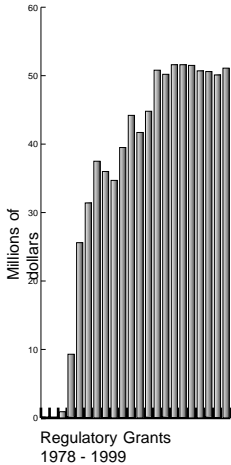
- the state's proposal for a permanent program has not been approved by the Secretary of the Interior;
- the state does not submit its own permanent regulatory program; or
- the state does not implement, enforce, or maintain its approved state program.

Although the Office of Surface Mining 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 the Office of Surface Mining. Federal programs are in effect in 12 states: Arizona, California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington.

Of the federal program states, only Tennessee and Washington had active coal mining in 1999. Table 8 includes the regulatory actions in those two states during 1999.

## Grants to States and Tribes



Section 201 of the Surface Mining Law authorizes the Office of Surface Mining to help state regulatory authorities develop or revise surface mining regulatory programs. In 1999, the Office of Surface Mining awarded \$600,000 for program development grants to the Crow, Northern Cheyenne, Hopi, and Navajo Tribes.

Section 705 of the Surface Mining Law authorizes the Office of Surface Mining to provide grants to states with approved regulatory programs in amounts not exceeding 50 percent of annual state program costs, matching state regulatory costs dollar for dollar. In addition, when a state elects to administer an approved program on federal land through a cooperative agreement with the Office of Surface Mining, the state becomes eligible for financial assistance of up to 100 percent of the amount the federal government would have spent to regulate coal mining on those lands. Table 9 shows grant amounts provided to states during 1999 to administer and enforce regulatory programs.

## Regulation of Surface Mining on Federal and Indian Lands

Section 523(a) of the Surface Mining Law 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 land. The Office of Surface Mining 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 234 billion tons of identified coal reserves in the western United States, 60 percent is federally owned. The development of federal coal reserves is governed by the Federal Coal Management Program of the Department of the Interior's Bureau of Land Management.

Through cooperative agreements, the administration of most surface coal mining requirements of the federal lands program may be delegated by the Secretary of the Interior to states with approved regulatory programs. By the end of 1999, the Secretary had entered into such cooperative agreements with Alabama, Colorado, Illinois,

Kentucky, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Utah, Virginia, West Virginia, and Wyoming. Under the Surface Mining Law, once the Secretary and a state have signed a cooperative agreement, the state regulatory authority assumes permitting, inspection, and enforcement responsibilities for surface coal mining activities on federal lands in that state. The Office of Surface Mining maintains an oversight function to ensure that the regulatory authority fully exercises its delegated responsibility under the cooperative agreement. In states without cooperative agreements, the required permitting, inspection, and enforcement activities under the Surface Mining Law are carried out by the Office of Surface Mining. During 1999, the Office of Surface Mining did not issue any new permits on federal lands.

For states with leased federal coal, the Office of Surface Mining

► Before mining, wildlife surveys found this mine site to be an excellent habitat for sharptailed grouse...an important Montana game bird, which has a unique "communal" courtship dance. Disturbance of the dancing grounds was a major concern. Company employees tried new techniques involving luring birds with decoys and sounds, and special rangeland management to reestablish the habitat. Dancing grounds on the reclaimed land were so successful these methods are now being used by other wildlife managers to reestablish grouse on non-coal mined lands.





TABLE 8: 1999 REGULATORY PROGRAM STATISTICS

State	Regulatory Staffing	AML Staffing	New Permits	New Acreage Permitted	Total Acreage Permitted	Disturbed Acreage	Inspectable Units	Complete Inspections	Partial Inspections	Notice of Violations	Failure-To-Abate Cessation Orders	Imminent Harm Cessation Orders	Bond Forfeitures	Acreage of Phase I Bond Release	Acreage of Phase II Bond Release	Acreage of Phase III Bond Release
Alabama	26.00	19.80	11	2,958	89,735	59,081	272	3,213	452	162	34	2	1	3,115	3,945	4,385
Alaska	3.25	5.25	0	0	1,218	1,218	10	32	69	1	0	0	0	0	0	0
Arizona	NA	NA	0	0	0	NA	0	0	0	0	0	0	0	NA	NA	0
Arkansas	5.60	6.25	0	0	805	NA	16	71	123	8	2	0	0	0	0	23
Colorado	26.00	14.00	0	0	166,600	22,595	58	250	382	12	0	0	0	453	775	910
Crow Tribe	NA	5.00	0	0	4,799	2,356	1	4	9	0	0	0	0	0	0	0
Georgia	NA	NA	0	0	0	141	6	6	1	0	0	0	0	0	0	0
Hopi Tribe	NA	4.35	0	0	6,137	0	1	4	7	NA	0	0	0	0	0	0
Illinois	49.95	36.00	2	1,901	146,359	74,225	108	1,172	3,011	33	0	0	0	2,699	2,528	2,236
Indiana	58.00	26.00	8	4,681	281,000	NA	302	1,095	2,420	79	1	0	0	4,403	6,110	7,706
Iowa	4.65	5.45	0	0	8,600	NA	28	112	224	15	0	0	1	0	0	0
Kansas	3.60	11.40	1	22	5,770	3,289	13	65	109	1	0	0	3	340	273	273
Kentucky	400.00	83.00	94	20,314	1,981,320	1,260,282	2,481	9,699	15,177	951	NA	NA	30	10,501	7,719	19,177
Louisiana	4.20	1.25	0	0	45,100	NA	2	8	25	2	0	0	0	0	0	0
Maryland	13.50	2.10	4	315	6,400	6,571	64	257	496	8	0	0	0	152	310	309
Mississippi	3.19	NA	0	0	1,908	625	1	4	9	2	0	0	0	0	0	0
Missouri	13.40	12.20	0	0	13,900	NA	29	*134	*130	*29	*11	*0	1	43	87	87
Montana	17.50	6.50	0	0	59,670	23,115	27	89	197	6	0	0	0	0	0	0
Navajo Tribe	NA	24.00	0	0	78,834	16,222	7	49	63	NA	0	0	0	0	0	0
New Mexico	9.00	8.00	0	0	80,000	20,180	15	60	180	6	0	0	0	1,832	457	0
North Dakota	8.85	5.65	0	0	71,700	43,032	39	164	565	2	0	0	0	834	1,021	2,619
Ohio	35.10	30.90	51	6,048	128,100	29,025	572	1,882	2,404	216	20	3	8	4,398	6,653	5,170
Oklahoma	28.10	10.00	2	1,289	35,000	NA	92	376	568	25	1	0	0	2,368	878	3,199
Pennsylvania	243.00	129.00	45	5,862	477,800	NA	2,377	8,410	13,509	841	58	1	7	7,021	7,015	8,617
Tennessee	54.00	0.00	5	973	26,700	15,176	364	1,026	1,075	16	14	0	7	3,024	1,394	2,580
Texas	44.75	9.80	0	0	248,300	NA	20	97	221	6	0	0	0	6,313	6,431	2,542
Utah	24.00	9.00	1	29	80,400	2,697	29	113	205	14	0	1	0	0	0	0
Ute Tribe	NA	NA	0	0	107	107	2	10	14	NA	0	0	0	0	0	0
Virginia	83.00	18.00	31	4,291	62,120	42,369	678	3,770	3,476	293	6	11	6	452	1,364	1,895
Washington	NA	NA	0	0	14,872	7,104	2	7	16	2	0	0	0	0	0	0
West Virginia	227.00	68.50	47	7,037	279,680	NA	2,676	9,901	13,579	1,030	224	13	23	2,361	4,999	10,915
Wyoming	31.00	13.05	1	0	319,470	81,561	40	159	303	16	0	0	0	197	375	106
Total	1,416.64	564.45	303	55,720	4,722,404	1,710,971	10,332	42,239	59,019	3,776	371	31	87	50,506	52,334	72,749

NA - Information not available

\* Unverified data

Note: Kentucky and West Virginia federal lands data is not listed separately in 1999. These states now have cooperative agreements and have assumed regulatory authority of federal lands in their states. The one remaining inactive federal lands permit in West Virginia that had 4 complete and 1 partial inspection.

prepares the Mining Plan Decision Documents required by the Mineral Leasing Act, as amended, and documentation for other non-delegable authorities, for approval by the Secretary of the Interior. During 1999, four mining plan actions were prepared and approved for coal mines on federal land.

Pursuant to Section 710 of the Surface Mining Law, the Office of

Surface Mining regulates coal mining and reclamation on Indian lands. There are three mines on the Navajo Reservation, one mine on the Hopi Reservation, a portion of an underground mine and a haul road on the Ute Mountain Ute Reservation, and one mine on the Crow Reservation permitted under the permanent Indian Lands Program. One mine on the Navajo and Hopi Reservation is operating under the

initial program. Also, on the Navajo reservation a permit application was submitted for a coal preparation plant, in accordance with the permanent Indian Lands Program, and is operating under administrative delay. In addition, the Office of Surface Mining, in cooperation with the Bureau of Indian Affairs and the Navajo Nation, is overseeing the final reclamation of three mines on the Navajo Reservation that are still

TABLE 9: REGULATORY GRANT FUNDING, 1999 OBLIGATIONS

State/Tribe	Federal Funding		Cumulative Through 1999 <sup>1</sup>
	1999	1998	
Alabama	\$896,167	\$769,358	\$22,371,372
Alaska	173,461	173,580	5,066,506
Arkansas	160,364	162,454	3,005,415
Colorado	1,609,340	1,633,954	22,252,017
Illinois	2,282,102	2,003,768	44,065,034
Indiana	1,930,615	31,181	25,259,956
Iowa	118,184	147,671	2,256,973
Kansas	105,102	111,899	2,498,773
Kentucky	12,515,093	13,249,061	220,540,343
Louisiana	189,821	191,146	3,037,817
Maryland	468,150	438,519	9,736,087
Michigan	0	0	135,458
Mississippi	115,960	132,072	807,650
Missouri	417,940	436,015	7,061,356
Montana	890,483	895,318	13,663,253
New Mexico	593,976	637,699	10,218,620
North Dakota	473,539	500,207	9,771,710
Ohio	1,410,906	1,400,240	51,892,102
Oklahoma	919,676	900,512	14,532,557
Pennsylvania	10,399,980	10,810,597	174,267,299
Rhode Island	0	0	158,453
Tennessee	0	0	5,340,085
Texas	1,414,116	1,446,563	17,410,400
Utah	1,504,093	1,499,619	22,431,893
Virginia	3,082,901	3,055,125	55,644,640
Washington	0	0	4,893
West Virginia	7,373,026	7,934,579	91,637,524
Wyoming	1,511,005	1,494,863	26,597,756
Crow Tribe	82,291	22,848	853,775
Hopi Tribe	180,024	27,278	1,115,688
Navajo Tribe	311,700	63,295	2,590,661
N. Cheyenne Tribe	25,985	6,579	38,547
Total	\$51,156,000	\$50,176,000	\$866,264,613

1. Includes obligations for AVS, TIPS, Kentucky Settlement, and other Title V cooperative agreements. Figures for FY 1997 do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

under the interim regulatory program.

