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**COMMISSION ON MINERAL RESOURCES
DIVISION OF MINERALS**

**NEVADA ABANDONED
MINE LANDS REPORT
2005**



by

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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 18th year in 2005. Key points for the program in 2005 include the following:

- One injury incident related to hazards at abandoned mines was reported to the Nevada Division of Minerals (NDOM) in May 2005.
- The total number of AML hazards discovered and ranked since the beginning of the program reached 10,779 hazards. The total number of hazards secured reached 8,432.
- 706 hazards were discovered and ranked in 2005, a 60.5% increase over 2004. This increase was in response to the need to focus attention on areas across the state having high levels of public use.
- 355 hazards were secured in 2005, a 46.1% decrease over 2004. Mining claimants and private property owners secured 77 hazards. 253 orphan hazards (hazards located on public land where no claimant or property owner exists) were secured by NDOM staff and volunteers, a decrease of 35.1% compared to 390 securings in 2004.
- Public awareness activities: 61 classroom presentations to approximately 1,510 students, 50 presentations at school functions outside the classroom to nearly 1,000 students. 20 presentations at other venues brought the "Stay Out and Stay Alive" message to over 15,000 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 74,200 brochures, and the "Stay Out and Stay Alive" video was sent to all new schools in the state.
- "55 in '05!" 2005 was a record year for permanent mine closures. In a cooperative effort between the Division, the Bureau of Land Management, and the Nevada Mining Association, 37 hazards were backfilled in the Beatty/Rhyolite area in Nye County and 18 were backfilled in Perry Canyon, north of Reno in Washoe County.
- The Summer Intern Program included 6 students in 2005. The interns were mining engineering students from the Mackay School of Earth Sciences and Engineering, University of Nevada, Reno.
- 46 hazards were secured and 8 previously secured hazards were repaired by 10 Eagle Scout candidates in 2005. Our very first Girl Scout completed a mine fencing project in 2005 in Elko County, fencing 4 hazards in the Spruce Mountain area of eastern Elko County. Since 1992, 51 Scout projects have been completed resulting in 328 secured orphan hazards and 26 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 78.2% (70% required) and total public awareness presentations were 14.6 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 \$320,697 in 2005, as compared with \$366,536 in 2004.

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 2005.

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 35-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, 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 2005.

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
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
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

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 2005

During 2005, there was one injury incident related to abandoned mines. The incident occurred in May of 2005. A woman in her 30's entered an adit at a mine site in the Pine Nut Range southeast of Carson City and fell down a 35-foot deep inclined winze. Her injuries consisted of minor cuts and bruises.

Discovery and Securing

From the beginning of the AML program in 1987 through December 31, 2005, 10,779 hazards have been discovered and ranked and 8,432 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 2005. 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 78.2% of all hazards discovered to date.

Of the 8,432 hazards secured, 724 (8.6%) were ranked high, 2,550 (30.2%) were ranked moderate, 3,844 (45.6%) were ranked low, and 1,314 (15.6%) were ranked minimal. Figure 2 is a pie chart showing the percentage distribution of secured mine openings by hazard rank.

Of the 8,432 hazards secured, 3,147 (37.3%) are orphans, ranked as follows: 145 (4.6%) high, 785 (24.9%) moderate, 1,521 (48.3%) low, and 696 (22.1%) 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 5,285, which represent the very significant contribution to the program by the mining industry, claimants, and landowners.

The total number of hazards discovered and ranked during 2005 was 706 compared with 440 hazards discovered and ranked in 2004. The 60.5% increase was in response to the need to focus attention on areas of high public use including Spruce Mountain in Elko County, Boundary Peak and Lida in Esmeralda County, Berlin and Ione in Nye County, and Mt. Hamilton/Treasure Hill in White Pine County. Of the 706 hazards discovered, 255 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 706 hazards discovered in 2005, 58 (8.2%) were ranked high, 198 (28.0%) moderate, 317 (44.9%) low, and 133 (18.8%) minimal. Figure 4 is a pie chart showing the percentage distribution of hazards discovered in 2005 by hazard rank.

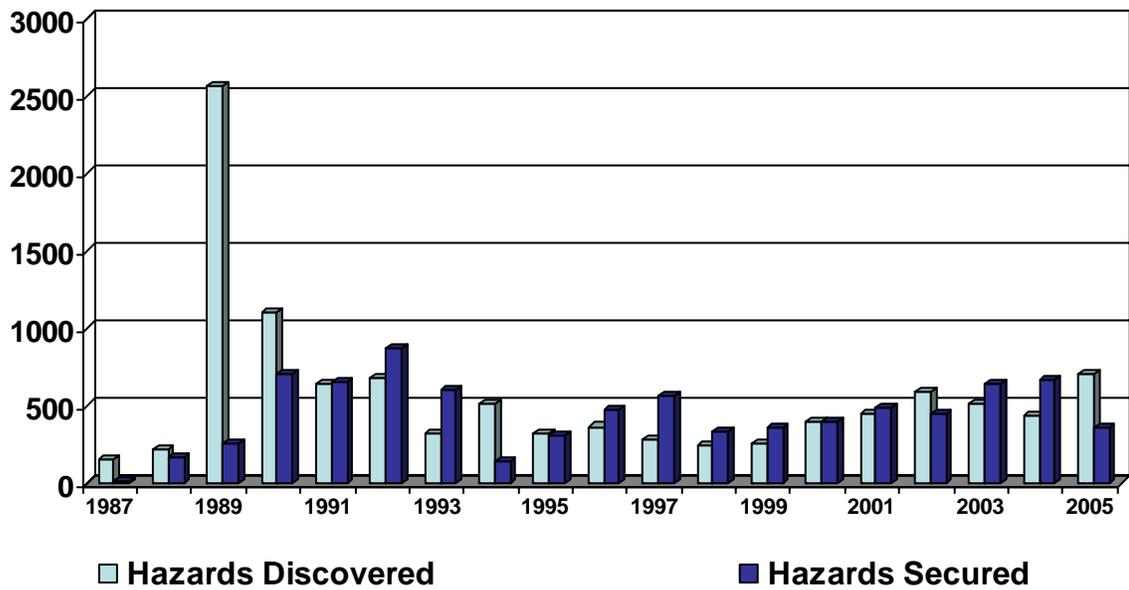


Figure 1. Hazards Discovered and Hazards Secured from 1987 to 2005.

