



DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

PROTECTION ♦ RESTORATION ♦ PARTNERSHIP ♦ TECHNOLOGY



PROTECTION ♦ RESTORATION ♦ PARTNERSHIP ♦ TECHNOLOGY

ANNUAL REPORT 2008

Includes data from Fiscal Year 2007

About this Report

This report was compiled to meet the specific requirements of Sections 706, 411, and 529 of the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The report describes the operations of the Office of Surface Mining Reclamation and Enforcement from October 1, 2007, through September 30, 2008 (Fiscal Year 2008). Some state program performance information contained herein was collected for the 12-month period of July 1, 2007, through June 30, 2008. In addition, data for the period from October 1, 2006, through September 30, 2007 (Fiscal Year 2007) is located in Appendix A.

Responsibilities under the Surface Mining Control and Reclamation Act that are performed by other bureaus or agencies do not appear in this report since they are reported to Congress by the agencies directly responsible. Those responsibilities include Titles VIII and IX, the University Coal Research Laboratories and the Energy Resource Graduate Fellowships, which are administered by the Department of Energy; and Section 406, the Rural Abandoned Mine Program, which is administered by the Secretary of Agriculture.

All facts and statistics cited in this report reflect circumstances as of October 1, 2008.

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Director's Message



Glenda H. Owens
Acting Director, OSM

The U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSM) is charged with protecting people and the environment from the adverse effects of surface coal mining operations and ensuring that the land and water are restored to beneficial use after mining. OSM must also address the hazards and environmental degradation of past mining by ensuring adequate reclamation of coal mines abandoned before the enactment of the Surface Mining Control and Reclamation Act of 1977 (SMCRA).

To fulfill this mission, we rely on the states and tribes that have chosen to carry out the requirements of SMCRA. In recent years, we have worked diligently to develop clear rules for operating and reclaiming coal mines. We have also sought to enforce our rules consistently from region to region and across the coal industry. Although regulations must evolve

as mining and reclamation technology changes, coal mine operators deserve to have a clear understanding of the requirements and a reasonable expectation of future obligations as they plan and carry out operations. Citizens also are entitled to a degree of certainty about the requirements that companies must meet so they can offer informed input during the mining and reclamation process. OSM has made considerable progress in clarifying its regulatory requirements to provide a more stable regulatory foundation.

Despite tremendous success in 30 years of reclaiming abandoned mines, there are still extensive health and safety problems all across the country — much greater than the funding available for reclamation. That's why I'm excited that OSM has taken the lead in finding innovative ways to reclaim coal mines and developing new solutions to tackle old problems. Rather than simply treating restoration as a static procedure with limited reclamation options, we now promote innovative practices that in some circumstances actually improve the quality of reclaimed land.

For example, instead of just regrading soil and planting grass after mining, more and more operators are willing to plant native hardwoods to generate new forests. In addition to reducing runoff, erosion, sedimentation, and downstream flooding, reforestation increases wildlife habitat, sequesters carbon, and provides a renewable resource of great potential value to local economies.

Further, because the naturally compacted soil and rock removed during surface mining are returned to the reclaimed site as loose soil and broken rock, the land can actually be more conducive to tree growth than it was before mining. Reclaimed mines have become an ideal setting for growing certain species of trees that ordinarily have low survival rates, including American Chestnut trees being re-introduced on reclaimed mines nearly a century after virtually disappearing from the forests of the eastern United States. We've also taken steps to implement the 2006 Amendments to SMCRA, one of the most significant changes to the Act since Congress enacted the law.

As a small organization of just over 500 employees nationwide, OSM is able to do a big job thanks to our state and tribal partners. One of the keys to this successful partnership is sharing the best available technology. In addition to funding states and tribes so they can carry out their responsibilities under SMCRA, OSM provides technical training and on-the-ground technical assistance, sponsors workshops and interactive forums on critical technical issues, and funds applied science projects.

With our close working relationships with states and tribes, we continually receive input on how to meet their program needs, what works well, and what needs refinement. We also work with the individual states and tribes as they pursue newer and better ways to do their jobs. Often, our investment and success in one state serves as a model for others. When OSM helps a state or tribe to excel at carrying out its responsibilities, we can serve as the conduit for sharing the best and most innovative practices and technologies with all states and tribes.

OSM has also taken a lead role the past two years in the Interior Department's development of a new automated business management system. OSM served as one of two pilot bureaus in testing and implementing Interior's break-through system for comprehensively managing grants, contracts, billing, procurement, collections, and a range of other business and financial transactions.

I'm particularly proud that OSM accomplished this transition without compromising its ability to meet all ongoing responsibilities for collecting AML fees from coal operators, awarding grants to states and tribes, maintaining internal financial controls, conducting all required audits, and carrying out other critical financial transactions. In fact, throughout the conversion of data to the new system, OSM even managed to continue its string of "clean opinions" on annual reviews by outside financial auditors. That's an Interior Department record of over 16 years with no adverse findings.

In this report, you will read about our many other accomplishments during Fiscal Years 2007 and 2008 in the areas of applied science, technical assistance and training, reforestation, watershed restoration, and our myriad of other responsibilities.

Glenda H. Owens

Overview: The Surface Mining Control & Reclamation Act of 1977

Congress Creates a National Program to Address a National Problem

For more than two centuries, coal has played a pivotal role in the growth and development of the United States — not surprising for a nation that covers just five percent of the Earth's land surface but possesses more than a quarter of the world's known coal reserves. Coal fueled the tremendous industrial growth that began in the mid-19th century, and it powered the arsenal of democracy to victory in two world wars. Even today, despite competition from oil, natural gas, nuclear power, thermo- and hydro-power, and an array of renewable sources of energy, we still rely on coal to generate more than half of the Nation's electricity.

Although a plentiful and inexpensive source of heat and power, coal is costly in other ways. Tens of thousands of lives were cut short by explosions, cave-ins, and other hazards commonplace to underground mining. Many of those miners lucky enough to survive to old age faced other perils brought on by decades of back-breaking work in the mines: severe physical ailments, recurrent medical conditions, and chronic lung diseases.

The high personal price to many miners, their widows, and their orphans was not the only cost of coal mining. For those living or working near the mines, coal's most enduring legacy was one of dangerous landscapes and environmental degradation: open mine shafts, unstable highwalls, and pits filled with water; streams clogged with sediment or poisoned by acid runoff from exposed coal seams; mine waste dumped into valleys or left on hillsides; and dams built with coal waste and filled with sludge and polluted water. This, too, was a cost of coal mining, but one that would continue to rise long after many of the mines had closed and the jobs had disappeared.

In the mid-20th century, an increasingly mechanized industry created more efficient ways to mine coal without having to tunnel into the ground to reach it. Newer and ever-larger earth-moving machines made it possible to strip away everything above the coal seam and then remove the coal more completely and more safely than with underground mining. Large-scale strip mining meant increased coal production. It also meant increased environmental damage.

A handful of states tried to limit this growing damage by setting standards for mining and requiring some reclamation of land and water after mining.

The success of individual states, however, was frustrated by the economic realities of coal: The more stringent a state's requirements, the greater the incentive for operators to move to a neighboring state with fewer requirements or lax enforcement. Some states were understandably reluctant to take a tough stance with an industry on which they relied so heavily for jobs and tax revenues.

By the 1970s, Congress had come under increasing pressure from citizens and environmental advocates to establish national requirements for coal mining and reclamation. In 1977, after several years of debate and two Presidential vetoes, the Surface Mining Control and Reclamation Act (SMCRA, or "the Act") became law. It was the first Federal law to regulate the environmental effects of strip mining and to require reclamation of damaged land and water.

The Act created two major programs for joint implementation by the states and the Federal government. The first was an environmental protection program to establish standards and procedures for approving permits and inspecting active coal mining and reclamation operations for surface — as well as the surface impacts of underground — mining. The second was a reclamation program, financed by fees paid by active coal operators, to restore land and water at abandoned mines. Congress included pro-

visions for prohibiting mining in sensitive areas, requirements that coal companies obtain bonds to cover the costs of reclamation in case the companies failed to meet their obligations, and provisions for citizen participation in mine permitting, inspection and enforcement.

Congress created the Office of Surface Mining Reclamation and Enforcement (OSM) and mandated that it work closely with states and tribes to implement the new law. Federal laws often encourage state-Federal cooperation, but in SMCRA, it is the cornerstone. States could gain primacy and exercise "exclusive regulatory authority" by adopting laws and programs that demonstrate the capability and willingness to carry out SMCRA's requirements.

In addition to implementing SMCRA on Federal lands and in those states and tribes that do not take on regulatory responsibility, OSM provides oversight to primacy states to ensure that they properly carry out their regulatory responsibilities. OSM's task is to help states succeed by giving them the regulatory and policy framework, oversight, funding, training, and technical tools necessary to have stable and effective regulatory and Abandoned Mine Land (AML) programs.

PROTECTION



REGULATING ACTIVE COAL MINES

Title V of the Surface Mining Control and Reclamation Act of 1977: Controlling the Environmental Impacts of Surface Coal Mining

Title V of SMCRA established the first national program to regulate all surface coal mining and reclamation operations. The Act also created OSM to administer this vital program in partnership with states. SMCRA provides the foundation upon which OSM builds a framework of regulatory stability and ensures that mining is conducted in an environmentally sound manner.

Regulatory stability is essential to enable all parties — the coal industry, regulators, and citizens — to have a common understanding of their relevant rights and obligations so that each can make informed decisions affecting its economic and personal interests with a minimum of controversy.

Most coal-producing states have chosen to assume primary responsibility — or primacy — for the regulation of surface coal mining operations within their borders. These states have developed regulatory programs, approved by the Secretary of the Interior, demonstrating that they are capable of carrying out the purposes and provisions of the Act.

For primacy approval, each state has:

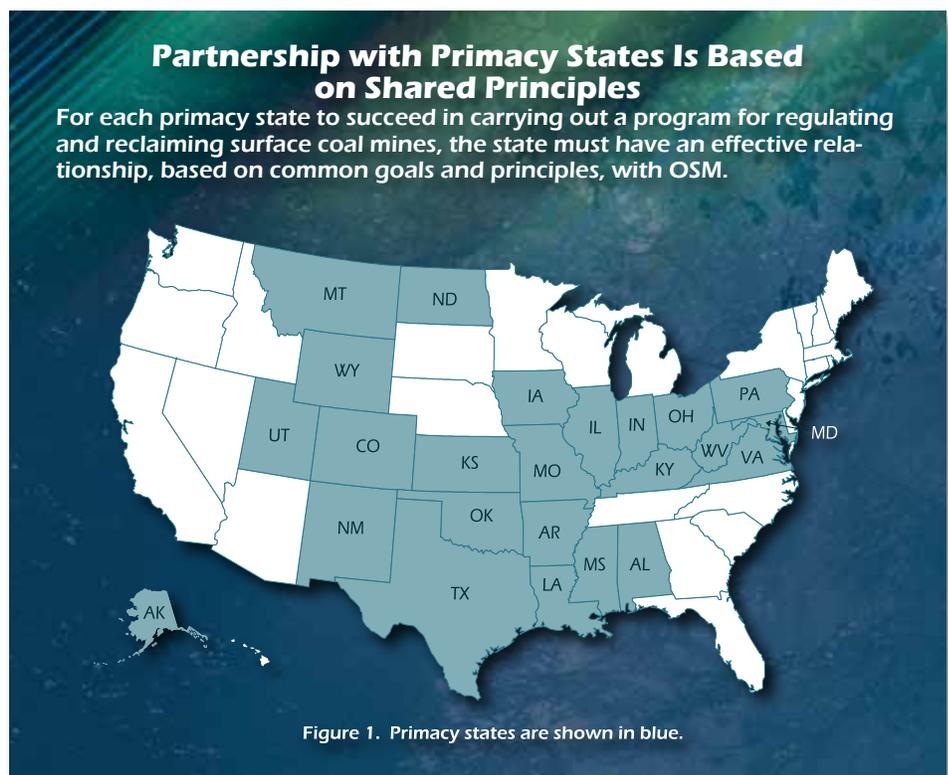
- Enacted a state law for the regulation of coal that meets the requirements of SMCRA;
- Adequate administrative and technical personnel to administer regulation of coal mining and reclamation within the state;
- A process in place to designate Areas Unsuitable for Mining;

- A process in place for coordinating other Federal and state program permitting processes; and
- Obtained approval of the state regulatory program from the Secretary of the Interior.

A State may lose primacy for failing to implement, enforce, or maintain its approved program.

Under primacy, the state's regulatory administration and enforcement program receives Federal funding for up to 50 percent of its approved budget with a required 50 percent state funding match.

Primacy requires a state to satisfy minimum Federal requirements, but it also allows a state to tailor its regulatory program to best protect its citizens and to meet its environmental needs, provided the state program is no less effective than the federal requirements. For example, a state can choose which mine reclamation standards work best for the ecosystems within that state. The Appalachian region is dominated by forests, while the Midwest is famous for its farmland. Much of the Western United States is semi-arid. The features that make each state unique — its native species



of plants and animals, its hydrology, its geology — are taken into account when controlling the impacts of coal mining.

All surface coal mining operations must obtain permits and comply with applicable regulations. In each primacy state, operations must also comply with the rules of that approved state program. Currently, there are 24 primacy states that administer and enforce surface coal mining and reclamation under SMCRA (see text box for identification of primacy states).

SMCRA sets out the five main functions needed by a state regulatory program for protecting the natural and human environment during mining and ensuring effective restoration following mining. All primacy programs must address the following:

Performance Standards

Performance standards ensure that all coal mining is done in ways that protect the environment and the public and that mined land is properly reclaimed after mining. Adopting uniform performance standards helps to ensure regulatory consistency across the nation's coalfields, giving mine operators reasonable expectations about what is required during and after mining.

Permits

A coal operator must receive a permit before conducting surface or underground coal mining operations. Applications for a permit are detailed documents explaining the proposed mining and reclamation activities. The operator must provide information describing baseline environmental conditions for a specific site, current and post-mining land use, mining and reclamation methods, and

measures used to address performance standards.

Performance Bonds

Before a mining permit is issued, the operator must secure a performance bond, which ensures that reclamation activities are performed in instances where the operator fails to meet all requirements of the permit. The regulatory authority releases the bond after the operator has met all performance standards, successfully reclaimed the land, and achieved the required post-mining land use. Reclamation success depends on overall land configuration and stability, water quality, and revegetation success. In the Eastern U.S. and Midwest, sites may be deemed reclaimed after a minimum of five years of successful plant growth. In the West, a period of 10 years of successful growth is achieved before the bond can be released.

Inspections and Enforcement

Once an operator has received a permit, inspectors visit mining sites and work with operators to en-

sure that the mine facility complies with the permit's conditions and applicable performance standards. If the inspector detects a problem, he or she is required to issue a Notice of Violation. The operator must correct the problem and may be required to pay a fine. If the operator fails to correct the problem, inspectors issue a Failure to Abate Cessation Order to stop all mining until corrective action has been taken by the operator. An inspector may immediately issue an Imminent Harm Cessation Order if a violation is found that creates an imminent danger to the public or causes significant environmental damage.

Lands Unsuitable for Mining

SMCRA prohibits mining where reclamation is not feasible, as well as in certain sensitive areas, including national parks, forests, wildlife refuges, trails, wild and scenic rivers, wilderness, or recreation areas. Mining is also prohibited where it would adversely affect sites listed in the National Register of Historic Places, or where it would occur too close to homes,

Oversight of State Programs: A Results-Oriented Inspection Strategy

In primacy states, OSM is required to evaluate how well states are administering their approved programs, also known as oversight. OSM provides this oversight by examining activities such as permitting, inspection, enforcement, and penalties to determine whether a state is achieving effective environmental compliance. Using a results oriented approach, OSM emphasizes cooperative problem solving in consultation with each state. To gauge how well the state program is protecting citizens, public and private property, and the environment, OSM evaluates and reports state-specific and national findings regarding the effects on land and water occurring outside of the mine permit boundaries.

OSM measures success as a percentage of inspectable units that have no offsite impacts and the number of acres that meet the bond release requirements for the various phases of reclamation. During 2008, 88 percent of inspectable units were free of offsite impacts, and Phase III performance bonds were released on 48,828 acres. This acreage is in addition to the 51,105 acres that met the bond release requirements in 2007.

public roads, buildings, parks, schools, churches, and cemeteries. In addition to these prohibited areas, the Act allows anyone to petition to have specific lands designated unsuitable for surface coal mining.

The following examples show how OSM uses its regulatory program to protect people and the environment by controlling the impacts of surface coal mining.

OSM Issues Proposed Rules for Re-mining and Reclaiming Abandoned Coal Mine Refuse Sites

Abandoned coal mine sites, mined in the 19th and 20th centuries before the passage of SMCRA, often pose environmental and public safety problems today. Hazards include landslides, erosion, sedimentation of streams, inadequate vegetation, and water quality problems. While many of these sites still contain coal reserves that can be mined using current technology, operators are reluctant to re-mine such sites due to the unknown quality, recoverability, and profitability of the coal. Operators are also concerned that they risk taking on added reclamation liability if unanticipated environmental problems arise during re-mining operations. As a result, many of these sites remain unreclaimed, even though they contain sufficient recoverable coal to make it profitable for an operator to mine and reclaim the sites. And, unless these sites present a serious health or safety threat to the public, they would not qualify as high-priority problems justifying reclamation with AML funds.

The OSM has proposed a rule, authorized by amendments to SMCRA in 2006, giving coal mine operators an incentive to re-mine and reclaim AML sites containing recoverable coal. As proposed, the rule would authorize states to waive the reclamation fees that are paid for each ton of coal produced on coal refuse disposal re-mining operations where the refuse is removed for reprocessing off site. OSM published the proposed rule on May 1, 2008. The bureau is analyzing comments submitted on the proposed rule as it considers final rulemaking.

Encouraging coal operators to re-mine these sites at no cost to the AML Fund will preserve the fund for uses at other AML sites. The result is that more of these hazardous sites will be reclaimed than would have been possible without this incentive

Ownership and Control Rule Revised

In December 2007, OSM issued rules that revised and clarified its ownership and control and related regulations, including rules that address information required in permit applications, permit eligibility determinations, and the transfer, assignment, or sale of permit rights.

SMCRA provides that an applicant is not eligible for a permit if it owns or controls mining operations that are in violation of SMCRA or other specified environmental laws. OSM first issued regulations defining what constituted ownership and control under SMCRA in 1988 to serve as the basis for denying permits to operators responsible for outstanding violations. Some of these regulations were in litigation for the past 20 years creating regula-



Completed McAlpin Refuse Pile AML Project, Raleigh County, West Virginia.

tory uncertainty for OSM, state regulatory authorities, the coal mining industry, and the public.

The final rule revises certain provisions of OSM's ownership and control rules revised and published on December 19, 2000. The overarching objective in issuing this rule is to promote regulatory stability while continuing effective enforcement of the authority to deny permits to applicants with outstanding violations.

Among other things, the rule revises the definitions of ownership and control; transfer, assignment, or sale of permit rights; aligns application information requirements more closely with the requirements in SMCRA; introduces additional due process in certain OSM regulatory processes; streamlines and clarifies the applicability of the transfer, assignment, or sale regulations; and clarifies the roles of OSM and state regulatory authorities in certain permitting processes.

Endangered Species Act Compliance

The purpose of the Endangered Species Act is to protect both endangered and threatened species and the habitats in which they reside. This law forbids any Federal agency from authorizing, funding, or carrying out actions that are likely to jeopardize the continued existence of endangered or threatened animals, or that are likely to result in destruction or adverse modification of designated critical habitats for those species.

In 1996, in response to OSM's request for formal consultation under section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service (FWS) completed a biological

opinion concerning the effects of the continuation and approval of surface coal mining and reclamation operations under state and Federal regulatory programs adopted pursuant to SMCRA. The FWS concluded that mining and reclamation operations under SMCRA regulatory programs are not likely to jeopardize the continued existence of any threatened, endangered, or proposed species or result in adverse modification of designated or proposed critical habitats. The opinion outlines the roles of each agency when dealing with threatened or endangered species.

Since the FWS issued the opinion, some states have struggled to determine the appropriate roles and responsibilities of each Federal and state agency involved in the permitting process. Some states, including West Virginia and Virginia, have taken important steps to implement the 1996 Biological Opinion more effectively.

In Virginia, coordination efforts involve the Virginia Department of Mines, Minerals and Energy; the Virginia Department of Game and Inland Fisheries; the U.S. Army Corps of Engineers; the FWS; and OSM. Together, these agencies are developing standard operating procedures, including specific protective measures for aquatic species, to implement the opinion.

In August 2005, West Virginia began providing assistance to the



Harp traps are used to catch bats at mine openings to study area populations.

FWS to help process the paperwork for mining permits and eliminate a backlog. On January 1, 2007, the State assumed primary responsibility for protection of threatened and endangered species through the mining permit review process. Coordination with the FWS will continue when special expertise is necessary.

On January 1, 2007, the State of West Virginia, FWS, and OSM announced release of the first species-specific protocol for a Federally listed endangered species (the Indiana bat, *Myotis sodalis*) in West Virginia. This protocol, which was developed in cooperation with all three agencies, establishes guidelines for meeting permit application requirements. It also identifies the survey methods and compliance options available to coal mining permittees. The document conforms to the principles of the 1999 Revised Indiana Bat Recovery Plan while implementing new geographic-specific measures to ensure protection of the species in West Virginia. Permittees now have more options for addressing the potential impacts of mining on the Indiana bat depending on the size, complexity, and other characteristics of the permit area.

From Bankruptcy to Reclamation

In 2008, OSM, four state partners, and a coal company demonstrated what is possible when the Federal government, states, and other affected parties work together to solve problems.

This cooperation resulted in the amendment of an historic and wide-ranging mine reclamation agreement that ensures the continued



This dangerous portal (left) was recently sealed with a culverted bat gate (right). Bat gates maintain the mine opening for bats while keeping people from entering the site.

clean-up of hundreds of mining sites scattered across five states.

In 2004, the U.S. Bankruptcy Court approved a reorganization of the Horizon Natural Resources Company, which had filed in 2002 for the largest coal company bankruptcy in history. In response, OSM partnered with the state regulatory programs in Illinois, Indiana, Kentucky, and West Virginia to negotiate a \$269 million reclamation agreement with Lexington Coal Company (LCC), the company formed through the bankruptcy proceedings. The agreement ensured land and water reclamation at over 300 inactive coal mining permits in those four states and in Tennessee, where OSM is the regulatory authority.

In June 2008, OSM, the four signatory states, and LCC amended the agreement to allow for distribution of excess LCC assets to shareholders when all of its permits achieve Phase I bond release and after LCC fully funds all of its required water treatment trust funds. A water treatment trust fund is a financial instrument created to pay for necessary treatment of mine-water discharges in perpetuity. OSM and the states continue to monitor LCC activities

closely. LCC has projected that by the end of 2009, it will achieve Phase 1 bond release conditions for land and water reclamation and will fund water treatment trusts in Kentucky, Tennessee, and West Virginia.

Meeting Phase I bond release eligibility will be a milestone not only for the Horizon bankruptcy, but also for OSM in Tennessee, since it includes the first Federal long-term, water-treatment trust fund (see text box).

Establishment of the Tennessee Treatment Trust

On June 25, 2008 — the day that the LCC agreement was amended — OSM's Knoxville Field Office and LCC also entered into OSM's first treatment trust agreement, which should improve water quality downstream from an inactive coal mine in south-central Tennessee's Sequatchie County.

OSM is the beneficiary of the trust. The trust is intended to protect the environment, as well as public health and welfare, by providing for the continued long-term maintenance and treatment of post-mining pollutional discharges from the mine operation. Establishment of the trust is also expected to benefit coal operators that experience unanticipated pollutional discharges by providing them with an alternative financial mechanism for treating acid mine drainage. Since sureties often do not fund such treatment, the additional funds from this trust will help prevent bankruptcy and potential bond forfeiture.

According to regulations at 30 CFR 942.800(c)(9), when a trust fund is in place and fully funded, OSM may approve bond release, under 30 CFR 800.40(c)(3), of conventional bonds posted for a permit or permit increment, provided that, apart from the pollutional discharge and associated treatment facilities, the area fully meets all applicable reclamation requirements. In addition, a trust fund is required to contain assets sufficient for treatment of pollutional discharges and reclamation of all areas involved in such treatment. The portion of the permit required for post-mining water treatment must remain bonded. A trust fund may serve as that bond.

The Knoxville Field Office anticipates eventually establishing three other similar trust funds in Tennessee related to the LCC reclamation agreement. In the meantime, the Field Office's goal is for the Tennessee Treatment Trust to serve as a model for other Federal programs and state regulatory authorities.



This project at Tennessee's Gladly Fork Mine is paid for by a water treatment trust fund and will improve local water quality.

Accomplished in fewer than four years, the reclamation of hundreds of inactive mine sites under the LCC reclamation agreement and the coordinated State-OSM follow-through with industry are a testament to the collective strength of states and the Federal government, even in bankruptcy court, when working collaboratively toward a common goal.

OSM Oversees Mining on Indian Lands

Under its Indian Lands Program, OSM directly regulates coal mining and reclamation operations on Indian lands. During 2008, OSM regulated active and inactive operations on the Hopi, Navajo, and Ute Mountain Ute Reservations, all in the southwestern United States. OSM also regulated operations on the Crow ceded strip in Montana and on lands owned by the Ute Mountain Ute Tribe.

OSM is a cooperating agency on an Environmental Impact Statement being prepared by the Bureau of Indian Affairs: the Desert Rock Energy Project, which includes a major expansion of an existing mine on the Navajo reservation. OSM was also a cooperating agency on an Environmental Impact Statement prepared by

the Bureau of Indian Affairs that addressed the expansion of the Absaloka Mine onto the Crow Reservation in Montana.