Section 2514 of the Energy Policy Act of 1992 (Public Law 102-486) gives authority to provide grants to the Crow, Hopi, Navajo, and Northern Cheyenne Tribes to assist them in developing programs for regulating surface coal mining and reclamation operations on Indian lands. The development of these programs includes: creating tribal mining regulations and policies; working with the Office of Surface Mining in the inspection and enforcement of coal mining activities on Indian lands (including permitting, mine

plan review, and bond release); and education in the area of mining and mineral resources. A series of separate, informal meetings began in 1995 to discuss issues and to determine how best to develop draft legislation that would allow tribal governments to assume primacy. All parties have agreed on making certain modifications to the draft legislation and have agreed to an action plan. Development grant funding for 1999 was \$600,000 from the Office of Surface Mining budget. This funding will continue in 2000. Table 8 includes statistics on regulatory activities on Indian lands during 1999.

On February 19, 1999, the Office of Surface Mining proposed a rule in the *Federal Register* to amend the regulatory definition of "Indian lands." The proposed rule clarifies that the definition includes individual Indian trust allotments located within an approved tribal land consolidation area. The Office of Surface Mining agreed to propose the rule change under the terms of a 1995 settlement agreement between the Department of the Interior, and the Navajo nation and Hopi Tribe. The Office of Surface Mining is also proposing changes to the Federal and Indian Lands Programs in conjunction with the proposed change in the definition of Indian lands. The primary effect of the proposal would be to transfer Surface Mining Law regulatory jurisdiction from the state to the Office of Surface Mining for individual Navajo trust allotments located within the Navajo land consolidation area in New Mexico. The Office of Surface Mining held a public hearing on the proposed rule on June 8<sup>th</sup> in Albuquerque. The comment period on the proposed rule closed June 21 and the Office of Surface Mining is currently reviewing the public comments received before proceeding with any further rulemaking action.

### Electronic Permitting

Office of Surface Mining's electronic permitting outreach started in Wyoming in 1993, became a national initiative in 1996, and will continue as a priority for the next three years. Electronic permitting is a long-term initiative that will result in significant monetary and time savings; and provide more complete and up-to-date records for all those involved in the permitting process. The Office of Surface Mining is currently assisting primacy states in developing and implementing electronic permitting. When implemented



▲ The reclamation at this Indiana mine has led to a unique fish and wildlife habitat to be managed by the Indiana Department of Natural Resources when the reclamation bond is released. The reclaimed land contains more than 40 lakes and ponds ranging in size from one to over 200 acres. A wide range of vegetation that was planted already provides good waterfowl nesting areas, and adds to the rich diversity of the reclaimed environment.

electronic permitting provides permit reviewers with computer-based tools to access electronic documents, maps and data, and to perform necessary environmental analyses. Additional benefits include sharing electronic data with field personnel, other agencies, and the public.

During 1999, North Dakota partnered with their coal industry to share drawings. They also created a digitized library of all the exploration core-holes in their lignite resource areas. New Mexico established desktop review and modeling capabilities for all permitting staff. Utah developed a water quality data base accessible on the World Wide Web. In Wyoming mining companies are

submitting annual reports and major permit revisions electronically on CD-ROMs to the regulatory agency and to court-houses of record in the mining communities. Montana has developed an extensive geographic information system data base. Alaska recently received its first totally electronic permit application. All seven western states are in various stages of implementing electronic permitting.

A workshop was held for eleven midwest coal states during 1999. The workshop allowed the states and the Office of Surface Mining to exchange ideas and the opportunity to build on each other's successes.

## Pennsylvania Anthracite Program

Section 529 of the Surface Mining Law provides an exemption from federal performance standards for anthracite coal operations, provided the state law governing those operations was in effect on August 3, 1997. Pennsylvania is the only state qualifying for the exemption, and thus regulates anthracite mining independent of the Surface Mining Law program standards.

The Pennsylvania anthracite coal region is located in the northeast quarter of the state and covers approximately 3,300 square miles. The long history of mining in the anthracite region has produced a legacy of abandoned mine land problems. However, because most active mining operations affect previously disturbed land, a large percentage of abandoned mine land is eventually restored to productive land use in connection with active mine reclamation.

In 1998,<sup>2</sup> the anthracite mining industry coal production<sup>3</sup> decreased from 8.9 million tons to 7.5 million tons. The reprocessing of anthracite culm and bank material account for 63 percent of the anthracite coal production. Some of this culm and bank material helps fuel eight cogeneration plants. Anthracite operators mined approximately 4.7 million tons from culm and bank material, 2.4 million tons from surface mines and 0.4 millions tons from underground mines.

Pennsylvania Department of Environmental Protection continues to successfully carry out the provisions of the anthracite regulatory program and initiates activities to clean up polluted waters caused by past mining. The District Mining Office in

2. Calendar Year 1998.

3. Pennsylvania Department of Environmental Protection, Harrisburg, 1998 Annual Report on Mining Activities.

Pottsville continues to do outstanding work in the headwaters of the Swatara Creek. To date this cooperative effort has resulted in the installation of numerous weirs, three limestone diversion wells and the construction of a passive wetland treatment system within the headwater area. Additionally, the District Office and the Mahanoy Creek Watershed Association, operating in Schuylkill and Northumberland counties, are currently involved in the construction of a five-acre passive treatment system for the Mahanoy Creek.

**Small Operator Assistance Program (SOAP)**

Section 401 (c)(11) of the Surface Mining Law authorizes up to \$10 annually of the fees collected for the Abandoned Mine Reclamation Fund to be used to help qualified small mine operators obtain technical data needed for permit applications. Through 1991, operators producing fewer than 100,000 tons of coal per year were eligible for assistance.

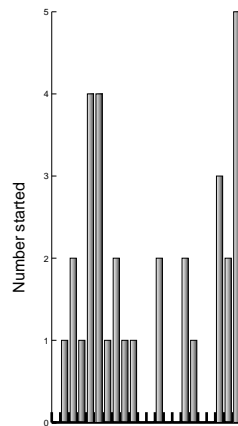
Beginning with 1992, the Abandoned Mine Reclamation Act of 1990 increased the production limit from 100,000 to 300,000 tons.

The Energy Policy Act of 1992 (Public Law 102-486) added additional technical permitting services to the list of items eligible for funding under the Small Operator Assistance Program. The new services include engineering analyses and design necessary for hydrologic impact determination, cross-section maps and plans, geologic drilling, archaeological and historical information, plans required for the protection of fish and wildlife habitat and other environmental values, and pre-blast surveys. The program has

always funded the hydrologic and geologic data collection and analyses required as part of the probable hydrologic consequences determination and statement of overburden analysis.

Small Operator Assistance Program regulations (30 CFR 795) place program responsibility with the states that have Office of Surface Mining approved permanent surface mining programs. In states with federal programs, the Office of Surface Mining operates the Small Operator Assistance Program. In 1999, 121 small mine operators received assistance, compared to the 140 operators who received assistance in 1998. Table 10 provides a breakdown of the Small Operator Assistance Program grant awards by state during 1999.

**Experimental Practices**



Experimental Practices Started 1978 - 1999

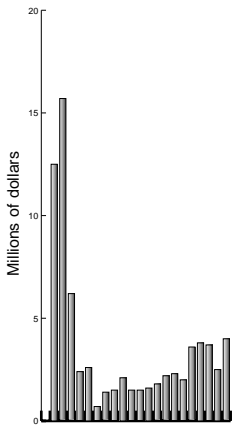
Section 711 of the Surface Mining Law allows variances to Sections 515 and 516 of the performance

standards as alternative, or experimental, mining and reclamation practices to encourage advances in mining technology or to allow innovative industrial, commercial, residential, or public postmining land uses. However, the experimental practices must be potentially more, or at least as, environmentally protective as the environmental protection standards established by the Surface Mining Law. Approval and monitoring of a permit containing an experimental practice requires a close working relationship between the mine operator, the state regulatory authority, and the Office of Surface Mining.

During 1999, six experimental practices were ongoing and five new experimental practices were approved. These experimental practices are addressing unique and varied reclamation practices.

The five experimental practices approved in 1999 allow for:

- In situ soil protection — preservation of the soil resource without stockpiling at an underground mine.
- Land use change to commercial development — two experimental practices.
- Remining and reclamation of an area that, without an experimental practice, would have been bypassed by the coal operator.
- Reclamation of an unstable highwall that would not have been



SOAP Grant Obligations 1978 - 1999

**TABLE 10: SMALL OPERATOR ASSISTANCE PROGRAM\***

State	Grant Amount		Number of Operators
	1999	1998	
Alabama	\$105,000	\$0	2
Arkansas	25,000	0	1
Kentucky	1,566,163	1,000,000	33
Maryland	35,000	65,855	2
Ohio	196,689	70,000	12
Pennsylvania	1,597,720	771,145	40
West Virginia	541,905	650,000	31
Total	\$4,057,477	\$2,557,000	121

\*These figures do not include downward adjustments of prior-year awards.

possible in the absence of an experimental practice.

Since the inception of the program, 32 experimental practices have been approved. In addition to the 11 currently underway, 13 were determined to be successful, three were unsuccessful, one was terminated due to a regulation change, and four have been completed but a final close-out report has not yet been submitted.

### Reclamation Awards

To recognize and transfer the lessons learned from completing the nation's most outstanding reclamation, the Office of Surface Mining presents awards to coal mine operators who have completed mining and reclamation operations that resulted in

outstanding on-the-ground performance. Awards for 1999 were presented October 11, 1999, at the National Mining Association's annual meeting, as follows:

#### Director's Award

Each year, one coal mining operation in the country is selected to receive the Director's Award for outstanding achievement in a specific area of reclamation. This year the award was presented for exemplary prime farmland reclamation. The 1999 award was presented to the TXU (formally the Texas Utilities Mining Company) Big Brown and Monticello Winfield Mines located in East Texas. TXU not only reclaimed existing prime farmland soils, it also improved soils during

reclamation that resulted in an additional 9,000 acres of highly productive prime farmland. TXU developed a soil handling technique that has wide-spread future application. Most native East Texas soils are sandy and have clay layers that prevent root development and water movement. During mining and reclamation, the layers are broken up and mixed. The reclaimed soils then have consistent texture that encourages deep root development and improved water holding capacity. The crop yields on the reclaimed soils have consistently outperformed the unmined native soils.

#### National Awards

■ Western Energy Company, Rosebud Mine, Colstrip, Montana. Western Energy, a mining subsidiary of Montana Power, operates a large surface mine that provides coal to an adjacent power plant. While the reclamation is outstanding, this year Western Energy was recognized for their far-reaching accomplishment in wildlife conservation. These efforts have resulted in reestablishing a habitat for the sharp-tailed grouse, an important Montana game bird. Western Energy has helped ensure the viability of the Montana grouse population for many years to come.

■ Paramount Coal Corporation, Cane Branch Mine, Clintwood, Virginia, for reclaiming a 600-acre site, which included 13,000 feet of abandoned highwalls from previous mining, changing the area from a barren wasteland into an aesthetically pleasing landscape with productive hay and pasture land. Paramount Coal Company has shown that previously mined and abandoned land can be reclaimed, the environment restored, and productivity increased.

■ Cyprus Amax Company, Ayrshire Mine, Evansville,

▼ Remining at this Virginia site resulted in removing 1,250,000 tons of coal and eliminating 13,000 feet of abandoned mine highwalls. This is another example that previously mined and abandoned land can be remined, the environment reestablished, and productivity restored.



Indiana, where reclamation has led to a unique fish and wildlife habitat which will benefit the community for years to come. When the reclamation bond is released in 2003, this land will be used for public recreation activities such as hunting, fishing, hiking, biking, and bird watching. Its close proximity to major highways and the city of Evansville make it a unique resource for the whole region.