Table 2. County-by-County Hazards Discovered and Secured from 1987 through 2005.

COUNTY	HAZARDS DISCOVERED	HAZARDS SECURED
Carson City	73	71
Churchill	446	372
Clark	1,619	1,249
Douglas	164	122
Elko	357	268
Esmeralda	1,215	946
Eureka	597	506
Humboldt	469	390
Lander	356	283
Lincoln	519	410
Lyon	795	624
Mineral	1,130	1,015
Nye	1,175	807
Pershing	885	621
Storey	141	124
Washoe	318	291
White Pine	520	333
TOTAL	10,779	8,432

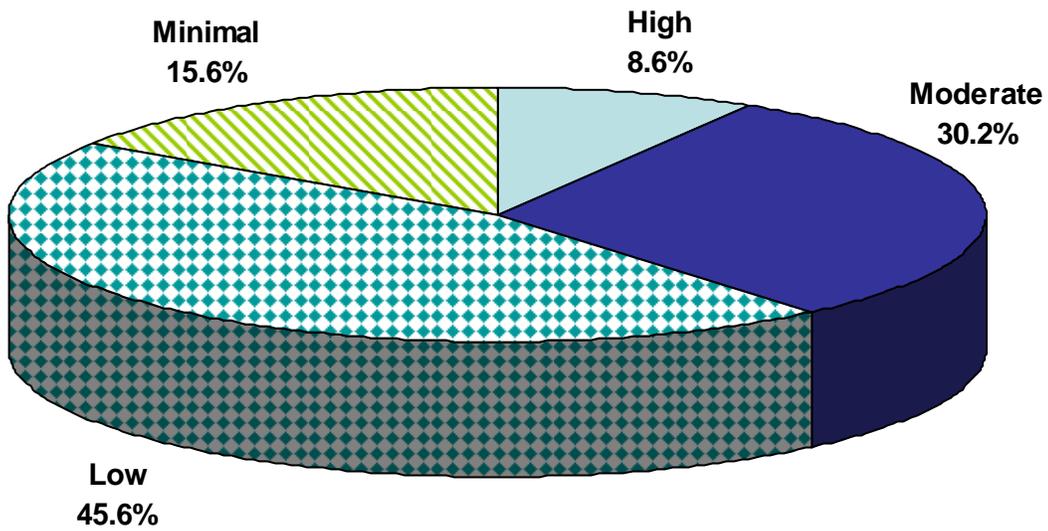


Figure 2. Distribution of Secured Mine Openings by Hazard Rank 1987 through 2005; total 8,432.

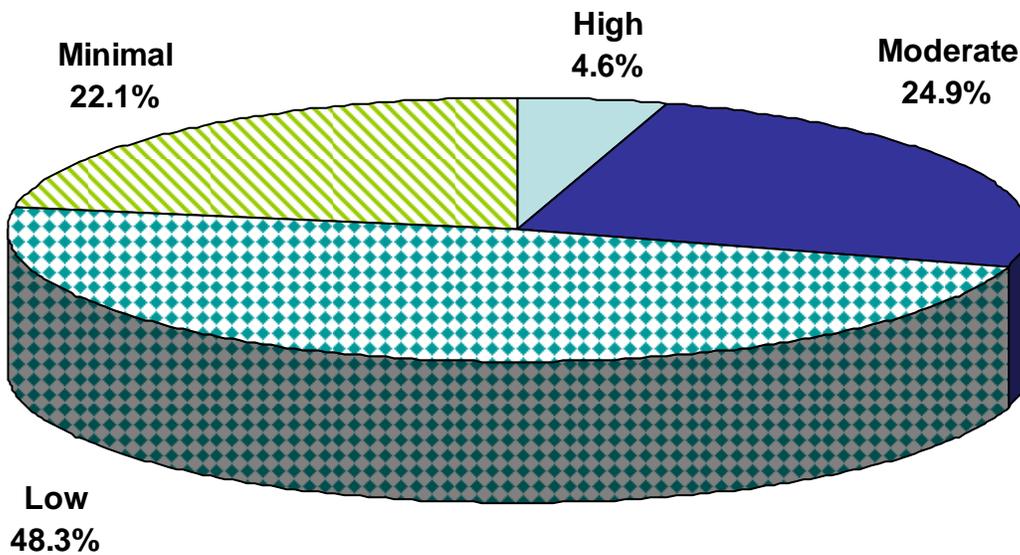


Figure 3. Distribution of Secured Orphan Mine Openings by Hazard Rank 1987 through 2005; total 3,147.

The total number of sites secured during 2005 was 355 compared to 659 in 2004. Of the 355, 196 were secured by NDOM staff and summer interns, 80 were secured by volunteers and other Good Samaritans, 77 were secured by claimants and owners of patented claims and private land, and 2 secured by natural effects (e.g. caving). 253 of the hazards secured in 2005 were orphans. The orphan hazards represent 71.3% of 2005 securings. The number of orphan securings decreased from 390 in 2004 to 253 in 2005, a decrease of 35.1%. The change was attributed to the Division's focus on new discoveries in high-use areas and the increasing remoteness of the hazards as work extends into more rural areas of the state.

169 of the orphans were secured by summer interns and NDOM staff. 50 hazards were secured and 8 previously existing fences were repaired during ten Eagle Scout projects in Clark, Lyon and Nye Counties and one Girl Scout project in Elko County. 8 orphans were found already secured when discovered and ranked. 3 hazards were found secured by former claimants in Clark County. 22 previously unsecured orphans were secured by backfilling in Nye and Washoe Counties. 1 orphan hazard was found caved by nature in Lincoln County.

