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**COMMISSION ON MINERAL RESOURCES
DIVISION OF MINERALS**

**NEVADA ABANDONED
MINE LANDS REPORT
2006**



by
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April 2007

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 19th year in 2006. Key points for the program in 2006 include the following:

- One non-injury incident involving a dog falling into a mine shaft was reported to the Nevada Division of Minerals (NDOM) in May 2006.
- The total number of AML hazards discovered and ranked since the beginning of the program reached 11,518 hazards. The total number of hazards secured reached 8,883.
- 738 hazards were discovered and ranked in 2006, a 4.5% increase over 2005. This increase was in response to the need to focus attention on areas across the state having high levels of public use.
- 540 hazards were secured in 2006, a 52.1% increase over 2005. Mining claimants and private property owners secured 228 hazards. 243 orphan hazards (hazards located on public land where no claimant or property owner exists) were secured by NDOM staff and volunteers, a decrease of 4.0% compared to 253 securings in 2005.
- Public awareness activities: 100 classroom presentations to approximately 2,795 students, 30 presentations at school functions outside the classroom to nearly 1,100 students. 24 presentations at other venues brought the "Stay Out and Stay Alive" message to over 16,000 additional adults and children. Students and teachers were given brochures, bumper stickers, magnets, "hard hat" stickers and pencils bearing the "Stay Out and Stay Alive" message. AML brochures were distributed to every 4th and 8th grade student in the state, a total of over 75,300 brochures, and the "Stay Out and Stay Alive" video was sent to all new schools in the state.
- In a cooperative effort between the Division, the Bureau of Land Management, and the Nevada Mining Association, 52 hazards were backfilled at the Ray Camp north of Tonopah in Nye County.
- The Summer Intern Program included 6 students in 2006. The interns were mining engineering students from the Mackay School of Earth Sciences and Engineering, University of Nevada, Reno.
- A record 78 hazards were secured and 5 previously secured hazards were repaired by 16 Eagle Scout candidates in 2006. Since 1992, 68 Scout projects have been completed resulting in 406 secured orphan hazards and 31 repairs to existing fences.
- The Division continued its role as the principal facilitator of the state's AML Environmental Task Force (NAMLET).
- 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 77.1% (70% required) and total public awareness presentations were 17.1 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 \$346,587 in 2006, as compared with \$320,697 in 2005.

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 2006.

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 36-year history of known incidents related to abandoned or idle mines. The legislation placed the program with the Division of Minerals 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 2006.

NEVADA DIVISION OF MINERALS Reported Abandoned Mine Lands Incidents		
Date	Incident	County
5/71	Male juvenile (15) injured in fall down 200 ft. deep mine shaft	Carson City
4/75	Two male juveniles killed when motorcycles fall into mine shaft near Searchlight	Clark
12/78	Juvenile killed in fall down mine shaft (Ninety-Nine Mine), body never recovered	Clark
4/79	Two teenagers killed in fall down mine shaft (Oest Mine)	Lyon
2/86	Young adult male (20) killed in fall down winze in adit	Lyon
9/88	Body of elderly male found at bottom of mine shaft	Lyon
9/89	Male adult seriously injured in fall down internal winze in mine near Henderson	Clark
3/90	Male juvenile lost for 19 hours in mine shaft near Tonopah	Nye/Esmeralda
5/90	Dog killed in mine shaft	Humboldt
2/91	Male adult (40) killed in fall down internal mine winze	Douglas
5/91	Male juvenile (13) injured (minor) in fall down 20 ft. deep mine shaft	Washoe
12/91	Male adult (44) killed in fall down internal mine winze	Lyon
9/92	Female adult (28) injured (cuts and bruises) in fall down mine shaft	Douglas
10/92	Male adult (27) news reporter injured in dynamite blast in mine	Humboldt
11/93	Dog rescued from 30 ft deep mine shaft	Storey
6/95	Male adult (30) killed while scuba diving in mine shaft filled with water	Humboldt
3/96	Male adult (31) injured in fall down internal mine winze on west side of Las Vegas	Clark
9/96	Two male adults (35) killed in mine adit near Virginia City by suffocation	Storey
10/96	Male (16) killed in fall off ATV at American Flats millsite	Storey
4/97	Two male adults (50's) injured in fall down hand dug well in town of Luning	Mineral
7/98	Male adult (20's) slightly injured in fall down internal mine winze in Brougher Divide Mine near Tonopah, another adult male lost for 7 hours, total of 6 adult males in mine	Esmeralda
9/98	Dog rescued from 20 ft deep mine shaft	Douglas
10/98	Two male adults seriously injured in fall down 50 ft. deep internal mine winze near Las Vegas	Clark
6/99	Male juvenile (15) drowned swimming in open pit lake.	Lander
10/99	Female juvenile (11) killed in fall down 130 ft. deep mine shaft near Beatty	Nye
11/00	Dog rescued from fall down 40 ft. mine shaft. Moderate injury to hip	Storey
12/00	Dog rescued from fall down 60 ft. winze. Minor injury to hip	Pershing
7/02	41 year old male drowned swimming in open pit lake	Storey
10/02	37 year old male received severe injuries from fall down 25 ft. winze	Clark
1/03	Dog fell down shaft	Humboldt
1/03	62 year-old man received minor injuries from fall down 25 ft. winze	Clark
4/04	30 year-old man received moderate injuries from fall down 25 ft. winze	Clark
5/05	Female adult (30's) received cuts and bruises from fall down a 35 ft. winze	Carson City
5/06	Dog rescued from 22' deep mine shaft	Washoe

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 60 days of the date of the notification letter, 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 2006

A single abandoned mine incident was reported in May of 2006. A dog fell down a 22' deep mine shaft on the northwest side of Reno in Washoe County. The uninjured dog was rescued by the owners. The previously unidentified mine hazard was backfilled by the private property owner following the incident.

Discovery and Securing

From the beginning of the AML program in 1987 through December 31, 2006, 11,518 hazards have been discovered and ranked and 8,883 hazards (claimed, owned, and orphans combined) have been secured. Figure 1 is a graph of hazards discovered and ranked and hazards secured for 1987 through 2006. 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 77.1% of all hazards discovered to date.

Of the 8,883 hazards secured, 735 (8.3%) were ranked high, 2,673 (30.1%) were ranked moderate, 4,080 (45.9%) were ranked low, and 1,395 (15.7%) were ranked minimal. Figure 2 is a pie chart showing the percentage distribution of secured mine openings by hazard rank.

Of the 8,883 hazards secured, 3,368 (37.9%) are orphans, ranked as follows: 147 (4.4%) high, 848 (25.2%) moderate, 1,632 (48.5%) low, and 741 (22.0%) 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 5,515, which represent the very significant (62.1%) contribution to the program by the mining industry, claimants, and landowners.