■ Panther Creek Partners, Nesquehoning, Pennsylvania, for reclaiming 150 acres of coal waste as part of a coal recovery operation on anthracite coal refuse. The company's special effort to control water runoff from the refuse resulted in immediate improvements to nearby streams. In addition, topsoil that was constructed using ash and other waste materials has provided an excellent seed bed, and vegetation is growing on the site for the first time in over 70 years. The improvements are so dramatic that a housing development has begun adjacent to the site.

▼ Typical of early Pennsylvania anthracite coal mining, this site was mined around 1918 and was abandoned leaving more than 150 acres of coal waste next to the Borough of Nesquehoning. In addition to aesthetic problems, water running off the refuse was polluting nearby creeks.



■ Jamieson Construction Company, Permit No. 863-0280, Langnay, Kentucky, for its reclamation efforts which helped to preserve Rockcastle River, one of the last "wild" rivers remaining in Kentucky. Special care was taken to keep sediment from leaving the mine site and draining into the river. Diversion ditches were constructed to control the flow of water through ponds. Today the ponds are used for livestock and wildlife. Completed two years ago, it's now difficult to distinguish from the surrounding countryside.

■ RAG Coal West, Inc. (formerly Amax Coal West, Inc.), Bell Ayr Mine, Gillette, Wyoming, for reclamation which preserved the historical integrity of the mine site. In 1865, an expedition that was establishing a wagon road to the western gold fields had several skirmishes with the Sioux and Northern Cheyenne Tribes. At the proposed mine site, the expedition had dug rifle pits or shallow bunkers, that were eligible for the National Register of Historical Places.

■ Basin Resources, Inc., Golden Eagle Mine, Weston, Colorado, for reclaiming a 30,000-acre mine site, which was an important wildlife habitat for bear, deer, mountain lion, turkey, and the second largest elk herd in the state. Once reclamation was complete, the company transferred the land to the Colorado Division of Wildlife. The site is now used for public recreation and a greatly expanded wildlife area.

#### Best-of-the-Best Award

Since 1996, when the Office of Surface Mining began presenting annual awards for the best reclamation, it was evident that in most cases there were one or two individuals responsible for achieving the success. It was sometimes the mine manager, the

reclamation specialist, or in one case a reclamation specialist and a state inspector working together. But in all cases, these people were the linchpin that held it together and the ones who made the extra effort to ensure achievement of the outstanding reclamation. The Office of Surface Mining recognizes these special individuals to give them credit for their work and to highlight their efforts as a model for others in the mining and reclamation field.

This year's winner of the Best-of-the-Best Award has been responsible for reclamation that has won five awards. In each case the success can be attributed to personal foresight, initiative, and creative implementation -- attributes that make this person a model in both the coal industry and government regulatory environment. Accomplishing outstanding reclamation is always a balance between production schedules, costs, and desire for the best possible reclamation. The ability to make it all work while achieving award-winning reclamation was exemplified by the 1999 winner, Bruce Waage, Senior Reclamation Specialist at the Western Energy Company's Rosebud Mine.

His personal efforts have resulted in preservation of petroglyphs, native wildlife, historical structures, and significant landscape features. In addition, his repetitive achievements have extended beyond coal mining and reclamation, and today others in the fields of wildlife management and historical preservation use his methods that were developed while reclaiming mine land. Bruce is a shining star among all those in the coal mining industry, and he is one of the reasons people say the "Surface Mining Law is working."

► Using a waste recovery operation on anthracite coal refuse, this site was mined and reclaimed. Vegetation is growing on the land for the first time in over 70 years.

**Goal 2. Better Protection:** Improve the Office of Surface Mining's regulatory program for protecting the environment, people, and property during current mining operations and subsequent reclamation through cooperative results-oriented oversight and evaluation of state programs, and in carrying out the Office of Surface Mining's regulatory responsibilities in order to safeguard people and the environment.

Performance Measure	1998 Actual	1999 Plan	1999 Actual*
Percent of active mine sites that are free of offsite impacts	93 percent	94 percent	94 percent

Protecting the environment, people, and property is measured by the number of times incidents occur outside the boundaries (off-site impacts) of the permitted areas being mined. The Office of Surface Mining and the states collect data on the number and severity of the impacts which are used to identify problems or program weaknesses which must be addressed during the upcoming year. Program efficiencies are accomplished by focusing financial, technical and other program resources on improvements that affect on-the-ground results.

\* For some states with a large number of active mines, the number and percentages of sites free of off-site impacts are estimates based on representative samples.



Most native soils in East Texas are very low in quality because of either claypans at shallow depths (the soil in this photo shows the distinct claypan 3 feet beneath the surface) or very deep sands. These soils only allow shallow root development and are generally unproductive for agriculture. At this lignite mine, soils were mixed during mining and reclamation. The reclaimed soils are uniform in texture, have more water-holding capacity, and are significantly more productive.





## Technology Development and Transfer

Improvement through technical assistance, transfer of technology and training

The Office of Surface Mining provides states, Indian tribes, federal agencies, the coal industry, and citizens with the technical information and tools they need to carry out their responsibilities under the Surface Mining Law. These activities include providing direct technical assistance to address specific mining and reclamation problems, maintaining automated systems and databases used by others in making decisions under the Law, and transferring technical capability to others through training,

at helping state and tribal partners do their jobs, the ultimate goal is to improve the health, safety, and the environment for our primary customers -- the people who live and work in coalfield communities. The Office of Surface Mining provides information to citizens to help them better understand their rights and responsibilities under the Surface Mining Law.

### Technical Information Processing System (TIPS)

The Technical Information Processing System is comprised of off-the-shelf hardware and software supported by the Office of Surface Mining in partnership with the states and tribes. The system is maintained by the Office of Surface Mining for use by state and tribal regulators and the Office of Surface Mining staff. The system consists of UNIX and NT-based computers at state, tribal, and select federal offices networked to a centrally-located fileserver through the Office of Surface Mining wide-area network. The Technical Information Processing System suite of scientific, data base, and mapping core software aids the technical decision-making associated with conducting reviews of permits, performing cumulative hydrologic impact assessments using a watershed approach, quantifying potential effects of coal mining, preventing acid mine drainage, quantifying subsidence impacts, measuring revegetation success, assisting in the design of abandoned mine lands projects, and providing the scientific basis for environmental assessments and environmental impact statements.

In 1999, the Technical Information Processing System staff began conversion of computer systems provided to state, tribal, and federal sites from UNIX to Windows NT-based systems. The object is to accommodate more



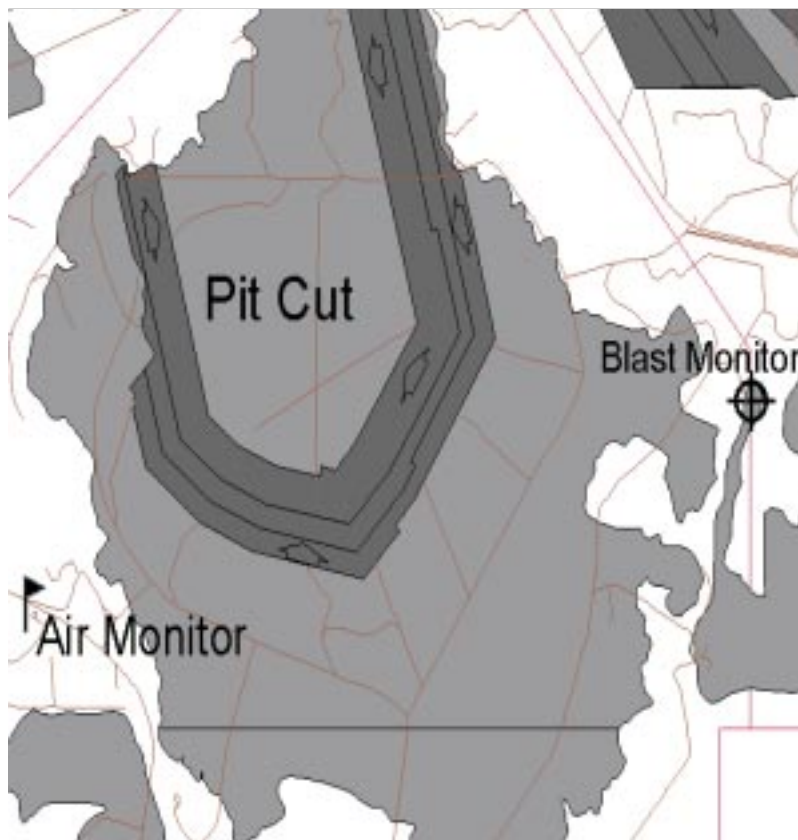
▲ Of the 22,000 acres which have been mined and reclaimed at two East Texas mines, about 5,100 acres of the premine area qualified as prime farmland soils; but, approximately 14,000 acres meet the prime farmland qualification as postmine soils. In this case mining and reclamation increased the amount of prime farmland soils by about 9,000 acres.

consultations, forums, and conferences to help them develop the skills needed for solving problems on their own. In recent years, we have been supplementing our traditional oversight presence with an increased emphasis on our role as a provider of technical assistance and support to states and tribes.

While the focus of the Office of Surface Mining's work is directed

software types, and to distribute Technical Information Processing System tools to each user's desktop. Conversion to the NT-based system began in 1999 with distribution of new hardware to state, tribal, and federal locations. The process will continue in 2000 with procurement and distribution of software to the new systems. This changeover in systems helps users keep pace with advances in both computer hardware and software. In moving the system directly to the user's desktop, use of the scientific and engineering tools is increased, enhancing electronic permitting nationwide. During 1999, work continued with state and tribal regulatory authorities in the implementation of the Electronic Permitting Initiative and Geographic Information Systems Initiative while continuing to provide daily user support for system applications. In addition, full implementation of the Hopi Land Information System was achieved, and Geographic Information System capabilities for the Navajo Nation at their Window Rock and Shiprock offices and mapping capabilities at their Tuba City office began.

Training of state, tribal, and Office of Surface Mining personnel in the practical application of the system is done on a continuing basis and is an integral part of the system operation. When space is available, the general public also attends Technical Information Processing Systems courses. This year training was reduced to allow staff to install new system components at sites throughout the country. In 1999, 121 students attended 14 classes, compared to the 352 students in 1998. This reduction occurred because of the Windows-NT platform conversion. Higher training levels are anticipated in 2000. Course offerings in 1999 included geographic information system use, global positioning system use, three-dimensional



▲ Technical Information Processing System maps such as this are used for electronic permitting. This map of the Black Mesa Mine in Arizona shows the existing mine pit, roads, areas that will be mined (shaded gray), and areas that will not be mined (unshaded).

spatial geologic and toxic-material modeling, and automated drafting and site-design.

### Acid Drainage Technology Initiative

The Acid Drainage Technology Initiative is a partnership which the Office of Surface Mining has joined with industry, states, academia, other governmental agencies, and groups to identify, evaluate and develop "best science" practices to prevent acid mine drainage, and to describe the best methods for preventing new acid mine drainage, and eliminating existing sources.

The National Mine Land Reclamation Center at the University of West Virginia serves as the central location for the Initiative. The Eastern Mine Drainage Federal Consortium, a group of federal agencies working in the Appalachian region, helps coordinate the federal participation. The Inter-

state Mining Compact Commission, representing eastern coal-producing states, and the National Mining Association, representing the U.S. coal industry, also participate.

While the initial focus has been on the coalfields of Appalachia, the Initiative has been expanded to include the Western states, including non-coal mining. In 1999, the Metal Mining Sector Work Group was formed to address western metal mining issues. Also in 1999, the Remediation Work Group's *AMD Remediation handbook—a user manual on AMD remediation methods*, was published.

