

ENVIRONMENTAL RESTORATION

(dollars in thousands)

		2002 Actual	2003 Estimate	Uncontroll. & Related Changes (+/-)	Program Changes (+/-)	2004 Budget Request	Change from 2003 (+/-)
Regulation & Technology **	\$\$\$	191	437	2	-1	438	1
	FTE	1	1	0	0	1	0
Abandoned Mine Land	\$\$\$	186,697	156,987	221	-71	157,137	150
	FTE	111	109	0	0	109	0
TOTAL	\$\$\$	186,888	157,424	223	-72	157,575	151
	FTE	112	110	0	0	110	0

***Actual and estimated Civil Penalty Collections (\$275,000) are included in the total with no change estimated in FY 2004.*

**MISSION GOAL: TO PROVIDE A CLEANER AND SAFER ENVIRONMENT
FOR THE AMERICAN PEOPLE BY RECLAIMING AND RESTORING
LAND AND WATER DEGRADED BY PAST MINING**

The Environmental Restoration business line funds the abandoned mine land program (AML). The program addresses threats to public health, safety, and general welfare through the reclamation of environmental hazards caused by past mining practices. Through this business line OSM provides funds to States and Tribes for administering their approved AML programs. OSM also evaluates State and Tribal AML programs, abates emergency and high-priority coal mining-related hazards through the Federal Reclamation program (where OSM has reclamation responsibility), and fosters partnerships for the Clean Streams Program aimed at addressing acid mine drainage/water pollution problems.

The total magnitude of the abandoned mine problem is difficult to assess, but OSM has developed a national inventory that contains information on over 17,200 problem areas associated with abandoned mine lands, mostly coal. A problem area is a geographical area, such as a watershed, that contains one or more problems. The more serious problem areas are classified as priority 1 (extreme danger to public health and safety), priority 2 (adverse affects to public health, safety, and general welfare), or priority 3 (environmental hazards). Since 1977, over 180,000 equivalent acres of priority 1, 2, and 3 health and safety, and environmental-related coal problems have been reclaimed.

OSM's Environmental Restoration business line supports accomplishment of the Department of the Interior's Resource Protection and Serving Communities mission goal components in the draft strategic plan. As stewards of our nation's natural and cultural resources, the Department is entrusted with safeguarding these treasures for future generations. Environmental problems

associated with abandoned mine sites, such as, water pollution, open portals and pits, land stripped of natural vegetation, and refuse piles degrade our natural resources. Environmental problems associated with abandoned mine sites include water pollution, open portals and pits, land stripped of natural vegetation, and refuse piles. Through the reclamation of these problems, our land and water resources are improved for beneficial uses, such as, agriculture, wildlife habitat or development.

Mine site cleanups not only improve our environment, but also safeguard people and property. In addition, these communities are revitalized through the creation of jobs associated with reclamation projects.

OSM's authority to collect the abandoned mine reclamation fee expires on September 30, 2004, the end of FY 2004. Therefore, prior to program reauthorization during formulation of the FY 2004 budget, the Administration began using the Program Assessment Rating Tool (PART) to identify strengths and weaknesses of programs and to inform budget, management, and policy recommendations. The process generated extensive information on program effectiveness and accountability, including the need for additional performance measures.

The principal PART findings for the AML program are:

- the program is well managed and implemented with considerable coordination among program stakeholders,
- the increased use of AML funding by states for other uses is slowing the reclamation in states with large numbers of AML sites, and
- OSM needs to develop long term measures that are more outcome oriented and develop an efficiency measure.

**Operational Processes
(Program Activities):**

Approximately 90 percent of OSM's total funding request for this business line is for State and Tribal Funding, which provides AML State and Tribal reclamation grant funding, including watershed cooperative agreements, as well as funding for State and Tribal operated emergency projects.

**ENVIRONMENTAL RESTORATION
ENCOMPASSES**

State and Tribal AML Reclamation Operations

- *Reclamation Grants*
- *Clean Streams Program*
- *Watershed Cooperative Agreements*

Federal and State Reclamation

- *Emergency Programs*
- *High Priority Projects*
- *Outcrop and Underground Fire Control*
- *Civil Penalty Reclamation*
- *Bond Forfeiture Reclamation*

Program Development and Maintenance

State Program Evaluation

The Federal Reclamation Program funds both emergency and high-priority reclamation projects in States and Tribes that do not have a coal regulatory program, and also provides for emergency reclamation of AML problems in States with a coal regulatory program but without their own emergency program. OSM's administration costs of these projects are included in this business line.

Evaluation and Oversight of the State and Tribal AML reclamation operations is coordinated by OSM through the State Program Evaluation program activity. This business line also funds the Program Development and Maintenance program activity, which provides policy direction and ensures State/Tribal programs are amended as needed.

FY 2004 PERFORMANCE GOALS AND MEASURES

The Environmental Restoration program activities improve natural resources and reduce the risk to public health, safety, and general welfare by correcting problems caused by past mining. OSM has identified success indicators to show incremental accomplishments for the mission goal. In fiscal year 2002 OSM held a series of meetings with our State and Tribal partners to discuss the existing goals and measures for the restoration business line. As a result of these meetings and in line with the Departmental draft Strategic Plan, OSM has identified new goals with associated objectives and measures to indicate program accomplishments.

The table illustrates the relationship between the Department draft mission goals and OSM draft goals and measures.

Table 1 – Strategic Goals and Measures

OSM Mission Goal: Environmental Restoration			
PROVIDE A CLEANER AND SAFER ENVIRONMENT FOR THE AMERICAN PEOPLE BY RECLAIMING AND RESTORING LAND AND WATER DEGRADED BY PAST MINING			
DOI Goal	DOI Outcome Measure	OSM Goal	OSM Measures
Resource Protection – Improve Health of Watersheds, Landscapes and Marine Resources that are DOI Managed or Influenced in a Manner Consistent with Obligations Regarding the Allocation and Use of Water.	1. Number of land acres for which degradation from past mining has been reclaimed. 2. Number of stream miles and number of acres of impounded water for which degradation from past surface coal mining has been reclaimed.	Improve mine-scarred land and water resources	# of mine-scarred land acres improved for beneficial use
			# of miles of streams improved
			# of acres of non-stream (impounded) surface water improved.
Serving Communities – Protect Lives, Resources, and Property	1. Reduce safety risks from abandoned mine lands by reducing the exposure potential for ‘X’ people 2. Injury reduction – number of fatalities and injuries on DOI managed or influenced lands and waters.	Eliminate health and safety hazards related to past mining.	# of hazards eliminated by type, actual units, and number of people no longer at risk for these hazards.
			% of declared emergencies abated within six months and the number of people directly affected.
		Improve the use of financial resources dedicated to protecting the public from the adverse effects of past mining.	# of active partnering and leveraging agreements, and the amount of increased funds thereby derived.
			% of funds obligated nationally by States and Tribes.

