

BUSINESS LINE: ENVIRONMENTAL RESTORATION

		FY 2002 Enacted	Uncontrollable Costs	Program Change	FY 2003 Request	Difference from FY 02
Regulation & Technology **	\$\$\$	435	2	0	437	2
	FTE	1	0	0	1	0
Abandoned Mine Land	\$\$\$	186,697	207	-29,917	156,987	-29,710
	FTE	111	0	0	111	0
TOTAL	\$\$\$	187,132	209	-29,917	157,424	-29,708
	FTE	112	0	0	112	0

*** Civil Penalty Collections (\$275,000) are included in total with no change estimated in FY 2003. These amounts do not reflect the Administration's proposal to include the cost of CSRS/FEHB in this Budget. For FY 2003, the estimated amount for this business line is \$736.*

ENVIRONMENTAL RESTORATION ENCOMPASSES

**Operational Processes
(Program Activities):**

Approximately 92 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.

<p style="margin-left: 40px;"><i>State and Tribal AML Reclamation Operations</i></p> <ul style="list-style-type: none"> ▪ <i>Reclamation Grants</i> ▪ <i>Clean Streams Program</i> ▪ <i>Watershed Cooperative Agreements</i> <p style="margin-left: 40px;"><i>Federal and State Reclamation</i></p> <ul style="list-style-type: none"> • <i>Emergency Programs</i> ▪ <i>High Priority Projects</i> ▪ <i>Outcrop and Underground Fire Control</i> ▪ <i>Civil Penalty Reclamation</i> ▪ <i>Bond Forfeiture Reclamation</i> <p style="margin-left: 40px;"><i>Program Development and Maintenance</i></p> <p style="margin-left: 40px;"><i>State Program Evaluation</i></p>

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.

**MISSION GOAL #1: TO
PROVIDE A CLEANER AND
SAFER ENVIRONMENT BY
RECLAIMING AND RESTORING
LAND AND WATER DEGRADED
BY PAST MINING**

Environmental Restoration emphasizes the enhancement of public health, safety, and general welfare by reclaiming mined lands abandoned before the passage of the Surface Mining Control and Reclamation Act (SMCRA), including certain interim program and insolvent surety coal sites abandoned after August 3, 1977. 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 (where OSM has reclamation responsibility), and fosters partnerships for the Clean Streams Program aimed at addressing acid mine drainage/water pollution problems.

Strategic Outcome: A cleaner and safer environment by reclaiming and restoring land and water degraded by past mining.

MAJOR OUTPUTS AND MEASURES:

Acres reclaimed and number of Clean Streams Program Projects started.

Indicator/Measure(s): Strategic goals and measures for 2003 include the number of acres reclaimed by the State and OSM AML Program. Those goals and activities are accomplished through the Abandoned Mine Land (AML) Program and include the cooperative efforts of the Office of Surface Mining, State, and Tribal Reclamation offices. The following measures are used by OSM as an indicator of annual performance.

ENHANCING EFFECTIVE PARTNERSHIPS

- Clean Streams Projects
- Watershed Cooperative Agreements
- Emergency Abatement Projects
- Efficient grant award and funding process

PERFORMANCE MEASURES – ACTUAL AND PROJECTED

Table 1: Strategic Measures and FY 2003 Measures	2001 Actual	2002 Enacted	2003 Estimate
<p><i>By 2005, the AML Program will reclaim an additional 40,000 acres 1/ of pre-SMCRA priority 1,2 &3 problems, coal interim sites, coal insolvent surety sites.</i></p> <ul style="list-style-type: none"> ▪ In FY 2003, the AML Program will reclaim 6,900 acres. 	8,600	8,200	6,900
<p><i>By 2005, OSM will initiate an additional 230 projects.</i></p> <ul style="list-style-type: none"> ▪ In FY 2003, OSM will provide funding for 28 new cooperative Acid Mine Drainage projects under the Clean Streams Program. 	37	40	28
<p><i>By 2005, OSM will provide reclamation grants and award funds within 60 days of receipt of a complete application 100% of the time.</i></p> <ul style="list-style-type: none"> ▪ In FY 2003, OSM will provide AML grants and award funds within 60 days 100% of the time. 	96%	100%	100%
<p><i>By 2005, the AML Program will abate 400 emergency hazards through OSM and State emergency reclamation programs.</i></p> <ul style="list-style-type: none"> ▪ In FY 2003, the AML Program will abate 400 emergency hazards. 	311	400	400

