

# Office of Surface Mining



## ***We review state regulatory and Abandoned Mine Land programs***

Rick Buckley conducts oversight on the West Virginia programs and is the West Virginia Clean Streams Coordinator. While stationed in Clarksburg, West Virginia, in 1978, he conducted Interim Regulatory Program mine inspections in two West Virginia counties. In 1982, he transferred to Casper, Wyoming, with responsibilities in regulatory program oversight and grant administration for the states of Alaska and North Dakota. In 1985, he transferred to the Columbus, Ohio, Field Office to help with oversight of the Ohio program.

Rick is married and has twin boys, and in his free time he is a soccer coach, oversees operation of the county recycle center, and likes to hunt, fish, and camp with his family.

Rick is an ardent supporter of the Clean Streams Initiative and is quick to identify the Abandoned Mine Lands Fund as an important source of reclamation funding for the expensive acid mine drainage problems caused by pre-1977 mining.



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## ***We support the Clean Streams Initiative***

Jennifer Peterson is a member of the Washington, D.C., Headquarters Acid Mine Drainage Team. She began working for the Office of Surface Mining in August, 1997 as a Presidential Management Intern and is one of the newest staff members. She holds a B. Sci. Degree in Geology-Chemistry and a M. Sci. in Earth Science.

Jennifer is currently investigating options for acid mine drainage abatement projects including both chemical and biological methods. She has already identified many potential sources of funding and has posted them on the Office of Surface Mining web site to help local groups in their search for watershed project funding. Jennifer is also working on the American Heritage Rivers Initiative and will be playing a major role in the development of Abandoned Mine Land Geographic Information Systems during the upcoming year.

Jennifer is personally committed to environmental education and she volunteers as a chemistry and geology guest speaker at grade schools.

We provide Abandoned Mine Land grants to states

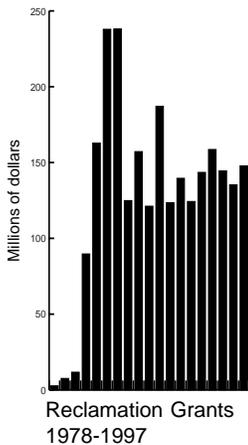
# 1.

# 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 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 presents 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. During 1988, the Navajo and Hopi Tribe programs were approved, and in 1989 the Crow Tribe received approval for its program. In 1997, the states and the tribes received grants totaling \$192,231,995.

Since 1979, when the states began receiving abandoned mine land administrative grants to operate their programs and construction grants to complete reclamation projects, \$2,487,590,309 has been distributed from the fund. Grant amounts for 1997 are shown in Table 1. On-the-ground coal mine reclamation accomplishments resulting from grant funding through 1997 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 plan. The Office of Surface Mining is no longer involved in cumbersome and detailed pre-award scrutiny of state grant applications based on individual projects.

### 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 1997, Alaska, Arkansas, Iowa, Kansas, Maryland, Missouri, North Dakota, Oklahoma, and Utah, were eligible for minimum-level program funding and received such grants during the year. Minimum-level program funding remained at \$1,500,000 for 1997. Eligible states received \$7,686,177 that was deducted from non-minimum program states and tribes for federal-share money in 1997. These amounts bring those nine



We complete emergency reclamation projects



We inventory Abandoned Mine Land problems such as this abandoned underground mine opening

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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. (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

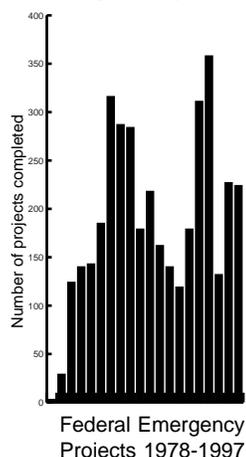
beginning in 1996, and only to reclaim eligible priority 1 and 2 abandoned coal mine land problems. In 1997, 11 states set aside \$7,245,309.

## 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 insure 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 1997, one \$195,137 subsidence insurance grant was issued to Wyoming. Through 1997, the Office of Surface Mining has granted a total of \$11,465,225 to Colorado, Indiana, Kentucky, Ohio, West Virginia, and Wyoming for this purpose.

# 1997 Annual Report

## Emergency Program



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

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 the emergency restoration, reclamation, abatement, control, or prevention of the effects of coal mining practices. In 1997, 402 Abandoned Mine Land emergencies

were abated in 17 states (see Table 2). Most emergencies occurred in Pennsylvania, followed by Kentucky, West Virginia, Kansas, and Ohio. The greatest amount of emergency funding was spent reclaiming landslides in Kentucky and West Virginia, reflecting the large number of landslides and their high abatement cost.

