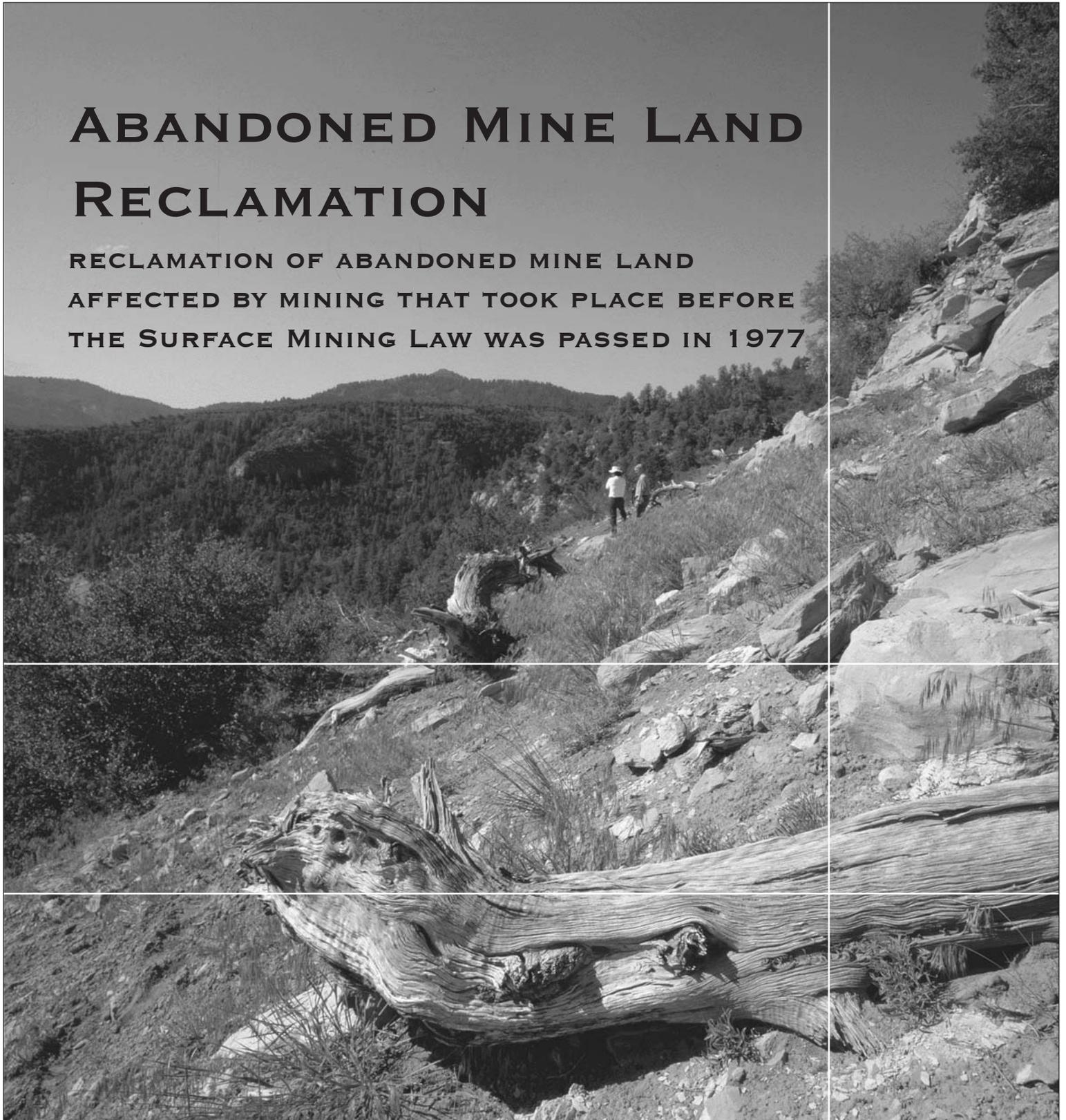


# ABANDONED MINE LAND RECLAMATION

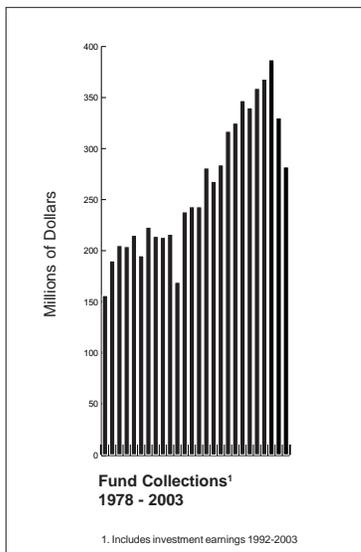
RECLAMATION OF ABANDONED MINE LAND  
AFFECTED BY MINING THAT TOOK PLACE BEFORE  
THE SURFACE MINING LAW WAS PASSED IN 1977



Title 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.

## Abandoned Mine Land Fund



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 active mining operations. The fees are deposited in the Abandoned Mine Land 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, 2003, the Fund collections totaled \$6,783,112,883. For the same period, Fund appropriations totaled \$5,288,251,105.

Expenditures from the Fund may only be made as a consequence of appropriations or other laws. The Surface

Mining Law specifies that 50 percent of the reclamation 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, to fund the Small Operator Assistance Program and additional projects directly through state reclamation programs, and to pay collection, audit, and administration 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 1 shows 2003 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 ensure that funds are provided for the United Mine Workers of America Combined Benefit Fund.

Despite the enormous amount of abandoned mine reclamation that has been accomplished under the Surface Mining Law, more than \$3 billion of health and safety hazards remain, as well as an additional \$3.6 billion worth of high priority abandoned coal mine problems affecting the general welfare of citizens in the coalfields. If all the collections received between now and September 30, 2004, when the fee will expire, as well as the unappropriated balance of \$1.56 billion are used, approximately \$1.8 billion worth of health and safety problems will remain along with other general welfare and environmental abandoned mine problems. These are not “ugly landscapes” that need to be made more attractive; they are

(Left) Located on the Navajo Reservation in Northeastern Arizona, this abandoned mine land reclamation eliminated health and safety hazards associated with 1950's uranium mining. Work was done on 61 different sites and included closing portals, grading and covering radioactive piles and embankments, eliminating highwalls, and planting vegetation. The land has been returned to beneficial use and the dangerous features associated with the abandoned mines have been eliminated. This scenic area is once again open to the community.

