

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior



Annual Evaluation Report for the
Abandoned Mine Land Program

Administered by New Mexico's Energy Minerals and Natural Resources Department



For Evaluation Year 2014
July 1, 2013 to June 30, 2014
Prepared by Denver Field Office
Sept 2014

EXECUTIVE SUMMARY

This Annual Report has been prepared by the Office of Surface Mining Reclamation and Enforcement (OSMRE), Program Support Division (PSD) to provide a summary of New Mexico's Abandoned Mine Reclamation Program (NMAMLP) for Evaluation Year 2014, which covers the period of July 1, 2013 through June 30, 2014. The following summary captures the highlights of this evaluation year. Specifically, this report identifies and highlights New Mexico's program administration, noteworthy accomplishments, technical assistance provided by OSMRE, and New Mexico's public participation and outreach efforts. Additionally, this report discusses the results of topic-specific evaluations performed in coordination with New Mexico's staff. Details regarding the required AML Grant and Administrative Reviews along with information NMAMLP entered into the electronic Abandoned Mine Land Inventory System (e-AMLIS) for this evaluation year are also included in this report.

OSMRE utilized two basic methods of analysis when constructing this report. The first method includes various administrative reviews that enabled OSMRE staff to accomplish the valuable oversight components such as grants and e-AMLIS. The second method performed includes communication with the NMAMLP staff and field visits that are an essential element of the agencies oversight process. This element provides insight to the actual on-the-ground reclamation that NMAMLP reported for the current evaluation year. All calculations are entered into e-AMLIS by NMAMLP staff and are utilized in this report to depict the different categories of interest. These results can be found in Tables 1-7 and Tables 1a through 5a in Section VI of this report.

Figure 1: Current AML Project Status

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Cover Page Photograph: Dillon Canyon, Vermejo Park Ranch, 2014

I. INTRODUCTION

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of and provide federal funding for the state regulatory programs and abandoned mine land programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. Title IV of the Surface Mining Control and Reclamation Act of 1977 (SMCRA or “the Act”), as amended, provides moneys to States and Tribes from the Abandoned Mine Reclamation Fund (the Fund) and the general Treasury of the United States. The Office of Surface Mining Reclamation and Enforcement (OSMRE) administers Title IV of SMCRA on behalf of the Secretary of the Interior. The primary purpose of Title IV is to pay the costs of mitigating the adverse effects of past coal mining, though it also allows AML Programs to address certain non-coal problems. On December 20, 2006, the President signed the Tax Relief and Health Care Act of 2006 (P.L. 109-432). That legislation included the Surface Mining Control and Reclamation Act Amendments of 2006 (the 2006 Act or the 2006 SMCRA amendments). The 2006 Act amended Title IV of SMCRA to make significant changes in the abandoned mine reclamation fee and the abandoned mine land (AML) program. OSMRE published final regulations implementing the 2006 Act in the November 14, 2008, Federal Register (73 FR 67576).

OSMRE awards grants to States and Tribes with moneys from the Fund and the general Treasury to pay for their administration costs and abandoned mine reclamation. SMCRA puts the highest priority on correcting the most serious AML problems that endanger public health, safety, and property. As amended, it also allows AML Programs to address certain lower priority coal problems if they are in conjunction with or adjacent to, higher priority problems. OSMRE, State, and Tribal AML Programs work together to achieve the goals of the national program. Additionally, OSMRE works cooperatively with the States and Tribes to evaluate their AML Programs.

The Secretary of the Interior approved New Mexico’s AML reclamation plan (the Plan) under Title IV of SMCRA. That approval allows the New Mexico Abandoned Mine Land Reclamation Program (NMAML) to reclaim abandoned mines in the State for non-emergency AML projects. NMAML is part of the Energy Minerals and Natural Resources Department (EMNRD). It administers New Mexico’s AML Program under the State’s approved plan. The Denver Field Division of OSMRE’s Western Region works with CIMRP to fund and approve AML projects in New Mexico and to evaluate AML reclamation and other aspects of the Program.

Directive AML-22 generally describes how OSMRE evaluates State and Tribal AML reclamation programs. Directive AML-22 was revised last evaluation year (March 28, 2013). Those revisions incorporated changes required by the 2006 SMCRA amendments, made distinctions between certified and uncertified programs, identified core program data to be reported annually, updated outreach and public participation requirements, replaced terminology

of “enhancement and performance reviews” with “topic-specific reviews,” and established the reporting cycle on the evaluation year (July 1 – June 30).