Data Verification and Validation for Measures: The data for measuring reclamation accomplishments will come from the Abandoned Mine Land Inventory System (AMLIS); from our State and Tribal partners; and a separate tracking system utilized for the Clean Streams projects.

The AMLIS is a computer database used by the State Reclamation Programs and maintained by OSM. In accordance with the requirements of SMCRA, AMLIS contains data for known Priority 1 and 2, pre-SMCRA coal reclamation problems. Each problem is classified as unfunded, funded or completed. Problems are designated “funded” when construction contracts have been awarded to reclaim them. The AMLIS also contains information regarding funded and completed Priority 3 coal and post-SMCRA coal problems, as well as information on completed non-coal problems.

Actions Required to Achieve Annual Goals: In FY 2004, OSM will continue to encourage partnership participation by working with States and Tribes through their reclamation agencies, and through private and grass-roots associations. In addition, OSM will increase efforts to leverage funding from other government and non-government organizations to address abandoned mine sites. This emphasis on partnership and leveraging of resources supports Secretary Norton’s 4C’s philosophy – Communication, Consultation and Cooperation in the service of Conservation.

Resources, Skills, and Technology Needed: OSM and the AML program States and Tribes will continue to need a diverse and multi disciplinary cadre of individuals with scientific and engineering skills. These human resources establish reclamation project design and construction criteria either directly or in conjunction with contractors. Program analysts, grant specialists, and other support personnel are needed to implement the State/Tribal grants program and to conduct program evaluations. Computer systems personnel and contractors are needed to maintain the Abandoned Mine Land Inventory System. OSM maintains the system and network by which the States and Tribes manage their data.

- The FY 2004 President’s Budget requests \$142.1 million for State and Tribal funding for AML reclamation and emergency program; \$2.5 million for State Program Evaluation; \$9.4 million for Federal Reclamation Program of which \$3.8 million is for projects; and \$3.1 million for Program Development and Maintenance. It also proposes \$0.072 million in savings resulting from efficiencies in information technology initiatives.

The following section details, by program activity, the funding and FTE resources required to meet the annual performance measures. It also includes examples of the types of efforts used to evaluate programs, address emergency and high-priority issues and manage those projects, and provide reclamation support services to communities affected by coal mining issues.

**Table 2 – Justification of Program and Performance
Environmental Restoration**
Summary Increases/Decreases for FY 2004
(Dollars in Thousands)

Program Activity		Regulation & Technology			Abandoned Mine Lands			Total			Inc/Dec	
		2002	2003	2004	2002	2003	2004	2002	2003	2004		
State and Tribal Funding	\$\$\$	0	0	0	159,585	142,085	142,085	159,585	142,085	142,085	0	
	FTE	0	0	0	0	0	0	0	0	0	0	
State Program Evaluation	\$\$\$	0	0	0	2,467	2,513	2,547	2,467	2,513	2,547	34	
	FTE	0	0	0	25	24	24	25	24	24	0	
Federal Reclamation Program	Projects:		34**	275**	275**	16,067	3,850	3,850	16,101	4,125	4,125	0
	<i>Emergency High-Priority</i>	\$\$\$				10,946	0	0				
						5,121	3,850	3,850				
	Operations	\$\$\$	157	162	163	5,363	5,468	5,543	5,520	5,630	5,706	76
		FTE	1	1	1	56	55	55	56	56	0	0
Program Dev/Maintenance	\$\$\$	0	0	0	3,215	3,071	3,112	3,215	3,071	3,112	41	
	FTE	0	0	0	30	30	30	30	30	30	0	
TOTAL	\$\$\$	191	437	438	186,697	156,987	157,137	186,888	157,424	157,575	151	
	FTE	1	1	1	111	109	109	111	110	110	0	

** Actual and estimated Civil Penalty Collections (\$275,000) are included in the total with no change estimated in FY 2004.

ONGOING PROGRAM

1. State and Tribal Funding

The grant funding provided to States and Tribes support the DOI Resource Protection and Serving Communities mission goal areas. The reclamation project work undertaken with these funds restores land to beneficial uses, improves the quality of life for coal field citizens, and promotes job creation in these economic depressed areas. Two-thirds (\$94.8 million) of the requested \$142.1 million for grants will be used to address the most serious health and safety problems (priority 1 and 2s) caused by past mining that pose imminent harm or adversely affect people and property. About one-third (\$47.3 million) of the request will address environmental clean up projects and water pollution caused by acid mine drainage in the Appalachian states through the Cleans Streams program.

SMCRA established the Abandoned Mine Reclamation Fund (AML Fund) to finance the restoration of land mined and abandoned prior to August 1977. Coal mining had disturbed more than one million acres of land, resulting in significant health and safety problems for coalfield citizens and the public in general. An adequate AML Fund is essential to ensure that these problems are abated by providing the financial resources for State, Tribal, and Federal reclamation efforts. Although substantial progress has been made, approximately \$3 billion of priority 1 and 2 problems that threaten public health and safety and \$3.6 billion of priority 2 general welfare problems remain unreclaimed, and over \$1.8 billion of unreclaimed priority 3 problems have been identified by States and Tribes.

The AML Fund receives revenues through the collection of coal production fees (the lesser of 35 cents/ton of surface mined coal; 15 cents/ton of coal mined underground; and 10 cents/ton of lignite; or ten percent of the value of the coal at the mine), which are paid by operators of active mines. Payment of required fees is ensured by the fee compliance activities of the Financial Management business line.

SMCRA establishes that 50 percent of the fees collected be allocated to the State/Tribe from which they were collected for use in the State/Tribal reclamation program on eligible coal and non-coal abandoned sites. If a State/Tribe has certified that all coal-related problems have been addressed, its 50 percent share may also be used for the construction of public facilities related to the coal or minerals industry in States/Tribes impacted by such mining.

In accordance with SMCRA, the remaining 50 percent is divided into three shares:

- (1) The Rural Abandoned Mine Program (RAMP);
- (2) The Federal Expenses Share; and
- (3) The Historical Share.

Share One: RAMP Share, administered by the U.S. Department of Agriculture (USDA), is 10 percent of the fees collected plus 20 percent of the interest earned on the investment of the unspent portion of the AML Fund. To date, appropriations for

RAMP have been \$196 million. No funds have been requested for RAMP in FY's 1996 - 2003, and none are included in the Administration's FY 2004 budget.

Share Two: The Federal Expenses Share is 20 percent of the fees collected plus 40 percent of the interest earned on the investment of the unspent portion of the AML Fund.

This Share is used to fund:

- (a) Emergency and High-priority coal projects under the Federal Reclamation Program in States and Tribes without approved AML programs;
- (b) The supplemental amount to minimum program States;
- (c) The approved State Emergency Programs;
- (d) The Small Operator Assistance Program (SOAP); and
- (e) Federal expenses to collect the AML fee and administer the AML program. The Clean Streams Program is funded from this share.

Share Three: The Historical Coal Share is 20 percent of the fees collected plus 40 percent of the interest earned on the investment of the unspent portion of the AML Fund. This Share is used for grants to eligible States and Tribes for high priority coal projects. It is distributed through a formula based on the amount of coal historically produced in the State or from the Indian lands prior to the August 3, 1977, passage of SMCRA.