The total number of hazards discovered and ranked during 2006 was 738 compared with 706 hazards discovered and ranked in 2005; a 4.5% increase. Of the 738 hazards discovered, 243 were determined to be orphans, 177 were found on leased claims or private property, 31 were found on State-owned lands, and 234 required additional ownership research. Of the 738 hazards discovered in 2005, 17 (2.3%) were ranked high, 182 (24.7%) moderate, 360 (48.8%) low, and 179 (24.3%) minimal. Figure 4 is a pie chart showing the percentage distribution of hazards discovered in 2006 by hazard rank.

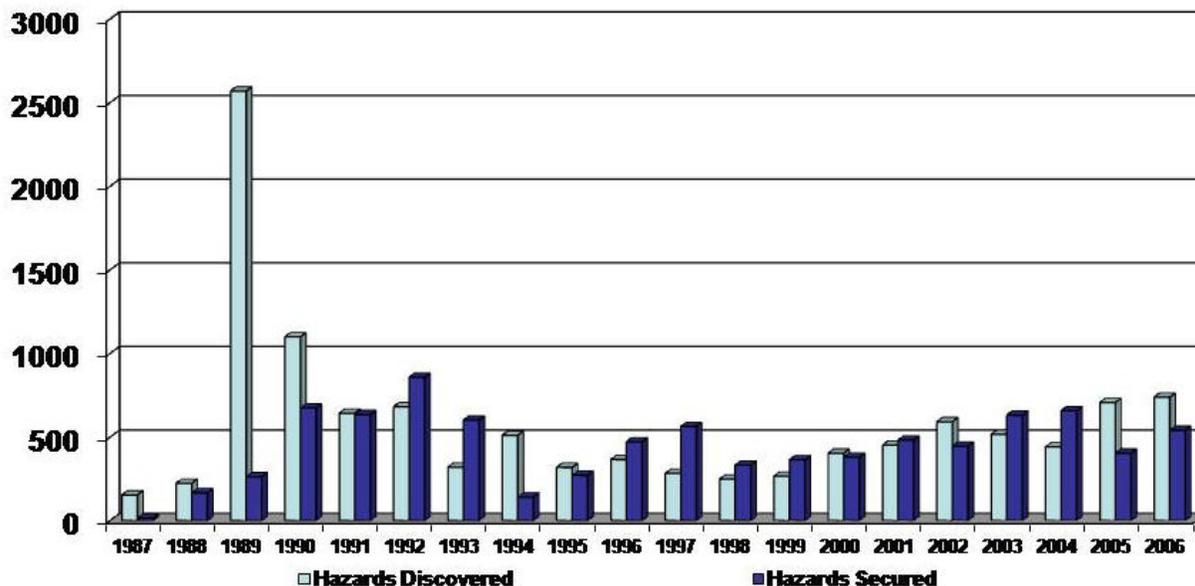
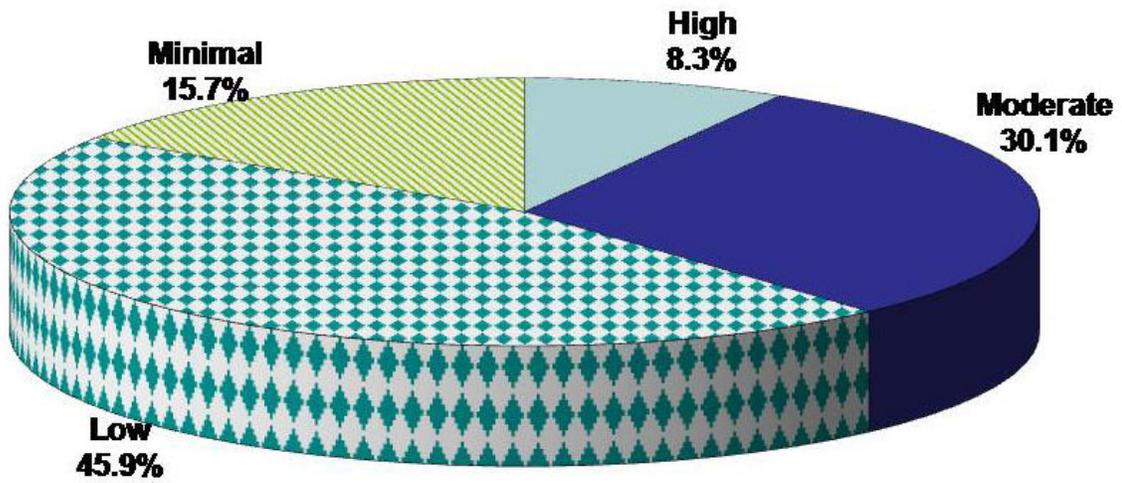


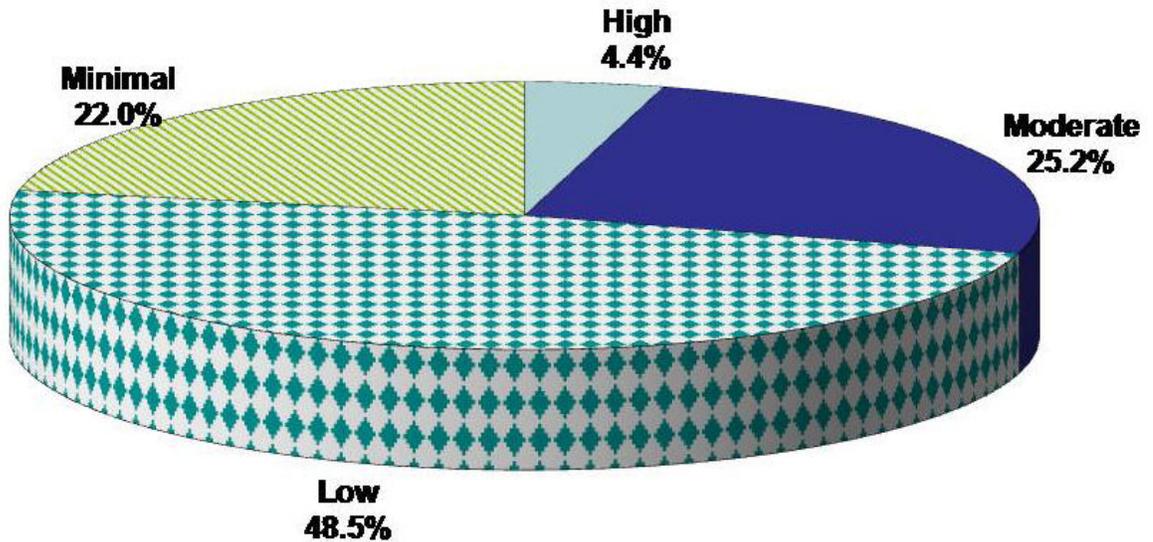
Figure 1. Hazards Discovered and Hazards Secured from 1987 to 2006.

Table 2. County-by-County Hazards Discovered and Secured from 1987 through 2006.