In addition to conducting oversight of approved state programs, OSMRE provides technical assistance, staff training, financial grants and assistance, as well as management assistance to each state program. This report contains summary information regarding the New Mexico’s program and the effectiveness of the New Mexico’s Abandoned Mine Land program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the Evaluation Year (EY) July 1, 2013 to June 30, 2014.

Detailed background information and comprehensive reports for the program elements evaluated during the EY are available for review and copying at the OSMRE, Denver Field Office, 1999 Broadway, Denver, CO 80202. To arrange an appointment time, contact OSMRE via telephone (303)293-5000.

The reports are also available at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. Adobe Acrobat Reader® is needed to view these documents. Acrobat Reader® is free and can be downloaded at <http://get.adobe.com/reader/>. Follow these steps to gain access to the document of interest:

1. Select New Mexico from the drop down box labeled “State”. Also select 2014 as the “Evaluation Year”, and then click “Submit”. The search can be narrowed by choosing selections under the “Keyword” or “Category” headings.
2. The oversight documents and reports matching the selected state and evaluation year will appear at the bottom of the page.
3. Select “View” for the document that is of interest and the report will appear for viewing, saving, and/or printing.

II. ACRONYMS

The following acronyms are used in this report:

OSMRE	Office of Surface Mining Reclamation and Enforcement
SMCRA	Surface Mining Control and Reclamation Act of 1977
AML	Abandoned Mine Lands
AMLIS	Abandoned Mine Land Inventory System
BLM	Bureau of Land Management
EA	Environmental Assessment
FAM	Federal Assistance Manual
FLIR	Looking Infrared Radiometer
FONSI	Finding of No Significant Impact
FTE	Full time equivalent
GCS	Geosynthetically Confined Soil
GIS	Geographic Information System
GPRA	Government Performance and Results Act
GPS	Global Positioning System
MOA	Memo of Authority
NEPA	National Environmental Protection Act
NMAMLP	New Mexico Abandoned Mine Land Program
NOV	Notice of Violation
OSM	Office of Surface Mining Reclamation and Enforcement
PA	Programmatic Agreement
PUF	Polyurethane Foam
ROE	Right of Entry
SHPO	State Historical Preservation Officer
SMCRA	Surface Mining Control and Reclamation Act
TIPS	Technology Innovation and Professional Services
UAS	Unmanned Aerial System
USFS	United States Forest Service
WR	Western Region
XRF	X-ray Florescence

III. OVERVIEW OF COAL MINING INDUSTRY in New Mexico

Coal is the most abundant fossil fuel in the world. The United States holds the world's largest estimated recoverable reserves of coal at approximately 27%. Based on current production levels, the United States has enough estimated recoverable reserves of coal to last more than 200 years. Coal production has played a significant role in the economic development of New Mexico beginning the 1850's. Today, mining companies are required to provide full bonded reclamation plans before they are able to obtain permits to mine in the State of New Mexico. But mining operations in the past were not held accountable for reclaiming disturbed land, leaving the mined areas as they were during active mining creating safety or environmental hazards.

New Mexico's Abandoned Mine Land (AML) Program is part of the Mining and Minerals Division and is responsible for reclamation of historical (pre-1977) mining-related disturbances. The Division also contains the Mining Act Reclamation Program, which permits hard rock mining operations; the Coal Mine Reclamation Program, which permits coal mining operations; and the Mine Registration and Reporting Program, which registers all active mines in the state.

To date, New Mexico's AML Program has addressed many long-abandoned mine sites. These sites contained hazardous mining features (open adits, shafts, pits and dilapidated structures) and exhibited serious erosion problems. Now many of these old mines have been safeguarded and revegetated.

The New Mexico Abandoned Mine Land (AML) Program and certain other abandoned mine land programs throughout the nation were formed by the passage of the Surface Mining Control and Reclamation Act (SMCRA) on May 2, 1977. This law places a fee on active coal mines. These monies are placed in a fund called the Abandoned Mine Reclamation Fund. This fund is used to reclaim coal mines abandoned prior to the enactment of SMCRA. Under certain conditions, abandoned non-coal mines may also be reclaimed.

