

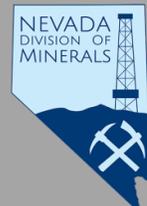
2022

Nevada Abandoned Mine Lands Physical Hazards Report



Commission on Minerals Resources
Division of Minerals

July 2023



State of Nevada

Commission on Mineral Resources

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Photo 1 – Interns touring McCoy/Cove Mine, with i-80 Gold staff in Lander County.

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Cover Photo: Cupola closure of the historic Forman Shaft in Storey County.

Additional copies of this report may be obtained from the Division of Minerals office or may be downloaded from the Division's website at

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Contents

1. Executive Summary.....4

2. The Commission on Mineral Resources.....5

3. Background.....5

4. Abandoned Mine Incidents in 202.....7

5. Inventory, Securings, and Repairs.....7

 Southern Nevada Revisits.....8

 Statewide Helicopter NV Point Inventory Project.....8

 Northwestern Nevada Safeguarding.....9

 Statewide Priority Revisit Project.....9

 Gillis Range Round II Safeguarding.....10

 Eureka and White Pine County Safeguarding.....10

6. Permanent Closure Projects.....10

 Virginia City Grand Prix, Lyon, and Storey counties.....11

 Buckingham Mine, Lander County.....11

7. Intern Program.....12

8. Public Awareness.....13

9. Performance Indicators.....14

10. Geologic, Cultural, and Wildlife Survey Contracts.....15

11. Summary.....15

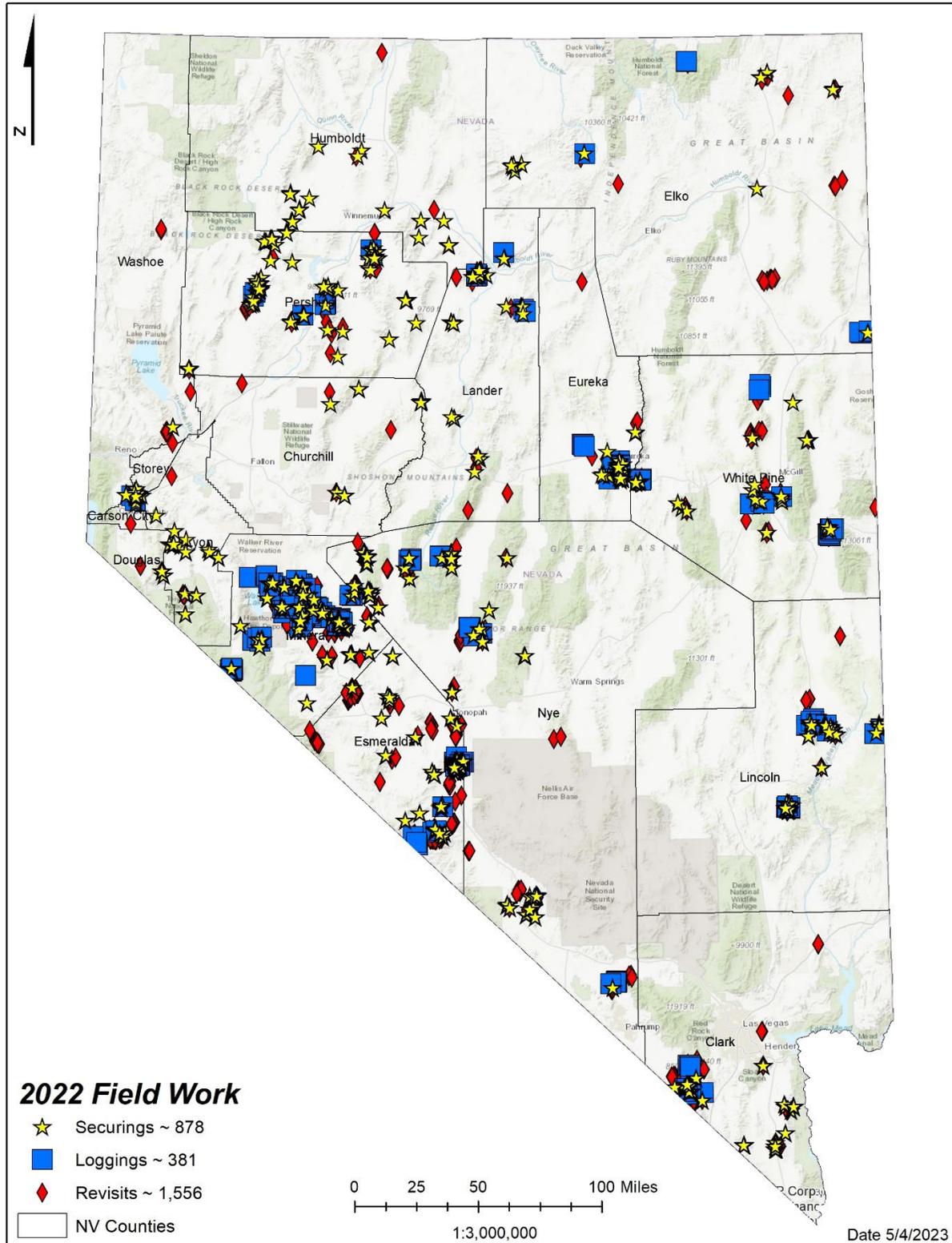
12. Acknowledgements.....16

13. Appendix A.....17

14. Appendix B.....19

15. Appendix C.....20

16. Appendix D.....21



Map 1 – AML field work performed in Nevada during the 2022 calendar year.

1. Executive Summary

The State of Nevada’s Abandoned Mine Lands (AML) program, operated by the Nevada Division of Minerals (the Division), finished its 36th year in 2022. Details and milestones include:

- No reported abandoned mine incidents in 2022.
- Over 155,000 historic mining related features cataloged since the inception of the AML program in 1987.
- 24,634 total hazards discovered and ranked since the beginning of the program; 20,388 hazards are currently recorded as secured.
- 381 new hazards discovered and 878 hazards secured in 2022.
- 502 hazards were secured by the Division, 315 by mining claimants and private property owners, 13 by federal agencies, and 48 were documented as naturally mitigated.
- 1,556 known hazards were revisited to confirm securing status and make repairs if necessary.
- 90 permanent closures were documented in eight of the 17 Nevada counties; 44 of which were completed by the Division’s contractor, Environmental Protection Services.
- \$1,617,757 expended towards contracted closures statewide, of which \$650,000 was funded by partner organizations.
- Exceeded the 2022 performance indicators required by the State Legislature, with 83% of inventoried hazards secured (70% required) and 25 outreach/public awareness presentations per FTE (24 required).
- New “Stay Out, Stay Alive” digital marketing campaign resulted in 2.3 million views of agency content.
- Collaborated with the Bureau of Land Management Nevada Department of Wildlife Nevada State Parks, Nevada State Historic Preservation Office, Nevada Department of Transportation, and the US Forest Service to secure abandoned mine land hazards throughout the state.



Photo 2 – AML staff performing safeguarding work at the historic Tunnel Camp in Pershing County as a large dust storm advances.



Photo 3 – Buckingham Mine headframe in Lander County. Permanent closure of the associated decline occurred in October 2022.