**TABLE 1: ABANDONED MINE LANDS FEE COLLECTIONS AND FUNDING (CASH BASIS)**

State/Tribe	AML Collections	State Share Distribution <sup>1</sup>	Federal Share Distribution <sup>1</sup>	Emergency Distribution <sup>1</sup>	Clean Streams Distribution <sup>1</sup>	Total Distribution <sup>1</sup>
Alabama	\$3,806,863	\$1,324,615	\$1,635,219	\$400,000	\$288,411	\$3,648,245
Alaska	338,979	155,421	1,344,579	25,000	0	1,525,000
Arkansas	3,260	453	1,499,547	15,000	0	1,515,000
Colorado	6,956,373	1,741,088	796,922	0	0	2,538,010
Illinois	5,969,437	2,284,815	6,057,907	800,000	730,381	9,873,103
Indiana	10,520,486	3,076,525	1,972,265	427,000	322,093	5,797,883
Iowa	0	3,163	1,496,837	60,000	172,851	1,732,851
Kansas	69,561	33,932	1,466,068	465,000	0	1,965,000
Kentucky	26,710,043	9,663,661	5,937,133	0	718,312	16,319,106
Louisiana	407,252	98,715	0	0	0	98,715
Maryland	1,048,744	244,042	1,255,958	0	163,446	1,663,446
Mississippi	353,549	0	0	0	0	0
Missouri	141,545	75,855	1,424,145	225,000	171,837	1,896,837
Montana	10,473,459	3,512,316	0	125,000	0	3,637,316
New Mexico	5,013,326	1,612,445	193,742	0	0	1,806,187
North Dakota	3,122,929	901,550	598,450	100,000	0	1,600,000
Ohio	4,881,631	1,882,157	3,713,576	2,300,000	496,106	8,391,839
Oklahoma	409,756	164,598	1,335,402	100,000	152,900	1,752,900
Pennsylvania	12,094,443	4,522,117	19,582,162	0	2,081,891	26,186,170
Tennessee	758,908	0	0	0	0	0
Texas	4,607,892	1,518,154	0	0	0	1,518,154
Utah	3,556,901	1,093,044	509,793	0	0	1,602,837
Virginia	6,304,383	2,033,593	1,822,292	1,200,000	307,106	5,362,991
Washington	2,321,286	0	0	0	0	0
West Virginia	32,451,295	9,572,163	11,254,277	3,458,000	1,249,666	25,534,106
Wyoming	129,934,233	29,305,188	0	0	0	29,305,188
Crow Tribe	1,902,197	545,954	0	0	0	545,954
Hopi Tribe	1,206,203	414,114	0	0	0	414,114
Navajo Tribe	7,189,663	2,315,769	0	0	0	2,315,769
<b>Total</b>	<b>\$282,554,597</b>	<b>\$78,095,447</b>	<b>\$63,896,274</b>	<b>\$9,700,000</b>	<b>\$6,855,000</b>	<b>\$158,546,721</b>

1. 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.

serious, life threatening, high-priority coal mine hazards that have been abandoned before passage of the Surface Mining Law in 1977. It is clear that the Abandoned Mine Land Fund must be reauthorized to abate the hazards and eliminate these historic problems from the Nation's coalfields.

During 2003, the Office of Surface Mining Director has been discussing fee reauthorization with members of Congress, coal industry representatives, state reclamation officials, and environmentalists. All agree that abating the abandoned mine hazards needs to be done, and the fee collection authority should be reauthorized. Although

there is a wide range of proposed modifications, common themes have emerged, including how future funds should be allocated, how to distribute the unappropriated state and tribal money collected through 2004, and the long-term obligation of the Abandoned Mine Land Fund to support the United Mine Workers Combined Benefit Fund.

In the upcoming year, the Office of Surface Mining will be assisting Congress in identifying issues, analyzing alternatives, and drafting reauthorization legislation.

In 1992, under authority of Public Law 101-508, the Office of Surface Mining began investing abandoned mine land funds. These funds are only invested in U.S. Treasury Securities.

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

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 defray anticipated health care costs for eligible union coal mine workers who retired on or before July 20, 1992, and their dependents. The Energy Policy Act authorizes a transfer of up to \$70 million per year of the interest earned on the principal balance of the Abandoned Mine Land Reclamation Fund to the Combined Benefit Fund to defray the costs related to health care for unassigned beneficiaries. Unassigned beneficiaries are those miners for whom no operating coal company is responsible. If, after a typical two-year cycle, the amount of the transfer previously made was greater or less than the actual health benefit costs, an adjustment is made to the next transfer. The 2003 annual payment was \$48.2 million for 15,562 beneficiaries. Prior year adjustments increased this payment by \$7.9 million. In addition, the Office of Surface Mining transferred an additional \$33.8

**TABLE 2: ABANDONED MINE LAND RECLAMATION FUND STATUS**

	Cash Basis	
	2003	2002
Balance, Beginning of Year	\$1,900,317,749	\$1,856,933,503
Fees, debts, and interest collected	282,554,597	287,066,346
Interest earned on investments	23,619,923	43,277,875
Total Earnings	\$306,174,520	\$330,344,221
Disbursements	189,223,581	196,607,171
Transfers to the United Mine Workers	89,858,283	90,352,804
Total Disbursements and Transfers	\$279,081,865	\$286,959,975
<b>Balance, End of the Year</b>	<b>\$1,927,410,404</b>	<b>\$1,900,317,749</b>

million to the Combined Benefit Fund pursuant to the Fiscal Year 2003 Omnibus Appropriations Act (Public Law 108-7). The total payment in 2003 was \$89.9 million. Since 1992, when the Office of Surface Mining began investing Abandoned Mine Land funds, the cumulative investment earnings have been \$729.8 million. Cumulative transfers to the United Mine Workers of America Combined Benefit Fund, including 2003, have been \$664 million, leaving an interest balance of \$65.9 million. Table 2 summarizes the Fund account for the past two years.