As abandoned mine sites around the state are inventoried, they are evaluated to determine if they qualify for AML funding. Federal policy requires that priority one and two projects be completed first. Priority three coal projects can be completed in conjunction with priority one and two projects or after all priority one and two projects have been completed.

The three reclamation priorities are:

1. Protection of public health, safety, general welfare and property from extreme danger resulting from the adverse effects of past mineral mining practices.
2. Protection of public health, safety and general welfare from adverse effects of past mineral mining and processing practices, which do not constitute an extreme danger.
3. Restoration of eligible lands and waters and the environment previously degraded by adverse effects of past mineral mining and processing practices, including measures for the conservation and development for soil, water (excluding channelization), woodland, fish and wildlife, recreation resources, and agricultural productivity.

The New Mexico AML Program was formed in 1981 after an agreement was signed between the State of New Mexico and the Department of Interior's Office of Surface Mining (OSM). Under SMCRA, priority is to be given to reclamation of abandoned coal mines and affected lands and water. Reclamation projects can be funded on a case-by-case basis upon the request by the Governor of the State indicating that reclamation of the site is necessary for the protection of the public health, safety and general welfare from extreme danger.

To be eligible for SMCRA funding, sites to be reclaimed must have been mined or affected by mining processes and abandoned or left in an inadequate reclamation status prior to August 3, 1977 (or prior to August 28, 1974 for U.S. Forest Service administered lands; and November 26, 1980 for U.S. Bureau of Land Management administered lands). A proposed SMCRA reclamation site cannot be within an area that has been designated for remedial action under the Uranium Mill Tailings Radiation Control Act (UMTRCA) or under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

IV. OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS

The New Mexico AML Program provides opportunities for public participation and interacts with the local associations, citizens, environmental organizations and other groups to:

- Determine areas of concern and receive suggestions relative to AML reclamation; and
- Provide timely information about OSMRE activities to interested groups.

The public can also access OSMRE annual reports and Performance Agreements (PA) via the internet at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. The Introduction section of this report (page 3) details how to access information using this website.

Public participation for this year includes:

- On August 8, 9 & 10, 2013, the AML Program with its contractor, Dekker/Perich/Sabatini (DPS), conducted a series of community field design meetings in Silver City for the Boston Hill project. This follows on earlier community meetings and discussions with the community. A website has been set up for public information on the project: <http://www.emnrd.state.nm.us/MMD/AML/BostonHill/Main.html>.
- In October 2013, the AML Program and DPS made a presentation on current status of the project to the Silver City town council.
- The AML Program set up a specific website to aid in its outreach in Madrid: www.madridmininglandscape.com (which directly links to <http://www.emnrd.state.nm.us/MMD/AML/MML/>). This website includes documents generated as result of public meetings, research, etc. The last public meeting in Madrid

was held just before the start of the evaluation year, on June 28, 2013. See these webpages for the history of the AML Program's work in Madrid in the last few years.

- AML and its contractor, Environmental Planning Group, held a public meeting for its Cookes Peak project on February 18, 2014, in Deming with about 12 people in attendance.

In addition to these public meetings and presentation, the AML Program continues to keep its website updated, including the webpages solely dedicated to its work in Madrid and Silver City and information on its projects in development and completed work. The Program also continues to maintain its display booth at the N.M. State Fair in September each year. This display focuses on abandoned mine land safety and New Mexico mining history.

Significant participation with local interest groups and programs continue throughout projects. The AML Program is now working very closely with Bat Conservation International's Subterranean Program for bat habitat surveys and recommendations at underground mines. The Program also works closely with several civic organizations in Madrid, including the Madrid Landowners Association and Madrid Cultural Projects and their Oasis Project Committee (which is working to harvest stormwater at residences and businesses). In Silver City, one of the key stakeholders for the Boston Hill project has been the Gila Resources Information Project (GRIP) and the Program has received help at public meetings and with AML reconnaissance from the OSM VISTA volunteers working with GRIP.

Public participation in Madrid continues to impact the approach that the N.M. AML Program adopts in reclaiming coal gob piles in the community. Most community members see the gob piles as an integral part of the landscape of the community that they wish to preserve (although the property owners most directly impacted are less enthusiastic about leaving the gob piles alone). Since the gob piles are directly above residences, streets, driveways, and businesses in the community, erosion of the gob piles and runoff from the piles are contributing significant amounts of sediment being delivered directly to property and infrastructure and exacerbating flooding problems. Following an extreme storm event in September 2013, the potential of these problems was powerfully demonstrated by the blowout of one gob pile that carried gob debris into buildings at the privately owned Old Coal Town Museum and onto State Highway 14 and by significant flooding problems in the community. The AML Program responded within a month with temporary measures to mitigate further flooding and property damage and is now completing the first phase of permanent erosion control measures, which concentrates on stabilizing the hillslope above the museum.