This year work continued on a handbook titled *Review of Mine Drainage Prediction Methods*. This handbook, to be completed in 2000, will cover overburden testing, sampling, and field validation.

## International Activities

In many countries, mining has been practiced for centuries with little regulation or noticeable concern for the environment. The successful implementation of the Surface Mining Law in the United States is a model for nations facing the challenge of protecting the environment while producing coal. In recent years, several governments have requested assistance from the Office of Surface Mining in improving their capability to administer mining and reclamation programs. In 1999, the Office of Surface Mining and state staff made presentations and assisted mining professionals from several foreign countries including South Africa, Hungary, and China.



▲ Instructor Nancy Roberts (Project Manager at the Office of Surface Mining Ashland, Kentucky Abandoned Mine Land office) on-site in Indonesia with Ministry of Mines and Energy professional staff.

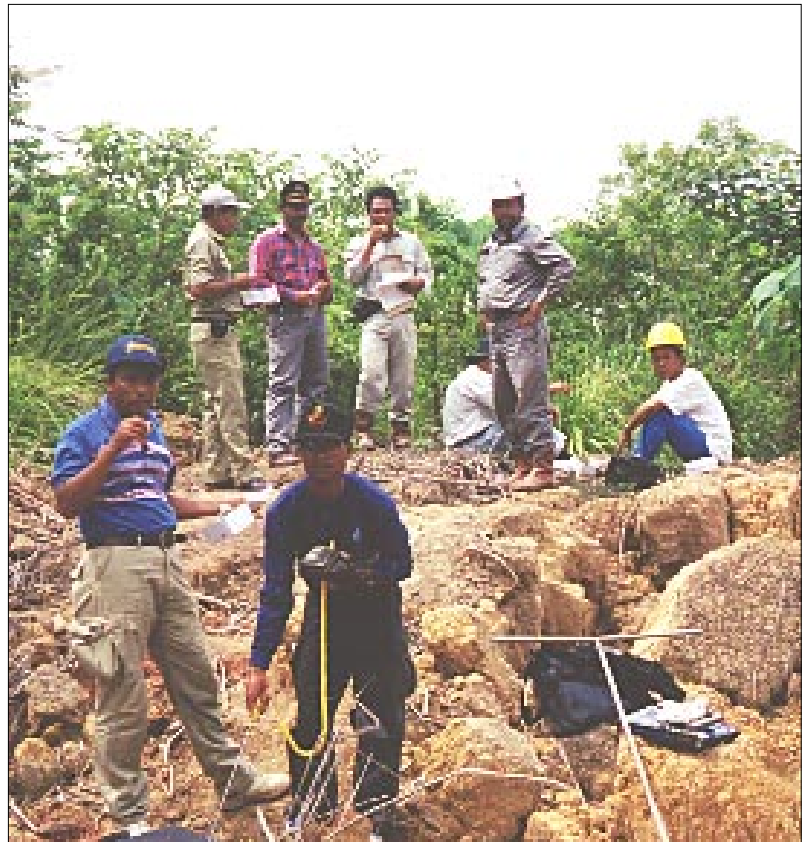
▶ Training class in East Kalimantan, Indonesia on the Island of Borneo. Students are measuring a coal seam fire as part of the Office of Surface Mining technical assistance training. The subsidence and destruction of the vegetation was caused by a fire burning through a coal seam close to the land surface.

Coal and Peat Fire Suppression in Indonesia Throughout 1999, the Office of Surface Mining provided direct technical assistance to the government of Indonesia in extinguish-

ing perpetually-burning coal and peat fires. The fire suppression training program is fully funded by the State Department's Southeast Asia Environmental Initiative. The training follows the 1998 completion of the Office of Surface Mining's highly successful 3-year project with Indonesia's Ministry of Mines and Energy. This technical assistance project, which was fully funded by the World Bank, provided assistance to improve the country's capacity to regulate the surface coal mining industry and reclaim mined lands in an economical and environmentally-sound manner.

Begun in September 1998, the fire suppression project provides training and technical assistance to

- Developed a fire suppression training course and a team-teaching approach that has resulted in the training of 43 professionals — from government, research institutions and private mining companies — in techniques for coal seam fire evaluation and suppression.
- Provided basic fire suppression training in Malaysia to 200 members of the Indonesian Ministry of Forestry as part of a multi-national regional training effort.
- Guided the newly-trained Indonesian professionals in extinguishing 13 coal fires in East Kalimantan, and provided direct financial support for extinguishing another 12 fires



the government of Indonesia in coal seam fire evaluation and suppression. Under the project, Office of Surface Mining and state regulatory staff, working with professionals from Indonesia and neighboring Malaysia, have:

that threatened the Wanariset Nature Preserve, a release area for orangutans rescued and rehabilitated following the forest fires which swept East Kalimantan in 1997.

Indonesia's Ministry of Mines and Energy has established a comprehensive coal fire suppression policy for Indonesia, and Ministry personnel are now engaged in suppressing coal fires using the training and equipment provided through the project.

The State Department's East Asia and Pacific Bureau provided 100% funding for this project as part of its East Asia and Pacific Environmental Initiative — a technical assistance effort designed to help nations in the region find solutions to environmental problems related to sustainable forest management, coastal resources conservation, and climate change. Total funding for the Office of Surface Mining is approximately \$1.5 million.

In addition to bringing valuable technical expertise to the program, the involvement of the Office of Surface Mining's state partners — Colorado, North Dakota, Pennsylvania, and West Virginia — has served as a model for Indonesia of how the close cooperation between national and regional levels of government can lead to better solutions and more efficient use of resources.

### Technical Training Program

The Office of Surface Mining continued its emphasis on providing technical assistance to the states and tribes by enhancing the technical skills of regulatory and reclamation staff through training. In 1999, the program offered 49 sessions of 29 different courses. In addition to scheduled course offerings, the program also responded to requests by several states to customize courses to address their specific needs. Special sessions were developed on

water sampling and evidence handling for Texas and Utah to meet the needs of regulatory staff, mine operators, and landowners. The Expert Witness class was tailored for West Virginia to address issues related to permit findings. A new course, "SMCRA in the 21<sup>st</sup> Century," was designed to meet the needs of program managers and staff in developing and evaluating meaningful on-the-ground performance measures. This course also seeks to enhance outreach skills, and increase the effectiveness of regulatory and reclamation programs through sharing of information about emerging technologies.

All aspects of the training program from identification of training needs through course development and presentation are cooperative efforts of states, tribes, and the Office of Surface Mining. In 1999, there were 199 instructors, — 47 percent from the Office of Surface Mining, 11 percent from

the Interior Department's Solicitor's Office, 41 percent from the states, and the remaining one percent from other sources. The 49 sessions, which reached 997 students, were presented in 27 locations in 15 states. State and tribal students accounted for 73 percent of the students, Office of Surface Mining 20 percent, and seven percent for non-government participants. The program's Government Performance and Results Act attendance goal of 900 students was exceeded by nearly ten percent due largely to attendance by non-government participants. Other new 1999 courses, include Enforcement Tools and Applications which addresses primary and alternative enforcement procedures, and Acid-Forming Materials for Program Staff which provides an introduction for program managers, staff, and attorneys in the science and technology of acid-forming materials. Training courses offered in 1999 included:



► On reclaimed surface mines, topsoil is essential for reestablishing native vegetation and crop, forage, and timber production. At this Indiana reclaimed mine site, the land is producing high yielding corn crops just as it was before mining.

COURSE NAME	SESSIONS	STUDENTS
Acid-forming Materials:		
Fundamentals	2	34
Planning & Prevention	1	19
For Program Staff	1	18
Administration of Reclamation Projects	1	23
Abandoned Mine Land Design Workshop:		
Dangerous Openings	1	10
Fires Underground & Refuse Burning	0	0
Landslides	1	10
Subsidence	1	11
Applied Engineering	2	33
Blasting and Inspection	3	52
Bonding Workshop:		
Administrative & Legal Aspects	1	19
Cost Estimation	1	18
Effective Writing	6	131
Enforcement:		
Procedures	1	22
Tools and Applications	2	43
Erosion and Sediment Control	2	41
Evidence Preparation and Testimony	2	66
Expert Witness	4	63
Historic and Archeological Resources	1	18
Instructor Training	1	23
NEPA Procedures	1	24
Permitting Hydrology	1	19
Principles of Inspection	1	18
SMCRA in the 21 <sup>ST</sup> Century	1	72
Soils and Revegetation	2	29
Spoil Handling and Disposal	1	21
Surface and Groundwater Hydrology	2	46
Underground Mining Technology	3	66
Wetlands Awareness	3	48
<b>TOTALS</b>	<b>49</b>	<b>997</b>

In 1999, the Office of Surface Mining, in conjunction with the Bureau of Land Management, Bureau of Indian Affairs, Minerals Management Service, Solicitor's Office, and the Office of American Indian Trust, also provided training for approximately 173 students in Indian Trust Responsibilities and Federal Obligations. The Office of Surface Mining provided the lead for development and instruction for solid minerals inspection and enforcement, prepared an award-winning video on sacred site issues, and developed training modules on cultural issues.

In cooperation with the Western states of Alaska, Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming, the Office of Surface Mining spon-

sored Interactive Forums on Bond Release. These forums addressed the issues related to a 10-year bond release period West of the 100<sup>th</sup> Meridian. During 1999 a Forum (second in a series of five) *Approaching Bond Release: Revegetation (Native Plants, Native American Culturally/Historically Significant Plants), Reclamation Issues, and Surface Mining Applications in the Arid, Semi-Arid West* was conducted. Three more Bond Release Forums are planned for years 2000 through 2002.

### Applicant Violator System (AVS)

One of the underlying principles in the Surface Mining Law is that those who benefit from mining are responsible for returning the land and water to productive use. Section 510(c) of the Law prohibits the issuance of new permits to applicants who are responsible for outstanding violations until those violations are corrected. Determining whether an applicant owns or controls operations with violations is often difficult, largely due to the complexities of corporate relationships and inconsistencies in interpretations of the regulations.

The primary purpose of the Applicant Violator System is to provide state regulatory authorities with a centrally-maintained database of violation records and information on ownership and control of mining operations. State officials check the system in evaluating an applicant's mining history and eligibility for new permits. The system also is used in determining the eligibility of potential recipients of Abandoned Mine Land reclamation contracts.



◀ At this reclaimed Alabama coal mine the land was returned to forest production. Good soil handling techniques and the region's climate have resulted in the rapid development of the forest.

During 1999, the Office of Surface Mining responded to 4,553 requests for Applicant Violator System data evaluation checks from state and federal regulatory authorities, state abandoned mine land programs, and others who use the system to check violation histories. The Office of Surface Mining collected and/or settled payments in the amount of \$3,958,994 partially due to violation information in the system.

On December 21, 1998, the Office of Surface Mining published a proposal to redesign its ownership and control, permit information, and related regulations. Development of the proposed rule followed an extensive outreach effort which included numerous discussions with states, coal industry

representatives, citizens' groups, and others potentially affected by changes in these regulations. Comments on the proposed rule have been reviewed and a final rule is currently being developed.

Access to the system is available to the public, coalfield citizens, coal companies, and industry representatives through public domain software, the Internet, or by direct dial-in. As needed, the Office of Surface Mining provides training to system users on how to access and interpret information. Instruction is tailored to meet the needs of the target audience; for example, inspectors, auditors, investigators, coal industry representatives, and citizens. New initiatives completed this year include creating an Applicant Violator System Office website

and an on-line users guide. General information about the system, including access information, instructions for downloading access software, and how to obtain customer assistance can be found on the website: ([www.avs.osmre.gov](http://www.avs.osmre.gov)).

