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DIVISION OF MINERALS**

**NEVADA ABANDONED  
MINE LANDS REPORT  
2009**



By  
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**Mike Visher – Chief, Abandoned Mine Lands Program**  
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**NEVADA COMMISSION ON MINERAL RESOURCES**  
**Division of Minerals**

The Nevada Division of Minerals, a part of the Commission on Mineral Resources, is responsible for administering programs and activities to promote, advance, and protect mining and the development and production of petroleum and geothermal resources in Nevada. The Division's mission is to conduct activities to further the responsible development and production of the State's mineral resources to benefit and promote the welfare of the people of Nevada. The seven-member Commission on Mineral Resources is a public body appointed by the Governor and directs mineral-related policy for the Division and advises the Governor and Legislature on matters relating to mineral resources. The Division focuses its efforts on three main areas: Industry relations and public affairs; regulation of oil, gas, and geothermal drilling activities and well operations; and abandoned mine lands.

The agency is involved in a wide array of activities relating to mineral development. Staff compiles annual data on all active mines in Nevada and maintains the State's mine registry. Information concerning mining operations and production is made available to the public through this yearly publication. Educational documents and materials concerning many aspects of the minerals industry are also produced. The Division participates in governmental activities affecting policies and laws concerning the minerals industry and resource development. The Division administers the State's reclamation bond pool.

The Division is responsible for permitting, inspecting, and monitoring all oil, gas, and geothermal drilling activities on both public and private lands in Nevada. Staff also monitors production of oil, gas, and geothermal resources to insure proper management and conservation. The Administrator is the Governor's Official Representative to the Interstate Oil and Gas Compact Commission.

The Division's abandoned mine lands program provides for public safety by identifying and ranking dangerous conditions at mines that are no longer operating, and by securing dangerous orphaned mine openings. The program continually urges the public to recognize and avoid hazardous abandoned mines.

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## Executive Summary

The State of Nevada's Abandoned Mine Lands (AML) program entered its 24<sup>th</sup> year in 2009. Key points for the program in 2009 include the following:

- One reported injury involving a dog who fell down an inclined shaft, and rescued ten days later, in Esmeralda County.
- The total number of AML hazards discovered and ranked since the beginning of the program reached 14,672 hazards. The total number of hazards currently recorded as secured reached 10,458.
- 930 hazards were discovered and ranked in 2009, an 11.8% decrease from 2008.
- 883 hazards were secured in 2009, a 50.7% increase from 2008. Mining claimants and private property owners secured 242 hazards. 374 orphan hazards (hazards located on public land where no claimant or property owner exists) were secured by Nevada Division of Minerals (NDOM) staff, contractors and volunteers, an increase of 29.9% compared to the 288 securings in 2008.
- Public awareness activities: 229 presentations brought the "Stay Out and Stay Alive" message to nearly 7,000 people. These included classroom presentations, other school and community functions, and smaller special interest groups. Students and teachers were given brochures, bumper stickers, magnets, "hard hat" stickers, temporary tattoos, and pencils bearing the "Stay Out and Stay Alive" message. A total of over 79,000 AML brochures were distributed to every 4<sup>th</sup> and 8<sup>th</sup> grade student in the state and the "Stay Out and Stay Alive" video was sent to all new schools in the state.
- The Summer Intern Program included 8 students in 2009. The interns were all students from the Mackay School of Earth Sciences and Engineering, University of Nevada, Reno.
- 57 hazards were secured and 8 previously secured hazards were repaired by 14 Eagle Scout candidates in 2009. Since 1992, 108 Scout projects have been completed resulting in 545 secured orphan hazards and 68 repairs to existing fences.
- The Division met or surpassed both of the AML performance indicators approved by the State Legislature. Total secured hazards divided by total discovered hazards was 71.3% (70% required) and total public awareness presentations averaged 22.9 per staff member (12 required).
- Total dedicated funding for the AML program from mining claim filings, fees on permitted surface disturbance associated with new mining operations on public lands, and Bureau of Land Management (BLM) grants totaled \$713,403 in fiscal 2009, as compared with \$371,705 in fiscal 2008.

## Program Background

Nevada's geology provides ideal conditions for the deposition of a large variety of valuable and useful minerals. These mineral deposits have attracted the attention of miners and prospectors for over 150 years. The hearty souls who searched across the state exploring for this vast mineral wealth left behind a legacy of shafts, adits, glory holes, stopes, mill sites and other features that are potentially dangerous to unwary or curious people and to wild and domestic animals. Over time, most of the mine openings have become unstable because of exposure to the elements and decay of support timbers. It is estimated that 200,000 to 300,000 of these mining-related features exist in the state. Of these, the Division estimates that 50,000 are significant hazards that require some type of securing. Appendix A lists the hazards discovered and hazards secured by the AML program from 1987 through 2009 and includes a map showing the location of hazards discovered and secured in 2009.

The State of Nevada AML program was created by the Nevada Legislature in 1987 in response to a number of incidents, both fatal and nonfatal, that had occurred in abandoned mine openings. Table 1 shows a 39-year history of reported incidents related to abandoned or idle mines. The legislation placed the program with the NDOM and mandated two primary functions: 1) Investigation and inventory of mining-related openings and structures at mining sites that are currently idle or abandoned, and 2) Development and maintenance of an aggressive public awareness campaign to educate the public about dangerous conditions that exist as a result of historic mining activities. The primary Nevada Revised Statutes (NRS) governing the AML program can be found in Appendix B.

In 1989, the Nevada Legislature expanded the program to include the responsibility of securing hazardous conditions on open public lands where no claimant or property owner could be identified (so-called "orphan" mine openings). The legislation also provided an opportunity for companies, individuals, and civic groups to voluntarily assist the program in securing orphan mine openings under a designated Good Samaritan law (NRS 41.0331). See Appendix B.

The AML program is administered under Nevada Administrative Code (NAC) 513. The pertinent regulations can be found in Appendix C. Sections 513.320 through 513.360 provide for the openings or structures to be given a hazard ranking based on the location and type of feature. The regulations also require that land ownership status be conducted at the county courthouse to determine whether a current claimant or landowner is responsible for abating hazardous conditions on lands under their control.

The AML program is primarily funded by fees on mining claim filings. The county recorder collects the fees for the Division at the time the claims are filed. The program is also funded by a fee paid by mining companies or individuals for new operations or expansions occurring on public lands. In 1995, the Division entered into a cooperative agreement with the BLM. Under this agreement, which was renewed in 2005, the BLM has provided a yearly assistance grant to enhance and accelerate both field investigation activities and work performed by staff and volunteers to secure orphan hazards.

**Table 1. Reported AML Incidents through 2009**

<b>Date</b>	<b>NEVADA DIVISION OF MINERALS Reported Abandoned Mine Lands Incidents</b>	<b>County</b>
5/1971	Male juvenile (15) injured in fall down 200 ft. deep mine shaft on Duck Hill	Carson City
4/1975	Two male juveniles killed when motorcycles fall into mine shaft near Searchlight	Clark
12/1978	Juvenile killed in fall down mine shaft (Ninety-Nine Mine), body never recovered	Clark
4/1979	Two teenagers killed in fall down mine shaft (Oest Mine)	Lyon
2/1986	Young adult male (20) killed in fall down winze in adit	Lyon
5/1987	Female child (5) injured in fall down 35 ft. deep mine shaft	Washoe
9/1988	Body of elderly male found at bottom of mine shaft	Lyon
9/1989	Male adult seriously injured in fall down winze in mine near Henderson	Clark
3/1990	Male juvenile lost for 19 hours in mine shaft near Tonopah old Mizpah mine	Nye/Esmeralda
5/1990	Dog killed in mine shaft MGL Mine – Winn. Dry Lake	Humboldt
2/1991	Male adult (40) killed in fall down mine winze	Douglas
5/1991	Male juvenile (13) injured (minor) in fall down 20 ft. deep mine shaft	Washoe
12/1991	Male adult (44) killed in fall down mine winze	Lyon
9/1992	Female adult (28) injured (cuts and bruises) in fall down mine shaft Hot Springs Mtn.	Douglas
10/1992	Male adult (27) news reporter injured in dynamite blast in mine west of Winnemucca, NV	Humboldt
1/1993	Dog rescued from 25 ft. deep shaft	Humboldt
11/1993	Dog rescued from 30 ft. deep mine shaft near Iron Mtn. Estates	Storey
6/1995	Male adult (30) killed while scuba diving in mine shaft filled with water Per 6/5/1995, Winnemucca New Article, happened at the old Crown Copper UG Mine.	Humboldt
3/1996	Male adult (31) injured in fall down mine winze on west side of Las Vegas	Clark
9/1996	Two male adults (35) killed in mine adit near Virginia City by suffocation	Storey
10/1996	Male (16) killed in fall off ATV at American Flats millsite	Storey
4/1997	Two male adults (50's) injured in fall down hand dug well in town of Luning	Mineral
7/1998	Male adult (20's) slightly injured in fall down mine winze in Brougner Divide Mine	Esmeralda
9/1998	Dog rescued from 20 ft. deep mine shaft	Douglas
10/1998	Two male adults seriously injured in fall down 50 ft. deep mine winze near Las Vegas	Clark
6/1999	Male juvenile (15) drowned swimming in open pit lake	Lander
10/1999	Female juvenile (11) killed in fall down 130 ft. deep mine shaft near Beatty	Nye
11/2000	Dog rescued from fall down 40 ft. mine shaft. Moderate injury to hip	Storey
12/2000	Dog rescued from fall down 60 ft. winze. Minor injury to hip	Pershing
7/2002	41 year-old male drowned swimming in open pit lake	Storey
10/2002	37 year-old CA male received severe injuries from fall down 25 ft. winze	Clark
1/2003	Dog fell down shaft	Humboldt
1/2003	62 year-old man received minor injuries from fall down 25 ft. winze (same as 10/2002)	Clark
4/2004	30 year-old man received moderate injuries from fall down 25 ft. winze near Las Vegas	Clark
5/2005	Woman of unknown age, received cuts and bruises from fall down a 35 ft. winze in Carson City	Carson
5/2006	Dog rescued from 22 foot-deep mine shaft	Washoe
5/2007	Adult male (mid-20's) injured in ~200' fall down inclined winze	Clark
5/2007	Adult male (63) suffered fatal injuries after rolling his Jeep into the Loring Pit, Virginia City	Storey
8/2008	Adult male (58) injured in 50' fall down inclined winze	Esmeralda
9/2008	Dog reportedly fell down 100' shaft, not recovered	Washoe
10/2008	Adult male (62) suffered fatal injuries after falling 60' down a winze	Lyon
5/2009	Dog fell down inclined shaft, rescued 10 days later	Esmeralda

In compliance with NRS 513.094.2, the Division notifies county commissions of hazardous conditions discovered in their counties, on an on-going basis by: 1) providing copies of notification letters sent to claimants requesting that hazardous conditions located on their claims or property be secured, and 2) providing documentation of orphan hazards identified and ranked within a week of determination of orphan status.