Community sentiment to minimize alteration to the gob piles, which is bolstered by their historic landscape importance in an area on the National Register of Historic Places, has made reclamation difficult. Rather than removal, placement of cover soils, or in-place reclamation, the Program is limited to diverting storm flow around the gob piles and down the slopes in rock channels, plantings at the base of gob piles to capture some of the sediment coming off the gob piles, and minimal planting or seeding on the gob piles themselves. The rock channel work

underway is innovative in its approach, using step-pool structures build by experienced equipment operators and hand crews. Photos of work are available at the Madrid mining landscape website. More work remains to be done on the east hillslopes above the town and the Program will continue to seek public participation at each stage of project development.

In Silver City, community meeting and an on-site preliminary design exercise have led to the development of several key design considerations for closures on public land and open space on Boston Hill, just outside of downtown. These include designing safeguarding measures at mine openings that preserve the sites as a remnant of historic local mining, maintain a feeling of adventure for visitors, and minimize disturbance to the mine workings. The AML Program continues to develop and evaluate closure options that meet these objectives while protecting the public from the mine hazards and conserving significant bat habitat.

V. MAJOR ACCOMPLISHMENTS AND INNOVATIONS

This year marks the 33rd anniversary of the abandoned mine land program in the State of New Mexico. The maturation of the program has helped protect the public and minimize environmental impacts within New Mexico.

Over the past year, OSMRE monitored State of New Mexico Abandoned Mine Land Program (NMAMLP) performance in meeting the goals and objectives of the approved state program. Once again, OSMRE finds that NMAMLP is successful in implementing its abandoned mine land program. A list of the oversight reviews used to reach this conclusion is included in Section VII of this report. OSMRE looks forward to working cooperatively with NMAMLP during the next year.

Work at Vermejo Park Ranch has the gained national interest in geomorphic reclamation and some of the lessons learned, as well as the AML Program’s post-completion mapping of the Swastika Mine site on Vermejo Park Ranch using an unmanned aerial vehicle system.

The most successful innovative approaches for the NMAMLP have been its use of unmanned aircraft system (UAS) for mapping and analysis purposes. The NMAMLP is exploring remote sensing techniques to monitor change in land cover and stream morphology at



Figure 1: The Trimble UX-A Aerial Imaging Rover used in areal mapping.

reclamation projects. Unmanned aircraft systems (UAS) promise high resolution imagery, flexible deployment, and relatively low cost at focused areas. NMAMLP examined the use of an UAS to supplement revegetation and stream channel morphology monitoring at the Dillon and Dutchman Canyons, once part of a larger coal mining site, on Vermejo Park Ranch in northern New Mexico. As a result of NMAMLP geomorphic reclamation work,

meanders and dynamic stability have been restored to sections of streams once straightened and degraded by historic coal mining practices. Coal waste had been redistributed and covered with

topsoil by earth moving equipment, drainages added, and conditions created to reestablish wetlands to mitigate net loss. Seeding, planting, and natural establishment of native plants were used in the process of revegetation.

A Trimble UX5 Aerial Imaging Rover, fixed wing UAS with 1 meter wing span and electric pusher propeller (figure 1), was deployed at the site in August 2014. A 16.1 MP compact camera with custom 15mm lens was used to take high-resolution images along a programmed flight-path over the 0.16 square mile reclamation in approximately 30 minutes (figure 2). The resulting data will be used to map topography of the post-construction reclamation as well as assist in revegetation mapping. A large number of overlapping mono ortho-imagery taken by the UX5 was used to generate a point cloud of XYZ values after photogrammetric processing. Ground control produced a mean $0.44 (\pm 0.23)$ foot vertical

accuracy and sensor resolution of 0.13 foot horizontal accuracy. One foot contours were then created from the topographic model. Vegetation height can be summarized from the point cloud which was attributed with RGB values of the images (figure 3) by subtracting the elevation between points classified as bare ground and vegetation. These high resolution aerial images will also aid subsequent vegetation classifications of a WorldView2 satellite image (eight bands) purchased by OSMRE Technical Innovation and Professional Services, acquired within two weeks of the UAS deployment. Ground validation included vegetation sampling and stream channel cross-sections (figure 3). The increased spatial resolution of a UAS compared to both traditional aerial photogrammetry and satellite imagery we expect will add significant value to reclamation monitoring as well as detection of mining and archaeological features.