### Prime Farmland

Successful reclamation of prime farmland has been a major concern to coal mine operators and citizens in the Midwest since before passage of the Surface Mining Law.

During 1999, the Office of Surface Mining provided partial funding for a prime farmland research project at the University of Illinois/Southern Illinois University Cooperative Reclamation Research Station. The research is developing a soils-based productivity evaluation method for reclaimed prime farmland soils.

In addition, Office of Surface Mining and the Agriculture Department's Natural Resources Conservation Service developed the "Specifications for soil removal, storage, replacement, and reconstruction" for mined and reclaimed prime farmland that are required by Section 515(b)(7) of the Surface Mining Law. The specifications were published in the *Federal Register* on June 29, 1999.



◀ This was the site of a Colorado underground mine between 1976 and 1995. Today it's a state wildlife area. In 1998, when the reclamation was complete, the company transferred the land to the Colorado Division of Wildlife.

▶ The non-forested areas in this photo were previously the principal underground mine site, including office, equipment, and maintenance buildings, parking lots, and coal-handling facilities.

**Goal 3. Better Service:** Strengthen the capabilities of states, tribes, and the Office of Surface Mining staff to enforce the Surface Mining Law effectively by improving service to customers, partners, and stakeholders, through open communications, technical training opportunities, technical assistance, and the transfer of technology in order to have better information and skills to make decisions.

<b>Performance Measure</b>	<b>1998 Actual</b>	<b>1999 Plan</b>	<b>1999Actual</b>
Number of students trained by the National Technical Training Program	819 students	900 students	997 students

One of the Office of Surface Mining’s most visible service initiatives is the National Technical Training Program, a cooperative effort with the states and tribes that addresses regulatory and reclamation requirements. The goal during this period of limited budgets is to maintain a level annual workload represented by the number of students trained annually. In 1999, the increase in the number of students trained reflected the following: 1) classes being shifted from both the 1998 and 2000 schedules to 1999; 2) a special session of the Expert Witness course in response to current events; and 3) cost savings that enabled more students to attend the classes.



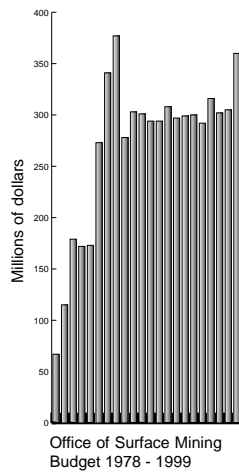


This reclaimed Kentucky coal mine is difficult to distinguish from the surrounding countryside. The site was mined and reclaimed by a small, family-owned company that operates under the Small Operator Assistance Program. During mining, special care prevented any off-site impacts, and by working closely with the landowners, the ponds and other features became an integral part of the long-term agricultural postmining land use. This is mining and reclamation as envisioned by the architects of the Surface Mining Law, and it's an outstanding model for all active mine operations in the country.



FINANCIAL  
MANAGEMENT

and Executive  
Direction and  
Administration



▲ Small cemeteries are common on mine sites and the Surface Mining Law protects them. At this Kentucky mine site, the cemetery was mined around and when reclamation was complete it was integrated into the landscape just as it was before mining.

Office of Surface Mining financial management consists of three program activities: fee compliance, grants management, and revenue management. Fee compliance covers the collection, accounting, audit, and investment of abandoned mine reclamation fees. Grants management includes accounting for and reporting on grants awarded to states and tribes for Abandoned Mine Land and regulatory purposes. Revenue management involves the accounting and collection of revenue other than reclamation fees, such as civil penalties assessed under federal citations of mining violations and federal performance bonds forfeited by coal mine permittees.

**Budget and Appropriations**

The Omnibus Appropriations Act of 1999 (Public Law 105-277) appropriated \$93,078,000 from the General Fund for the Office of Surface Mining's regulation and technology activities (\$1,859,000 less than 1998). In addition, \$185,416,000 was made available for obligation from the Abandoned Mine Reclamation Fund (\$7,792,000 more than 1998). Public Law 106-51 rescinded \$45,500 and \$24,500 from the Regulation/Technology and the Abandoned Mine Land appropriations respectively for the purpose of funding the Emergency Steel Loan Guarantee and Emergency Oil and Gas Guaranteed Loan Act of 1999.

The 1999 Regulation and Technology appropriation included the following provisions:

- Where the Office of Surface Mining is the regulatory authority, proceeds of performance bonds forfeited under Section 509 of the Surface Mining Law can be used to reclaim lands where the mine operator did not meet all the requirements of the Law or

permit. In 1999, six performance bond forfeitures resulted in revenue collections of \$241,000. Obligations of prior- and current-year bond forfeitures amounted to \$35,600 in 1999.

- Federal civil penalties and related interest collected under Section 518 of the Surface Mining Law can be used to reclaim coal mine lands abandoned after August 3, 1977. In 1999, \$99,401 was deposited into the Civil Penalty Fund for reclamation purposes. (An additional \$4,486 was collected in administrative and penalty charges which the Office of Surface Mining is not authorized to use.) During 1999, \$80,242 from this fund was obligated for post-Surface Mining Law reclamation projects.

- State regulatory program grants were funded at \$51,156,000 (\$980,000 more than 1998). These grants are used to fund state regulatory program payroll and other operational costs.

The Abandoned Mine Land appropriation included the following provisions:

- Beginning in 1999, the Office of Surface Mining received authorization to collect and expend donations to support projects under the Appalachian Clean Streams and Western Mine Land Restoration Partnerships Initiatives pursuant to 30 C.F.R. 1231.
- State reclamation grants were funded at \$144,802,677 (\$2,450,677 more than 1998).
- Expenditures up to \$7,000,000 were authorized for supplemental grants to states for the reclamation of abandoned sites with acid mine drainage

TABLE 11: APPROPRIATIONS\*

	1999	1998
<b>Regulation &amp; Technology</b>		
Environmental Restoration	\$ 144,000	\$ 144,000
Environmental Protection	70,440,000	69,159,000
Regulatory Grants	[51,156,000]	[50,176,000]
Technology Dev. & Transfer	11,050,000	11,211,000
Financial Management	511,000	501,000
Executive Dir. & Admin	10,887,500	10,759,000
Executive Direction	[2,172,525]	[2,215,000]
Administrative Support	[3,644,975]	[3,683,000]
General Services	[5,070,000]	[4,861,000]
Subtotal:	\$93,032,500	\$91,774,000
<b>Abandoned Mine Reclamation Fund</b>		
Environmental Restoration	\$167,716,784	\$166,107,000
Reclamation Grants	[144,802,677]	[142,352,000]
Environmental Protection	0	0
Technology Dev. & Transfer	5,896,216	3,225,000
Financial Management	5,860,000	5,736,000
Executive Dir. & Admin	5,918,500	5,719,000
Executive Direction	[1,188,935]	[1,177,000]
Administrative Support	[1,997,565]	[1,959,000]
General Services	[2,732,000]	[2,583,000]
Subtotal:	\$185,391,500	\$180,787,000
Transfer **	\$81,766,325	\$32,561,520
<b>Total</b>	<b>\$ 360,190,325</b>	<b>\$ 305,122,520</b>

\* The appropriation for both years include reprogramming and rescissions.

\*\* United Mine Workers of America Combined Benefit Fund

through the Appalachian Clean Streams Initiative.

- Up to \$18,000,000 was authorized for the emergency program associated with Section 410 of the Surface Mining Law of which no more than 25 percent shall be used for emergency reclamation projects in any one state.
- Federally-administered emergency reclamation project expenditures were limited to \$11,000,000 which was the same amount appropriated in 1998.
- Prior-year unobligated funds appropriated for emergency reclamation programs were not subject to the 25 percent

► Located about 50 miles northeast of Austin, Texas this reclaimed mine land was planted with thousands of tree and shrub seedlings. Today, it is already a diverse wildlife habitat and in the years to come, the native vegetation will continue to grow and enhance this reclaimed landscape.

limitation per state and may be used without fiscal year limitation for emergency projects.

- Up to 20 percent of the funds recovered from delinquent debts were authorized for contracting the collection of other delinquent debts. In 1999, the Office of Surface Mining spent \$112,254 to collect \$6,498,836 in delinquent Abandoned Mine Land fees and audit bills and \$38,054 to collect \$65,637 in Civil Penalty debt.

All appropriations provisions were met.

### Abandoned Mine Land Fund Management

Fees of 35 cents per ton of surface mined coal, 15 cents per ton of coal mined underground, and 10 cents per ton of lignite are collected from mining operations. The fees are deposited in the Abandoned Mine Reclamation Fund, which is used to pay the

costs of abandoned mine land reclamation projects. The fund consists of fees, contributions, late payment interest, penalties, administrative charges, and interest earned on investment of the fund's principal. From January 30, 1978, when the first fees were paid, through September 30, 1999, the fund collections totaled \$5,456,282,203. For the same period Fund appropriations totaled \$4,012,394,974.

Expenditures from the Fund are made through the regular budgetary and appropriation process. The Surface Mining Law specifies that 50 percent of the reclama-

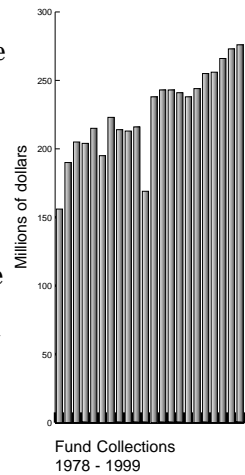


TABLE 12: 1999 ABANDONED MINE LAND FEE COLLECTIONS AND FUNDING

State/Tribe	Collections	State Share Distribution <sup>2</sup>	Federal Share Distribution <sup>2</sup>	Emergency Distribution <sup>2</sup>	Clean Stream Distribution <sup>2</sup>	Total Distribution <sup>2</sup>
Alabama	\$4,210,789	\$1,510,499	\$1,511,958	\$425,000	\$263,804	\$3,711,261
Alaska	456,905	155,623	1,344,377	25,000	0	1,525,000
Arkansas	14,091	0	1,500,000	13,000	0	1,513,000
Colorado	6,386,700	1,536,904	736,851	0	0	2,273,755
Illinois	6,673,120	2,689,379	5,601,270	621,000	639,235	9,550,884
Indiana	11,597,528	2,938,688	1,823,598	293,344	292,416	5,348,046
Iowa	0	5,591	1,494,409	0	165,644	1,665,644
Kansas	127,011	41,333	1,458,667	460,000	0	1,960,000
Kentucky	32,379,713	10,165,843	5,489,599	0	628,976	16,284,418
Louisiana	300,992	94,912	0	0	0	94,912
Maryland	723,357	205,622	1,294,378	0	157,657	1,657,657
Missouri	115,965	114,985	1,385,015	49,771	164,785	1,714,556
Montana	12,236,164	3,490,344	0	125,000	0	3,615,344
New Mexico	6,257,183	1,424,983	179,139	0	0	1,604,122
North Dakota	3,075,543	880,704	619,296	50,000	0	1,550,000
Ohio	6,097,469	2,032,967	3,433,651	2,100,000	440,230	8,006,848
Oklahoma	506,187	175,615	1,324,385	40,000	0	1,540,000
Pennsylvania	30,116,282	3,937,776	18,106,085	0	1,787,239	23,831,100
Tennessee	737,607	0	0	0	0	0
Texas	5,370,949	1,555,907	0	0	0	1,555,907
Utah	3,892,440	1,028,768	491,549	0	0	1,520,317
Virginia	6,268,901	2,133,560	1,684,930	1,000,000	279,687	5,098,177
Washington	1,518,208	0	0	0	0	0
West Virginia <sup>3</sup>	19,123,551	9,725,866	10,405,943	1,071,885	1,080,327	22,284,021
Wyoming	108,468,449	23,815,989	0	0	0	23,815,989
Crow Tribe	1,907,130	523,831	0	0	0	523,831
Hopi Tribe	1,227,137	400,444	0	0	0	400,444
Navajo Tribe	6,791,861	2,606,767	0	0	0	2,606,767
<b>Total</b>	<b>\$276,581,232<sup>1</sup></b>	<b>\$73,192,900</b>	<b>\$59,885,100</b>	<b>\$6,274,000</b>	<b>\$5,900,000</b>	<b>\$145,252,000</b>