If a claimant fails to notify the Division of completion or of their intention to secure hazards within the timeframe specified in NAC 513.380, their file is turned over to the appropriate county commission per NRS 455.030 and 455.040. The county is authorized to take appropriate enforcement action, which may include warnings issued by the county sheriff, securing work performed under direction of the county at the owner's expense, and possible fines of up to \$250 per violation.

## **Abandoned Mine Incidents in 2009**

There was one abandoned mine incident reported in 2009. In May, a dog was injured when it fell approximately 50 feet down an inclined shaft in Esmeralda County.

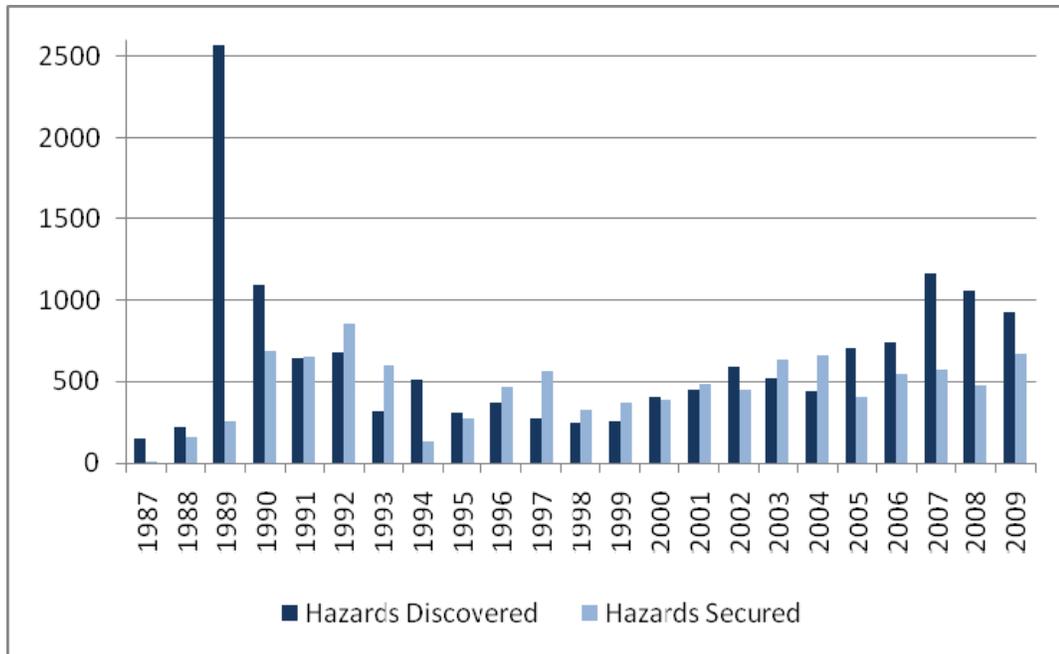
## **Discovery and Securing**

From the beginning of the AML program in 1987 through December 31, 2009, 14,672 hazards have been discovered and ranked and 10,458 hazards (claimed, owned, and orphans combined) are currently recorded as secured. Figure 1 is a graph of hazards discovered and ranked and hazards secured for 1987 through 2009. Table 2 is a county-by-county listing of hazards discovered and secured since the beginning of the program. The number of hazards secured represents 71.3% of all hazards discovered to date.

Of the 10,458 hazards currently secured, 785 (7.5%) are ranked high, 3,024 (28.9%) are ranked moderate, 4,887 (46.7%) are ranked low, and 1,762 (16.8%) are ranked minimal. Figure 2 is a pie chart showing the percentage distribution of secured mine openings by hazard rank.

Of the 10,458 secured hazards, 4,020 (38.4%) are orphans, ranked as follows: 164 (4.1%) high, 986 (24.5%) moderate, 1,999 (49.7%) low and 871 (21.7%) minimal. Figure 3 is a pie chart showing the percentage distribution of secured orphan mine openings by hazard rank. The difference between total securings and orphan securings is 6,438, which represent the very significant (61.6%) contribution to the program by the mining industry, claimants, and landowners.

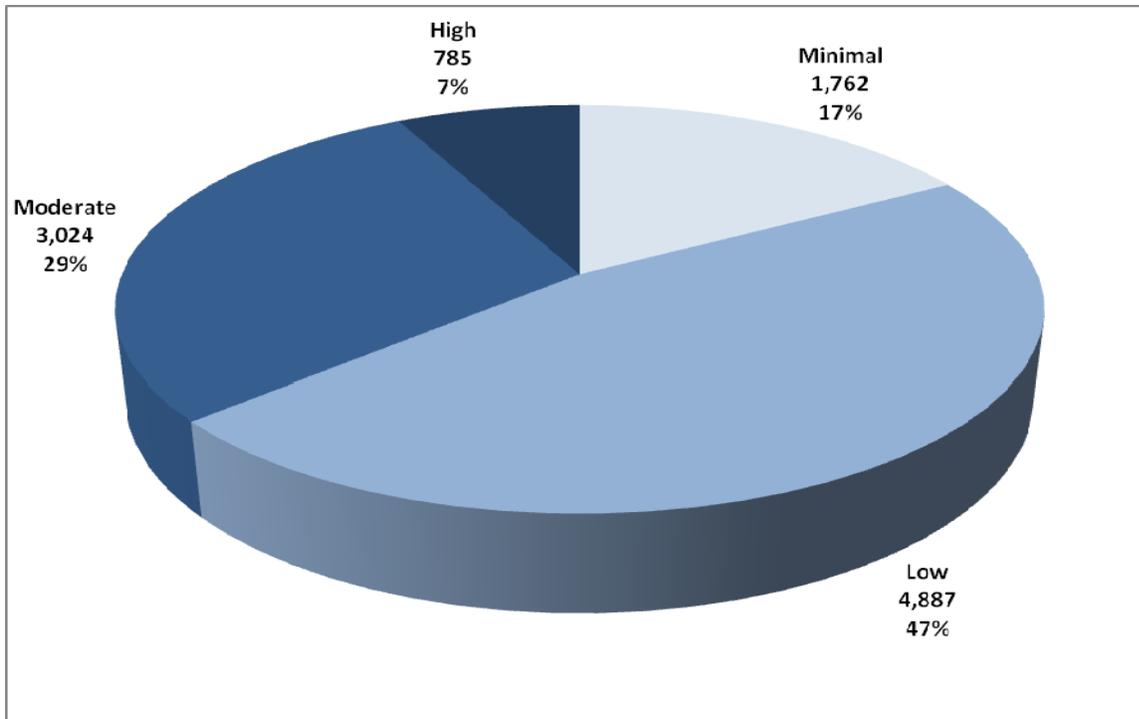
The total number of hazards discovered and ranked during 2009 was 930 compared with 1,054 hazards discovered and ranked in 2008; a decrease of 11.8%. Of the 930 hazards discovered, 169 were determined to be orphans, 309 were determined to be on leased claims or private property, and 452 require ownership research. Of the 930 hazards discovered in 2009, 18 (1.9%) were ranked high, 183 (19.8%) moderate, 423 (45.5%) low, and 306 (32.9%) minimal. Figure 4 is a pie chart showing the percentage distribution of hazards discovered in 2009 by hazard rank.



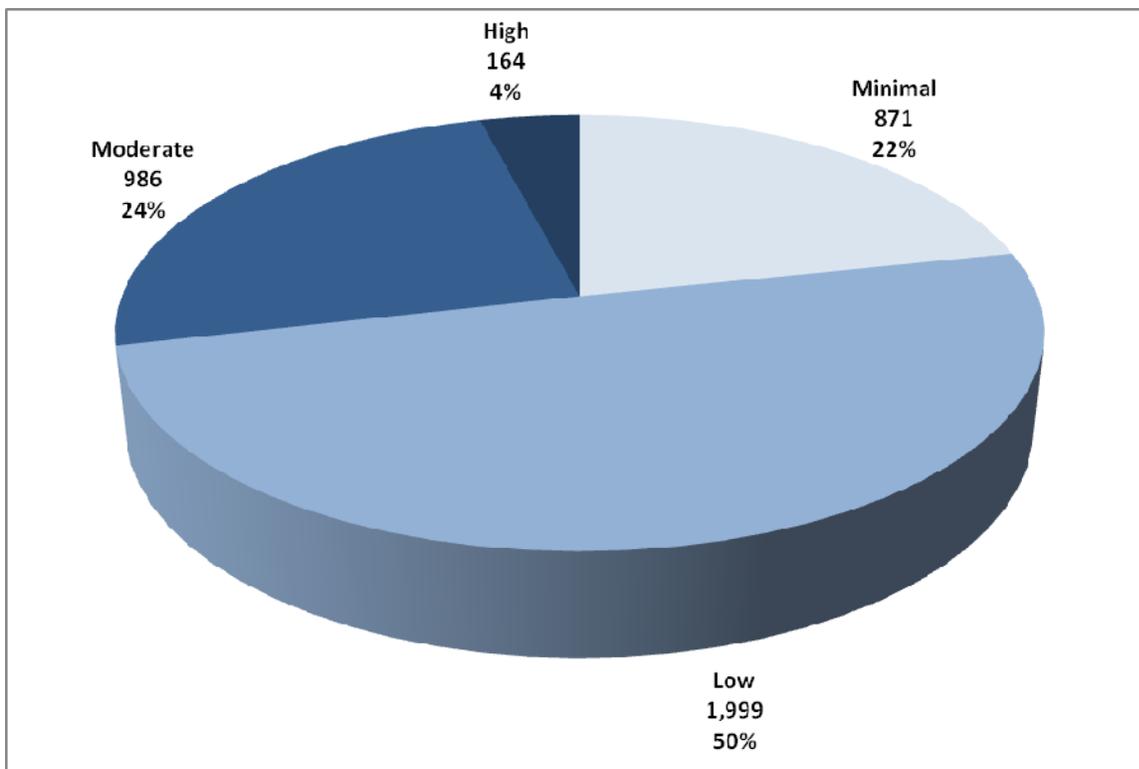
**Figure 1. Hazards Discovered and Hazards Secured on an Annual Basis from 1987 to 2009**