The Office of Surface Mining collects fees from coal operators through voluntary reporting, audit, and debt collection. In 2003, the initial rate of those reporting and paying on time was 93.28 percent. Through follow-up and other work with the operators, the compliance rate was raised to 99.93 percent, resulting in total collections of \$282,554,597 for the Fund. 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 provides preprinted forms to all active coal mining companies on the e-filing website or by mail and provides guidance by phone and mail. Because of factors beyond Office of

**TABLE 3: ABANDONED MINE LAND GRANTS<sup>1</sup>**

State/Tribe	Subsidence Insurance	10% Program Set-Aside <sup>2</sup>	Administration <sup>3</sup>	Project Costs <sup>4</sup>	Emergency <sup>5</sup>	2003 Total	2002 Total
Alabama	\$0	\$0	\$574,378	\$3,239,327	\$400,000	\$4,213,705	\$4,185,891
Alaska	0	0	304,076	1,195,924	25,000	1,525,000	1,525,000
Arkansas	0	0	380,360	1,143,508	15,000	1,538,868	1,515,000
Colorado	0	253,801	717,800	2,066,399	0	3,038,000	2,650,000
Illinois	0	834,272	1,538,810	6,700,021	800,000	9,873,103	11,725,689
Indiana	0	504,879	1,167,895	3,698,109	467,000	5,837,883	6,247,169
Iowa	0	0	193,461	1,506,496	60,000	1,759,957	1,675,361
Kansas	0	0	299,785	1,474,307	460,000	2,234,092	2,262,895
Kentucky	0	0	1,809,320	14,655,201	0	16,464,521	16,759,600
Louisiana	0	0	118,454	0	0	118,454	99,758
Maryland <sup>2</sup>	0	65,000	480,783	2,166,547	0	2,712,330	2,527,011
Missouri	0	0	0	61,773	225,000	286,773	1,850,591
Montana	0	0	499,769	3,230,622	125,000	3,855,391	3,736,665
New Mexico	0	161,245	1,041,682	611,373	0	1,814,300	3,536,930
North Dakota	0	118,540	179,601	1,244,872	100,000	1,643,013	1,679,202
Ohio <sup>2</sup>	0	572,109	2,415,645	3,676,194	2,300,000	8,963,948	12,441,102
Oklahoma	0	0	242,045	1,257,955	180,000	1,680,000	1,753,135
Pennsylvania <sup>2</sup>	0	2,410,428	2,610,226	21,170,516	0	26,191,170	32,064,024
Texas	0	0	156,502	3,226,658	0	3,383,160	197,694
Utah	0	0	406,602	1,767,364	0	2,173,966	1,736,309
Virginia	0	385,589	608,050	3,715,115	2,103,000	6,811,754	7,091,704
West Virginia	0	2,930,518	5,054,605	23,287,762	8,070,959	39,343,844	34,357,364
Wyoming	261,287	0	1,332,161	31,389,201	0	32,982,649	30,868,081
Crow Tribe	0	0	84,352	380,067	0	464,419	550,551
Hopi Tribe	0	0	667,246	0	0	667,246	215,000
Navajo Tribe	0	0	943,601	2,259,164	0	3,202,765	8,249,799
<b>TOTAL</b>	<b>\$261,287</b>	<b>\$8,236,381</b>	<b>\$23,827,209</b>	<b>\$135,124,475</b>	<b>\$15,330,959</b>	<b>\$182,780,311</b>	<b>\$191,501,525</b>

1. Funding for these grants is derived from the 2003 Distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals.

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

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

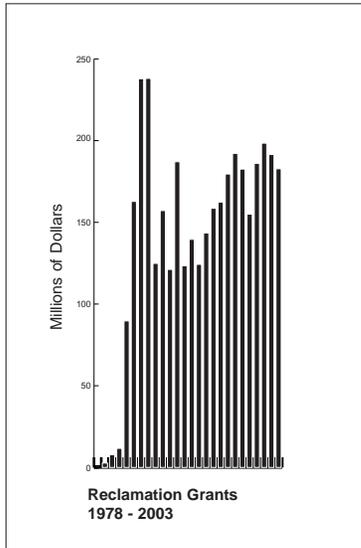
4. The term "Project Costs" is now used instead of Construction. Abandoned Mine Land simplified grants do not contain specific construction cost breakouts, but rather list all costs associated with a construction project as a project cost. This category contains non-water supply, water supply, and non-coal project costs, and includes \$6,530,259 in funding for the Appalachian Clean Streams Program.

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

Surface Mining's control, such as company financial difficulties and errors, some nonpayment and non-reporting will probably always be present. When such instances of noncompliance are found, auditors and collection staff examine each issue and determine 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.

## Grants to States and Tribes



Starting 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 2003, the states and tribes received grants totaling \$182,780,311 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, \$3,422,803,176 has been distributed from the Fund. Grant obligations (the amount used by the states) for 2003 are shown in Table 3<sup>5</sup>.

During 2003, the Office of Surface Mining awarded 100 percent of the Abandoned Mine Land grants to the states within 60 days of receiving the grant application.

### 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 2003, 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 2003. The eight eligible programs received a total of \$7,672,760 in 2003.

This funding supplements the formula-based grant and brings those eight states to the minimum-program level. Once minimum-program states or 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 extended that date to September 30, 2004.) Statutory amendments contained in Public Law 101-508 created a new acid mine drainage 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; but, only to reclaim eligible priority 1 (protection of public health, safety, general welfare, and property from extreme danger of adverse effects of coal mining practices) and 2 (protection of public health, safety, and general welfare from adverse effects of coal mining practices) abandoned coal mine land problems. In 2003, 10 states set aside \$8,236,381.

### Subsidence Insurance

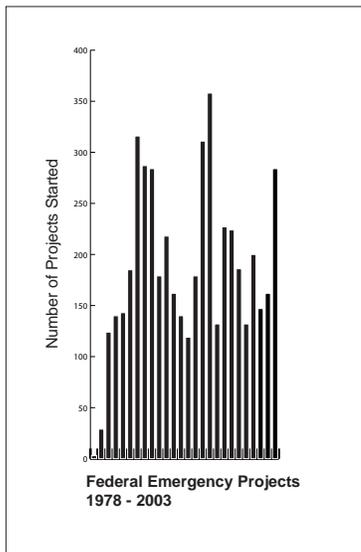
Public Law 98-473 authorized states and tribes with approved reclamation programs to use abandoned mine

5. Larger total obligations (shown in table 3) than total distribution (shown in table 1) result from previous year carry-over or funding from past years distribution that were not used until 2003.

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 receive a subsidence insurance grant of up to \$3,000,000, awarded from the state's share of the Abandoned Mine Land Fund.

In 2003, one subsidence insurance grant was issued to the state of Wyoming for \$75,600. Through 2003, the Office of Surface Mining has granted a total of \$11,854,658 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.