1. The collections total also does not include federal collections of \$93,174 paid to OSM which are not attributable to any state or tribal entity.
2. The term "Distribution" is now used instead of "Allocation." Allocation refers to the "pooling" of monies collected for the AML Fund. State and Federal share distribution amounts are based on formulas and parameters provided annually by the Assistant Director, Program Support. The emergency program distribution amounts are based on estimates provided by the states and approved by the Deputy Director.
3. The State of West Virginia received an additional \$3,565,872 from an account that was recovered from prior years and carried forward for future emergency needs. West Virginia's total emergency funding is \$4,637,757.

tion fees collected in each state with an approved reclamation program, or within Indian lands where the tribe has an approved reclamation program, are to be allocated to that state or tribe. This 50 percent is designated as the state or tribal share of the fund. The remaining 50 percent (the federal share) is used by the Office of Surface Mining to complete high priority and emergency projects under its Federal Reclamation Program, to fund the Small Operator Assistance Program, to fund additional projects directly through state reclamation programs, and to pay collection, audit, and administrative costs. In 1991, at the direction

of Congress, a formula to distribute federal-share money to the state reclamation programs was established based on historic coal production. Table 12 shows collections and funding by states.

The Abandoned Mine Reclamation Act of 1990 (Public Law 101-508) extended fee collection authority through September 30, 1995; the Energy Policy Act of 1992 (Public Law 102-486) further extended fee collection authority until September 30, 2004, after which the fee will be established at a rate to provide funds for the United Mine Workers Combined Benefit Fund.

In 1992, under authority of Public Law 101-508, the Office of Surface Mining began investing unappropriated abandoned mine land funds. To prevent the reduction of principal, the Office of Surface Mining invests only in treasury bills, the safest treasury securities offered.

Beginning in 1996, under a requirement of the Energy Policy Act of 1992 (Public Law 102-486) the Office of Surface Mining began an annual transfer from the investment interest earned to the United Mine Workers of America Combined Benefit Fund. This cash transfer is used to pay for anticipated health benefits of mine workers and their beneficiaries. If, after a typical two-year cycle, the amount of the transfer was greater or less than the actual health benefits, an adjustment is made to the next transfer. A June 1998, U.S. Supreme Court decision effectively increased the number of beneficiaries covered by the United Mine Workers of America Combined Benefit Fund. The

TABLE 13: ABANDONED MINE LAND FUND STATUS

	CASH BASIS	
	1999	1998
Balance, Start of Year	\$1,638,718,075	\$1,526,022,407
<i>Plus</i>		
Transfer from R & T Account - PL 105-174	\$0	\$3,163,000
Fees, debts, and interest collected	276,674,406	273,038,560
Interest earned on investments	82,830,155	67,031,208
Total Earnings	\$359,504,561	\$343,232,768
<i>Less</i>		
Disbursements	\$180,530,354	\$197,975,580
Transfers to the United Mine Workers	81,766,325	32,561,520
Total Disbursements and Transfers	\$262,296,679	\$230,537,100
Balance, End of the Year	\$1,735,925,957	\$1,638,718,075

TABLE 14: 1999 COLLECTIONS MANAGEMENT

Category	Collections	Balance Owed
AML Fees	\$276,674,406	\$17,507,387
Civil Penalties	103,887	11,372,058
Administrative	0	0
<b>Total</b>	<b>\$276,778,293</b>	<b>\$28,879,445</b>

1999 annual payment was \$47.5 million for 19,663 beneficiaries. An additional \$34.2 million prior-year adjustment resulted in a total payment of \$81.8 million. Table 13 summarizes investments for the past two years.

The Surface Mining Law requires active coal mining companies to report coal tonnage and pay abandoned mine reclamation fees. The Office of Surface Mining ensures mine operators fully comply with the fee provisions by

collecting Abandoned Mine Land fees from coal companies through voluntary reporting, audit, and debt collection. The primary goal for fee compliance is to achieve a high rate of compliance. In 1999 the overall compliance rate was 99 percent, which resulted in \$276.6 million in revenue for the Fund. To achieve this rate of success, it is necessary to:

- track all mines that have the potential of producing coal,
- provide coal mine operators with the information and assistance needed to comply, and
- conduct a comprehensive audit program.

Experience has shown that helping the industry achieve compliance reduces the need for additional regulatory resources. To assist in compliance, the Office of Surface Mining mails preprinted forms to all active companies and provides guidance by phone and mail. Because of factors beyond the Office of Surface Mining's control, such as company financial difficulties and errors, some non-payment and non-reporting will probably always be present. When such instances of non-compliance are found, auditors and collection staff explain each issue and how similar occurrences can be avoided in the future. The high compliance rate can be attributed to this proactive cooperative approach, and the overall efficiency of the collection and audit activities. The last Inspector General report on the fee compliance program concluded that the program, including both fee collection and audit activities, was operated efficiently and effectively.

▼ This is an important archaeological site where the James Sawyers Wagon Road Expedition camped and dug rifle pits to protect against a possible raid by Sioux and Northern Cheyenne Tribes. The company enhanced required mitigation by involving the public, providing education, and working with the local museum. The required process achieved mitigation and enhanced public awareness.



When unpaid reclamation fees are identified, or civil penalties are assessed for mine site violations, the Office of Surface Mining takes appropriate collection actions. Delinquent debt information is retained in the Applicant Violator System. When necessary, and after all of the agency debt collection avenues have been exhausted, delinquent accounts are referred to the Department of Treasury for additional collection efforts, or to the Interior Department's Solicitor's Office for appropriate legal action or bankruptcy proceedings. Of the \$28.9 million 1999 year-end balance, \$14.5 million (50 percent) is principal. The remainder represents interest, late payment penalties, and administrative charges on unpaid balances. The Office of Surface Mining has referred \$26.2 million of this amount to the Office of the Solicitor for legal action, \$8.6 million under bankruptcies, and \$17.6 million for litigation.



▲ The company was dedicated to preserving the site's historical integrity. Public access to archaeological excavations is rarely available. However, at this site local citizens participated in the work. Today, the artifacts are on display at the local museum.

Another \$1.4 million has been referred to the Department of Treasury for legal action, and the remaining \$1.3 million is being pursued internally by the Office of Surface Mining. Table 14 shows 1999 collections and year-end debt balances.

### Financial Systems: Electronic Improvements

The Office of Surface Mining is pursuing the following initiatives to improve its financial and administrative management. Added improvements in 1999 include:

#### ■ Financial Statements/ Accounting Standards

The managerial cost accounting standard has been fully implemented. Cost accounting reports are being produced, compilation of the financial statements has been streamlined, and a system of automated checks to simplify the quality assurance process created.

#### ■ Financial Management Systems

In December 1998, a sub-system for processing the integrated

credit card centrally-billed transactions was implemented. The cardholder inputs transactions which are matched against the invoice download from the Bank of America to allow next-day payment of the invoice. All non-matched charges are automatically paid to default accounts. The module which is fully integrated with the administrative accounting system allows for up to ten default accounts and permits the cardholder to adjust the accounting information at anytime. Reports produced by the system include showing all the purchases by office, purchase by cardholder, and detailed accounting information by purchase and cardholder.

The Management Accounting and Performance System (MAPS) was enhanced during 1999. This system is an online reporting tool that utilizes the administrative accounting system as a data source. It provides decision makers with information regarding the status of funds, labor and payroll, grant, and personnel management information. The 1999 work involved enhancing quality controls, system availability, and increasing the user base. In addition, a report library was developed to ease data access to recurring information requests. During 2000, Office of Surface Mining plans to use the system to generate quarterly Government Performance and Results Act/managerial cost accounting reports. Other planned enhancements include increasing the number of "canned" reports in the report library and enlarging the physical size of the data warehouse to accommodate future data.

#### ■ Electronic Data

Interchange Pilot Project  
A pilot project is being developed for the electronic transmission of information on the OSM-1 form (Coal Reclamation Fee Report). This information is currently

submitted on paper by all reporting coal companies. The information provided on the OSM-1 form determines the quarterly Abandoned Mine Land reclamation fees that are due.

Information obtained from coal companies participating in the pilot project will not differ in content from what is currently collected. The intent of the pilot project is to reduce reliance on paper, increase efficiency, and give coal operators a convenient electronic alternative for reporting OSM-1 information. Work began on a prototype in 1999 and the pilot project will begin in 2000.

In addition, use of a credit card collection program will be reviewed in 2000. This may increase customer satisfaction by allowing a more convenient method of payment.

#### ■ Payments and Business Methods

Prompt Payment Act interest was reduced from 1.2% at the start of 1999 to a cumulative rate of .95% in June 1999.

An aggressive policy to comply with the Electronic Funds Transfer provisions of the Debt Collection Improvement Act of 1996 was implemented and during 1999, vendor compliance increased from 62.6% to 81.9% and travel (misc.) payments from 93.0% to 99.5%.

### Audited Financial Statements

Since 1990, the Office of Surface Mining has prepared an Annual Financial Statement after the close of each fiscal year, as required by the Chief Financial Officers Act of 1990 (Public Law 101-576). The statements are audited by the Department of the Interior's Office of Inspector General to ensure that financial results are fairly stated and conform with

► Abandoned mine openings, such as this one in Maryland, are extremely dangerous. This example is typical of openings where underground coal mining has taken place. In addition to the dangers, acid mine drainage flows from many of these openings.

generally-accepted accounting principles for federal agencies. The 1999 opinion is on page 71.

### Information Technology

The Office of Surface Mining uses information technology to be more efficient, support program functions, and provide better information access for other federal agencies, coal industry, states, tribes, and the public. A telecommunications network is maintained to electronically transmit and receive information from sources both inside and outside of the agency.

During 1999, improved safeguards and increased security of automated systems has been implemented. With increased security threats from both internal and external sources, a security directive was developed and risk assessments conducted for automated systems. This ensures that any security weaknesses in automated systems are identified and removed.

The expansion and improvement of the Wide Area Network continued. This expanded network provides improved telecommunications support to accommodate the increased volume of electronic transactions. Both public and private sources connecting to the Office of Surface Mining via the Internet benefit from the increased processing speed of the expanded network.

Conversion of all mission critical automated systems for the Year 2000 systems compliance has been completed. This major agency-wide project has ensured that all mission critical automated systems will process correctly at Year 2000 and beyond.



### Human Resources Management

In support of the recruitment and merit staffing program, an automated recruitment, rating, and ranking system was purchased. This system is designed to dramatically reduce the time and resources needed to determine highly-qualified applicants for virtually any position. The system will be Web based allowing applicants to apply on line, and will provide a list of eligible candidates almost immediately after a vacancy has closed. The system will also provide historical information concerning applicant pools and responses so that successful and unsuccessful recruitment efforts can be measured.