**Table 2. County-by-County Hazards Discovered and Secured from 1987 through 2009.**

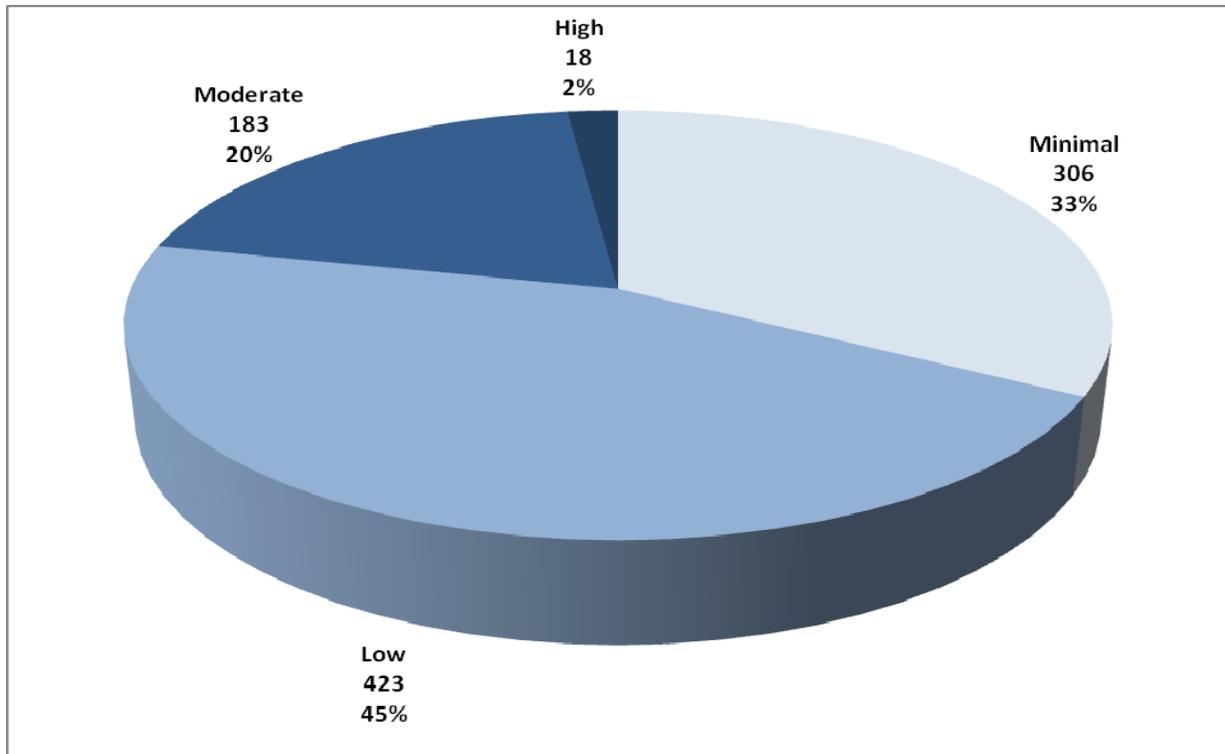
<b>COUNTY</b>	<b>HAZARDS DISCOVERED</b>	<b>HAZARDS SECURED</b>
Carson City	75	72
Churchill	498	387
Clark	2,073	1,427
Douglas	182	137
Elko	425	325
Esmeralda	2,049	1,481
Eureka	709	613
Humboldt	696	514
Lander	458	332
Lincoln	599	473
Lyon	901	670
Mineral	1,236	1,068
Nye	1,989	1,231
Pershing	1,133	759
Storey	177	126
Washoe	380	348
White Pine	1,092	495
<b>TOTAL</b>	<b>14,672</b>	<b>10,458</b>



**Figure 2. Distribution of Currently Secured Mine Openings by Hazard Rank 1987 through 2009. Total: 10,458**

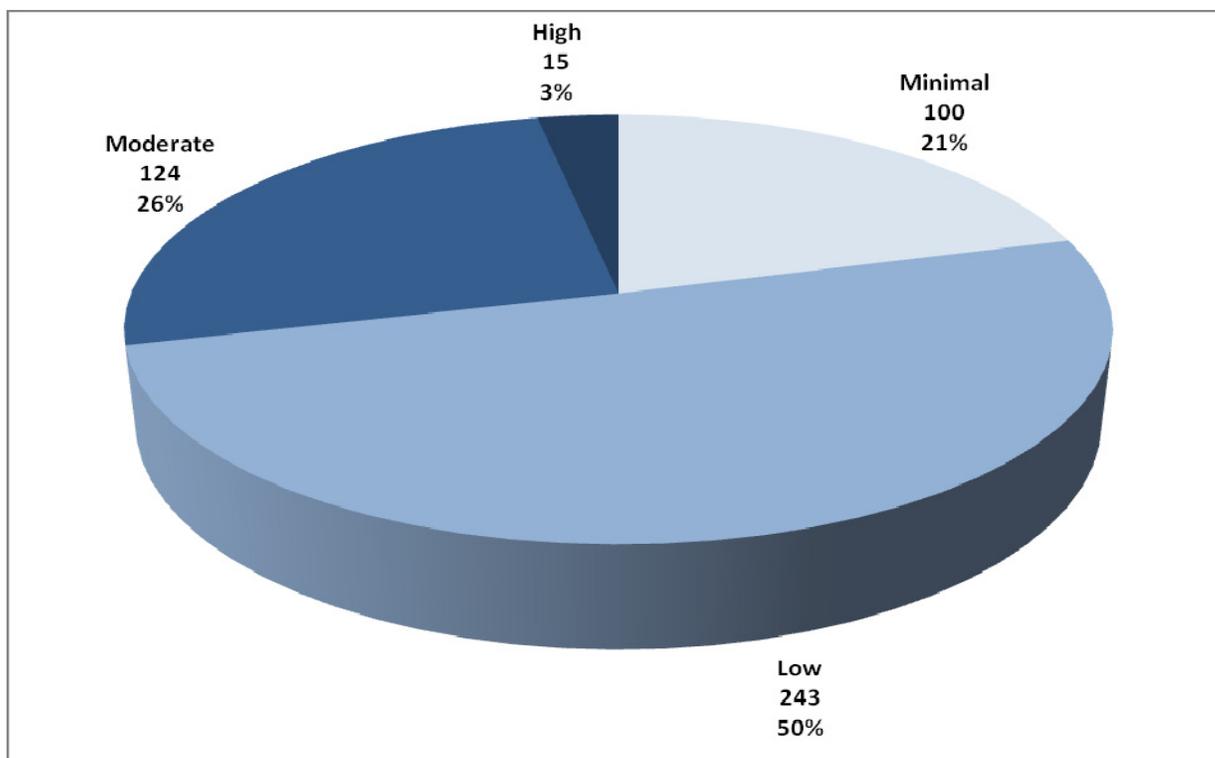


**Figure 3. Distribution of Currently Secured Orphan Mine Openings by Hazard Rank 1987 through 2009. Total: 4,020**



**Figure 4. Distribution of Discoveries by Hazard Rank 2009**  
**Total: 930**

The total number of sites secured during 2009 was 883 compared to 586 in 2008, a 50.7% increase. Of the 883, 306 were secured by NDOM staff and summer interns, 242 were secured (or discovered as secured) by claimants and owners of patented claims and private land, 64 were secured by volunteers and other Good Samaritans, 141 were secured by a contractor, 61 were secured by the Bureau of Land Management, 35 were secured by U. S. Forest Service personnel, nine were secured by the Nevada Department of Wildlife, and 25 were found to be secured by natural effects (e.g. caving). 482 of the hazards secured in 2009 were orphans. The orphan hazards represent 54.6% of 2009 securings. Orphan securing work during calendar year 2009 resulted in the abatement of 15 hazards with a ranking of high (3.1%), 124 with a ranking of moderate (25.7%), 243 with a ranking of low (50.4%), and 100 with a ranking of minimal (20.7%). Figure 5 is a pie chart showing the percentage distribution of currently secured orphans by hazard rank in 2009.



**Figure 5. Distribution of Currently Secured Orphan Mine Openings by Hazard Rank 2009**  
**Total: 482**

### **Public Awareness**

In the area of public awareness, the theme is “Stay Out and Stay Alive.” This message is carried to the public through several channels including; an 11-minute video of the same name which has been distributed to every school and library in Nevada, informational brochures, mini-unit curriculum guides targeting 4<sup>th</sup> and 8<sup>th</sup> grade students, TV and radio public service announcements, highway billboards and handouts that include bumper stickers, magnets and pencils. These materials reach tens of thousands of people every year.

In 2009, staff made 229 presentations to nearly 7,000 people at a wide variety of events ranging from school classrooms to community gatherings, even handing out free “Mining in Nevada” posters and rock samples at the State Fair. Additionally in 2009, 79,442 brochures were mailed out during January and February to 4<sup>th</sup> and 8<sup>th</sup> grade students in Nevada public and private schools. 2,342 mini-unit curriculum guides were sent to all new schools and to all public or private schools that added additional 4<sup>th</sup> or 8<sup>th</sup> grade classes to their schedules.

### **Permanent Closure Projects**

The permanent closure of abandoned mine hazards may employ methods such as backfilling with available and suitable fill material, the construction of bat gates (for adits) or bat grates or cupolas (for shafts), and the use of expansive polyurethane foam (PUF), or a combination of these methods. In 2009, 131 hazards were permanently secured on public lands in Nevada.

Bat Friendly Closure Projects

The Division works with several State and Federal agencies to identify adits and shafts which may be suitable for bat habitat and would benefit from bat-compatible closures such as bat gates and bat cupolas. Prior to any permanent closure, such as a backfill, pre-closure surveys are performed to confirm that the closure will not negatively impact significant biological habitat. These surveys are conducted by appropriately trained biologists working for one or more of our partnering agencies; Nevada Department of Wildlife, Nevada Natural Heritage Program, Bureau of Land Management, or US Forest Service.

During 2009, 47 bat gates or cupolas were constructed by state and federal agencies (42), owners (2), and Good Samaritans (3).

Backfill and PUF Closures

For those hazards determined to have no significant bat usage or habitat potential, backfill or PUF plug closures were employed. In 2009, a total of 63 hazards were recorded as backfilled and 21 were closed with PUF plugs. Table 3 summarizes BLM and USFS backfill projects from 1999 through 2009.