Following passage of the Surface Mining Law, the Office of Surface Mining performed all emergency reclamation; however, as programs were approved,

many states took over emergency programs. The following states are implementing emergency programs: Alabama, Alaska, Arkansas, Illinois, Indiana, Iowa, 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 completes emergency projects in



What other reclaimed abandoned mine land site can boast of being an operating site of a world championship cross-country running event? Located just East of was once a barren and eroded mine refuse area that created sedimentation and trash dump for years and an open mine entry was a safety hazard to residents of the location for local, national, and world sports competitions.



landfill, a growing community recreational complex, and the Terre Haute, Indiana this reclaimed abandoned mine site acid mine drainage problems. The site was also used as a the community. Today the site is a major recreation area and

**TABLE 4: RECLAMATION PROJECTS STARTED**

	2003		Emergency			Non-Emergency	
	Federal	State	1978-2003 Federal	1978-2003 State <sup>2</sup>	Total <sup>2</sup>	2002 Federal	2002 State <sup>3</sup>
Alabama	0	13 <sup>1</sup>	10	104	114	0	5
Alaska	0	0 <sup>1</sup>	0	1	1	0	3
Arkansas	0	1 <sup>1</sup>	1	19	20	0	1
California	0	0	5	0	5	0	0
Colorado	1	0	101	0	101	0	7
Crow Tribe	0	0	0	0	0	0	6
Georgia	0	0	0	0	0	1	0
Hopi Tribe	0	0	0	0	0	0	1
Illinois	0	9 <sup>1</sup>	51	256	307	0	7
Indiana	0	15 <sup>1</sup>	94	136	230	0	24
Iowa	0	0 <sup>1</sup>	22	0	22	0	2
Kansas	0	16 <sup>1</sup>	270	617	887	0	3
Kentucky	108	0	1,043	0	1,043	0	25
Louisiana	0	0	0	0	0	0	0
Maryland	1	0	18	0	18	0	1
Michigan	0	0	13	0	13	1	0
Mississippi	0	0	0	0	0	0	0
Missouri	0	2 <sup>1</sup>	6	4	10	0	3
Montana	0	0 <sup>1</sup>	7	13	20	0	4
Navajo Nation	0	0	6	0	6	0	14
New Mexico	1	0	16	0	16	0	10
North Dakota	0	0 <sup>1</sup>	15	13	28	0	3
Northern Cheyenne	0	0	2	0	2	0	0
Ohio	0	25 <sup>1</sup>	190	283	473	0	14
Oklahoma	0	4 <sup>1</sup>	47	21	68	0	4
Pennsylvania	170	0	2,365	0	2,365	0	43
Rhode Island	0	0	3	0	3	0	0
Southern Ute Tribe	0	0	1	0	1	0	0
Tennessee	0	0	17	0	17	2	4
Texas	0	0	6	0	6	0	2
Utah	0	0	0	0	0	0	4
Virginia	0	20 <sup>1</sup>	30	145	175	0	12
Washington	3	0	53	0	53	0	0
West Virginia	0	48 <sup>1</sup>	179	730	909	0	10
Wyoming	0	0	38	0	38	0	0
<b>Totals</b>	<b>284</b>	<b>153<sup>1</sup></b>	<b>4,609</b>	<b>2,342</b>	<b>6,951</b>	<b>4</b>	<b>212</b>

1. Estimated annual statistics, see footnote 2, page 1 for a description of the methodology.  
 2. Compiled using estimated 2003 data, see footnote 2, page 1 for a description of the methodology.  
 3. Total for the period 10/1/02 - 6/30/03.

California, Colorado, Georgia, Kentucky, Louisiana, Maryland, Michigan, Mississippi, New Mexico, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Washington, and Wyoming, as well as on all tribal lands.

**TABLE 5: FEDERAL PROJECT OBLIGATIONS**

State or Tribe	Emergency	High Priority	1978-2003 <sup>1</sup>
Alabama	\$0	\$0	\$13,934,015
Alaska	0	0	194,638
Arkansas	0	0	84,904
California	0	218,474	2,552,467
Colorado	9,800	0	1,954,406
Georgia	0	333,744	3,972,555
Illinois	0	0	5,376,749
Indiana	0	0	4,032,023
Iowa	0	0	1,438,442
Kansas	0	0	5,094,172
Kentucky	9,116,078	0	113,845,411
Maryland	271,515	0	3,080,398
Michigan	0	211,473	3,377,333
Missouri	0	0	8,015,909
Montana	0	0	729,058
New Mexico	1,345	0	2,366,041
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	1,981,064	0	110,632,150
Rhode Island	0	0	556,229
South Dakota	0	0	143,461
Tennessee	25,044	988,390	24,188,774
Texas	0	0	289,849
Utah	0	0	123,791
Virginia	0	0	10,139,469
Washington	220,484	349,038	7,472,220
West Virginia	0	0	29,023,226
Wyoming	0	0	1,067,101
Cheyenne Rive Sioux Tribe	0	0	2,803,165
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	0	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	580
<b>Total</b>	<b>\$11,625,330</b>	<b>\$2,101,119</b>	<b>\$383,942,256</b>

1. Includes prior year contract deobligations and upward adjustments.

Investigations of potential emergency problems (called “complaint” investigations) are undertaken by state reclamation agencies or by the Office of Surface Mining. Potential emergency problems are referred to the states or the Office of Surface Mining from affected citizens, municipalities, emergency response agencies, and other state agencies. Information on how to report emergency problems can be found at [www.osmre.gov/amlemerg.htm](http://www.osmre.gov/amlemerg.htm). Following identification of a potential emergency problem, a technical investigation is performed, usually within 48 hours, and an emergency determination made. Of the 1,542<sup>6</sup> potential emergencies referred to the states and Office of Surface Mining in 2003, 452<sup>6</sup> were determined to be emergencies, 1007<sup>6</sup> were determined to be not of an emergency nature or not related to coal mining, and 83<sup>6</sup> were still under investigation at the end of the period. Problems which were not emergencies; but, were otherwise eligible for reclamation are considered for funding as high priority projects.

During 2003, states obligated \$15.3 million (see Table 3) and the Office of Surface Mining obligated \$11.6 million on emergency reclamation projects (see Table 5). No state expenditures exceeded the Congressionally-imposed “cap” of \$4.5 million which can be spent in any state within a year. In 2003, the states and the Office of Surface Mining started 437<sup>7</sup> Abandoned Mine Land emergency projects in 16 States (see Table 4). As usual, most emergencies occurred in Pennsylvania and Kentucky.

6. State data is for the period 10/1/02 - 6/30/03 and federal data is for the period 10/1/02 - 9/30/03.  
7. Estimated annual statistics, see footnote 2, page 1 for a description of the methodology.

## 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 as an abandoned mine land reclamation problem that meets one of the priorities of Section 403(a) or 411(c) or (f) in the Surface Mining Law. Until 1980, when states and Indian tribes began to receive approval for their Abandoned Mine Land programs, the Office of Surface Mining administered all non-emergency reclamation. However, since that time, state and tribal programs have assumed responsibility for correcting abandoned mine land problems and currently use 99 percent of non-emergency reclamation funds. During 2003, the Office of Surface Mining initiated 4 non-emergency projects and the states and tribes initiated 212<sup>8</sup> non-emergency projects.