These three Shares collectively are referred to as the Federal Share.

The interest earned on the investment of the unspent portion of the AML Fund, while divided into the three Shares as explained above, has been primarily devoted to making transfers to the United Mine Workers of America Combined Benefit Fund. The Combined Benefit Fund is used to defray costs for the health care benefits of eligible former coal mining employees and their beneficiaries. OSM makes an annual mandatory transfer payment of interest earned on the AML Fund to the Trustees of the Combined Benefit Fund, within the requirements of the Energy Policy Act of 1992 and SMCRA.

a. Reclamation Program Grants

OSM provides grants to States and Tribes that have approved reclamation programs. States and Tribes use the grants to address hazards and problems such as underground fires, subsidence, landslides, open shafts, unstable or burning refuse piles, acid mine drainage, and dangerous, unstable highwalls. Reclamation grants to States and Tribes comprise the majority of this program activity's resources.

Each State must have an approved SMCRA regulatory (Title V) program and a reclamation (Title IV) program before it is eligible to receive reclamation grant funding. Tribes are allowed access to AML funds derived from reclamation fees if they have an approved reclamation program. Currently, three Tribes (Crow, Hopi, and Navajo) have approved programs and receive AML grant distributions. Twenty-three States and three Tribes will receive reclamation grant funding in FY 2004. For FY 2002, \$142.1 million is requested for grants.

Each year, the States and Tribes select reclamation projects from their inventories of eligible Problem Areas. AML grants normally have a three-year life cycle to allow for project planning and design, contract development and award, actual construction activities, and contract close-out. The AML grants also fund 100 percent of States' and Tribes' administrative costs related to reclamation program management.

OSM does not require advance approval of each AML project before it awards a grant. After OSM approves a grant, but before construction begins, OSM provides an authorization for a specific project to proceed. After OSM approves a grant, it establishes a letter of credit at a local bank for a State or Indian tribe. This incurs a Federal obligation and makes the funds available for the State or Tribe. When a State needs funds to pay expenses, the letter of credit is drawn down. OSM oversees the reclamation projects and expenditure of grant monies.

In the 1990 amendments to SMCRA, an authorized allocation level of at least \$2 million was established for States/Tribes having an approved reclamation plan and eligible Priority 1 and 2 coal sites. The minimum program amount includes the State Share, the Historical Coal Share and an additional supplemental amount (charged to the Federal Expenses Share). For FY 2004, the minimum funding level request remains at \$1.5 million.

b. Clean Streams Program

In FY 2004, OSM proposes to maintain funding for the Clean Streams Program by making available a total of \$10 million for the program; \$6.9 million to fund State Reclamation Grants, \$2.75 million for Watershed Cooperative Agreements, \$0.200 million for the Acid Drainage Technology Initiative (ADTI) and \$0.150 for program management, maintenance and assistance. The ADTI is under the Technology Development and Transfer business line. The requested level would enable OSM to support State Abandoned Mine Reclamation agencies to identify, evaluate, plan, and construct projects to treat acid mine drainage (AMD) in the Appalachian coal region.

OSM's emphasis on Clean Streams Program projects as a national priority, combined with increasing watershed stewardship at the community level, and more sophisticated and cost-effective treatment technology, has promoted a general increase in State project activity related to, or incorporating, AMD treatment. With additional opportunities to

field-test and observe passive AMD treatment systems, the efficacy, sophistication, and cost effectiveness of treatment technology has increased considerably in just a few years.

AMD is the number one water pollutant in the coalfields of the Appalachian area causing major environmental and public health problems. AMD problems are occurring in other regions as well. OSM's effort to control and eliminate AMD in streams and rivers supports the Department's commitment to clean water and strengthening local communities. 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 Program was designed to facilitate development of partnerships in the Appalachian coal region. Through this effort, OSM has partnered with over 100 government agencies, private watershed groups, environmental groups, private foundations, coal producers, and private individuals.

Through FY 2002, approximately \$26 million in matching grant funds have been committed by participating States to 89 projects. States identified the projects and secured additional sources of funding, wherever possible. Through FY 2002, partnering sources have contributed approximately \$20 million in project funds and services. In addition, many in-kind services, without a specific determined monetary value, have been provided by partnering entities.

OSM, in consultation with the States, distributes Clean Streams Program grant funding in the Appalachian coal region using a base amount of \$125,000 to each of the eligible States, with the remainder distributed based on historical coal production. As inventory data on the extent of acid mine drainage in each State is not available, historical coal production is perhaps the most equitable basis for distributing available funding.

Many of the demonstration projects that received Clean Streams funding since inception through FY 2002 are now completed, under construction, or in design, with construction to commence soon. OSM's emphasis on the Clean Streams Program has also helped promote a general increase in State project activity related to, or incorporating, AMD treatment. The following are some examples of how the funds are being used:

New Project Examples:

- **Peabody Washer Project, Alabama** - The Peabody Washer AMD Remediation Project, located in Tuscaloosa, Alabama, includes a four-acre gob pile, stacked 100 feet high with unstable outer slopes. The southern perimeter of the pile has become severely eroded. The unstable refuse flows freely into two clogged sediment ponds, which in turn drain directly into the Holt Lake section of the Black Warrior River. Over the years, large amounts of sediment and debris have been deposited, forming a sandbar that extends 20 feet into the river. This continual buildup of sediment within the river poses a hazard to navigation and is detrimental to water quality. Drainage intermittently flowing through the gob material was analyzed by the Alabama Dept. of Industrial Relations as having low

pH (3.48), no alkalinity, and acidity of 83 mg/l. A Clean Streams Project has been approved by OSM that will excavate and regrade the gob pile and upper sediment pond, returning the outer slopes to a stable, 4:1 configuration. The regraded pile and lower sediment pond will be armored with onsite material, and the drainage from the upper pond diverted around the lower pond. A passive limestone leach bed will be built below the site to treat acidic drainage in a seep that discharges the groundwater from the site. These actions will reduce infiltration into the acidic gob material, eliminate mine-waste related sedimentation of the river and treat the acidic seep that drains the site.