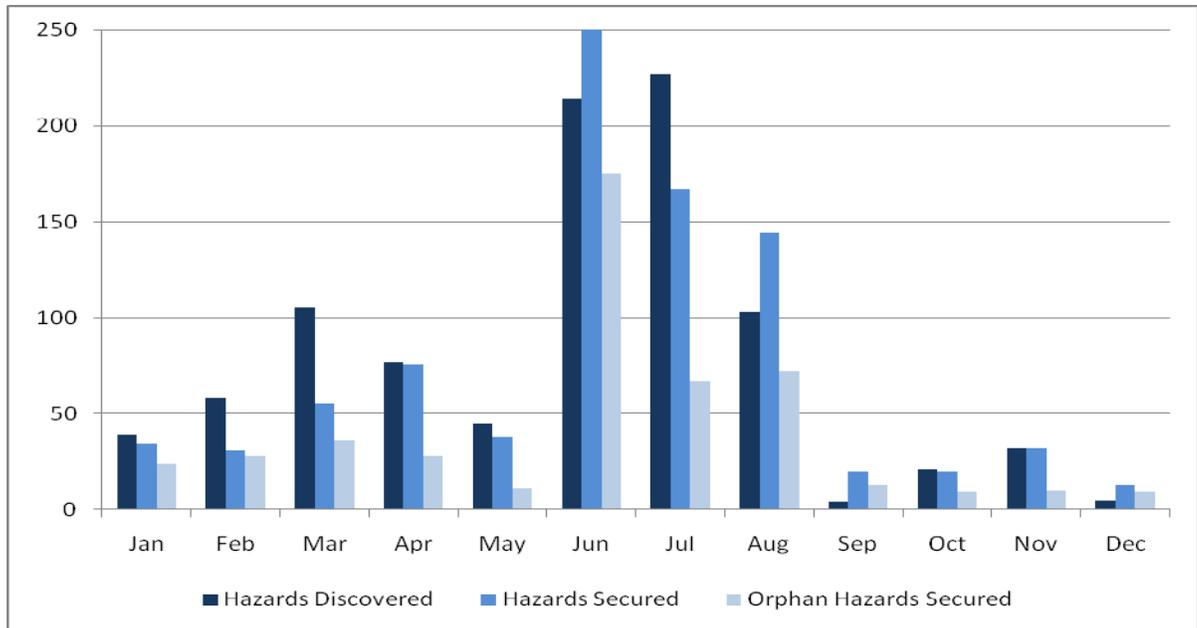
<b>Table 3. Summary of Completed Backfill/PUF Projects – 1999-2009</b>		
<u>Yr</u>	<u>#</u>	<u>Description</u>
1999	6	South of Henderson in Clark County (BLM)
2000	13	South and west of Henderson in Clark County (BLM)
2001	22	Near Goodsprings in Clark County (BLM)
2002	21	Near Goodsprings in Clark County (BLM)
	7	On Peavine Mountain, northwest of Reno, Washoe County (USFS)
2003	41	In the Searchlight and Nelson areas of Clark County (BLM)
2004	45	In Esmeralda and Nye Counties near Tonopah (BLM)
2005	55	In Beatty/Rhyolite, Nye County, 18 in Perry Canyon, Washoe County (BLM)
2006	53	In Ray Camp north of Tonopah in Nye County (BLM)
2007	108	In Douglas, Esmeralda and Washoe counties (BLM)
2008	93	In Clark and Washoe counties (BLM)
	10	In Nye, Washoe and White Pine counties (USFS)
2009	37	In Clark, Elko and Eureka counties (BLM)
	18	In Lander County (USFS)
	<b><u>494</u></b>	<b><u>GRAND TOTAL BLM THROUGH 2009</u></b>
	<b><u>35</u></b>	<b><u>GRAND TOTAL USFS THROUGH 2009</u></b>

## Summer Intern Program

The Division completed its ninth summer intern program in 2009. Eight students from the Mackay School of Earth Sciences and Engineering, University of Nevada, Reno were hired. The eight interns were Andreas Achleithner, Elizabeth Baker, Blake Easby, Stephen Hein, Jason Henderson, Daniel Kough, Kyle Leigh, and Jamie Loyola. The Division appreciates the great work they performed during the 14 weeks of the program, see Figure 6. This program helps to advance the AML program, and provides the students with valuable field experience in map reading, data collection, land status research, and geological investigation. Figure 7 is a chart illustrating the monthly hazard discovery, securing and orphan securing efforts made during 2009. It clearly shows the interns' presence during the May-August time frame had a marked positive impact on the program. Working in 14 counties, the interns secured 275 hazards, completed inspection/assessment/repair visits to 220 previously secured hazards, logged 499 new hazards and logged nearly 6,000 non-hazards.



**Figure 6. 2009 Summer Interns Performing Inventory and Securing Work Throughout Nevada.**



**Figure 7. Hazards Discovered, Hazards Secured and Orphan Hazards Secured 2009**

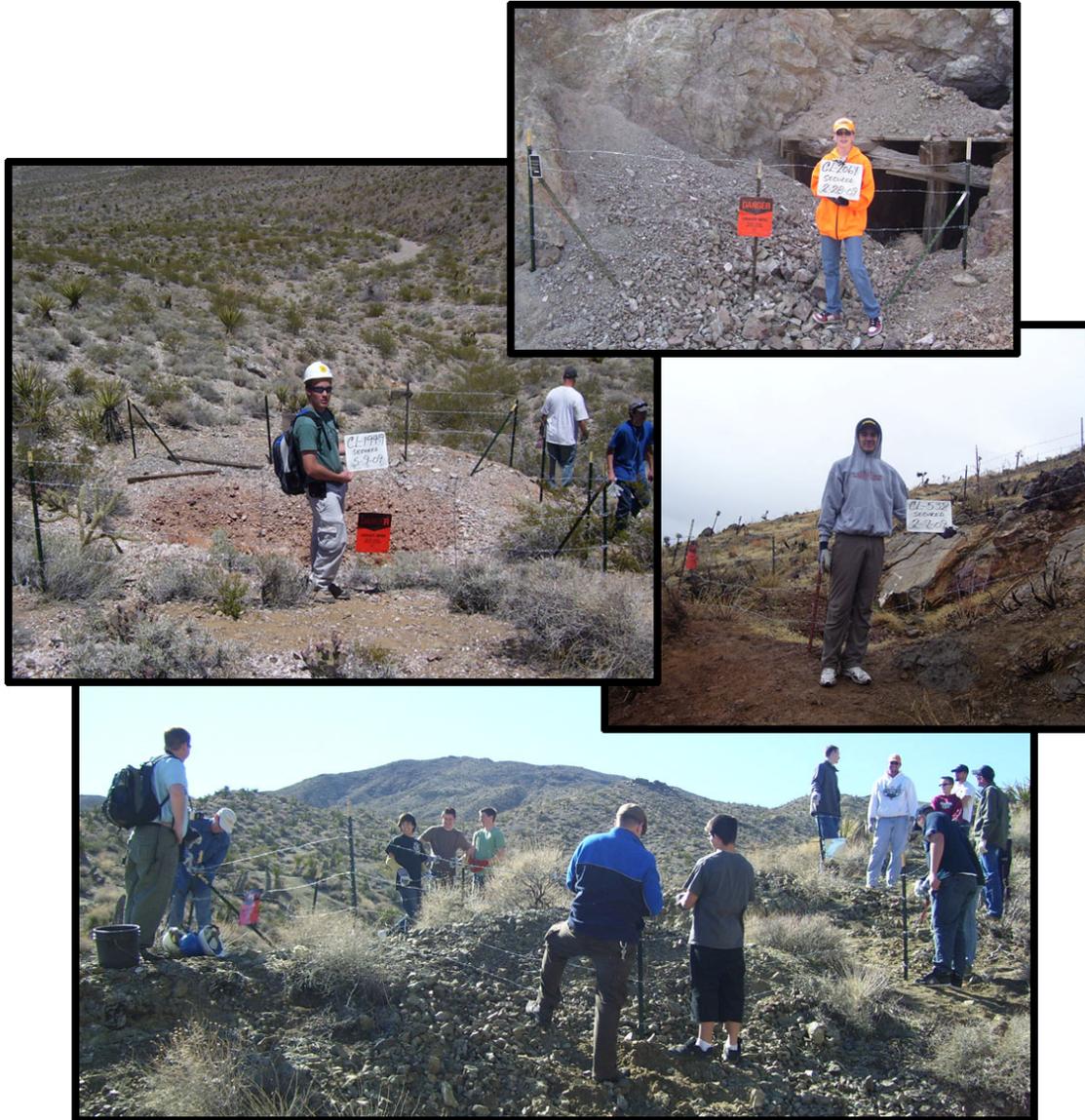
### **Contracted AML Work**

Environmental Protection Services (EPS) was awarded a \$30,000 contract to implement a revisit program of all previously secured AML hazards in the greater Reno-Carson City corridor. The purpose of this program was to assess the current securing status and perform repairs, if needed, to those on public lands. With nearly 600 sites visited, the program found that typical barbed wire fences and barricades needed repair or replacement within five years of initial installation and that even backfilled or otherwise sealed sites needed to be checked within 12 to 15 years of initial closure to check for settling. In late 2009, Geotemps, Inc. was awarded one \$25,000 contract to perform ownership research on unsecured hazards at various county seats throughout Nevada. At the conclusion of the contract in spring 2010, contractor Pete Herrera had researched the ownership of nearly 2,700 hazards in nine counties.

### **Scout Projects**

In 1992, a young Eagle Scout candidate presented NDOM with a proposal to secure mine openings for his Eagle Service project in Washoe County. This volunteer effort was very successful and has led to many other projects throughout Nevada. In 2009, 14 Eagle projects were completed in Clark, Humboldt, Lyon and Washoe Counties resulting in 57 mine openings secured and 8 repairs made to previously existing fences. Through 2009, 108 Eagle Scout projects have been completed resulting in 545 orphan hazards secured and 68 previously secured hazards re-built or restored. Figure 8 shows several Eagle Scout projects in Nevada.

Appendix D lists the accomplishments of Scouts in the Nevada AML program.



**Figure 8. Clark County Boy Scout Eagle Service Projects (clockwise from top right): Jacob Allum, Daniel Herrera, Mark Boggess and his formidable work crew, and Matt Ireland**

### **Performance Measures**

The Legislature requires state agencies to have performance measures in place for all of their major programs. For the AML program, the Division has two performance indicators: 1) maintain the number of secured hazardous mine openings to the number of hazardous mine openings identified, logged and ranked at a minimum of 70% (71.3% in 2009), and 2) maintain the number of public awareness and education presentations concerning the Nevada mineral industry and abandoned mines per staff member at a minimum of 12 per year (22.9 in 2009). The Division has consistently attained or surpassed these goals.

## Funding

The Division's AML program is funded by three major revenue sources: 1) mining claim fees, 2) surface disturbance fees paid on new mining plans of operations on public lands, and 3) grants from the Bureau of Land Management. As of June 29, 2009, \$2.50 of every mining claim filing collected by the county on behalf of the Division is dedicated to the AML program (NAC 513.315). The Division collects a one-time fee of \$20 per acre for every acre of permitted disturbance associated with new mining operations on public lands. The Division has an assistance agreement with the Bureau of Land Management, which provides annual support for the AML program, depending on available funding. Table 4 shows the revenues received by the Division from these three revenue sources for the Nevada fiscal years 2002 through 2009.