Orphan securing work during calendar year 2005 resulted in the abatement of 12 hazards with a ranking of high (4.7%), 64 with a ranking of moderate (25.3%), 109 with a ranking of low (43.1%), and 68 with a ranking of minimal (26.9). Figure 5 is a pie chart showing the percentage distribution of secured orphans by hazard rank in 2005.

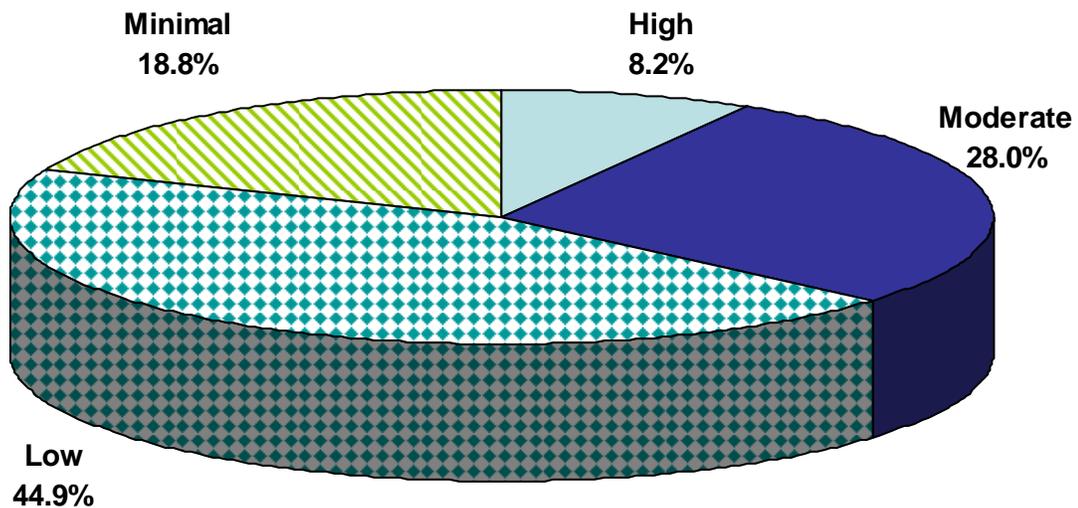


Figure 4. Distribution of Discoveries by Hazard Rank 2005; total 706.

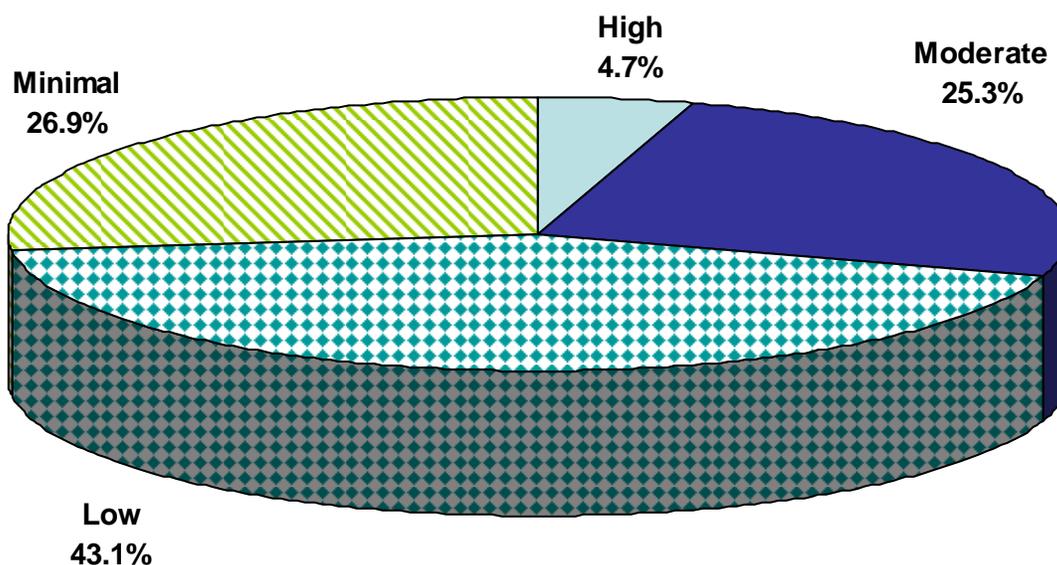


Figure 5. Distribution of Secured Orphan Mine Openings by Hazard Rank 2005; total 253.

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.

As a joint project with the BLM Nevada State Office, a new public service announcement was created in 2005 to focus attention on the hazards of off highway vehicle (OHV) travel in and around Nevada’s historic mining districts. With the assistance of ten volunteers from the Southern Nevada Off-Road Enthusiasts (SNORE), filming took place near Tonopah, see Figure 6. Three PSAs (15, 30 and 60-seconds), produced by BCI Video, were delivered to television stations in Las Vegas, Reno, and Elko for airing. They have also been selectively distributed in DVD format for additional outreach opportunities.



Figure 6. Filming of Public Service Announcement near Tonopah.