The 2006 Amendments to SMCRA allow tribes to apply for and obtain Federal approval of tribal regulatory programs to regulate surface coal mining and reclamation operations on their reservations. Of the 26 coal-owning tribes, only the Crow Tribe, Hopi Tribe, and Navajo Nation have expressed an interest in assuming regulatory authority over operations on their lands. OSM is actively working with tribal governments and has awarded grants to the Crow Tribe, Hopi Tribe, and Navajo Nation to assist them in developing regulatory programs. These tribal grants totaled \$670,818 in 2007 and \$921,182 in 2008.



PARTNERING ENHANCES RESULTS, AVOIDS ADDITIONAL REGULATIONS: OSM officials and Hopi leaders meet for their quarterly consultation to discuss their regulatory programs. Meetings like this led OSM to decide that additional nationwide regulations were not necessary to give tribes primacy under the 2006 amendments to SMCRA.

Agreements Provide Regulation and Reclamation on Federal Lands

The Federal government owns significant amounts of land and coal reserves, primarily in the Western United States. Sixty percent of the 147 billion tons of recoverable coal reserves in the West is Federally owned or managed. The Federal Coal Management Program administered by Interior's Bureau of Land Management governs the development of Federal coal reserves.

SMCRA requires the Secretary of the Interior to establish and implement a Federal regulatory program for surface coal mining and reclamation operations on Federal land. Through cooperative agreements, the Secretary delegates most regulatory responsibilities for surface coal mining and reclamation operations on Federal lands to states with approved regulatory programs. The Secretary has entered into cooperative agreements with 14 states: Alabama, Colorado, Illinois, Indiana, Kentucky, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Utah, Virginia, West Virginia, and Wyoming.

Under these cooperative agreements, each state regulatory authority assumes permitting, inspection, and enforcement responsibilities for coal mining and reclamation activities on Federal lands within that state. OSM maintains an oversight function to ensure that the state fully exercises its delegated responsibility under the cooperative agreement.

OSM remains responsible for preparing mining plan decision documents for coal mining on Federal lands and submitting them to the Interior Department's Assistant

Secretary, Land and Minerals Management (ASLM), for approval. During Fiscal Year 2007, OSM prepared decision documents and recommended that the ASLM approve mining plans or mine plan modifications for six operations on Federal lands in OSM's Western Region. These Secretarial approvals authorized mining of approximately 50 million, 24 million, and 444 million tons of leased Federal coal in Colorado, Utah and Wyoming, respectively, under approximately 18,183 acres of land. OSM also prepared decision documents in Fiscal Year 2007 recommending that ASLM approve one mining plan and one mining plan modification authorizing mining of approximately one million tons of leased Federal coal in Oklahoma under 222 acres of private land.

In Fiscal Year 2008, based on five decision documents, ASLM approvals authorized mining of approximately 12 million, 37 million, and 3 million tons of leased Federal coal in Colorado, New Mexico, and North Dakota, respectively, under approximately 6,321 acres of land.

West Virginia Bonding Program Improvements

While some in the general public may view bond forfeiture reclamation simply as "one-time" restoration efforts to reclaim mined land, the practice is far more complicated than most land restoration, especially when the mining operation is causing water pollution. The variability of site conditions, including water chemistry, flow, location, and access determines the degree of difficulty and the cost to treat a site.

For example, the West Virginia Department of Environmental Protection (WVDEP) historically has not had enough money in its Special Reclamation Fund (or State Alternative Bonding System) — a bond pool made up of forfeited bonds and taxes on coal production — to both reclaim land and treat any long-term water pollution discharges, commonly called acid mine drainage.



Treating acid mine drainage in West Virginia.

By 2008, the West Virginia Department of Environmental Protection (WVDEP) Special Reclamation Program had installed 50 active treatment systems and 63 passive treatment systems at these forfeited permit sites.

However, WVDEP's inability to deal with acid mine drainage changed in 2002 and 2008 with several improvements to the state's bonding system, including:

- An increase in the Special Reclamation Fund tax rate from 3 cents per ton of clean coal mined to 14 cents (with 7 of the 14 cents expiring after 39 months). In 2008, the tax rate increased to 14.4 cents per ton of clean coal mined;
- The creation of a Special Reclamation Fund Advisory Council to monitor the progress of the Fund in meeting future bond forfeiture reclamation obligations; and
- The removal of a regulatory limitation on the expenditure of funds for treating pollutional discharges at bond forfeiture sites.

As part of this effort, the WVDEP developed an inventory of all forfeited permits including those with acid mine drainage. The WVDEP also agreed to treat water at forfeited sites that occurred prior to the bonding changes. That inventory now reflects a total of 180 sites with acid mine drainage. A reclamation schedule was developed to install treatment facilities at the inventoried sites. In some cases, the WVDEP is able to install "passive" systems such as wetlands that function without daily maintenance for several years. In other cases, the agency has had to install "active treatment" systems that require the routine addition of chemi-

cals to a mechanical distribution system and the periodic disposal of sludge from a treatment plant. These systems often have high annual operational costs.

By 2008, the WVDEP Special Reclamation Program had installed 50 active treatment systems and 63 passive treatment systems at these forfeited permit sites.

The WVDEP has closely coordinated its reclamation efforts with OSM and the Special Reclamation Fund Advisory Council in monitoring the progress and solvency of the Special Reclamation Fund.

The Journey to Electronic Permitting in Tennessee

OSM prides itself as a leader in promoting new technology. One example is the first Federal electronic permitting process for surface coal mining, which debuted in 2008 in OSM's Knoxville Field Office in Tennessee.

The Electronic Permit Application Control Solution (EPACS) encompasses all of the permitting aspects in the Knoxville Field Office's area of responsibility.

EPACS consists of two major components: the client tool that allows the applicant to electronically prepare and transmit the application; and the internal tracking tool that allows OSM management and staff to track and review the application.

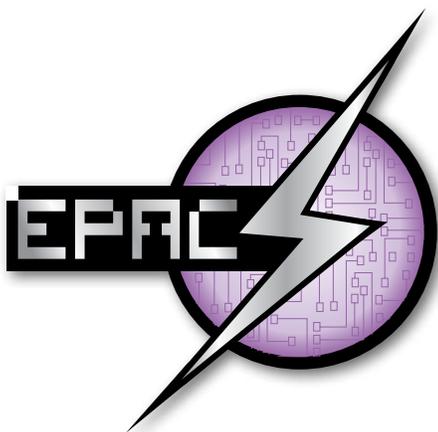
The EPACS Development Team, which consists of information technology specialists, were instrumental in the development of EPACS and the success of Knoxville's electronic permitting efforts.



The Electronic Permit Application Control Solution Development Team (left to right): Nancy Osbourne, Harry Morris, Bob McKenzie, Bill Arthur, Chris Ellis, Dave Agnor, and Daniel Lewis.

Benefits of an electronic permitting process include:

- Reducing paper: Only one electronic copy of the application is submitted;
- Exchanging pre-submission information: Existing geologic and hydrologic data is available to the applicant;
- Improving review times: Includes centralized responses for additional information and electronic review and identification of changes;
- Tracking reviews in real time with the ability to determine the status of applications;
- Reviewing multiple permits from a single source so that one employee can review several permits from a single desktop; and
- Improving customer service: OSM can provide customers with the ability to review information in an electronic form giving the customer the ability to track and stay apprised of the progress on the permit application.



Applicant/Violator System Helps Regulators Spot Permit Problems

OSM's Applicant/Violator System (AVS) Office provides regulatory authorities a central database of application, permit, ownership, control, and violation information.

Federal and state officials review AVS data when evaluating an applicant's permit history and eligibility for new permits. The system is also used to determine the eligibility of potential recipients of AML reclamation contracts, as well as for inspection and oversight purposes. The information in the AVS is also available to citizens.

Based in Lexington, Kentucky, the AVS Office over the past two years has provided quality reviews for 6,494 requests for data evaluations from state and Federal regulatory authorities and state AML program officials.

During Fiscal Years 2007 and 2008, OSM collected or settled payments of civil penalties and reclamation fees totaling \$2,316,371 from operators or other entities trying to remedy Federal mining violations based on information contained in the system.

General information about the AVS Office, contacts, and system user information is located at www.avs.osmre.gov.

Aiming for Perfection

Having consistently received high customer satisfaction ratings, including a recent score of 98 percent, the AVS Office continues to make the system even better.

The AVS Office completed a re-design of its computer system in 2007 to boost accessibility and ease of use. Topping the list of improvements is the elimination of the software formerly required to access the system. Now completely Internet-based, AVS allows users to simply go to a secure website to access AVS information.

A further improvement allows users to request an entity evaluation narrative online. This enables a state agency to check the eligibility status of an operator or contractor before approving operations.

Finally, the AVS Office also created a new "Reporting" module that aids coal operators in completing a permit application to submit to regulatory authorities and allows any user to run reports of information related to the permit review process.

RESTORATION



RECLAIMING ABANDONED MINE LANDS

Title IV of the Surface Mining Control and Reclamation Act of 1977: Correcting Health and Safety Problems at Abandoned Mines

Consistent with one of the underlying principles of SMCRA — those who profit from coal mining should correct any damage caused by their mining — today's coal operators bear the cost of reclaiming land and water affected by their operations. For the tens of thousands of sites that were mined or abandoned before the Act was enacted in 1977, however, clean-up of associated problems is based in Title IV of the Act. These problems included serious health and safety hazards such as streams polluted by acid mine drainage, steep and unstable slopes, open mine shafts, deadly mine gases, and buildings falling into the earth as a result of land subsided over aged, collapsed underground mines.

In Title IV of SMCRA, Congress established the AML Program to deal with the legacy of past mining. In addition to covering the costs of reclamation for their own active mining operations, all coal operators bear the collective responsibility for paying to correct the damage of past mining. Funds for this program come from fees paid by active coal mine operators for each ton of coal mined. The money is deposited in the Abandoned Mine Land Reclamation Fund, which is then used to pay for projects that reclaim eligible abandoned mines. States and tribes with approved AML programs receive grants from the AML Fund to reclaim high-priority reclamation problems - those con-

stituting dangers to public health, safety, and general welfare.

OSM has administered the AML Program for over three decades. Under this program, some states and tribes have addressed all coal-related problems within their borders. These states and tribes are known as "certified" because the Secretary officially concurred with their certification that they have addressed all their AML problems. While some states and tribes have certified completion of their AML problems, the majority of states have remaining problems related to abandoned coal mines.

After years of debate over how the AML Program could accelerate the pace of reclaiming abandoned coal mines, in December 2006, the Tax Relief and Health Care Act (Public Law 109-432) amended SMCRA to reauthorize the fee collection authority and redesign the AML Program.

Changes Made by the 2006 AML Amendments

The 2006 amendments significantly changed the AML program, including dramatically increasing the funds available for reclamation of abandoned coal mines. After an initial phase-in period, approximately 83 percent of the reclamation fees collected annually will be allocated to uncertified states and tribes. Some of the amendments' other major changes are as follows:

- New allocation percentages for reclamation fees increase the allocation for historical coal production — coal produced before 1977 — from 20 percent to 30 percent of collections.
- New allocation percentages eliminate SMCRA's previous 10 percent allocation for the Rural Abandoned Mine Program, operated by the U.S. Department of Agriculture.
- Certified states and tribes are now ineligible for the AML Program's state share and tribal share, while uncertified states continue to receive 50 percent of the collections from coal operations within their boundaries.
- State and tribal share money that previously went to certified states and tribes now increases the historic coal allocation available to uncertified states and tribes.
- New funding to certified states and tribes now comes from the U.S. Treasury funds in lieu of AML funds coming from the state and tribal share. These are mandatory distributions.
- Prior unappropriated state and tribal share balances in the AML Reclamation Fund are now available for all eligible states and tribes. These funds are distributed to the states and tribes in grants using funds from the Treasury, in seven equal installments. These are also mandatory distributions.

- The unappropriated balance in the AML fund is retained. The interest it earns is used to supplement payments to the United Mine Workers of America health benefit funds.
- The minimum funding level provided to AML Program states increases to three million dollars, phased in over the first four years under the 2006 Amendments.
- Title IV funds to states and tribes are distributed annually, only to uncertified states, based on fee collection amounts, historic coal production, and any amount necessary to ensure that the minimum program amount is reached. These distributions are mandatory appropriations.
- Funding limits increase for water supply restoration projects and acid mine drainage set-aside funds.
- Expenditures for federal AML projects in non-program states (those not having approved AML programs), the emergency reclamation program, administrative expenses, and watershed cooperative agreements remain subject to appropriation.
- Certified states and tribes can now apply for grants under a simplified process and use the Treasury money granted based upon their unappropriated balances as directed by their state legislatures or tribal councils.

Change in Fee Schedule

Congress extended the reclamation fee the coal industry pays on each ton of coal it mines through September 30, 2021. However, the fee rates are reduced by 10 percent from the levels established in 1977 for the period from October 1, 2007, through September 30, 2012, and then reduced by an additional 10 percent until September 30, 2021.

Fees will be collected at the following rates:

Fiscal Years 2008-2012:

Surface:	31.5 cents per ton
Underground:	13.5 cents per ton
Lignite:	9 cents per ton

Fiscal Years 2013-2021:

Surface:	28 cents per ton
Underground:	12 cents per ton
Lignite:	8 cents per ton

Annual Distribution of Fees

Uncertified States

Beginning in FY 2008, annual fee collections were distributed to states and tribes as mandatory appropriations, no longer subject to the annual budget approval process.

In addition, for the first seven years each state and tribe receives from the US Treasury an amount equal to one-seventh of its unappropriated state and tribal share balances.

The legislation provides for a four-year phase in to the full distribution level. In Fiscal Years 2008 and 2009, funding is 50 percent of the final distribution, which will increase to 75 percent in Fiscal Years 2010 and 2011.

Certified States and Tribes

Beginning with Fiscal Year 2009, certified states and tribes annually receive funds from the Treasury in lieu of the AML Fund state and tribal share allocations they previously received. In addition, for the first seven years, each state or tribe receives from the Treasury an amount equal to one-seventh of its unappropriated state and tribal share balances.

For the first three years, payments from the Treasury to certified states and tribes will be reduced to 25 percent, 50 percent, and 75 percent, respectively, of the final

statutory amount. Those funds not received in the phase in period will be received in two equal payments, beginning with Fiscal Year 2018.

Grants to States and Tribes

Since the inception of the program, OSM has distributed funds to the states and tribes with AML programs through grants. Until the 2006 Amendments made distributions mandatory, the grants were based on a formula that distributed the appropriation at a ratio of 55 percent state and tribal share and 45 percent historic coal share. The historic coal share was reduced as necessary to allow for the minimum program makeup.

Beginning with Fiscal Year 2008, distribution of funds is a mandatory appropriation, and no longer subject to the annual budget approval cycle. The Solicitor has advised OSM that grants are still required by law. While grants are still required, the 2006 amendments give certified states and tribes great latitude in how their funds are spent, and limit OSM's involvement in the process to assuring that Federal financial obligations and rules are followed. OSM simplified the grants process to the certified states and tribes, reducing the paperwork and information required and the time OSM has to process a grant.

The grant process for uncertified states remains unchanged.

OSM distributed Title IV AML grant funds to 28 states and tribes for 2008. This total increased by two from 2007, with new programs in Mississippi and Tennessee. The 25 States with approved reclamation programs are Alabama, Alaska, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Utah, Virginia, West Virginia, and Wyoming. The three tribes with approved pro-

grams are the Crow Tribe, the Hopi Tribe, and the Navajo Nation. For 2008, OSM distributed funds totaling \$274.3 million to the states and tribes, a significant increase from the \$145.4 million OSM distributed the previous year.

Grant obligations, the amount awarded to the states and tribes in grants, for 2008 are shown in Table 3 in Appendix B. These obligation totals can differ from the distribution totals because grant awards may include funds distributed or carried over from previous years.

Minimum Program

Minimum program make-up funding was established by Congress to ensure that programs can continue to complete reclamation projects where the annual grant distribution is otherwise too small for a program to operate. In the past, the Act provided for a minimum \$2 million annual allocation for those states and tribes, while Congress historically appropriated only a \$1.5 million grant funding minimum.

The 2006 amendments increased the minimum annual grant funding to \$3 million for each uncertified state and tribe with an approved AML reclamation plan, eligible lands and waters, and Priority 1 or 2 coal sites totaling at least \$3 million. When the state or tribal inventory drops below \$3 million in Priority 1 or 2 coal sites, the minimum level for that program drops to the same level.

For 2008, OSM distributed minimum program make-up funds totaling \$9,775,987 to nine states: Alaska, Arkansas, Iowa, Kansas, Maryland, Missouri, North Dakota, Oklahoma, and Tennessee.

Final AML Rule

The final rule, published in November 2008 (*Federal Register*, Vol. 73, No. 221, November 14, 2008), codifies the extension of OSM's authority to collect reclama-

tion fees and the reduction of the fee rates. In general, it broadens state and tribal authority, expands program activities, and simplifies grant procedures for certified states and tribes.

As the following examples demonstrate, reclamation of abandoned or insufficiently restored mines is occurring in every region of the Nation. While there is still a lot of work to do, it is clear that SMCRA established a vital program that OSM, the states and tribes are aggressively implementing to improve communities, lands, and waters affected by past mining.

Dangerous Highwalls Eliminated and Eight Thousand Trees Planted

Thanks to the combined efforts of three offices in OSM's Federal Reclamation Program Division, two dangerous mine sites in northeastern Tennessee are now hills with gentle slopes and beautiful young trees. At the Wheel Ridge 82-047 bond forfeiture site near Newcomb, dangerous highwalls rose 12 stories. After regrading and replanting took place in 2007, 6,000 white ash, northern red oak, white oak, redbud, black walnut, and yellow poplar seedlings are now growing.

At the Wheel Ridge 82-116 project site, heavy erosion was the principal problem. To remedy this, the Reclamation Program Division and the Knoxville Field Office regraded the site and placed drainage-control structures to divert water away from the eroding slopes. Afterwards, 2,000 seedlings of white ash, northern red oak, white oak, redbud, black walnut, and yellow poplar were planted.

Alabama AML Project Reclaims Hazards and Restores Stream Channel

In 2007, the Alabama Department of Industrial Relations (ADIR) Abandoned Mine Lands Office restored a stream to its original course, eliminated a highwall, and reclaimed a dangerous body of water. Because of the stream channel restoration, the presence of endangered species, and the critical habitat designation of the stream, ADIR worked closely with the U. S. Fish and Wildlife Service and the Army Corps of Engineers to complete this \$470,000 project.

The project covered materials that remained from the mining operation, revegetated 25 acres of land, and restored an unnamed tributary using geomorphic principles, which aim to replicate patterns of naturally occurring landforms. ADIR also planted native hardwood trees and shrubs on the stream banks to reduce sedimentation and improve water quality.

Office of Surface Mining Reclamation and Enforcement 2008 Reclamation Awards

Since 1986, OSM has presented awards to coal mine operators who demonstrate exemplary reclamation. A parallel award program for abandoned mine land reclamation began in 1992. The objective was to give public recognition to those responsible for the Nation's most outstanding achievement in environmentally sound surface mining and land reclamation and to encourage the exchange and transfer of successful reclamation technology.

Excellence in Abandoned Mine Land Reclamation

The National Award

Colorado Program of Reclamation, Mining and Safety, Inactive Mines Reclamation Program

Peanut Mine Reclamation Project

Crested Butte, Gunnison County, Colorado

Complicated by remaining anthracite along with coal waste and hard-rock mine and mill waste, reclamation at this Rocky Mountain site shows how community involvement, innovative partnering among public, private, and governmental groups, and careful planning combine to produce exemplary reclamation.

At this previously impaired and once dangerous site, 16 acres of mine and mill wastes are now reclaimed, including three new acres of wetlands.

The National Award Category II

New Mexico Energy, Minerals and Natural Resources Department Mining and Minerals Division Abandoned Mine Land Program

Yankee-Vukonich Coal Reclamation Project

Colfax County, New Mexico

Mined sporadically since the early 1800s and as recently as 1971, this site contained substantial amounts of coal waste dumped down steep slopes, partially collapsed mine entrances, and streams near waste material. The coal waste was severely eroded, and it polluted both ephemeral and perennial waterways.

Mixing the coal waste with native soil and adding lime, gypsum, wood waste, and compost to support native vegetation has reclaimed much of the area to a point where it blends in with undisturbed areas. Streams have been reshaped to a natural state, and historic buildings from the mining era have been preserved.

The Appalachian Regional Award

Pennsylvania Department of Environmental Protection Bureau of Abandoned Mine Reclamation

The Fishing Run Restoration and Maude Mine Reclamation Project

South Fayette Township, Allegheny County, Pennsylvania

A remnant of 19th and early 20th century mining, this site included an open portal, a partially sealed mine opening, 1,500 feet of dangerous high-wall, and numerous dilapidated coal-facility structures. An open mine portal had captured all of the flow from the upper portion of a clean-water stream called Fishing Run and diverted it. The captured water flowed through an abandoned mine and pro-



Peanut Mine Reclamation Project, Gunnison County, Colorado.



Yankee-Vukonich Coal Reclamation Project, Colfax County, New Mexico.



Maude Mine Reclamation Project, Allegheny County, Pennsylvania.



Cottonwood Wash Reclamation Project, San Juan County, Utah.

ceeded to discharge acid mine drainage into a major stream.

Fill material from the project site and nearby areas have eliminated the highwalls.

The open mine portal and partially sealed mine opening have been permanently sealed, and, using geomorphic principles, the Pennsylvania Department of Environmental Protection's Bureau of Abandoned Mine Reclamation has now restored Fishing Run to a natural streambed lined with trees.

The Mid-Continent Regional Award

Indiana Department of Natural Resources

Division of Reclamation
Log Creek Church AML Sites 900 & 2040
 Pike and Warrick Counties, Indiana

Over a century of surface mining had left dangerous, near-vertical highwalls and a devastated landscape within yards of a mid-eighteenth century church and a heavily travelled county road in southwestern Indiana. Acid mine drainage from exposed sites was extensive and complicated by the use of coal and coal waste to construct haul roads.

At Log Creek Church, over 70 acres of acid-producing waste were sequestered and forested

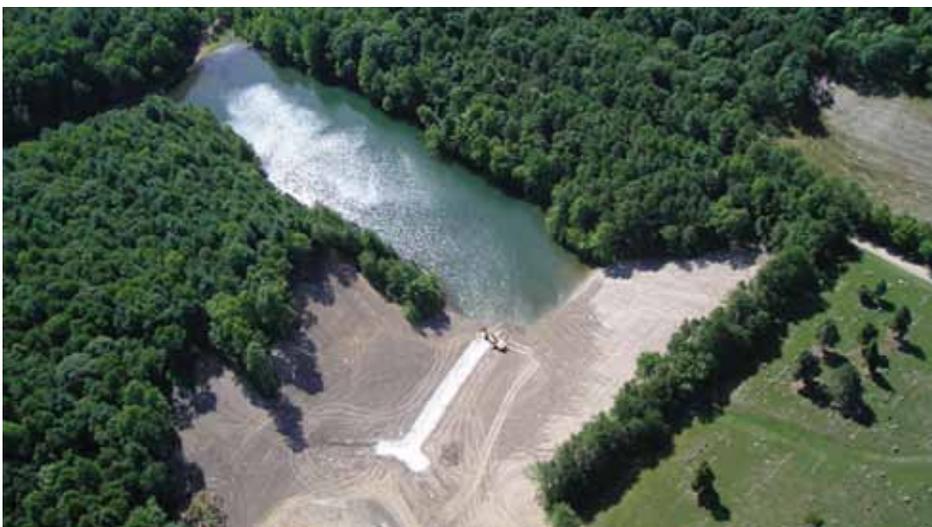
wetlands established. Using geomorphic modeling, sustainable stream channels, and drainage areas are now in place, while 4,000 feet of highwall have been replaced with natural slopes.

The Western Regional Award

Utah Division of Oil, Gas & Mining Abandoned Mine Reclamation Program

Cottonwood Wash Reclamation Project
 San Juan County, Utah

An archeologically rich area inhabited for three thousand years and extensively mined for vanadium and uranium in the 20th century, this southeastern Utah site was littered with radioactive waste. Open mine shafts and adits were another threat to public safety. Cooperative partnerships among the responsible agencies have maximized funding and expertise to reclaim the land that required 239 adit closures and 66 shaft closures. Under these cooperative efforts, 73 miles of roads have been reclaimed, 225 drill holes plugged, and 39 hazardous structures removed.



Log Creek Church AML Sites 900 and 2040, Pike and Warrick Counties, Indiana.

The Dolph Colliery Mine Fire

An illegal rubbish fire ignited coal refuse and quickly spread into the abandoned underground mine workings known as the Dolph and Underwood Collieries near Olyphant, in northeastern Pennsylvania's Lackawanna County. There was nothing to prevent the underground fire from continuing beneath an adjacent highway, a nearby industrial park, and the residential community beyond.

OSM and the Pennsylvania Department of Environmental Protection (PADEP) combined resources to keep this dangerous fire from spreading. The total cost of the project exceeded \$11.5 million.

In addition to abating the emergency portion of the project, OSM provided technical assistance such as expert analysis, thermal imaging, and three-dimensional modeling of the extent of the fire. The fire control work was managed by OSM and began in June 2007, with the permanent relocation of a 6,500-foot section of a sewer line on a gravity flow route far to the east of the fire. The fire-isolation segment of the work involved excavation of a 3,400-foot-long containment trench that reached depths of 165 feet. This work included drilling, blasting, excavating more than 920,000 cubic yards of rock, and moving 360,000 cubic yards of unconsolidated material. The dangerous highwalls were encircled by a chain link fence.

A seismograph was stationed at the nearest man-made structure and monitored each of the 46 blasts that were detonated to fracture the rock material.

The project was completed in April 2008, and the underground and surface fires were successfully contained. PADEP will monitor borehole temperatures at the site to verify that the fire remains contained, and PADEP will eventually backfill the trench with onsite rock.