**Table 4. Revenue to the AML program for the fiscal years 2002 through 2009.**

Year	BLM Grants	Mining Claim Fees	Disturbance Fee	Total
2002	\$ 60,000	\$ 140,856	\$ 37,440	\$ 238,296
2003	\$ 66,204	\$ 157,056	\$ 36,800	\$ 260,060
2004	\$ 60,000	\$ 210,596	\$ 95,940	\$ 366,536
2005	\$ 70,000	\$ 227,221	\$ 23,476	\$ 320,697
2006	\$ 60,000	\$ 249,763	\$ 36,824	\$ 346,587
2007	\$ 10,000	\$ 278,493	\$ 34,126	\$ 322,619
2008	\$50,000	\$317,625	\$4,080	\$371,705
2009	\$110,000	\$455,223	\$148,180	\$713,403

AML revenue is used to pay salary expenses, travel expenses, the summer intern program, vehicle expenses, and field supplies such as fence posts, signs, and barbed wire. The revenue is also used to support the AML public awareness program through school presentations, video distributions, brochures, magnets, pencils, bumper and hard hat stickers, and other means of outreach.

## Summary

The Nevada Division of Minerals Abandoned Mine Lands program continues to make good progress in the discovery and securing of abandoned mine hazards across Nevada. The total number of hazards discovered decreased nominally in 2009, however, the number of securings completed in 2009 increased substantially. The combined help of the Nevada mining industry, the federal land management agencies, the summer intern program, contractors and many volunteers have greatly enhanced the efforts of the NDOM staff.

The public awareness program reached over 20,000 people directly in 2009 through personal interaction with students, teachers, parents and members of civic groups and organizations and the media. Thousands of other people may have been impacted through a "Stay Out and Stay Alive" public service announcement on television or reading an AML brochure brought home by a student.

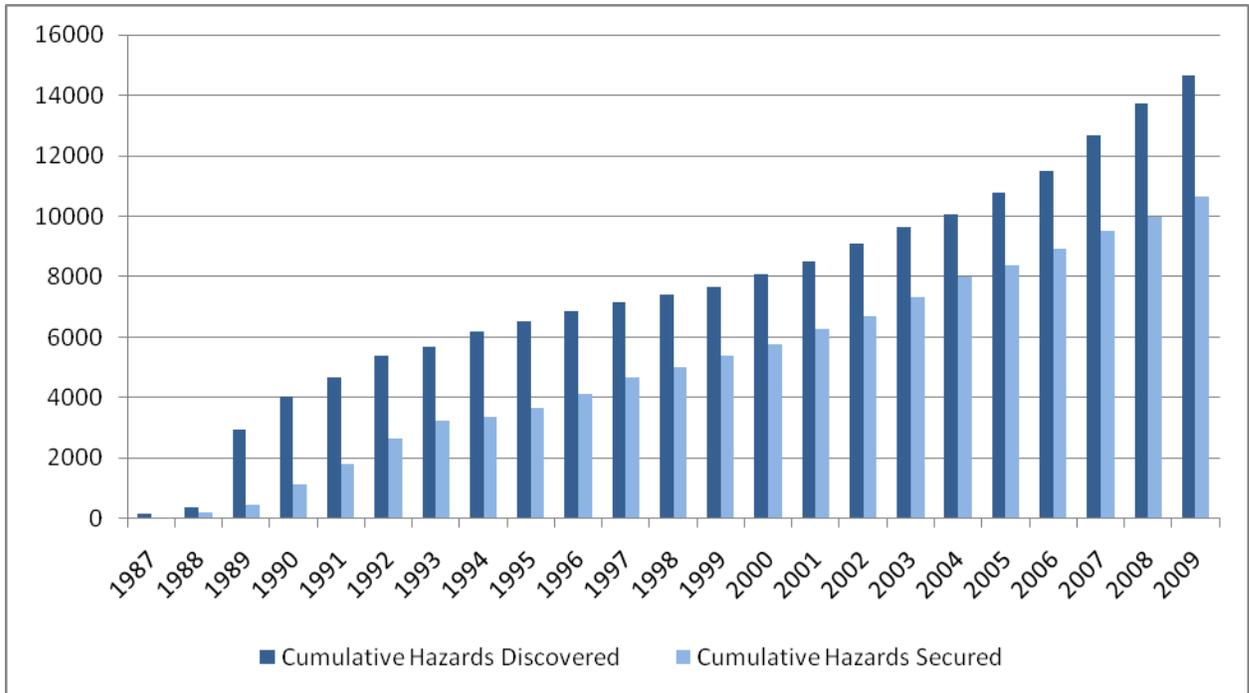
Despite the growing number of visitors that recreate in Nevada, there has been no significant increase in the number of injuries or fatalities related to abandoned mine hazards. It is the sincere hope of the NDOM staff that the mine backfill efforts, fences, barricades and signs, and the awareness brought to people through the “Stay Out and Stay Alive” message are factors that contribute to keeping the incident rate as low as possible.

The Commission on Mineral Resources and the Nevada Division of Minerals will continue to aggressively support the AML program through fieldwork and public awareness because the only satisfactory number of abandoned mine injuries or fatalities is **ZERO!**

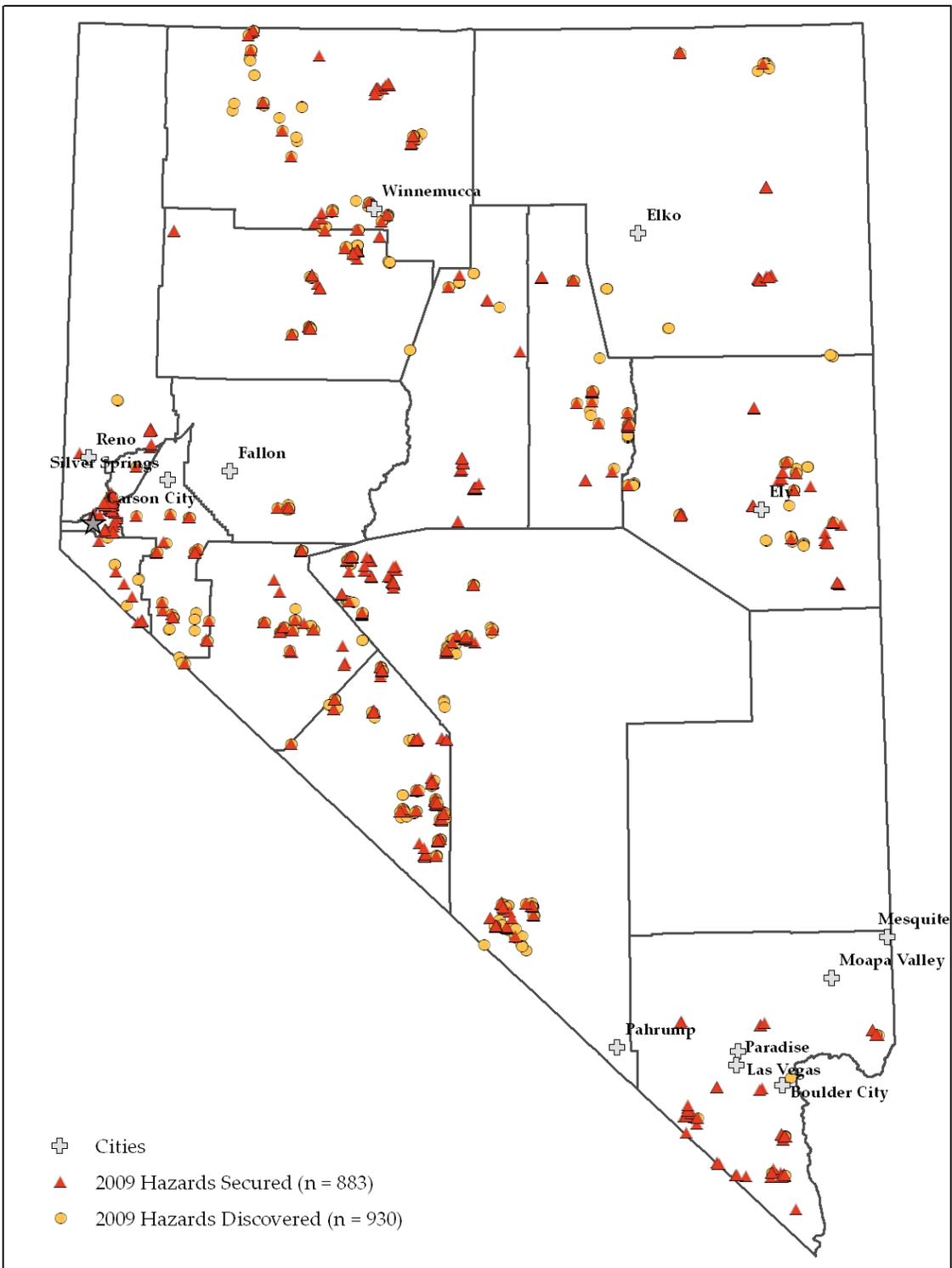
## **Acknowledgements**

The authors would like to draw attention to, and gratefully acknowledge, the many efforts of those at the Division who provide integral support to the AML Program. Field Specialist **George Bishop** who manages all communication and equipment issues, whether it be related to office, field, personnel or vehicles. Administrative Assistant **Linda Wells** who works tirelessly to keep the AML database as up-to-date as possible and send out notification letters, while also addressing the many Human Resource issues that arise. Deputy Administrator **Doug Driesner** who manages all AML related contractual agreements and spearheads the summer intern interview and hiring process. Administrative Assistant **Debbie Selig** who manages the Las Vegas office, while providing invaluable computer hardware and software support to the Division. Program Officer **Wanda Martin** who manages all budget and accounting issues, including our numerous and varied Work Programs. Field/GIS Specialist **Paul Buffington** who enthusiastically tackles the many safety facets of our program, supervises the contractor and intern programs, and continues to maximize our field efficiency by integrating our AML efforts with the ever increasing capabilities of a geographic information system (GIS).

## Appendix A



**Cumulative Hazards Discovered and Secured on an Annual Basis 1987 through 2009**



**Distribution of Hazards Discovered and Secured in 2009**

## Appendix B. Nevada Revised Statutes (NRS) pertinent to the AML Program

NRS 455.030 Board of county commissioners to transmit information concerning dangerous condition at mine no longer operating to sheriff or constable; service of notice upon owner or responsible person.

1. If a board of county commissioners receives information from the division of minerals of the commission on mineral resources that there is in the county a dangerous condition that results from mining practices which took place at a mine that is no longer operating, if the information identifies a person responsible for the condition, the board shall transmit this information to the sheriff or the constable of the township where the condition exists.
2. Upon receipt of information pursuant to subsection 1 or upon the filing of the notice, as provided for in NRS 455.020, the sheriff or constable shall serve a notice, in the same manner and form as a summons, upon each person identified as owner or otherwise responsible.

[3:16:1866; B §§ 111; BH §§ 292; C §§ 273; RL §§ 3235; NCL §§ 5632]—(NRS A 1983, 905; 1987, 1869; 1993, 1625; 1999, 3624)

NRS 455.040 Contents of notice; judgment; criminal penalty.