In 2005, staff made 61 classroom presentations to approximately 1,510 students in Carson City, Clark, Lyon and Washoe Counties. Additional presentations involving large numbers of children included Capital City Farm Days at Fuji Park in Carson City – (staff made 50 short presentations to small groups of 1st through 3rd graders, teachers and parent helpers rotating through various displays – 1,000 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 nearly 15,400 people through 20 other venues, including:

- Presentations made to grade levels 4-5 and 9-12 teachers at the 16th Annual Minerals Education Workshop in Las Vegas and the 21st Annual Northern Nevada Minerals Education Workshop in Winnemucca (total of 71 teachers), see Figure 7.
- Helldorado Days Celebration - Las Vegas (500 visitors to NvMA/NDOM display booth)
- Earth Day – Reno (500 visitors to display and 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, the Society for Mining, Metallurgy and Exploration Annual Meeting, the Geological Society of Nevada Symposium 2005, and the Northwest Mining Association Annual Meeting (approximately 13,100 attendees total)
- Presentation at the Bats and Mines Conference – Reno (98 attendees)
- Family Learning Night – Dayton (300 attendees)
- Presentation to the Southern Nevada Gem and Mineral Society – Las Vegas (70 attendees)
- Presentation to the Mackay Club at the University of Nevada, Reno (20 attendees)
- Festival in the Pines – Kyle Canyon – Clark County (15 visitors to display before flash flood hit)

- Mount Charleston Hotel Oktoberfest – Clark County (50 visitors to display)
- Presentation at the National Minerals Education Conference, Tucson, Arizona (100 attendees)
- International Collegiate Mining Competition – Ranch San Rafael Park – Reno (AML materials distributed to 200 attendees)
- Second Saturday Mining program – Las Vegas Natural History Museum – (AML materials distributed to 100 attendees)



Figure 7. Images from the Minerals Education Teachers Workshops in Las Vegas and Winnemucca.

Also in 2005, 74,179 brochures were mailed out during January and February to 4th and 8th grade students in Nevada public and private schools. 1,697 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 schedule. “Stay Out and Stay Alive” videos were sent out to all new schools.

Backfill Projects

55 in '05!

2005 was a banner year for mine backfill projects. Two projects were completed, one in the Beatty/Rhyolite area or Nye County, the other in Perry Canyon north of Spanish Springs and Sparks in Washoe County. A total of 55 mine openings were permanently closed. Once again, the partnership between the Bureau of Land Management, the Division, the Nevada Mining Association and many others, came together to enhance safety on Nevada’s public lands.

Beatty/Rhyolite Backfill Project

Beatty, Nevada, a rural community at the “Gateway to Death Valley,” and Rhyolite, 3 miles to the west, a booming gold mining town in the early 1900s, now a popular “ghost town” tourist attraction visited by thousands annually. Hundreds of mine workings dot the landscape in all directions. Staff from the Tonopah BLM Field Station contacted the Division in early 2005 regarding their interest in permanently closing a number of hazardous mine openings. This interest was fueled by the large number of visitors to Rhyolite and a Beatty Habitat Trails Project proposed by Nye County. A list of 48 “orphan” hazards was assembled by the Division, BLM, and Ninyo and Moore, a contractor for Nye County’s Beatty Habitat Trails Project. 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 and were on-hand to monitor backfill operations. Staff from the Tonopah Field Station and BLM Nevada State Office (NSO) conducted biological evaluations (plants, animals). Internal bat surveys were conducted by Dr. Rick Sherwin, Christopher Newport University, Newport News, Virginia, with assistance from Marcus Mika, UNLV and David Waldien of Bat Conservation International. External bat surveys were conducted by Christopher Ross, BLM-NSO assisted by Division of Minerals staff Bill Durbin.

A total of 36 hazards were approved for backfilling. One shaft was rejected for backfill due to an excellent example of mine timbering and the remains of a rock wall structure at the collar. These were determined to be worth preserving so the shaft was approved for permanent sealing using a polyurethane foam (PUF) plug. A PUF plug approximately 10 feet thick was constructed in the shaft 7 feet below the collar (surface). Figure 8 is a photograph of the completed PUF plug. The plug was covered with a foot of rock and soil to prevent exposure to UV radiation (sunlight) and vandalism.

The backfill project was conducted the week of November 24-28, 2005. Nevada Mining Association member companies and suppliers provided the following support: A D-6 dozer was provided by Cashman Equipment, Las Vegas, dozer transportation courtesy of DeLong Trucking, Las Vegas and equipment operator, Manny Sandoval, was generously loaned out for the week by Chemical Lime Company, Las Vegas. Fuel and logistical support were provided by Jonathan Brown, Nevada Mining Association. Figure 9 is a photograph of backfill work in progress in Rhyolite.



Figure 8. PUF plug used to secure shaft while preserving historic rock wall and framing.



Figure 9. Shaft being backfilled. Ruins of Rhyolite buildings in background.

Perry Canyon Backfill Project

The Perry Canyon area is located approximately 30 miles northeast of Reno and 4 miles southwest of Pyramid Lake. Nearby Spanish Springs Valley, a suburb of Sparks, is an area seeing rapid growth of new homes and businesses. Recreationists from this area (OHV users, horseback riders, hunters and hikers) visit Perry Canyon area on a regular basis. 37 hazards were initially identified, however many were found to be inappropriate for backfilling, due to archeological, biological or accessibility concerns. NEPA work was carried out by the following individuals: Cultural resources: Alvin McLean, archaeologist, retired and Tom Burke, BLM-NSO; Biological surveys (plants, animals): Claudia Funari, biologist, Carson City BLM Field Office; Bat surveys: Internal: Christopher Ross, BLM-NSO; External: Christopher Ross, Jennifer Newmark, Nevada Natural Heritage Program, Claudia Funari, Carson City BLM Field Office, Division staff Mike Visher. Cultural resource monitoring during the backfill project was conducted by Susan McCabe of the Carson City BLM Field Office.

The backfill project took place October 31st and November 1st. During those two days, 18 identified hazardous mine openings were backfilled. The Nevada Mining Association member companies and suppliers provided enormous support: the D-6 dozer and its transport were provided by Cashman Equipment, Reno; Round Mountain Gold Corporation offered the services of equipment operator Alfred Anderson; fuel and logistical support were provided by Jonathan Brown, Nevada Mining Association. Figure 10 is a photograph of backfill work in progress at Perry Canyon.

We would like to express our appreciation to all of the partners in this project for their cooperation, expertise, and generosity.