Emergency Program Story

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

Following the passage of SMCRA, OSM performed all emergency reclamation nationwide. As OSM approved programs developed by individual states, however, many states assumed responsibility for

administering their own emergency programs. In 2008, the following 15 States had emergency programs: Alabama, Alaska, Arkansas, Illinois, Indiana, Iowa, Kansas, Missouri, Montana, North Dakota, Ohio, Oklahoma, Texas, Virginia, and West Virginia. OSM provides funds to these states to complete emergency projects.

OSM is responsible for conducting emergency projects in California, Colorado, Georgia, Idaho, Kentucky, Louisiana, Maryland, Michigan, Mississippi, New Mexico, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Washington, and Wyoming, as well as on all tribal lands.

The report of an emergency problem may come from anywhere: citizens, municipalities, emergency



Dragline at work in an isolation trench at the Dolph Colliery Mine Fire.



Large excavator loading trucks after encountering "hot material" in a containment trench at the Dolph Colliery Mine Fire.

response agencies, and other state or local agencies. After receiving a report of an emergency, OSM or the relevant state agency usually performs a technical investigation within 48 hours, after which time a determination is made about whether the site is eligible for emergency abatement.

Information on how to report emergency problems is available at www.osmre.gov/amlemerg.htm.

Saving Homes in Coal Country

Eastern Kentucky's Eli Campbell Landslide AML Reclamation Project was just one of eighteen landslides reclaimed by the State's AML program in 2007. The landslide threatened to damage the foundations of two residences. The landslide also altered the flow pattern of a small stream, which, if left unabated, would have eliminated access to four additional homes and a recycling business.

Selective land grading and construction of a retaining wall with underground drains stabilized the homes and diverted mine drainage away from the problem areas. The project also sealed two old mine openings, preventing people from entering while maintaining access for bats and other wildlife.

United Mine Workers of America Combined Benefit Fund

OSM began annual transfers to the United Mine Workers of America (UMWA) Combined Benefit Fund (CBF) in 1996 under a requirement of the Energy Policy Act of 1992. This cash transfer defrays anticipated health care costs for eligible union coal mine workers who retired on or before July 20, 1992, and their dependents.

The 2006 Amendments to SMCRA require:

- Annual transfer of all estimated AML fund interest earnings for each fiscal year to three UMWA retiree benefit plans — the Combined Benefit Fund, the 1992 Plan, and the 1993 Plan — to the extent payments from premiums and other sources do



Eli Campbell Slide, Perry County, Kentucky.



Graded land at the Eli Campbell Slide, Perry County, Kentucky.

not meet those plans' needs, subject to certain limitations.

- That the unappropriated balance of the Rural Abandoned Mine Program allocation as of the date of enactment be available for transfer to the UMWA plans. Most of this had already been transferred to the Secretary's discretionary share by the Fiscal Year 2006 Interior appropriations bill.
- Additional transfers to the CBF began in Fiscal Year 2007 for amounts to cover the deficit in CBF assets as of October 1, 2006, when there was a \$70 million cap on annual transfers from the AML fund. Similar transfers to the 1992 and 1993 plans began in Fiscal Year 2008. Transfers to the 1992 and 1993 plans will be phased in, with transfers in Fiscal Years 2008-2010 limited to 25 percent, 50 percent, and 75 percent, respectively, of the amounts that would otherwise be transferred.
- That payments from unappropriated amounts in the Treasury to the three UMWA plans be subject to the \$490 million cap on all annual transfers from the Treasury under this legislation. This cap includes the three plans, funds for certified in-lieu payments, and prior-balance replacement funds.
- The set-aside of all interest earned by the AML fund before passage of this law and not previously transferred to the CBF (the "stranded interest") in a reserve fund that would be used to make payments to the three UMWA

plans in the event that their needs exceed the \$490 million annual cap on all transfers from the Treasury under this legislation. The reserve may not be used to pay the CBF premium refunds to operators authorized under section 402(i)(1)(C) of SMCRA.

- That the Interior Secretary consult with the trustees of the three UMWA plans at reasonable intervals and notify Congress if the reserve fund appears insufficient to cover any shortfall in transfers from the Treasury because of the cap.

In general, the three UMWA plans must exhaust all available revenue sources more or less in the following order:

- Premiums paid by operators and other UMWA revenues (although the legislation also phases out premiums for unassigned beneficiaries).
- Payments from other Federal agencies for benefit purposes (e.g., the Medicare prescription drug program).
- Estimated interest to be earned by the AML fund during the fiscal year in question.
- Unappropriated balance of the Rural Abandoned Mine Program allocation.
- Transfers from unappropriated funds in the U.S. Treasury, subject to the \$490 million cap on annual transfers to both the UMWA plans and states and tribes.

PARTNERING



PRODUCTIVE PARTNERING

Working Together to Implement the Surface Mining Control and Reclamation Act of 1977

The Surface Mining Control and Reclamation Act (SMCRA, or “the Act”) established a framework of cooperative Federalism – a partnership among OSM, states, and tribes with the shared responsibility for implementing the requirements of the Act. These strong, collaborative partnerships have led to additional innovative relationships involving local governments, the coal industry, citizens’ groups, communities, schools, other Federal agencies, and conservation organizations.

Principles for Partnering Success:

- Create a bond of trust and demonstrate openness,
- Work as a team for consensus and consultation,
- Respect the organizational mission of each partner,
- Respect the expectations and limits of each partner,
- Share power, risks, and responsibilities.

OSM consults with its state and tribal partners in determining agency priorities. For instance, before OSM finalizes its decision on which aspects of state and

tribal programs to focus on during annual oversight reviews, the bureau consults with states and tribes and seeks input from stakeholders. SMCRA’s public participation opportunities foster openness and transparency in all that the bureau does.

OSM’s Abandoned Mine Land (AML) program also emphasizes the reclamation of those past mining problems that present the most urgent threats to public health and safety. Public partnerships and feedback from stakeholders are key to identifying the most serious AML problems and ensuring that scarce reclamation dollars are spent wisely. OSM’s clean-up efforts, particularly watershed clean-up, are most effective when Federal resources are pooled with those of local, state, and other Federal organizations with common goals.

While the relationships among the States, Tribes, and OSM are essential to success, there are many partnerships that help the bureau accomplish the mission of SMCRA. For example, OSM works on coal mining-related issues with the Environmental Protection Agency, Mine Safety and Health Administration, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers, among other partners.

The examples that follow illustrate how OSM is able to leverage its efforts through its commitment to productive partnerships.

Mined Land Reforestation

OSM’s focus on promoting mined-land reforestation uses the “Forestry Reclamation Approach,” five steps that constitute the best way to prepare a mine site for successful tree planting, the tree species to plant, the types of vegetative ground cover to use, and the proper way to plant a tree.

In the eastern United States, the Appalachian Regional Reforestation Initiative (ARRI) brings many diverse interests together to accomplish one objective: planting high-value hardwood trees on reclaimed mine lands.

The many benefits of reforestation include restoring native habitat; reducing forest fragmentation; renewing valuable economic

National and International Recognition for Reforestation Goals

In 2007, teams from ARRI were among 14 groups to receive one of the Department of the Interior’s highest honors, the Cooperative Conservation Award, which recognizes the achievements of collaborative conservation efforts among Federal, state, and local governments, private for-profit and non-profit institutions, other non-government entities, and individuals.

resources; providing recreational lands; sequestering carbon; and controlling erosion and flooding during and after reclamation. So far, 267 individuals, representing numerous public and private interests, have signed the reforestation pledge in the ARRI Statement of Mutual Intent (see <http://arri.osmre.gov/SMI.htm>).

Interest in OSM's success has brought invitations to participate in international reforestation conferences in Canada, Romania, Greece, Korea, and Colombia. Because of ARRI's success in reforesting mined lands and its connections with the coal industry, the U.S. Fish and Wildlife Service and the American Bird Conservatory have asked representatives from ARRI to help serve as a liaison between the coal industry in the United States and the coffee industry in Central America. These representatives are taking part in Central American reforestation efforts that help bird species affected by mining operations.

These representatives are taking part in Central American reforestation efforts that help bird species affected by mining operations.

OSM Partnership with Private Foundation Brings Back the American Chestnut

The American chestnut tree largely disappeared from the Eastern forests because of a disease introduced from China in the early 1900s. Over the next 50 years, the chestnut blight killed almost four billion trees. The loss of the chestnut as a dominant species in the Eastern forests prompted a group of scientists to form The American Chestnut Foundation in 1983 with

the goal of restoring the species to its former prominence. Since then, the Foundation has promoted scientific research and breeding programs that cross American chestnuts with blight-resistant Chinese chestnuts.

The native range of the American chestnut closely matches the extent of the Appalachian coal fields. OSM and the Foundation recognized that this match-up was the logical basis for an ideal partnership. The result was Operation Springboard, launched in the spring of 2008 (for more information, go to <http://arri.osmre.gov/AC/OS08.htm>). OSM provides the know-how of the Forestry Reclamation Approach, encouraging tree survival and growth; the Foundation provides the blight-resistant chestnut nuts and seedlings.

For Operation Springboard, the Foundation provided 4,500 native American chestnut seeds and several thousand American chestnut seedlings for planting on reclaimed Appalachian mine sites during Arbor Day celebrations held in Alabama, Illinois, Indiana, Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

The survival rates and growth of the American chestnut nuts are being monitored to assess the suit-

ability of various reclamation methods and soil types for chestnut trees. The Arbor Day events that launched Operation Springboard, along with the full-scale forestry reclamation proposed at mine sites nationwide, mark the beginning of a long-term effort to create stable and productive reclaimed mine land that will help restore an important part of America's heritage to the Eastern forests.

Celebrate Arbor Day!

In 2008, OSM's 16 Arbor Day events in 13 states featured volunteers planting more than 28,000 trees, including chestnuts and a variety of other hardwood seedlings, on reclaimed mine sites. Giving people a chance to see and participate in mine reclamation using the Forestry Reclamation Approach spreads the word about reforestation. Over 750 school children attended the events, some receiving credit for the event as part of their science curricula, and helped plant the trees with expertise provided by volunteers from conservation groups, industry, and state and Federal agencies.



Some of the 60 volunteers planting American chestnut seeds during Tennessee's 2008 Arbor Day event. Over time, weathering of the spoil at this mine site will result in typical mountain forest soils that support tree growth.

Reforestation Partners' Summer Meeting

OSM held its first ARRI Mined Land Reforestation Conference in August 2007 in south-western Virginia, with a second conference following in August 2008 in southern West Virginia.

Through conferences and symposia, ARRI has brought together stakeholders with traditionally opposing views to promote a common goal: reclaiming surface mined lands to high-value hardwood commercial forests. In addition to forging unprecedented partnerships, this environmentally sound reforestation technology and land use provides countless benefits to future generations. See <http://arri.osmre.gov> and <http://www.mcrc.org/osmre.gov/reforestation/> to read more about OSM's reforestation initiative.

The Indiana Soils/Prime Farmland Team

Farmland is vital to the Nation, so reclaiming farmland after surface coal mining is one of SMCRA's highest priorities.

In 1996, OSM established a team consisting of representatives from OSM, the Indiana Department of Natural Resources, and the USDA Natural Resources Conservation Service to identify issues and develop solutions for restoring reclaimed prime farmland to full productivity.

The team quickly became a self-directed group of soil professionals with members from Purdue University, the Purdue Extension Service, and the Indiana Farm

Bureau, among others. The team has grown to include farmers growing crops on reclaimed prime farmland, reclamation professionals from several coal companies that mine on prime farmland, the Sierra Club, and the University of Illinois.

The team's accomplishments have included production of two brochures: "Citizen Guide to Land Reclamation," and "Farm Management Practices for Reclaimed Cropland."

The team sponsors a bi-annual tour of prime farmland demonstrating mining and reclamation techniques at active coal mines in Indiana. The team has supported prime farmland research, including development of new soil mapping units for reclaimed soils and an applied science research project: "A System to Evaluate Prime Farmland and Reclamation Success."

Standardizing Coal Mining Geospatial Information for the Nation

With satellites bringing location data to the general public through global positioning systems (GPS) and interactive maps, more and more information is available to help coal operators map information to get mining permits, design AML projects, and determine surface and mineral ownership. These new geospatial technologies also help regulatory and AML authorities meet their review and approval responsibilities.

OSM's Technical Innovation and Professional Services (TIPS) program began an initiative in 2005 to promote increased use of geospatial technology in implementing SMCRA and to standardize nomenclature for the geospatial data created during that process. The



Participants at the 2007 tour watch a demonstration of deep ripping to alleviate compaction of reclaimed prime farmland. Compaction of reclaimed soils is one of the factors that can prevent achievement of full production capability.

National Coal Mining Geospatial Committee (NCMGC) was formed as yet another partnership to represent the interests of the states, tribes, and OSM offices. The NCMGC includes representatives of the Interstate Mining Compact Commission, the National Association of Abandoned Mine Lands Programs, the Western Interstate Energy Board, the three OSM regions, and OSM Headquarters.

This effort resulted in the 2006 formation of the Coal Mining Spatial Data Standards Task Group, an interdisciplinary, 12-member team of state, industry, environmental, and OSM personnel, working through the internationally recognized standards organization, the American Society for Testing and Materials (ASTM). This team set the objective of developing geospatial standards for both surface coal mining operation boundaries and underground coal mining boundaries.

The ASTM standard for surface coal mining boundaries was finalized in September 2007, and the ASTM boundary standard for underground coal mining was completed in April 2008.

Watershed Cleanup: Better Decisions Result From a Collective Approach

Drainage flowing from abandoned coal mines can cause pollution so severe that plant and animal life in streams cannot survive. OSM participates in partnerships aimed at protecting and — when needed — restoring the health of watersheds damaged by past mining practices.

OSM partners with federal, state, and local government, passionate and enthusiastic citizens, civic-minded coal mining companies, consultants, and local businesses drawn together by the common goal of watershed restoration.

Mine drainage can contain acidity, iron, manganese, aluminum, and other metals derived from coal and rock high in iron-sulfide minerals (such as pyrite) exposed to oxygen and moisture during surface or underground mining operations. If produced in sufficient quantity, iron hydroxide and sulfuric acid, resulting from chemical and biological reactions, can contaminate surface and ground water.

There are thousands of miles of polluted streams in the coal regions of Appalachia and the Midwest, largely the result of decades of unregulated mining before passage of SMCRA. Through watershed cooperative agreements, OSM awards seed money and technical assistance to boost the efforts of communities to clean up watersheds.

In 2008, OSM awarded 17 watershed cooperative agreements providing almost \$1,362,000 for watershed clean-up. Using local know-how and ingenuity, the recipients leveraged this money to



Mine drainage at an abandoned coal mine in Pennsylvania.

North Fork Montour Run AMD Treatment Project Dedicated

The water quality and aquatic habitat of nearly two miles of a stream located on property owned by the Pittsburgh International Airport Authority has a chance of sustaining a trout fishery thanks to the North Fork Montour Run Acid Mine Drainage Treatment Project.

The project is funded with \$100,000 from OSM's Watershed Cooperative Agreement Program; \$337,367 from Pennsylvania's Growing Greener program; \$189,120 from the Pennsylvania Turnpike Commission; and \$47,794 in in-kind donations of services, for a total of \$574,281.

Biking/hiking trails were installed along sections of Montour Run, and the stream is designated for trout stocking once the water quality has reached acceptable levels. In June 2008, the Montour Run Watershed Association dedicated the North Fork Montour Run AMD Treatment Project, the third of its kind constructed by the non-profit watershed group.

produce nearly \$7 million worth of restoration and mitigation projects (for more details, see Figure 2, "Watershed Cooperative Agreements," in Appendix B).

Ely and Puckett Creeks Restoration Celebrated in Virginia

The Powell River, in southwestern Virginia and eastern Tennessee, is one of the most ecologically diverse streams in the Nation, home to 29 species of rare mussels and 19 species of rare fish. Yet it is en-

dangered by the very streams that feed it. When the U.S. Army Corps of Engineers identified Powell River tributaries degraded by mine drainage, Ely and Puckett Creeks in southwest Virginia were named the number one priority.

With financial backing from the Environmental Protection Agency, Tennessee Valley Authority, and the Virginia Department of Mines, Minerals and Energy, and support from others including the Lee County Board of Supervisors, a \$3.4 million project to restore the aquatic ecosystem was completed. Sixty-five percent of the project's funding was Federal money.

The sites were designed using passive treatment systems that work year-round and round-the-clock to clean up the water. The project operates by gravity, making operation and maintenance relatively simple and inexpensive.

OSM/VISTA Initiative

Using Volunteers to Clean Up Watersheds

A joint initiative between OSM and AmeriCorps/Volunteers in Service to America (VISTA) allows the Appalachian Coal Country Watershed Team (ACCWT) to target problems associated with the legacy of pre-regulatory coal mining in Appalachian watersheds. In concert with coal country watershed groups, ACCWT places, trains, and coordinates a group of up to 55 OSM/VISTA volunteers who live and work in host communities in eight states: Alabama, Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. Akin to a domestic version of the Peace Corps, VISTA is a national program supporting

volunteer and community service projects.

OSM/VISTA members serve full-time with their local sponsoring organizations or projects for at least a year. OSM/VISTA members across this region monitor 228 acid mine drainage discharges and have contributed to the development of 17 acid mine drainage treatment systems in the second half of 2008 alone. Team members serve exclusively in watershed areas affected by acid mine drainage and other AML problems.

Each team member works within a rural host community to build the capacity of locally driven, volunteer-run watershed reclamation efforts such as monitoring for acid mine drainage, recruiting volunteers, and educating the public about coal country watershed issues.

OSM's modest investment in these VISTA workers is producing equal or greater grant funding for watershed organizations in addition to the organizational energy and monitoring already gained through the program.

ACCWT members receive a modest VISTA living stipend, health insurance, an education award, ongoing support from a support office based in Beckley, West Virginia, and other benefits through the AmeriCorps' VISTA program.

In return, ACCWT members provide targeted training, research initiatives, and other forms of support to local organizations that are attempting to address mine drainage, support reclamation and economic development projects for mine-scarred landscapes, eliminate household sewage discharge into creeks, and achieve other goals in their local watershed.



The same site, after construction of a passive treatment system (above).

A mine drainage bog along Ely Creek, before the project.



Community volunteers assist with plantings surrounding the Pine Forest Treatment system in Schuylkill County, Pennsylvania.

OSM/VISTA Brings Together Kids and Community to Improve a Local Treatment System

Working in her year-long placement with the Schuylkill County Conservation District in east-central Pennsylvania, OSM/VISTA Catherine Webster made great strides in establishing community stewardship for acid mine drainage treatment systems in her county where plantings will help shade the system's settling ponds, reduce its temperature, stabilize the banks, provide wildlife habitat, and improve the aesthetics of the area.

Catherine is participating in fundraising, public outreach, and monitoring programs surrounding 17 acid mine drainage treatment sites in partnership with six local watershed groups. The Schuylkill County Conservation District is just one of many examples of how OSM/VISTA projects are building community stewardship around acid mine drainage treatment systems and the watersheds that benefit from them.

Pennsylvania Plans Major Watershed Work

The Pennsylvania Department of Environmental Protection (PADEP) has committed to spend nearly \$400 million of the \$1.4 billion in OSM AML funding it expects to receive over the next 15 years on acid mine drainage treatment projects.

The 2006 SMCRA amendments reauthorized the AML fee and authorized states to use up to 30 percent of their AML grant to deal with mine drainage issues.

PADEP estimates that mine drainage projects built by volunteer watershed groups, using a mixture of Federal, state and private funding, treat an estimated 36 billion gallons of acid mine drainage each year.

PADEP recently used \$2 million of its AML funding to establish a new account for the long-term maintenance of more than 250

mine drainage treatment facilities already built in the state.

In 2008, PADEP held eight meetings in conjunction with its Citizens Advisory Council and the Mining and Reclamation Advisory Board to discuss priorities for the continued OSM AML funding. State and locally elected officials, environmental and watershed groups, businesses, foundations and economic development organizations attended. Programs driven by public input on priorities is a tenet of SMCRA that has led to thirty years of success in the AML arena.

SMCRA has led to over 30 years of successful partnerships in reclaiming abandoned mine lands.

Four treatment facility projects planned for initiation in west-central Pennsylvania in 2008 will restore miles of rivers and streams. Treating ten million gallons a day discharged from the Lancashire No. 15 Mine near the headwaters of the West Branch of the Susquehanna River in Clearfield County will improve up to 63 miles of stream.

A plant constructed near the headwaters of Clearfield Creek in Cresson, Clearfield County, will treat 5.7 million gallons a day and improve water quality through 10 miles of the creek. Those two facilities will cost in excess of \$20 million.

The planned Wehrum discharge facility, located on the main stem of Blacklick Creek in Indiana County, is expected to restore about 22 miles of stream, while the Hollywood treatment facility will clean up approximately 32 miles of the Bennett Branch of Sinemahoning Creek in Clearfield County.

The State's Bureau of Abandoned Mine Reclamation also has another 20 mine drainage abatement projects in design or development with construction costs estimated at more than \$410 million.

West Virginia Watershed Celebration Day

For the past 10 years, watershed groups from across West Virginia have been recognized by the West Virginia Watershed Network (WVWN) for their efforts in protecting and restoring local streams. This annual event, called "West Virginia Watershed Celebration Day," honors watershed groups for their hard work and commitment for protecting and restoring streams and educating their communities about the importance of watershed protection. Among other categories, recognitions include awards for "Watershed Association of the Year" and for "polluted coal mine drainage." The latter award is presented to the watershed association that has researched, monitored, and demonstrated long-term solutions for coal mine drainage problems.

The WVWN also sponsors annual forums to provide watershed restoration information to the public, industry, academia, resource agencies, and other groups. In March of 2007, the WVWN sponsored a statewide forum to discuss

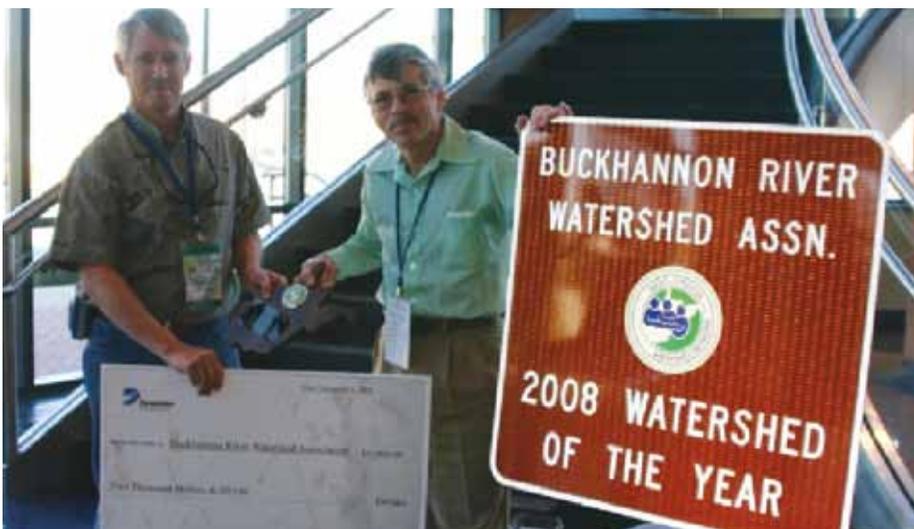
permits required when conducting remedial work in or adjacent to West Virginia streams and wetlands. Representatives from Federal, state, and local government agencies, that regulate and permit such activities gave presentations on the different permitting processes. The forum resulted in the WVWN developing a single document that briefly describes all the various stream disturbance permits.

Watershed Celebration Day honors watershed groups for their hard work and commitment.

The booklet provides a brief overview of the permits or certifications required before remedial work is conducted in and around West Virginia streams and wetlands. These activities may include water quality improvement projects, installation of habitat structures, stream bank stabilization, and other channel modification measures.

The document is available at: http://www.wvca.us/news/upload/wvwn_publications/966.WV%20Stream%20Disturbance%20Permitting%20Requirements%20Guide.pdf.

To find more about the West Virginia Watershed Network, go to: <http://www.wvca.us/wvwn>.



Pictured (right), Paul Richter with the Buckhannon River Watershed Association receiving the "2008 Watershed of the Year Award" from Rick Buckley (left), Branch Chief, OSM Charleston, West Virginia Field Office.

TECHNOLOGY



TECHNOLOGY DEVELOPMENT AND TRANSFER

Using Technological Innovations to Protect Public Safety and the Environment

Innovations in technology — and the sound science that make these innovations possible — are the foundation for the work that OSM does to protect public safety and the environment and return the land to productive use while helping to meet the Nation's energy needs. In addition, applying sound science to reclaiming abandoned mine lands also ensures that the bureau is putting into practice the highest-quality reclamation.

The purpose of OSM's Technology Development and Transfer program is to enhance the technical skills that OSM, the states, and tribes need to effectively implement SMCRA. Technology development and transfer is an ever-evolving, interactive process. It starts with the development and dissemination of technical information through workshops, forums, and benchmarking symposiums that OSM either sponsors or supports. OSM's applied science funding program and partnerships with other technical programs also support the development or refinement of new technologies.

The result of this process is valuable information that OSM shares with its Federal, state, tribal, industry, and academic partners through training, publications, exhibits, conferences, and websites. OSM also provides technical consultation and other services that lead to strategies that apply

new technologies. The bureau continues to explore and promote innovative, efficient methods that enhance the protection of people and the environment during mining and reclamation.

Three principles guide OSM's efforts to promote sound science through developing and transferring technology. First, OSM seeks to increase technical knowledge and understanding of the reclamation process for active coal mining and abandoned mine lands. Second, OSM seeks to build and enhance state and Federal working relationships with academic institutions and scientists in the coal fields. Third, OSM seeks to boost the impacts of its funding by forming partnerships. For example, OSM may do project monitoring, evaluation, and project design and may provide grant funding while partners furnish matching funds and complete the project.