1. The notice served pursuant to subsection 2 of NRS 455.030 must require the person or persons to appear before the justice of the peace of the township where the hole, excavation, shaft or other condition exists, or any municipal judge who may be acting in his place, at a time to be stated therein, not less than 3 days nor more than 10 days from the service of the notice, and show, to the satisfaction of the court, that the provisions of NRS 455.010 to 455.180, inclusive, or the standards established by the commission on mineral resources for the abatement of dangerous conditions have been complied with, or if he or they fail to appear, judgment will be entered against him or them for double the amount required to abate the condition.
2. All proceedings had therein must be as prescribed by law in civil cases.
3. Such persons, in addition to any judgment that may be rendered against them, are liable and subject to a fine not exceeding the sum of \$250 for each violation of the provisions of NRS 455.010 to 455.180, inclusive, which judgments and fines must be adjudged and collected as provided for by law.

[4:16:1866; B § 112; BH § 293; C § 274; RL § 3236; NCL § 5633]—(NRS A 1979, 1476; 1987, 1869; 1993, 881)

NRS 513.094 Additional fee; administrator to establish program to discover dangerous conditions of nonoperating mines; employment of qualified assistant; regulations.

1. An additional fee, in an amount established pursuant to subsection 4, is imposed upon all filings to which NRS 517.185 applies. Each county recorder shall collect and pay over the additional fee, and the additional fee must be deposited in the same manner as provided in that section.
2. The administrator shall, within the limits of the money provided by this fee, establish a program to discover dangerous conditions that result from mining practices which took place at a mine that is no longer operating, identify if feasible the owner or other person responsible for the condition, and rank the conditions found in descending order of danger. The administrator shall annually during the month of January, or more often if the danger discovered warrants, inform each board of county commissioners concerning the dangerous conditions found in the respective counties, including their degree of danger relative to one another and to those conditions found in the state as a whole. In addition, the administrator shall work to educate the public to recognize and avoid those hazards resulting from mining practices which took place at a mine that is no longer operating.
3. To carry out this program and these duties, the administrator shall employ a qualified assistant, who must be in the unclassified service of the state and whose position is in addition to the unclassified positions otherwise authorized in the division by statute.
4. The commission shall establish by regulation:
  - (a) The fee required pursuant to subsection 1, in an amount not to exceed \$4 per claim.
  - (b) Standards for determining the conditions created by the abandonment of a former mine or its associated works that constitute a danger to persons or animals and for determining the relative degree of danger. A condition whose existence violates a federal or state statute or regulation intended to protect public health or safety is a danger because of that violation.
  - (c) Standards for abating the kinds of dangers usually found, including, but not limited to, standards for excluding persons and animals from dangerous open excavations.

(Added to NRS by 1987, 1867; A 1993, 298, 1683; 1995, 579; 1999, 890, 3627; 2001, 66)

NRS 513.103 Account for the Division of Minerals: Creation; sources, lapse and use of money in Account.

1. The Account for the Division of Minerals is hereby created in the State General Fund.
2. The following special fees and money must be deposited in the Account:
  - (a) All fees collected pursuant to NRS 513.094, 517.185 and chapter 522 of NRS.
  - (b) All money collected pursuant to NRS 235.016.
  - (c) Any money received by the Division from a county pursuant to NRS 513.108.
  - (d) All fees collected pursuant to NRS 534A.080.
  - (e) Any money appropriated to the Division from the State General Fund.
3. No money except that appropriated from the State General Fund lapses to the State General Fund.
4. The money in the Account is appropriated to the Division. The money deposited in the Account pursuant to paragraph (a) of subsection 2, and the interest earned thereon, must be expended for the purposes of administering chapter 522 of NRS and the provisions of this chapter, except for NRS 513.108. The money deposited pursuant to paragraphs (b) and (c) of subsection 2, and the interest earned thereon, must be distributed to the counties pursuant to NRS 513.108, except that portion required to pay the cost of administering the provisions of that section. All interest earned on the Account must remain in the Account.

(Added to NRS by 1983, 2070; A 1985, 303; 1987, 1868; 1989, 141; 1991, 1779; 1993, 111, 1684; 1995, 509)

NRS 513.108 Abatement of dangerous condition of non-operating mines; reimbursement of Division.

1. The board of county commissioners in each county may apply to the Division for money to abate a dangerous condition resulting from mining practices which took place at a mine that is no longer operating.
2. The Division shall, within the limits of the money available pursuant to paragraphs (b) and (c) of subsection 2 of NRS 513.103, provide counties with money to abate such dangerous conditions based on the relative degree of danger of those conditions.
3. If a county which receives money from the Division subsequently receives monetary compensation from the mine owner or other person responsible for the existence of the dangerous condition, it shall reimburse the Division to the extent of the compensation received. Any money received by the Division pursuant to this subsection must be deposited in the Account for the Division of Minerals created pursuant to NRS 513.103.

(Added to NRS by 1989, 141; A 1991, 1780; 1993, 1684)

NRS 235.016 Royalties for medallions and bars; reports by Director; deposit of money collected.

1. The Director shall set and collect a royalty for the use of The Great Seal of the State of Nevada from the mint which produces the medallions or bars. The amount of the royalty must be:
  - (a) Based on the usual and customary fee charged as a commission by dealers of similar medallions or bars; and
  - (b) Adjusted at least once each year to ensure it is competitive with the usual and customary fee.
2. The Director shall report every 6 months to the Legislature, if it is in session, or to the Interim Finance Committee, if the Legislature is not in session. The report must contain:
  - (a) The amount of the royalties being charged; and
  - (b) The information used to determine the usual and customary fee charged by dealers.
3. The money collected pursuant to this section must be deposited in the Account for the Division of Minerals created pursuant to NRS 513.103.

(Added to NRS by 1989, 140; A 1991, 1758; 1993, 1537; 1999, 3620)

NRS 519A.250 Operator to provide division of minerals copy of filing of plan of operation or amended plan of operation; fee; refunds; use of money collected; division to file report with governor and legislature.

1. An operator who is required by federal law to file a plan of operation or an amended plan of operation with the United States Bureau of Land Management or the United States Forest Service for operations relating to mining or exploration on public land administered by a federal agency, shall, not later than 30 days after the approval of the plan or amended plan, provide the division of minerals of the commission on mineral resources with a copy of the filing and pay to the division of minerals a fee in an amount established pursuant to subsection 5 for each acre or part of an acre of land to be disturbed by mining included in the plan or incremental acres to be disturbed pursuant to an amended plan.
2. The division of minerals shall adopt by regulation a method of refunding a portion of the fee required by this section if a plan of operation is amended to reduce the number of acres or part of an acre to be disturbed pursuant to the amended plan. The refund must be based on the reduced number of acres or part of an acre to be disturbed.

3. All money received by the division of minerals pursuant to subsection 1 must be accounted for separately and used by the division of minerals to create and administer programs for:

(a) The abatement of hazardous conditions existing at abandoned mine sites which have been identified and ranked pursuant to the degree of hazard established by regulations adopted by the division of minerals; and

(b) The education of the members of the general public concerning the dangers of the hazardous conditions described in paragraph (a).

All interest and income earned on the money in the account, after deducting applicable charges, must be deposited in the account for the division of minerals created pursuant to NRS 513.103.

4. On or before February 1 of each odd-numbered year, the division of minerals shall file a report with the governor and the legislature describing its activities, total revenues and expenditures pursuant to this section.

5. The commission on mineral resources shall, by regulation, establish the fee required pursuant to subsection 1 in an amount not to exceed \$30 per acre.

(Added to NRS by 1989, 1286; A 1989, 2063; 1991, 1780; 1993, 210, 211, 1687; 1995, 511; 1999, 891, 3631; 2001, 66)

NRS 41.0331 Construction of fence or other safeguard around dangerous condition at abandoned mine. A person, the State of Nevada, any political subdivision of the state, any agency of the state or any agency of its political subdivisions is immune from civil liability for damages sustained as a result of any act or omission by him or it in constructing, or causing to be constructed, pursuant to standards prescribed by the commission on mineral resources, a fence or other safeguard around an excavation, shaft, hole or other dangerous condition at an abandoned mine for which the person, state, political subdivision or agency is not otherwise responsible.

(Added to NRS by 1989, 1556)

## **Appendix C. Nevada Administrative Code (NAC) pertinent to the AML Program**

### **DANGEROUS CONDITIONS CREATED BY ABANDONMENT OF MINES**

NAC 513.200 Definitions. (NRS 513.094) As used in NAC 513.200 to 513.390, inclusive, unless the context otherwise requires, the words and terms defined in NAC 513.205 to 513.290, inclusive, have the meanings ascribed to them in those sections.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88; A by R069 -99, 8-19-99)

NAC 513.205 “Administrator” defined. “Administrator” means the administrator of the division.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88) (Substituted in revision for NAC 513.250)

NAC 513.210 “Animal” defined. “Animal” means any member of the bovine, equine, porcine or caprine species as well as dogs, cats or other animals under the restraint or control of a person.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.220 “Commission” defined. “Commission” means the commission on mineral resources.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.230 “Dangerous condition” defined. “Dangerous condition” means a condition resulting from mining practices which took place at a mine that is no longer operating or its associated works that could reasonably be expected to cause substantial physical harm to persons or animals.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.240 “Division” defined. “Division” means the division of minerals of the commission on mineral resources.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.260 “Fence” defined. “Fence” has the meaning ascribed to it in subsection 5 of NRS 207.200.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.270 “Owner” defined. “Owner” means the owner of real property who is shown to be the owner on records located in the courthouse of the county in which the real property is located.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.280 “Person” defined. “Person” means a natural person.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.290 “Responsible person” defined. “Responsible person” means the owner of a patented claim or the claimant of an unpatented claim.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.300 Scope. The provisions of NAC 513.200 to 513.390, inclusive, apply to all owners or other responsible persons for dangerous conditions on private or public land.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.310 Waiver of provisions. Upon the approval of the administrator, the division may grant a waiver from any provision of NAC 513.200 to 513.390, inclusive, if the waiver does not defeat the purpose of NRS 513.094.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.315 Additional fee. (NRS 513.094) The amount of the additional fee that is imposed on filings pursuant to subsection 1 of NRS 513.094 is \$2.50 per claim.