The NMAML P expects to continue to monitor bats pre- and post-closure and will continue its collaboration with Northern Arizona University (NAU) at two sites in Cookes Peak. NAU completed pre-closure surveys at two mine openings, where the Program plans to have bat compatible gates installed shortly, and NAU will monitor post-closure response by bats. The Program is beginning to evaluate the results of the unmanned aerial system mapping at the Swastika Mine site, including using the digital elevation models to design channel stabilization measures as maintenance to the original construction and as a tool for evaluating revegetation success. The Program also expects to continue to build on its community outreach and

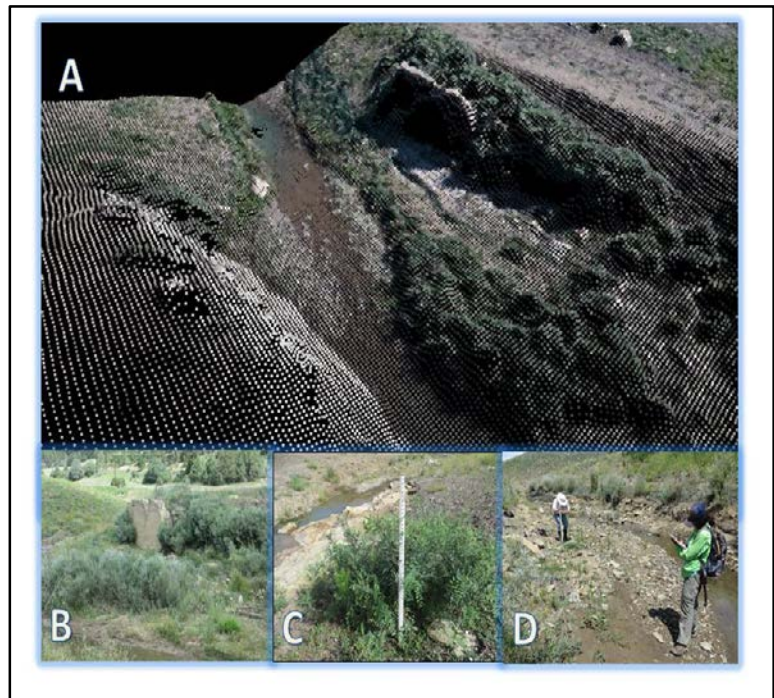


Figure 2: A.) Point cloud of XYZ locations and RGB imagery values of a section of stream in Dillon Canyon. B.) Photo on the ground same section. C.) Data validation of vegetation species, height, and GPS location. D.) Stream cross-section to compare with topographic surface model.

participation efforts in Madrid and Silver City for future design and construction projects in those communities.

Although there have been challenges throughout the year, NMAMLP continues to achieve success. Some descriptions of those challenges can be found above in the descriptions above of the use of UAS for mapping and community outreach. In addition, the AML Program has received over \$2.7 million in funding from the BLM over the last five years. In order to be able to meet the increased work load demand resulting from already granted and anticipated future BLM funding, the AML Program plans to add an engineer to its staff within the next year. Since July of last year, the N.M. Program has completed several construction projects. In Orogrande in the south central area of New Mexico, north of El Paso, Texas, an AML installed horizontal bat gate had been vandalized and then repaired by the claim holder in such a way that the opening was rendered unusable by bats. In July 2013, the original octagonal lift-off gate was replaced by a square hinged bat gate, using the same outer frame. Hinged gates are recently becoming NMAMLP's design standard for human access.

Oscura maintenance repair is another small maintenance project, to close a previously backfilled coal adit had reopened at some point. In August 2013, the adit was closed with a short horizontal corrugated steel pipe culvert with bat gate inside a polyurethane foam plug with rock facing. Other than the on-site rock, all materials were carried over a quarter mile to the site by hand because of access restrictions.



Figure 3: Oscura before and after maintenance.