- **Red Oak Project, Oklahoma** – Construction work was initiated in 2002 to abate acid mine drainage (AMD) discharging into Red Oak Creek in Latimer County, Oklahoma. The AMD is from a continuous artesian flow out of an underground mine dewatering borehole that was abandoned around 1925. The project employs newer AMD passive treatment technology involving a two-stage, bio-reactor type, Vertical Flow Wetlands. The technology employed uses bacteria in a thick compost layer to remove pollutants. The Oklahoma Conservation Commission has partnered with the University of Oklahoma, the local Soil Conservation District and a local business to implement the project. Revegetation plans for the project were developed by the local soil conservation district and wetland plantings were done free of charge by University of Oklahoma students. Monitoring will continue through 2003 and into 2004.
- **Will Scarlet Mine, Illinois** - Illinois used Appalachian Cleans Streams funding over two consecutive years to reclaim more than 160 acres of acid producing spoils at the Will Scarlet Mine site in Williamson County, within the watershed of the South Fork of the Saline River. Precipitation falling in the ungraded spoil ridges emerged as acid mine drainage in the lower reaches of the area. Significant quantities of alkaline cement kiln dust were used to fill low areas and the spoil was graded to drain. Kiln dust and sewage sludge were incorporated into the regraded spoil surface to add alkalinity and organic matter, and vegetation was established. Though qualitative data is not yet available, visual inspection indicates a decrease in acid mine drainage (AMD) from the area. The site owner, Peabody Coal Company, joined as a partner in this effort providing heavy equipment, alkaline kiln dust, and sewage sludge. Peabody was joined by another corporate partner, Southern Illinois Power. Together, their investment in the project was worth several hundred thousand dollars and the project will improve 45 miles of river.
- **Buckeye Furnace, Ohio** - This project in the Raccoon Creek watershed, reclaimed 60.5 acres of acidic slurry ponds and gob piles and utilized several passive treatment techniques, including an anoxic limestone drain, a successive alkalinity producing system, and steel slag leach beds.

Sampling showed that acid loads downstream of the project were reduced by 805.3 tons of acid per year, and iron concentrations were reduced from an average concentration of 38.3 mg/l to 4.8 mg/l. Aluminum was reduced from an average concentration of 13.4 mg/l to 0.7 mg/l.

- **Keyser Avenue, Pennsylvania** - Due to adjacent mining, water from Lucky Run was leaking through cracks in the streambed into an underground mine pool, thereby adding to the AMD contamination of the Lackawanna River. Water loss was so severe that, in times of low flow, water entering the fracture zone from upstream was 100% lost to the underground mine pool by the time it reached the lower end. The Keyser Avenue project successfully restored surface flow to 1,300 feet of stream channel by lining the stream bottom with an impervious fabric to prevent stream water from infiltrating the underground mine pool through cracks in the streambed and underlying rock strata. The stream channel was rebuilt using the nationally known Fluvial Geomorphology Method to simulate natural stream characteristics, reduce the force of the water in times of flood, provide stable banks, and improve habitat for fish and aquatic life. Other benefits include prevention of mine drainage, protection of an underground coal mine renovated for public tours, restoration of aquatic habitat, and enhancement of a public park. The Lackawanna County Commissioners dedicated \$80,000 for project enhancements to help the project blend into the look of the surrounding public park with the restored stream as its centerpiece. Based on this successful project, Pennsylvania plans to extend the stream reconstruction area several hundred additional feet downstream through an additional fracture zone.

OSM implemented the Watershed Cooperative Agreement Program as part of the Clean Streams Program in FY 1999. The program allows OSM to award funding, in the form of cooperative agreements, directly to private not-for-profit agencies, such as small watershed organizations, to undertake local AMD reclamation projects. This program is intended to provide the final amount necessary to complement the contributions of other supporting partners and proceed to actual construction.

In FY 2000, OSM received 29 applications and awarded 19 cooperative agreements ranging from \$22,000 to \$80,000 and totaling \$1.7 million. In FY 2001, funding for the watershed program was increased to \$2,743,950. During FY 2001, OSM awarded 13 cooperative agreements for projects in five States. In FY 2002, OSM awarded 21 cooperative agreements in seven States, for \$1.6 million.

The following represent examples of some of the projects funded under the program:

- **The Black Diamond Resource Conservation and Development, Inc.**, Lebanon, Virginia, received funding to abate acid mine drainage on the University of Virginia at Wise campus. The source of acid mine drainage is abandoned

underground mining conducted prior to the 1950's. The acid mine drainage stains the stream that runs through the campus. The project already has a diverse group of partners including UVA-Wise, Virginia Tech, VA Division of Mine Land Reclamation, Guest River Group, Lonesome Pine Soil and Water Conservation District, VA Department of Conservation and Recreation, NRCS, AMD&ART and Maxim Engineering. OSM funding for the project is \$100,000 and the current non-federal match is \$100,000.

- **The Sagamore Mine Drainage Remediation Project** is sponsored by the Mountain Watershed Association. The Association was created in 1994 to raise public awareness of environmental issues and implement environmental restoration projects in the Indian Creek Watershed. Indian Creek watershed is in northeast Fayette County Pennsylvania. There are about 30 miles of streams, with 17 miles severely impacted by drainage from abandoned coal mines. The Association has developed a strong coalition of citizens, businesses, and local, Pennsylvania and Federal partners. As a first step, the Association undertook a comprehensive assessment and inventory of the sources of water quality degradation. As a partner, the Natural Resources Conservation Service (NRCS) completed a watershed restoration plan in 2000. That plan identified 119 sources of abandoned mine drainage. Of those, 10 were targeted for treatment as they contribute over 90% of the total problem in the Indian Creek Watershed. The Association now has projects in construction or development on six of those sites. The Sagamore site is the first AMD remediation project completed in the watershed. The project involved the collection of underground mine seeps, the relocation, and reclamation of a streamside coal refuse pile, and design and construction of two treatment systems. A special feature is the incorporation of two 20-foot tall windmills that operate air pumps. The windmills pump a stream of air into the water, enhancing the process that leads to precipitation of iron. OSM contributed \$107,000 of the total cost of \$358,000 to construct the project. Other primary financial partners included the NRCS and EPA, and the Western Pennsylvania Watershed Protection Foundation. The Pennsylvania Department of Environmental Protection cleans out the collection pipes, and is an active financial and design partner in several of the other AMD remediation projects in the watershed. The local school system is using the site for environmental field trips, and local youth groups have planted trees and shrubs along the trail. The Mountain Watershed Association leveraged their success on this project to improve public involvement in environmental issues affecting the watershed and to begin additional projects.
- **The McCarty Highwall Project** involves an abandoned surface mine that discharges acid mine drainage into Beaver Creek, a part of the Cheat River Watershed in Preston County, West Virginia. The mine discharge adversely affects receiving stream water quality and fish populations. This project site was selected and developed through the River of Promise (ROP) steering committee, chaired by Friends of the Cheat (FOC). The ROP steering committee believed that treatment of the discharge would significantly improve water quality in

Beaver Creek, allowing the stream to be returned to a cold-water fishery. FOC obtained project funds and in-kind services from OSM, EPA, the National Mine Lands Reclamation Center, Triad Engineering, and the U.S. Department of Energy. The total project costs were approximately \$100,000. The project was started in September 2000 and completed in October 2000. One year of post-construction water quality data reflected significant improvements at the site and to Beaver Creek. The West Virginia Division of Natural Resources (WVDNR) considered the improvements and determined that it was feasible to reintroduce native brook trout populations.

In August 2002, a fish survey was conducted to evaluate the success of the October 2001 trout stocking. The fish survey found good survival rate with transplanted fish and several young-of-the-year trout (at least 4 age classes). The survival rate was so successful that the WVDNR Fishery Biologist recommended against conducting additional transfers of adult fish to the stream.