“HRManager” was implemented during 1999 to help create job descriptions, classify positions, do job analysis, and create crediting plans. Use of this software is expected to reduce the time it takes to create a position description by about 50 percent and the

time for job analysis by about 75 percent.

In 1998 an electronic Official Personnel Folder was developed. During 1999, it was extended so employees, using the wide area network, could review their personnel data from their workstations.

As part of the Succession Planning process a national survey of all employees was completed to determine workload and workforce analysis. Participation in the survey exceeded 95 percent. Using this data, projected retirement dates, the skill levels of current employees, the skills required for future employees, and workload requirements for the present and future will be determined.

Personnel policy guidance to the Bureau of Indian Affairs continued in 1999, as well as operational services to the Washington, D.C. offices.

A great number of retirement calculations were completed and counseling sessions held as employees made their decisions on whether to switch from Civil Service Retirement System (CSRS) to Federal Employees Retirement System (FERS) during the Open Season. In the end, four employees decided to switch to the Federal Employees Retirement System. Also during the year, 660 records were reviewed for retirement coding errors. Three errors were identified and resolved.

During 1999, Quality of Worklife Seminars on income tax preparation, eldercare, latch-key kids, win-win communication, conflict

resolution, and stress management were presented. As part of the Interior Department's 150<sup>th</sup> year anniversary, the Unsung Hero Awards program was successfully begun.

Recruitment efforts during 1999 were very successful in providing a diverse pool of applicants from which minorities and women could be chosen. The result was improvements in all areas of minority recruitment, retention, and promotion. In addition, as part of the summer hire program the first two persons with disabilities were hired. Historically black colleges and universities were aggressively contacted for applications, and the Federal Employee

Pay Comparability Act was used to retain and recruit high quality persons.

**Monitoring Potential Conflicts of Interest**  
Sections 201(f) and 517(g) of the Surface Mining Law prohibits any federal or state employee "performing any function or duty under this Act" from having "direct or indirect financial interests in underground or surface coal mining operations." The Office of Surface Mining monitors compliance to prevent conflicts with an employee's official duties. In 1998<sup>4</sup>, 648 Office of Surface Mining, 1,211 other federal, and 2,873 state employees filed financial disclosure statements. Four violations were identified and resolved by the Head of the State regulatory authority.

▼ It's easy to question if this was ever a coal mine. At this Kentucky site the operator mined and reclaimed this small farm and within a short time it was returned to the premining landuse without any environmental impact. Today, reclamation such as this is becoming common practice--a distinct difference from the years before the Surface Mining Law was passed.



### Labor-Management Partnership

The Office of Surface Mining maintains two labor-management partnerships, created in response to Executive Order 1287. The first was established in 1994 at Washington, D.C., headquarters with the National Federation of Federal Employees, Local 1993. Since June 1995, Local 2148 of the National Federation of Federal Employees and the Albuquerque Field Office have also maintained a partnership.

There are three other exclusive recognitions, although partnerships have not yet been established. They are located at the Casper Field Office (Wyoming); Lexington Field Office (Kentucky); and Division of Compliance Management-Region II (Lexington, Kentucky). The Office of Surface Mining, under a Memorandum of Agreement with the Bureau of Indian Affairs, continues to provide labor

4. 1998 data are reported here, 1999 federal statistics will not be available until January 2000, and state statistics until February 2000.



▲ All forms of coal mining are regulated under the Surface Mining Law. This Missouri dredge operation, although very unlike the typical surface mine, must prevent environmental damage during mining and reclaim the site when the operation is complete. The mine operator at this site is recovering coal that was considered refuse at a near-by coal washing facility.

relations support throughout the Bureau of Indian Affairs. On June 11, 1999 there was an election to determine whether employees would continue to be represented by the National Federation of Federal Employees or the Indian Education Federation. The Indian Education Federation won the election. The National Federation of Federal Employees filed exceptions to the election resulting in an investigation by the Federal Labor Relations Authority. Therefore, the National Federation of Federal Employees will continue to be the exclusive representative until a decision is reached by the Federal Labor Relations Authority.

### Equal Opportunity

The Office of Surface Mining is in its second year of implementing its Strategic Plan for Improving Diversity. The Diversity Plan is designed to address the recruitment of women, minorities, persons with disabilities, reasonable accommodation issues, employee development, retention, zero tolerance of discrimination, quality of work life, management training and accountability. Although, there is much work still to be done in attaining a diverse workforce, 1999 was another successful year.

The Office of Surface Mining hired 36 new employees during 1999. These new employees included 20 (55.5%) women and 10

(27.2%) minorities. However, improving diversity through internal actions resulted in the most significant gains. For example, there were 81 promotions during 1999, women and minorities received 67 (82.7 percent) of the promotions. It is also significant that minorities and women received 15 of the 22 promotions at the GS-13 & 14 grade levels.

This year for the first time, the retention bonus authority was used to retain a highly-productive African American male. Additionally, recruitment and position management procedures were developed that must be followed when recruiting for a vacant position. The procedures allow Personnel and Equal Employment Opportunity staffs to explore, with the manager, the recruitment method most likely to determine the grade level and a diverse applicant pool for each recruitment.

Training was provided in the prevention of Sexual Harassment and Diversity, which included the new guidance in the area of Sexual Orientation.

During 1999, 13 discrimination complaints were filed against the Office of Surface Mining. This was a decrease of two complaints over the previous year and the second consecutive year that the number of complaints filed has decreased. At the end of the year, there were 30 complaints being processed, which include 23 complaints pending hearings by the Equal Opportunity Commission and/or Final Agency Decisions to be issued by the Department of the Interior, Office for Equal Opportunity. The year ended with no backlogged complaints.

► Not all reclaimed mine sites are farmland or forest. This reclaimed Pennsylvania site is now a golf course.



**Goal 4. Better Operations:** Improve the Office of Surface Mining’s operations through a more effective and efficient management of human and fiscal resources to facilitate reclamation of abandoned mine lands in order to protect the environment, people and property, during and after mining.

Performance Measure	1998 Actual	1999 Plan	1999Actual
Abandoned Mine Land fee compliance rate as measured by:			
the percent of permits reporting, and	99.4%	99%	99.6%
the percent of tons accurately reported.	98.0%	99%	99.1%

The fee compliance rate is used as the key measure for this goal because of its significance in the implementation of the Surface Mining Law. The Office of Surface Mining annually collects more than \$270 million into the Abandoned Mine Reclamation Fund, which is used to finance the Abandoned Mine Land Program. Over the years, the coal industry and Office of Surface Mining have gradually improved compliance with the Surface Mining Law’s quarterly tonnage reporting requirements. For 1999, the compliance rate was more than 99 percent. Work will continue with the industry to ensure the companies have a complete understanding of all reclamation fee requirements, and that the high level of compliance is maintained.



**OSM Headquarters**

*Kathleen M. Karpan, Director*  
1951 Constitution Ave., N.W.  
Washington, D.C. 20240  
(202) 208-4006

**Albuquerque Field Office**

(Arizona, California, New Mexico, Navajo Tribe,  
Hopi Tribe, and Ute Tribe)  
*Willis L. Gainer, Director*  
505 Marquette Ave., NW, Suite 1200  
Albuquerque, NM 87102  
(505) 248-5070

**Appalachian Regional  
Coordinating Center**

(Maryland, Ohio)  
*Allen D. Klein, Regional Director*  
Three Parkway Center  
Pittsburgh, PA 15220  
(412) 937-2828

**AVS Lexington Office**

*Earl D. Bandy, Chief*  
2679 Regency Road  
Lexington, KY 40503  
(606) 233-2796

**Appalachia Team**

*John Sefton, Team Leader*  
1405 Greenup Ave., Rm 224  
Ashland, KY 41101  
(606) 324-2828, ext. 19

**Beckley Area Office**

*Jack Nelson, Manager*  
313 Harper Park Dr.  
Beckley, WV 25801  
(304) 255-5265

**Big Stone Gap Field Office**

(Virginia)  
*Robert A. Penn, Director*  
1941 Neeley Road, Suite 201  
Compartment 116  
Big Stone Gap, VA 24219  
(540) 523-0001

**Birmingham Field Office**

(Alabama and Mississippi)  
*Arthur Abbs, Director*  
135 Gemini Circle, Suite 215  
Homewood, AL 35209  
(205) 290-7282, ext. 16

**Casper Field Office**

(Idaho, Montana, North Dakota, South Dakota,  
Wyoming, Crow Tribe, Northern Cheyenne Tribe,  
Cheyenne River Sioux Tribe)  
*Guy Padgett, Director*  
100 East B St., Rm. 2128  
Casper, WY 82601-1918  
(307) 261-6550

**Charleston Field Office**

(West Virginia)  
*Roger W. Calhoun, Director*  
1027 Virginia Street, East  
Charleston, WV 25301  
(304) 347-7162

**Harrisburg Field Office**

(Massachusetts, Michigan, Pennsylvania,  
and Rhode Island)  
*Bob Biggi, Director*  
Harrisburg Transportation Center  
415 Market Street, Suite 3C  
Harrisburg, PA 17101  
(717) 782-4871

**Indianapolis Field Office**

(Indiana and Illinois)  
*Andrew R. Gilmore, Director*  
Milton-Capehart Fed. Bldg.  
575 North Pennsylvania St., Rm 301  
Indianapolis, IN 46204  
(317) 226-6700

**Johnstown Area Office**

*Joe Geissinger, Manager*  
Richland Professional Bldg.  
334 Bloomfield St., Suite 104  
Johnstown, PA 15904  
(814) 533-4223

**Knoxville Field Office**

(Georgia, North Carolina, and Tennessee)  
*George Miller, Director*  
530 South Gay St., Suite 500  
Knoxville, TN 37902  
(423) 545-4103

**Lexington Field Office**

(Kentucky)  
*Bill Kovacic, Director*  
2675 Regency Road  
Lexington, KY 40503-2922  
(606) 233-2894

**London Area Office**

*Patrick Angel, Team Leader*  
P.O. Box 1048  
London, KY 40743  
(606) 878-6440

**Madisonville Area Office**

*Michael Vaughn, Team Leader*  
100 YMCA Drive  
Madisonville, KY 42431  
(270) 825-4500

**Mid-Continent Regional  
Coordinating Center**

(Iowa, Kansas, and Missouri)  
*Rick Seibel, Acting Regional Director*  
Alton Federal Bldg.  
501 Belle Street, Rm 216  
Alton, IL 62002  
(618) 463-6460

**Morgantown Area Office**

*Jack Nelson, Supervisor*  
P.O. Box 886  
Morgantown, WV 26507-0886  
(304) 255-5265

**Olympia Office**

*Glen Waugh, Manager*  
Evergreen Plaza Bldg.  
711 South Capitol Way, Suite 703  
Olympia, WA 98501  
(360) 753-9538

**Pikeville Area Office**

*Patrick Angel, Team Leader*  
Matewan Bank Bldg.  
334 Main Street, Rm. 409  
Pikeville, KY 41501  
(606) 878,6440

**Tulsa Field Office**

(Arkansas, Louisiana, Oklahoma, and Texas)  
*Michael C. Wolfrom, Director*  
5100 E. Skelly Dr., Suite 470  
Tulsa, OK 74135-6548  
(918) 581-6430, Ext. 23

**Western Regional  
Coordinating Center**

(Alaska, Colorado, Utah, Washington,  
and Indian Lands)  
*Brent Wahlquist, Regional Director*  
1999 Broadway, Suite 3320  
Denver, CO 80202  
(303) 844-1401