Following passage of the Surface Mining Law, the Office of Surface Mining did all emergency reclamation; however, as state and tribal programs were approved, many states took over emergency programs as well. In 1983, Arkansas and Montana assumed emergency project responsibility, followed by Illinois in 1984. During 1988 and 1989, Kansas, Virginia, and West Virginia took over responsibility for their emergency projects. Alabama assumed emergency responsibility in 1990, followed by Ohio in 1992, Alaska and North Dakota in 1993, and Indiana in

**TABLE 1  
ABANDONED MINE LAND GRANTS\* TO PRIMACY STATES AND INDIAN TRIBES  
1997**

| State/Tribe                | Subsidence Insurance | 10% Program Set-Aside | Administration <sup>3</sup> | Project Costs <sup>4</sup> | Emergency <sup>5</sup> | 1997 Total           | 1996 Total           |
|----------------------------|----------------------|-----------------------|-----------------------------|----------------------------|------------------------|----------------------|----------------------|
| Alabama                    | \$0                  | \$0                   | \$692,606                   | \$3,560,494                | \$400,000              | \$4,653,100          | \$3,972,981          |
| Alaska                     | 0                    | 0                     | 372,490                     | 1,127,510                  | 25,000                 | 1,525,000            | 2,664,992            |
| Arkansas                   | 0                    | 0                     | 260,435                     | 1,567,845                  | 13,000                 | 1,841,280            | 2,035,124            |
| Colorado                   | 0                    | 219,639               | 528,514                     | 1,271,486                  | 0                      | 2,019,639            | 2,168,720            |
| Illinois                   | 0                    | 855,000               | 1,439,526                   | 6,290,731                  | 588,970                | 9,174,227            | 9,476,382            |
| Indiana                    | 0                    | 498,731               | 938,182                     | 3,674,054                  | 247,998                | 5,358,965            | 6,751,594            |
| Iowa                       | 0                    | 0                     | 212,727                     | 1,415,513                  | 0                      | 1,628,240            | 1,554,288            |
| Kansas                     | 0                    | 0                     | 184,444                     | 1,559,970                  | 450,000                | 2,194,414            | 2,020,920            |
| Kentucky                   | 0                    | 0                     | 1,389,738                   | 18,570,201                 | 0                      | 19,959,939           | 16,286,880           |
| Louisiana                  | 0                    | 0                     | 157,249                     | 30,701                     | 0                      | 187,950              | 185,903              |
| Maryland <sup>1</sup>      | 0                    | 1,042,348             | 657,027                     | 1,224,033                  | 0                      | 2,923,408            | 562,682              |
| Missouri                   | 0                    | 64,997                | 505,113                     | 1,813,509                  | 0                      | 2,383,619            | 2,188,935            |
| Montana                    | 0                    | 0                     | 478,047                     | 3,075,259                  | 125,000                | 3,678,306            | 3,787,988            |
| New Mexico                 | 0                    | 136,070               | 1,063,196                   | 436,800                    | 0                      | 1,636,066            | 2,351,496            |
| North Dakota               | 0                    | 116,850               | 222,232                     | 1,581,583                  | 50,000                 | 1,970,665            | 1,817,145            |
| Ohio <sup>1</sup>          | 0                    | 1,000,000             | 2,655,438                   | 4,674,616                  | 2,240,000              | 10,570,054           | 7,980,865            |
| Oklahoma                   | 0                    | 0                     | 290,684                     | 1,249,864                  | 0                      | 1,540,548            | 1,528,801            |
| Pennsylvania <sup>1</sup>  | 0                    | 2,261,674             | 5,151,073                   | 32,590,941                 | 0                      | 40,003,688           | 38,678,331           |
| Texas                      | 0                    | 0                     | 382,694                     | 7,560,024                  | 0                      | 7,942,718            | 439,226              |
| Utah                       | 0                    | 0                     | 279,822                     | 1,450,614                  | 0                      | 1,730,436            | 1,579,831            |
| Virginia <sup>1,2</sup>    | 0                    | 100,000               | 1,440,162                   | 4,059,951                  | 1,598,164              | 7,198,277            | 6,896,075            |
| West Virginia <sup>1</sup> | 0                    | 950,000               | 6,971,272                   | 19,290,422                 | 6,437,575              | 33,649,269           | 38,625,263           |
| Wyoming                    | 195,137              | 0                     | 407,470                     | 21,977,446                 | 0                      | 22,580,053           | 22,148,367           |
| Crow Tribe                 | 0                    | 0                     | 163,443                     | 1,026,949                  | 0                      | 1,190,392            | 1,113,209            |
| Hopi Tribe                 | 0                    | 0                     | 331,812                     | 400,000                    | 0                      | 731,812              | 241,606              |
| Navajo Tribe               | 0                    | 0                     | 693,758                     | 3,266,172                  | 0                      | 3,959,930            | 2,633,132            |
| <b>Total</b>               | <b>\$195,137</b>     | <b>\$7,245,309</b>    | <b>\$27,869,154</b>         | <b>\$144,746,688</b>       | <b>\$12,175,707</b>    | <b>\$192,231,995</b> | <b>\$179,690,736</b> |

\* Funding for these grants is derived from the 1997 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 \$164,612 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 breakouts, but rather list all costs associated with a construction project as a project cost. This category contains water supply project costs plus \$3,575,000 in Appalachian Clean Streams Initiative funds.