(Added to NAC by Commission on Mineral Resources by R069 -99, eff. 8-19-99; A by R199-08, eff. 8-14-2008)

NAC 513.320 Assignment of points to dangerous condition. The administrator or his representative shall assign a dangerous condition one to five points for the location of the condition and an additional one to five points for the degree of danger associated with the condition. The condition must then be ranked according to the total number of points for location and

degree of danger.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.330 Rating of location. The location of a dangerous condition must be rated in the following manner:

1. One point must be assigned to a dangerous condition located at least 5 miles from an occupied structure or a public road maintained by some governmental entity.
2. Two points must be assigned to a dangerous condition located between 1 and 5 miles from an occupied structure or a public road maintained by some governmental entity.
3. Three points must be assigned to a dangerous condition located  $\frac{1}{2}$  to 1 mile, inclusive, from a town.
4. Four points must be assigned to a dangerous condition located not more than  $\frac{1}{2}$  mile from a town or not more than 1 mile from an occupied structure or a public road maintained by some governmental entity.
5. Five points must be assigned to a dangerous condition located within a town or within 100 feet of an occupied structure or a public road maintained by some governmental entity.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.340 Rating of degree of danger. The degree of danger for a dangerous condition must be rated in the following manner:

1. One point must be assigned to a dangerous condition consisting of:
  - (a) A vertical or near vertical hole 8 to 20 feet, inclusive, in depth and highly visible upon approach;
  - (b) An inclined hole less than 50 feet deep from which a person could climb out;
  - (c) A horizontal hole with no associated stopes, winzes or raises; or
  - (d) A high wall of an open pit.
2. Two points must be assigned to a dangerous condition consisting of:
  - (a) A vertical or near vertical hole 8 to 20 feet, inclusive, in depth which is not visible upon approach;
  - (b) Any vertical or near vertical hole 20 to 50 feet, inclusive, in depth; or
  - (c) Any inclined hole greater than 50 feet deep from which a person could climb out with no associated stopes, winzes or raises.
3. Three points must be assigned to a dangerous condition consisting of:
  - (a) Any vertical or near vertical hole 50 to 100 feet, inclusive, in depth; or
  - (b) Any horizontal or inclined hole with associated stopes, winzes or raises with less than a 20 -foot vertical opening.
4. Four points must be assigned to a dangerous condition consisting of:
  - (a) Any vertical or near vertical hole which is at least 100 feet deep and visible upon approach; or
  - (b) Any horizontal or inclined hole with associated stopes, winzes or raises with a vertical opening greater than 20 feet.
5. Five points must be assigned to a dangerous condition consisting of any vertical or near vertical hole which is at least 100 feet deep and not visible upon approach.

The administrator or his representative may assign a higher degree of danger to a dangerous condition if other factors such as loose ground or the presence of water increase the danger, but the degree of danger for a single dangerous condition may not be scored higher than five points.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.350 Dangerous condition causing fatality or injury. Any dangerous condition that has been the cause of a documented fatality or injury must be ranked as a high hazard, regardless of its numerical score.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.360 Rating of dangerous condition. Dangerous conditions must be rated as follows:

1. A dangerous condition with a total number of 2 or 3 points is a minimal hazard;
2. A dangerous condition with a total number of 4 or 5 points is a low hazard;
3. A dangerous condition with a total number of 6 or 7 points is a moderate hazard; and
4. A dangerous condition with a total number of at least 8 points is a high hazard.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.370 Posting warning sign. A dangerous condition regardless of its ranking must be posted with an orange warning sign mounted on a post. The sign must be posted within 30 days after the responsible person is notified by the county sheriff of the existence of the condition.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.380 Period after notification to secure dangerous condition. Upon notification of the existence of a dangerous

condition, the responsible person shall:

1. Secure within 180 days a dangerous condition rated as a low hazard;
2. Secure within 120 days a dangerous condition rated as a moderate hazard; and
3. Secure within 60 days a dangerous condition rated as a high hazard, in the manner prescribed in NAC 513.390.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

NAC 513.390 Methods for securing dangerous condition. A dangerous condition must be secured by one or more of the following:

1. A barricade made of wood, metal or plastic, set in place in a solid manner with an orange warning sign attached.
2. A fence constructed to prevent a person or animal from accidentally exposing himself to the dangerous condition.
3. Permanently anchored seals constructed of material not subject to rapid decomposition and, if used to secure a vertical opening, strong enough to support the weight of any person or animal.
4. Backfilling so that no void spaces remain.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

#### FEE FOR FILING PLAN OF OPERATION

NAC 519A.634 Amount of fee. (NRS 519A.250) The amount of the fee that an operator must pay pursuant to subsection 1 of NRS 519A.250 is \$20 per acre or part of an acre.

(Added to NAC by Commission on Mineral Resources by R069 -99, eff. 8-19-99)

NAC 519A.635 Refund of portion of fees.

1. The division will refund to an operator a portion of the fees required by NRS 519A.250 according to the following schedule:

(a) For an amended plan:

(1) That reduces the number of acres or part of an acre to be disturbed from the original number of acres or part of an acre to be disturbed; and

(2) For which a fee has been paid to the division pursuant to NRS 519A.250, the refund is \$15 for each acre or part of an acre removed from planned disturbance by the amendment.

(b) For a plan, there is no refund.

(c) For a notice, there is no refund.

2. An operator who wishes to receive a refund must send to the administrator a written request and a copy of the approved amended plan showing the reduction in acreage. Within 20 business days after receiving a valid written request for a refund and a copy of the amended plan, the administrator or his designee will request that the state controller issue a check to the operator in an amount calculated pursuant to paragraph (a) of subsection 1.

3. As used in this section:

(a) "Notice" means a notice of intent to conduct activities that disturb the surface which is filed with the United States Bureau of Land Management or the United States Forest Service.

(b) "Operator" includes a person who is required by federal law to file a plan, an amended plan or a notice with the United States Bureau of Land Management or the United States Forest Service.

(Added to NAC by Department of Minerals, eff. 10-9-90; A by Comm'n on Mineral Resources by R080-1, 1-16-2002, R066-02, 8-23-2002)

## Appendix D. Scout Projects

NEVADA SCOUT AML SECURING PROGRAM						THROUGH 12/31/2009
ORDER COMPLETED	NAME OF SCOUT	PROJECT DATE(S)	# SITES SECURED	# SITES REPAIRED	COUNTY	ID NUMBERS OF SECURED SITES
1	David Loring	Sept. 12 & 26, 1992	8	0	WASHOE	WA-10, 31, 32, 82, 109, 110, 112, 113
2	Tom Hawke	Oct. 24, 1992	5	0	WASHOE	WA-103, 143, 144, 145, 146
<b>1992 TO DATE</b>			<b>13</b>	<b>0</b>		
3	Chris Johnson	Sept. 4 & 11, 1993	5	0	WASHOE	WA-114, 116, 117, 118, 119
4	Eric Bowman	Oct. 3, 23, & 24, 1993	7	0	CARSON CITY	CC-13, 14, 27, 28, 31, 65, 69
<b>1993 TO DATE</b>			<b>12</b>	<b>0</b>		
5	Josh Johnson	Nov. 12, 1994	4	0	CLARK	CL-1407, 1408, 1409, 1425
<b>1994 TO DATE</b>			<b>4</b>	<b>0</b>		
6	Nate Burnett	Aug. 10, 1996	7	0	WASHOE	WA-210, 211, 220, 221, 227, 228, 232
7	Cory Miller	Dec. 14, 1996	6	0	WASHOE	WA-212, 222, 223, 224, 225, 226
<b>1996 TO DATE</b>			<b>13</b>	<b>0</b>		
8	Tony Kopp	Jan. 31, 1998	9	0	CLARK	CL-567, 940, 1338, 1339, 1340, 1341, 1342, 1343, 1386
9	Nathen Berger	July 18, 1998	4	0	CARSON CITY	CC-39, 40, 48, 49
10	Jason Smith	Aug. 22, 1998	6	0	DOUGLAS	DO-46, 47, 48, 50, 99, 100
11	Danny Miller	Oct. 24, 1998	3	0	WASHOE	WA-241, 253, 254
12	Logan Nordyke	Nov. 7 & Dec. 12, 1998	3	0	CARSON CITY	CC-52, 54, 61
<b>1998 TO DATE</b>			<b>25</b>	<b>0</b>		
13	James Smith	Jan. 17 & May 15, 1999	2	2	WASHOE	WA-49, 256 + repairs to 57, 58
14	Daniel Murrell	April 10, 1999	7	0	CLARK	CL-46, 47, 48, 49, 50, 51, 1434
15	Steven Scheetz	Sept. 25, 1999	6	0	DOUGLAS	DO-51, 52, 53, 54, 55, 131
<b>1999 TO DATE</b>			<b>15</b>	<b>2</b>		
16	Jason Hayes/Peter Peterson	Oct. 20 & 21, 2000	7	0	CLARK	CL-688, 689, 690, 691, 692, 693, 694
17	Glen Farnsworth	Dec. 1 & 2, 2000	7	0	WASHOE	WA-280, 281, 287, 288, 289, 295, 296
<b>2000 TO DATE</b>			<b>14</b>	<b>0</b>		
18	Richard Dwyer	Jan. 13 & 14, 2001	10	2	CLARK	CL-38, 39, 41, 42, 43, 58, 59, 708, 709, 1471 + repairs to 35, 36
19	Colby Cole	February 24, 2001	6	6	CLARK	CL-543, 544, 546, 547, 551, 1479 + repairs to 545, 548, 549, 550, 552, 553
20	Blake Kalmes	April 7, 2001	7	1	CLARK	CL-1464, 1465, 1466, 1467, 1469, 1470, 1480 + repairs to 1416
21	Shawn Holloman	July 14, 2001	6	0	LYON	LY-322, 323, 324, 325, 326, 327
22	Travis Jarland	Aug. 11, 2001	5	0	LYON	LY-373, 592, 593, 594, 597
23	William Bunch	December 8, 2001	5	0	CLARK	CL-1331, 1332, 1333, 1334, 1335 - sites previously secured very poorly
<b>2001 TO DATE</b>			<b>39</b>	<b>9</b>		
24	Travis Cummins	Jan. 21, 2002	9	0	LYON	LY-279, 280, 299, 300, 301, 302, 679, 680, 681
25	Beau Kalmes	Feb. 9, 2002	7	0	CLARK	CL-1161, 1162, 1163, 1164, 1505, 1506, 1507
26	Thomas Schwedhelm	June 29, 2002	8	0	LYON	LY-234, 235, 236, 239, 240, 645, 659, 660
27	Ben Stanphill	Nov. 2, 2002	11	0	LYON	LY-227, 229, 230, 231, 232, 233, 707, 708, 709, 710, 711
<b>2002 TO DATE</b>			<b>35</b>	<b>0</b>		
28	Chris Mullins	Mar. 29, 2003	6	0	CLARK	CL-412, 413, 414, 415, 416, 417