Figure 10. Backfilling a hazardous shaft near Perry Canyon.

Backfill Projects Proposed for 2006

Additional backfill projects are in the planning stages for 2006. One proposal includes another round in Esmeralda and Nye Counties near Tonopah, made at the request of the Tonopah BLM Field Station. Another project centers on backfilling mine openings on BLM lands in the Virginia City area, Storey and Lyon Counties, 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 2006 or 2007.

<u>Summary of Completed Backfill Projects – 1999-2005</u>	
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)
<u>GRAND TOTAL BLM THROUGH 2005 – 203</u>	
<u>GRAND TOTAL USES THROUGH 2005 - 7</u>	

Foaming Projects

In addition to the foaming of the shaft in Rhyolite, two additional hazards were secured using polyurethane foam plugs. A previously secured adit in Carson City, with a history of public visitation, was secured using a PUF plug. Christopher Ross (BLM-NSO), Kevin Sullivan and Jeryl Gardner (NDEP), and Division staff Mike Visher participated in this project. Another very dangerous orphan adit, in the Perry Canyon area of Washoe County, was secured with foam by Rolling Rock Reclamation, demonstrating the viability and efficiency of spray foaming, see Figure 11.

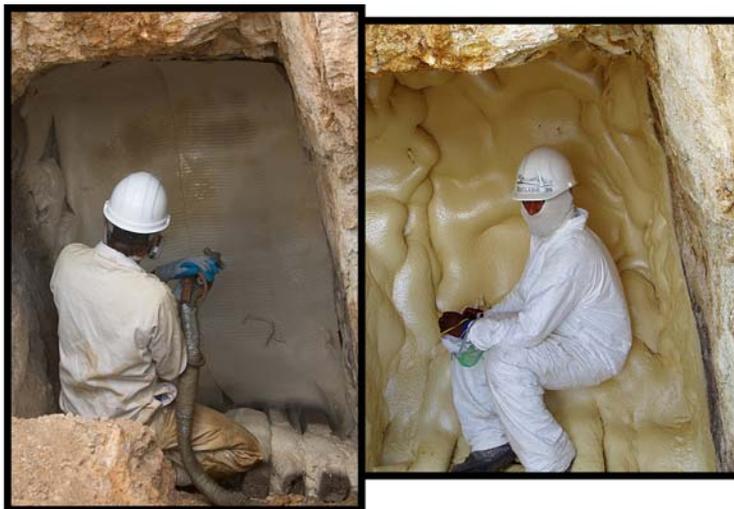


Figure 11. Rolling Rock Reclamation foaming an adit in Washoe County.

Bat Gate 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. Three bat gates were constructed in 2005 in Nevada; one by the US Forest Service on an adit south of Austin in Lander County and two by the Nevada Department of Wildlife on adits in Elko County, see Figure 12.

Twenty mine openings have been identified on federal lands in Clark County as potential habitat for bats. Initial studies were done between 1999 and 2003 to evaluate each mine opening as bat habitat. The work was done through consultants 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. Additional studies and construction on the twenty sites, and work to discover and evaluate other mine sites having bat habitat on BLM, USFS and National Park Service lands, will be on-going in 2006. Funding for studies and construction work will come from a grant received by the Department of the Interior from land sales under the Southern Nevada Public Land Management Act (SNPLMA).



Figure 12. A Townsend's big-eared bat roosting in an adit in Washoe County, bat gate construction in Lander County, and a completed bat gate in Elko County.

Summer Intern Program

The Division completed its sixth summer intern program in 2005. Six students from the Mackay School of Earth Science and Engineering were hired. The six, all mining engineering majors, were Jay Gillon, Randal Huntsman*, Josh Kantor, Austin Leach, Noah Millett, and William Newman* (* returnees from 2004). The Division appreciates the great work they performed during the 11 weeks of the program, see Figure 13. 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 14 is a chart illustrating the monthly hazard discovery and orphan securing efforts made during 2005. It is very clear the interns' presence during the May-August time frame had a marked positive impact on the program.



Figure 13. 2005 Summer interns securing hazards in Mineral County.

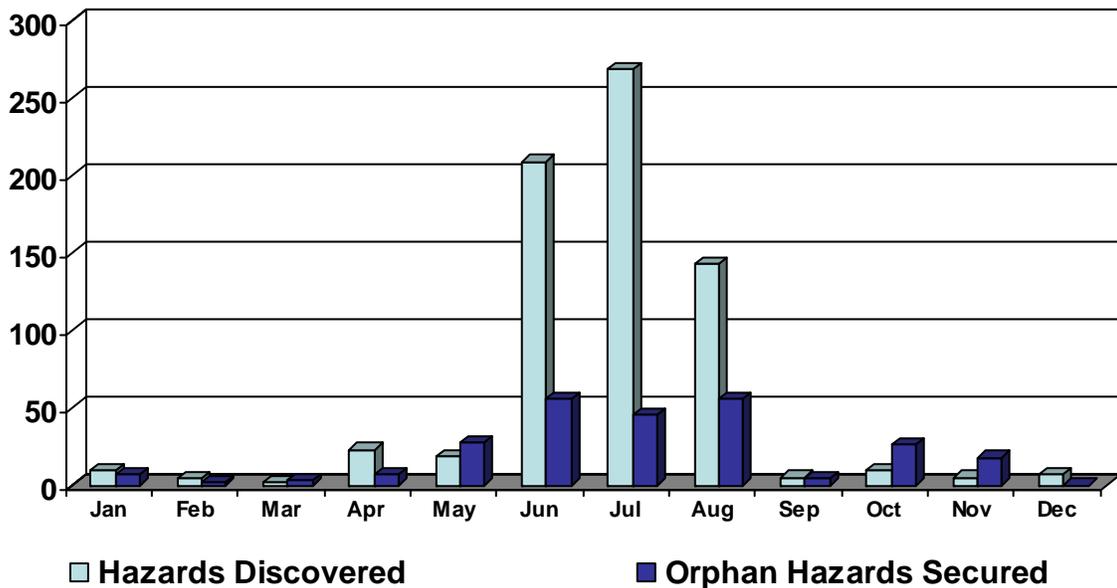


Figure 14. Hazards Discovered and Orphan Hazards Secured 2005.