In 2007 and 2008, OSM continued to do the following:

- Provide technical assistance to meet specific needs of the states and tribes;
- Promote the use of Technical Innovation and Professional Services (TIPS) in the decision-making processes related to SMCRA;
- Support prevention and remediation of acid mine drainage through participating in the Acid Drainage Technology Initiative;
- Provide basic and advanced technical training opportunities for state, tribal, and Federal

personnel through the National Technical Training Program (NTTP) and TIPS;

- Partner with the states and tribes to develop and coordinate technology development and transfer efforts through national and regional technology transfer teams;
- Solicit, select, and award applied science grants for improved reclamation technologies and underground mine-mapping projects for the preservation of underground mine maps for general public use;
- Sponsor forums, workshops, and technical seminars to address mining and reclamation environmental issues; and
- Produce technical publications, fact sheets, DVDs, and CDs and make these products available to the public and target audiences through websites, libraries, and exhibits.

The following examples describe some of OSM's programs or demonstrate the on-the-ground results that OSM achieves with the help of its partners to apply sound science.

Wide Range of Technical Training Delivers Assistance, Results to OSM's Partners

One of the ways that OSM delivers the best available technology is to offer specialized training courses that provide state and tribal partners as well as OSM's own employees with a common understanding of how innovations in science or technology can enable them to carry out SMCRA effectively and consistently. OSM provides these opportunities through related training initiatives: the NTTP and TIPS.

OSM established the NTTP in 1985 after recognizing the need for an ongoing educational program that would enhance professionalism and technical competence of Federal, state, and tribal personnel. The NTTP today teaches the theory, principles, and applications of over 40 technical subjects. Participating agencies collaborate in developing courses and providing instruction. The coal-mining industry also participates by providing field sites needed for on-the-ground training. NTTP delivers training related to enforcement, abandoned mine reclamation, bond release, and permit approval. The program fosters consistent application of standards and updates technical expertise as well as offering courses in basic concepts related to implementing SMCRA.

In addition to providing specialized hardware, scientific software, customized software training, and technical assistance to its user community, TIPS also provides training in these software and hardware tools tailored to mining

applications. TIPS courses concentrate on high-end computer modeling applications, and they complement the NTTP theory and application courses. Both programs help strengthen the capabilities of states, tribes, and OSM staff to enforce SMCRA through high-quality technical expertise, assistance, and training.

Like NTTP, TIPS is a collaborative effort between OSM, the states, and tribes. The instructors are scientists, engineers, and land reclamation specialists from these programs who use the TIPS technology tools in their everyday work, then share that expertise with other program personnel nationwide as they teach. Although the TIPS technology tools are off-the-shelf, the training program is specifically designed for applications of SMCRA, and can be found nowhere else.

TIPS Training Program Values Its Trainers

Training classes provided by TIPS continue to gather excellent reviews by attendees. Course developers and instructors are what make this national training program so successful. Many TIPS courses are in demand. In the past two years, the TIPS training program educated more than 800 students who attended over 60 instructor-led classes, and over 100 students completed on-line



TIPS Saves Indiana AML Program Money

The Indiana AML program has saved over \$2 million in the past 12 years, thanks in part to software provided by OSM's TIPS program. Fifteen years ago, the Indiana AML Engineering Team — a chief engineer, five design engineers, an engineering assistant, a geologist, and three surveyors — drafted their designs by hand. Since then, OSM has provided the State with drafting and engineering design software packages (AutoCAD and SurvCADD) that have revolutionized how the team does business. The Engineering Team is now two years ahead on its design work, and designs are now ready to bid before the start of the grant cycle.

courses. Demand for TIPS training is expected to continue to rise in the coming years, with over half of the classes held at maximum capacity and a notable increase in requests for on-site classes being received.

TIPS' specialized training provides instruction on how to use off-the-shelf software for specific application to SMCRA, and represents the most requested component of TIPS. Twenty-six courses addressing the latest advances in geospatial technology, engineering applications, hydrology, and mobile computing are offered to students. As with OSM's NTTP courses, TIPS course developers and instructors work to ensure their courses are hands-on, incorporate up-to-date theories about how people learn, and have time built in for one-on-one student coaching. Many TIPS classes contain an outdoor component while others address specific projects that students are working on in their jobs. This underscores the



Students in West Virginia participating in a field exercise during a TIPS class.

real-world applicability of the material being presented.

Instructors are OSM and state reclamation experts who are proficient in the use of TIPS software to solve a wide range of complex problems related to permitting and abandoned mine land problems. In addition, TIPS instructors are selected by current instructors who observe students excelling in the classroom. Students who show an interest in the information presented, catch on quickly to the material, communicate effectively, and work well with others are asked to participate as future TIPS instructors. Instructors are required to attend the NTPP-sponsored Instructor Training Course session and receive advanced tools and resources at the NTPP Master Instructor Forum once they become experienced trainers.

The National Technology Transfer Website

Promoting the development of technology is only the first part of improving coal field management through sound science. Equally important is taking that technology and knowledge to people working in the coalfields.

Launched in 2007, OSM's National Technology Development and Transfer website allows the public to obtain the latest information in mining-related publications, regulations, applied science programs, training, initiatives, maps, and technology transfer events.

This centralized set-up of the new site enables organization and distribution of National Technology Transfer products on a national scale and improves communication and interaction with tech

transfer customers. The website is frequently updated to ensure it remains a valuable resource of information to the public.

Using Mobile Computing Technology to Advance Mapping of Western Mines

Precision ensures that mine operators contain their activities within the mine permit area, which constitutes the site's legal boundaries. The TIPS program is showing state regulatory officials and mine officials how mobile computing can solve disputes, prevent problems, and protect the public and the environment.

In 2007, the TIPS program invested in mobile computing hardware and software for geospatial positioning and placed this "seed technology" in the hands of state and tribal customers. Using



Visit the website at:
www.techtransfer.osmre.gov

Remote Sensing Team Activities

One component of the TIPS program is a multi-disciplinary Remote Sensing Team whose primary goal is to develop simple-to-use tools and techniques so that customers and employees can use remote sensing technologies in their everyday work without extensive training on the equipment.

During Fiscal Year 2007, the team identified eight remote sensing prototype projects to address SMCRA issues:

1. Virginia AML inventory;
2. Tennessee water quality assessment;
3. Kentucky terrain change analysis;
4. West Virginia mine site inspection/return on investment comparison;
5. Indiana bat habitat assessment protocol;
6. West Virginia highwall detection;
7. Revegetation analysis for bond release; and,
8. West Virginia AMD inventory.

In Fiscal Year 2008, the team took initial steps to acquire information needed to begin these projects. The team acquired satellite imagery from a private company and started preliminary analysis. Doing so constituted work that was necessary before the team began working on the prototype projects in Fiscal Year 2008.



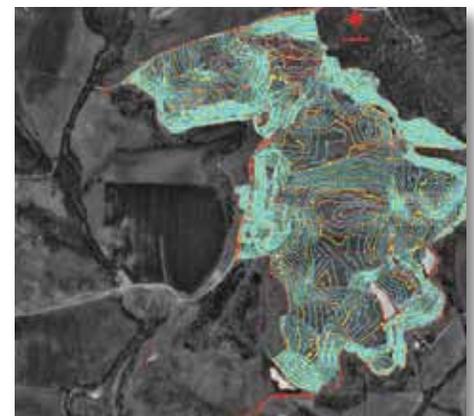
OSM staff use GPS-enabled mobile computers to assess stream health in the coalfields.

Global Positioning System technology gives customers ultra-precise locations to aid in geo-referencing mining coordinate systems and yields detailed maps of mine site topography. For example, these highly accurate data were used to map mine sites in the Montana

regulatory program's Geographic Information System. New Mexico and North Dakota also used this system to establish "real-world" coordinates on mine sites mapped using local coordinates.

Through the TIPS program, mobile computing hardware and

software customers learned how to use the equipment in the field. In addition, a series of mobile computing workshops were conducted at the national meeting of the American Society for Surface Mining and Reclamation, state reclamation organization meetings, and the Environmental System Research Institute international meeting.



OSM staff used a high-precision GPS data collector and mobile computer mounted on an off-road vehicle to create design-quality topographic maps in a fraction of the time needed using traditional methods.

OSM Helps States and Tribes through Technical Training



The National Technical Training Program (NTTP) delivers training related to all aspects of SMCRA programs including permit approval, bond release, reclamation, inspection, and enforcement. Training is provided in all disciplines involved in implementation of SMCRA including engineering, blasting, botany, and legal procedures. To keep pace with changes in technology, the program disseminates the latest technological information as well as other changes in regulatory and associated reclamation activities.

In both 2007 and 2008, NTTP received a program effectiveness rating of 96 percent, exceeding its goal by 3 percent. The program is a model partnership with state and tribal regulatory and reclamation agencies. All aspects of the program, from needs identification through course design, development, instruction, and evaluation, are cooperative efforts of OSM and state and tribal offices.

The program exceeded its annual attendance goal of 1,200 students per year in both 2007 and 2008. In 2007, NTTP trained a total of 1,746 students in 64 sessions of 49 different courses and workshops (see Figure 5 in Appendix A); in 2008, 1,426 students participated in 60 sessions (see Figure 5 in Appendix B).

In 2007, in addition to regularly scheduled courses and in response to specific requests, NTTP offered a number of special course sessions. These included a session of the Coalfield Communications course for Utah and Colorado; a session of the Bonding Cost-Estimation for Ohio; and two sessions of the Forensic Hydrologic Investigations for Pennsylvania. NTTP held the New Employee Orientation training for OSM employees in 2007. Thirty new OSM employees attended this training. In 2008, NTTP offered a special session of the Effective Writing course for Kentucky. Special sessions of the Passive Treatment course were also held for Ohio and Pennsylvania.

A new course, the Master Instructor Forum was added to course offerings. All OSM instructors for NTTP and TIPS classes initially attend OSM's Instructor Training Course to give them a solid foundation for teaching adults. The Master Instructor Forum is a second level course for experienced instructors to improve their presentation skills and to keep them abreast of developments in instructional technology. This course has five modules including Differences in Learning Styles; Presentation Techniques; Multi-Media Presentations; Questioning Techniques; and Transferring Learning to Students' Jobs. The course contains dozens of practical exercises specific to the classroom and has been very well received with many instructors advising that they were able to put what they learned to use as soon as they returned to the classroom. Refreshing instructors helps to maintain the high quality of courses.

Some training needs are best met in benchmarking forums and workshops where there are free-flowing discussions of unresolved issues and best practices and exchanges that promote transfer of new technologies and development of shared solutions. In 2007, bench-

marking sessions included: Underground Mine Mapping Workshop, a special hands-on workshop hosted by West Virginia to demonstrate technology and practices used to acquire, digitize, store, and manage maps. In 2008, benchmarking workshops and forums included sessions on Abandoned Mine Pool Discharges and Surface and Groundwater Databases, Mid-Continent acid-mine drainage issues workshop, and a conference on reforestation.

One of the trademarks of the NTTP is its continual effort to improve its curriculum. In 2008, NTTP undertook two efforts to underscore its commitment to further improve the quality of the program.

Program Review: NTTP conducted an Alternative Internal Control Review to determine if current courses were meeting student's job training needs and whether the correct students were attending courses. The results of the review overwhelmingly confirmed that customers' needs are being met.

Instructor Advisory Council: Experienced instructors from the TIPS and NTTP programs formed a council to enhance the quality of instruction. The Instructor Advisory Council focuses on issues like developing a succession plan since 40 percent of TIPS and NTTP instructors will retire within three to five years. In Fiscal Year 2008, the council completed the development and implementation on three major projects that will help plan for the next generation of instructors. These projects include a brochure to recruit new instructors and an Instructor Incentives Program, which recognizes the varied and many levels of contributions of instructors. A "Career Series Guide for SMCRA Staff" was also completed and implemented in 2008, which will assist students and their supervisors in selecting the correct classes and the correct sequence of NTTP and TIPS classes to attend.

Borehole Cameras Give New Look to Subsurface Investigations

Borehole cameras are allowing OSM regional offices to see where no one could easily see before. These fully submersible cameras are capable of descending to great depths to allow visual inspections of wells, mine shafts, underground mine voids, and other subsurface features. Borehole cameras provide continuous, permanent records of existing conditions, as well as real-time viewing.

Working in cooperation with various state programs, OSM staff has successfully used borehole cameras to investigate domestic well complaints, document monitoring well constructions, reveal voids beneath subsiding highways in preparation for grouting projects, and examine flooded and abandoned mine shafts scheduled for closure or treatment of acid discharge.

In well investigations, these systems provide critical information on well bore conditions, casing and pumping systems, bacterial

growth, and influx of gases. In mine voids and shafts, the borehole camera provides crucial information on roof and floor conditions, void and shaft dimensions, and general subsurface conditions. This information has yielded economic benefits to numerous Abandoned Mine Land programs, as it helps program staff choose appropriate closure activities for a given site.

Each of OSM's regions has borehole video equipment available to serve its customers. The systems use both color and low-light black-and-white cameras with recording capabilities in various media. When investigating mine voids or other vast subsurface structures, additional light sources can be used to enhance visibility.

Technical Studies Project Awards: Streamlining and Clarifying Procedures

OSM sponsors Technical Studies Project Awards, which help transform cutting-edge science into technology that protects lives and the natural environment of the Nation's coalfields.

Technical studies include applied science projects, underground mine map projects, and technical investigations. The projects are conducted as cooperative agreements between researchers and OSM

to ensure a lasting bridge is built between sound science and the required practical applications needed on the ground. Since the program was initiated in 2005, OSM has awarded over \$3.9 million to support 46 applied science projects and \$939,576 to support 29 underground mine map projects.

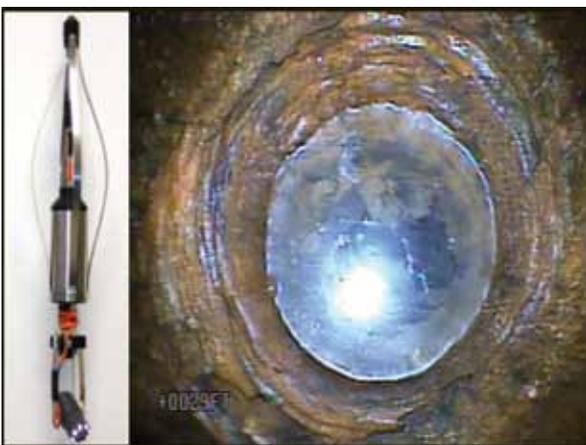
These technical studies and investigations have made invaluable contributions in the areas of protection of endangered species, enhanced reforestation and revegetation, improvements for the preservation of prime farmland, more effective mitigation for acid mine drainage, and conversion of paper underground mine maps to archival digital images.

Many other issues related to protecting the public and the environment from the effects of surface coal mining could benefit from funding technological development. To ensure this funding produces the greatest results for the investment, OSM issued in 2008 Directive TSR-4, which establishes the procedures for conducting and administering OSM-funded technical studies.

Technical Studies: Spreading the Word and Reaping Rewards

Completion of a technical study signals the start of a critical phase: getting the word out about the results and encouraging change across coalfield country. This means making the data and information available to the largest possible audience in the most convenient methods possible.

Once a project is completed, the OSM project representative and the principal investigator assemble information, pictures, and graphs into a two-page factsheet that summarizes the results of the project. Factsheets are available



Borehole camera (left), and image from camera (right).

both electronically and by hard copy. An electronic version of the final report is distributed to each member of the national and regional technology transfer teams for dissemination to the people on the ground in the coalfields. Final reports are also available on OSM's National Technology Transfer Website.

Reforestation Applied Science Projects Support Technology Transfer

OSM scientists, working with academia and state partners, supported eight new applied science projects approved in 2007 and 2008 that involve reforestation research.

Applied research is being conducted to advance the science of the Forestry Reclamation Approach on steep slopes and to develop protocols for establishing high-value native hardwoods, like the American chestnut, on mine sites.

OSM awarded cooperative agreements valued at over \$1 million in 2007 and 2008 to Ohio University, The American Chestnut Foundation, University of Kentucky, University of Tennessee, Virginia Polytechnic Institute and State University, and West Virginia University for reforestation studies.

Forest Reclamation Advisories, generated by the Appalachian Region Reforestation Initiative's (ARRI) Science Team partners, are a popular way of sharing the results of the latest reforestation study findings. These publications explain the Forestry Reclamation Approach and help field personnel implement proper reforestation on mined lands. By the end of 2008, ARRI had published five Forest Reclamation Advisories, with several more on the way (see <http://arri.osmre.gov/Publications.htm>).

A Short History of the Barriers to Reforestation

Lack of success in reforesting surface mines is a concern to the diverse groups that monitor, regulate, and conduct mined-land restoration. Reforestation efforts of coal mined lands in Appalachia were often unsuccessful under the traditional reclamation methods commonly practiced. At the same time, public criticism of conventional reclamation practices, climate change, and threats to endangered terrestrial and aquatic species were indicators that more reforestation of surface mined lands was needed.

While there were decades of research that indicated the Forestry Reclamation Approach was extremely effective in promoting the survivability and growth of planted trees, its acceptance was limited because of barriers that had arisen during the implementation of SMCRA. Following the passage of the law in 1977, reclamation efforts gravitated toward controlling immediate challenges such as severe erosion, sedimentation, landslides, and mass instability caused by pre-1977 surface mining operations. As a result, restoring coal-mined lands to heavily compacted grasslands became commonplace. Mine operators and regulators ultimately came to believe that restoring coal-mined land to grasslands was easier and cheaper than re-forestation. The Forestry Reclamation Approach aims to change perceptions about planting trees on surface mines by increasing the understanding of the technical, environmental and economic benefits of restoring mined land to forests.



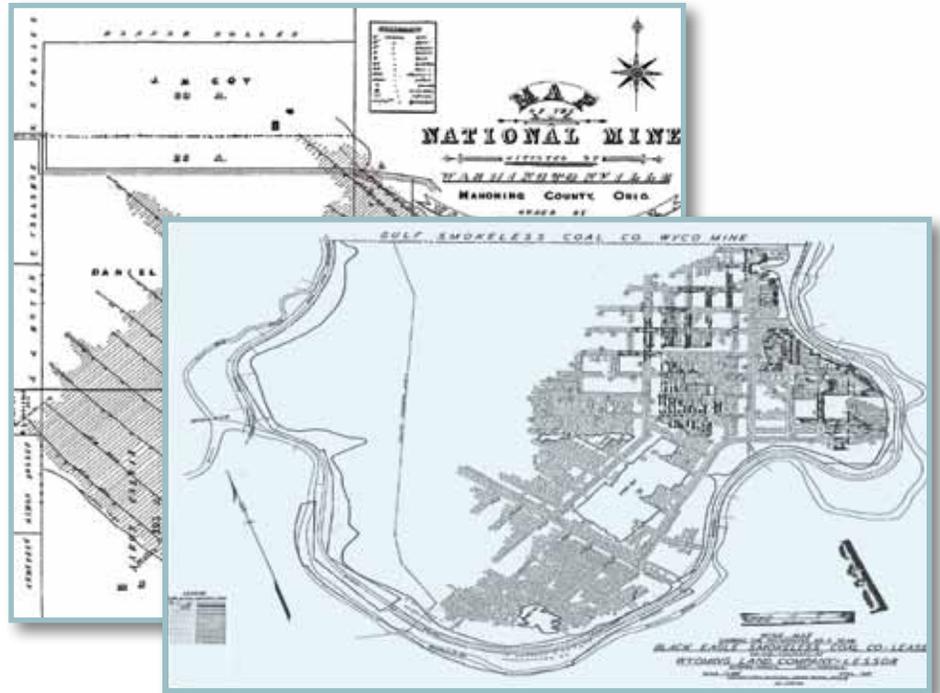
OSM fact sheet informs the reader of new technology from the Applied Science Program.

OSM and States Increase Cooperation to Build a Better Inventory of Maps of Abandoned and Closed Underground Mines

The danger posed by old, poorly mapped mines is very real. A missing, incomplete, or erroneous mine map can cost lives, damage homes and property, or create an environmental disaster. That is why OSM and coal mining states have actively inventoried abandoned mine land (AML) surface features for years using the latest information and technologies. The inventory includes information about a feature's location, size, and whether it poses any high-priority risks to public health or safety.

Understanding the risks posed by abandoned underground mines require even more information. Underground mines may flood, accumulate flammable or suffocating gases, or collapse. These conditions can threaten active mining operations that accidentally break into unknown mine voids. Land above certain mine works may be unsuitable for residential or commercial development because of the potential for subsidence.

OSM partnered with the Interstate Mining Compact Commission — a multi-state governmental organization representing the natural resource and environmental protection interests of its member states — to hold a 2003 benchmarking



forum to determine the scope of existing mine map collections and identify the best practices related to collecting, cataloging, and archiving underground mine maps. Since then, OSM and the Interstate Mining Compact Commission hosted a “best practices” workshop in 2007. Stemming from that initial benchmarking workshop, OSM and the Interstate Mining Compact Commission started the Underground Mine Map Initiative.

Since 2005, OSM has provided over \$900,000 to 29 underground mine map-archiving projects in 15 coal-producing states. OSM has also worked with states and other Federal agencies to develop approaches for acquiring mine maps and making them available. All of the projects typically include other in-kind contributions and/or funding sources, which give the U.S. taxpayer greater value for their dollar.

The National Mine Map Repository



Located in Pittsburgh, OSM's National Mine Map Repository (NMMR) was founded in the 1970s within the former U.S. Bureau of Mines. It was subsequently transferred to OSM and celebrated its 25th year at OSM during 2008.

The NMMR fills a unique need for government, industry, citizens, and other stakeholders looking for information about the presence and extent of past underground coal mining at particular locations in the United States.

The NMMR, in cooperation with the various state repositories

throughout the country, continues to excel in the archival preservation of underground mine maps.

The NMMR's collection currently consists of 145,000 mine maps on microfilm aperture cards. About 90,000 of these maps are digitally scanned, geo-located, and stored electronically. The NMMR receives both digital and hard-copy maps from all sources and currently scans about 3,000 new maps per year. Its customers can receive microfilm, digital scans, or hard copy maps, depending on their needs.

To meet the increasing demand for mine mapping records, OSM developed a five-year plan to improve outreach to map owners, advance the technical capability for the electronic copying and storage of mine maps, and further enhance the existing intranet-based retrieval system for mine maps.

During Fiscal Years 2007 and 2008, OSM upgraded equipment capabilities and hired summer college interns to reduce map archive backlogs.

The NMMR plan also addresses the importance of continuing to pursue cooperative relationships with state mine map repositories. This cooperation serves to



Filing one of the tens of thousands of archive-quality microfilm aperture cards at OSM's National Mine Map Repository.

minimize duplication of effort and ensures greater preservation and availability of maps. Many state repositories are leaders in developing new and innovative methods for archiving and distributing maps over the internet.

A number of state repositories work closely with NMMR in acquiring, preserving, and processing mine maps to further develop their own map repositories.

The states and OSM share the latest technology through the networking provided by the Underground Mine Map Initiative.

Recent examples of NMMR and state collaboration on mine map preservation include: producing and scanning 12,000 aperture cards of mine maps from 29 rolls of Kentucky microfilm; providing scanning services for oversized mine maps from Kentucky, New Mexico, Pennsylvania, Utah, Virginia, and West Virginia; and providing aperture card scanning services for Minnesota, New Mexico, Pennsylvania and West Virginia.

The NMMR and the states are always in search of previously unidentified mine maps. The NMMR recently received access to two private collections from the anthracite region

of Pennsylvania. The first of those collections consists of approximately 10,000 previously unknown mine maps from the north eastern Pennsylvania area. These maps are presently being added into the NMMR collection. The second collection has only recently been identified and the NMMR, in collaboration with the Pennsylvania DEP, will begin the process of archiving these maps in the near future.

Geophysical Surveying Aids Mine Water Studies

OSM is applying geophysical equipment well known for locating ore bodies to help improve public health and safety in the coalfields of northern Appalachia.

Throughout the Appalachian region, hidden water at mine sites poses a danger of contaminating off-site water resources or, if suddenly released, causing flooding. Land subsidence over mine voids can endanger people and property.

Some of OSM's investigations have made use of an instrument known as WADI™, which was originally developed to locate ore bodies and water-filled fractures. While this remote-sensing technology has been used for more than two decades to locate ore bodies and delineate possible water-filled fractures, using it to locate and delineate mine water and mine voids represents a new application of this time-tested technology.

In the past year, OSM personnel used the WADI™ to conduct a survey above an underground mine to find water-filled entries. The survey showed promise: Two holes drilled encountered



NMMR employee gathers data from an underground mine map prior to scanning.

underground mine works in the abandoned Lovedale Mine near Elizabeth about 15 miles south of Pittsburgh, Pennsylvania. While more work remains to refine how this technology can be used, VLF electro-magnetics show potential for improving the accuracy of locating relatively shallow — i.e., 300 feet below the surface — flooded mine entries, which will reduce the amount of drilling otherwise needed to provide this information.

Mine Pool Study Crosses State Borders

In western Maryland, OSM hydrologists and GIS specialists are evaluating what will happen as a huge, abandoned underground mine complex fills with water. The Maryland Department of the Environment requested that OSM provide technical assistance in its evaluation of the mine pool, which will help the State prevent future environmental degradation to the watershed.

The work includes a characterization of the hydrologic conditions; a conceptual physical and geochemical model of the North Branch of the Potomac River Basin mine pools in western Maryland and Northern West Virginia; an assessment of potential hydrologic scenarios and future environmental risks; and a proposed monitoring program that provides advance notice of potential adverse impacts to the river.

At least eight mines are involved in the study, which covers an area of 61,000 acres or 95 square miles. From its headwaters near the town of Kempton to the town of Gorman (both are in Maryland), the North Branch of the Potomac



An OSM hydrologist uses the WADI to find water-filled fractures near an abandoned underground mine in Westmoreland County, Pennsylvania.

River Basin encompasses both West Virginia and Maryland surface and deep-mining operations. In this area, the North Branch is the boundary between Maryland and West Virginia.

Characterization of the hydrologic conditions has identified



OSM is deploying the WADI in a new capacity to improve public health and safety in the coalfields of northern Appalachia.