**Anthracite Team**

*Michael Kuhns, Team Leader*  
Suite 308  
7 North Wilkes-Barre Blvd.  
Wilkes-Barre, PA 18702-5203  
(570) 830-1403

**Alabama**

*Randall C. Johnson, Director*  
Alabama Surface Mining Commission  
P.O. Box 2390  
Jasper, AL 35502-2390  
(205) 221-4130

**Alaska**

*Ed Fogels, Manager*  
Alaska Division of Mining, Land and Water  
3601 C Street, Suite 800  
Anchorage, AK 99503-5935  
(907) 269-8600

**Arkansas**

*Floyd G. Durham, Chief*  
Dept. of Environmental Quality  
P.O. Box 8913  
8001 National Drive  
Little Rock, AR 72219-8913  
(501) 682-0809

**Colorado**

*Michael B. Long, Director*  
Office of Active and Inactive Mines  
Division of Minerals and Geology  
Department of Natural Resources  
1313 Sherman Street, Rm. 215  
Denver, CO 80203  
(303) 866-3567

**Illinois**

*Brent Manning, Director*  
Department of Natural Resources  
524 South Second Street  
Springfield, IL 62701-1787  
(217) 782-6791

**Indiana**

*Larry Macklin, Director*  
Department of Natural Resources  
402 W. Washington St., Rm. W256  
Indianapolis, IN 46204  
(317) 232-4020

**Iowa**

*Kenneth Tow, Chief*  
Department of Agriculture &  
Land Stewardship  
Division of Soil Conservation  
Wallace State Office Building  
Des Moines, IA 50319  
(515) 281-6147

**Kansas**

*Murray J. Balk, Section Chief*  
Surface Mining Section  
Department of Health & Environment  
4033 Parkview Drive  
Frontenac, KS 66763  
(316) 231-8540

**Kentucky**

*James E. Bickford, Secretary*  
Natural Resources and  
Environmental Protection Cabinet  
5th Floor, Capital Plaza  
Frankfort, KY 40601  
(502) 564-3350

**Louisiana**

*Tony Duplechin*  
Department of Natural Resources  
Office of Conservation  
Injection and Mining Division  
P.O. Box 94275  
Baton Rouge, LA 70804-9275  
(504) 342-5528

**Maryland**

*C. Edmon Larrimore, Mining Program  
Manager*  
Department of the Environment  
2500 Broeing Highway  
Baltimore, MD 21224  
(410) 631-8055

**Mississippi**

*S. Cragin Knox, Director*  
Department of Environmental Quality  
2380 Highway 80 West  
P.O. Box 20307  
Jackson, MS 39289-1307  
(601) 961-5500

**Missouri**

*Larry Coen, Director*  
Land Reclamation Program  
Department of Natural Resources  
Jefferson State Office Building  
P.O. Box 176  
Jefferson City, MO 65102  
(573) 751-4041

**Montana**

*Jan Sensibaugh, Administrator*  
Permitting and Compliance Division  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901  
(406) 444-5270

**New Mexico**

*Doug Bland, Director*  
Mining and Minerals Division  
Energy, Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, NM 87505  
(505) 827-5988

**North Dakota**

*Jim Deutsch, Director*  
Reclamation Division  
North Dakota Public Service Commission  
Capitol Building  
Bismarck, ND 58505  
(701) 328-2251

**Ohio**

*Russ Scholl, Acting Chief*  
Division of Mines and Reclamation  
Department of Natural Resources  
1855 Fountain Square, Bldg. H3  
Columbus, Oh 43224  
(614) 265-6633

**Oklahoma**

*Mary Ann Pritchard, Director*  
Oklahoma Department of Mines  
4040 N. Lincoln Blvd., Suite 107  
Oklahoma City, OK 73105

(405) 521-3859

**Pennsylvania**

*Bob Dolence, Deputy Secretary for  
Minerals Resource Management*  
P.O. Box 2063  
Harrisburg, PA 17105-2063  
(717) 783-5338

**Texas**

*Melvin B. Hodgkiss, Director*  
Surface Mining and Reclamation Division  
Railroad Commission of Texas  
P.O. Drawer 12967, Capitol Station  
Austin, TX 78711-2967  
(512) 463-6900

**Utah**

*Lowell P. Braxton, Director*  
Utah Division of Oil, Gas, and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801  
(801) 538-5370

**Virginia**

*O. Gene Dishner, Director*  
Department of Mines, Minerals and Energy  
Ninth Street Office Bldg., 8th Floor  
202 N. 9th Street  
Richmond, VA 23219  
(804) 692-3202

**West Virginia**

*Michael C Castle, Director*  
Division of Environmental Protection  
10 McJunkin Road  
Nitro, West Virginia 25143-2506  
(304) 759-0515

**Wyoming**

*Dennis Hemmer, Director*  
Department of Environmental Quality  
Herschler Bldg., 4th Floor West  
122 West 25th Street  
Cheyenne, WY 82002  
(307) 777-7682

**Crow Tribe**

*Clara Nomee, Chairperson*  
Crow Tribe of Indians  
P.O. Box 159  
Crow Agency, MT 59022  
(406) 638-2601

**Hopi Tribe**

*Norman Honie, Jr., Director*  
Office of Mining and Minerals  
Department of Natural Resources  
P.O. Box 123  
Kykotsmovi, AZ 86039  
(520) 734-2441, ext 217 (Kykotsmovi)  
(520) 714-1879(Flagstaff)

**Navajo Nation**

*Akhtar Zaman, Director*  
Minerals Department  
Division of Natural Resources  
P.O. Box 1910  
Window Rock, AZ 86515  
(520) 871-6587

**Northern Cheyenne**

*Jason Whiteman, Director*  
Department of Natural Resources  
P.O. Box 128  
Lame Deer, MT 59043  
(406) 477-6503

**Alabama**

*Bill Guyette, Deputy Administrator*  
State Programs Division  
Department of Industrial Relations  
649 Monroe Street  
Montgomery, AL 36131  
(334) 242-8265

**Alaska**

*Brian McMillian, AML Prog. Coordinator*  
Division of Mining  
3601 C Street, Suite 800  
Anchorage, AK 99503-5935  
(907) 269-8625

**Arkansas**

*Wayne Van Buren, Supervisor Environmental Quality*  
Dept. of Pollution Control and Ecology  
Russellville Field Office  
1220 West 2nd Street  
Russellville, AR 72801  
(501) 968-7339

**Colorado**

*Michael Long, Director*  
Office of Active & Inactive Mines  
Department of Natural Resources  
Division of Minerals and Geology  
1313 Sherman Street, Rm. 215  
Denver, CO 80203  
(303) 866-3567

**Illinois**

*Al Clayborne, Manager*  
Abandoned Mine Land Reclamation Div.  
Office of Mines and Minerals  
Department of Natural Resources  
524 South Second Street  
Springfield, IL 62701-1787  
(217) 782-0588

**Indiana**

*John Allen, Assistant Director-Restoration*  
Department of Natural Resources  
Division of Reclamation  
R.R. 2, Box 129  
Jasonville, IN 47438-9517  
(812) 665-2207

**Iowa**

*Erica Berrier, AML Coordinator*  
Division of Soil Conservation  
Dept. of Agriculture and Land Stewardship  
Wallace State Office Building  
Des Moines, IA 50319  
(515) 281-5347

**Kansas**

*Murray J. Balk, Mining Section Chief*  
Surface Mining Section  
Department of Health & Environment  
4033 Parkview Drive  
Frontenac, KS 66763  
(316) 231-8540

**Kentucky**

*Steve Hohmann, Director*  
Division of Abandoned Mine Lands  
Department of Surface Mining  
Reclamation and Enforcement  
2521 Lamrenebury Rd  
Frankfort, KY 40601  
(502) 564-2141

**Louisiana**

*Tony Duplechin*  
Dept. of Natural Resources  
Office of Conservation  
Injection and Mining Division  
P.O. Box 94275  
Baton Rouge, LA 70804-9275  
(504) 342-5528

**Maryland**

*Fred Bagley, Supervisor*  
Abandoned Mine Lands Section  
Coal Mining Division  
Maryland Dept. of the Environment  
160 S. Water St.  
Frostburg, MD 21532  
(301) 689-6764 Ext. 303

**Missouri**

*Dennis Stinson, Chief*  
AML Section Land Reclamation Program  
Department of Natural Resources  
Division of Environmental Quality  
1738 East Elm Street  
Jefferson City, MO 65101  
(573) 751-4041

**Montana**

*Vic Anderson, Chief*  
Abandoned Mine Reclamation Bureau  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901  
(406) 444-4972

**New Mexico**

*Bob Evetts, AML Program Manager*  
Mining and Minerals Division  
Energy, Minerals & Natural Resources Dept.  
2040 South Pacheco Street  
Santa Fe, NM 87505  
(505) 827-5970 Ext 33

**North Dakota**

*Lou Ogaard, Director*  
AML Division  
North Dakota Public Service Commission  
State Capitol  
Bismarck, ND 58505  
(701) 328-4108

**Ohio**

*Terry Van Offeren, Natural Resources Administrator*  
Division of Mines and Reclamation  
Department of Natural Resources  
1855 Fountain Square, Bldg. H  
Columbus, OH 43224  
(614) 265-1094

**Oklahoma**

*Michael L. Kastl, Program Director*  
AML Program  
Oklahoma Conservation Commission  
2800 N. Lincoln Blvd., Suite 160  
Oklahoma City, OK 73105  
(405) 521-2384

**Pennsylvania**

*Ernest Giovannitti, Director*  
Bureau of Abandoned Mine Reclamation  
Department of Environmental Protection  
P.O. Box 8476  
Harrisburg, PA 17105-8476  
(717) 783-2267

**Texas**

*Melvin B. Hodgkiss, Director*  
Surface Mining and Reclamation Division  
Railroad Commission of Texas  
P.O. Drawer 12967, Capitol Station  
Austin, TX 78711-2967  
(512) 463-7313

**Utah**

*Mark Mesch, Chief*  
Abandoned Mine Reclamation Program  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-1203  
(801) 538-5349

**Virginia**

*Roger L. Williams, AML Manager*  
Division of Mine Land Reclamation  
P.O. Drawer 900  
Big Stone Gap, VA 24219  
(540) 523-8208

**West Virginia**

*John Johnston, Chief*  
Office of Abandoned Mine Lands  
and Reclamation  
Division of Environmental Protection  
10 McJunkin Road  
Nitro, WV 25143-2506  
(304) 759-0521

**Wyoming**

*Evan Green, Administrator*  
AML Program  
Department of Environmental Quality  
Herschler Building - 4th Floor West  
122 West 25th Street  
Cheyenne, WY 82002  
(307) 777-7682

**Crow Tribe**

*Hugh Whiteclay*  
Crow AML Program  
P.O. Box 460  
Crow Agency, MT 59022  
(406) 638-2894

**Hopi Tribe**

*Raymond Tsingine, Manager*  
Abandoned Mine Land Program  
Department of Natural Resources  
The Hopi Tribe  
P.O. Box 123  
Kykotsmovi, AZ 86039  
(520) 734-7145 (Flagstaff)

**Navajo Nation**

*Madelaine Roanhorse, Director*  
Abandoned Mine Land Reclamation Department  
Navajo Nation  
P.O. Box 1875  
Window Rock, AZ 86515  
(520) 871-7593

Photo Credits: Nancy Roberts, page 33; all others, Chuck Meyers, Office of Surface Mining.