COUNTY	HAZARDS DISCOVERED	HAZARDS SECURED
Carson City	73	71
Churchill	446	372
Clark	1,638	1,279
Douglas	164	134
Elko	371	281
Esmeralda	1,482	1,071
Eureka	634	546
Humboldt	480	407
Lander	367	293
Lincoln	575	454
Lyon	819	657
Mineral	1,165	1,017
Nye	1,395	888
Pershing	889	632
Storey	144	125
Washoe	335	309
White Pine	541	347
TOTAL	11,518	8,883



**Figure 2. Distribution of Secured Mine Openings by Hazard Rank 1987 through 2006.
Total: 8,883**



**Figure 3. Distribution of Secured Orphan Mine Openings by Hazard Rank 1987 through 2006.
Total: 3,368**

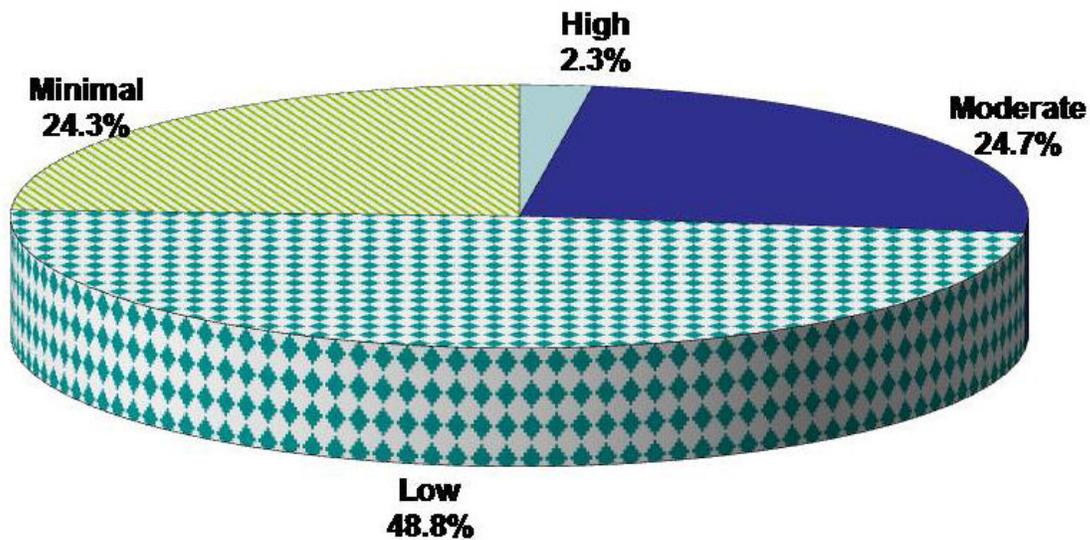


Figure 4. Distribution of Discoveries by Hazard Rank 2006.
Total: 738

The total number of sites secured during 2006 was 540 compared to 355 in 2005, a 52.1% increase. Of the 540, 170 were secured by NDOM staff and summer interns, 130 were secured by volunteers and other Good Samaritans, 228 were secured (or discovered as secured) by claimants and owners of patented claims and private land, and 12 were found to be secured by natural effects (e.g. caving). 243 of the hazards secured in 2006 were orphans. The orphan hazards represent 45.0% of 2006 securings. The number of orphan securings decreased slightly from 253 in 2005 to 243 in 2006, a decrease of 4.0%. The change was attributed to the increasing remoteness of the hazards as work extends into more rural areas of the state. Orphan securing work during calendar year 2006 resulted in the abatement of 2 hazards with a ranking of high (0.8%), 62 with a ranking of moderate (25.5%), 127 with a ranking of low (52.3%), and 52 with a ranking of minimal (21.4%). Figure 5 is a pie chart showing the percentage distribution of secured orphans by hazard rank in 2006.

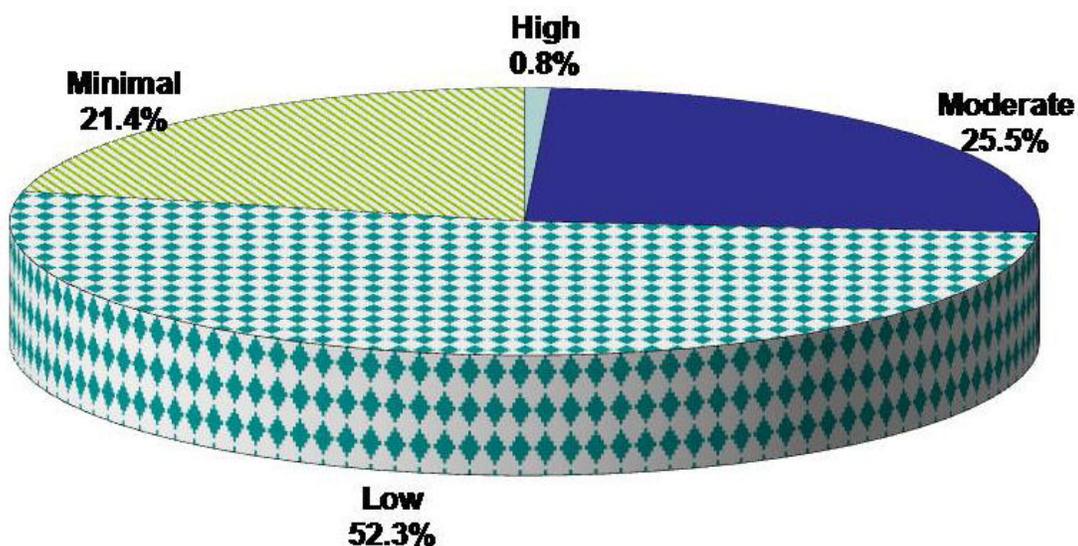


Figure 5. Distribution of Secured Orphan Mine Openings by Hazard Rank 2006.
Total: 243

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 4th and 8th 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 2006, staff made 100 classroom presentations to approximately 2,795 students in Carson City, Clark, Lyon and Washoe Counties; letters of appreciation can be seen in Appendix E. Additional presentations involving large numbers of children included Capital City Farm Days at Fuji Park in Carson City – (staff made 30 short presentations to small groups of 1st through 3rd graders, teachers and parent helpers rotating through various displays – 1,100 attendees). Students, teachers, and parent helpers were all given brochures, bumper stickers, magnets, “hard hat” stickers, and pencils to use and share with family members and friends.