2. The Commission on Mineral Resources

The Nevada Division of Minerals, a part of the Commission on Mineral Resources (the Commission), is charged by statute to encourage and assist in the responsible exploration for, and the production of, minerals, oil, gas, and geothermal energy that are economically beneficial to the State; to provide for public safety by identifying, ranking and securing dangerous conditions at mines that are no longer operating; and to collect and disseminate information on exploration, production, and related topics. The seven-member commission is a public body appointed by the Governor to adopt regulations, formulate administrative policies for the Division, and advise the Governor and Legislature on policy relating to mineral resources. The Division focuses its efforts on four main areas: collection and dissemination of educational information; inventory

and securing of abandoned mine hazards; regulation of oil, gas, geothermal drilling activities and dissolved mineral resource exploration; and the Nevada Reclamation Performance Bond Pool.

3. Background

Nevada’s geology and tectonic setting created the ideal conditions for the formation of a wide range of mineral commodities and has attracted the attention of miners and prospectors for over 150 years. The prospectors who traveled across the state exploring for this vast mineral wealth, prior to the development of modern reclamation standards, left behind a legacy of mining shafts, adits, glory holes, stopes, mill sites and other features that are potentially dangerous to people and animals. It is estimated that over 300,000 historic mining-related features exist in the state. Of these, the Division estimates at least 50,000 features present a significant physical safety hazard and require some form of exposure mitigation.

The Division’s AML program was created by the Nevada Legislature in 1987 in response to incidents, both fatal and nonfatal, that had occurred at abandoned mines. The Legislature placed the program within the Division and mandated two primary functions codified in Nevada Revised Statute (NRS) chapter 513, which can be found in Appendix A:

- 1) Establish a program to discover dangerous conditions that result from mining practices that took place at a mine that is now no longer operating; identify the owner or other person responsible for the condition, if feasible; and apply a hazard ranking based on the location and type of feature.
- 2) Develop a public awareness campaign to educate the public about dangerous conditions that exist as a result of historic mining activities.

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. These are referred as “orphan” abandoned mine hazards. The Legislature also provided an opportunity for companies, individuals, and civic groups to voluntarily assist the program in the construction of a fence or other safeguard around a dangerous condition at an abandoned mine opening under a designated Good Samaritan law. (NRS 41.0331, appendix A).

The AML program is administered under Nevada Administrative Code (NAC) Chapter 513, found in Appendix B. Sections 513.320 through 513.360 of the chapter require that hazardous openings be given a hazard ranking based on its accessibility and its degree of danger. The Division notifies claimants and property owners of hazardous abandoned mining features on their claims or

property and informs them of their responsibility to secure the hazards. The Division also notifies each board of county commissioners of the hazardous conditions discovered within their respective county. The appropriate county is also notified if a claimant fails to confirm the completion of securing to the Division or fails to make clear their intention to secure hazards within the timeframe specified by NAC 513.380. Under NRS 455, 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.

No state general funds are used to operate this AML program. It is funded from the following three sources:

1. A \$4 fee collected by county recorders and remitted to the Division for each unpatented mining claim filing, (NAC 513.315).
2. A one-time fee of \$20 per acre for every acre of permitted disturbance associated with new or amended mining or exploration plans of

Year	Assistance Agreements	Mining Claim Fees	Disturbance Fees	Total
2022	424,549	1,096,128	97,080	1,617,757
2021	\$222,157	\$1,105,252	102,460	1,429,869
2020	\$19,127	\$779,292	\$86,860	\$885,239
2020	\$258,087	\$792,940	\$29,026	\$1,080,053
2018	\$359,910	\$837,688	\$36,630	\$1,234,228
2017	\$137,198	\$802,372	\$84,640	\$1,024,210
2016	\$110,448	\$725,257	\$5,280	\$840,985
2015	\$60,000	\$432,242	\$64,300	\$556,542
2014	\$84,008	\$466,835	\$164,740	\$715,583
2013	\$69,031	\$494,967	\$228,220	\$792,218
2012	\$31,670	\$561,930	\$9,800	\$603,400
2011	\$0	\$481,584	\$139,360	\$620,944
2010	\$75,000	\$463,236	\$41,008	\$579,244

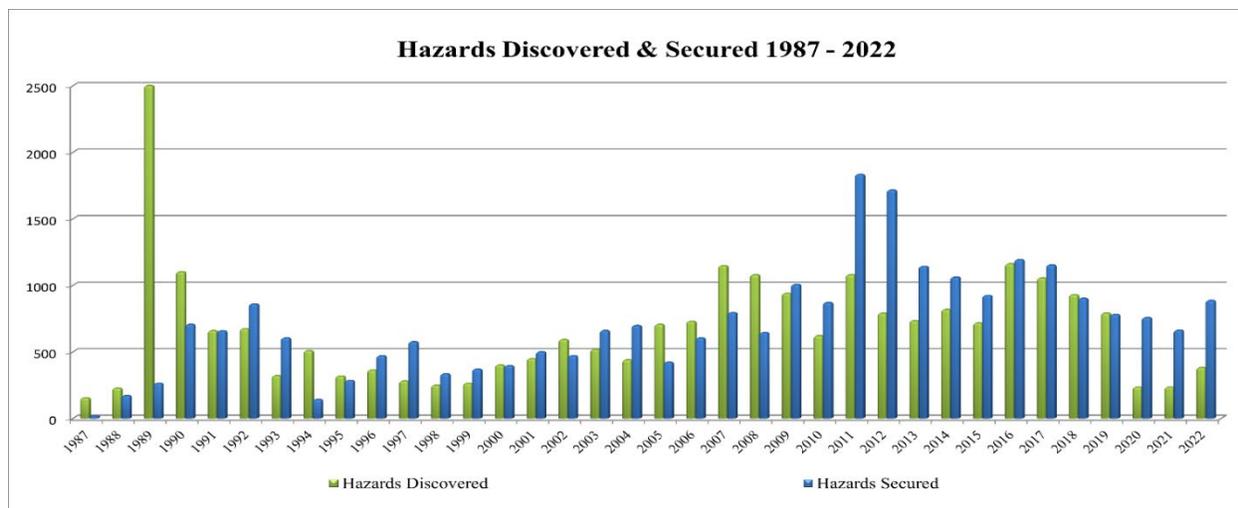


Figure 1 - Annual representation of hazards discovered and secured from 1987 – 2022.

operation on public lands (NRS 519A.250).

3. Assistance agreements in place with multiple partnering organizations including the Bureau of Land Management (BLM), the United States Forest Service (USFS), and Clark County Desert Conservation Program, which provide financial assistance to enhance and accelerate both field investigation activities and work performed by staff, contractors, and volunteers to secure hazards.

Collected revenues are used for contracted closures, fencing, and inventory work; field supplies such as fence posts, signs and barbed wire, travel and vehicle expenses; required office supplies, hardware and software. The revenue is also used to support the AML public awareness program through school presentations, videos, handouts, classroom exercises, and other means of outreach. Table 1 shows the historical revenues received by the Division from each funding source.

The Division’s AML program is separate from the Nevada Division of Environmental Protection’s (NDEP) AML program. The Division’s AML

program is focused on the aspects of physical danger (falls, collapses, etc.), while the NDEP AML program is responsible for aspects of environmental safety. Both programs urge the public to recognize and avoid hazardous abandoned mines.