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

# Office of Surface Mining

**TABLE 2  
EMERGENCY RECLAMATION PROJECTS**

|                         | 1997 Projects |            | 1978-1996 Projects |              | Total        |
|-------------------------|---------------|------------|--------------------|--------------|--------------|
|                         | Federal       | State      | Federal            | State        |              |
| Alabama                 | 0             | 13         | 10                 | 15           | 38           |
| Arkansas                | 0             | 0          | 1                  | 6            | 7            |
| California              | 0             | 0          | 3                  | 0            | 3            |
| Colorado                | 1             | 0          | 90                 | 0            | 91           |
| Illinois                | 0             | 10         | 51                 | 167          | 228          |
| Indiana                 | 0             | 15         | 94                 | 42           | 151          |
| Iowa                    | 3             | 0          | 15                 | 0            | 18           |
| Kansas                  | 0             | 41         | 270                | 339          | 650          |
| Kentucky                | 58            | 0          | 621                | 0            | 679          |
| Maryland                | 3             | 0          | 11                 | 0            | 14           |
| Michigan                | 0             | 0          | 9                  | 0            | 9            |
| Missouri                | 0             | 0          | 6                  | 0            | 6            |
| Montana                 | 0             | 0          | 7                  | 11           | 18           |
| Navajo Tribe            | 0             | 0          | 6                  | 0            | 6            |
| New Mexico              | 0             | 0          | 15                 | 0            | 15           |
| North Dakota            | 0             | 2          | 15                 | 3            | 20           |
| Northern Cheyenne Tribe | 0             | 0          | 2                  | 0            | 2            |
| Ohio                    | 0             | 33         | 190                | 113          | 336          |
| Oklahoma                | 1             | 0          | 43                 | 0            | 44           |
| Pennsylvania            | 153           | 0          | 1,511              | 0            | 1,664        |
| Rhode Island            | 0             | 0          | 1                  | 0            | 1            |
| Southern Ute Tribe      | 0             | 0          | 1                  | 0            | 1            |
| Tennessee               | 1             | 0          | 11                 | 0            | 12           |
| Texas                   | 1             | 0          | 5                  | 0            | 6            |
| Virginia                | 0             | 11         | 30                 | 53           | 94           |
| Washington              | 3             | 0          | 38                 | 0            | 41           |
| West Virginia           | 0             | 53         | 179                | 372          | 604          |
| Wyoming                 | 0             | 0          | 38                 | 0            | 38           |
| <b>Total</b>            | <b>224</b>    | <b>178</b> | <b>3,273</b>       | <b>1,121</b> | <b>4,796</b> |

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1994. In 1989, the Office of Surface Mining established a policy that provided federal share funds (in addition to formula-based allocations) to states and tribes with emergency programs.

The Office of Surface Mining spent \$18.4 million on emergency reclamation projects in 1997. States spent \$8 million on emergency reclamation projects in 1997.

Of the 511 potential emergencies referred by Office of Surface Mining field offices, 212 resulted in a declaration of emergency, 58 were determined to be not of an emergency nature, 196 were considered not related to coal mining or were reclaimed by the landowner, and 45 were still under investigation at the close of the year on September 30, 1997. Non-emergency mining-related complaints were referred to the states for consideration as high-priority abandoned mine land grant projects.

Table 3 summarizes Office of Surface Mining Abandoned Mine Land reclamation project obligations.

## 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 30 CFR 870.5 as “a condition that could reasonably be expected to cause substantial harm to persons, property, or the environment and to which persons or improvements on real property are currently exposed.”

Until 1980, when states and Indian tribes began to receive approval of their abandoned mine land programs, all reclamation was administered by the Office of Surface Mining. However, as state and tribal programs were approved and the states and tribes assumed responsibility for correcting abandoned mine land problems, the Office of Surface Mining has greatly reduced its direct participation in the non-emergency portion of the program and during 1997 initiated seven non-emergency projects in Georgia, Kentucky, Michigan, Tennessee, and Washington. Table 4 summarizes emergency and non-emergency abandoned coal mine reclamation project accomplishments through 1997.

The Abandoned Mine Land Fund also is used to reclaim some 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 abandoned mine land problems. Non-coal reclamation project accomplishments are included in Table 4.

## Post-Surface Mining Law Reclamation

As authorized in the 1997 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 1997, the Office of Surface Mining funded seven reclamation projects costing a total of \$512,860 in Colorado, Georgia, Kentucky, and Virginia. An additional \$77,039 in unobligated funds will be carried over for use in 1998 reclamation projects.