A large mine safeguard project was completed in October 2013 at the Cleveland Mine, north of Silver City in southwestern New Mexico. The project includes several horizontal bat gate build over shafts. The hillslopes around several of the shaft closures are supported with geosynthetically confined soil (or GCS) retaining walls with concrete masonry unit facing. GCS is a low-cost, high strength, easily constructed method for retaining walls. Compacted granular fill is placed in eight-inch lifts separated by standard geotextile layers. The project consisted of backfilling 17 mine features, constructing three polyurethane foam closures, one culvert with bat gate, one adit bat gate with hinged access door, and eight horizontal bat gates (for a total of 30 closures). Final construction cost was \$452,000.

A second large mine safeguarding project at the Bradley Mine and nearby areas near Deming in southern New Mexico was completed in November 2013 and safeguarded 29 mine openings. The project included backfilling of eight features, construction of one PUF plug, four culverts with bat gates, one bat gate in rock bulkhead, five mesh closures, three adit bat gates, five bat cupolas, one horizontal bat gate, and one steel picket fence around a large stope opening.

Final construction cost was \$503,000. The Bradley Mine project was completed in November 2013.



Figure 2: Bradley Group Mine Safeguard Phase 1

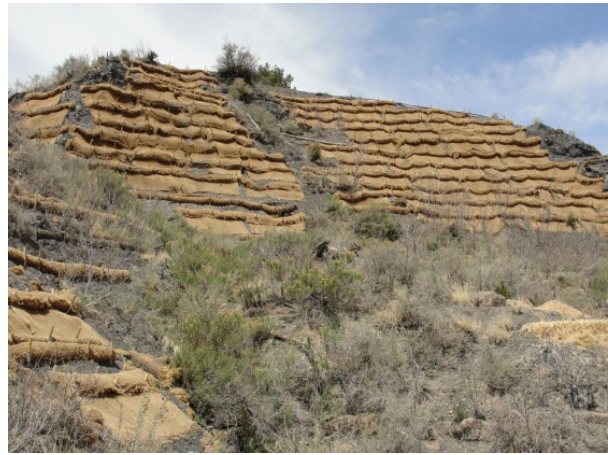


Figure 3: Sugarite Gob Reclamation Phase VIII

The Program currently has two projects under construction. In Sugarite Canyon State Park, it continues with its multi-year, multi-phase project to reclaim in place 22 acres of extremely steep coal gob piles. The eighth phase of construction includes installation of additional straw bale and coir roll terraces, coir blocks on the most extreme steep slopes, sediment barrier dams, and seedling planting to further stabilize slopes at four gob piles worked on over the last dozen years. The slope with coir blocks shown in Figure 5 is steeper than 1:1 and is the remnant head scarp of a landslide in the 1980s. Seedlings are closely planted along the top edges of the blocks. Additional work is concurrently underway in nearby Yankee Canyon to repair damage to reclamation resulting from a wildfire in 2011. This phase of work, which is expected to be the final phase at the Sugarite and Yankee sites, was completed in early August at a cost of \$513,000.

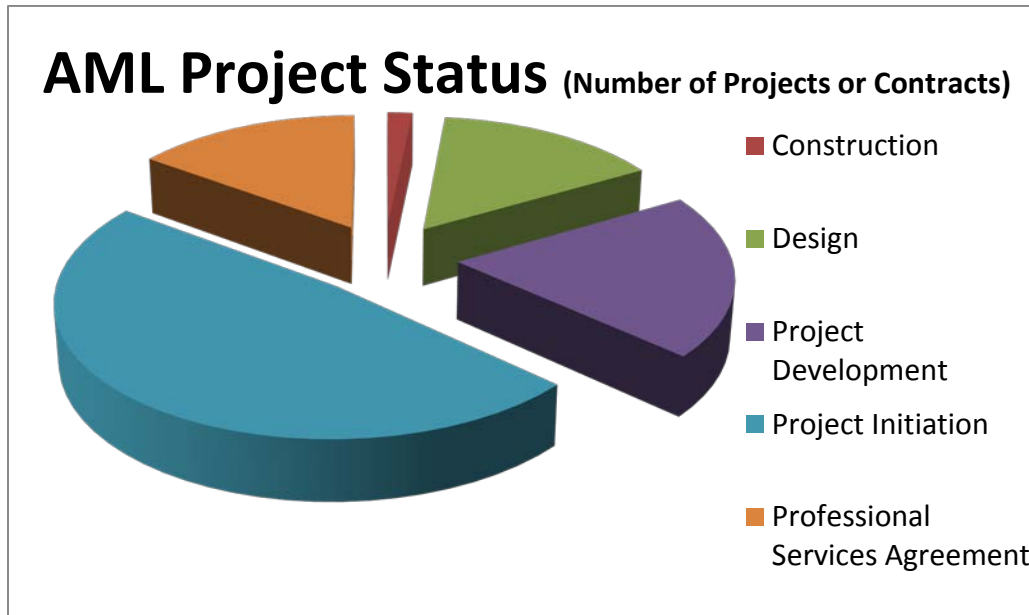
In June of this year, construction started on an erosion control project on steep hill slopes in Madrid, south of Santa Fe. Last September, during the large storms that hit Colorado and New Mexico, one of these gob piles blew out, sending gob into buildings at the Old Coal Town Museum and across the state highway. Shortly afterwards, the NMAMLP spent \$96,000 on an accelerated preliminary response for immediate protection of public health and property.