4. Abandoned Mine Incidents in 2022

This was the tenth consecutive year without an abandoned-mine-related death in Nevada. AML incidents in Nevada date back to the early 1860’s and the Bonanza era at the Comstock Load. The first fatality was reported by the Red Bluff Independent in 1861, “A man named Kelley, who left Gold Hill on horseback, during a storm on Monday last, was found on Thursday, together with his horse, in a shaft one hundred feet deep, about a mile from town.” Appendix C lists a modern history of reported incidents related to abandoned or idle mines.

5. Inventory and Securings

In 2022, The Division's Abandoned Mine Land (AML) program achieved a significant milestone, having inventoried over 155,000 historic-mining-related features to date. By the end of the year, the cumulative totals for hazards discovered and ranked, as well as non-hazardous mining features characterized, reached 24,634 and 129,113, respectively. Notably, out of the hazards discovered and ranked, 20,388 (82%) have been successfully secured. Figure 1 illustrates the annual accounting of these securings, while Table 2 provides a breakdown of hazards by county, and Figure 2 presents all hazards categorized by securing method, 2022 securings by type, and 2022 securings by agency or group.

To efficiently prioritize locations for field work, the Division utilizes its existing AML database and U.S. Geological Survey (USGS) information on the locations of mining features. Each USGS 7.5'

County	Discovered	Secured	% Secured
Carson City	85	74	87.1%
Churchill	905	820	90.9%
Clark	2,374	1,925	81.0%
Douglas	241	216	89.0%
Elko	1,045	835	79.0%
Esmeralda	3,740	3,198	85.5%
Eureka	1,229	1,004	81.6%
Humboldt	1,034	892	86.2%
Lander	759	659	86.8%
Lincoln	1,088	958	88.0%
Lyon	1,249	1,145	91.6%
Mineral	2,398	1,808	75.3%
Nye	3,437	2,802	81.5%
Pershing	2,045	1,753	85.7%
Storey	227	211	97.2%
Washoe	467	435	93.1%
White Pine	2,311	1,653	71.5%
TOTAL (Since 1987)	24,634	20,388	82.7%

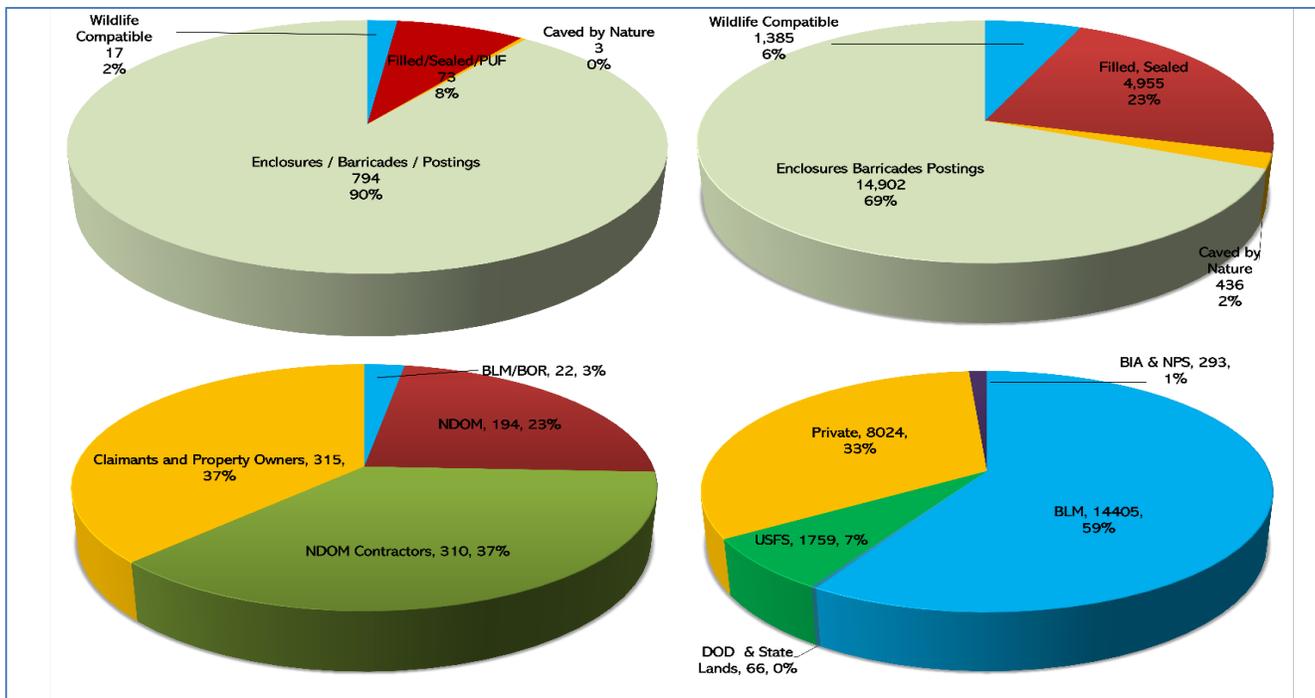


Figure 2 – Clockwise from top left: 2022 securings by type; All securings by type; All securings by land status; 2022 securings by entity

topographic map within the state is then ranked by number of features not yet inventoried. The adoption of digital data collection via tablets and the utilization of unmanned aircraft systems (UAS or drones) have significantly enhanced the efficiency of the Division's AML field staff. Additionally, the Division has successfully employed helicopter surveys to assess potential hazards on a larger scale than ever before. Collaborative efforts with partner agencies, including field reports, also play a vital role in identifying new hazard locations.

Through these initiatives, the Division demonstrates its commitment to proactively addressing abandoned mine hazards and promoting safety for both the public and the environment.

In 2022, the Division and its contractors conducted visits to 2,779 hazardous sites with the aim of cataloging new hazards, revisiting previously identified hazards, and securing existing hazards. Among these visits, 878 securings were successfully completed to safeguard public safety. The securings were achieved through various methods, including 794 instances of fencing or posting warning signs, 73 through backfill or polyurethane expansive foam (PUF or foam plugged), 17 with bat-compatible

closures (BCC), and 3 cases where hazards had naturally caved in or collapsed. Additionally, three hazards were secured using steel mesh.

The Division and its contractors accounted for 98% of all hazards inventoried and 77% of all securings in the state during 2022. Over the period from 2017 to 2022, their efforts have been responsible for 93% of all inventories and 55% of all securings carried out within the state. The AML program focuses its securing efforts on hazards located on federal lands lacking any valid claimant, such sites are referred to as “orphaned hazards”.

During field work, the Division’s policy prioritizes the immediate securing of moderate or high hazards, regardless of ownership or land status, to ensure public safety. By taking this approach, the Division aims to promptly mitigate safety risks.