We collect reclamation fees on coal extracted at all active mines

# 1997 Annual Report

**TABLE 3  
FEDERAL RECLAMATION PROGRAM PROJECTS  
1997 OBLIGATIONS**

|                            | Emergency          | High Priority      | Total<br>1978-96*    | Total<br>Emergency<br>Prior Year Adj<br>in<br>1997* | Total High<br>Priority<br>Prior Year<br>Adj in<br>1997* | Total 1978-97        |
|----------------------------|--------------------|--------------------|----------------------|---|---|----------------------|
| Alabama                    | \$0                | \$0                | \$13,934,015         | \$0   | \$0   | \$13,934,015         |
| Alaska                     | 0                  | 0                  | 194,638              | 0   | 0   | 194,638              |
| Arkansas                   | 0                  | 0                  | 84,904               | 0   | 0   | 84,904               |
| California                 | 0                  | 0                  | 1,100,059            | 0   | 186   | 1,100,245            |
| Colorado                   | 17,774             | 0                  | 1,898,612            | (1,388)   | 0   | 1,914,998            |
| Georgia                    | 0                  | 236,339            | 3,122,212            | 0   | 6,769   | 3,365,320            |
| Illinois                   | 0                  | 0                  | 5,376,749            | 0   | 0   | 5,376,749            |
| Indiana                    | 0                  | 0                  | 4,032,023            | 0   | 0   | 4,032,023            |
| Iowa                       | 73,765             | 0                  | 1,095,205            | 0   | 0   | 1,168,970            |
| Kansas                     | 0                  | 0                  | 5,094,172            | 0   | 0   | 5,094,172            |
| Kentucky                   | 5,912,246          | 100,000            | 84,090,742           | (314,278)   | 0   | 89,788,710           |
| Maryland                   | 49,845             | 0                  | 2,667,608            | 0   | 0   | 2,717,453            |
| Michigan                   | 0                  | 253,985            | 2,057,254            | 0   | 0   | 2,311,239            |
| Missouri                   | 0                  | 0                  | 8,015,909            | 0   | 0   | 8,015,909            |
| Montana                    | 0                  | 0                  | 729,058              | 0   | 0   | 729,058              |
| New Mexico                 | 0                  | 0                  | 2,364,696            | 0   | 0   | 2,364,696            |
| North Carolina             | 0                  | 0                  | 205,407              | 0   | 0   | 205,407              |
| North Dakota               | 0                  | 0                  | 1,723,933            | 0   | 0   | 1,723,933            |
| Ohio                       | 0                  | 0                  | 18,410,967           | (115,668)   | 0   | 18,295,299           |
| Oklahoma                   | 1,994              | 0                  | 1,215,670            | 0   | 0   | 1,217,664            |
| Oregon                     | 0                  | 0                  | 42,275               | 0   | 0   | 42,275               |
| Pennsylvania               | 3,491,912          | 0                  | 94,296,434           | (158,759)   | 0   | 97,629,587           |
| Rhode Island               | 0                  | 0                  | 556,229              | 0   | 0   | 556,229              |
| South Dakota               | 0                  | 0                  | 27,255               | 0   | 0   | 27,255               |
| Tennessee                  | 315,330            | 1,469,043          | 17,857,845           | 0   | (18,451)  | 19,623,767           |
| Texas                      | 2,000              | 0                  | 287,849              | 0   | 0   | 289,849              |
| Utah                       | 0                  | 0                  | 123,791              | 0   | 0   | 123,791              |
| Virginia                   | 0                  | 0                  | 10,139,469           | 0   | 0   | 10,139,469           |
| Washington                 | 56,100             | 283,637            | 6,092,306            | (3,843)   | (59,721)  | 6,368,479            |
| West Virginia              | 0                  | 0                  | 29,023,226           | 0   | 0   | 29,023,226           |
| Wyoming                    | 0                  | 0                  | 1,067,101            | 0   | 0   | 1,067,101            |
| Cheyenne River Sioux Tribe | 0                  | 0                  | 2,812,372            | 0   | 0   | 2,812,372            |
| Crow Tribe                 | 0                  | 0                  | 1,097,895            | 0   | 0   | 1,097,895            |
| Fort Berthold Tribe        | 0                  | 0                  | 69,972               | 0   | 0   | 69,972               |
| Fort Peck Tribe            | 0                  | 0                  | 147,991              | 0   | 0   | 147,991              |
| Hopi Tribe                 | 0                  | 0                  | 1,263,409            | 0   | 0   | 1,263,409            |
| Jacarillo Apache Tribe     | 0                  | 0                  | 50,998               | 0   | 0   | 50,998               |
| Navajo Tribe               | 0                  | 0                  | 2,222,792            | 0   | 0   | 2,222,792            |
| Northern Cheyenne Tribe    | 0                  | 0                  | 585,044              | 0   | 0   | 585,044              |
| Southern Ute Tribe         | 0                  | 0                  | 94,206               | 0   | 0   | 94,206               |
| Rocky Boy Tribe            | 0                  | 0                  | 60,188               | 0   | 0   | 60,188               |
| Uintah/Ouray Tribe         | 0                  | 0                  | 138,738              | 0   | 0   | 138,738              |
| Ute Mountain Ute Tribe     | 0                  | 0                  | 14,300               | 0   | 0   | 14,300               |
| Ute Mountain Apache Tribe  | 0                  | 0                  | 1,838                | 0   | 0   | 1,838                |
| Wind River Tribe           | 0                  | 0                  | 73,267               | 0   | 0   | 73,267               |
| Zuni Tribe                 | 0                  | 0                  | 125,009              | 0   | 0   | 125,009              |
| Undistributed              | 2,000              | 0                  | 2,000                | (1,998)   | 0   | 2,002                |
| <b>Total</b>               | <b>\$9,922,966</b> | <b>\$2,343,004</b> | <b>\$325,687,632</b> | <b>(\$595,934)</b>                                  | <b>(\$71,217)</b>                                       | <b>\$337,286,451</b> |

\* Includes prior year contract deobligations and upward adjustments.