Figure 4: Recently completed, this Zuni bowl drop-structure was constructed for erosion control around the edge of a gob pile in Madrid.

Because residents of the town want to see the gob piles left largely undisturbed and the project had to be constructed with no adverse impacts to cultural resources, including preservation of the mining landscape viewshed, the focus of this stabilization project was to divert stormwater around the gob piles in rock lined

channels and swales and to stabilize erosion directly on two previously reclaimed gob piles using low rock structures. Both machines and hand work was done to build the rock structures. The permanent erosion control work was completed in early September at a cost of \$705,000.



VI. OSMRE ASSISTANCE

OSMRE provides technical assistance and technology support to state Regulatory and AML Programs at the individual state level on project specific efforts, and at the national level in the form of national meetings, forums, and national initiatives. The OSMRE provides direct technical assistance in project and problem investigation, developing technical guidelines, training and support. OSMRE initiated a regional Technology Transfer Team in 2004 to support and enhance the technical skills needed to operate regulatory and reclamation programs which each state, including New Mexico has a representative. Program staff member have completed a variety of classes TIPS offered this year in their respective areas such as: Galena Slope Stability Analysis, ARCGIS Spatial Analyst: For Mining and Reclamation; Introduction to GIS for Mining and Reclamation I.

In addition, TIPS deployed the FLIR 660 Infrared Camera to the State of NMAMLP to conduct bat counts in mine shafts on reclaimed AML sites. The XFR was deployed as well to evaluate soil contamination. New Mexico had a representative on the Geomorphic Reclamation Workshop planning committee, the in-situ working group and monthly Western Region Technical Training conference calls. The TIPS Remote Sensing team ordered and processed satellite imagery for several mine sites in New Mexico. This imagery will be used by both the State of New Mexico Energy, Minerals and Natural Resources Department and the WR-OSMRE Program Support Division. The NMAMLP submitted two “Success Stories to TIPS based on their recent usage of TIPS software. One is the “New Mexico Coal

Mine Reclamation and Reclamation and Abandoned Mine Land Programs, Mining and Minerals Division, Apply Updated GPS Units to Project Workflows” and the other is “Bat Habitat Use In New Mexico Abandoned Mines: Using GIS To Plan Monitoring.” Both stories can be found on the TIPS website: http://www.tips.osmre.gov/newsroom/success_stories.shtml.

Title IV: Summary of Core Data to Characterize the AML Program
New Mexico Annual Evaluation Report

Evaluation Year 2014

APPENDIX 1, Part B

Summary of Core Data to Characterize the AML program

The following tables present summary data pertinent to abandoned mine land activities under the New Mexico AML program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of New Mexico performance are available for review in the evaluation file maintained by OSMRE. Because of the enormous variations from state to state and the differences between state programs, the summary data should not be used to compare one state to another.