To improve efficiency, the Division has embraced various technological advancements. Digital platforms for data collection have been adopted, enhancing data quality and processing time. Cloud-based geospatial apps and data have led to increased location accuracy and reduced data entry time. The utilization of Google Earth and available Light Detecting and Ranging (LiDAR) imagery has

allowed staff to identify new areas requiring inventory work, resulting in a more comprehensive dataset for field investigations. Unmanned aircraft systems (UAS) have proved invaluable in exploring remote or challenging-to-reach sites quickly. An evolving SQL-based database and a robust GIS software suite have further facilitated data management and analysis. The online AML database has been refined with the assistance of US Army Corps of Engineers' contractor TerraSpectra, streamlining its utility for partner agencies, and expediting the National Environmental Policy Act (NEPA) process. Helicopter-aided surveys, coupled with GPS tracking, enabled the logging of non-hazards in just six hours of flight time.

The Division's acquisition of a UTV (Utility Terrain Vehicle) in late 2021 has been instrumental in supporting fence construction and serving as a reconnaissance tool, resulting in increased field productivity.

The cumulative impacts of these enhancements is evident in the consistent yearly increase in the

recording of non-hazardous features in the Division's AML database, indicating more comprehensive field investigations. In 2022, the staff and interns inventoried over 8,000 non-hazardous mining features. Furthermore, 2022 witnessed the second-highest number of revisits in the program's history, with 1,556 visits, which is more than double the average revisits in the preceding seven years (as shown in Figure 7). These developments underscore the Division's commitment to leveraging technology for more effective and comprehensive abandoned mine hazard management.

Southern Nevada Revisit and Safeguarding Project

The Division adheres to a practice of conducting revisit surveys of previously secured sites at least every five years. However, this poses logistical challenges due to the increasing number of sites in remote regions of the state. To address this, the Division expanded its revisit project area, initiated in 2021, to encompass Clark, Nye, and



Photo 4 – Field Specialist Dustin Holcomb logging new hazards during statewide helicopter survey project work.

Esmeralda counties. This expansion aimed to enhance efforts in managing maintenance of securings at abandoned mine hazards.

From January to April of 2022, the project resulted in a total of 475 revisit surveys being conducted. These surveys involved returning to previously secured sites to reassess their safety conditions and take any necessary measures to maintain their security. During the revisit survey project, 29 new sites were identified and inventoried.

Statewide Helicopter NV Point Survey Project

The AML program made significant progress by conducting helicopter-aided survey work in Washoe, Pershing, Churchill, and Nye counties. This particular type of survey has proven to be highly effective in identifying AML features, especially in basins and on alluvial fans where there is a high density of AML features.

To carry out this survey effectively, AML

staff compiled existing geospatial data that indicated possible hazards and strategically developed a flight plan to traverse those locations. As part of this effort, the Division entered into a cooperative agreement with the Nevada Division of Forestry (NDF). Collaboratively, NDF and AML staff executed three missions, focusing on dense clusters of areas with potential hazards, and collected valuable data points during the flights. Target areas included clusters in Washoe, Pershing, Churchill, and Nye Counties.

The resulting spatial data collected from the helicopter survey was carefully processed, leading to the identification of over 3,800 non – hazard sites and the discovery of 130 newly identified hazards.

Northwestern Nevada Safeguarding Project

The Division employs a prioritization approach for safeguarding projects, considering multiple factors to efficiently allocate resources. One of the primary considerations is the presence of



Photo 5 – EPS installing wildlife compatible and culturally sensitive grate at Sutro Airshaft #4, during the VC Grand Prix hard closure project.

numerous highly dangerous hazards with easy access for the public. Projects meeting these criteria are considered to have the highest impact in terms of cost-effectiveness, logistical feasibility, and enhancing public safety. These sites are given priority to address immediate safety risks effectively.

In northwestern Nevada, there are historical mining districts that contain only a few highly hazardous features, with significant distances between each site. Despite the sparse distribution of hazards, many of these districts are experiencing increased visitation by the public. The rise in visitation can be attributed to offroad and backcountry enthusiasts sharing trip information on online forums and drawing attention to these areas.

To address the safety concerns in such districts, the Division identified 71 orphaned sites located in Churchill, Humboldt, Lander, and Pershing counties. Despite the lower density of hazards, the increasing public presence in these regions necessitated timely action. Again, the Division collaborated with EPS to secure all hazards in June 2022 ensuring that potential risks were promptly mitigated.

Statewide Priority Revisit Project

Building on the success and experience gained from previous large-scale revisit projects in Southern Nevada, the Division took the initiative to implement a similar undertaking on a broader scale. The project focused on a backlog of 110 priority revisits (highly hazardous sites secured 5+ years previously) and was completed in July 2022.

Gillis Range Safeguarding, Mineral County

In 2021, the Division identified a concerning concentration of hazardous sites within the historic Gillis Mining district, located in Mineral County. To address this issue comprehensively, the Division contracted EPS to conduct an initial inventory of the area. During this survey, EPS logged a total of 36 new hazardous sites and 170 non-hazardous features. Despite the significant number of hazards identified during the initial inventory, follow-up reconnaissance indicated that these findings represented only a small fraction of the actual hazards present in the Gillis Mining district. Recognizing the need for further action, a follow-up project was scheduled for July 2022.



Photo 6 – Ore loadout at Red Rocks mine, Esmeralda County.

During the follow-up project, EPS conducted a more extensive inventory and inventory, leading to the identification of an additional 92 new hazardous sites. In response to these findings, the Division moved swiftly to secure 54 of the newly identified hazards to mitigate immediate safety risks.

Eureka and White Pine County Safeguarding Project

During the summer of 2022, the Division's summer interns conducted field work which revealed several clusters of densely spaced abandoned mine hazards on the border of Eureka and White Pine counties. New data obtained during the inventory work prompted the Division to plan a comprehensive project aimed at addressing the identified hazards in these counties. The project was designed to address a total of 100 sites, where immediate action was required to enhance public safety and environmental protection.

In October 2022, EPS was entrusted with completing the project. Throughout their efforts, EPS

managed to secure 69 hazardous sites, thereby mitigating immediate safety risks in these areas. Additionally, they revisited 44 previously secured sites to ensure their continued functionality. During the project, EPS conducted inventory work, leading to the discovery of 23 new hazardous sites that had not been previously identified. The inclusion of these newly found hazards in the inventory helps the Division to better assess the overall safety landscape in the region and take necessary action.

6. Permanent Closure Projects

In 2022, there were 90 hazards documented as permanently secured, including 44 by the BLM, 22 by the Division, and 34 by owners or claimants. Prioritization for permanent closures is based on a risk assessment. This assessment may include a recorded accident or incident, hazard rank, and the proximity to public or recreation areas. Hazardous sites might also be considered as permanent closure candidates when exclusionary fencing or barricading