For FY 2004, OSM will continue to use up to \$150,000 of the overall Clean Streams funding to support activities such as: 1) assisting OSM Field Offices and States as they encourage formation of new, or more effective, watershed organizations in areas with AMD from abandoned coal mining; 2) supporting States, other Federal agencies, watershed organizations, and associated groups in partnering; 3) leveraging human and fiscal resources for stream restoration projects; and 4) implementing the Watershed Intern Program.

c. State Emergency Programs Grants

Under provisions of SMCRA, OSM provides funds to States to abate emergencies. These are AML problems which occur suddenly and present high probability of substantial physical harm to the health, safety, or general welfare of people, and have to be addressed immediately. The funding for this activity supports DOI's goal to protect lives, resources, and property under the Serving Communities mission component.

States that operate their own emergency programs, fund the emergency projects from their AML grants. Emergency project funds originate in the Federal Share portion of the AML Allocation and are in addition to States' regular AML grant allocation. During FY 2003 OSM turned over emergency program authority to Iowa, bringing to fourteen the number of active State emergency programs. The following States now operate their own emergency programs: Alabama, Alaska, Arkansas, Illinois, Indiana, Iowa, Kansas, Missouri, Montana, North Dakota, Ohio, Oklahoma, Virginia, and West Virginia.

OSM carries out emergency project responsibilities for the Tribes, for States without approved reclamation programs (California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee and Washington) and for States that have not requested the authority to administer their own emergency programs (Colorado, Kentucky, Louisiana, Maryland, New Mexico, Pennsylvania, Texas, Utah, and Wyoming).

OSM will continue to encourage States to assume responsibility for emergency AML reclamation projects. States have developed considerable expertise in performing reclamation. More effective reclamation can occur when States perform the emergency abatement and then immediately follow-up by completing the reclamation project through their regular AML programs.

OSM's FY 2004 request does not include any new federal funds for Federal emergency programs, however the request does include funds for the State administered programs. Previous OSM appropriation language has limited expenditures of current year funds in any one state to \$4.5 million. In the past, West Virginia, Pennsylvania, and Kentucky have all reached this limit. This has resulted in the need to use prior year emergency funds, which are not subject to the per state limitation. To assure the timely response to emergency conditions, it is imperative that OSM continue to be able to supplement current year funds with carryover funds from previous years.

2. State Program Evaluation

SMCRA requires OSM to monitor the progress and quality of each State and Tribal program to ensure that their reclamation programs function effectively. This program area is an integral part of the State and Tribal funding. Evaluation of State and Tribal reclamation programs ensure efficient and effective use of program dollars for the intended purpose. Two-thirds or \$1.7 million of the funds provided support the protection of lives, resources and property; one-third or \$0.8 million addresses the improvement of land and water degraded by past mining.

OSM analyzes documents submitted by States and Tribes (e.g. grants, amendments, reports), and conducts on-site evaluations of selected reclamation projects. OSM also provides the States and Tribes with expert technical assistance on reclamation projects. OSM, States, and Tribes hold conferences and forums to discuss reclamation issues, technology, and solutions to reclamation problems.

OSM, in consultation with States and Tribes, developed a review system that provides for enhancement and performance evaluation of programs, rather than oversight. This system, which is based on principles of excellence, recognizes that evaluation involves an ongoing relationship between OSM and the State or Tribal agencies - which have the autonomy to run their programs. OSM is responsible for assisting in program enhancement while monitoring compliance with SMCRA.

This evaluation system does not require that each program be reviewed each year in each of the six areas covered under the principles of excellence. Instead, the system allows each State or Tribe to develop, with the appropriate Field Office, a programmatic agreement which addresses the areas to be reviewed and establishes applicable performance measures. Since much of the enhancement and performance evaluation is trend analysis and because the interaction between the programs and OSM is continual, the programmatic agreements can be for periods longer than one year. However, OSM reviews them each year to determine the progress being made.

These agreements first address the overriding goal of the AML program, which is reclamation. They recognize that if the State or Tribe is permanently reclaiming abandoned mine sites by abating hazards, reducing or mitigating adverse effects of past mining, and restoring adversely affected lands and water to beneficial use, then it is conducting an overall successful program.

OSM encourages States and Tribes to maintain ongoing programs for post-project monitoring to assure that completed reclamation projects receive adequate maintenance until reclaimed lands are stable, and to ensure the effectiveness of reclamation designs. OSM evaluations of post-construction monitoring ensure implementation of these types of State monitoring plans.

3. Federal Reclamation Program

Through the Federal Reclamation sub-activity funds (\$9.4 million) are provided for the elimination of the highest priority environmental hazards associated with past mining in non-primacy States; and, elimination of hazards that pose imminent harm to people and property in States without an emergency program (Kentucky and Pennsylvania). These activities support accomplishment of the Department's Communities goal by protecting people, property and resources from direct adverse affects caused by past mining operations.

This program activity funds the following components:

- emergency projects;
- high-priority projects;
- program operations (OSM administration of projects).

This program activity also funds OSM's administration of projects funded by Federal civil penalties collected from operators and projects funded from bonds forfeited by operators of federally permitted sites.

a. Federal Emergency Projects

OSM manages emergency abatement projects in States and on Tribal lands where the State or Tribe has no approved regulatory program and is therefore ineligible for an AML program, and where the State or Tribe has determined it does not want to have an emergency reclamation program. Many coal-producing States, including two with high numbers of emergencies, Pennsylvania and Kentucky, do not have an approved emergency program. Typically, OSM administers over half of all emergency abatement work performed annually.

The Federal Emergency Projects component provides immediate relief from abandoned mine hazards that threaten public health and safety on Federal and Indian lands in States without their own emergency program. Emergencies are generally the result of two different types of events. The most common emergencies are subsidence events, the caving in of old underground mines. Subsidence can impact man-made structures on the surface, and may be life threatening when they occur in areas where there is frequent human activity, such as in parks, playgrounds, and residential areas. These types of emergencies are most common in the Midwestern states and Anthracite regions of northeastern Pennsylvania.

The second type of event is landslides. These are usually the result of unstable mine spoil placed on steep hillsides. This occurs generally in the steep slope areas of Appalachia, and especially in eastern Kentucky and southern West Virginia. Landslides can impact homes and other man-made structures and may block streams, which, in turn, can cause flooding either above or below the blocked stream. Landslides are generally more costly to abate than other AML problem types.

In FY 2002, the OSM abated 166 AML emergencies in six States. The most emergencies, (95) occurred in Pennsylvania, followed by Kentucky (65). Kentucky emergencies required the most funding, over \$3.5 million, primarily in abating landslides. This was due in part to heavy rains that fell in late winter and early spring. About \$3 million was spent in Pennsylvania, generally related to lower-cost subsidence events.