The “Stay Out and Stay Alive” message was spread to over 16,000 people through 24 other venues, including:

- Presentations made to grade levels 4-5 and 9-12 teachers at the 17th Annual Las Vegas Earth Science Education Workshop in Las Vegas and the 22nd Annual Northern Nevada Earth Science Education Workshop in Carson City (total of 73) teachers), see Figure 6.
- Helldorado Days Celebration - Las Vegas (200 visitors to NvMA/NDOM display booth)
- Burk High School Career Fair – Las Vegas (60 visitors)
- Truckee Meadows Career Day – Reno (44 classroom attendees)
- Westergard Elementary School Science Fair – Reno (350 attendees)
- Natives Impacted By Mining Conference – Reno (37 attendees)
- Earth Day – Reno (500 visitors to the display and participate in concrete paving stone activity)
- Nevada Mining Association Annual Convention – Lake Tahoe – (AML materials available for the 267 registered attendees)
- Interaction with visitors to the agency display at the Elko Mining Expo and the Northwest Mining Association Annual Meeting (approximately 12,000 attendees total)
- Sponsored Silver City Youth Theater performance of “Ol’ Plumbottom”, on the dangers of abandoned mines, at Piper’s Opera House - Virginia City (AML materials handed out) – 6 shows (200 attendees total)
- Presentation at meeting of the Reno Gem and Mineral Society (98 attendees)
- Family Learning Night – Dayton (300 attendees)
- Boomtown History Event – Amargosa Valley (190 attendees)
- Presentation to the Mackay Club at the University of Nevada, Reno (25 attendees)
- Annual Mackay Days Celebration at University of Nevada, Reno (200 visitors)
- Washoe High School Science Field Trip to Twin Creeks Mine (40 attendees)
- Presentation to NBMG Earth Science Week field trip attendees – Reno (37 attendees)
- Festival in the Pines – Kyle Canyon – Clark County (100 attendees)
- Red Rock NCA Harvest Festival – Las Vegas (700 attendees)

- Las Vegas Hard Assets Investment Conference – Mandalay Bay – Las Vegas – (600 attendees)
- NAMLET conference – Reno (32 attendees)
- Nevada BLM State Leadership Team meeting – Reno (30 attendees)



Figure 6. Images from the 2006 Earth Science Education Workshops for Teachers in Las Vegas and Carson City.

Also in 2006, 74,930 brochures were mailed out during January and February to 4th and 8th grade students in Nevada public and private schools. 3,033 mini-unit curriculum guides were sent to all new schools and to all public or private schools that added additional 4th or 8th grade classes to their schedules. “Stay Out and Stay Alive” videos were sent out to all new schools, 26 in 2006.

Backfill Projects

The partnership between the Bureau of Land Management (BLM), the Division, the Nevada Mining Association and others, came together once again in 2006 to enhance safety on Nevada’s public lands with a backfill project at the Ray Camp in Nye County.

Ray Camp, Nye County

On Christmas Day 1901, Judge L. O. Ray of Tonopah discovered silver at a site about 10 miles north of Tonopah and he staked a number of mining claims. Two months later in February 1902, with reported ore assays of \$240 a ton, a small rush took place, and nearly 200 men worked the Ray claims. It was a short-lived “boom”. Only a few wagon loads of ore were shipped in February 1903 and the rush was over. One mine developed later on in the decade but its history and production are unknown. The Ray Camp mines were developed with a number of shafts, adits and prospects. All that remains of the Ray Camp is depressions where buildings once stood and the mine openings. The area currently receives considerable visitation by hunters, hikers and 4WD/OHV enthusiasts.

Staff from the Tonopah BLM Field Station contacted the Division in early 2006 regarding their interest in permanently closing a number of hazardous mine openings in Nye or Esmeralda County in the general vicinity of Tonopah. Previous backfill activities took place south of Tonopah in 2004 and in the Beatty/Rhyolite area in 2005. A list of 67 “orphan” hazards was prepared by the Division and submitted to BLM, Tonopah and included locations north and south of Tonopah in both Esmeralda and Nye Counties. For logistical purposes in transporting and “walking” heavy equipment, the list was narrowed to Ray Camp and selected hazards near Black Mountain and Red Mountain 3 miles to the south. National Environmental Policy Act (NEPA) studies were conducted to determine the cultural and biological impacts of using waste rock dump material to backfill the mine openings. Susan Rigby and Michael Oberndorf from the Tonopah Field Station conducted cultural resource site clearances. Nancy Army of the Tonopah Field station was on-hand to monitor backfill operations. Bryson Code from the Tonopah Field Station and BLM Nevada State Office (NSO) conducted non-bat biological surveys. External bat surveys were conducted by Christopher Ross, BLM-NSO assisted by Division of Minerals staff Bill Durbin and Terry Slatauski of the Nevada Division of Wildlife (NDOW).

A total of 53 hazards were approved for backfilling. Figure 7 is a photograph of backfill work in progress on an adit at Ray Camp. One shaft proved to be much deeper than anticipated. After 6 hours and 10 minutes of dozer work over two days, it was still over 100 feet deep and backfill work was halted. The hazard was re-fenced and will be considered for a polyurethane foam (PUF) plug at a future time. Of the 53 hazards selected for backfill, 35 were already secured with T-post and barbed wire fences. Ahead of the dozer, work crews removed the fences and were able to recycle nearly 400 metal T-posts which are being used on other AML fencing projects. Figure 8 is a photograph of the results of T-post recycling.

The backfill project was conducted the week of September 25-29, 2006. Nevada Mining Association member companies and suppliers provided the following support: A D-6 dozer was provided by Cashman Equipment, Las Vegas, dozer transportation was courtesy of DeLong Trucking, Las Vegas and equipment operator, Alfred Anderson, was generously loaned for the project by Round Mountain Gold Corporation. Fuel purchases and logistical support were provided by Jonathan Brown of the Nevada Mining Association. We would like to express our appreciation to all of the partners in this project for their cooperation, expertise, and generosity.

Table 3 summarizes backfill projects completed from 1999 through 2006.



Figure 7. Backfill work in progress on an adit at Ray Camp.



Figure 8. Recycling metal fence posts during Ray Camp backfill.

Table 3. Summary of Completed Backfill Projects – 1999-2006

1999	Total of 6 south of Henderson in Clark County (BLM)
2000	Total of 13 south and west of Henderson in Clark County (BLM)
2001	Total of 22 near Goodsprings in Clark County (BLM)
2002	Total of 21 near Goodsprings in Clark County (BLM) Total of 7 on Peavine Mountain, northwest of Reno, Washoe County (USFS)
2003	Total of 41 in the Searchlight and Nelson areas of Clark County (BLM)
2004	Total of 45 in Esmeralda and Nye Counties near Tonopah (BLM)
2005	Total of 55 , 37 in Beatty/Rhyolite, Nye County, 18 in Perry Canyon, Washoe County (BLM)
2006	Total of 53 , in Ray Camp north of Tonopah in Nye County (BLM)
	<u>GRAND TOTAL BLM THROUGH 2006 – 256</u>
	<u>GRAND TOTAL USFS THROUGH 2006 – 7</u>

Backfill Projects Proposed for 2007

Additional backfill projects are in the planning stages for 2007. One proposal includes another round in Esmeralda and Nye Counties near Tonopah, made at the request of the Tonopah BLM Field Station. Other projects center on backfilling mine openings on BLM lands in Washoe County west of Virginia City, as well as several in Douglas County, made at the request of the Carson City BLM Field Office. Funding has also been obtained from the Southern Nevada Public Land Management Act (SNPLMA) Round 6 by the Las Vegas BLM Field Office for the purpose of backfilling additional hazards in Clark County in 2007 or 2008.