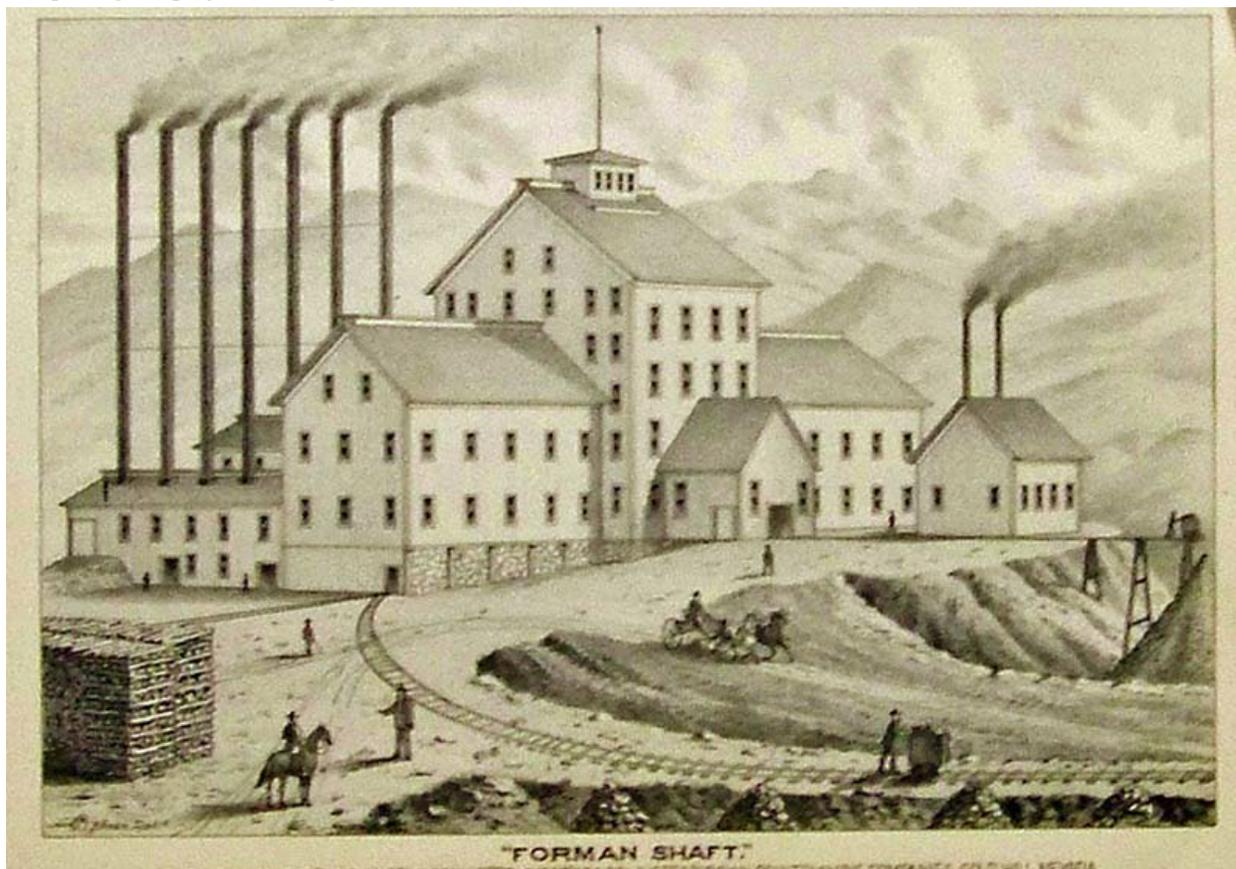


Figure 3 – Pictograph of the Foreman Shaft Complex circa 1881.

has been repeatedly vandalized and is no longer a suitable securing method.

Permanent closures include backfills, bat-compatible closures, foam plugs, or a combination of these methods. Unlike fencing or barricade securings, permanent closure of an abandoned mine opening may result in alteration of the landscape and character of the site. Under NEPA guidelines, all mine openings proposed for permanent closure on federal lands must be evaluated for cultural and biological resource impacts. Closure methods are determined based on the outcome of the biological and cultural resource surveys, as well as the safety risk present at the site.

The Division completed eight closure projects in 2022. Out of the 137 permanent closures completed throughout the year, 28 were completed as bat-compatible closures. All the contracted closure work was completed by Environmental Protection Services. The Bureau of Reclamation and BLM partnered to complete federal permanent closures.

Virginia City Grand Prix Hard Closures

The completion of the AML closure project in Virginia City was a significant accomplishment that took five years of planning and coordination with various state, federal, city, and local partners. The project's goal was to address 24 dangerous abandoned mine hazards found within a 100-foot buffer of a designated race route used for the annual "Virginia City Grand Prix" dirt bike race. To execute the project, the Division collaborated with a greater number of agencies than ever before, including the BLM, NDOW, NDOT, Carson City Public Works, Storey County Sheriff's Office, and the State Historic Preservation Office. The scope of the project was established using shapefiles to identify all AML hazards within the 100-foot buffer of the race route. The project focused on AML hazards on BLM lands, with almost 50 hazards initially identified, eventually narrowing down to 24 through detailed cadastral surveys to identify the 100-year-old survey boundaries.

The BLM's Medford (Oregon) Archeological Team conducted an in-depth cultural survey, producing a comprehensive report with

closure recommendations. LiDAR mapping provided valuable estimates for necessary closure material and insight into the historical infrastructure of the 19th-century mine sites. The team's narrative on the cultural history of the project area contributed to a deeper understanding of Virginia City's bonanza era. Additionally, the BLM Carson City District Office conducted biological survey work, while NDOW completed wildlife surveys and provided recommendations. Both agencies collaborated on establishing wildlife-compatible and culturally sensitive closure methods. NDOT and Carson City played a crucial role by providing over 500 cubic yards of approved fill material from sites in the Carson City area for use in backfilling features. BLM Medford continues to work with NDOM on the installation of an informational kiosk at the Forman Shaft, the most complex closure site of the project.



Photo 7 – Before and after photos of the Forman Shaft permanent closure.

Construction of the safeguards, including the creation of wildlife-compatible cupolas over the historic Forman Shaft, began in March 2022 and was completed on time and within the budget of \$738,760.

The successful completion of this large-scale AML closure project within a National Historic Landmark highlights the dedication and cooperation of multiple agencies to ensure public safety, environmental protection, and cultural preservation.

Buckingham Mine Hard Closure Project

In May of 2022, the BLM Mount Lewis Field Office reached out to the Division to report the extensive vandalism and illegal entry at the historic Buckingham Mine. The perpetrator even posted a video of the entry on YouTube and encouraged visitation by the public. The BLM wished to fast-track permanent closure of 38 hazards associated with the mine site. The Division quickly developed a plan with the BLM to complete wildlife and cultural surveys in accordance with NEPA and coordinated with BLM to notify all claimants of the proposed closures. The Division was granted a categorical exclusion in September of 2022 and EPS began project work in early October. Persistent early winter weather caused the project to be delayed, with 24 of 38 sites completed. Critical sites around the Buckingham headframe were completed before work stoppage took effect. The Division plans to return to finish the 14 remaining sites in 2023.

7. Intern Program

The Division employs college students majoring in the geosciences and related fields to assist with inventorying, revisiting, and safeguarding of hazardous AML features throughout the state. The intern program began in 2000 and has since expanded from two to eight students in the summer and four to six in the winter. These interns are trained and supervised by Division staff throughout the program.

The internship lasts 13 weeks over the summer months, and four weeks during the winter. Interns in this program are trained in field safety, first aid, operation of 4WD vehicles, GPS data collection, map reading, and working in teams. The work is physically demanding and involves dry camping in remote areas for extended periods.

The program not only acts as a crucial force multiplier for the Division's impact in the field but also functions as a leadership and skill-building opportunity for students aspiring to pursue careers in field-based geosciences and mining. Every year, interns participate in a tour of a mine or exploration project, providing them with valuable opportunities to network with professional geologists on-site. In 2022, interns toured the Cove/McCoy mine with i-80 Gold staff.