Seepage emanating from a mine into the North Branch of the Potomac River Basin.

critical areas where potential mine pool seepage into the river might occur should water levels in the mine pool rise above a key elevation. The next phase is to develop preventative actions and monitoring programs. Work is expected to continue through 2009.

Networking and Outreach Make for Safer Blasting

The use of explosives in surface coal mining operations could result in death, injury and/or property damage on or off the permitted area. OSM's blasting specialists use every opportunity to deliver the message of safety and proper procedures to regulatory authorities and the regulated community.

During 2008, OSM focused on promoting better blasting techniques, safer blasting methods, accurate blast monitoring, record-keeping, and sound public relations. OSM conducts numerous education and outreach events aimed at improving mine site and public safety from blasting impacts and at reducing the number of blasting-related complaints. OSM

provides information on blasting presentations, reports, and literature for the public and interested stakeholders at <http://www.arblast.osmre.gov/>.

In response to interest from the states taking part in the Appalachian Blaster Certification Delegation (ABCD), OSM is establishing a national question pool for blaster certification examinations that states will be able to use to assess blaster competence. OSM is also making increasing use of granting blaster certificates through reciprocity, in which OSM recognizes a blaster certificate issued by a State regulatory authority under an OSM-approved program as qualifying an applicant for an OSM blaster certificate. As reciprocity increases, so too does the need

During 2008, OSM focused on promoting better, safer blasting methods.

for reliable, up-to-date information on the status of a blaster's certification in all jurisdictions.

In 2008, OSM began working with the Interstate Mining Compact Commission states to modify the Federal Blaster Certification Tracking System to create another prototype: a national tracking system that will facilitate certification reviews and performance history queries by all the states. Such a unified blaster certification tracking system will minimize irresponsible blasters repeating poor performance in other states.



By monitoring vibrations and blasting techniques at sites like this operation in West Virginia, regulatory authorities build better relationships with local communities.

Unique Software Models Mine Drainage Treatment Costs



AMDTREAT

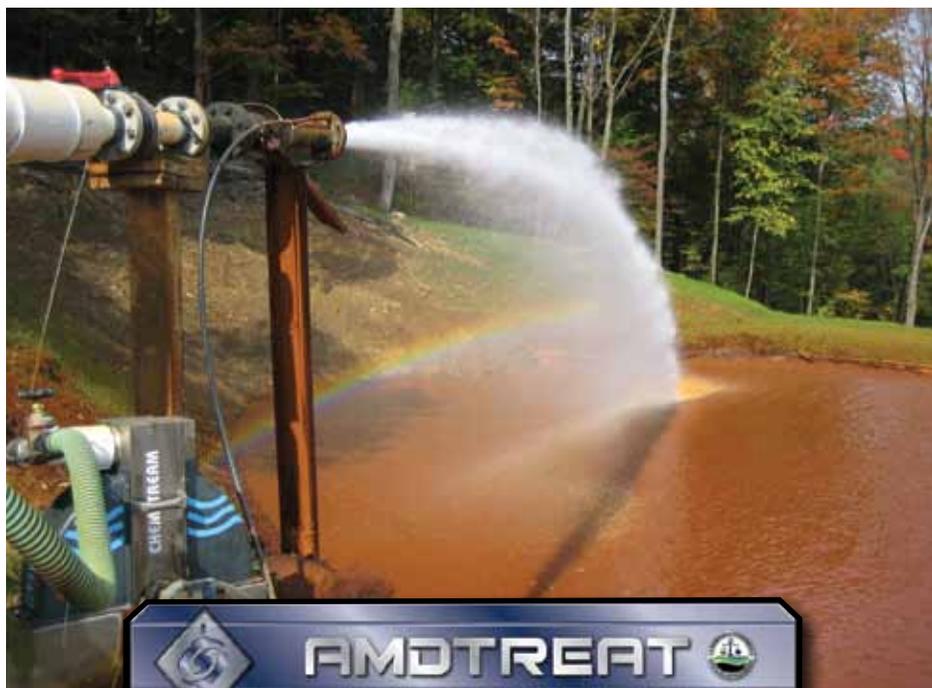
In 2008, OSM continued to update the popular acid mine drainage (AMD) cost-modeling software known as “AMDTreat.” The software is used by state and federal government agencies and mine-water practitioners to model costs to treat acid mine drainage, which in turn helps ensure an adequate bond is in place to ensure that a site is reclaimed.

This year, OSM partnered with the Pennsylvania and West Virginia Departments of Environmental Protection to release a new version of the innovative software program. AMDTreat provides a variety of treatment options and performs economic analysis of each option.

The program includes a complete update of the default costs and values in the program and incorporates numerous other minor enhancements.

Future anticipated enhancements include: integration of the geochemical modeling capabilities of the U.S. Geological Survey’s PHREEQ computer program —

An acid mine drainage treatment facility at work.



To learn more, please visit the AMDTreat website at: <http://amdtreat.osmre.gov>.

AMDTreat software is used to model costs to treat acid mine drainage.

a program designed to perform a variety of aqueous geochemical calculations — to model titrations for alkaline and other discharges; enhancement of the Financial Forecasting tool to include an additional method to calculate investment volatility; and further adjustment of the program’s default values to reflect recent changes in energy and treatment costs.

APPENDIX A

Fiscal Year 2007 Tables and Figures

2007 Fast Facts

1,423
OSM mine inspection
visits

state and tribal mine
inspections
(full **31,736**)
(partial **50,868**)

3,601
state and tribal
notices of violations

90.2%
percentage of active
coal mining sites free
of offsite impacts

51,105
acres released from
Phase III Performance
Bonds

6,658
Federal, private,
and tribal land
and surface water
acres reclaimed or
mitigated

15
watershed interns
taking part in
OSM/VISTA Program



OSM at a Glance

As of October 1, 2007

Since 1977, about 30.6 billion tons of coal have been mined under the provisions of the Surface Mining Control and Reclamation Act.

The Abandoned Mine Land Program has reclaimed almost 246,658 acres of hazardous high-priority (Priority 1 and 2) coal-related problems.

Safety and environmental hazards have been eliminated on 357,159 acres, including all three coal priority categories and non-coal problems in 32 states and on the lands of four Indian tribes, plus the Council of Energy Resource Tribes, a non-profit corporation.

Since 1977, OSM has provided \$4 billion in grants to its partners in 23 states and three tribes to clean up dangerous abandoned mine sites.

OSM has provided \$1,306,895,589 in grants to the states and tribes to assist in funding the regulation of active coal mines.

Since implementation of the Watershed Cooperative Agreements Program, OSM has awarded 180 cooperative agreements and amendments (to existing cooperative agreements) totaling \$15,481,711.

Since 1977, OSM has addressed 5,269 Abandoned Mine Land emergencies, while the states and tribes have dealt with 2,911.

2007 Fast Facts

\$304,879,883
Abandoned Mine
Land fees collected in
FY 2007

\$114,329,104
contributed to
miners' health
benefits fund

1,746
students trained in
NTTP courses

409
students trained in
TIPS courses

19
new watershed
cooperative
agreements

\$1,413,046
new watershed
cooperative
agreements funded

270,102
number of people
with reduced
exposure potential
to safety risks from
Abandoned Mine
Lands

OSM/DOI Strategic Plan Measures

Fiscal Year 2007

Measure	Target	Results
Mission Area: Resource Protection		
Number of Federal, private and tribal land and surface water acres reclaimed or mitigated from the effects of natural resource degradation from past mining. (Calculated equivalent acres)	6,900	6,658 ¹
Mission Area: Resource Use		
Percent of active coal mining sites that are free of offsite impacts.	93%	90.2% ^{2/3}
Percent of mined acreage reclaimed.	45%	53.4% ^{2/4}

¹ Information calculated from projects reported with completion dates of 10/1/06 - 9/30/07 and entered in the Abandoned Mine Land Inventory System. The AMLIS database reported 5,215 acres reclaimed, and an additional 1,443 acres were reported through a field survey, because during a three month period the States experienced some problems entering data in AMLIS. The 2007 results were lower than the target for various reasons, for example more funds were used for design and less for construction. OSM will review AMLIS for data limitations to improve reporting in FY 2008.

² Calculated values: State programs provide data on a July 1, 2006- June 30, 2007 timeframe, to accommodate the accelerated publishing requirements. Results are calculated by subtracting the 2006 quarter data (July 1 – September 30, 2006) and adding the 2007 quarter for (July 1 - September 30, 2007). Federal data is on the Federal fiscal year.

³ Offsite impacts: The results represent the mean (average) value. The median value of all the States/Tribes is 93%. Ten States/Tribes showed a slight increase in the percentage of sites free of off-site impacts, while 12 States/Tribes showed a slight decrease. Therefore the percentage is down slightly from the FY 2006 actual of 91.5%.

⁴ Mined acreage reclaimed: In collaborative consultation with States and Tribes, OSM developed a new performance measure that compares cumulative acres reclaimed to cumulative acres mined. The numerator is the sum of all acreage that has been processed through Phases I, II, and III bond release. The denominator is the sum of all acreage that has been mined. Bonded acreage data, reported in Directive REG-8 Table 5, is a proxy for the mined acreage. This measure is reported in the DOI Strategic Plan 2007-2012. In 2007 new data reporting requirements were established and the data was reported utilizing a newly implemented electronic database. OSM will revise this target as trend data becomes available.

TABLE 1 (Fiscal Year 2007)

Abandoned Mine Lands Fee Collection and Funding for FY 2007(Cash Basis) ¹

State/Tribe	AML Collections ²	State Share Distribution ³	Federal Share Distribution ³	Emergency Distribution ³	Clean Stream Distribution ³	Total Distribution ³
Alabama	\$4,508,715	\$1,181,091	\$1,489,427	\$400,000	\$173,884	\$3,244,402
Alaska	\$534,578	\$131,146	\$1,368,854	\$25,000	\$0	\$1,525,000
Arkansas	\$7,762	\$3,928	\$1,496,072	\$15,000	\$0	\$1,515,000
Colorado	\$7,077,888	\$1,717,610	\$725,871	\$0	\$0	\$2,443,481
Crow Tribe	\$2,538,631	\$523,896	\$0	\$0	\$0	\$523,896
Hopi Tribe	-\$1,871,562	\$440,223	\$0	\$0	\$0	\$440,223
Illinois	\$6,049,902	\$1,839,769	\$5,517,801	\$1,000,000	\$373,713	\$8,731,283
Indiana	\$9,598,808	\$2,675,831	\$1,796,423	\$338,516	\$189,112	\$4,999,882
Iowa	\$0	\$1,682	\$1,498,318	\$60,000	\$121,635	\$1,681,635
Kansas	\$175,090	\$24,700	\$1,475,300	\$465,000	\$0	\$1,965,000
Kentucky	\$26,119,722	\$8,016,905	\$5,407,794	\$0	\$368,256	\$13,792,955
Louisiana	\$337,140	\$95,622	\$0	\$0	\$0	\$95,622
Maryland	\$933,229	\$257,856	\$1,242,144	\$0	\$117,383	\$1,617,383
Mississippi	\$362,177	\$0	\$0	\$0	\$0	\$0
Missouri	\$83,981	\$68,808	\$1,431,192	\$50,000	\$0	\$1,550,000
Montana	\$11,943,043	\$3,087,226	\$0	\$125,000	\$0	\$3,212,226
Navajo Nation	\$8,782,151	\$1,964,171	\$0	\$0	\$0	\$1,964,171
New Mexico	\$3,497,917	\$1,250,144	\$249,856	\$0	\$0	\$1,500,000
North Dakota	\$3,041,542	\$807,264	\$692,736	\$100,000	\$0	\$1,600,000
Ohio	\$4,617,130	\$1,547,116	\$3,382,483	\$2,300,000	\$267,790	\$7,497,389
Oklahoma	\$519,674	\$139,090	\$1,360,910	\$110,000	\$112,614	\$1,722,614
Pennsylvania	\$12,251,336	\$3,729,068	\$17,836,269	\$0	\$984,777	\$22,550,114
Tennessee	\$729,698	\$0	\$0	\$0	\$0	\$0
Texas	\$4,315,018	\$1,305,747	\$0	\$15,000	\$0	\$1,320,747
Utah	\$3,541,232	\$960,066	\$539,934	\$0	\$0	\$1,500,000
Virginia	\$5,892,435	\$1,745,840	\$1,659,821	\$1,700,000	\$182,336	\$5,287,997
Washington	\$376,255	\$0	\$0	\$0	\$0	\$0
West Virginia	\$34,863,569	\$8,641,165	\$10,250,875	\$3,100,000	\$608,500	\$22,600,540
Wyoming	\$154,052,822	\$30,471,022	\$0	\$0	\$0	\$30,471,022
TOTAL ²	\$304,879,883	\$72,626,986	\$59,422,080	\$9,803,516	\$3,500,000	\$145,352,582

¹Reporting on a "Cash Basis" refers to the recognition of revenue when it is received. Abandoned Mine Land (AML) Fee Collections are reported using cash basis criteria. AML revenue in OSM's financial statements may include other amounts.

²The "AML Collections" and "Total" figures above have been adjusted for rounding.

³The term "Distribution" is now used instead of "Allocation." Allocation refers to the "pooling" of monies collected for the AML Fund. State and Federal share distribution amounts are based on formulas and parameters provided annually by the Assistant Director, Program Support. The emergency program distribution amounts are based on estimates provided by the States and approved by the Deputy Director.

Data Source: Financial Business Management System and the Grant Distribution

TABLE 2 (Fiscal Year 2007)		
Abandoned Mine Reclamation Fund Status		
Cash Basis (Includes Investments) ¹		
(Dollars in Thousands)	2007 ²	2006 ²
Balance, Start of Year	\$2,264,649	\$2,133,969
Fees, Debts, and Interest Collected	\$304,880	\$302,992
Interest Earned on Investments	\$105,818	\$95,687
Total Earnings	\$410,698	\$398,679
Less:		
Disbursements	\$197,719	\$208,995
Transfers to the United Mine Workers	\$114,329	\$59,004
Total Disbursements and Transfers	\$312,048	\$267,999
Balance, End of the Year	\$2,362,428	\$2,264,649

¹ The information presented in this table is on a cash basis (which refers to the recognition of revenue when it is received) and, therefore, will not reconcile to accrual-based financial data presented elsewhere.

² The figures in this table have been adjusted for rounding.

Data Source: Financial Business Management System

TABLE 3 (Fiscal Year 2007)

Abandoned Mine Land Grants¹ To Primacy States And Indian Tribes For FY 2007

(All numbers are rounded)

State/Tribe	Subsidence Insurance	10% Program Set-Aside	Administration ³	Project Costs ⁴	Emergency ⁵	TOTALS		Program Staff (FTE)
	2007	2007	2007	2007	2007	2007	2006	2007
Alabama	\$0	\$0	\$745,297	\$1,901,728	\$400,000	\$3,047,025	\$3,512,942	16.20
Alaska	\$0	\$0	\$320,014	\$1,179,986	\$25,000	\$1,525,000	\$1,525,000	4.25
Arkansas	\$0	\$0	\$310,869	\$1,189,131	\$88,000	\$1,588,000	\$1,515,000	6.70
Colorado	\$0	\$0	\$792,083	\$1,772,194	\$0	\$2,564,277	\$3,189,091	14.00
Crow Tribe	\$0	\$0	\$171,207	\$523,896	\$0	\$695,103	\$738,370	3.55
Hopi Tribe	\$0	\$0	\$354,468	\$228,140	\$0	\$582,608	\$449,023	2.40
Illinois	\$0	\$0	\$461,363	\$9,552,778	\$1,000,000	\$11,014,141	\$11,957,600	24.00
Indiana	\$0	\$0	\$816,035	\$3,845,331	\$338,516	\$4,999,882	\$4,975,622	20.00
Iowa	\$0	\$0	\$113,869	\$1,507,766	\$60,000	\$1,681,635	\$1,681,635	4.10
Kansas	\$0	\$0	\$227,234	\$1,272,766	\$365,000	\$1,865,000	\$1,981,457	8.80
Kentucky	\$0	\$0	\$80,393	\$13,712,562	\$0	\$13,792,955	\$14,025,336	80.00
Louisiana	\$0	\$0	\$71,653	\$0	\$0	\$71,653	\$114,555	1.15
Maryland ²	\$0	\$258,000	\$470,536	\$888,847	\$0	\$1,617,383	\$1,767,963	4.39
Missouri	\$0	\$0	\$403,761	\$1,096,239	\$50,000	\$1,550,000	\$2,489,994	8.30
Montana	\$0	\$0	\$361,007	\$2,726,219	\$125,000	\$3,212,226	\$3,367,051	8.85
Navajo Tribe	\$0	\$0	\$682,640	\$2,154,355	\$0	\$2,836,995	\$2,788,066	17.50
New Mexico	\$0	\$0	\$1,080,000	\$420,000	\$0	\$1,500,000	\$3,098,188	9.00
North Dakota	\$0	\$0	\$245,916	\$1,313,711	\$100,000	\$1,659,627	\$1,618,995	5.28
Ohio ²	\$0	\$491,110	\$1,213,541	\$3,492,738	\$2,300,000	\$7,497,389	\$9,055,969	33.67
Oklahoma	\$0	\$0	\$290,453	\$1,247,250	\$56,000	\$1,593,703	\$1,680,000	9.00
Pennsylvania ²	\$0	\$0	\$2,462,119	\$20,087,995	\$0	\$22,550,114	\$28,391,963	127.00
Texas	\$0	\$0	\$96,693	\$57,189	\$15,000	\$168,882	\$2,937,226	5.00
Utah	\$0	\$0	\$406,888	\$1,219,579	\$0	\$1,626,467	\$1,853,303	11.00
Virginia	\$0	\$30,000	\$714,372	\$2,926,971	\$1,700,000	\$5,371,343	\$5,546,995	23.00
West Virginia ²	\$0	\$500,000	\$4,907,600	\$10,850,669	\$3,100,000	\$19,358,269	\$26,090,238	55.18
Wyoming	\$26,711	\$0	\$1,315,585	\$31,772,457	\$0	\$33,114,753	\$37,930,468	13.90
TOTAL⁶	\$26,711	\$1,279,110	\$19,115,596	\$116,940,497	\$9,722,516	\$147,084,430	\$174,282,050	516.22

¹ Funding for these grants is derived from the FY 2007 Distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals. Therefore, the total in this chart does not match the FY 2007 mandatory distribution that appears in Table 1.

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

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

⁴ The term "Project Costs" is now used instead of "Construction." AML simplified grants do not contain specific construction cost breakouts, but rather list all costs associated with a construction project as a project cost. This category contains non-water supply, water supply and non-coal project costs, and includes \$3,095,692 in funding for Appalachian Clean Streams initiatives.

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

⁶ The "Total" figures above have been adjusted for rounding.

Data Source: Financial Business Management System

TABLE 4 (Fiscal Year 2007)

Reclamation Projects Started							
State/Tribe	Federal Emergency	State Emergency	Emergencies FEDERAL	Emergencies STATE	Total Emergencies	Federal Non- Emergency	State Non- Emergency
	2007	2007	1978-2007	1978-2007	2007	2007	2007
Alabama	0	5	10	138	148	0	6
Alaska	0	1	0	2	2	0	1
Arkansas	0	1	1	24	25	0	0
California	0	0	5	0	5	0	0
Colorado	0	0	107	0	107	0	9
Crow Tribe	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Hopi Tribe	0	0	0	0	0	0	0
Illinois	0	15	51	304	355	0	16
Indiana	0	15	94	189	283	0	43
Iowa	0	3	22	6	28	0	3
Kansas	0	46	270	755	1,025	0	2
Kentucky	45	0	1,208	0	1,208	0	20
Louisiana	0	0	0	0	0	0	0
Maryland	0	0	0	0	0	0	1
Michigan	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0
Missouri	0	0	6	6	12	0	4
Montana	0	0	7	14	21	0	2
Navajo Nation	0	0	6	0	6	0	3
New Mexico	0	0	16	0	16	0	5
North Dakota	0	1	15	19	34	0	5
Northern Cheyenne	0	0	2	0	2	0	0
Ohio	0	21	190	366	556	0	15
Oklahoma	0	4	47	35	82	0	2
Oregon	0	0	0	0	0	4	0
Pennsylvania	124	0	2,872	0	2,872	0	118
Rhode Island	0	0	4	0	4	0	0
South Dakota	0	0	0	0	0	1	0
Tennessee	0	0	22	1	23	0	0
Texas	0	0	6	0	6	0	1
Utah	0	0	0	0	0	0	2
Ute Reservation	0	0	1	0	1	0	0
Virginia	0	8	30	189	219	0	13
Washington	1	0	60	0	60	6	0
West Virginia	0	27	179	863	1,042	0	15
Wyoming	0	0	38	0	38	0	8
TOTAL	170	147	5,269	2,911	8,180	11	294

Notes:

1. Federal projects started in 2007 (October 1, 2006 - September 30, 2007).
2. State projects started during the period July 1, 2006 - June 30, 2007.
3. "Total Emergencies" column includes projects started during both time periods.

TABLE 5 (Fiscal Year 2007)			
Federal Reclamation Projects (Obligations) ¹			
State/Tribe	Emergency	High Priority	Total 1978 - 2007 ²
	2007	2007	
Alabama	\$0	\$0	\$13,934,015
Alaska	\$0	\$0	\$194,638
Arkansas	\$0	\$0	\$84,904
California	\$0	\$12,857	\$2,602,533
Cheyenne River Sioux Tribe	\$0	\$0	\$2,803,165
Colorado	\$0	\$0	\$2,195,402
Crow Tribe	\$0	\$0	\$1,097,895
Fort Berthold Tribe	\$0	\$0	\$69,972
Fort Peck Tribe	\$0	\$0	\$147,991
Georgia	\$0	\$0	\$4,225,070
Hopi Tribe	\$0	\$0	\$1,263,409
Illinois	\$0	\$0	\$5,376,749
Indiana	\$0	\$0	\$4,032,023
Iowa	\$0	\$0	\$1,438,442
Jicarilla Apache Tribe	\$0	\$0	\$59,998
Kansas	\$0	\$0	\$5,094,172
Kentucky	\$4,835,070	\$0	\$130,818,295
Maryland	\$0	\$0	\$3,280,577
Michigan	\$0	\$0	\$3,668,247
Missouri	\$0	\$0	\$8,015,909
Montana	\$0	\$0	\$729,058
Navajo Tribe	\$0	\$0	\$2,222,792
New Mexico	\$0	\$0	\$2,366,041
North Carolina	\$0	\$0	\$205,407
North Dakota	\$0	\$0	\$1,723,933
Northern Cheyenne Tribe	\$0	\$0	\$595,044
Ohio	\$0	\$0	\$18,295,299
Oklahoma	\$0	\$0	\$1,232,159
Oregon	\$0	\$79,250	\$252,196
Pennsylvania	\$8,855,360	\$0	\$127,748,268
Rhode Island	\$21,000	\$0	\$577,088
Rocky Boy Tribe	\$0	\$0	\$60,188
South Dakota	\$0	\$0	\$234,327
Southern Ute Tribe	\$0	\$0	\$94,206
Tennessee	\$0	\$0	\$27,889,262
Texas	\$0	\$0	\$289,849
Uintah/Ouray Tribe	\$0	\$0	\$138,738
Utah	\$0	\$0	\$123,791
Ute Mountain Tribe	\$0	\$0	\$14,300
Virginia	\$0	\$0	\$10,139,469
Washington	\$204,121	\$228,180	\$9,445,792
West Virginia	\$0	\$0	\$29,023,226
White Mountain Apache Tribe	\$0	\$0	\$1,838
Wind River Tribe	\$0	\$0	\$73,267
Wyoming	\$0	\$0	\$1,067,101
Zuni Tribe	\$0	\$0	\$125,009
Undistributed ³	\$0	\$0	-\$781
TOTAL	\$13,915,551	\$320,287	\$425,070,274

¹ The figures above have been adjusted for rounding.

² Includes prior-year contract deobligations and upward adjustments.

³ Refers to funds that OSM awarded in previous fiscal years that were subsequently returned to the Department of the Interior.