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Table 1 –New Mexico Status of AML Inventory all Priority 1, 2, and 3 Hazards on June 30, 2014					
	High Priority		Elevated Priority 3	Stand-Alone Priority 3 (Not adjacent or in conjunction w/ P1&2)	Total
	Priority 1	Priority 2			
UNFUNDED					
GPRA Acres	4.1		N/A	184.2	188.3
Dollars	487,556		N/A	6,717,020	7,204,576
FUNDED					
GPRA Acres	1.6		12.4	45.0	46.6
Dollars	54,936		911,497	1,523,454	1,578,390
COMPLETED					
GPRA Acres	131.9		86.9	347.7	479.6
Dollars	8,303,550		2,518,094	11,953,400	20,256,950

Table 2 - New Mexico Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards

As of June 30, 2014

PROBLEM TYPE (keyword)												
	Clogged Stream (CS) (miles)	Dangerous Pile or Embankment (DPE)(acres)	Hazardous Equip./Facilities (HEF) (count)	Hazardous Water Body (HWB) (count)	Portal (P) (count)	Polluted Water:Agri/Industrial (PWA)(count)	Polluted Water: Human Consumption (PWHC)(count)	Subsidence (S) (acres)	Surface Burning (SB) (acres)	Underground Mine Fire (UMF) (acres)	Vertical Opening (VO) (count)	TOTAL
UNRECLAIMED/REMAINING HAZARDS (Unfunded)												
Units		39.0	15.0	1.0	48.0	2.0	0.0	2.0	1.0	1.0	16.0	N/A
GPRA Acres		39.0	1.5	5.0	4.8	10.0	0.0	2.0	1.0	1.0	1.1	65.4
Dollars		2,487,160.0	447,500.0	5,000.0	735,000.0	130,000.0	0.0	217,556.0	700,000.0	250,000.0	266,000.0	5,238,216.0
ANNUAL RECLAMATION - EY2014 only (Completed)												
Units	1.0	30.0			2.0	2.0						N/A
GPRA Acres	1,200,000.0	1,200,000.0			23,991.0	1,300,000.0						2,523,991.0
Dollars	5.0	30.0			0.2	10.0						40.2
HISTORICAL RECLAMATION - EY1978 - 2014 (Completed)												
Units	2.5	41.5	16.0	0.0	252.0	2.0	1.0	45.0	35.0	32.0	83.0	N/A
GPRA Acres	15.0	41.5	1.6	0.0	25.1	10.0	5.0	45.3	35.0	32.0	8.3	203.8
Dollars	1,355,000.0	2,178,397.0	118,840.0	0.0	1,170,563.0	1,300,000.0	1,728.0	2,945,117.0	696,036.0	234,984.0	820,980.0	9,466,645.0

Table 3 - New Mexico Accomplishments in Eliminating Environmental Problems Related to Past Mining Priority 3 and SMCRA section 403(b) Hazards As of June 30, 2014

PROBLEM TYPE (keyword)										
	Bench , Solid Bench, Fill Bench (BE) (acres)	Equipment and Facilities (EF) (count)	Gob (GO) (acres)	Haul Road (HR) (acres)	Mine Opening (MO) (count)	Pit, Open Pit, Strip Pit (PI) (acres)	Spoil, Spoil Bank (SA) (acres)	Slurry (SL) (acres)	Water (WA) (gallons)	TOTAL
UNRECLAIMED/REMAINING HAZARDS (Unfunded)										
Units	9	2	131	8	15	0	39.5	0	3	N/A
GPRA Acres	9	0.2	131	8	1.5	0	39.5	0	0	0
Dollars	360000	20000	4540020	320000	87000	0	1540000	0	50000	0
ANNUAL RECLAMATION - EY2014 only (Completed)										
Units			25	5						N/A
GPRA Acres			25	5						0
Dollars			668131	10000						0
HISTORICAL RECLAMATION - EY1978 - 2014 (Completed)										
Units	3	11	103.5	34.5	13	2	2	2	0	N/A
GPRA Acres	3	1.1	102	34.5	1.3	2	2	2	0	0
Dollars	7301	13634	3808775	1833143	123540	3890	2301	1		0

**Table 4 - New Mexico Public Well-Being Enhancement
 (All Priority 1, 2, and 3 AML projects completed during EY 2014)**

#	PAD Number	Project Name	Problem Type(s) Reclaimed	GPRA Acres	Cost	Number of People with Reduced Exposure Potential (State Estimated /or/ Census Data)
1	NM000008	Swastika/Dillon Canyon	CS,DPE,GO,HR,P,PWAI	75.1	4485131	22
2	NM000049	Oscura	P	0.1	6991	3
3						
4						
5						
6						
7						
8						
9						
10						
TOTAL				0	0	0

Figure 5: Number of Full Time Employees