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. Table 6 summarizes both emergency and non-emergency abandoned coal and non-coal mine reclamation project accomplishments through 2003.

## Post-Surface Mining Law Reclamation

As authorized by the 2003 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 2003, the Office of Surface Mining funded three civil penalty projects in Alabama and Kentucky costing a total of \$80,965. An additional \$172,604 in unobligated funds will be carried over for use in 2004 reclamation projects.

## Clean Streams Program

The Clean Streams Program began as the Appalachian Clean Streams Initiative in the fall of 1994. The Program supports local efforts to eliminate environmental and economic impacts of acid mine drainage from abandoned coal mines. The mission 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 acid mine drainage. During 2003, 16 cooperative agreements were awarded for a total of \$6.9 million to 12 states (Alabama, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, Ohio, Oklahoma, Pennsylvania, Virginia, and West Virginia) and 20 acid mine drainage projects were begun. This funding provided the incentive for other sources to contribute to the projects, and during 2003 the funding grew to over \$22.0 million. Since 1994, when the program began, 98 Clean Streams Program projects have been funded by the Office of Surface Mining, and 71 have been completed (see Figure 1).

**Figure 1**

	<i>Clean Streams Projects</i>		<i>Watershed Projects</i>	
	<i>Started in 2003</i>	<i>Completed Since 1994</i>	<i>Started in 2003</i>	<i>Completed Since 1999</i>
Alabama	1	3	0	0
Illinois	1	1	0	0
Indiana	3	17	0	2
Kentucky	3	7	0	0
Maryland	0	4	2	7
Ohio	2	9	3	3
Oklahoma	0	1	0	0
Pennsylvania	10	18	15	15
Tennessee	0	0	1	0
Virginia	0	1	1	1
West Virginia	0	10	0	5
<b>Total</b>	<b>20</b>	<b>71</b>	<b>22</b>	<b>33</b>

One of the successful Clean Streams Program projects completed during 2003 was located in Armstrong County, Pennsylvania. The White Lake project received \$180,315 of Appalachian Clean Streams Program funds and was completed by the Pennsylvania Department of Environmental Protection. The project involved

8. For the period 10/1/02 - 6/30/03

**TABLE 6:  
1978-2002 ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS**  
PRIORITY 1 AND 2 (PROTECTION OF PUBLIC HEALTH, SAFETY AND GENERAL WELFARE) AND  
EMERGENCY PROJECTS<sup>7</sup>

	Clogged Stream <sup>1</sup>	Clogged Stream Land <sup>2</sup>	Dangerous Highway <sup>3</sup>	Dangerous Impoundment <sup>4</sup>	Dangerous Pile & Embankment <sup>2</sup>	Dangerous Slide <sup>2</sup>	Dangerous Gas <sup>4</sup>	Hazardous Equipment & Facilities <sup>4</sup>	Hazardous Water Body <sup>4</sup>	Industrial/Residential Waste <sup>2</sup>	Portal <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 Fire <sup>2</sup>	Vertical Opening <sup>4</sup>
Alaska	0	0	11,190	4	6	0	0	1,420	2	4	26	0	0	0	21	0	36
Alabama	1	198	249,840	1	1,446	20	0	472	69	25	1,004	5	13	30	68	0	388
Arkansas	1	0	58,076	1	751	0	0	2	73	25	25	0	0	12	4	0	102
California	0	0	0	0	0	0	0	0	0	0	34	0	0	1	0	0	41
CERT Tribes <sup>6</sup>	0	0	7,170	0	475	0	0	4	30	9	73	0	0	35	0	0	15
Colorado	0	0	52,142	0	29	0	0	2	0	2	2,353	3	0	50	35	159	3,314
Crow Tribe	1	0	2,267	1	58	23	0	32	1	0	14	3	0	16	0	0	5
Georgia	0	0	10,250	3	3	0	0	0	0	0	112	0	1	0	0	0	11
Hopi Tribe	0	0	11,662	0	0	0	0	8	0	0	9	0	0	0	0	0	2
Iowa	8	651	56,490	3	824	0	0	5	23	12	1	12	2	2	0	0	20
Idaho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	20	1,290	33,861	7	252	3	21	312	2	71	187	11	1	88	115	0	1,139
Indiana	14	176	118,193	6	631	4	3	96	7	32	68	15	7	176	15	1	334
Kansas	1	9	141,900	1	111	3	0	2	1	24	0	3	0	24	8	0	932
Kentucky	44	8,374	25,238	113	444	2,016	0	205	31	30	1,786	6	8,420	50	224	58	140
Maryland	5	51	42,930	2	224	66	0	24	20	35	41	188	44	15	1	0	6
Michigan	0	0	950	0	0	0	0	7	2	0	0	0	1	0	8	0	39
Missouri	11	1,514	69,502	6	502	0	0	28	11	71	35	34	15	4	19	7	157
Montana	9	86	22,460	3	173	1	1	237	1	355	1,096	17	12	494	302	69	620
Navajo Nation	0	1	106,613	4	658	7	0	5	0	5	795	19	0	12	3	0	380
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
North Dakota	0	0	68,299	4	303	35	0	14	18	2	13	6	0	1,331	17	0	94
New Mexico	0	1	0	0	9	0	0	17	0	0	462	4	1	35	35	32	788
Ohio	38	5,308	56,704	7	96	396	4	49	10	34	282	53	203	106	94	3	215
Oklahoma	12	1	222,204	0	0	0	0	15	192	7	170	4	3	12	0	0	109
Oregon	0	0	0	0	0	0	0	3	0	0	12	0	0	0	0	0	3
Pennsylvania	94	140	789,016	45	563	42	0	320	121	20	279	27	37	2,454	122	915	486
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
South Dakota	0	0	135	0	0	0	0	4	0	0	5	0	0	1	0	0	1
Tennessee	0	147	35,595	3	448	66	0	31	44	14	192	5	13	6	28	0	10
Texas	0	0	48,715	0	1,461	0	0	0	16	0	59	0	0	17	0	0	337
Utah	14	9	3,425	1	388	3	19	203	0	2	2,862	2	0	186	43	29	921
Virginia	74	846	26,860	25	259	253	0	45,982	2	2	951	0	1,584	11	51	0	106
Washington	0	0	0	0	3	0	0	7	0	0	30	0	0	7	15	0	83
West Virginia	46	150	192,022	579	4,397	503	5	541	6	36	2,239	51	9,876	304	449	20	140
Wyoming	114	1,634	501,243	136	1,950	25	0	180	376	29	509	3	0	1,136	12	41	564
<b>Total</b>	<b>507</b>	<b>20,586</b>	<b>2,964,952</b>	<b>955</b>	<b>16,464</b>	<b>3,466</b>	<b>53</b>	<b>50,227</b>	<b>1,058</b>	<b>846</b>	<b>15,724</b>	<b>471</b>	<b>20,233</b>	<b>6,621</b>	<b>1,689</b>	<b>1,334</b>	<b>11,543</b>