1/ A statistical conversion has been applied to the Priority 1,2 and 3 reclamation projects, which are measured in various units such as miles, acres, counts, etc. in an attempt to make comparisons and summarizations possible in acres.

2/ The FY 2001 accomplishment for acres reclaimed is a calculated estimate. The accomplishments reported to OSM by States and Tribes for FY 2001 (13,808 acres) included more than one fiscal year. Also, all estimates generally reflect the full number of projects funded by the increase; actual project completion occurs one to three years after initiation.

Data Verification and Validation for Measures: Most of the data for measuring reclamation accomplishments will come from the Abandoned Mine Land Inventory System (AMLIS). The remainder will come from separate tracking systems 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 2003, OSM will continue to increase its outreach efforts on AML enhancement and to potential government and non-government cooperators in reclamation projects.

Resources, Skills, and Technology Needed: OSM and the AML program States and Tribes will continue to need a diverse and multi disciplinary cadre of 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 2003 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; \$9.7 million for Federal Reclamation Program of which \$4.1 million is for projects; and \$3.1 million for Program Development and Maintenance. The budget proposes program decreases of \$29.7 million from the FY 2002 enacted level as follows:

- A decrease of \$17 million for regular State and Tribal Reclamation grants;
- A decrease of \$0.5 million resulting from the termination of FY 2002 one time funding specifically earmarked for the State of Pennsylvania;
- A decrease of \$1.271 million for Federal high priority reclamation projects;
- A decrease of \$10.946 million for a one time reduction to Federal emergency projects; and
- A decrease of \$.02 million for travel.

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 2003
(Dollars in Thousands)

Program Activity		Regulation & Technology		Abandoned Mine Lands		Total		Inc/Dec	
		2002	2003	2002	2003	2002	2003		
State and Tribal Funding	\$\$\$	0	0	159,585	142,085	159,585	142,085	-17,500	
	FTE	0	0	0	0	0	0	0	
State Program Evaluation	\$\$\$	0	0	2,467	2,513	2,467	2,513	46	
	FTE	0	0	25	25	25	25	0	
Federal Reclamation Program	Projects:		275**	275**	16,067	3,850	16,342	4,125	-12,217
	<i>Emergency High-Priority</i>	\$\$\$			10,946	0			
					5,121	3,850			
	Operations	\$\$\$	160	162	5,363	5,468	5,523	5,630	107
	FTE	1	1	56	56	57	57	0	
Program Dev/Maintenance	\$\$\$	0	0	3,215	3,071	3,215	3,071	-144	
	FTE	0	0	30	30	30	30	0	
TOTAL	\$\$\$	435	437	186,697	156,987	187,132	157,424	-29,708	
	FTE	1	1	111	111	112	112	0	

**Civil Penalty Collections (\$275,000) are included in total with no change estimated in FY 2003.

These amounts do not reflect the Administration's proposal to include the cost of CSRS/FEHB in this Budget. For FY 2003, the estimated amount for this business line is \$736.

ONGOING PROGRAM

1. State and Tribal Funding

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: The Rural Abandoned Mine Program (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 1996-2002, and none are included in the Administration's FY 2003 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 in States and Tribes without approved AML programs under the Federal Reclamation Program;

- (b) The supplemental amount to minimum program States;
- (c) The approved State Emergency Programs;
- (d) The Small Operator Assistant 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 in FY 2002, and proposed to continue with funding from this share in FY 2003.

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.