TABLE 6A (Fiscal Year 2007)
1978-2007 Abandoned Mine Land Reclamation Accomplishments

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

(Statistics do not include OSM emergency project accomplishments)

Measurement	Miles	Acres						Feet		Number of Occurrences							
		Clogged Stream	Clogged Stream Land	Dangerous Pile & Embankment	Dangerous Slide	Industrial/ Residential Waste	Subsidence	Surface Burning	Underground Mine Fire	Dangerous Highwalls	Vertical Opening	Dangerous Impoundments	Dangerous Gas	Hazardous Equipment & Facilities	Hazardous Water body	Portal	Polluted Water: Agricultural & Industrial
State/Tribe																	
Alabama	0	198	1,462	20	25	40	75	0	287,638	408	1	0	470	884	1,037	8	15
Alaska	1	0	6	0	4	0	42	0	11,190	39	4	0	1,483	2	35	0	0
Arkansas	1	0	838	0	34	16	4	0	70,391	112	1	0	2	84	28	0	0
California	0	0	0	0	0	1	0	0	0	42	0	0	0	0	34	0	0
CERT Tribes *	0	0	475	0	9	34	0	0	7,050	18	0	0	6	30	74	0	0
Colorado	0	0	44	0	10	56	30	184	51,992	4,248	0	0	14	0	3,091	3	0
Crow Tribe	0	1	58	23	0	16	0	0	2,267	5	1	0	32	1	15	3	0
Georgia	0	0	3	0	0	0	0	0	11,450	11	2	0	0	0	112	0	1
Hopi Tribe	0	0	0	0	0	0	0	0	11,662	2	0	0	8	0	9	0	0
Idaho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	21	1,427	430	4	72	136	115	0	62,351	134,201	7	23	377	9	199	11	1
Indiana	14	176	636	7	32	223	15	1	124,812	384	6	4	103	7	70	15	7
Iowa	9	744	847	0	19	4	0	0	63,086	22	3	0	5	27	1	12	2
Kansas	1	9	111	3	29	24	9	0	155,610	1,336	1	0	2	1	0	3	0
Kentucky	47	7,890	530	2,148	27	51	227	63	27,298	196	119	0	260	44	2,058	6	10,340
Maryland	5	68	272	68	35	15	1	2	44,430	5	3	0	25	20	41	84	41
Michigan	0	0	0	0	0	0	0	8	950	53	0	0	7	2	0	0	1
Missouri	11	1,514	572	0	71	6	19	7	73,702	187	6	0	28	11	35	34	15
Montana	21	97	174	1	439	554	305	69	25,560	622	3	1	264	1	1,111	17	12
Navajo Nation	0	1	665	7	6	12	3	0	109,586	382	4	0	5	0	870	19	0
New Mexico	2	21	10	0	0	35	35	32	280	1,018	0	0	17	0	551	4	1
North Carolina	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
North Dakota	0	0	317	35	2	1,385	18	0	80,599	109	4	0	14	18	13	6	0
Ohio	38	5,549	102	462	34	160	154	3	70,864	263	8	4	64	14	370	53	315
Oklahoma	15	1	0	0	26	17	4	0	250,894	114	0	0	15	219	174	6	3
Oregon	0	0	0	0	0	0	0	0	0	3	0	0	3	0	12	0	0
Pennsylvania	103	223	676	65	35	2,602	138	1,024	931,130	557	16	0	348	120	311	27	314
Rhode Island	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	1	0	0	135	1	0	0	4	0	5	0	0
Tennessee	2	147	533	68	14	6	28	0	57,028	11	3	0	31	72	192	7	14
Texas	0	0	1,533	0	0	19	0	0	64,002	368	0	0	0	17	66	0	0
Utah	14	9	356	3	0	185	43	20	3,425	1,220	1	19	206	2	3,168	3	0
Virginia	75	863	260	320	2	14	52	0	28,625	107	53	0	235	2	1,042	0	5,780
Washington	0	0	3	0	0	12	15	0	0	92	0	0	7	0	30	0	0
West Virginia	54	167	4,900	573	38	425	488	28	200,322	152	740	5	609	7	2,443	75	12,213
Wyoming	114	1,714	2,312	25	29	1,166	15	49	540,712	611	139	0	209	371	550	3	0
TOTAL	548	20,819	18,125	3,832	992	7,221	1,843	1,482	3,369,041	146,904	1,125	56	4,853	1,965	17,747	399	29,075

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

Includes AML projects funded through Acid Mine Drainage Plans, Coal Interim Site Funding, Clean Streams Initiatives, Coal Insolvent Surety Site Funding, Federal Reclamation Program Funding, Pre-SMCR Grants Funding, State Emergencies, State Set-Aside Funding, Watershed Cooperative Agreements and Funding for Non-Coal projects.

Data Source: Abandoned Mine Land Inventory System

**TABLE 6B (Fiscal Year 2007)
1978-2007 Abandoned Mine Land Reclamation Accomplishments**

Priority 3 (Environmental Restoration)

Measurement	Acres								Number		Feet	Gallons/ Minute	
	State/Tribe	Bench	Industrial/ Residential Waste	GoB	Haul Road	Pit	Spoil Area	Slurry	Slump	Equipment/ Facility	Mine Opening	Highwalls	Water Problem
Alabama		3	15	169	1	0	7,275	5	9	8	33	22,585	368
Alaska		0	0	2	0	0	47	0	25	0	0	0	0
Arkansas		0	0	0	0	6	153	0	0	0	0	0	
California		0	0	2	0	0	0	0	0	0	0	0	50
CERT Tribes *		0	0	0	0	0	0	0	0	0	0	0	0
Colorado		3	5	91	0	64	98	0	0	7	18	1,175	1
Crow Tribe		2	0	7	4	10	7	0	0	0	1	400	0
Georgia		3	0	3	0	3	7			0	0	400	
Hopi Tribe		0	0	25	15	10	10	0	0	0	0	51	0
Illinois		3	0	1,687	170	405	941	490	1	123	53	10,370	2,658
Indiana		0	79	1,205	169	327	1,290	513	2	156	18	1,965	4,805,056
Iowa		0	2	1	5	21	440	0	0	0	1	2,900	0
Kansas		0	0	89	0	23	316	10	0	1	0	3,200	0
Kentucky		97	0	81	0	1	256	14	0	39	57	240	60
Maryland		10	1	46	2	22	263	0	1	2	8	5,335	273
Michigan		0	0	27	1	1	10	0	11	1	0	0	0
Missouri		0	5	147	1	87	1,337	69	0	5	0	19,424	73
Montana		1	72	135	1	32	809	0	17	56	221	1,170	133
Navajo Nation		41	1	113	197	135	235	0	0	1	45	670	3
New Mexico		3	0	89	11	2	335	2	0	29	29	0	0
North Dakota		0	0	0	0	0	0	0	0	0	0	0	0
Ohio		2	0	197	0	19	396	0	0	3	19	9,620	100
Oklahoma		0	0	0	0	0	0	0	0	0	0	0	0
Oregon		0	0	0	0	0	0	0	0	0	1	0	0
Pennsylvania		0	0	67	0	116	2,928	1	27	22	35	8,258	20
Tennessee		76	2	67	8	136	686	0	4	15	3	10,376	360
Texas		0	0	8	0	0	553	0	0	0	0	0	0
Utah		4	7	255	4	8	55	1	16	64	0	550	20
Virginia		0	1	21	1	0	12	0	120	25	52	13,000	
Washington		0	0	0	0	0	0	0	0	0	0	0	0
West Virginia		3	1	88	10	5	218	2	1	5	5	35,041	622
Wyoming		0	0	32	398	7,178	8,125	199	15	12	24	0	75
TOTAL		248	191	4,653	996	8,609	26,801	1,305	248	574	623	146,730	4,809,872

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

Includes AML projects funded by the Federal Reclamation Program, Non-Coal project funding and Pre-SMCRA Grants.

Data Source: Abandoned Mine Land Inventory System

TABLE 7 (Fiscal Year 2007)

Final Rules Published			
Title	Citation	Date Effective	Rules Text
Tennessee Federal Program	30 CFR Part 942 72 FR 9616	3/2/2007	<p>The rule allows us to accept financial assurances in the form of trust funds and annuities in Tennessee to fund the treatment of long-term postmining pollutional discharges from surface coal mining operations and thus satisfy performance bond obligations for treatment of those discharges.</p> <p>The rule also contains revisions which will facilitate the growth of high quality hardwood forests where the postmining land uses are related to forestry.</p>

During FY 2007, OSM published 16 proposed and 11 final rules for State programs.

Data Source: OSM, Program Support Directorate

TABLE 8 (Fiscal Year 2007)

Significant Court Decisions in FY 2007		
Court Decisions	Citation	Decision Text
Pennsylvania Fed'n of Sportsmen's Clubs, Inc. v. Kempthorne	No. 06-1780 (3d Cir.)	Plaintiffs challenge the adequacy of Pennsylvania's performance bonding program. In the 1980s, Pennsylvania established an alternative bond system (ABS) to cover the costs of mine reclamation through a state-wide bond pool in lieu of individual operator bonds. In 1991, OSM notified Pennsylvania that its ABS was no longer in conformance with SMCRA and required it to address the deficiencies in a program amendment. Faced with chronic shortfalls in its ABS, Pennsylvania converted to a conventional bonding system (CBS) in August 2001. After the conversion, Pennsylvania asserted, and OSM agreed, that the State had no continuing responsibility to provide adequate moneys to reclaim sites that had undergone bond forfeitures under the ABS. On August 2, 2007, the United States Court of Appeals for the Third Circuit ruled against the government, holding that reclamation obligations incurred under the old ABS for sites with forfeited bonds continued after the conversion. On September 17, 2007, Pennsylvania filed a petition for rehearing, contending that the Third Circuit's decision could be construed in a manner that violates the Tenth and Eleventh Amendments to the United States Constitution. The Federal defendant did not seek rehearing.
Ohio Valley Env'tl. Coalition, et al. v. U.S. Army Corps of Engineers, et al.	No. 05-784 (S.D. W. Va.)	Plaintiffs challenge the U.S. Army Corps of Engineers' (Corps') reissuance of Clean Water Act Section 404 individual permits to four coal companies. Plaintiffs allege that the Corps' actions violate the Clean Water Act, the National Environmental Policy Act, and the Administrative Procedure Act. The permits at issue allow coal companies to create "valley fills" and other structures in waters of the United States in conjunction with their surface coal mining operations. On March 23, 2007, after a trial on the merits, the district court granted judgment in favor of plaintiffs. On June 13, 2007, the trial court also concluded that stream segments between toes of valley fills and sediment pond embankments are waters of the United States and that pollutional discharges into these waters require Clean Water Act Section 402 permits. The government filed a notice of appeal relating to the court's March 23 decision and is still deciding whether to appeal the June 13 decision.
Benchmark Res. Corp., et al. v. United States	No. 03-178L (Fed. Cl.)	Plaintiffs alleged a regulatory taking of their coal interests based on OSM's designation of certain lands as unsuitable for surface coal mining operations under SMCRA Section 522(e)(2). Plaintiffs sought compensation of "not less than \$846,385,000." On November 22, 2006, the U.S. Court of Federal Claims granted the government's motion to dismiss the claims of all plaintiffs. The court held that: (1) none of the plaintiffs' claims are ripe for review because plaintiffs have never sought permits to mine the portions of their property that are not affected by OSMs designation and (2) the claim of one of the plaintiffs is barred by the applicable six-year statute of limitations. Plaintiffs did not appeal the trial court's decision.
Cane Tennessee, Inc. v. United States	No. 06-5045 (Fed. Cir.)	Appellant Cane Tennessee, Inc. claimed that the Secretary of the Interior's designation of certain lands as unsuitable for surface coal mining operations under SMCRA Section 522(e)(2) effected a permanent regulatory taking of Cane's coal interests, which are located in close proximity to Fall Creek Falls State Park in Tennessee. On January 10, 2007, the U.S. Court of Appeals for the Federal Circuit affirmed the trial court's rulings in favor of the government. Cane did not seek further review.

Data Source: U.S. Department of the Interior, Office of the Solicitor

TABLE 9 (Fiscal Year 2007)				
FY 2007 Federal Oversight of State Programs ¹				
State	Site Visits	Notice of Violations (NOVs)	Failure-To-Abate Cessation Orders (FTA COs)	Imminent Harm Cessation Orders (IH COs)
Alabama	46	0	0	0
Alaska	6	0	0	0
Arkansas	2	0	0	0
Colorado	10	0	0	0
Illinois	114	0	0	0
Indiana	70	0	0	0
Iowa	0	0	0	0
Kansas	3	0	0	0
Kentucky ²	368	1	0	0
Louisiana	4	0	0	0
Maryland	44	0	0	0
Mississippi	1	0	0	0
Missouri	20	0	0	0
Montana	6	0	0	0
New Mexico	13	0	0	0
North Dakota	11	0	0	0
Ohio	131	0	0	0
Oklahoma	14	0	0	0
Pennsylvania ³	212	0	1	0
Texas	8	0	0	0
Utah	6	0	0	0
Virginia ⁴	98	0	0	2
West Virginia	225	0	0	0
Wyoming	11	0	0	0
TOTAL	1,423	1	1	2

¹ Violations cited by the Office of Surface Mining - excludes any NOVs or COs that have been vacated.

² Kentucky - Includes one inspection and one NOV for AML Reclamation Fee Collections.

³ Pennsylvania - Includes three inspections and one FTA CO for AML Reclamation Fee Collections.

⁴ Virginia - IHCos issued at the request of the State because of jurisdictional issues.

Data Source: Inspection and Enforcement Tracking System

TABLE 10 (Fiscal Year 2007)**FY 2007 Regulatory Program Statistics ¹**

State/Tribe	Regulatory Staffing ²	New Permits	New Acreage Permitted ⁴	Total Acreage Permitted	Inspect-able Units	Complete Inspections	Partial Inspections	Notices of Violation ⁵	Failure-To-Abate CO's ⁵	Imminent Harm CO's ⁵	Bond Forfeitures	Acreage of Phase I Bond Released	Acreage of Phase II Bond Released
Alabama	25	8	4,538	85,820	216	2,276	336	207	22	0	2	2,240	356
Alaska	4	1	606	9,650	12	24	74	3	1	0	0	0	0
Arkansas	4	0	22	1,680	10	46	94	2	0	0	0	0	26
Colorado	24	0	26	168,600	45	166	289	7	1	0	0	2,272	9
Crow Tribe ³	0	0	0	6,470	1	4	8	0	0	0	0	304	156
Georgia ³	0	0	0	140	6	0	0	0	0	0	0	0	0
Hopi Tribe ³	2	0	0	6,140	1	4	7	0	0	0	0	0	0
Illinois	32	2	899	58,190	88	394	852	39	0	0	0	1,977	2,205
Indiana	42	6	8,580	427,360	109	758	1,055	61	6	0	0	6,182	6,197
Iowa	3	0	0	2,260	12	14	0	0	0	0	0	0	0
Kansas	3	0	328	4,820	12	43	72	1	0	0	0	0	447
Kentucky	299	102	96,102	1,825,000	1,950	7,880	15,018	1,118	173	18	6	13,973	5,253
Louisiana	2	0	0	42,370	2	8	16	1	0	0	0	2,266	779
Maryland	12	4	138	7,100	68	520	914	8	1	9	5	98	224
Mississippi	2	0	0	5,810	1	4	9	0	0	0	0	0	0
Missouri	6	1	350	10,840	29	70	89	0	0	0	0	0	35
Montana	16	0	3,789	66,300	15	87	90	5	0	0	0	2,410	1,294
Navajo Nation ³	5	0	0	88,700	18	64	41	16	0	0	0	0	0
New Mexico	10	0	0	86,150	8	34	88	3	0	0	0	672	872
North Dakota	7	0	1,173	104,390	31	126	528	3	0	0	0	361	361
Ohio	32	22	7,325	105,560	321	1,190	2,538	112	0	6	0	2,662	3,073
Oklahoma	20	2	903	21,800	59	231	308	45	2	0	0	645	1,242
Pennsylvania	240	84	9,263	345,600	1,767	7,590	10,591	597	28	80	4	8,414	7,177
Tennessee ³	36	4	1,648	31,770	313	569	915	63	19	2	2	227	167
Texas	33	1	15,397	281,100	31	121	241	21	0	0	0	4,889	5,166
Utah	17	0	8,090	2,710	33	121	203	9	0	0	0	99	32
Ute Mountain Ute Tribe ³	0	1	0	180	1	0	3	0	0	0	0	0	0
Virginia	71	13	4,463	82,200	451	1,927	2,863	153	4	17	5	2,649	1,147
Washington ³	7	0	0	14,820	2	8	21	10	0	0	0	0	0
West Virginia	254	63	11,022	327,540	2,209	7,315	13,350	1,110	152	13	8	5,095	11,710
Wyoming	30	0	36,952	399,690	36	142	255	7	0	0	0	3,849	986
TOTAL	1,240	314	211,614	4,620,760	7,857	31,736	50,868	3,601	409	145	32	61,284	48,914

¹ State program statistics are for the one-year period, July 1, 2006 - June 30, 2007, except where noted (Federal statistics for the States of Georgia, Tennessee and Washington, as well as for the Crow, Hopi and Ute Mountain Ute Tribes and the Navajo Nation. See Footnote 3.)

² Number of regulatory program staff as of June 30, 2007.

³ Federal statistics are for the one-year period, October 1, 2006 - September 30, 2007.

⁴ New acreage permitted includes acreage permitted for incidental boundary revisions and other revisions or amendments that add acreage, in addition to acreage for new permits.

⁵ Starting in Fiscal Year 2007, the data reported in this column refers to the number of violations cited within an enforcement document. In previous annual reports, this column cited the number of enforcement documents, which contain one or more violations.

Data Source: OSM Directive REG-8, Oversight of State Regulatory Programs

TABLE 11 (Fiscal Year 2007)**Regulatory Grant Funding FY 2007 Obligations ¹**

State/Tribe	Federal Funding		Cumulative Federal Funding Through FY 2007 ²
	FY 2007	FY 2006	
Alabama	\$1,070,211	\$1,022,211	\$30,101,864
Alaska	\$183,601	\$183,601	\$6,457,675
Arkansas	\$145,457	\$145,457	\$4,137,734
Colorado	\$1,903,776	\$1,903,776	\$37,272,755
Crow Tribe	\$29,387	\$29,387	\$1,233,292
Hopi Tribe	\$172,158	\$169,439	\$2,380,933
Illinois	\$2,025,884	\$2,375,884	\$62,984,480
Indiana	\$1,710,906	\$1,787,798	\$40,019,096
Iowa	\$125,378	\$125,378	\$3,187,006
Kansas	\$0	\$109,642	\$3,291,506
Kentucky	\$11,992,212	\$11,992,212	\$320,371,334
Louisiana	\$163,018	\$163,018	\$4,211,870
Maryland	\$675,538	\$575,520	\$14,266,030
Michigan	\$0	\$0	\$135,458
Mississippi	\$110,763	\$13,459	\$1,552,203
Missouri	\$245,767	\$245,767	\$9,201,075
Montana	\$1,023,335	\$1,043,335	\$21,498,249
Navajo Tribe	\$469,273	\$436,973	\$5,604,282
N. Cheyenne Tribe	\$0	\$0	\$86,888
New Mexico	\$718,290	\$718,290	\$15,800,711
North Dakota	\$533,659	\$513,659	\$13,557,825
Ohio	\$1,967,353	\$1,967,353	\$66,590,540
Oklahoma	\$962,173	\$919,448	\$22,176,909
Pennsylvania	\$10,387,573	\$10,387,573	\$258,461,173
Rhode Island	\$0	\$0	\$158,453
Tennessee	\$0	\$0	\$5,340,085
Texas	\$1,283,016	\$1,399,190	\$28,440,868
Utah	\$1,698,219	\$1,698,219	\$36,001,807
Virginia	\$3,394,421	\$3,174,421	\$81,347,795
Washington	\$0	\$0	\$4,893
West Virginia	\$11,199,595	\$11,199,595	\$168,465,738
Wyoming	\$2,064,742	\$2,064,742	\$42,555,061
Total	\$56,255,705	\$56,365,347	\$1,306,895,589

¹ Figures shown above have been adjusted for rounding

² Includes obligations for Applicant/Violator System, the Technical Innovation and Professional Services, Kentucky Settlement, and other cooperative agreements under OSM's regulatory program. Figures for FY 2006 do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

Data Source: Financial Business Management System

TABLE 12 (Fiscal Year 2007)

Appropriations¹		
	2007	2006
Regulation & Technology		
Environmental Restoration	\$156,676	\$155,676
Environmental Protection	\$78,700,393	\$78,615,393
Technology Dev. & Transfer	\$14,976,460	\$14,683,460
Financial Management	\$482,820	\$480,820
Executive Dir. & Admin	\$14,782,887	\$14,874,887
Subtotal	\$109,099,236	\$108,810,236
Abandoned Mine Reclamation		
Environmental Restoration	\$167,730,244	\$167,609,244
Technology Dev. & Transfer	\$3,881,298	\$3,864,298
Financial Management	\$6,197,283	\$6,142,282
Executive Dir. & Admin	\$7,584,038	\$7,632,038
Subtotal	\$185,392,863	\$185,247,862
Total OSM Budget	\$294,492,099	\$294,058,098
Transfer to United Mine Workers Fund	\$114,329,104	\$59,003,833
Total	\$408,821,203	\$353,061,931

¹ The appropriations figures include rescissions for FY 2006 and represent the full year's Continuing Resolution for 2007.

Data Source: Fiscal Year 2007 Congressional appropriations

Note: This table was formerly labelled "Table 13" in previous annual reports.

TABLE 13 (Fiscal Year 2008)		
Clean Streams Program Projects		
State	Supplemental State Grants	
	Active in 2008	Completed Since 1994
Alabama	3	8
Illinois	1	5
Indiana	1	24
Iowa	1	5
Kentucky	0	13
Maryland	5	18
Missouri	0	5
Ohio	2	26
Oklahoma	0	3
Pennsylvania	5	48
Tennessee	0	3
Virginia	0	17
West Virginia	5	0
TOTAL	23	175

Data Source: OSM Regional Offices

TABLE 14 (Fiscal Year 2007)		
FY 2007 Watershed Cooperative Agreements		
State	Project Name/Description	Grant Amount
Iowa	Herbert AML Site	\$ 100,000
	Pathfinders RC&D	
Iowa	Boender AML Site	\$ 100,000
	Pathfinders RC&D	
Maryland	Winbrenner Run AMD Project	\$ 61,800
	Western Maryland RC&D	
Maryland	Aaron Run Acid Mine Drainage Remediation Project	\$ 100,000
	Western Maryland RC&D	
Ohio	Thomas Restoration Project	\$ 100,000
	Rural Action, Inc.	
Ohio	Belden AMD Project	\$ 100,000
	Rural Action Huff Run Watershed	
Pennsylvania	Marsolino-Leight Project	\$ 100,000
	Mountain Watershed Association	
Pennsylvania	Wood Corners AMD Restoration Project	\$ 50,000
	South Sandy Creek Watershed Association	
Pennsylvania	Saxman Run Project	\$ 20,000
	Loyalhanna Watershed Association	
Pennsylvania	Little Coon Run Project	\$ 39,803
	Western PA Coalition for Abandoned Mine Reclamation	
Pennsylvania	Bear Creek Project (Amendment)	\$ 30,000
	Eastern PA Coalition for Abandoned Mine Reclamation	
Pennsylvania	Klondike Mine Project	\$ 100,000
	Clearfield Creek Watershed Association	
Pennsylvania	Bear Run Phase I	\$ 30,000
	Evergreen Conservancy	
West Virginia	Lambert Run Allen Meadows Site 5 Project	\$ 87,319
	Guardians of the West Fork	
West Virginia	Kanes Creek South Side #1 Project	\$ 95,252
	Friends of Decker Creek	
West Virginia	Albert Highwall Enhancement Project	\$ 92,800
	Friends of Blackwater, Inc. (North Fork Project)	
West Virginia	Summerlee AMD Treatment Phase I Project	\$ 100,000
	Plateau Action Network, Inc.	
West Virginia	Valley Highwall #3 Acid Mine Drainage Remediation	\$ 99,877
	Friends of Decker Creek	
West Virginia	Valley Point #12 Project (Amendment #3)	\$ 6,195
	Friends of Decker Creek	
	TOTAL	\$ 1,413,046

Data Source: OSM Regional Offices

TABLE 15 (Fiscal Year 2007)								
Number Of Watershed Interns in FY 2007								
State	2007	2006	2005	2004	2003	2002	2001	2000
Alabama	0	1	1	1	1	1	0	3
Colorado	0	1	0	0	0	0	0	0
Indiana	0	0	0	0	0	1	1	0
Kentucky	0	1	0	0	0	0	1	2
Maryland	1	1	2	2	1	2	2	1
Ohio	2	0	2	1	5	4	3	2
Oklahoma	1	0	1	0	0	0	0	0
Pennsylvania	3	6	5	7	9	8	12	5
Tennessee	3	5	4	3	1	3	1	3
Virginia	0	2	1	1	3	3	2	1
West Virginia	5	5	6	8	6	9	11	6
TOTAL	15	22	22	23	26	31	33	23

Data Source: OSM/Volunteers in Service to America Program

TABLE 16 (Fiscal Year 2007)				
FY 2007 Inventory Costs ¹				
Inventory Costs	Dollars (Billion \$)	Percentage	Dollars (Billion \$)	Percentage
	2007	2007	2006	2006
Completed	2.4	20.9	2.4	21.1
Funded	0.3	2.6	0.3	2.6
Unreclaimed ²	8.8	76.5	8.7	76.3
TOTAL	11.5	100	11.4	100

¹ Includes Priority 1, 2 and 3 coal and non-coal costs.

² Includes all programs except RAMP and Federal emergencies.

Data Source: Abandoned Mine Land Inventory System

TABLE 17 (Fiscal Year 2007)**NTP FY 2007 Courses and Enrollment**

Course Name	Sessions	Students
Acid-forming Materials: Fundamentals	1	23
Advanced Blasting	1	18
Advanced Explosives Training for IO Investigations	1	41
AML Design Workshop: Dangerous Highwalls	1	9
AML Design Workshop: Dangerous Openings	1	13
AML Design Workshop: Drilling and Grouting	1	14
AML Design Workshop: Fires	1	14
AML Reclamation Projects	1	27
AML Workshop: Subsidence	1	12
Applied Engineering Principles	1	22
Blasting and Inspection	2	39
Bonding Workshop: Administrative & Legal	1	19
Bonding Workshop: Cost Estimation	2	36
CCB Forum	1	124
Coalfield Communications	3	63
Communications-ISMIR Conference	1	7
Effective Writing	1	30
Enforcement Procedures	2	39
Enforcement Tools and Applications	1	17
Erosion and Sediment Control	2	39
Evidence Preparation and Testimony	1	23
Excess Spoil Handling	1	29
Expert Witness	1	10
Forensic Hydrologic Investigation	3	57
Geology and Geochem of AFM	2	35
Historic and Archeological Resources	1	12
IMCC/OSM Benchmarking: Reauthorization Leg.	1	44
IMCC/OSM Mine Mapping Workshop	1	18
Indiana Bat & Coal Recovery Plan Wkshp.	1	72
Instructor Training	1	22
Master Instructor Forum	2	28
Mine Pool Workshop	1	53
Mined Land Reforestation	1	193
NEPA Procedures	1	22
NYSDEC-BLI Seminar	1	26
Orientation	1	35
Passive Treatment	1	21
Principles of Inspection	1	28
Quantitative Hydrology	1	17
Reclamation of Inactive MSHA Class Impoundments	1	42
Reforestation & Tree Planting Workshop - ARRI	2	72
Roundtable on Blasting Issues at Mining Ops - IMCC	1	25
SMCRA and the ESA	1	23
Soils and Revegetation	1	27
Subsidence	2	51
Surface and Groundwater Hydrology	2	38
Underground Mine Mapping Workshop - WV	1	32
Underground Mining Technology	2	45
Wetlands Awareness	2	40
TOTAL	64	1,746

APPENDIX B

Fiscal Year 2008 Tables and Figures

2008 Fast Facts

1,401
OSM mine inspection
visits

state and tribal mine
inspections
(full **31,160**)
(partial **52,826**)

3,748
state and tribal
notices of violations

88%
percentage of active
coal mining sites free
of offsite impacts

48,828
acres released from
Phase III Performance
Bonds

9,909
Federal, private,
and tribal land
and surface water
acres reclaimed or
mitigated

22
watershed interns
taking part in
OSM/VISTA Program



OSM at a Glance

As of October 1, 2008

The Abandoned Mine Land Program has reclaimed almost 256,567 acres of hazardous high-priority (Priority 1 and 2) coal-related problems.