Scout Projects – Eagle Scouts and Girl Scouts

Eagle Scouts

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 2005, ten Eagle projects were completed in Clark, Lyon and Nye Counties resulting in 46 mine openings secured and 8 repairs made to previously existing fences. Through 2005, 51 Eagle Scout projects have been completed resulting in 324 orphan hazards secured and 26 previously secured hazards re-built or restored. Figure 15 shows an Eagle Scout project in Clark County.

Girl Scouts

In 2005, our very first Girl Scout, Jennifer Giraudo of Spring Creek, Nevada, approached the Division regarding an abandoned mine fencing project for her Silver Award, Girl Scouting’s second highest merit award. Four “orphan” sites were secured by Jennifer and her crew in the Spruce Mountain area of eastern Elko County. Figure 16 shows work being performed during Jennifer’s Silver Award project.

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



Figure 15. Bill Durbin (right) congratulates Boy Scout Kenny Booth on an Eagle Project in Clark County well done, as Kenny's work crew cheers him on.



Figure 16. Girl Scouts Jenny Girauo (left) and Cristina Martinez secure hazards in Elko Co.

Other Mine Securing Projects

As part of his Senior Project, Carson High School Senior Jordan LaPorte secured three hazards by constructing fences around a shaft in Storey County and a shaft and an adit in Lyon County, see Figure 17.



Figure 17. Carson High School Senior Jordan LaPorte securing a hazard above Silver City.

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 scheduled for 2006.
2. **Caselton** (Lincoln) – Channel diversion completed with channel armoring scheduled for 2006.
3. **Crum Canyon/Hilltop** (Lander) – Initial water sampling scheduled for 2006.
4. **Easy Junior** (White Pine) - Reclamation completed.
5. **Elder Creek** (Lander) - Site characterization and final closure plan completed with reclamation scheduled for 2006.
6. **Golden Butte** (White Pine) - Reclamation completed with post closure monitoring of a demonstration ET project scheduled for 2006.
7. **Golden Eagle** (White Pine) – Site characterization scheduled for 2006.
8. **Gooseberry** (Storey) – Hazmat cleanup completed with bond money, Brownfields project scheduled for 2006.
9. **Guanomi** (Washoe) – Waste rock removal and lime addition completed with topsoil placement and revegetation scheduled for 2006.
10. **Johnston Mill Site** (Lincoln) – Site characterization and closure plan completed with reclamation scheduled for 2006.
11. **Kingston** (Lander) – Reclamation completed.
12. **MacArthur** (Lyon) – Site characterization and closure plan completed with reclamation scheduled for 2006.
13. **Mt. Hamilton** (White Pine) – Reclamation of part of haul road scheduled for 2006.
14. **Norse-Windfall** (Eureka) – Engineering design and final closure plan completed with structure removal scheduled for 2006.
15. **Paradise Peak** (Nye) – Site characterization completed with engineering design and final closure plan scheduled for 2006.
16. **Perry Canyon** (Washoe) – Site characterization completed with further reclamation suspended pending an agreement with adjacent private property owner.
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 2006.
19. **Tybo Tailings** (Nye) – Final closure plan completed, initial reclamation planned for 2007.
20. **Veta Grande** (Douglas) - Reclamation completed.
21. **Ward** (White Pine) – Site characterization and closure plan scheduled for 2006.

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>.

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% (78.2% in 2005), 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 (14.6 in 2005). 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 3 shows the revenues received by the Division from these three revenue sources for the years 2000 through 2005.

Table 3. Revenue to the AML program for the years 2001 through 2005.

Year	BLM Grants	Mining Claim Fees	Disturbance Fee	Total
2001	\$ 120,000	\$ 140,635	\$ 21,830	\$ 282,465
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

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 2005 and the number of securings completed in 2005 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 15,400 people directly in 2005 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.

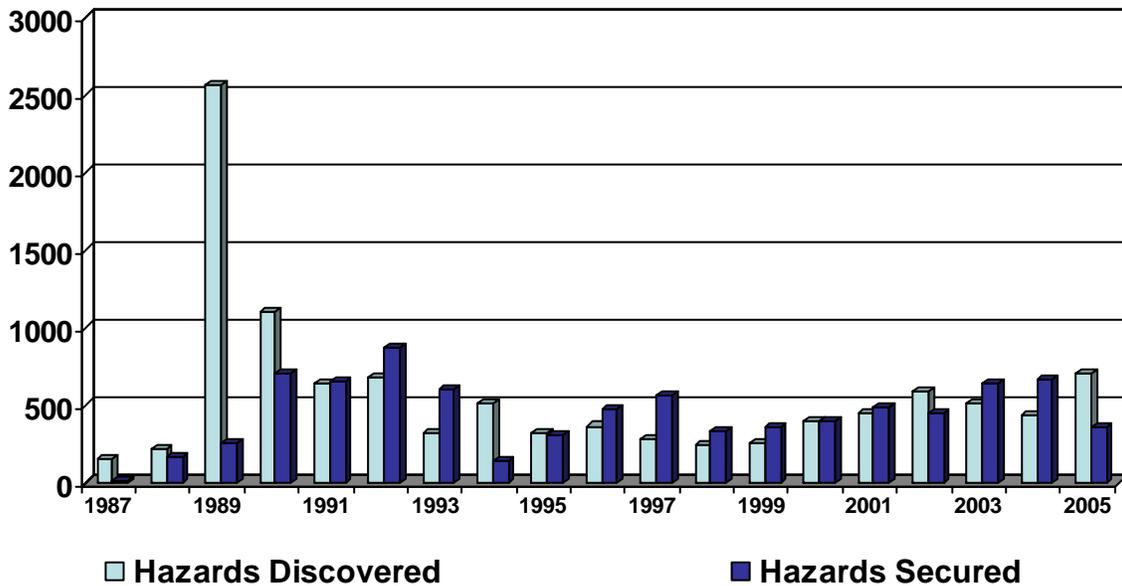
Despite Nevada’s tremendous population growth and the growing number of visitors that recreate in Nevada, there has been no significant increase in the number of injuries or fatalities related to abandoned mine hazards. It is the sincere hope of the NDOM staff that the mine backfill efforts, fences,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