**TABLE 6:  
1978-2002 ABANDONED MINE LAND RECLAMATION ACCOMPLISHMENTS  
PRIORITY 3 (ENVIRONMENTAL RESTORATION)<sup>7</sup>**

	Bench <sup>2</sup>	Industrial/Residential Waste <sup>2</sup>	Equipment/Facility <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 Problem <sup>5</sup>
Alabama	23	14	8	214	32,435	2	50	0	9,294	5	11	379
Arkansas	0	0	0	0	0	0	0	0	8	0	0	0
CERT Tribes <sup>6</sup>	0	0	2	6	1,500	0	1	7	80	0	0	0
Colorado	3	6	7	162	2,028	0	18	83	829	0	0	1
Crow	6	0	0	35	2,245	12	2	26	25	0	4	0
Georgia	3	0	0	3	400	0	0	3	7	0	0	0
Hopi Tribe	0	0	0	25	51	15	0	10	10	0	0	0
Iowa	0	2	0	1	2,900	5	1	21	440	0	0	0
Illinois	1	6	152	2,448	10,880	178	61	574	1,880	1,112	1	836
Indiana	0	107	177	1,356	13,746	227	23	371	1,803	966	3	6,305,068
Kansas	0	0	1	89	3,200	0	0	23	316	10	0	0
Kentucky	599	0	53	222	2,000	0	69	4	1,011	58	5	0
Maryland	10	1	2	58	5,335	2	6	22	263	0	1	88
Michigan	0	0	1	27	0	1	0	1	10	0	11	0
Missouri	0	5	5	146	16,824	1	0	96	1,373	69	0	86
Montana	1	76	58	147	1,170	1	230	34	875	0	19	2,741
Navajo Nation	39	1	2	136	280	122	63	144	265	0	0	3
North Dakota	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	3	0	11	68	0	6	4	2	254	2	0	0
Ohio	0	0	3	162	9,620	0	19	17	418	0	0	100
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	1	0	0	0	0	0
Pennsylvania	0	0	24	54	7,658	0	21	73	2,155	1	26	91,546
Tennessee	76	0	15	67	230	8	3	82	359	0	4	360
Texas	0	0	0	8	0	0	0	0	466	0	0	0
Utah	4	7	64	255	550	5	0	8	55	1	16	20
Virginia	0	1	25	20	13,000	1	52	0	3	0	0	120
West Virginia	0	0	0	66	30,656	0	4	5	182	0	0	622
Wyoming	0	0	0	39	0	91	0	7,137	8,017	199	0	0
<b>Total</b>	<b>768</b>	<b>226</b>	<b>610</b>	<b>5,814</b>	<b>156,708</b>	<b>677</b>	<b>628</b>	<b>8,743</b>	<b>30,398</b>	<b>2,432</b>	<b>101</b>	<b>6,401,970</b>

1. Miles  
2. Acres  
3. Feet  
4. Count (Number of occurrences)  
5. Gallons/minute.  
6. 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).  
7. These statistics do not include Office of Surface Mining emergency project accomplishments.



This 90-acre site is located about two miles from Widen, West Virginia and was part of a massive abandoned coal preparation and waste disposal facility that ceased operation in the 1950's. Before reclamation the site consisted of two large refuse areas totaling 72 acres along with an 18-acre impoundment filled with 1.5 million gallons of acidic mine water. A sizable portion of the refuse was also burning and producing irritating, noxious fumes for nearby residents. The reclamation not only eliminated the health and safety related problems; but, also successfully restored the site's pre-mined aesthetic values and appeal, and eliminated the potential for serious future flooding.

treatment of a mine discharge that was flowing from the toe of a reclaimed abandoned underground mine refuse pile. This discharge was one of the worst and largest in the Cowanshannock Creek watershed, which is stocked with trout in some segments. The discharge was characterized by high acidity and aluminum with a flow of 14 gallons per minute.

Initially, the Agriculture Department's Soil Conservation Service graded and revegetated the refuse material as part of a 1982 Rural Abandoned Mine Reclamation Program project. However, after completion a substantial contaminated seep persisted. In 1988, the Armstrong County Conservation District, in cooperation with R&P Coal Company, Pennsylvania Department of Environmental Protection, and the Armstrong Conservancy Charitable Trust, completed another project to address this seep. The second project involved construction of a subsurface rock drain, three small wetland ponds, and a large polishing pond. The large pond was named White Lake, and it was hoped that clean water from the treatment system would facilitate recreational use. However, the treatment system was unsuccessful, and highly contaminated water continued to flow into Cowanshannock Creek.

In 2002-2003, Pennsylvania Department of Environmental Protection removed the existing unsuccessful treatment system and installed state-of-the-art passive treatment technology, including a pretreatment buried limestone bed to generate alkalinity using on-site uncontaminated water; a large vertical flow limestone bed with a redundant flushing systems to help prevent clogging in the system; and a precipitation pond to remove the aluminum. The treatment system was designed to discharge uncontaminated water into White Lake. These technologies were not available in the 1980s when the first two attempts to clean up the discharge took place. The whole system was developed with the additional intent of providing recreational, interpretative,

and educational opportunities for the school students and citizens in the community.

This is an outstanding example of partnership, persistence, and use of ever improving technology to address an abandoned mine problem. The Clean Streams Program funding provided the necessary resources for the community to eliminate the water pollution and restore the environmental health of the watershed.

### ***Watershed Cooperative Agreement Program***

In 1999, the Office of Surface Mining began the Watershed Cooperative Agreement Program as part of the Clean Streams Program. The purpose was to provide funds, in the form of cooperative agreements, to not-for-profit organizations, especially small local watershed organizations, to clean streams affected by acid mine drainage. Applicants are required to have other partners contributing either funding or in-kind services.