When notified of a possible emergency situation, OSM personnel will visit the site, usually within 24 hours. Should OSM determine an emergency exists, OSM conducts remedial action as quickly as possible to abate the emergency situation. In FY 2002 of the 597 potential emergencies referred to the Federal program, 162 were determined to be emergencies. Of the remainder, 419 were determined not to be emergencies or did not result from coal mining, or were reclaimed by the landowner, while 16 were still under investigation at the close of the fiscal year.

OSM is not requesting new funding for the Federal emergency program for FY 2004, as OSM had \$22.9 million in carryover funds available at the start of FY 2003. Federal emergency expenditures over the past ten fiscal years have averaged about \$9 million.

b. Federal High-Priority Projects

OSM manages projects in States and on Tribal lands where the State/Tribe has no approved regulatory program and is, therefore, ineligible for an AML program.

During FY 2002, OSM completed six high priority projects. Five were in the State of Tennessee which included three projects that reclaimed a total of 85 acres, and two projects that provided six and one half miles of waterlines to homes and businesses whose water supplies had been impacted by pre SMCRA mining. One project for 21 acres was completed in Georgia. Three projects in Washington continued ongoing reclamation efforts. Tennessee, with an unfunded inventory of projects of over \$13 million, remains the largest consumer of OSM's high-priority funds.

c. Outcrop and Underground Fire Control Projects

Pursuant to Public Law 83-738, as amended by Public Law 102-486 (Energy Policy Act of 1992), project funds are provided to control or extinguish outcrop and underground fires. Funds for this purpose are provided by the Regulation and Technology appropriation to control or extinguish coal fires. OSM costs of administering these projects are included in the AML budget request. These projects are not eligible for funding under the AML program. Coal outcrops are ignited by forest/brush fires, lighting, and campfires and occur mostly in the western States. The purpose of these projects is to prevent injury and loss of life, protect public health, conserve natural resources, and protect public and private property. This program was originally authorized under the former Bureau of Mines and subsequently transferred to OSM.

In FY 2002, the Colorado Department of Natural Resources, Inactive Mine Reclamation Program was provided a grant of \$60,000 for the Smokey Mountain Outcrop Fire on

BLM land near Grand Junction, Colorado. BLM has ranked this fire as a high priority risk to human health and safety and for wildlife potential. The funds will be used to fence the perimeter of the burn zone, remove vegetation from the near surface hot zones, conduct aerial surveys, conduct drilling to delineate the fire, and develop recommendations for long-term control of the fire.

d. Program Operations

OSM performs all the work related to emergency reclamation occurrences on Federal and Tribal lands and in States without an emergency program. This begins with the initial investigation on the site in order to make two threshold determinations: (1) does an emergency condition exist? and (2) is the condition related to abandoned coal mining? Time is of the essence; in some instances, abatement activities begin within hours of OSM's initial investigation.

Once the determination is made that the site is eligible for funding as an emergency project, the Federal Reclamation Program staff obtains approval for project funding and develops the abatement plan. This includes:

- compliance with the National Environmental Policy Act (NEPA) and the Historic Preservation Act;
- obtaining the right of entry for access;
- developing engineering plans and specifications needed for abatement;
- preparing and mailing bid packages to potential construction contractors;
- conducting pre-bid and pre-construction conferences;
- awarding contracts;
- coordinating, managing and inspecting all aspects of the ongoing construction; and
- reviewing, approving and paying invoices.

e. Civil Penalty Reclamation Projects

Federal civil penalties collected under Section 518 of SMCRA are authorized for reclaiming lands mined and abandoned after passage of SMRCA on August 3, 1977. These funds are derived from civil monetary penalties from OSM-issued citations nationwide. The funds are also available for reclamation of bond forfeiture sites. These funds are divided among projects proposed by both State and Federal regulatory authorities and used for project costs only.

Since the major coal producing states administer their own programs, civil penalty revenues available to OSM have decreased to levels that are not sufficient for all emergency post act reclamation needs. In FY 2002 two emergency projects were funded in eastern Kentucky using civil penalty funds.

f. Bond Forfeitures

These funds are receipts from forfeited performance bonds and can only be used to reclaim lands where the bond was forfeited where OSM was the regulatory authority. States have their own programs. Forfeited funds are site-specific and cannot be used to reclaim other sites or for other purposes. Surplus amounts must be returned to the operator. Using the forfeited funds, OSM issues and administers contracts for reclamation in accordance with the mining plan developed during the permit process. OSM is mandated under SMCRA to reclaim sites that have been abandoned and forfeited in Federal Program States. Bond forfeiture is an important component of OSM's mission to restore lands abused by mining.

Approximately 91 acres were reclaimed in Tennessee at a cost of \$1.15 million in FY 2002. OSM anticipates reclaiming approximately 35 acres at an approximate cost of \$275,000 in FY 2003, and approximately 101 acres at an approximate cost of \$338,480 in FY 2004.

4. Program Development and Maintenance

This program activity provides funding for reclamation program management and programmatic guidance to States and Tribes. Program Development and Maintenance activity is an integral part of the State and Tribal funding program. The funding is divided one-third (\$1.0 million) Resource Protection and two-thirds (\$2.1 million) Serving Communities. OSM has an ongoing process of reviewing existing policies in the Environmental Restoration business line. Whenever necessary, policies are revised to meet the existing need of the programs and to keep abreast of changes to the law.

OSM, in consultation with the States and Tribes, developed an oversight review system that provides for enhancement and performance evaluation of reclamation programs. OSM also assists States and Tribes to build on successes by providing ongoing technical assistance, by continually enhancing the primacy grants process, and by ensuring National Environmental Policy Act compliance, and by conducting program-focused enhancement and performance evaluation. OSM encourages States to assume responsibility for their reclamation and emergency abatement programs, and supports implementation of their AML programs through technical and program assistance as needed.

OSM emphasizes State/Tribal and Federal partnerships in the AML program. OSM works directly with the States and Tribes, through State and Tribal associations and with other Federal agencies, to coordinate and enhance reclamation. Such relationships foster

coordination essential to land reclamation. New policy and changes to existing policy are circulated to the States and Tribes for input prior to being finalized enabling OSM to make programmatic decisions in a collegial manner. Examples of activities are: (1) working with States/Tribes to develop improved strategic plan measurements for the AML program; (2) participating with EPA in conducting a Brownfields workshop for States and local watershed organizations; (3) holding meetings/workshops with the State/Tribal grantees to provide training for new employees to keep them abreast of policies and procedures and to solicit their input on issues in the grants program; and (4) working with the National Association of Abandoned Mine Land Programs (NAAML) to decide winners of the annual AML Reclamation Awards.

As the need arises, OSM works with the States on revision to their approved Abandoned Mine Plan. These changes are approved through the Reclamation Plan amendment process.

During FY 2002, the State Reclamation Plan amendment activity was as follows:

Table 3 – State Reclamation Plan Activity FY 02				
<i>Number of Amendments</i>				
Amendment Type	Pending Oct. 1, 2001	Received FY 2002	Completed FY 2002	Pending Sept. 30, 2002
Informal	0	2	2	0
Formal	1	3	2	2
Total	1	5	4	2

a. AML Inventory

OSM manages the National AML Inventory, which serves as a planning and evaluation tool for the States, Tribes, and OSM. The States and Tribes also use the inventory to assist them in planning to make funding decisions and to report program accomplishments. The inventory is maintained on a computer system known as the Abandoned Mine Land Inventory System (AMLIS). AMLIS is the system OSM uses to record and report AML Program accomplishments under GPRA.