Bat Related 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 enclosures 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 from one or more of our partnering agencies; Nevada Department of Wildlife, Nevada Natural Heritage Program, Bureau of Land Management, US Forest Service, see Figure 10. In 2006, pre-closure surveys were conducted at more than 100 sites in Nevada.

A grant received by the Department of the Interior from land sales under the Southern Nevada Public Land Management Act (SNPLMA) Round 5 is currently being used to fund archaeological and biological surveys on 344 previously identified orphan abandoned mine hazards, on federally managed public lands (BLM, USFS and National Park Service) in Clark County. Survey work began in 2006 and may take two years to complete. Funding from the same grant is earmarked for the construction of bat-compatible closures (e.g. bat gates, bat cupolas) on those hazards identified as containing potential or significant bat habitat. In 2006, 57 of the 344 hazards were surveyed by Walter Clevenger, a biologist for the Army Corps of Engineers. Thirteen were identified as potential bat habitat and are recommended for additional surveys.

This recent work, along with initial studies done from 1999 to 2003 by Pat Brown and Bob Berry, Bat Conservation International; Rick Sherwin, Christopher Newport University, Newport News, Virginia; the Harry Reid Center for Environmental Studies at the University of Nevada, Las Vegas; and Christopher Ross of the BLM NSO, bring the current total to twenty-nine mine openings on federally managed lands in Clark County as having potential habitat for bats and may be recommended for bat-compatible closures (under SNPLMA Round 4 and 5 grants). Construction of these closures is expected to begin in 2007. Sites found not suitable as bat habitat are recommended for permanent closure by backfill, and this work, funded by SNPLMA Round 6, is expected to begin in 2007 as well.



Figure 10. NDOW biologist, Jason Williams, conducts a pre-closure survey in Nye County. A Townsend's big-eared bat in flight in an adit in Nye County.

Summer Intern Program

The Division completed its sixth summer intern program in 2006. Four students from the Mackay School of Earth Sciences and Engineering and two incoming freshman were hired. The six were Erin Doerr, Jack Jacquet, Marcie Purkey, Sam Saunders, Garrett Schult, and Greg Stokes. The Division appreciates the great work they performed during the 14 weeks of the program, see Figure 11. 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 12 is a chart illustrating the monthly hazard discovery and orphan securing efforts made during 2006. It is very clear the interns' presence during the May-August time frame had a marked positive impact on the program. Working in 13 counties, the interns secured or repaired 173 hazards, completed inspection/assessment visits to 85 previously secured hazards, logged 212 new hazards and logged 773 non-hazards!



Figure 11. 2006 Summer interns in a group photo at the Round Mountain Gold Mine and logging and securing hazards in Esmeralda and Lincoln Counties.

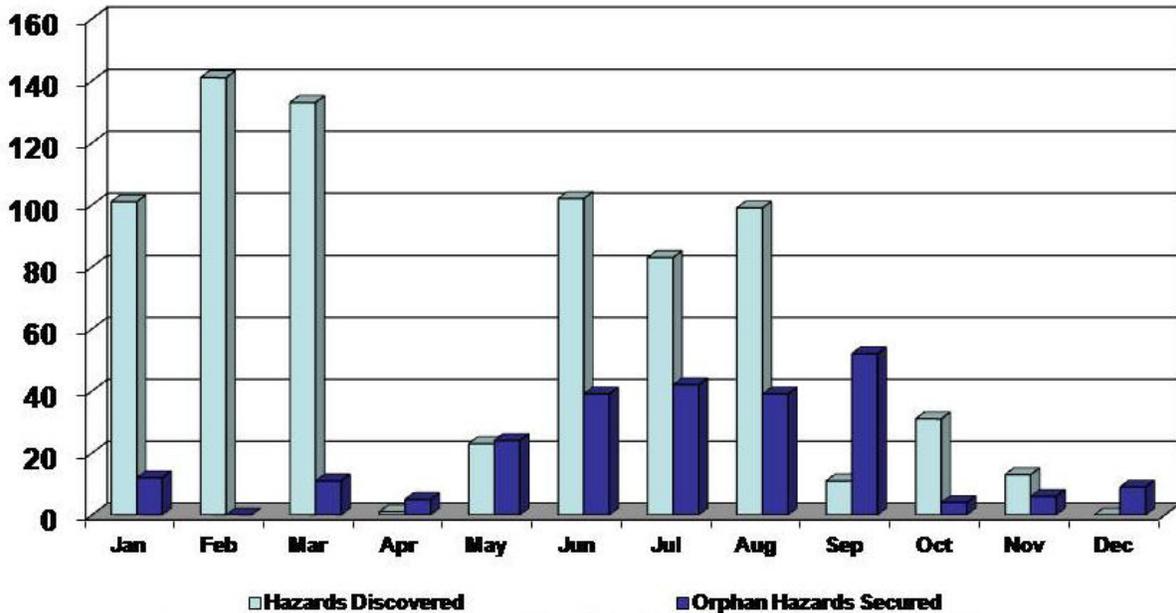


Figure 12. Hazards Discovered and Orphan Hazards Secured 2006.

Scout Projects

Eagle Scouts

A record Year!

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 2006, a record 16 Eagle projects were completed in Clark, Douglas, Lyon, Nye and Washoe Counties resulting in 78 mine openings secured and 5 repairs made to previously existing fences. Through 2006, 68 Eagle Scout projects have been completed resulting in 406 orphan hazards secured and 31 previously secured hazards re-built or restored. Figure 13 shows an Eagle Scout project in Clark County and Figure 14 shows Eagle Scout projects in northern Nevada.

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



Figure 13. Eagle Scout Candidate Joshua O'Barr supervises construction on AML fencing project in Clark County.



Figure 14. Boy Scouts (L-R), Matt Robinson, Mitch Benning, and Andy Haskin, on AML projects in Douglas and Washoe Counties.

Contracted AML Work

In early 2006, Geotemps was awarded a \$40,000 contract to locate and log previously unidentified hazards and non-hazards in Nye and Esmeralda Counties. Contractors John Morley and Dustin White logged 352 new hazards and 834 non-hazards from late January through March. Particular emphasis was placed on the historic mining districts near Goldfield, Beatty and Lida.

Nevada AML Environmental Task Force

In March of 1999, the Bureau of Land Management (BLM) initiated the formation of a Nevada Abandoned Mine Land Environmental Task Force (NAMLET) to begin the remediation of environmental problems associated with abandoned and inactive mines in Nevada. The task force is comprised of 13 federal and state agencies in order to foster regulatory cooperation, identify priority sites for cleanup, and provide administrative oversight for funded projects. The Division is the lead coordinator in this effort.