Since the program began 85 cooperative agreements totaling more than \$6.5 million have been awarded. During 2003, 21 cooperative agreements and eight amendments to existing agreements were awarded for a total of \$2.0 million (see Figure 2). Agreements are limited to a maximum of \$100,000 and are used primarily for the construction phase of the projects; however, administrative costs associated with completion of a project are also allowable. In 2003, 22 projects were started in the Clean Streams Program states of Maryland, Ohio, Pennsylvania, Tennessee, and Virginia (see figure 1). Since 1999, 33 watershed projects have been completed.

Significant on-the-ground improvement has been made by these watershed projects. For example, about 10 years ago, the Mill Creek Coalition, in partnership with the Pennsylvania National Guard, Clarion University, the Pennsylvania Department of Environmental Protection, and numerous other local citizens, installed one of the first mine drainage treatment systems to use the emerging

**Figure 2**

<i>Organization and Project Name</i>	<i>Grant Amount</i>
<b>Maryland</b>	
Western Maryland Resource Conservation, Inc. McDonald AMD <sup>1</sup>	25,000
Georges Creek Watershed Potomac Hill AMD Project <sup>1</sup>	25,000
Western Maryland Resource Conservancy Kempton Manshaft <sup>1</sup>	55,000
<b>Ohio</b>	
Rural Action, Inc. Congo Subsidence Closure	71,500
Buckeye Hills Resource Conservation & Dev. Dist. Carbondale II Reclamation Project	100,000
Ohio State University Research Foundation Hope Mine Reclamation Project	76,836
Ohio Valley Resource Conservation & Development Mulga Run AMD Remediation Project	150,000
<b>Pennsylvania</b>	
Southern Alleghenies Conservancy Wells Creek-Moore Site	75,000
Southern Alleghenies Conservancy Wells Creek-Skeria Site	76,500
Babb Creek Watershed Rattler Mine A2-2 AMD	100,000
Babb Creek Watershed Hunters Drift Discharge	100,000
Babb Creek Watershed Rattler Mine A2-3 and A2-4	163,292
Babb Creek Watershed Anna S #1 and Anna S #2	100,000
Penn's Corner Conservancy Cenco Seep-Raccoon Creek	75,000
Chestnut Ridge Chapter Trout Unlimited Glade Run Drift Mine Phase 2	90,747
Southern Alleghenies Conservancy Boswell AMD Passive Treatment System <sup>1</sup>	80,000
Trout Unlimited, Inc. Twomile Run Treatment System <sup>1</sup>	50,000
Southern Alleghenies Conservancy Wells Creek Discharge #6 Skeria	22,000
Penns Corner Conservancy JB #2 Raccoon Creek	150,000
AMD & ART, Inc. Vitondale AMD Phase II	50,500
Headwaters Charitable Trust Back Hayes Run	27,500
Shamokin Creek Restoration Alliance Site 25	8,300
Penns Corner Conservancy Hamilton Mine Reclamation Project <sup>1</sup>	21,800
Western Pennsylvania Conservancy Big Run #2 Watershed <sup>1</sup>	15,000
National Fish and Wildlife Foundation Kettle Creek Phase III	50,000
Mountain Watershed Association Gallentine Phase II AMD Project	54,000
Wildlands Conservancy Lausanne Tunnel Discharge	150,000
Shamokin Creek Restoration Alliance Site 25 <sup>1</sup>	4,300
<b>West Virginia</b>	
Friends of the Cheat Greens Run	49,608
<b>Total</b>	<b>2,016,883</b>

1. Amendment

“passive treatment” technology which uses limestone, mushroom compost, and settling ponds to remove dissolved iron, aluminum, and neutralize acidity from the water. Up to that time, water contaminated by drainage from abandoned mine lands, if treated at all, was treated through the addition of highly alkaline chemicals in systems using tanks, water lines, and electrical pumps housed in buildings, and needing regular maintenance. Passive treatment offered the prospect of improved water quality in systems using natural materials, which were aesthetically pleasing, environmentally friendly, and could be operated and maintained on less intensive schedules using local volunteer help. As the years progressed, passive treatment designs and technology have become increasingly more complex in response to performance information gained through study of already installed systems. However, where applicable, passive treatment technologies are still preferred over other forms of “active treatment”.

Mill Creek is a large watershed in Clarion County, Pennsylvania that is heavily impacted by mine drainage from abandoned surface and underground coal mines. Since building the Howe Bridge project, the Coalition has installed numerous passive treatment systems using ever improving technologies and designs and is starting to see improvement in the water quality of the streams. Last year they returned to the original Howe Bridge site, which was losing effectiveness because the limestone was almost gone, and the settling ponds were filled with iron sludge. Using funds from the Office of Surface Mining’s Watershed Cooperative Assistance Program (\$100,000), Pennsylvania’s Growing Greener program (\$50,000), and Title IV Abandoned Mine Land grant funds awarded by the Office of Surface Mining for resource recovery activities (\$27,000), Mill Creek Coalition completely renovated the system, enlarging the treatment ponds, and installing the latest technology designed to help avoid clogging, thereby prolonging the life of the system. The iron oxide contained in the settling ponds was dug out

and placed in large porous synthetic tubes on the site for drying. When sufficient water has drained out of the sludge, it will be hauled away and sold as paint pigment. This use of iron oxide from the acid mine drainage for pigments is called resource recovery. It is a still small but growing beneficial use of certain specific types of mine drainage.

### **Summer Watershed Internship Program**

The Office of Surface Mining and the Environmental Protection Agency initiated the Summer Watershed Internship program in 1999, and in 2003, funded 26 interns in seven states. Since the program began, 123 interns have been placed in nine states (see Figure 3), all of them working directly for watershed groups on acid mine drainage issues.

The internship program enables college students (juniors and above) to bring technical expertise and youthful energy to volunteer watershed organizations. Each intern spends a semester working in a watershed and receives college credit for his or her efforts. In 2003, the Office of Surface Mining funding provided a \$2,000 stipend and \$500 for project expenses to each intern. In every case, the interns strengthened the capacity of the sponsoring watershed group, adding to their monitoring data, developing watershed plans, and building public awareness.

**Figure 3**

State	Number of Interns				
	2003	2002	2001	2000	1999
Alabama	1	1	0	3	0
Kentucky	0	0	1	2	0
Maryland	1	2	2	1	0
Ohio	5	4	3	2	1
Pennsylvania	9	8	12	5	3
Tennessee	1	3	1	3	1
Virginia	3	3	2	1	0
West Virginia	6	9	11	6	4
Indiana	0	1	1	0	1
<b>Total</b>	<b>26</b>	<b>31</b>	<b>33</b>	<b>23</b>	<b>10</b>

### **VISTA Initiative<sup>9</sup>**

The Office of Surface Mining and AmeriCorps/VISTA are working together to place full-time VISTA staff in coal-impacted watersheds across coal country. These VISTA positions are funded by the national VISTA program and include a three-year commitment to the sponsoring watershed group. The Office of Surface Mining provides a small cooperative agreement of \$5,000 for administrative support during the first year, and coordinates the activities.