Under the Act, 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 continue to receive reclamation grant funding in FY 2003. In FY 2003, \$142.1 million is requested for grants. The State of Mississippi is developing a reclamation program and is expected to request reclamation grants in early FY 2003.

Each year, the States and Tribes select reclamation projects from their inventories of eligible projects. 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 no longer requires 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 2003, the appropriation funding level request remains at \$1.5 million.

b. Clean Streams Program

In FY 2003, 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 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 increase considerably in just a few years.

AMD is the number one water pollutant in the coal fields 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 of the Interior'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 2001, approximately \$25 million in matching grant funds have been provided to eligible States for 79 projects. Projects were identified by the States and additional sources of funding were secured, wherever possible. Through FY 2001, commitments from other sources

have generated 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 2001 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:

- **Cedar Creek, Missouri.** The Missouri Department of Natural Resources is constructing a project in partnership with local landowners in the Cedar Creek watershed of central Missouri. The project uses OSM's Appalachian Clean Streams funds and EPA 319 grant funds to help landowners eliminate acid mine drainage (AMD) from Cedar Creek. During FY 2000, three monitoring wells were installed to determine the source of AMD and to develop a reclamation solution. Native warm season grasses were planted on 31 acres of barren spoil that were previously releasing acid sediment into the stream channel. In FY 2001, reclamation was completed on four wetlands and 13 streambank areas along Cedar Creek. The constructed wetlands are designed to increase alkalinity while reducing iron and sulfates, resulting in major water quality improvements in the 2000-acre Upper Cedar Creek mining area. Before the state launched their multi-year cleanup, AMD pollution from the area periodically caused fish kills as far as 44 miles downstream where Cedar Creek empties into the Missouri River.
- **Bell's Gap Run – Cambria County, Pennsylvania.** This project, suggested by the Blair County Conservation District, involves passive treatment of several AMD sites, and reclamation of an associated abandoned surface mine. The project will eliminate AMD impacts and improve biological resources in about 2 miles of a tributary to Bell's Gap Run. The project will also improve the water quality in a public water supply for the city of Altoona, PA. Clean Streams is contributing \$105,813 and the balance is coming from Pennsylvania's Growing Greener Program, for a total project cost of \$442,189. The project is part of a comprehensive watershed restoration plan that also includes a recently completed project funded by the Blair County conservation District using EPA's 319 funds.
- **Palzo Mine, Illinois.** OSM's Appalachian Clean Streams funding is being supplemented with funds from an Illinois EPA 319 Grant of \$475,272. Additional partners include the landowner, USDA-Forest Service and corporate partners Southern Illinois Power and the Lafarge Corporation, who are providing alkaline scrubber sludge and alkaline cement kiln dust at no or reduced costs. Due to the high acidity and porosity of the spoil

materials, precipitation falling on the site emerges as AMD in two drainways and along Sugar Creek, a tributary of the South Fork of the Saline River. The expressed goal of this project is to profoundly diminish this AMD. In general terms, this will be accomplished by improving surface grades, reducing permeability, adding alkalinity, and isolating exposed acid producing materials from the air and water which fuel the production of AMD. As part of this grading, 30 acres will include a scrubber sludge / spoil cap to further reduce infiltration, while kiln dust will be incorporated into the other 30 acres. This project, in combination with the Will Scarlet Project, will dramatically improve the water quality of Sugar Creek and the South Fork of the Saline River. These streams are the most mining impacted watershed within Illinois and classified as "non-supportive" of biotic life for thirty miles of their runs