# Office of Surface Mining

**TABLE 4**  
**ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS**  
**PRIORITY 1 & 2 (Protection of public health, safety, and general welfare) and Emergency Projects**  
**1978-1997**

|               | Clogged Streams <sup>1</sup> | Clogged Stream Lands <sup>2</sup> | Highwalls <sup>3</sup> | Impoundments <sup>4</sup> | Piles & Embankments <sup>2</sup> | Slides <sup>2</sup> | Gases <sup>4</sup> | Equipment & Facilities <sup>4</sup> | 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 | Vertical Openings <sup>4</sup> |
|---------------|------------------------------|-----------------------------------|------------------------|---------------------------|----------------------------------|---------------------|--------------------|-------------------------------------|---------------------------|---|----------------------|--|--|-------------------------|------------------------------|------------------------|--------------------------------|
| Alabama       | 2.4                          | 135.5                             | 147,030                | 2                         | 36                               | 12.1                | 0                  | 445                                 | 51                        | 22.3                                      | 897                  | 0  | 12   | 11.2                    | 49.9                         | 0                      | 291                            |
| Alaska        | 0                            | 0                                 | 5,221                  | 3                         | 7.5                              | 0                   | 0                  | 58                                  | 2,000                     | 4   | 6                    | 0  | 0  | 0                       | 0                            | 0                      | 5                              |
| Arkansas      | .5                           | 0                                 | 40,206                 | 0                         | 374                              | 0                   | 0                  | 1                                   | 43                        | 19  | 15                   | 0  | 0  | 3                       | 4                            | 0                      | 73                             |
| California    | 0                            | 0                                 | 0                      | 0                         | 0                                | 0                   | 0                  | 0                                   | 0                         | 0   | 25                   | 0  | 0  | 0                       | 0                            | 0                      | 38                             |
| CERT*         | .1                           | 0                                 | 7,305                  | 0                         | 474.8                            | 0                   | 0                  | 10                                  | 30                        | 9   | 63                   | 0  | 0  | 34.6                    | 0                            | 0                      | 18                             |
| Colorado      | 0                            | 0                                 | 51,492                 | 0                         | 6.6                              | 0                   | 0                  | 1                                   | 0                         | 2   | 500                  | 3  | 0  | 45.5                    | 31                           | 114.5                  | 272                            |
| Crow Tribe    | 0                            | 0                                 | 670                    | 1                         | 45.5                             | 22                  | 0                  | 32                                  | 0                         | 0   | 8                    | 1  | 0  | 16                      | 0                            | 0                      | 4                              |
| Georgia       | 0                            | 0                                 | 4,700                  | 3                         | 2.5                              | 0                   | 0                  | 0                                   | 0                         | 0   | 85                   | 1  | 0  | .1                      | 0                            | 0                      | 8                              |
| Hopi Tribe    | 0                            | 0                                 | 14,302                 | 0                         | 0                                | 0                   | 0                  | 8                                   | 0                         | 0   | 9                    | 0  | 0  | 0                       | 0                            | 1.7                    | 2                              |
| Idaho         | 0                            | 0                                 | 0                      | 0                         | 0                                | 0                   | 0                  | 0                                   | 0                         | 0   | 0                    | 0  | 0  | 0                       | 0                            | 0                      | 0                              |
| Illinois      | 16                           | 965.5                             | 17,181                 | 6                         | 157.5                            | 1.5                 | 9.1                | 237                                 | 2                         | 47.4                                      | 129                  | 11   | 0  | 36                      | 16.5                         | 0                      | 471                            |
| Indiana       | 14.1                         | 109                               | 93,425                 | 6                         | 499.1                            | 1                   | 3                  | 85                                  | 2                         | 22  | 44                   | 6  | 6  | 55.3                    | 5                            | 0                      | 268                            |
| Iowa          | 5.6                          | 851                               | 47,970                 | 1                         | 762                              | 0                   | 0                  | 4                                   | 20                        | 7   | 1                    | 12   | 1  | 2                       | 0                            | 0                      | 20                             |
| Kansas        | .1                           | 8                                 | 90,650                 | 1                         | 103.5                            | 1                   | 0                  | 2                                   | 2                         | 14  | 0                    | 3  | 0  | 25.4                    | 4                            | 0                      | 299                            |
| Kentucky      | 33.7                         | 8,074.6                           | 17,069                 | 90                        | 272.3                            | 1,748.2             | 0                  | 163                                 | 18                        | 47.5                                      | 1,224                | 5  | 3,123  | 63.7                    | 208                          | 82.8                   | 69                             |
| Maryland      | 3.2                          | 41                                | 29,680                 | 0                         | 98.8                             | 22.5                | 0                  | 12                                  | 11                        | 14.5                                      | 17                   | 3  | 1  | 8.5                     | 1                            | 0                      | 2                              |
| Michigan      | 0                            | 0                                 | 950                    | 0                         | 0                                | 0                   | 0                  | 4                                   | 2                         | 0   | 0                    | 0  | 0  | .3                      | 8                            | 0                      | 11                             |