Safety and environmental hazards have been eliminated on 411,406 acres, including all three coal priority categories and non-coal problems in 32 states and on the lands of four tribes, plus the Council of Energy Resource Tribes, a non-profit corporation.

Since 1977, OSM has provided \$4.29 billion in grants to its partners in 25 states and three Indian tribes to clean up dangerous abandoned mine sites.

OSM has provided \$1,369,211,608 in grants to the states and tribes to assist in funding the regulation of active coal mines.

Since implementation of the Watershed Cooperative Agreements Program, OSM has awarded 191 cooperative agreements and amendments (to existing cooperative agreements) totaling \$16,404,145.

Since 1977, OSM has addressed 5,257 Abandoned Mine Land emergencies, while the states and tribes have dealt with 2,929.

2008 Fast Facts

\$305,339,221
Abandoned Mine
Land fees collected in
FY 2008

\$167,165,037
contributed to
miners' health
benefits fund

1,426
students trained in
NTTP courses

426
students trained in
TIPS courses

18
new watershed
cooperative
agreements

\$1,413,046
new watershed
cooperative
agreements funded

255,640
number of people
with reduced
exposure potential
to safety risks from
Abandoned Mine
Lands

OSM/DOI Strategic Plan Measures

Fiscal Year 2008

Measure	Target	Results
Mission Area: Resource Protection		
Number of Federal, private and tribal land and surface water acres reclaimed or mitigated from the effects of natural resource degradation from past mining. (Calculated equivalent acres)	6,900	9,909 ¹
Mission Area: Resource Use		
Percent of active coal mining sites that are free of offsite impacts.	93%	88% ^{2/3}
Percent of mined acreage reclaimed.	45%	83% ^{2/4}

¹ Information calculated from projects reported with completion dates of 10/1/07 - 9/30/08 and entered in the Abandoned Mine Land Inventory System. The total does not include 12,835 acres, which translates to 2,567 households that have had polluted water problems resolved, as reported on one AMLIS problem area description. This number represents an anomaly related to a State decision to focus on an existing backlog of water line replacements. This level of effort is not anticipated to continue in the future years. For clarification, the proportion of water-related problems in the FY 2008 reported total is consistent with trend data in recent years. **Target Exceeded:** The AMLIS database reported 9,909 acres reclaimed for Priority 1, 2, and associated 3 projects. The 2008 results were higher than the target due to an increase in the number of problems addressed. In FY 2007, 306 problems were addressed in contrast to 334 in FY 2008. This is almost a 50% increase over the FY 2007 accomplishments of 6,658 acres reclaimed.

² Calculated values: State programs provide data on a July 1, 2007- June 30, 2008 timeframe, to accommodate the accelerated publishing requirements. Results are calculated by subtracting the 2007 quarter data (July 1 – September 30, 2007) and adding the 2008 quarter for (July 1 - September 30, 2008). Federal data is on the Federal fiscal year.

³ Offsite impacts: The results represent the total number of inspectable units free of off-site impacts over the total number of inspectable units. This measure covers the mining activities in 31 States and Tribes. Of these States and Tribes, 17 exceeded the target of 93% while 14 were below the target. Explanations provided by staff for the increases in off-site impacts include: use of Geographic Information System technology to verify permit boundaries; and better documentation of off-site impacts which led to the identification of more violations by both OSM and the State. Operators are notified of violations when they are identified. States and Tribes are taking measures to reduce the number of off-site impacts. These efforts include increased partnering between OSM and State agencies and meetings with operators to discuss the nature of the violations and actions needed. **Target Not Met:** While the FY 2008 actual is down slightly from the FY 2007 actual of 90.2%, the percentage of impacts were increasingly minor in nature, i.e., it does not jeopardize public safety or land use.

⁴ Mined acreage reclaimed: The significant increase is the result of implementation of a new definition and data element for cumulative acres in OSM's Directive REG-8 "Oversight of State Regulatory Programs." Collection of this data established a revised baseline for the calculation. The numerator is the sum of all acreage that has been processed through Phases I, II, and III bond release. The denominator is the sum of all acreage that has been mined. Bonded acreage data, is a proxy for the mined acreage. This measure is reported in the DOI Strategic Plan 2007-2012.

Revised FY 2009 Target: The target for FY 2009 has been revised based on trend data. The FY 2009 target is 75%.

TABLE 1 (Fiscal Year 2008)

Rounded Figures on AML Collections

AML FUNDING FOR FY 2008 (Cash Basis)

State/Tribe	AML Collections ¹	State Share Distribution ²	Historic Coal Distribution ²	Minimum Program Distribution ²	Prior Balance Replacement Distribution ²	Total Mandatory Distribution ²	Emergency Distribution ³
Alabama	\$4,557,000	\$1,139,250	\$1,325,240	\$0	\$2,913,226	\$5,377,716	\$400,000
Alaska	\$453,636	\$113,409	\$14,300	\$1,274,528	\$323,236	\$1,725,473	\$25,000
Arkansas	\$4,696	\$1,174	\$110,182	\$1,439,685	\$9,275	\$1,560,316	\$15,000
Colorado	\$7,164,559	\$1,791,140	\$645,854	\$0	\$4,260,584	\$6,697,578	
Illinois	\$6,060,153	\$1,515,038	\$4,909,546	\$0	\$4,476,798	\$10,901,382	\$1,000,000
Indiana	\$9,765,854	\$2,441,464	\$1,598,394	\$0	\$6,566,872	\$10,606,730	\$338,516
Iowa	\$0	\$0	\$388,061	\$1,304,069	\$3,802	\$1,695,932	\$60,000
Kansas	\$166,493	\$41,623	\$314,586	\$1,289,483	\$64,825	\$1,710,517	\$465,000
Kentucky	\$26,074,770	\$6,518,693	\$4,811,666	\$0	\$19,518,442	\$30,848,801	
Louisiana	\$316,385	\$0	\$0	\$0	\$246,411	\$246,411	
Maryland	\$727,211	\$181,803	\$311,794	\$936,438	\$633,527	\$2,063,562	
Mississippi	\$359,895	\$89,974	\$0	\$0	\$133,541	\$223,515	
Missouri	\$87,479	\$21,870	\$379,841	\$1,219,269	\$159,751	\$1,780,731	\$50,000
Montana	\$12,199,945	\$0	\$0	\$0	\$8,069,086	\$8,069,086	\$125,000
New Mexico	\$3,443,967	\$860,992	\$157,015	\$0	\$3,009,503	\$4,027,510	
North Dakota	\$3,023,461	\$755,865	\$200,994	\$27,197	\$1,988,747	\$2,972,803	\$100,000
Ohio	\$4,688,951	\$1,172,238	\$3,009,615	\$0	\$3,744,905	\$7,926,758	\$2,300,000
Oklahoma	\$489,073	\$122,268	\$226,262	\$1,154,734	\$342,002	\$1,845,266	\$110,000
Pennsylvania	\$12,016,581	\$3,004,145	\$15,870,089	\$0	\$9,065,709	\$27,939,943	
Tennessee	\$731,798	\$182,949	\$555,883	\$1,130,584	\$0	\$1,869,416	
Texas	\$4,176,570	\$0	\$0	\$0	\$3,335,548	\$3,335,548	\$15,000
Utah	\$3,642,611	\$910,653	\$373,838	\$0	\$2,360,196	\$3,644,687	
Virginia	\$5,793,880	\$1,448,470	\$1,476,851	\$0	\$4,257,059	\$7,182,380	\$1,700,000
Washington	\$0	\$0	\$0	\$0	\$0	\$0	
West Virginia	\$35,479,612	\$8,869,903	\$9,120,870	\$0	\$21,407,423	\$39,398,196	\$3,100,000
Wyoming	\$154,502,065	\$0	\$0	\$0	\$82,700,759	\$82,700,759	
Crow Tribe	\$2,495,726	\$623,932	\$0	\$0	\$1,318,208	\$1,942,140	
Hopi Tribe	(\$1,948,055)	\$0	\$0	\$0	\$879,524	\$879,524	
Navajo Tribe	\$8,864,907	\$0	\$0	\$0	\$5,182,493	\$5,182,493	
Total	\$305,339,221	\$31,806,853	\$45,800,881	\$9,775,987	\$186,971,452	\$274,355,173	\$9,803,516

Total figures above have been adjusted for rounding.

"Cash Basis" refers to the recognition of revenue when it is received. AML Fee Collections are reported using cash-basis criteria. AML revenue in OSM's financial statements may include other amounts.

¹ AML Collections are reported from 12/01/2006 to 11/30/2007. These collections represent the actual collections that were paid during FY07 and also are the basis for the FY2008 Distribution.

² The term "Distribution" is now used instead of "Allocation." OSM allocates funds when it receives the fee collections and "pools" the monies in the AML Fund. Funds are distributed annually to make them available to individual states and tribes for subsequent grant awards. The distributions are calculated as required by SMCRA, except for the appropriated State Emergency funding which is based on state estimates and approved by the OSM Director.

³ The total Mandatory Distribution does not include AML State Emergency Program funding as these funds are appropriated and not part of the mandatory distribution process.

For FY 2008 to FY2011, the State Share, Historic Coal, and Minimum Program Distributions are phased in as required by the 2006 AML Amendments. The Prior Balance Replacement Distribution is distributed by the U.S. Treasury for the unappropriated state and tribal share balances disbursed over seven years. FY 2008 is the first year for this distribution.

Data Source: FBMS (Financial Business Management System) and the Grant Distribution

Table 2 (Fiscal Year 2008)

Abandoned Mine Reclamation Fund Status		
Cash Basis (Includes Investments)		
(dollars in thousands)	FY 2008	FY 2007
Balance, Start of Year	\$2,362,684	\$2,264,649
Fees, debts, and interest collected	\$291,453	\$305,469
Interest earned on investments	\$83,764	\$105,818
Total Earnings	\$375,217	\$411,287
Less:		
Disbursements	\$198,559	\$199,179
Transfers to the United Mine Workers	\$100,394	\$114,329
Total Disbursements and Transfers	\$298,953	\$313,508
Balance, End of the Year	\$2,438,948	\$2,362,684

Note: The information presented in this table is on a cash basis and therefore will not reconcile to accrual based financial data presented elsewhere in this report.

Data Source: Financial Business Management System

TABLE 3 (Fiscal Year 2008)

AML GRANTS¹ TO STATES AND INDIAN TRIBES FOR FY 2008

State/Tribe	Administration ³	Project Costs ⁴	Emergency ⁵	AMD Set-Aside	Subsidence Insurance	2008 Total	2007 Total	Program Staff (FTE) 2008
Alabama	\$714,350	\$4,502,008	\$400,000	\$0	\$0	\$5,616,359	\$3,047,025	14
Alaska	\$402,092	\$1,323,382	\$25,000	\$0	\$0	\$1,750,474	\$1,525,000	4
Arkansas	\$383,026	\$1,177,290	\$15,000	\$0	\$0	\$1,575,316	\$1,588,000	7
Colorado	\$1,704,379	\$4,993,198	\$0	\$0	\$0	\$6,697,578	\$2,564,277	16
Illinois	\$714,837	\$10,617,247	\$1,000,000	\$0	\$0	\$12,332,084	\$11,014,141	24
Indiana	\$1,369,355	\$8,357,451	\$338,516	\$1,211,957	\$0	\$11,277,279	\$4,999,882	20
Iowa	\$273,485	\$1,422,756	\$60,000	\$0	\$0	\$1,756,241	\$1,681,635	4
Kansas	\$321,662	\$1,388,855	\$815,000	\$0	\$0	\$2,525,517	\$1,865,000	10
Kentucky	\$1,645,577	\$25,798,562	\$0	\$0	\$0	\$27,444,139	\$13,792,955	94
Louisiana	\$229,886	\$0	\$0	\$0	\$0	\$229,886	\$71,653	1
Maryland ¹	\$216,102	\$1,832,263	\$0	\$258,000	\$0	\$2,306,364	\$1,617,383	4
Mississippi	\$34,304	\$189,211	\$0	\$0	\$0	\$223,515	\$0	1
Missouri	\$273,824	\$1,506,907	\$50,000	\$0	\$0	\$1,830,731	\$1,550,000	8
Montana	\$689,395	\$7,379,691	\$125,000	\$0	\$0	\$8,194,086	\$3,212,226	11
New Mexico	\$1,245,050	\$2,782,460	\$0	\$0	\$0	\$4,027,510	\$1,500,000	9
North Dakota	\$292,113	\$2,680,690	\$100,000	\$0	\$0	\$3,072,803	\$1,659,627	4
Ohio ¹	\$2,270,845	\$4,945,688	\$2,300,000	\$634,556	\$0	\$10,151,090	\$7,497,389	49
Oklahoma	\$353,103	\$1,492,163	\$160,000	\$0	\$0	\$2,005,266	\$1,593,703	9
Pennsylvania ¹	\$1,165,830	\$24,774,113	\$0	\$0	\$0	\$25,939,943	\$22,550,114	127
Tennessee	\$5,000	\$1,642,767	\$0	\$221,649	\$0	\$1,869,416	\$0	0
Texas	\$124,615	\$4,422,124	\$15,000	\$0	\$0	\$4,561,739	\$168,882	6
Utah	\$428,882	\$3,215,805	\$0	\$0	\$0	\$3,644,687	\$1,626,467	9
Virginia	\$1,249,091	\$4,887,155	\$1,700,000	\$577,596	\$0	\$8,413,842	\$5,371,343	21
West Virginia ¹	\$6,188,758	\$30,452,862	\$3,100,000	\$3,850,341	\$0	\$43,591,961	\$19,358,269	55
Wyoming	\$1,516,498	\$80,641,448	\$0	\$0	\$107,789	\$82,265,735	\$33,114,753	14
Crow Tribe	\$740,172	\$1,201,968	\$0	\$0	\$0	\$1,942,140	\$695,103	3
Hopi Tribe	\$953,785	\$902,540	\$0	\$0	\$0	\$1,856,325	\$582,608	2
Navajo Tribe	\$827,057	\$4,355,436	\$0	\$0	\$0	\$5,182,493	\$2,836,995	21
TOTAL	\$26,333,071	\$238,886,042	\$10,203,516	\$6,754,099	\$107,789	\$282,284,518	\$147,084,430	547

¹ Funding for these grants is derived from the FY 2008 Distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals. Therefore, the total does not match the FY2008 mandatory distribution that appears in Table 1.

² Acid Mine Drainage set-aside funding are funds set aside in a trust account to be used for Acid Mine Drainage abatement and treatment.

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

⁴ The term "Project Costs" is now used instead of Construction. AML simplified grants do not contain specific construction cost breakouts, but rather list all costs associated with a construction project as a project cost. This category contains non-water supply, water supply, and non-coal project costs. There were no new obligations for clean streams in FY08. However there was \$536,099.96 of prior year money deobligated.

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

⁶ The "Total" figures above have been adjusted for rounding.

Data Source: Financial Business Management System

TABLE 4 (Fiscal Year 2008)**Reclamation Projects Started**

State/Tribe	Federal Emergency	State Emergency	Emergencies FEDERAL	Emergencies STATE	Total Emergencies	Federal Non- Emergency	State Non- Emergency
	2008	2008	1978-2008	1978-2008	2008	2008	2008
Alabama	0	7	10	140	150	0	2
Alaska	0	0	0	1	1	0	3
Arkansas	0	1	1	24	25	0	2
California	0	0	5	0	5	0	0
Colorado	2	0	109	0	109	0	12
Crow Tribe	0	0	0	0	0	0	1
Georgia	0	0	0	0	0	1	0
Hopi Tribe	0	0	0	0	0	0	1
Illinois	0	19	51	308	359	0	11
Indiana	0	12	94	186	280	0	38
Iowa	0	4	22	7	29	0	4
Kansas	0	33	270	742	1,012	0	1
Kentucky	44	0	1,207	0	1,207	0	41
Louisiana	0	0	0	0	0	0	0
Maryland	1	0	1	0	1	0	4
Michigan	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0
Missouri	0	1	6	7	13	0	4
Montana	0	0	7	14	21	0	3
Navajo Nation	0	0	6	0	6	0	5
New Mexico	0	0	16	0	16	0	6
North Dakota	0	3	15	21	36	0	5
Northern Cheyenne	0	0	2	0	2	0	0
Ohio	0	29	190	374	564	0	8
Oklahoma	0	7	47	38	85	0	2
Oregon	0	0	0	0	0	0	0
Pennsylvania	105	0	2,853	0	2,853	0	83
Rhode Island	0	0	4	0	4	0	0
South Dakota	0	0	0	0	0	0	0
Tennessee	0	0	22	1	23	0	0
Texas	0	0	6	0	6	0	1
Utah	1	0	1	0	1	0	1
Ute Reservation	0	0	1	0	1	0	0
Virginia	0	0	30	190	220	0	11
Washington	5	0	64	0	64	1	0
West Virginia	0	40	179	876	1,055	0	16
Wyoming	0	0	38	0	38	0	8
TOTAL	158	156	5,257	2,929	8,186	2	273

Notes:

1. Federal projects started in 2008 (October 1, 2007 - September 30, 2008)

TABLE 5 (Fiscal Year 2008)			
FEDERAL RECLAMATION PROGRAM PROJECTS			
FY 2008 Obligations ¹			
State or Tribe	Emergency	High Priority	Total 1978-2008 ²
Alabama	\$0	\$0	\$13,934,015
Alaska	\$0	\$0	\$194,638
Arkansas	\$0	\$0	\$84,904
California	\$0	\$40,000	\$2,642,533
Colorado	\$34,684	\$0	\$2,219,494
Georgia	\$0	\$218,679	\$4,443,749
Idaho	\$0	\$0	\$0
Illinois	\$0	\$0	\$5,376,749
Indiana	\$0	\$0	\$4,032,023
Iowa	\$0	\$0	\$1,438,442
Kansas	\$0	\$0	\$5,094,172
Kentucky	\$2,561,717	\$0	\$133,402,657
Maryland	\$28,265	\$0	\$3,308,842
Michigan	\$0	\$0	\$3,668,247
Missouri	\$0	\$0	\$8,015,909
Montana	\$0	\$0	\$729,058
New Mexico	\$0	\$0	\$2,366,041
North Carolina	\$0	\$0	\$205,407
North Dakota	\$0	\$0	\$1,723,933
Ohio	\$0	\$0	\$18,295,299
Oklahoma	\$0	\$0	\$1,232,159
Oregon	\$0	\$0	\$247,885
Pennsylvania	\$2,249,129	\$0	\$130,113,683
Rhode Island	\$0	\$0	\$567,259
S Dakota	\$0	\$0	\$226,368
Tennessee	\$0	\$0	\$27,888,513
Texas	\$0	\$0	\$289,849
Utah	\$0	\$0	\$123,791
Virginia	\$0	\$0	\$10,139,469
Washington	\$32,200	\$264,150	\$9,660,862
West Virginia	\$0	\$0	\$29,023,226
Wyoming	\$0	\$0	\$1,067,101
Cheyenne River Sioux Tribe	\$0	\$0	\$2,803,165
Crow Tribe	\$0	\$0	\$1,097,895
Fort Berthold Tribe	\$0	\$0	\$69,972
Fort Peck Tribe	\$0	\$0	\$147,991
Hopi Tribe	\$0	\$0	\$1,263,409
Jicarilla Apache Tribe	\$0	\$0	\$59,998
Navajo Tribe	\$0	\$0	\$2,222,792
Northern Cheyenne Tribe	\$0	\$0	\$591,834
Southern Ute Tribe	\$0	\$0	\$94,206
Rocky Boy Tribe	\$0	\$0	\$60,188
Uintah/Ouray Tribe	\$0	\$0	\$138,738
Ute Mountain Tribe	\$0	\$0	\$14,300
White Mountain Apache Tribe	\$0	\$0	\$1,838
Wind River Tribe	\$0	\$0	\$73,267
Zuni Tribe	\$0	\$0	\$125,009
Undistributed ³	\$0	\$0	-\$782
Total	\$4,905,995	\$522,829	\$430,520,098

¹ Figures shown above have been adjusted for rounding

² Includes prior-year contract de-obligations and upward adjustments

³ Refers to funds that OSM awarded in previous fiscal years that were subsequently returned to the Department of the Interior.

Table 6a (Fiscal Year 2008)
1978-2008 Abandoned Mine Land Reclamation Accomplishments

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

(Statistics do not include OSM emergency project accomplishments)

State/Indian Lands	Clogged Streams	Clogged Stream Lands	Dangerous Highwalls	Dangerous Impoundments	Dangerous Pile & Embankments	Dangerous Slides	Dangerous Gases	Hazardous Equipment & Facilities	Hazardous Water Bodies	Industrial/Residential Waste	Portals	Polluted Water: Agriculture & Industrial	Polluted Water: Human Consumption	Subsidence	Surface Burning	Underground Mine Fires	Vertical Openings
Alabama	1	198	295,538	1	1,462	20	0	470	886	25	2,325	8	15	41	75	0	408
Alaska	0	0	11,190	4	6	0	0	1,498	2	4	38	0	0	3	42	0	51
Arkansas	1	0	70,931	1	841	0	0	2	84	34	28	0	0	16	4	0	115
California	0	0	0	0	0	0	0	0	0	0	34	0	0	1	0	0	42
CERT Tribes*	0	0	7,050	0	473	0	0	6	30	9	74	0	0	34	0	0	18
Colorado	0	0	51,993	0	74	0	1	14	0	10	3,200	3	0	59	29	184	4,356
Crow Tribe	1	0	2,267	1	58	23	0	32	1	0	15	3	0	16	0	0	5
Georgia	0	0	11,500	2	0	0	0	0	0	0	112	0	1	0	0	0	11
Hopi Tribe	0	0	11,662	0	0	0	0	8	0	0	9	0	0	0	0	0	2
Idaho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	21	1,427	62,351	7	459	4	25	402	9	72	199	11	1	170	119	0	134,231
Indiana	14	82	125,412	6	638	7	4	103	7	32	70	110	7	240	15	1	399
Iowa	11	888	66,602	3	873	0	0	5	28	28	1	12	2	4	0	0	22
Kansas	1	19	155,610	1	111	3	0	2	1	29	0	3	0	25	9	0	1,526
Kentucky	47	8,309	27,298	119	542	2,233	1	260	44	27	2,089	6	11,176	51	227	63	198
Maryland	5	66	44,680	3	272	69	0	26	20	35	41	85	41	15	1	2	5
Michigan	0	0	950	0	0	0	0	7	2	0	0	0	1	0	8	0	53
Missouri	11	1,519	73,702	6	599	0	0	28	11	71	36	36	15	6	19	7	191
Montana	21	98	25,560	3	180	1	1	267	1	443	1,112	17	12	554	305	69	623
Navajo Nation	0	1	109,586	4	665	7	0	5	0	6	870	19	0	12	3	0	382
New Mexico	2	21	280	0	15	0	0	17	0	0	567	4	1	42	35	32	1,089
North Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
North Dakota	0	0	80,599	4	317	35	0	14	18	2	13	6	0	1,407	18	0	91
Ohio	38	5,554	72,814	11	102	476	4	65	15	34	392	53	317	170	171	3	267
Oklahoma	15	1	254,364	0	0	0	0	15	221	26	173	6	3	18	4	0	114
Oregon	0	0	0	0	0	0	0	3	0	0	16	0	0	0	0	0	3
Pennsylvania	104	261	959,836	16	693	65	0	361	124	36	313	27	373	2,598	147	1,094	559
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
South Dakota	0	0	135	0	0	0	0	4	0	0	5	0	0	1	0	0	1
Tennessee	2	147	61,028	3	533	68	0	31	79	16	192	7	14	6	28	0	11
Texas	0	0	64,002	0	1,533	0	0	0	17	0	66	0	0	8	0	0	368
Utah	14	9	3,425	1	356	3	19	206	0	2	3,436	3	0	185	43	20	1,453
Virginia	76	870	29,855	55	255	327	0	231	2	2	1,046	0	6,034	14	52	0	110
Washington	0	0	0	0	3	0	0	7	0	0	30	0	0	12	15	0	92
West Virginia	55	167	200,322	788	4,939	579	5	623	8	38	2,466	78	15,041	429	490	28	152
Wyoming	116	1,730	550,931	140	2,363	25	0	216	371	29	597	3	0	1,178	17	54	628
Totals	555	21,368	3,431,472	1,179	18,360	3,943	60	4,927	1,981	1,009	19,564	500	33,054	7,322	1,874	1,557	147,581

Table includes AML projects funded through Acid Mine Drainage Plans, Coal Interim Site Funding, Clean Streams Initiatives, Coal Insolvent Surety Site Funding, Federal Reclamation Program Funding, Pre-SMCRA Grants Funding, State Emergencies, State Set-Aside Funding, Watershed Cooperative Agreements and Funding for Non-Coal projects.