- **Thompson Run of the South Fork of the Patoka River, Indiana.** The 52,000-acre Patoka South Fork Watershed is the state's most heavily damaged mining district. For more than 70 years, this once-pristine watershed has lain in ruins from unregulated strip mining. Almost three-fourths of the watershed is biologically dead or impaired; with acid mine drainage (AMD) as low as pH 3. Encouraged by OSM's Appalachian Clean Streams Program, citizens formed a committee with a unique grassroots approach to the Patoka River's problems, with a goal to study and prioritize all of the watershed's pollution sources and to resolve as many as possible over several years. One of the watershed's worst tributaries, Thompson Run presents technical challenges because of high metal concentrations including iron and aluminum up to 60 PPM. Any attempt to neutralize these discharges using most conventional technologies would produce heavy metal precipitation that would clog the treatment system. The Patoka South Fork Watershed Steering Committee (PSFWSC) consulted experts at two universities to help design alkaline recharge systems that are immune from the precipitant clogging problem. OSM provided the vital link between watershed citizens and university researchers through the Acid Drainage Technology Initiative, a partnership that promotes cutting-edge AMD technology development. Since the alkaline recharge structures are not totally passive and require occasional replenishment, PSFWSC is turning to their corporate partner, AirGas Corporation, to supply calcium hydroxide suspension, a non-hazardous by-product of the manufacture of acetylene gas. Thus, a waste product is put to beneficial use at almost no cost to the government. The project design also calls for building three different configurations of the alkaline recharge structures, which will create a laboratory for future applied research of cost-effective AMD treatment technologies.
- **Cherry Creek, Maryland.** Local historians once noted the fine native brook trout fishing in the lower reaches of Cherry Creek in Garrett County and spawning runs of rainbow trout upstream. A fish kill attributed to AMD put an end to this sport fishery in 1957, but the combined efforts of OSM's Appalachian Clean Streams Program and Maryland's Bureau of Mines (BOM) are about to bring trout back to Cherry Creek. The uplands of the 14 square mile watershed encompass a unique ecosystem of conifers and sphagnum wetlands similar to landscapes in the northern U.S. and Canada. Since these areas tend to generate natural low-pH organic acidity, it took only a few coal mines to ruin the watershed. The Maryland BOM has completed several mine closures and

“regular” AML projects in the area and recently, two small Clean Streams projects. However, the Everhart Seep remained as one source of 90 percent of the AMD polluting Cherry Creek. The multi-partner Everhart AMD Treatment Project combines several technologies including alkaline producing systems, oxidizing ponds, and wetlands. High concentrations of dissolved iron and aluminum have been nearly eliminated; the high net acidity of the drainage is now net alkaline, and the pH has increased from 3.5 to more than 6.0. This fairly small project enabled the restoration of 1.75 miles of stream and is a key part of the eventual total recovery of Cherry Creek.

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. The awards ranged from \$22,000 to \$80,000, totaling \$1.7 million.

In FY 2001, funding for the watershed program was increased to \$2,743,950. During FY 2001, OSM awarded 14 cooperative agreements for projects in five States. In FY 2002 and 2003, OSM propose to maintain a similar level of funding for each year for the Watershed Cooperative Agreement program.

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

- **The Alabama Rivers Alliance**, of Birmingham, Alabama, will engage in an abandoned mine land remediation project in the headwaters of Hurricane Creek, in Tuscaloosa County, Alabama. Hurricane Creek has been classified as “impaired” pursuant to section 303(d) of the Clean Water Act. Funding for this project is intended to treat acid runoff from approximately 240 acres of abandoned mine spoils bordering Weldon Creek. The effects of the acid mine drainage has impacted aesthetics, aquatic communities, and potable water supplies, as well as recreational use of Weldon and Hurricane Creeks. OSM funding in the amount of \$100,000 will supplement funding from the other partners involved in the project for a total cost of \$168,000.
- **The Fours Rivers Resource Conservation & Development Area, Inc.**, in Petersburg, Indiana, has committed to address acid mine drainage runoff on the Old Ben Scout Reservation, located in Pike County, Indiana. The 270-acre former mining site was donated to the Buffalo Trace Council of the Boy Scouts of America of Evansville, Indiana. Although the largest lake was chemically treated in the 1980’s there are three remaining lakes that were never treated and continue to receive acid mine drainage runoff from the surrounding acid bearing spoils. The project involves (1) determining the acid load of the three lakes; (2) establishing access to each lake for chemical neutralization; (3) direct neutralization of each lake; and (4) creating

long-term neutralization trenches for post project water chemistry stability. Providing a solution to the Old Ben Scout Reservation through remediation of the three lakes will create useful water-bodies for the Boy Scouts. The cooperative agreement funding of \$79,300 is the total project cost but will supplement in-kind contributions.