Beginning in FY 2000, OSM began working with the Bureau of Land Management, the National Park Service and the Forest Service to consolidate copies of all AML inventories in AMLIS. This effort will continue in the future. The public can access AMLIS via the Internet. AMLIS currently is being converted to a web-based system to allow even easier access by the public. OSM is using the AMLIS hardware and software to develop a web site where the public can create maps showing the locations of underground mine maps stored in OSM’s Mine Map Repository. Individuals will be able to view maps of interest on their computer monitor and/or download the maps as electronic files.

b. Grants Management

OSM supports and participates in the Department of the Interior's grants simplification efforts based on Public Law 106-107, the Administration's e-Government initiative, and Health and Human Services' e-Grants program. OSM has a decentralized grants management organization, with a small policy staff at headquarters. The day-to-day grants and program management is performed in regional/field offices, and the accounting and reporting occurs under the Financial Management business line activity. OSM and the State/Tribal grantees cooperate to maximize the use of available funding and operate an effective program. Grantees provide input by participating on ad hoc teams and by reviewing and commenting on proposed changes in the program. This cooperative working relationship contributes to streamlined application and awards processes, faster obligation of Federal funds, innovative program monitoring, and less paperwork-intensive reporting and close-out of grants. In addition, OSM periodically holds meetings/workshops with the State/Tribal grantees to provide training for grantees and to keep them abreast of policies and procedures.

c. AML Enhancement Initiative

OSM issued final rules on February 12, 1999 that allow more AML eligible sites to be reclaimed without significant additional cost to the government.

Under this rule, reclamation at a particular AML site can be provided by private contractors in exchange for the incidental coal found at the site. The removal of the coal must be a necessary part of the reclamation project. The cost to the AML program would, accordingly, be reduced by the value of the coal removed from the site. OSM expects to achieve environmental restoration at many sites that now contribute to AMD or create other environmental problems that likely would never be mined and reclaimed by industry under Title V. Removal of coal at many of these abandoned sites will permanently eliminate the environmental problems and their sources.

The rule includes a number of important safeguards to ensure that remaining under the AML program will not be used as a loophole for coal operators to avoid regulation. One control will disqualify sites where it is economical and feasible to recover coal under Title V provisions. A second is that all administrative and financial procedures and the environmental safeguards of the existing AML programs will apply to projects covered under the scope of the proposal.

The States and Indian Tribes have the option of adopting the provisions of this rule in their reclamation programs. Several States have availed themselves of this opportunity. Pennsylvania has amended its program and has already identified 41 areas to be eventually reclaimed under this concept. Ohio published its final rules in 1999, and Virginia published its rule in 2000. OSM approved Alabama's regulatory program amendment in June of 2000. The program amendment for the AML Enhancement

program was approved by OSM and the final rule was published on November 8, 2000. Maryland finalized regulations on April 12, 2001.

On April 4, 1999, the Kentucky Resources Council (KRC) challenged the rule in the Federal District Court for the District of Columbia. On September 1, 2000 the court ruled in favor of the Department of the Interior. As a result of the July 2001 appeal by the KRC, part of the rule was upheld, and part was remanded back to OSM for clarification. After consulting with States and Tribes, OSM has determined to issue a final rule to address the remanded issue. This final rule will be issued in FY 2003.

The following are some examples of AML Enhancement projects conducted in FY2002.

The Alabama - Blue Creek Gob AML Enhancement Project. The project successfully met the challenge of correcting an assortment of public safety hazards and environmental problems stemming from 40 acres of abandoned coal refuse or gob at a remarkably low cost. This was accomplished by allowing the contractor to extract and sell marketable coal from the refuse in return for grading the site under a no-cost contract with the State. Final reclamation of the project is currently underway.

The Alabama - Gorgas Mine Refuse AML Enhancement Project includes approximately 30 acres of slurry that is surrounded on three sides by 50 acres of gob material, forming a dam 1,300 feet in length. Cracks in the dam threaten its integrity. The refuse material is currently being removed and transported to a processing plant where it is blended with other materials and shipped to the Alabama Power Company Wilsonville Steam Plant for use as fuel. Reclamation of the site under the current "no-cost contract" will save the AML Program approximately \$1,000,000.

FY 2002 PROGRAM PERFORMANCE ACCOMPLISHMENTS

In 2002, the major accomplishments in the Environmental Restoration program activity include:

- Through grants provided to States and Indian tribes, reclaimed 8,000+ equivalent acres of abandoned coal mine lands presenting health and safety hazards.
- Distributed \$6.9 million to 12 States under the Clean Streams Program to restore and improve the quality of watersheds damaged by mining; another \$2.7 million was available for non-profit organizations and an additional \$4.4 million was contributed by outside sources to fund watershed projects.
- Expanded assistance to communities interested in Brownfield grants.
- OSM placed 31 summer interns with watershed organizations in eight States.
- Awarded \$1.6 million in the form of watershed cooperative agreements to 17 organizations in seven States for acid mine drainage treatment projects.
- OSM and States started 349 emergency abandoned coal mine reclamation projects and 317 non-emergency abandoned mine reclamation projects.
- Through 2002 partnership agreements under the Appalachian Clean Streams program have contributed approximately \$20 million in funds and in-kind services to the restoration of water polluted by acid mine drainage.

	2002 Planned	2002 Actual	Change	Reason for Change
Equivalent Acres Reclaimed	8,200	8,019	-2%	This is below the 2002 target goal; however, there is a delay in states reporting projects completed, but it is anticipated that the goal will be attained when all on-the-ground reclamation is reported.
Number of new Watershed Cooperative Agreements	46	33	-28%	The target set several years ago, based upon available information was too high. In recent years States have begun concentrating on larger projects thus reducing the number of new projects.
AML grants awarded within 60 days	100%	96%	-4%	OSM continues to strive for the highest rate of grants awarded within 60 days.
Number of emergency hazards abated ¹	400	347	- 13%	The number in the planned column represents the number of anticipated emergencies based upon prior years. The actual number of emergencies may be lower or higher.

1/ Figure includes OSM and State emergency reclamation project work.

FY 2003 PLANNED PROGRAM PERFORMANCE

- Through grants provided to States and Indian tribes, will reclaim 6,900 equivalent acres of abandoned coal mines sites.
- Fund 28 new projects that address water pollution in the Appalachian states caused by acid mine drainage.
- Continue expansion of assistance to communities interested in Brownfield grants and Vista Watershed Development Coordinators in states, under the Appalachian Clean Streams Program.