| Missouri      | 10.6                         | 1,407.8                           | 57,212                 | 6                         | 427.4                            | 0                   | 0                  | 27                                  | 10                        | 70.5                                      | 23                   | 30   | 15   | 2.5                     | 19                           | 2                      | 74                             |
| Montana       | 3                            | 1.9                               | 5,650                  | 3                         | 61.8                             | .9                  | 0                  | 182                                 | 0                         | 73.5                                      | 718                  | 17   | 12   | 473                     | 301.9                        | 68.9                   | 430                            |
| Navajo Tribe  | 0                            | 0                                 | 0                      | 1                         | 1                                | 7                   | 0                  | 4                                   | 0                         | .3  | 152                  | 0  | 0  | 5                       | 3                            | 0                      | 7                              |
| New Mexico    | 0                            | 0                                 | 0                      | 0                         | 1.5                              | 0                   | 0                  | 13                                  | 0                         | 0   | 225                  | 1  | 1  | 29.3                    | 35                           | 32                     | 80                             |
| N. Carolina   | 0                            | 0                                 | 0                      | 0                         | 0                                | 0                   | 0                  | 0                                   | 0                         | 0   | 0                    | 0  | 0  | 0                       | 0                            | 0                      | 5                              |
| N. Dakota     | 0                            | 0                                 | 43,049                 | 4                         | 303                              | 35                  | 0                  | 14                                  | 18                        | 2   | 13                   | 6  | 0  | 1,173                   | 1                            | 0                      | 88                             |
| Ohio          | 26.3                         | 4,650.7                           | 33,284                 | 5                         | 96                               | 321.2               | 1                  | 41                                  | 4                         | 34  | 159                  | 0  | 9  | 43.8                    | 72.5                         | .2                     | 140                            |
| Oklahoma      | 1.1                          | 0                                 | 170,194                | 0                         | 0                                | 0                   | 0                  | 13                                  | 151                       | 5   | 101                  | 3  | 2  | 4.8                     | 0                            | 0                      | 75                             |
| Oregon        | 0                            | 0                                 | 0                      | 0                         | 0                                | 0                   | 0                  | 3                                   | 0                         | 0   | 12                   | 0  | 0  | .1                      | 0                            | 0                      | 3                              |
| Pennsylvania  | 46.8                         | 43.7                              | 479,645                | 42                        | 489.1                            | 25.5                | 0                  | 289                                 | 82                        | 14.7                                      | 223                  | 1  | 21   | 2,273.4                 | 122.2                        | 814.8                  | 420                            |
| Rhode Island  | 0                            | 0                                 | 0                      | 0                         | 0                                | 0                   | 0                  | 0                                   | 0                         | 0   | 0                    | 0  | 0  | 6                       | 0                            | 0                      | 0                              |
| S. Dakota     | 0                            | 0                                 | 135                    | 0                         | 0                                | 0                   | 0                  | 4                                   | 0                         | 0   | 5                    | 0  | 0  | .6                      | 0                            | 0                      | 1                              |
| Tennessee     | 0                            | 147                               | 16,255                 | 0                         | 200                              | 47.8                | 0                  | 29                                  | 9                         | 11  | 188                  | 0  | 5  | 6                       | 27.5                         | 0                      | 10                             |
| Texas         | 0                            | 0                                 | 3,285                  | 0                         | 987                              | 0                   | 0                  | 0                                   | 0                         | 0   | 6                    | 0  | 0  | 6                       | 0                            | 0                      | 21                             |
| Utah          | 13.6                         | 9                                 | 2,925                  | 1                         | 121.5                            | 0                   | 19                 | 148                                 | 0                         | 2   | 497                  | 2  | 0  | 5                       | 38.8                         | 19                     | 23                             |
| Virginia      | 62                           | 786                               | 13,393                 | 14                        | 230.7                            | 191.1               | 0                  | 193                                 | 1                         | 2   | 667                  | 0  | 90   | 6.8                     | 27.3                         | 0                      | 86                             |
| Washington    | 0                            | 0                                 | 0                      | 0                         | 3                                | 0                   | 0                  | 4                                   | 0                         | 0   | 24                   | 0  | 0  | 6.3                     | 15                           | 0                      | 56                             |
| West Virginia | 35.9                         | 148.8                             | 151,053                | 204                       | 2,793.3                          | 373.9               | 3                  | 311                                 | 1                         | 28.5                                      | 1,520                | 20   | 426  | 215.1                   | 336.5                        | 18                     | 92                             |
| Wyoming       | .5                           | 0                                 | 9,011                  | 1                         | 500                              | 0                   | 0                  | 15                                  | 0                         | 1   | 186                  | 0  | 0  | 277.5                   | 9                            | 92.1                   | 187                            |
| <b>Total</b>  | <b>275.5</b>                 | <b>17,379.5</b>                   | <b>1,552,942</b>       | <b>394</b>                | <b>9,055.4</b>                   | <b>2,810.7</b>      | <b>35.1</b>        | <b>2,352</b>                        | <b>2,457</b>              | <b>453.2</b>                              | <b>7,742</b>         | <b>125</b>   | <b>3,724</b>                                   | <b>4,835.8</b>          | <b>1,336.1</b>               | <b>1,246</b>           | <b>3,649</b>                   |