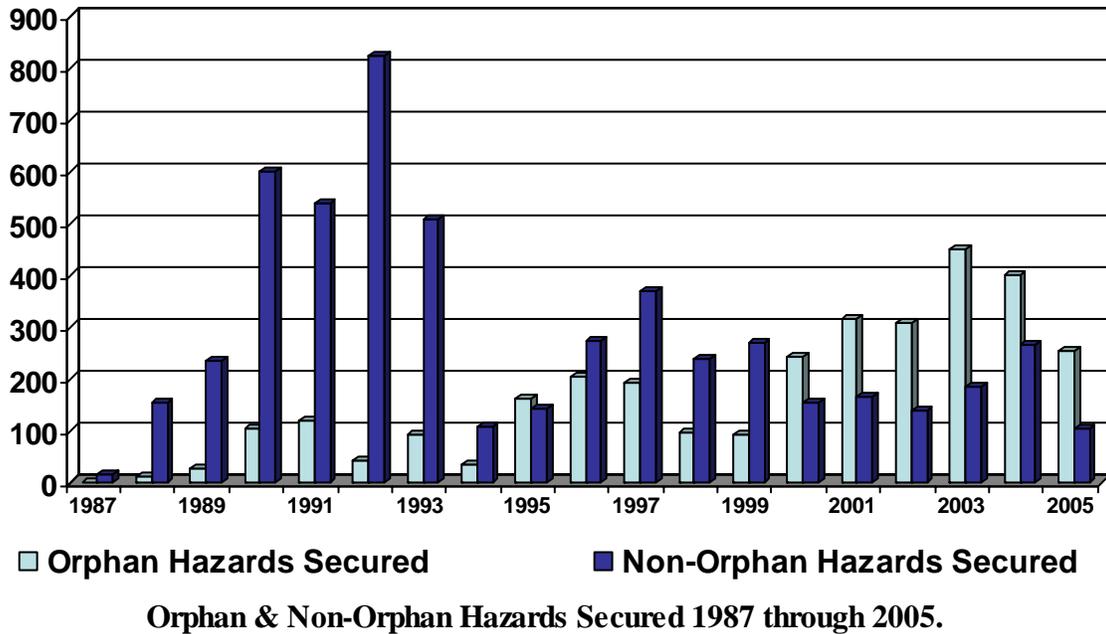
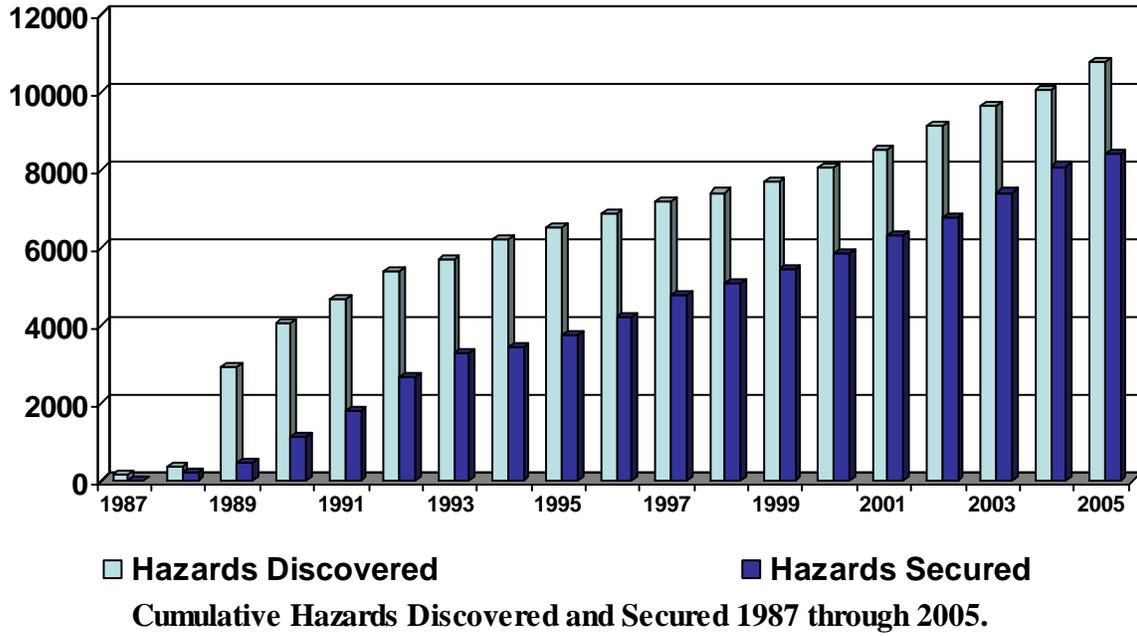
Hazards Discovered and Hazards Secured from 1987 through 2005.

	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	2,569	2,945	28	234	262	444
1990	1,099	4,044	102	601	703	1,147
1991	642	4,686	119	537	656	1,803
1992	683	5,369	44	822	866	2,669
1993	319	5,688	94	507	601	3,270
1994	510	6,198	36	109	145	3,415
1995	318	6,516	162	144	306	3,721
1996	365	6,881	203	274	477	4,198
1997	282	7,163	192	371	563	4,761
1998	248	7,411	95	238	333	5,094
1999	261	7,672	92	270	362	5,456
2000	403	8,075	241	153	394	5,850
2001	451	8,526	317	164	481	6,331
2002	591	9,117	307	138	445	6,776
2003	516	9,633	450	185	635	7,411
2004	440	10,073	399	267	666	8,077
2005	706	10,779	253	102	355	8,432



Hazards Discovered and Hazards Secured from 1987 to 2005.