- **The Western Maryland Resource Conservation and Development Council, Inc.**, has undertaken treatment of acid mine drainage from a deep mine bore hole near the West Virginia/Maryland border. The bore hole drainage flows into Laurel Run, Snowy Creek and into the Youghiogheny River near the town of Crellin, in Garrett County, Maryland. The drainage has caused degradation of these bodies of water in Western Maryland and upstream into West Virginia. Implementation of this project is expected to cover over one mile of improved quality. The cooperative agreement funding of \$100,000 will supplement other funding and in-kind partners, for a total project cost of \$138,000.
- **The Black Diamond Resource Conservation and Development, Inc.**, Lebanon, Virginia, received funding to abate acid mine drainage in the Upper Guest River Watershed, a tributary of the Clinch River. The project proposes to install an alkalinity cell in an abandoned 0.25 hectare pond. The current pond is a source of acidic water and metals to both the local ground water system and Upper Guest River. OSM funding for the project is \$80,000 to complement in-kind contributions, for a total project cost of \$96,000.
- **Trout Unlimited, of Arlington, Virginia**, received funding to construct a passive treatment system to abate acid mine drainage discharges to Robbins Hollow. Robbins Hollow, located in Pennsylvania, is a major tributary of Twomile Run, flowing into Kettle Creek and eventually into the western branch of the Susquehanna River. Treatment of Robbins Hollow is strongly recommended as part of an overall recovery plan for the lower Kettle Creek watershed, along with the reduction of non-point source pollution to the Susquehanna River. The results of the treatment will restore approximately 2,420 feet of Robbins Hollow and reduce a significant source of AMD to Twomile Run. The cooperative agreement funding of \$100,000 will supplement funding from other partners, for a total project cost of \$327,100.
- **The Friends of the Cheat, Inc.**, of Preston County, West Virginia, received funding to abate acid mine drainage problems that stems from the Sovern Run Mine located in the small community of Valley Point in Preston County, West Virginia. The problem area consist of four collapsed deep mine portals, one deep mine portal, 2,000 linear feet of highwall approximately 35 feet high, a small refuse pile, and a dilapidated mining facility. Also, it was determined based on stream samples collected downstream of the mine discharge sites, that these AMD sources contribute an average acid load of 950 lbs. per day to Sovern Run. Reclamation of the Sovern Run Mine drainage problem area would substantially improve water quality in Sovern Run, which would greatly enhance the fishery in Big Sandy Creek downstream of Sovern Run. OSM's funding of \$80,000 will supplement other funding and in-kind partners, for a total project cost of \$762,750.

For FY 2003, 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. In FY 2001, OSM, with additional funding from EPA, placed 33 summer interns with local watershed organizations in 8 States.

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.

States that operate their own emergency programs fund the emergency projects from their AML grants. The following thirteen States now operate their own emergency programs: Alabama, Alaska, Arkansas, Illinois, Indiana, 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, Iowa, 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 2003 request does not include any new federal funds for both the Federal and State emergency programs, however the program will continue at the FY 2002 level of \$18 million using the balance of carryover available. OSM's appropriation language limits expenditures of current year funds in any one state to 25 percent of this total. In the past, West Virginia, Pennsylvania, and Kentucky have all reached this limit, usually as a result of an above average rainfall and/or snow melt. 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.