Since 1999, the task force has overseen reclamation activities at 21 abandoned mine sites and initiated work on two database projects. Funding for these projects has come from a variety of sources including the U.S. Army Corps of Engineers (USACE), BLM, Bureau of Reclamation, Environmental Protection Agency, and mining reclamation bonds. The USACE Restoration of Abandoned Mine Sites (RAMS) program has received \$4 million in congressional appropriations since 2000 for work in Nevada to support the development of closure plans, and small, innovative, on-the-ground demonstration projects related to abandoned mine cleanup. The following is a list of AML projects currently underway or completed:

1. **Aurora Creek/Bodie Creek** (Esmeralda) – Site characterization initiated in 2006.
2. **Casleton** (Lincoln) – Channel diversion and armoring completed in 2006.
3. **Crum Canyon/Hilltop** (Lander) – Characterization planned for 2007.
4. **Easy Junior** (White Pine) - Reclamation completed in 2005.
5. **Elder Creek** (Lander) – Reclamation completed in 2006.
6. **Golden Butte** (White Pine) - Reclamation completed in 2005.
7. **Golden Eagle** (White Pine) – Site characterization completed in 2006, waiting for reclamation funding.
8. **Gooseberry** (Storey) – Hazmat cleanup completed with bond money, Brownfields project underway in 2006.
9. **Guanomi** (Washoe) – Reclamation completed in 2006, see figure 15.
10. **Johnston Mill Site** (Lincoln) – Reclamation completed in 2006.
11. **Kingston** (Lander) – Reclamation completed in 2006 except for well abandonment.
12. **MacArthur** (Lyon) – Site characterization and closure plan completed with reclamation scheduled for 2007.
13. **Mt. Hamilton** (White Pine) – Reclamation of part of haul road scheduled for 2007.
14. **Norse-Windfall** (Eureka) – Engineering design and final closure plan completed with structure removal scheduled for 2007.
15. **Paradise Peak** (Nye) – Site characterization completed with engineering design and final closure plan completed in 2006.
16. **Perry Canyon** (Washoe) – Reclamation completed with cooperation from private property owner in 2006.

17. **Rip Van Winkle** (Elko) - Site characterization and design work completed, waiting for reclamation funding, possible Good Sam site with help from Trout Unlimited.
18. **Pine Grove/Rockland** (Lyon) – Site characterization scheduled for 2007.
19. **Tybo Tailings** (Nye) – Final closure plan completed, initial reclamation planned for 2007, more reclamation funding needed.
20. **Veta Grande** (Douglas) - Reclamation completed in 2005
21. **Ward** (White Pine) – Site characterization and closure plan scheduled for 2007.

Further information on some of these projects is available at the USACE RAMS website at <http://www.nwo.usace.army.mil/html/rams/rams.html>.



Figure 15. Reclamation work at the Guanomi Mine, Pyramid Lake Indian Reservation.

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% (77.1% in 2006), 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 (17.1 in 2006). 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 July 16, 2001, \$1.50 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 years 2002 through 2006.

Table 4. Revenue to the AML program for the years 2002 through 2006.

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

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 increased in 2006 and the number of securings completed in 2006 remained at a level well above the historical average. This is despite the fact that much of the remaining work is located in the more remote, less accessible areas of the state. The combined help of the Nevada mining industry, the federal land management agencies, the summer intern program, and many volunteers have greatly enhanced the efforts of the NDOM staff.

The public awareness program reached nearly 20,000 people directly in 2006 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.

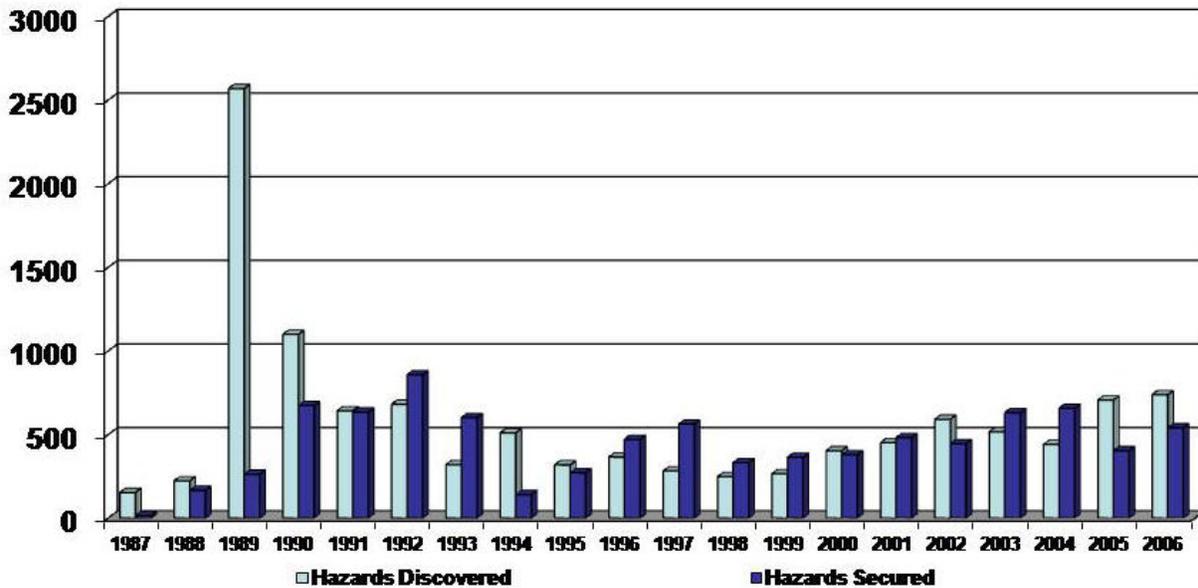
Despite Nevada’s tremendous population growth and the growing number of visitors that recreate in Nevada, there has been no significant increase in the number of injuries or fatalities related to abandoned mine hazards. It is the sincere hope of the NDOM staff that the mine backfill efforts, fences, 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!**