NEVADA SCOUT AML SECURING PROGRAM						THROUGH 12/31/2009
ORDER COMPLETED	NAME OF SCOUT	PROJECT DATE(S)	# SITES SECURED	# SITES REPAIRED	COUNTY	ID NUMBERS OF SECURED SITES
29	Nathan Mayes	May 31, 2003	13	0	MINERAL	MI-396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 917
30	C.J. Gent	June 22, 2003	11	0	CHURCHILL	CH-409, 411, 412, 413, 414, 415, 416, 417, 418, 421, 422
31	Kye Stoker	June 28, 2003	5	0	CLARK	CL-1016, 1017, 1018, 1560, 1561
32	Daniel Miles	July 12, 2003	12	1	LYON	LY-687, 688, 689, 690, 691, 692, 693, 695, 696 (repair), 698, 699, 700, 701
33	Chris Rice	August 9, 2003	8	0	CHURCHILL	CH-280, 281, 282, 283, 284, 285, 286, 287
34	Chris Sipma	Sept. 6, 2003	6	2	LYON	LY-221, 222, 223, 224, 225, 226, repairs to LY-217, 218
<b>2003 TO DATE</b>			<b>61</b>	<b>3</b>		
35	Duncan Rickford	Jan. 10, 2004	5	0	CLARK	CL-866, 867, 868, 869, 870
36	Corey Sobrio	Mar. 20, 2004	10	0	LYON	LY-702, 703, 704, 705, 706, 751, 752, 753, 754, 769
37	Sean Hayes	Apr. 24, 2004	7	0	CLARK	CL-846, 847, 848, 849, 850, 851, 852 (USFS)
38	Chase Bodhaine	May 22, 2004	6	0	CLARK	CL-558, 559, 560, 562, 563, 564
39	John Hefner	Sept. 18, 2004	6	1	DOUGLAS	DO-130, 134, 135, 136, 150, 160, repairs to DO-132
40	Shane Donelson	Oct. 23, 2004	8	0	NYE	NY- 352, 353, 354, 355, 357, 358, 359, 360
41	Randy Sgamma	Nov. 12-13, 2004	5	3	CLARK	CL-908, 909, 912, 913, 915, repairs to CL-910, 911, 914
<b>2004 TO DATE</b>			<b>47</b>	<b>4</b>		
42	Kenny Booth	Jan. 2, 2005	7	0	NYE	NY-362, 363, 364, 365, 366, 367, 1020
43	John Gardner	April 30, 2005	5	0	CLARK	CL-242, 243, 244, 245, CL-1594
44	Isaiah Haywood	May 7, 2005	5	0	CLARK	CL-1235, 1236, 1237, 1238, 1239
45	Chip Holton	May 21, 2005	3	0	LYON	LY-731, 732, 735
46	McKay Miles	May 28, 2005	5	0	CLARK	CL-253, 254, 255, 256, 1595
47	Jennifer Giraud	September 24, 2005	4	0	ELKO	EL-249, 251, 252, 253
48	John Crepeau	October 29, 2005	4	0	CLARK	CL-257, 1597, 1598, 1599
49	Luke Smith	November 5, 2005	5	0	CLARK	CL-1603, 1604, 1610, 1614, 1615
50	Brad Peterson	November 19, 2005	7	0	LYON	LY-757, 758, 759, 760, 762, 763, 764
51	Steven Archer	November 19, 2005	5	1	CLARK	CL-983, 984, 985, 986, 1596, replaced old fence at CL-1454
52	Cameron Legere	Dec. 3, 2005	0	7	CLARK	repairs to CL-576, 577, 578, 580, 757, 758, 759 (USFS)
<b>2005 TO DATE</b>			<b>50</b>	<b>8</b>		
53	Weston Milne	January 7, 2006	5	0	CLARK	CL-1605, 1606, 1607, 1608, 1609
54	Tyson Parker	January 28, 2006	6	0	CLARK	CL-1492, 1493, 1494, 1623, 1624, 1625
55	Jacob Gibson	March 4, 2006	5	0	CLARK	CL-1495, 1496, 1497, 1498, 1626
56	Kyle LeFevre	April 22, 2006	5	0	CLARK	CL-1616, 1617, 1618, 1619, 1634
57	Stephen Erickson	May 6, 2006	4	1	CLARK	CL-596, 597, 598, 599, repairs to CL-1394
58	Mitch Benning	May 13, 2006	6	0	WASHOE	WA-104, 105, 106, 111, 112, 113
59	Jordan Wall	May 20, 2006	4	0	NYE	NY-372, 373, 374, 375 (USFS)
60	Derek Gibson	June 3, 2006	4	0	CLARK	CL-1629, 1630, 1631, 1632
61	Shane Sobrio	June 24, 2006	5	1	LYON	LY-379, 380, 381, 382, 383 (repair), 385
62	Matt Robinson	June 24, 2006	7	0	DOUGLAS	DO-153, 154, 155, 156, 157, 158, 159
63	Mitchell Walton	August 5, 2006	4	2	WASHOE	WA-96, 211, 259, 323, repairs to 212 and 258
64	Robbie Ayres	August 20, 2006	4	0	WASHOE	WA-74, 76, 77, 78

NEVADA SCOUT AML SECURING PROGRAM						THROUGH 12/31/2009
ORDER COMPLETED	NAME OF SCOUT	PROJECT DATE(S)	# SITES SECURED	# SITES REPAIRED	COUNTY	ID NUMBERS OF SECURED SITES
65	Andy Haskin	September 9, 2006	6	0	WASHOE	WA-79, 80, 82, 84, 85, 109
66	Paul Pearson	November 19, 2006	4	1	WASHOE	WA-6, 8, 61, 64, 65(repair)
67	Joshua O'Barr	December 2, 2006	4	0	CLARK	CL-106, 200, 930, 937
68	Kai Fisher	December 2, 2006	5	0	WASHOE	WA-325, 326, 327, 328, 330
<b>2006 TO DATE</b>			<b>78</b>	<b>5</b>		
69	Chris Chubb	April 21, 2007	0	4	CLARK	repairs to CL-1421, 1422, 1424, 1425
70	Taylor Smith	April 28, 2007	0	4	CLARK	repairs to CL-568, 569, 570, 571 (USFS)
71	Shane Palmer	May 12, 2007	5	0	CLARK	CL- 1555, 1556, 1557, 1558, 1559
72	Jared Cooper	May 19, 2007	0	5	CLARK	repairs to CL-765, 766, 1407, 1408, 1409
73	Jessica Shalita	May 20, 2007	0	3	CLARK	repairs to CL-866, 867, 1419
74	DJ Stanger	June 2, 2007	0	6	CLARK	repairs to CL-1464, 1465, 1466, 1469, 1470, 1480
75	Chris Eliason	June 16, 2007	5	0	NYE	NY-368, 369, 370, 371, 1022 (USFS)
76	Paul Herget	July 28, 2007	5	0	WASHOE	WA-355, 357, 358, 359, 360
77	Daniel Baird	Sept. 30, 2007	3	0	CLARK	CL-840, 841, 842
78	Austin Echler	December 16, 2007	3	2	CLARK	CL-946 and 947 re-secured, 1668, 1727, 1729
<b>2007 TO DATE</b>			<b>21</b>	<b>24</b>		
79	Jacob Trotter	January 5, 2008	4	0	CLARK	CL-800, 1652, 1653, 1654
80	Travis Peterson	January 26, 2008	4	0	WASHOE	WA-346, 347, 348, 349
81	Justin Graf	February 2, 2008	6	0	CLARK	CL-385, 386, 387, 388, 1635, 1636
82	Brian Cooper	February 16, 2008	2	0	CLARK	CL-1659, SE and E highwall portion of CL-1660 open pit fenced & posted
83	Zach Nielsen	February 23, 2008	4	0	CLARK	CL-1587, 1588, 1673, 1674
84	Jeff Mohlman	March 29, 2008	3	0	CLARK	CL-843, 844, 845
85	Casey Sylvester	March 29, 2008	10	0	PERSHING	PE-791, 793, 794, 795, 797, 798, 799, 931, 941
86	Michael Erickson	April 12, 2008	3	0	CLARK	CL-1677, 1678, 1679
87	Michael Hartley	April 19, 2008	4	0	DOUGLAS	DO-166, 167, 168, 169
88	Kody Brian	April 26, 2008	4	0	CLARK	CL- 1621, 1689, 1691, 1756
89	Robert Marder	April 27, 2008	4	0	CLARK	CL-1628, 1681, 1685, 1687
90	Justin Wall	May 3, 2008	2	0	CLARK	CL-1670, portion of CL-1660
91	Dean Wilhite	May 4, 2008	4	0	WASHOE	WA-343, 344, 345, 350
92	Brennen Marshall	November 21, 2008	1	0	CLARK	CL-1721 (7 openings - room and pillar mine)
93	Doug Harris	December 13, 2008	1	5	CLARK	CL-1954, repairs to CL-53, 54, 55, 56, 57
94	Eli Bagley	December 13, 2008	5	0	WASHOE	WA-351, 352, 353, 368, 371
<b>2008 TO DATE</b>			<b>61</b>	<b>5</b>		
95	Myles Putnam	January 24, 2009	3	0	CLARK	CL-1988, 1990, 1992
96	Mark Boggess	January 31, 2009	3	0	CLARK	CL-1680, 1682, 1684
97	Daniel Herrera	February 7, 2009	1	1	CLARK	CL-1565, replaced CL-532 fence
98	Jacob Allum	February 28, 2009	6	0	CLARK	CL-1850, 1852, 1856, 1866, 1868, 2061
99	Bread Iverson	March 21, 2009	3	1	CLARK	CL-2056, 2058, 2060, repair CL-355
100	Grant Zampirro	March 28, 2009	7	0	WASHOE	WA-4, 366, 367, 369, 372, 377, 378
101	Trevin Jarrett	April 13, 2009	8	0	HUMBOLDT	HU-487, 489, 491, 493, 510, 511, 512, 513
102	Matt Ireland	May 9, 2009	3	0	CLARK	CL-1933, 1949, 1951
103	Justin Myhre	May 23, 2009	0	2	CLARK	Re-closure of CL-671, 672 using PUF

NEVADA SCOUT AML SECURING PROGRAM						THROUGH 12/31/2009
ORDER COMPLETED	NAME OF SCOUT	PROJECT DATE(S)	# SITES SECURED	# SITES REPAIRED	COUNTY	ID NUMBERS OF SECURED SITES
104	Taylor Jenkins	June 13, 2009	0	4	CLARK	Repairs to CL-500, 501, 502, 503
105	Evan Pearson	July 25, 2009	8	0	LYON	LY-870, 871, 873, 874, 875, 877, 878, 882
106	Lance Thompson	August 8, 2009	5	0	HUMBOLDT	HU-536, 557, 581, 583, 587
107	Jacob Carver	August 8, 2009	5	0	HUMBOLDT	HU-539, 555, 588, 601, 603
108	Ricardo Milan	October 17, 2009	5	0	CLARK	CL-2032, 2034, 2036, 2038, 2040
<b>2009 TO DATE</b>			<b>57</b>	<b>8</b>		
<b>CURRENT GRAND TOTAL</b>			<b>545</b>	<b>68</b>		
			SECURED	REPAIRED		