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 per claim.

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

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 a warning sign mounted on an orange 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. For the purposes of 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.

(c) "Plan" means a plan of operation filed with and approved by the United States Bureau of Land Management or the United States Forest Service.

(Added to NAC by Department of Minerals, eff. 10-9-90)

Appendix D. Scout Projects

NEVADA SCOUT AML SECURING PROGRAM						
	NAME OF EAGLE SCOUT	DATE(S) OF PROJECT	# 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
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	William Bunch	December 8, 2001	5	0	CLARK	CL-1331, 1332, 1333, 1334, 1335 - sites previously secured very poorly
22	Shawn Holloman	July 14, 2001	6	0	LYON	LY- 322, 323, 324, 325, 326, 327
23	Travis Jarland	Aug. 11, 2001	5	0	LYON	LY-373, 592, 593, 594, 597
2001 TOTAL			39	9		
24	Beau Kalmes	Feb. 9, 2002	7	0	CLARK	CL-1161, 1162, 1163, 1164, 1505, 1506, 1507
26	Travis Cummins	Jan. 21, 2002	9	0	LYON	LY-279, 280, 299, 300, 301, 302, 679, 680, 681
27	Thomas Schwedhelm	June 29, 2002	8	0	LYON	LY-234, 235, 236, 239, 240, 645, 659, 660
28	Ben Stanphill	Nov. 2, 2002	11	0	LYON	LY-227, 229, 230, 231, 232, 233, 707, 708, 709, 710, 711
2002 TOTAL			35	0		
25	Daniel Miles	July 12, 2003	12	1	LYON	LY-687, 688, 689, 690, 691, 692, 693, 695, 696 (repair), 698, 699, 700, 701
29	Chris Mullins	Mar. 29, 2003	6	0	CLARK	CL-412, 413, 414, 415, 416, 417
30	Nathan Mayes	May 31, 2003	13	0	MINERAL	MI-396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 917
33	C.J. Gent	June 22, 2003	11	0	CHURCHILL	CH-409, 411, 412, 413, 414, 415, 416, 417, 418, 421, 422
34	Kye Stoker	June 28, 2003	5	0	CLARK	CL-1016, 1017, 1018, 1560, 1561
35	Chris Rice	August 9, 2003	8	0	CHURCHILL	CH-280, 281, 282, 283, 284, 285, 286, 287
37	Chris Sipma	Sept. 6, 2003	6	2	LYON	LY-221, 222, 223, 224, 225, 226, repairs to LY-217, 218
2003 TO DATE			61	3		
31	Duncan Rickford	Jan. 10, 2004	5	0	CLARK	CL-866, 867, 868, 869, 870
32	Chase Bodhaine	May 22, 2004	6	0	CLARK	CL-558, 559, 560, 562, 563, 564
38	John Hefner	Sept. 18, 2004	6	1	DOUGLAS	DO-130, 134, 135, 136, 150, 160, repairs to DO-132
39	Corey Sobrio	Mar. 20, 2004	10	0	LYON	LY-702, 703, 704, 705, 706, 751, 752, 753, 754, 769

NEVADA SCOUT AML SECURING PROGRAM						
	NAME OF EAGLE SCOUT	DATE(S) OF PROJECT	# SITES SECURED	# SITES REPAIRED	COUNTY	ID NUMBERS OF SECURED SITES
40	Shane Donelson	Oct. 23, 2004	8	0	NYE	NY- 352, 353, 354, 355, 357, 358, 359, 360
41	Sean Hayes	Apr. 24, 2004	7	0	CLARK	CL-846, 847, 848, 849, 850, 851, 852 (USFS)
44	Randy Sgamma	Nov. 12-13, 2004	5	3	CLARK	CL-908, 909, 912, 913, 915, repairs to CL-910, 911, 914
2004 TO DATE			47	4		
36	Devin Jones	XXX	XXX	XXX	XXX	APPARENTLY MOVED - NO FORWARDING INFO
42	Kenny Booth	Jan. 2, 2005	7	0	NYE	NY-362, 363, 364, 365, 366, 367, 1020
43	Isaiah Haywood	May 7, 2005	5	0	CLARK	CL-1235, 1236, 1237, 1238, 1239
47	Chip Holton	May 21, 2005	3	0	LYON	LY-731, 732, 735
49	Cameron Legere	Dec. 3, 2005	0	7	CLARK	repairs to CL-576, 577, 578, 580, 757, 758, 759 (USFS)
51	Justin Riker	XXX	XXX	XXX	XXX	WITHDRAWN EFFECTIVE 4/1/2005
52	John Gardner	April 30, 2005	5	0	CLARK	CL-242, 243, 244, 245, CL-1594
53	John Crepeau	October 29, 2005	4	0	CLARK	CL-257, 1597, 1598, 1599
54	Steven Archer	November 19, 2005	5	1	CLARK	CL-983, 984, 985, 986, 1596, replaced old fence at CL-1454
55	McKay Miles	May 28, 2005	5	0	CLARK	CL-253, 254, 255, 256, 1595
59	Luke Smith	November 5, 2005	5	0	CLARK	CL-1603, 1604, 1610, 1614, 1615
60	Brad Peterson	November 19, 2005	7	0	LYON	LY-757, 758, 759, 760, 762, 763, 764
61	Jennifer Giraud	September 24, 2005	4	0	ELKO	EL-249, 251, 252, 253
2005 TO DATE			50	8		
CURRENT GRAND TOTAL			328	26		
			SECURED	REPAIRED		