The Office of Surface Mining/VISTA staff address four primary goals: Watershed Group Capacity Building, Research and Project Development, Education and Outreach, and Community Revitalization. Recognizing that the problems in the coal field watersheds include many issues, the Office of Surface Mining/VISTA team concentrates on pre-regulatory coal mining legacies; but, works to address other environmental and economic issues.

During 2003, there were 24 full-time Office of Surface Mining/VISTA staff in five states (Kentucky, Maryland, Tennessee, Virginia, and West Virginia) Six new positions in Pennsylvania and three in Alabama are expected to be filled early in 2004.

### **Brownfields Initiative**

Working under an Office of Surface Mining and Environmental Protection Agency-Brownfields Program Memorandum of Understanding, the Office of Surface Mining is bringing Brownfields Assessment Grants to the coal-impacted watersheds.

During 1999, the Office of Surface Mining initiated the first successful Environmental Protection Agency Brownfields pilot project for an entire coal-impacted watershed. Since then, the project has been completed,

9. VISTA, Volunteers in Service To America, was first organized in the 1960s and is now a part of the Corporation for National Service, a Federal agency. VISTA, AmeriCorps and the National Community Conservation Corps (NCCC) are the three primary initiatives of the Corporation for National Service. The Office of Surface Mining provides a \$5,000 Cooperative Agreement to non-profit watershed groups that sponsor Office Of Surface Mining/VISTA positions for administrative support in their first year.

and two new grants, each for \$200,000 have been awarded for projects in West Virginia and Tennessee.

The Office of Surface Mining also serves as the Chair of the Mine-Scarred Lands Working Group of the Brownfields Federal Partnership, a new group working to coordinate multiple federal agency programs to work on solving Brownfields problems.

### **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 a computer system which is accessible from the web at [www.osmre.gov/aml/inven/zintroin.htm](http://www.osmre.gov/aml/inven/zintroin.htm). The system creates reports on abandoned mine land accomplishments and problems that still require reclamation. This was the ninth year the states and Indian tribes managed their own data, entering it electronically into the Office of Surface Mining's inventory system. In 2003, this process resulted in 1,305 records added, 5,026 modified, and 161 deleted. As of September 30, 2003, the system contained information for 17,717 problem areas, mostly related to abandoned coal mines. (A problem area is a geographic area 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.)

Although the Abandoned Mine Land Program is one of the Nation's most successful environmental restoration programs, with over \$1.6 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, and new problems arise, such as subsidence and mine fires. As of September 30, 2003, a breakdown of (Priority 1, 2, and 3) costs from the inventory system show over \$8.5 billion of unreclaimed problems (see Figure 4).

Also, during 2003, the Bureau of Land Management continued to store its federal lands abandoned mine inventory in a specially modified version of the Office of Surface Mining inventory system.

### **Reclamation Awards**

After more than 26 years of abandoned mine land reclamation funded under the Surface Mining Law, thousands of dangerous health and safety problems have been eliminated. To enhance communication about achievements in abandoned mine land reclamation, the Office of Surface Mining has presented awards to those state and Indian Abandoned Mine Land programs responsible for completion of the most outstanding reclamation. (See [www.osmre.gov/amlrules01.htm](http://www.osmre.gov/amlrules01.htm) for a description of the awards program and the 2004 rules.) This year five awards were presented at the 2003 annual meeting of the National Association of Abandoned Mine Land Programs.

**Figure 4**

Completed	\$2.0 billion	19.2 percent
Funded	0.1 billion	1.1 percent
Unfunded	8.5 billion	79.7 percent
<b>Total</b>	<b>\$10.6 billion</b>	<b>100 percent</b>

■ National Abandoned Mine Land and Appalachian Region Awards -- The West Virginia Office of Abandoned Mine Lands and Reclamation Taylor Creek Impoundment project in Widen, West Virginia, won the national and regional awards for reclamation of a 90-acre abandoned coal preparation and waste disposal facility that ceased operation in the 1950's. Before reclamation this abandoned site had an 18-acre impoundment filled with acidic mine water, and a massive amount of steep-banked mine refuse, some of which was burning.

During construction 1.8 million cubic yards of refuse was excavated and reshaped, the fires extinguished, and the acid water treated. Today, in addition to the fantastic visual improvements realized by the reclamation all previous health and safety hazards have been eliminated.

■ Mid-Continent Region Award -- The Indian Division of Reclamation received the Mid-Continent Region award for reclamation of the Victory Mine Site. Once the site of barren and eroded abandoned mine refuse that created sedimentation and acid mine drainage problems of adjacent streams, it was transformed into productive land that has become an asset to the community.

Located just outside the city of Terre Haute, this site has been transformed into an outstanding wildlife habitat much of which has become an area of intense human activity. The landowner donated the reclaimed property to the Wabash Valley Family Sports Center, a nonprofit local organization, which developed a community recreation facility complex on the property. Today, this reclaimed abandoned mine site is home to a championship cross country running course that is used by local high schools and colleges and became the site of the 2002 national championships. In addition, the site has a sports center with basketball courts, weight room, and other public activity rooms. At this successful reclaimed abandoned mine site the hazards were eliminated and the site has become an important location for community

activities, sports competitions, and a wide variety of recreational uses.

■ Western Region and People's Choice Awards<sup>10</sup> -- The Navajo Abandoned Mine Land Reclamation Program, won the Western regional and People's Choice Awards for its reclamation of the Cove 3 Project. This reclamation eliminated health and safety hazards associated with 1950's uranium mining. This work was done on 61 different sites and included closing portals, grading and covering radioactive piles and embankments, eliminating highwalls, and planting vegetation.

These difficult abandoned mine problems have been successfully reclaimed and no longer pose a safety hazard to visitors of this scenic Arizona mountain range.

For additional information on the award program and the 2004 program rules see [www.osmre.gov/awardwin01.htm](http://www.osmre.gov/awardwin01.htm) or [www.osmre.gov/pdf/aml2003.pdf](http://www.osmre.gov/pdf/aml2003.pdf) for an illustrated description of the 2003 award winning reclamation.

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10. Using the Office of Surface Mining web site, the public selects one reclamation project they think is best. This project received the most votes and became the winner of the People's Choice Award.