For the 2022 season, field areas were designated using a ranking system that take into

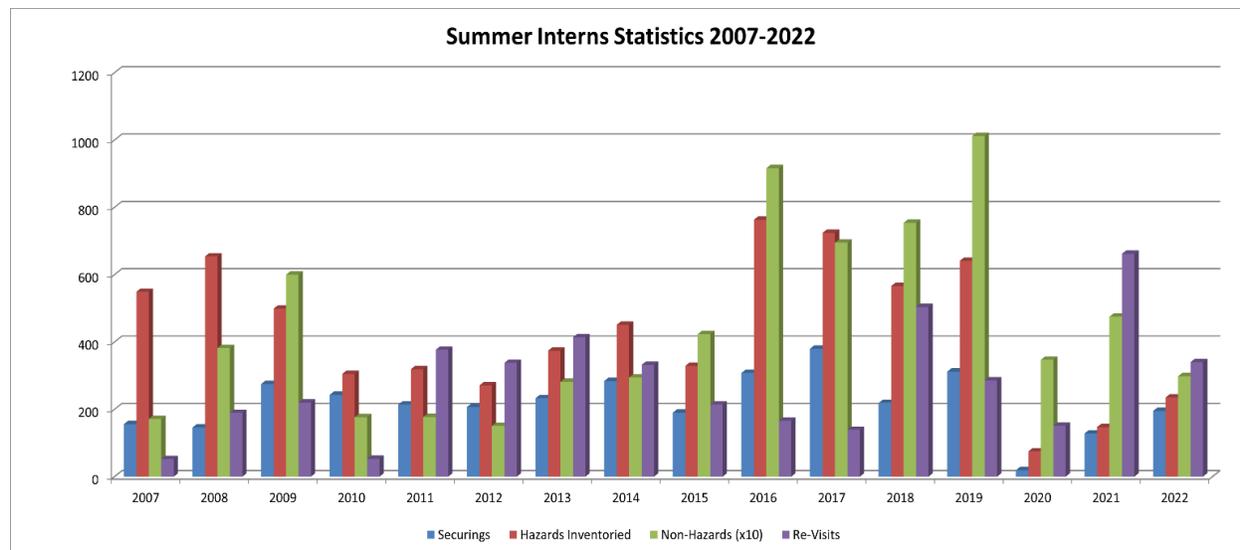


Figure 4 – Summer intern statistics from 2007 – 2022.

account various factors, such as hazard ranking (accessibility to the public and potential lethality) and the time elapsed since the last visit. The Division's AML database was utilized by the staff to process the topo ranking data, resulting in the creation of a color scale heat map. Topo quads with higher scores in these criteria, indicating a higher density of hazards, were chosen as intern field areas. The following locations were selected for the 2022 season: Aurora, Virginia City, central Humboldt County, Tonopah, Eureka, Battle Mountain, Goldfield, Berlin / Ione, Round Mountain, and Ely.

Throughout the season, interns accomplished a significant amount of work, including 195 securings, logging 235 hazards, revisiting 340 known hazards, and documenting 2,982 non-hazardous features. Summer interns of 2022 were Lindey Smith, Morgan Adamson, Austin Warren, Jorge Ruiz, D. Burgman, and Abe Clayson.

8. Public Awareness

In addition to the Division's mandate to conduct the AML field program, the agency also aims to educate the public about recognizing and avoiding potential hazards resulting from mining

activities at abandoned mines that are no longer operational. Over the past decade, AML program staff has noticed a significant surge in online content that strongly promotes the exploration of abandoned mines. Additionally, some individuals have been vocally critical of the Division and its mission. Feedback from federal and state agencies, as well as the public, indicates that such content has led to damage at secured AML sites, including theft and vandalism of cultural resources, harm to wildlife habitat, and an overall increase in abandoned mine visitation, not only in Nevada but also across the western region.

In response, the Division consistently carries out AML outreach efforts, combining in-person presentations with online video content. However, an initial analysis revealed that content promoting AML visitation was being viewed at least 100 times more frequently than the Division's public safety messaging.

To address this disparity, in August 2021, AML staff proposed implementing a digital marketing campaign to maximize the outreach of the classic "Stay Out, Stay Alive" motto. Through research, a scope of work was developed for the creation of a public safety awareness campaign with diverse content suitable for distribution on social



Photo 8 – Title Frame of “Jimmy King – King of Bad Ideas” 1:09 PSA video release in November 2022.

media, targeted web pages, and, most importantly, YouTube. To ensure effective engagement, the campaign was to utilize a software platform specifically designed to connect with viewers of sites promoting AML visitation, based on observable data points generated by the software.

Production and media contractors used feedback from the Division to tailor the messaging style and online engagement for specific target demographics. Concept development led to the creation of a character named Jimmy King, known as the "King of Bad Ideas," who would appear in a series of brief and disastrous misadventures juxtaposed with abandoned mine visitation. Each misadventure would be narrated by the "Voice of Common Sense," encouraging the audience not to follow Jimmy's actions and reinforcing the Division's "Stay Out, Stay Alive" message.

Filming and content creation were completed in September 2022, resulting in a variety of content options. The online content engagement strategy involved viewers accessing the content through social media sites, targeted websites, YouTube, or internet browser searches related to AML visitation. After viewing the content, users were directed to a landing

page hosting additional content and facilitating content sharing and direct engagement with the Division. During this interaction, the Division collected valuable data, including user demographics, geolocation (at the county level), conversion rates (how often an initial view led to a visit to the state's landing page or homepage), and how frequently the content was shared. This process was active for four weeks from late November through December, during which, the message reached a remarkable 2.3 million online viewers. Two separate 30-second edits of the content appeared on local television broadcasts in northwestern Nevada from mid-December through the end of January. While the campaign aired, the Division engaged in a social media push offering free license plate frames for those who engaged with the content or with the agency's social media accounts.

The Division has extended its 2021 billboard campaign into 2022 with the integration of three more billboards that prominently display SOSA messaging. These strategically positioned billboards near AML hot spots within White Pine, Mineral, and Humboldt counties, serving as a powerful means to bolster outreach and raise awareness in these specific regions.