Appendix A

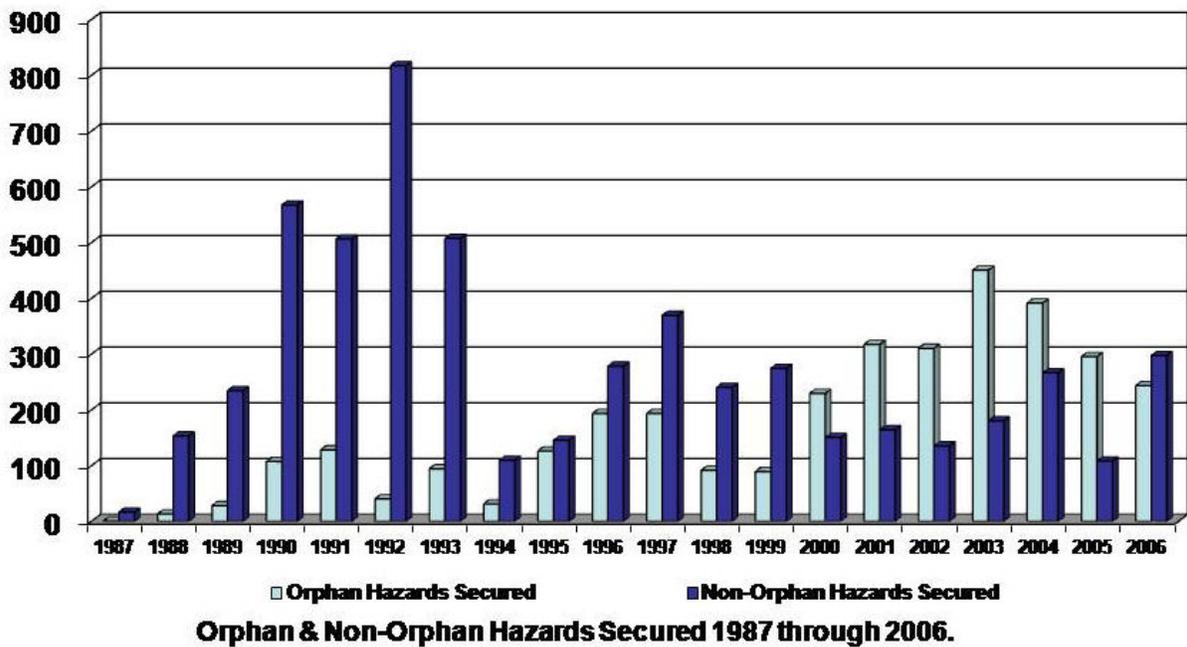
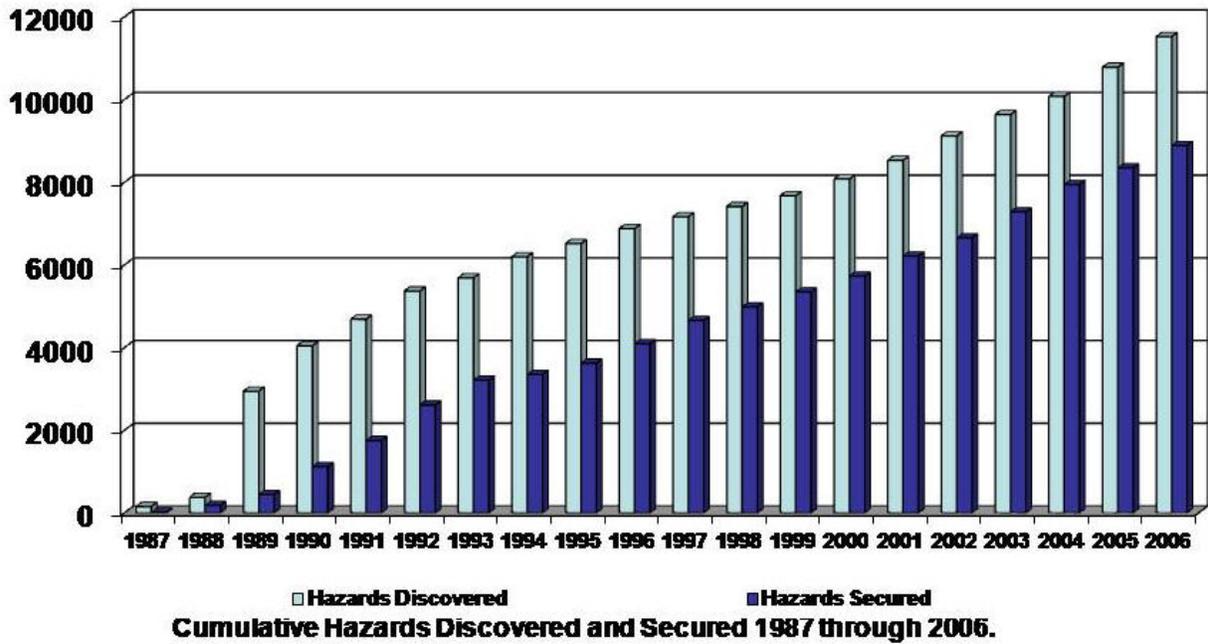
Hazards Discovered and Hazards Secured from 1987 through 2006.

	Hazards Discovered	Cumulative Hazards Discovered	Orphan Hazards Secured	Non-Orphan Hazards Secured	Hazards Secured	Cumulative Hazards Secured
1987	153	153	0	16	16	16
1988	223	376	13	153	166	182
1989	2568	2944	28	234	262	444
1990	1099	4043	107	567	674	1118
1991	642	4685	128	506	634	1752
1992	681	5366	40	817	857	2609
1993	319	5685	94	507	601	3210
1994	510	6195	31	109	140	3350
1995	318	6513	126	145	271	3621
1996	365	6878	193	278	471	4092
1997	282	7160	193	369	562	4654
1998	248	7408	91	240	331	4985
1999	265	7673	89	274	363	5348
2000	403	8076	229	150	379	5727
2001	451	8527	317	164	481	6208
2002	591	9118	310	135	445	6653
2003	516	9634	450	180	630	7283
2004	440	10074	391	266	657	7940
2005	706	10780	295	108	403	8343
2006	738	11518	243	297	540	8883



Hazards Discovered and Hazards Secured from 1987 to 2006.

Appendix A (continued)



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 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 \$1.50 per claim.

(Added to NAC by Commission on Mineral Resources by R069 -99, eff. 8-19-99; A by R080-1, eff. 1-16-2002)

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 ½ to 1 mile, inclusive, from a town.
4. Four points must be assigned to a dangerous condition located not more than ½ 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 an 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 \$1 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.