# 1997 Annual Report

## TABLE 4 (continued) ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS PRIORITY 3 (Environmental Restoration) 1978-1997

|  | Bench <sup>2</sup> | Industrial/Residential Waste <sup>2</sup> | Equipment & Facilities <sup>4</sup> | Gob <sup>2</sup> | Highwall <sup>3</sup> | Haul Road <sup>2</sup> | Mine Opening <sup>4</sup> | Pit <sup>2</sup> | Spoil Area <sup>2</sup> | Slurry <sup>2</sup> | Slump <sup>2</sup> | Water <sup>5</sup> |               |
|--|--------------------|---|-------------------------------------|------------------|-----------------------|------------------------|---------------------------|------------------|-------------------------|---------------------|--------------------|--------------------|---------------|
|  | 22.5               | 13  | 8                                   | 186.1            | 26,475                | 1.5                    | 48                        | .3               | 9,210.6                 | 8                   | 7.7                | 379                | Alabama       |
|  | 0                  | 0   | 0                                   | 6.5              | 0                     | 0                      | 0                         | 0                | 47                      | 9                   | 25                 | 0                  | Alaska        |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | Arkansas      |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | California    |
|  | 0                  | 0   | 2                                   | 4                | 1,500                 | 0                      | 1                         | 7                | 80                      | 0                   | 0                  | 0                  | CERT*         |
|  | 3                  | 5   | 7                                   | 101.5            | 2,027.5               | 0                      | 18                        | 82.9             | 829                     | 0                   | 0                  | 1                  | Colorado      |
|  | 6                  | 0   | 0                                   | 27.6             | 1,980                 | 13                     | 2                         | 9                | 22.8                    | .1                  | 3.6                | 27.6               | Crow          |
|  | 3                  | 0   | 0                                   | 2.5              | 400                   | 0                      | 2                         | 3                | 7                       | 0                   | 0                  | 0                  | Georgia       |
|  | 0                  | 0   | 0                                   | 24.9             | 551                   | 14.7                   | 0                         | 9.7              | 10.1                    | 0                   | 0                  | 0                  | Hopi          |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | Idaho         |
|  | 1                  | 6   | 108                                 | 2,319.4          | 4,510                 | 146                    | 72                        | 423.3            | 1,861                   | 1,015.5             | 1.4                | 522                | Illinois      |
|  | 0                  | 65.6                                      | 155                                 | 1,102.9          | 5,230                 | 63                     | 18                        | 54.5             | 1,260.8                 | 617                 | 2                  | 109.3              | Indiana       |
|  | 0                  | 0   | 0                                   | 1                | 0                     | 5                      | 1                         | 18.5             | 439.5                   | 0                   | 0                  | 0                  | Iowa          |
|  | 0                  | 0   | 1                                   | 89               | 5,100                 | 0                      | 0                         | 17.4             | 272.6                   | 10                  | 0                  | 0                  | Kansas        |
|  | 618.7              | 0   | 51                                  | 196.8            | 2,000                 | .4                     | 68                        | 3                | 996.7                   | 58                  | 10                 | 0                  | Kentucky      |
|  | 0                  | 0   | 1                                   | 21               | 3,650                 | 1                      | 3                         | 0                | 212                     | 0                   | .5                 | 73                 | Maryland      |
|  | 0                  | 0   | 1                                   | 19               | 0                     | .6                     | 0                         | 1                | 10                      | 0                   | 11                 | 0                  | Michigan      |
|  | 0                  | 2.9                                       | 4                                   | 129.2            | 10,024                | 1.4                    | 0                         | 71.9             | 1,258.8                 | 69                  | .3                 | 86                 | Missouri      |
|  | .8                 | 75.8                                      | 58                                  | 146.2            | 1,170                 | .5                     | 42                        | 17.8             | 842.1                   | 0                   | 18.5               | 240.5              | Montana       |
|  | .8                 | 1   | 2                                   | 111.6            | 0                     | 10.2                   | 43                        | 17.4             | 163.5                   | 0                   | 0                  | 0                  | Navajo Tribe  |
|  | 2                  | 0   | 11                                  | 44               | 0                     | 6                      | 4                         | 2                | 2                       | 2                   | 0                  | 0                  | New Mexico    |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | N. Carolina   |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | N. Dakota     |
|  | 0                  | 0   | 3                                   | 83.1             | 9,220                 | 0                      | 19                        | 17               | 382.3                   | 0                   | 0                  | 0                  | Ohio          |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | Oklahoma      |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 1                         | 0                | 0                       | 0                   | 0                  | 0                  | Oregon        |
|  | 0                  | 0   | 21                                  | 50.3             | 5,108                 | 0                      | 19                        | 77.9             | 1,125.2                 | 1                   | 25.6               | 90,306             | Pennsylvania  |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | Rhode Island  |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | S. Dakota     |
|  | 76                 | 0   | 15                                  | 67               | 130                   | 8                      | 0                         | 47               | 325                     | 0                   | 3                  | 360                | Tennessee     |
|  | 0                  | 0   | 0                                   | 8                | 0                     | 0                      | 0                         | 0                | 152                     | 0                   | 0                  | 0                  | Texas         |
|  | 4                  | 7   | 64                                  | 260              | 550                   | 3                      | 0                         | 8                | 55                      | 1                   | 16                 | 20.3               | Utah          |
|  | 0                  | 1   | 21                                  | 14.3             | 0                     | 1                      | 21                        | 0                | 3                       | 0                   | 0                  | 20                 | Virginia      |
|  | 0                  | 0   | 0                                   | 0                | 0                     | 0                      | 0                         | 0                | 0                       | 0                   | 0                  | 0                  | Washington    |
|  | 0                  | 0   | 0                                   | 11               | 18,940                | 0                      | 4                         | 5                | 13.6                    | 0                   | 0                  | 602                | West Virginia |
|  | 0                  | 11  | 3                                   | 30.4             | 1,300                 | 1                      | 4                         | 10               | 385.6                   | 0                   | 0                  | 400,002            | Wyoming       |
|  | 737.8              | 188.3                                     | 536                                 | 5,057.3          | 99,865.5              | 276.3                  | 390                       | 903.6            | 19,967.2                | 1,790.6             | 124.6              | 492,748.7          | Total         |

**Key**

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

**Units of Measure:**

- 1. Miles
- 2. Acres
- 3. Feet
- 4. Count
- 5. Gallons/Minute

**Conversion to Metric:**

To convert these statistics to metric units use the following conversion factors:  
 Miles to Kilometers = 1.609  
 Acres to Hectars = .40469  
 Feet to Meters = .30473  
 Gallons to Liters = 3.7854

**Source of Data:**

The 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.