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

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, or because 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 projects, 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 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 2001, the States and OSM abated 311 AML emergencies in 20 States. The most emergencies, (103) occurred in Pennsylvania, followed by West Virginia (50), Kentucky (35), Kansas (27), and Ohio (30). Rhode Island experienced its first AML emergency in almost 20 years, when a large subsidence appeared in a mall parking lot in Cranston, Rhode Island. OSM's cost of abatement for this particular project was over \$158,000. Kentucky emergencies required the most funding, over \$3.5 million, primarily in abating landslides. About \$2 million was spent in Pennsylvania, generally related to low-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 2001, of the 197 potential emergencies referred to the Federal program, 147 were determined to be emergencies. Of the remainder, 31 were determined not to be emergencies or did not result from coal mining, or were reclaimed by the landowner, while 19 were still under investigation at the close of the fiscal year.

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 2001, OSM initiated six non-emergency projects, two in Tennessee and four in Washington – and continued ongoing reclamation of one problem in Georgia, and five in Tennessee. Tennessee, with an unfunded inventory of projects of over \$14 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 for coal fire control or extinguishments. 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, lightning, 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.

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.

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 have to 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 4.5 acres were reclaimed in Tennessee at a cost of \$43,000 in FY 2001. OSM anticipates reclaiming approximately 91 acres at an approximate cost of \$1.04 million in FY 2002 and approximately 100 acres at an approximate cost of \$1.1 million in FY 2003.

4. Program Development and Maintenance

This program activity provides funding for reclamation program management and programmatic guidance to States and Tribes. 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 also assists States and Tribes to build on successes and enhances primacy grants process, 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 reclamation programs, and supports implementation of their AML programs through technical and program assistance as needed.

OSM emphasizes State/Tribal and Federal partnership 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 and implement non-traditional ways to accomplish reclamation such as the AML Enhancement Rule; (2) participating with EPA in conducting an Acid Mine Drainage 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 2001, the State Reclamation Plan amendment activity was as follows:

Table 3 – State Reclamation Plan Activity FY 00 – FY 01				
<i>Number of Amendments</i>				
Amendment Type	Pending Oct. 1, 2000	Received FY 2001	Completed FY 2001	Pending Sept. 30, 2001
Informal	0	3	3	0
Formal	3	2	3	3
Total	3	5	6	3

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.

In FY 2000, AMLIS was modified, under a reimbursable agreement, to maintain the Bureau of Land Management's (BLM) AML inventory. The BLM is currently preparing an inventory and entering eligible sites into AMLIS. Also, OSM began working with the National Park Service and the Forest Service in the Department of Agriculture 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 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 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 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 approximately 41 areas to be eventually

reclaimed under this concept. OSM has already issued authorization to proceed on six of these. Ohio published its final rule in November 1999, and Virginia published its rule in January 2000. OSM approved Alabama's regulatory program amendment in June 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. On October 2, 2000, KRC filed a motion to reconsider the court's decision. OSM submitted its opposition to the motion on October 27, 2000. As of December 31, 2001, the court had not set a briefing schedule on the matter.

Justification of Program Changes:

Environmental Restoration	FY 2003 Budget Request	Program Changes (+/-)
\$(000)	156,987	-29,917
FTE	111	0

Relationship to Performance Goals: The funds for this business line support the long-term goal for a cleaner and safer environment by reclaiming and restoring land and water degraded by past mining. In FY 2003, the AML reclamation grant program will reclaim 6,900 acres of degraded land and water.

Program Changes In FY 2003, OSM proposes a total decrease of \$17.5 million for regular (i.e. non-emergency, non-Clean Streams) grants to States and Indian tribes.

A decrease of \$1.271 million also is proposed in funding for Federal high priority projects. The remaining balance, at this time is believed adequate to fund Federal high priority projects in FY 2003.

A decrease of \$10.946 million is proposed for a one-time reduction to Federal emergency projects. At the beginning of FY 2002, a total of \$32.8 million was available for the Federal emergency program. Because the annual average for Federal emergency costs in recent years has been approximately \$9 million, the current balance available in this activity is believed adequate to fund Federal emergency projects in FY 2003.

A decrease of \$0.2 million for travel also is proposed for FY 2003.

Additionally, OSM intends to transfer \$2 million in carryover funds from the Federal AML emergency program to the AML state grant program resulting in a total state grant level of \$144.1 million.