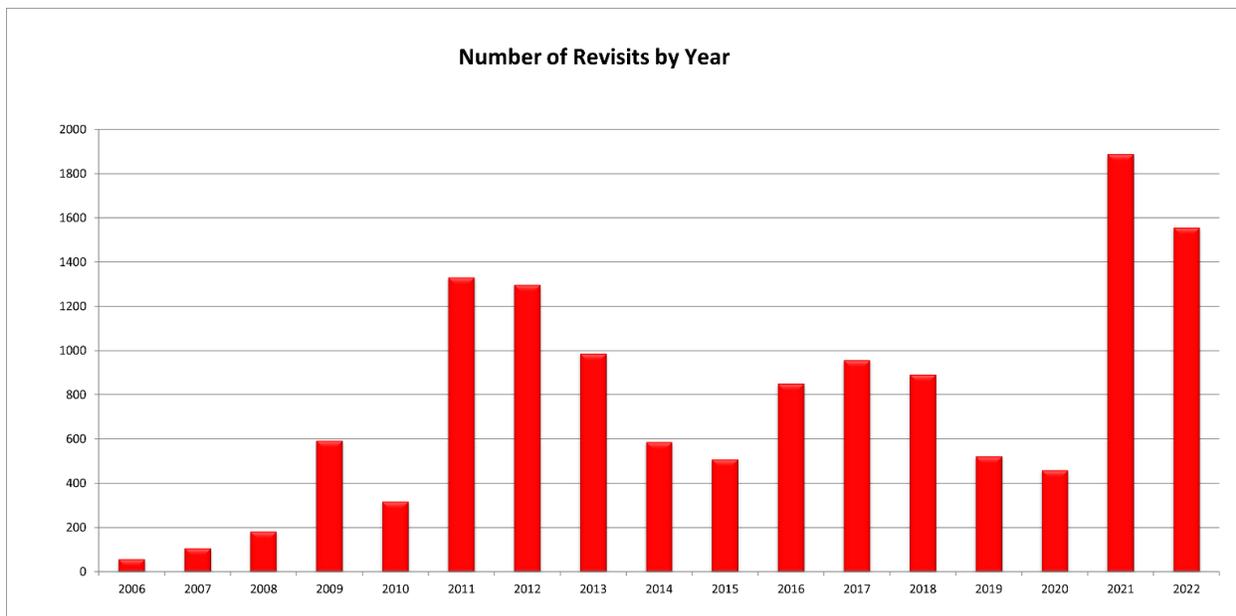


Figure 5 – The annual number of previously secured hazards revisited by year from 2006 to 2022.

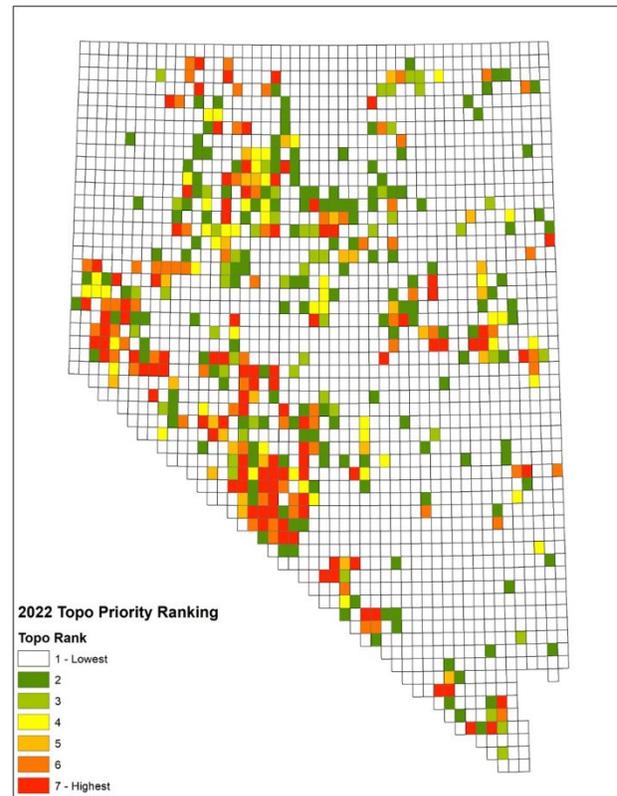
9. Performance Indicators

The Legislatively-approved performance indicators for the abandoned mine lands public safety program are:

1. Maintain a 70% securing rate, which is the percentage of secured hazardous mine openings compared to the total number of hazardous mine openings inventoried. The Division finished 2022 with 82.7% of hazards secured (see Table 2).
2. Maintain a minimum of 24 public awareness and education presentations per year, per staff member, including topics concerning the Nevada mineral industry and abandoned mines. Division staff averaged 25 presentations per staff member in 2022.

10. Cultural, Geological, and Wildlife Contracts

The Division expanded on initiatives introduced in 2021 intended to streamline the AML program's permanent closure project pipeline. Thanks to robust partnerships at the state and federal levels, a consistent flow of closure work was maintained in alignment with the Division's budgetary capacities. However, many of these projects necessitated cultural and biological survey work, typically conducted by BLM and USFS staff at the district level. A general increase in recreational and commercial activity on public land as well as latent staffing issues at the federal level has resulted in a sustained and substantial backlog of field survey work, with cultural and biological surveys being particularly affected at the BLM and USFS. Recognizing the potential hindrance to the AML program's goals, and with guidance from the BLM and USFS, the Division opted to expand most cultural and biological surveys to delegated to contractors. Cultural survey work was completed by Broadbent and Associates of Reno. NDOW continues to effectively manage the majority of biological survey work required by the BLM. West



Map 2 – Statewide topo quad hazard ranking.

Inc. of Cheyenne, Wyoming performed the majority of wildlife survey work required by the USFS. All requested surveys were completed within two months of initial tasking.

As partner agency requests and internal proposals for closure projects increased, along with the Division's growing use of geospatial data for public and private purposes, it became evident that capturing summary geological information and analytical data prior to sites being permanently closed was desirable. To this end, in October 2021, the Division contracted McGinley and Associates with the objective of completing geologic assessments of most hard closure project areas. This comprehensive study includes district-wide sample characterizations, site descriptions, assay information, and brief historical details of the relevant mining districts. Geospatial data will complement this reporting, and all data and reports will be made available online. McGinley conducted site characterizations at all proposed project locations in 2022.

11. Summary

In 2022, the Division's AML program maintained exceptional productivity, surpassing all legislative mandates. Notably, the Division introduced innovative initiatives aimed at enhancing field efficiency and significantly broadening the reach of our “Stay Out, Stay Alive” message to new and diverse audiences.

Data from the 2022 field season highlights a sustained high level of non-hazards identified, and revisit surveys were conducted at a rate over twice the annual average. The number of hazards secured in 2022 reached the highest level since 2018.

Based on the Division's outreach efforts and feedback from partner agencies, it is evident that there is an increasing public interest in visiting abandoned mine lands, with access to remote historical mining districts also on the rise. Taking this into consideration, the AML program will be dedicating its efforts in 2023 to further boost inventory numbers through the increased use of UTVs, aerial reconnaissance, LiDAR imaging, and GIS-integration to improve on-the-ground efficiencies.

12. Acknowledgements

We would like to extend our appreciation and recognition to the following individuals and teams for their unwavering commitment and invaluable assistance to the State's AML program: John Callan, Kurt Miers, Alicia Jensen, and the entire Nevada BLM AML team, whose dedication and support have significantly contributed to the success of our program. David Risley from the Humboldt-Toiyabe National Forest, for his exceptional work in conducting inventory and closures on USFS-managed land and playing a vital role in our securing efforts. The AML crew at the Bureau of Reclamation, whose diligence and dedication in closure work will have long-lasting public safety impacts. Jason Williams and Jenni Jeffers, along with the entire NDOW AML team, for their remarkable statewide biological

survey efforts, greatly enhancing our program's environmental benefits. Our valued partners at NDEP, whose contributions to AML documentation have been instrumental in our collaborative progress. The BLM archaeological team from Medford, whose thoroughness in documenting, maintaining, and preserving our precious cultural resources has been invaluable. Lastly, we extend our gratitude and thanks to the numerous claimants and landowners who actively cooperate with the Division, playing an essential role in securing AML sites throughout the state. Their partnership is vital to the success of our mission, and we deeply appreciate their support.