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

Data Source: Abandoned Mine Land Inventory System

**Table 6b (Fiscal Year 2008)
1978-2008 Abandoned Mine Land Reclamation Accomplishments**

Priority 3 Coal and Non-Coal Problems (Environmental Restoration)

(Statistics do not include OSM emergency project accomplishments)

State/Indian Lands	Bench	Industrial/ Residential Waste	Equipment/ Facility	Gobs	Highwalls	Haul Road	Mine Openings	Pits	Spoil Area	Slurry	Slump	Water Problems
Alabama	23	15	8	241	32,435	2	50	0	9,775	5	9	379
Alaska	0	0	0	2	0	0	0	0	51	0	25	0
Arkansas	0	0	0	0	0	0	0	6	153	0	0	0
California	0	0	0	2	0	0	0	0	0	0	0	50
CERT Tribes*	0	0	2	4	1,500	0	1	7	80	0	0	1,594
Colorado	3	6	7	162	2,028	0	18	131	829	0	0	1
Crow	6	0	0	37	2,245	12	2	38	29	0	4	0
Georgia	3	0	0	3	400	0	0	3	7	0	0	0
Hopi Tribe	0	0	0	25	51	15	0	10	10	0	0	0
Illinois	1	6	166	2,644	10,880	210	69	633	1,895	1,166	1	2,896
Indiana	0	111	227	1,653	15,226	263	28	378	2,407	1,140	86	9,105,428
Iowa	0	2	0	1	2,900	5	1	21	356	0	0	0
Kansas	0	0	1	89	3,200	0	0	23	316	10	0	0
Kentucky	562	0	61	233	2,240	0	71	4	819	66	5	60
Maryland	10	1	2	46	5,335	2	11	22	263	0	1	273
Michigan	0	0	1	27	0	1	0	1	10	0	11	0
Missouri	0	5	5	148	16,824	1	0	96	1,386	69	0	86
Montana	1	105	58	162	1,170	1	230	34	870	0	19	2,741
Navajo Nation	41	1	2	141	890	203	79	148	265	0	0	3
New Mexico	3	0	29	90	0	12	29	2	335	2	0	0
North Dakota	0	0	0	0	0	0	0	0	0	0	0	0
Ohio	2	0	3	202	9,620	0	19	19	425	0	0	156
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	1	0	0	0	0	0
Pennsylvania	0	0	29	127	9,358	0	26	141	3,383	1	27	6,620
Tennessee	76	2	15	67	10,376	8	3	145	862	0	4	360
Texas	0	0	0	8	0	0	0	0	553	0	0	0
Utah	4	7	64	255	550	4	0	8	55	1	16	20
Virginia	0	1	25	21	13,000	1	52	0	12	0	0	120
West Virginia	3	1	5	88	35,041	10	5	5	218	2	1	622
Wyoming	0	0	25	40	0	398	99	7,184	8,187	199	108	75
Total	737	264	735	6,516	175,269	1,147	794	9,058	33,549	2,660	316	9,121,484

Table includes AML projects funded by the Federal Reclamation Program, Non-Coal project funding, and Pre-SMCRA Grants.

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

Data Source: Abandoned Mine Land Inventory System

TABLE 7 (Fiscal Year 2008)**Final Rules Published in FY 2008**

Title	Citation	Date Effective	Rules Text
Ownership and Control; Permit and Application Information; Transfer, Assignment, or Sale of Permit Rights	30 CFR Parts 701, 773, 774, 778, 843, and 847 72 FR 68000	12/3/2007	The rule revises our definitions pertaining to ownership, control, and transfer, assignment, or sale of permit rights and our regulatory provisions governing: permit eligibility determinations; improvidently issued permits; ownership or control challenges; post-permit issuance actions and requirements; transfer, assignment, or sale of permit rights; application and permit information; and alternative enforcement.

During FY 2008, OSM published in the *Federal Register* 13 proposed and 16 final rules for State programs.

Data Source: OSM, Program Support Directorate

TABLE 8 (Fiscal Year 2008)**Significant Court Decisions in FY 2008**

Court Decisions	Citation	Decision Text
Consolidation Coal Co., et al. v. United States	528 F.3d 1344 (Fed. Cir. 2008)	On June 11, 2008, the U.S. Court of Appeals for the Federal Circuit issued a favorable decision in the government's appeal of an adverse trial court ruling in this Export Clause litigation. More than 90 plaintiffs brought suit against the United States claiming that the Surface Mining Control and Reclamation Act's abandoned mine land fee violates the Export Clause of the U.S. Constitution to the extent it is applied to exported coal. The U.S. Court of Federal Claims agreed with plaintiffs and granted plaintiffs' motion for summary judgment on the issue of liability. Applying the canon of constitutional avoidance, the Federal Circuit reversed the lower court's grant of summary judgment, holding that "the government's construction [of the statute] must [] prevail as it is the only reasonable construction which preserves the constitutionality of the statute." The case is currently on remand to the trial court for proceedings consistent with the appellate decision.
National Mining Association v. Kempthorne	512 F.3d 702 (D.C. Cir. 2008)	On January 15, 2008, the U.S. Court of Appeals for the District of Columbia Circuit upheld the Secretary's 1999 valid existing rights (VER) rulemaking against an industry challenge. The VER rule defines the circumstances under which a person has VER to conduct surface coal mining operations on lands listed in SMCRA Section 522(e). In affirming the trial court's decision, the court of appeals concluded that the Secretary's interpretation was reasonable, and based on a permissible construction of the statute, and that the Secretary had considered the matter in a detailed and reasoned fashion. The plaintiff is currently seeking Supreme Court review.
Ohio Valley Environmental Coalition, et al. v. U.S. Army Corps of Engineers, et al.	No. 07-1479 (4th Cir.)	Ohio Valley Environmental Coalition (OVEC) is challenging the U.S. Army Corps of Engineers' (Corps') reissuance of Clean Water Act Section 404 individual permits to four coal companies. OVEC alleges that the Corps' actions violate the Clean Water Act, the National Environmental Policy Act, and the Administrative Procedure Act. The permits at issue allow coal companies to create "valley fills" and other structures in waters of the United States in conjunction with their surface coal mining operations. On March 23, 2007, after a trial on the merits, the district court granted judgment in favor of OVEC. On June 13, 2007, the trial court also concluded that stream segments between toes of valley fills and sediment pond embankments are waters of the United States and that pollutional discharges into these waters require Clean Water Act Section 402 permits. The government appealed the trial court's decisions to the U.S. Court of Appeals for the Fourth Circuit. Oral argument was held on September 23, 2008. We are awaiting the court's decision.
Benchmark Resources Corp., et al. v. United States	74 Fed. Cl. 458 (2006)	Plaintiffs alleged a regulatory taking of their coal interests based on OSM's designation of certain lands as unsuitable for surface coal mining operations under SMCRA Section 522(e)(2). Plaintiffs sought compensation of "not less than \$846,385,000." On November 22, 2006, the U.S. Court of Federal Claims granted the government's motion to dismiss plaintiffs' claims. The court held that: (1) none of the plaintiffs' claims are ripe for review because plaintiffs have never sought permits to mine the portions of their property that are not affected by OSM's designation and (2) the claim of one of the plaintiffs is barred by the applicable six-year statute of limitations. Plaintiffs did not appeal the trial court's decision.
Cane Tennessee, Inc. v. United States	No. 06-5045 (Fed. Cir.)	Cane Tennessee, Inc. claimed that the Secretary of the Interior's designation of certain lands as unsuitable for surface coal mining operations under SMCRA Section 522(e)(2) effected a permanent regulatory taking of Cane's coal interests, which are located in close proximity to Fall Creek Falls State Park in Tennessee. On January 10, 2007, the U.S. Court of Appeals for the Federal Circuit affirmed the trial court's rulings in favor of the government. Cane did not seek further review.

Data Source: U.S. Department of the Interior, Office of the Solicitor

TABLE 9 (Fiscal Year 2008)				
FY 2008 Federal Oversight of State Programs ¹				
State	Site Visits	Notice of Violations (NOVs)	Failure-To-Abate Cessation Orders (FTA COs)	Imminent Harm Cessation Orders (IHCOs)
Alabama	19	0	0	0
Alaska	0	0	0	0
Arkansas	3	0	0	0
Colorado	7	0	0	0
Illinois	93	0	0	0
Indiana	73	0	0	0
Iowa	0	0	0	0
Kansas	5	0	0	0
Kentucky	329	0	0	1
Louisiana	5	0	0	0
Maryland	21	0	0	0
Mississippi	3	0	0	0
Missouri	10	0	0	0
Montana	6	0	0	0
New Mexico	2	0	0	0
North Dakota	15	0	0	0
Ohio	209	0	0	0
Oklahoma	12	0	0	0
Pennsylvania ²	214	0	0	0
Texas	3	0	0	0
Utah	12	0	0	0
Virginia	93	0	0	1
West Virginia	262	1	0	0
Wyoming	5	0	0	0
TOTAL	1,401	1	0	2

¹ Violations cited by the Office of Surface Mining - excludes any NOVs or COs that have been vacated.

² Pennsylvania - Includes three inspections, two NOVs, and one FTA CO for AML Reclamation Fee Collections.

Data Source: Inspection and Enforcement Tracking System

TABLE 10 (Fiscal Year 2008)

FY 2008 Regulatory Program Statistics ¹

State/Tribe	Regulatory Staffing ²	New Permits	New Acreage Permitted ⁴	Total Acreage Permitted	Inspectable Units	Complete Inspections	Partial Inspections	Notices of Violation ⁵	Failure-To-Abate CO's ⁵	Imminent Harm CO's ⁵	Bond Forfeitures	Acreage of Phase I Bond Released	Acreage of Phase II Bond Released	Acreage of Phase III Bond Released
Alabama	25	11	5,884	90,140	214	2,328	368	204	16	0	8	3,211	783	2,278
Alaska	4	0	0	9,650	12	13	52	0	0	0	0	0	0	0
Arkansas	4	0	0	1,560	9	32	76	11	2	0	0	0	0	0
Colorado	24	1	2,766	161,400	43	168	255	5	0	0	0	48	272	278
Crow Tribe ³	0	0	0	6,470	1	4	10	0	0	0	0	0	0	0
Georgia ³	0	0	0	140	6	0	0	0	0	0	0	0	0	0
Hopi Tribe ³	2	0	0	6,140	1	4	0	0	0	0	0	0	0	0
Illinois	32	6	2,482	47,710	86	397	795	45	3	0	0	2,540	848	1,799
Indiana	41	2	11,730	222,510	103	713	959	39	0	0	0	4,203	4,856	5,202
Iowa	2	0	0	1,810	8	8	0	0	0	0	0	0	0	0
Kansas	4	2	432	4,720	10	34	72	0	0	0	0	0	0	6
Kentucky	277	82	79,582	1,841,500	1,934	7,683	14,723	1,333	186	29	10	11,405	8,168	11,004
Louisiana	2	0	(4)	42,270	2	8	16	0	0	0	0	62	62	62
Maryland	13	5	521	7,500	68	339	616	5	0	0	1	200	424	455
Mississippi	2	0	0	5,800	1	4	8	0	0	0	0	0	0	0
Missouri	6	0	0	6,800	22	52	75	0	0	0	0	492	1,211	3,192
Montana	15	0	2,208	68,520	15	84	82	4	0	0	0	3,328	1,788	101
Navajo Nation ³	7	0	0	88,710	18	69	44	20	0	0	0	487	0	1,044
New Mexico	10	0	560	87,400	9	40	88	7	0	2	0	0	0	0
North Dakota	8	0	5,025	108,710	31	130	565	2	0	0	0	597	648	709
Ohio	41	8	6,101	106,510	308	1,198	2,411	176	5	3	2	3,574	2,661	2,680
Oklahoma	20	0	580	20,200	58	246	302	51	1	0	0	733	1,625	1,386
Pennsylvania	214	71	4,103	377,300	1,808	6,691	10,558	744	30	58	1	6,525	4,851	5,164
Tennessee ³	34	8	1,445	31,460	315	585	951	64	16	6	1	2,208	2,519	2,057
Texas	33	2	8,962	278,200	33	123	252	18	0	0	0	6,397	242	770
Utah	14	0	1,133	2,840	33	121	187	17	0	0	0	2	2	2
Ute Mountain Ute Tribe ³	0	0	0	180	1	4	8	0	0	0	0	0	0	0
Virginia	73	12	3,245	81,550	426	1,838	2,765	106	1	7	0	2,999	113	2,771
Washington ³	7	0	0	14,820	2	9	17	0	0	0	0	0	0	0
West Virginia	257	58	14,514	337,360	2,155	8,092	16,309	886	90	12	11	5,363	2,813	7,676
Wyoming	28	0	1,443	393,740	35	143	262	11	0	0	0	13	1,434	192
TOTAL	1,199	268	152,712	4,453,620	7,767	31,160	52,826	3,748	350	117	34	54,387	35,320	48,828

¹ State program statistics are for the one-year period, July 1, 2007 - June 30, 2008, except where noted (Federal statistics for the States of Georgia, Tennessee and Washington, as well as for the Crow, Hopi and Ute Mountain Ute Tribes and the Navajo Nation. See Footnote 3.)

² Number of regulatory program staff as of June 30, 2008.

³ Federal statistics are for the one-year period, October 1, 2007 - September 30, 2008.

⁴ New acreage permitted includes acreage permitted for incidental boundary revisions and other revisions or amendments that add acreage, in addition to acreage for new permits.

⁵ As noted in Table 10 in Appendix A, the data reported in this column now refers to the number of violations cited within an enforcement document. In previous annual reports, this column cited the number of enforcement documents, which contain one or more violations.

Data Source: OSM Directive REG-8, Oversight of State Regulatory Programs

TABLE 11 (Fiscal Year 2008)**Regulatory Grant Funding FY 2008 Obligations ¹**

State/Tribe	FY 2008 Federal Funding	Total FY 2007 Federal Funding	Cumulative Federal Funding Through FY 2008 ²
Alabama	\$1,253,652	\$1,070,211	\$31,355,516
Alaska	\$219,164	\$183,601	\$6,674,933
Arkansas	\$141,123	\$145,457	\$4,268,283
Colorado	\$2,322,607	\$1,903,776	\$39,595,362
Illinois	\$2,646,092	\$2,025,884	\$65,594,816
Indiana	\$1,762,946	\$1,710,906	\$41,782,042
Iowa	\$83,074	\$125,378	\$3,270,080
Kansas	\$144,654	\$0	\$3,436,160
Kentucky	\$11,858,072	\$11,992,212	\$331,849,284
Louisiana	\$169,938	\$163,018	\$4,368,686
Maryland	\$716,596	\$675,538	\$14,982,626
Michigan	\$0	\$0	\$135,458
Mississippi	\$127,051	\$110,763	\$1,679,254
Missouri	\$223,650	\$245,767	\$9,405,167
Montana	\$1,227,501	\$1,023,335	\$22,660,450
New Mexico	\$850,000	\$718,290	\$16,650,711
North Dakota	\$644,571	\$533,659	\$14,194,277
Ohio	\$2,247,626	\$1,967,353	\$68,838,166
Oklahoma	\$1,112,882	\$962,173	\$23,289,791
Pennsylvania	\$12,545,785	\$10,387,573	\$271,003,786
Rhode Island	\$0	\$0	\$158,453
Tennessee	\$0	\$0	\$5,340,085
Texas	\$1,545,898	\$1,283,016	\$29,986,766
Utah	\$2,029,409	\$1,698,219	\$38,031,216
Virginia	\$4,010,342	\$3,394,421	\$85,358,137
Washington	\$0	\$0	\$4,893
West Virginia	\$11,791,029	\$11,199,595	\$180,256,767
Wyoming	\$2,318,000	\$2,064,742	\$44,823,596
Crow Tribe	\$69,360	\$29,387	\$1,292,922
Hopi Tribe	\$173,977	\$172,158	\$2,554,910
Navajo Tribe	\$677,845	\$469,273	\$6,282,127
N. Cheyenne Tribe	\$0	\$0	\$86,888
Total	\$62,912,844	\$56,255,705	\$1,369,211,608

¹ Figures shown above have been adjusted for rounding

² Includes obligations for the Applicant/Violator System, Technical Innovation and Professional Services, Kentucky Settlement, and other Title V cooperative agreements. Figures for FY 2008 do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

Data Source: Financial Business Management System

TABLE 12 (Fiscal Year 2008)

Appropriations ¹		
	2008	2007
Discretionary Appropriations		
Regulation & Technology		
Environmental Restoration	\$157,504	\$156,676
Environmental Protection	\$87,424,564	\$78,700,393
Technology Dev. & Transfer	\$15,175,510	\$14,976,460
Financial Management	\$483,340	\$482,820
Executive Dir. & Admin	<u>\$15,120,384</u>	<u>\$14,782,887</u>
Subtotal	\$118,361,302	\$109,099,236
Abandoned Mine Reclamation		
Environmental Restoration	\$33,945,065	\$167,730,244
Technology Dev. & Transfer	\$3,920,865	\$3,881,298
Financial Management	\$6,308,035	\$6,197,283
Executive Dir. & Admin	<u>\$7,776,760</u>	<u>\$7,584,038</u>
Subtotal	\$51,950,725	\$185,392,863
Total Discretionary Appropriations	\$170,312,027	\$294,492,099
Mandatory Appropriations		
Payments to States in Lieu of Coal Fee Receipts (Treasury Fur	\$186,971,452	-
Grants to States and Tribes (AML Fund)	\$87,383,721	-
Transfer to United Mine Workers Fund	<u>\$167,165,037</u>	<u>\$114,329,105</u>
Total Mandatory Appropriations	\$441,520,210	\$114,329,105
Total, OSM	\$611,832,237	\$408,821,204

¹ The appropriations figures include reprogrammings and rescissions for FY 2007 and rescissions for FY 2008. The appropriations displayed on this table do not include Civil Penalties collections: \$162,000 for 2007, and \$111,000 for 2008.

Data Source: Fiscal Year 2008 Congressional appropriations

Note: This table was formerly labelled "Table 13" in previous annual reports.

TABLE 13 (Fiscal Year 2008)		
Clean Streams Program Projects		
State	Supplemental State Grants	
	Active in 2008	Completed Since 1994
Alabama	3	8
Illinois	1	5
Indiana	1	24
Iowa	1	5
Kentucky	0	13
Maryland	5	18
Missouri	0	5
Ohio	2	26
Oklahoma	0	3
Pennsylvania	5	48
Tennessee	0	3
Virginia	0	17
West Virginia	5	0
TOTAL	23	175

Data Source: OSM Regional Offices

TABLE 14 (Fiscal Year 2008)**FY 2008 Watershed Cooperative Agreements**

State	Project Name/Description	Grant Amount
Iowa	Westercamp AML Site Pathfinders RC&D	\$ 100,000
	Wall West AML Site Pathfinders RC&D	\$ 100,000
	Edwards/ACC Wash Plant #1 Pathfinders RC&D	\$ 100,000
Kansas	Mine 19 Phase III SeeKAN RC&D	\$ 100,000
Ohio	Shawnee Steel Slag Leach Bed Project Rural Action, Inc.	\$ 67,250
	Congo Run - II Rural Action, Inc.	\$ 68,773
Pennsylvania	Bear Run Phase II Evergreen Conservancy	\$ 100,000
	Kettle Creek – Swamp Project Trout Unlimited, Inc.	\$ 100,000
	North Fork Montour Run Montour Run Watershed Association	\$ 100,000
	Morgan Run MR FROG Clearfield Creek Watershed Association (CCWA)	\$ 80,250
	Little Coon Run Project (Amendment) Western PA Coalition for Abandoned Mine Reclamation	\$ 15,000
	Little Coon Run Project (Amendment) Western PA Coalition for Abandoned Mine Reclamation	\$ 20,000
	Hubler Run Phase I Emigh Run/Lakeside Watershed Association	\$ 36,500
	Gallentine Rebuild Mountain Watershed Association	\$ 50,000
	Bear Creek 05-01 (Amendment) Cumberland Mountain, RC&D	\$ 99,000
Tennessee	Bear Creek 05-02 (Amendment) Cumberland Mountain, RC&D	\$ 98,000
	Smooth Rock Lick #1 & #2 Buckhannon River Watershed Association, Inc.	\$ 84,130
West Virginia	Smooth Rock Lick #3 Buckhannon River Watershed Association, Inc.	\$ 42,934
	TOTAL	\$ 1,361,837

Data Source: OSM Regional Offices

TABLE 15 (Fiscal Year 2008)										
Number Of Watershed Interns Taking Part in OSM/VISTA Program										
State	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Alabama	0	0	1	1	1	1	1	0	3	0
Colorado	1	0	1	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	1	1	0	1	1
Iowa	1	0	0	0	0	0	0	0	0	0
Kentucky	0	0	1	0	0	0	0	1	2	0
Maryland	1	1	1	2	2	1	2	2	1	0
Ohio	1	2	0	2	1	5	4	3	2	1
Oklahoma	1	1	0	1	0	0	0	0	0	0
Pennsylvania	5	3	6	5	7	9	8	12	5	3
Tennessee	5	3	5	4	3	1	3	1	3	1
Virginia	1	0	2	1	1	3	3	2	1	0
West Virginia	6	5	5	6	8	6	9	11	6	4
TOTAL	22	15	22	22	23	27	31	32	24	10

Data Source: OSM/Volunteers in Service to America Program

TABLE 16 (Fiscal Year 2008)		
Inventory Costs		
FY 2008		
<i>Completed</i>	<i>2.9 billion</i>	<i>23.4 percent</i>
<i>Funded</i>	<i>0.3 billion</i>	<i>2.4 percent</i>
<i>Unfunded</i>	<i>9.2 billion</i>	<i>74.2 percent</i>
<i>Total</i>	<i>12.4 billion</i>	<i>100 percent</i>

Data Source: Abandoned Mine Land Inventory System

TABLE 17 (Fiscal Year 2008)**NTTP 2008 COURSES AND ENROLLMENT**

COURSE NAME	NUMBER OF SESSIONS	STUDENTS
Acid-forming Materials: Fundamentals	1	25
AMD Workshop-MCR	1	39
AML Landslides	1	15
AML Realty	1	21
AML Reclamation Projects	1	21
AML Design Workshop: Fires	1	10
AML Design Workshop: Dangerous Highwalls	1	13
AML Design Workshop: Dangerous Openings	1	12
AML Design Workshop: Drilling and Grouting	1	13
AML Workshop: Subsidence	1	13
Applied Engineering Principles	2	37
ARRI	1	167
Blasting and Inspection	1	22
Bonding Workshop: Administrative & Legal	1	12
Bonding Workshop: Cost Estimation	1	16
Coalfield Communications	2	57
Effective Writing	3	54
Enforcement Procedures	2	33
Enforcement Tools and Applications	1	10
Erosion and Sediment Control	2	30
Evidence Preparation and Testimony	1	20
Forensic Hydrologic Investigation	2	44
Geology and Geochem of AFM	2	40
Geospatial Forum	1	143
Historic and Archeological Resources	1	15
Historic and Archeological Resources: Ref.	1	8
Instructor Training	1	16
Inspectors Workshop	1	50
IMCC/OSM Benchmarking Workshop: SGW	1	53
Master Instructor Forum	1	15
Mine Pool Workshop	1	16
NEPA Procedures	3	39
Orientation	1	30
Passive Treatment	2	39
Permit Findings	1	12
Permitting Hydrology	1	10
Principles of Inspection	2	29
Quantitative Hydrology	1	18
Sediment Workshop	1	32
SMCRA and the ESA	1	21
Soils and Revegetation	2	40
Subsidence	1	24
Surface and Groundwater Hydrology	2	39
Underground Mining Technology	1	12
Wetlands Awareness	2	41
GRAND TOTALS AS OF 09/30/08	60	1,426

Data Source: National Technical Training Program

Appalachian Regional Office

Three Parkway Center
Pittsburgh, PA 15220
(412) 937-2828
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Pittsburgh Field Division

(Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, and Rhode Island)
Harrisburg Transportation Center
415 Market Street, Suite 3C
Harrisburg, PA 17101
(717) 782-4849

Columbus Area Office

4605 Morse Road, Room 102
Columbus, OH 43230
(614) 416-2238

Johnstown Area Office

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

Charleston Field Office

(West Virginia)

1027 Virginia Street, East
Charleston, WV 25301
(304) 347-7162

Beckley Area Office

313 Harper Park Dr.
Beckley, WV 25801
(304) 255-5265

Morgantown Area Office

604 Cheat Road, Suite 150
Morgantown, WV 26508
(304) 291-4004

Lexington Field Office

(Kentucky)

2675 Regency Road
Lexington, KY 40503-2922
(859) 260-3902

London Area Office

421 West Highway 80
P.O. Box 1048
London, KY 40741
(606) 878-6440

Madisonville Area Office

100 YMCA Drive
Madisonville, KY 42431
(270) 825-4500

Knoxville Field Office

(Georgia, North Carolina, Tennessee, Virginia)

710 Locust Street, 2nd Floor
Knoxville, TN 37902
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Big Stone Gap Area Office

1941 Neeley Road, Suite 201
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OSM REGIONAL OFFICES



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Denver Field Division

(Alaska, Colorado, Utah)

Mailing Address:
P.O. Box 46667
Denver, CO 80201-6667
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1999 Broadway, Suite 3320
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Olympia Area Office

(Washington)

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

Albuquerque Area Office

(Arizona, California, New Mexico, Navajo Tribe, Hopi Tribe, Ute Mountain Ute Tribe)

505 Marquette Ave., NW
Suite 1200
Albuquerque, NM 87102
(505) 248-5070

Farmington Area Office

501 Airport Drive, Suite 208
Farmington, NM 87401
(505) 326-5291

Casper Field Office

(Idaho, Montana, North Dakota, South Dakota, Wyoming, Crow Tribe, Northern Cheyenne Tribe, Cheyenne River Sioux Tribe)

150 East B St., Rm. 1018
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(307) 261-6550

Mid-Continent Regional Office

Alton Federal Bldg.
501 Belle Street, Room 216
Alton, IL 62002
(618) 463-6460
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Alton Field Division

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Alton Federal Bldg.
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Alton, IL 62002
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Indianapolis Area Office

Milton-Capehart Fed. Bldg.
575 North Pennsylvania St.
Room 301
Indianapolis, IN 46204
(317) 226-6700

Birmingham Field Office

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Barber Business Park
135 Gemini Circle, Suite 215
Homewood, AL 35209
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Tulsa Field Office

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1645 South 101st East Avenue
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