## 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 local efforts to eliminate environmental, economic, and public health impacts of acid mine drainage from abandoned coal mines in Appalachia. The principal source of acid mine drainage pollution in Appalachia is abandoned coal mines. Because of the extent and high reclamation cost of the pollution, this problem cannot be eliminated by any single government agency or group. As a result, the Clean Streams Initiative was designed to facilitate development of partnerships. Through this effort, the Office of Surface Mining has partnered with over 100 government agencies, private watershed groups, environmental groups, private foundations, coal producers, and private individuals representing a strong beginning for the Clean Streams Initiative. Building on this foundation, the 1997 appropriation provided \$4 million of "seed-money" for 15 acid mine drainage clean-up projects in nine states. This initial funding provided the incentive for other sources to contribute to the projects, and during 1997 the funding available for these projects grew to over \$8 million. Currently the Office of Surface Mining has 42 projects submitted in 11 Appalachian and mid-western states that can begin reclamation in the upcoming year if funding is available. Also during 1997, interest in the Clean Streams Initiative spread to the Midwest with project proposals submitted by Indiana and Missouri. In addition, projects are being developed by several other states.

## 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).

The Office of Surface Mining maintains its inventory on the Abandoned Mine Land Inventory System (AMLIS), a computer system that generates reports on abandoned mine land accomplishments and problems that still require reclamation. During 1997, for the third 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 588 records added, 1,216 modified, and 41 deleted.

As of September 30, 1997, the system contained information for over 14,060 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 \$1.1 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, 1997, a break-down of costs from the Abandoned Mine Land Inventory System is as follows:

|           |               |              |
|-----------|---------------|--------------|
| Completed | \$1.5 billion | 24.2 percent |
| Funded    | \$.3 billion  | 4.8 percent  |
| Unfunded  | \$4.4 billion | 71.0 percent |
| <hr/>     |               |              |
| Total     | \$6.2 billion | 100 percent  |

## Reclamation Awards

After 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. Following a recommendation of the National Association of Abandoned Mine Land Programs, the Office of Surface Mining restructured the awards program this year to reduce the number of awards so that only the best reclamation project in each of the three regions plus the best project in the country received awards. This year, 18 individuals responsible for three award-winning projects received recognition for their work. Awards for the following projects were presented at the 1997 annual meeting of the National Association of Abandoned Mine Land Programs.

### *National award*

- Upper Lehigh Project, Freeland, Pennsylvania.

### *Regional awards*

- Upper Lehigh Project, Freeland, Pennsylvania (Appalachian Region) for reclamation of an abandoned anthracite mining site containing dangerous underground mine openings, highwalls, water pits, and large spoil banks that posed a threat to citizens of the surrounding area.
- ALCOA Project, Rockdale, Texas (Mid-Continent Region), which reclaimed more than 1,000 acres of mine spoil and dangerous impoundments into valuable land that today is a prime source of hay for local livestock.
- Silver Reef Project, Leeds, Utah (Western Region), for reclaiming the historic mining district covering 800 acres with more than 500 mine openings. Reclamation included installation of grates which preserve the habitat of a large colony of Townsend's big-eared bats and keep people safely out of the mines.



### *We ensure high professional standards*

Jeff Franklin is a civil engineer with the Charleston Field Office. Jeff joined the Office of Surface Mining in 1980, coming from the U.S. Corps of Engineers where he had worked on traffic engineering and civil works construction projects. When he came to the Office of Surface Mining, the program was just beginning and he was responsible for design and construction of federal Abandoned Mine Land projects and engineering review of designs completed by the state of West Virginia. In 1982 he rejoined the Corps of Engineers, where he helped construct the King Khalid Military City 60 miles south of the Iraqi border. In 1986, he returned to the Charleston Field Office where he has worked on Maryland and West Virginia regulatory and Abandoned Mine Land oversight.

When he is not working at the Office of Surface Mining Jeff can be found tracking Franklin family legends, learning more about cheese, wine, and beer making, or just getting his last two children through college.



### *We fund state reclamation programs*

Charles McDaniel has been with the Office of Surface Mining since 1979 and has been the Chief of Fee Compliance for Region III (Indianapolis), an Abandoned Mine Land program specialist, and currently a Grants Financial Specialist in the Mid-Continent Regional Coordinating Center. He is responsible for the administration of Abandoned Mine Land and regulatory grants for Illinois, Indiana, and Missouri. This grant funding allows the states to fulfill the Surface Mining Law's mission by providing personnel and equipment to do the necessary work.

When Charles describes his work he says that "the Office of Surface Mining is unique because it is one of the very few federal government agencies where you can see some immediate benefit of its existence."

Charles enjoys all sports, especially cheering for his two sons at their football games, exercising, reading, and music. He has played the drums since he was 10 years old and currently plays drums at his church on Sundays.