	2002 Actual	2003 Planned	Change	Comments/ Explanation of 2003
Equivalent Acres Reclaimed	8,019	6,900	- 13%	Accomplishments based upon level of appropriations anticipated for 2003.
Number of new Watershed Cooperative Agreements	33	28	-15%	In recent years States have begun concentrating on larger projects thus reducing the number of new projects.
AML grants awarded within 60 days	96%	100%	+4%	OSM continues to strive for the highest rate of grants awarded within 60 days.
Number of emergency hazards abated ¹	347	400	+13%	The number in the planned column represent the number of anticipated emergencies based upon prior years. The actual number of emergencies may be lower or higher.

1/ Figure includes OSM and State emergency reclamation project work.

JUSTIFICATION OF 2004 PROGRAM CHANGES

Environmental Restoration	FY 2003 Budget Request	Program Changes (+/-)
\$(000)	157,575	-72
FTE		

Information Technology (-\$72,000) – The Department is undertaking significant information technology reforms to improve the management of IT investments, to improve the security of systems and information, and to realize short and long term efficiencies and savings. The Department is taking a corporate approach that will include consolidated purchases of hardware and software, consolidation of support functions including helpdesks and email support, and web services, and coordination of training.

In addition to Department-wide efforts, OSM will explore further savings in information technology by fully participating in Departmental enterprising and capital planning projects, delaying system enhancements, consolidating bureau level services (i.e., servers and helpdesk), accelerating the acquisition of the MS Enterprise Licensing Agreement, and reviewing life cycle replacements. In addition, potential savings may result from competitive sourcing studies.

FY 2004 ENVIRONMENTAL RESTORATION PROGRAM PERFORMANCE

DOI Strategic Goal: Serving Communities – Protect Lives, Resources and Property						
End Outcome Goal 4.1: Protect Lives, Resources and Property						
End Outcome Measure(s)	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
Hazards: Reduce safety risks from abandoned mine lands by reducing the exposure potential for 10,000 people. ¹	NA	NA	NA	NA	10,000	0
Injury Reduction: Number of fatalities and injuries on DOI managed or influenced lands and waters. ²	NA	NA	NA	NA	0	0
Intermediate Outcome: Improve Public Safety and Security and Protect Public Resources from Damage.						
Intermediate Outcome Measures	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
Number of hazards eliminated by type. ³	NA	NA	NA	NA	Establish Baseline	0
Number of actual units eliminated by hazard type. ³	NA	NA	NA	NA	Establish Baseline	0
Number of people no longer at risk for these hazards. ¹	NA	NA	NA	NA	10,000	0
Intermediate Outcome: Improve the Use of Financial Resources Dedicated to Protecting the Public from the Adverse Effects of Past Mining.						
Intermediate Outcome Measures¹	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
Enhance partnering and leveraging to increase funds for reclamation, annually: Number of active partnering and leveraging agreements.	NA	NA	NA	NA	56	56
\$ amount of increased funds thereby derived. ⁴	NA	NA	NA	NA	\$7,000	\$7,000
Improve the timely obligation of project funds, annually: Percentage of funds obligated nationally by States and Tribes.	NA	NA	NA	90%	90%	0
Intermediate Outcome: Improve public safety and security and protect public resources from damage.						
Abate within six months all						

DOI Strategic Goal: Serving Communities – Protect Lives, Resources and Property						
End Outcome Goal 4.1: Protect Lives, Resources and Property						
End Outcome Measure(s)	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
emergency mine-related health and safety hazards identified.	NA	NA	NA	NA	100%	
Percentage of declared emergencies abated within six months. ⁵	NA	NA	NA	NA	92%	0
Number of people directly affected. ⁵	NA	NA	NA	NA	9,500	0
DOI Strategic Goal: Resource Protection – Watersheds, Landscapes and Marine Resources						
End Outcome Goal 1.1: Improve the health of watersheds, landscapes and marine resources that are DOI Managed or Influenced in a manner consistent with obligations regarding the allocation and use of water.						
End Outcome Measure(s)	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
Number of land acres for which degradation from past mining has been reclaimed. ⁶	13,808 ⁷	8,200	8,019 ⁸	6,900 ⁹	6,900	0
Number of stream-miles and Number of acres of impounded water for which degradation from past surface coal mining has been reclaimed. ¹⁰	NA	NA	NA	NA	150	0
DOI Strategic Goal: Resource Protection – Watersheds, Landscapes and Marine Resources						
End Outcome Goal 1.1: Improve the health of watersheds, landscapes and marine resources that are DOI Managed or Influenced in a manner consistent with obligations regarding the allocation and use of water.						
Intermediate Outcome: Restore and maintain proper function to watersheds and landscapes.						
Intermediate Outcome Measures	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
Improve mine-scarred land and water resources:						
Number of mine-scarred land acres improved for beneficial uses.	13,808	8,200	8,019	6,900	6,900	0
Number of miles of streams or acres of non-stream (impounded)						

DOI Strategic Goal: Serving Communities – Protect Lives, Resources and Property						
End Outcome Goal 4.1: Protect Lives, Resources and Property						
End Outcome Measure(s)	FY 2001 Actual	FY 2002 Plan	FY 2002 Actual	FY 2003 Plan	FY 2004 Plan	Change in Performance 2003 to Planned 2004
surface water improved. ¹⁰	NA	NA	NA	NA	150	0

1\ Analysis of population density in relation to AML sites is not complete, '04 target number is an estimate.

2\ No existing baseline, draft performance measures for 2004. Targets for 2004 are based upon management's knowledge and experience in the program area.

3\ Performance targets for hazard type and units presented in the below table.

4\ Dollar amount shown in thousands.

5\ 2004 performance target based upon the number of anticipated Federal Reclamation program AML emergencies.

6\ GPRA acres.

7\ FY 2001 accomplishments reported by the States and Tribes included more than one fiscal year. OSM's calculated estimate for 2001 was 8,600 based upon anticipated appropriations.

8\ This is below the 2002 target goal; however, there is a delay in states reporting projects completed, but it is anticipated that the goal will be attained when all on-the-ground reclamation is reported.

9\ FY 2003 performance reflects \$17.5 million decrease in regular (i.e. non-emergency and non Clean Streams) grants to States and Tribes.

10\ FY 2004 target represents acres of impounded water improved.

Priority 1 & 2 (Protection of Public Health, Safety and General Welfare)

Hazard Type	Unit	Number of Units
Clogged streams	miles	2
Clogged stream lands	acres	105
Dangerous highwalls	linear feet	1,411
Dangerous impoundments	count	41
Dangerous piles and embankments	acres	623
Dangerous slides	acres	43
Gases: hazardous/explosive	count	0
Underground mine fires	acres	0
Hazardous equip. & facilities	count	0
Hazardous water bodies	count	13
Industrial/residential waste	acres	19
Portals	count	271
Polluted water: agriculture	count	10
Polluted water: human consumption	count	893
Subsidence	acres	77
Surface burning	acres	80
Vertical opening	count	126

Note: New performance measures for 2004. Planned performance targets based upon 2002 completions, actual 2004 performance may be higher or lower for each problem type.