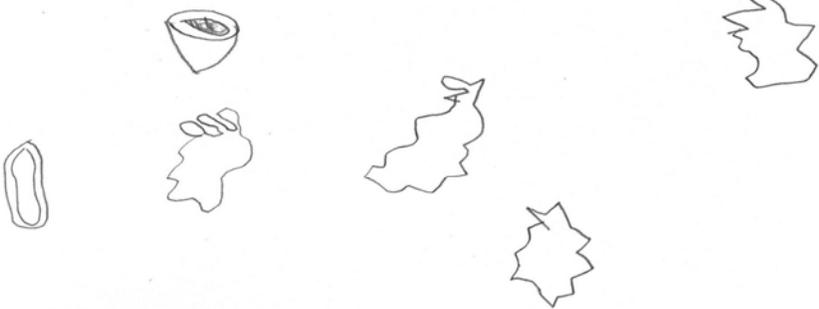
(Added to NAC by Department of Minerals, eff. 10-9-90; A by Comm'n on Mineral Resources by R080-1, 1-16-2002, R066-02, 8-23-2002)

Appendix D. Scout Projects

NEVADA SCOUT AML SECURING PROGRAM					THROUGH DECEMBER 31, 2006	
ORDER	NAME OF	DATE(S) OF	# SITES	# SITES	COUNTY	ID NUMBERS OF SECURED SITES
COMPLETED	SCOUT	PROJECT	SECURED	REPAIRED		
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
1992 TOTAL			13	0		
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
1993 TOTAL			12	0		
5	Josh Johnson	Nov. 12, 1994	4	0	CLARK	CL-1407, 1408, 1409, 1425
1994 TOTAL			4	0		
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
1996 TOTAL			13	0		
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
1998 TOTAL			25	0		
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
1999 TOTAL			15	2		
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
2000 TOTAL			14	0		
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
2001 TOTAL			39	9		
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
2002 TOTAL			35	0		
28	Chris Mullins	Mar. 29, 2003	6	0	CLARK	CL-412, 413, 414, 415, 416, 417
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
2003 TOTAL			61	3		
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
2004 TOTAL			47	4		
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 Giraudo	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)
2005 TOTAL			50	8		
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
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
2006 TOTAL			78	5		
CURRENT GRAND TOTAL			406	31		
			SECURED	REPAIRED		

Appendix E. Letters of Appreciation



Dear Mr. Durbin

Thank you for coming at Eisenberg Elementary school and bringing the rocks to enjoy. I enjoy the bead mining. Thank you for telling us what we don't know about rocks. I like the light that you point on the rocks and it was showing colorful colors. Thank you for telling us to stay out of mines.

Thank you again,
Christian

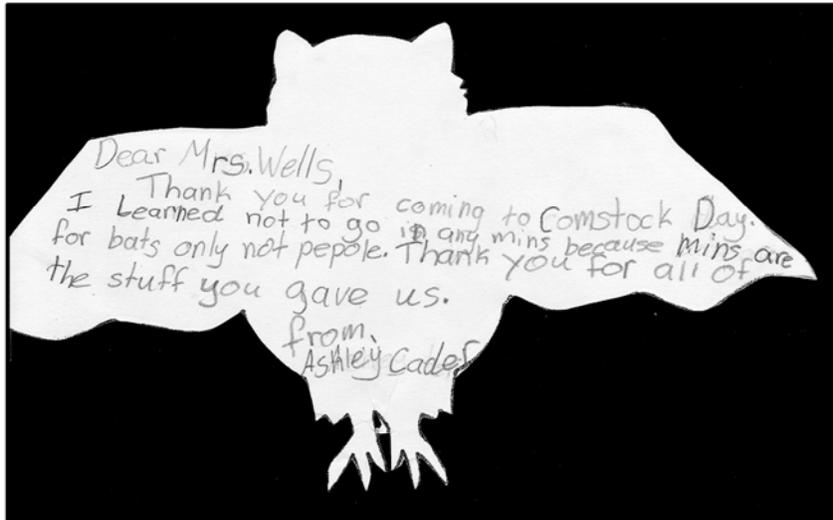
- a 3rd grade student at Dorothy Eisenberg Elementary School, Las Vegas

Dear Mr. Durbin Nov. 29, 2006

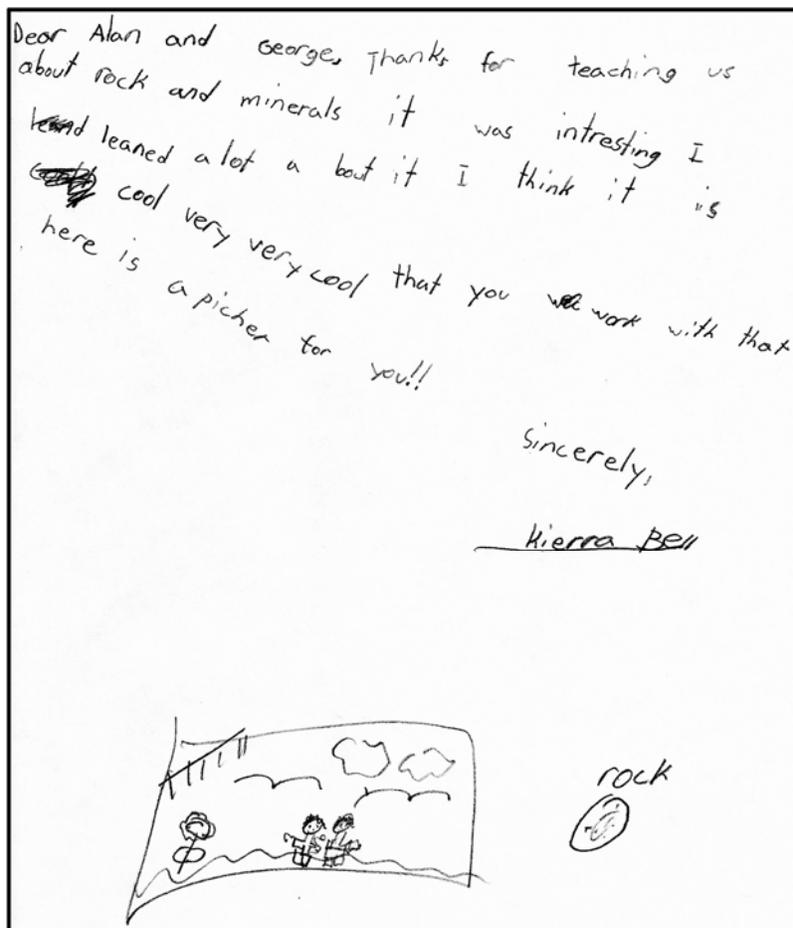
I really think ~~everything~~ ^{everything} you taught us was fascinating. I didn't know mines could be dangerous and thank you for warning us. I think every single rock you brought for us was cool. Thank you for visiting our school! I guess being a person that knows a lot about rocks is cool!

Sincerely,
Nathan Mactal

- a 3rd grade student at Elizabeth Wilhelm Elementary School, N. Las Vegas



- a 4th grade student at Piñon Hills Elementary School, Minden



- a 2nd grade student at Bordewich-Bray Elementary School, Carson City

Dear Mike Vischer,

Thank you for coming in. I never knew so much about rocks. I can't wait to get home and tell my mom. She might not believe me. I didn't know you had minerals. I really like the rocks you bring in. Once again thank you.

Sincerely,
Jessica Foote

Dear Mr. Vischer, Thank you really much for teaching us about Rocks, and Minerals. I really enjoy touching all the rocks that you passed out. When I see a black, and big holes I'll never go, and thanks for telling me never to go in there.

Thank you one's agin.

From: Christian H. #18

- two 4th grade students at Sarah Winnemucca Elementary School, Reno