Photo 9 – Interns completing a revisit in Lincoln County.

13. Appendix A

Nevada Revised Statutes (NRS) pertinent to the AML Program

NRS 455.010 Erection of fence or other safeguard around excavation, hole or shaft required. Any person or persons, company or corporation, who shall dig, sink or excavate, or cause the same to be done, or being the owner or owners, or in the possession under any lease or contract, of any shaft, excavation or hole, whether used for mining or otherwise, or whether dug, sunk or excavated for the purpose of mining, to obtain water, or for any other purpose, within this State, shall, during the time they may be employed in digging, sinking or excavating, or after they may have ceased work upon or abandoned the same, erect, or cause to be erected, good and substantial fences or other safeguards, and keep the same in good repair, around such works or shafts, sufficient to guard securely against danger to persons and animals from falling into such shafts or excavations.

NRS 41.510 Limitation of liability; exceptions for malicious acts if consideration is given or other duty exists.

1. Except as otherwise provided in subsection 3, an owner of any estate or interest in any premises, or a lessee or an occupant of any premises, owes no duty to keep the premises safe for entry or use by others for participating in any recreational activity, or to give warning of any hazardous condition, activity or use of any structure on the premises to persons entering for those purposes.

2. Except as otherwise provided in subsection 3, if an owner, lessee or occupant of premises gives permission to another person to participate in recreational activities upon those premises:

(a) The owner, lessee or occupant does not thereby extend any assurance that the premises are safe for that purpose or assume responsibility for or incur liability for any injury to person or property caused by any act of persons to whom the permission is granted.

b) That person does not thereby acquire any property rights in or rights of easement to the premises.

3. This section does not:

(a) Limit the liability which would otherwise exist for:

(1) Willful or malicious failure to guard, or to warn against, a dangerous condition, use, structure or activity.

(2) Injury suffered in any case where permission to participate in recreational activities was granted for a consideration other than the consideration, if any, paid to the landowner by the State or any subdivision thereof. For the purposes of this subparagraph, the price paid for a game tag sold pursuant to [NRS 502.145](#) by an owner, lessee or manager of the premises shall not be deemed consideration given for permission to hunt on the premises.

(3) Injury caused by acts of persons to whom permission to participate in recreational activities was granted, to other persons as to whom the person granting permission, or the owner, lessee or occupant of the premises, owed a duty to keep the premises safe or to warn of danger.

(b) Create a duty of care or ground of liability for injury to person or property.

4. As used in this section, "recreational activity" includes, but is not limited to:

(a) Hunting, fishing or trapping;

(b) Camping, hiking or picnicking;

(c) Sightseeing or viewing or enjoying archaeological, scenic, natural or scientific sites;

(d) Hang gliding or paragliding;

(e) Spelunking;

(f) Collecting rocks;

(g) Participation in winter sports, including cross-country skiing, snowshoeing or riding a snowmobile, or water sports;

(h) Riding animals, riding in vehicles or riding a road or mountain bicycle;

(i) Studying nature;

(j) Gleaning;

(k) Recreational gardening; and

(l) Crossing over to public land or land dedicated for public use.

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

1. If a board of county commissioners receives information from the division of minerals of the commission on mineral resources that there is in the county a dangerous condition that results from mining practices which took place at a mine that is no longer operating, if the information identifies a person responsible for the condition, the board shall transmit this information to the sheriff or the constable of the township where the condition exists.

2. Upon receipt of information pursuant to subsection 1 or upon the filing of the notice, as provided for in NRS 455.020, the sheriff or constable shall serve a notice, in the same manner and form as a summons, upon each person identified as owner or otherwise responsible.

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

NRS 455.040 Contents of notice; judgment; criminal penalty.

1. The notice served pursuant to subsection 2 of NRS 455.030 must require the person or persons to appear before the justice of the peace of the township where the hole, excavation, shaft or other condition exists, or any municipal judge who may be acting in his place, at a time to be stated therein, not less than 3 days nor more than 10 days from the service of the notice, and show, to the satisfaction of the court, that the provisions of NRS 455.010 to 455.180, inclusive, or the standards established by the commission on mineral resources for the abatement of dangerous conditions have been complied with, or if he or they fail to appear, judgment will be entered against him or them for double the amount required to abate the condition.

2. All proceedings had therein must be as prescribed by law in civil cases.

3. Such persons, in addition to any judgment that may be rendered against them, are liable and subject to a fine not exceeding the sum of \$250 for each violation of the provisions of NRS 455.010 to 455.180, inclusive, which judgments and fines must be adjudged and collected as provided for by law.

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

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

1. An additional fee, in an amount established pursuant to subsection 4, is imposed upon all filings to which NRS 517.185 applies. Each county recorder shall collect and pay over the additional fee, and the additional fee must be deposited in the same manner as provided in that section.

2. The administrator shall, within the limits of the money provided by this fee, establish a program to discover dangerous conditions that result from mining practices which took place at a mine that is no longer operating, identify if feasible the owner or other person responsible for the condition, and rank the conditions found in descending order of danger. The administrator shall annually during the month of January, or more often if the danger discovered warrants, inform each board of county commissioners concerning the dangerous conditions found in the respective counties, including their degree of danger relative to one another and to those conditions found in the state as a whole. In addition, the administrator shall work to educate the public to recognize and avoid those hazards resulting from mining practices which took place at a mine that is no longer operating.

3. To carry out this program and these duties, the administrator shall employ a qualified assistant, who must be in the unclassified service of the state and whose position is in addition to the unclassified positions otherwise authorized in the division by statute.

4. The commission shall establish by regulation:

(a) The fee required pursuant to subsection 1, in an amount not to exceed \$4 per claim.

(b) Standards for determining the conditions created by the abandonment of a former mine or its associated works that constitute a danger to persons or animals and for determining the relative degree of danger. A condition whose existence violates a federal or state statute or regulation intended to protect public health or safety is a danger because of that violation.

(c) Standards for abating the kinds of dangers usually found, including, but not limited to, standards for excluding persons and animals from dangerous open excavations.

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

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

1. The Account for the Division of Minerals is hereby created in the State General Fund.

2. The following special fees and money must be deposited in the Account:

(a) All fees collected pursuant to [NRS 513.094](#), [517.185](#) and [chapter 522](#) of NRS.

(b) All money collected pursuant to [NRS 235.016](#).

(c) Any money received by the Division from a county pursuant to [NRS 513.108](#).

(d) All fees collected pursuant to [NRS 534A.080](#).

(e) Any money appropriated to the Division from the State General Fund.

3. No money except that appropriated from the State General Fund lapses to the State General Fund.

4. The money in the Account is appropriated to the Division. The money deposited in the Account pursuant to paragraph (a) of subsection 2, and the interest earned thereon, must be expended for the purposes of administering [chapter 522](#) of NRS and the provisions of this chapter, except for [NRS 513.108](#). The money deposited pursuant to paragraphs (b) and (c) of subsection 2, and the interest earned thereon, must be distributed to the counties pursuant to [NRS 513.108](#), except that portion required to pay the cost of administering the provisions of that section. All interest earned on the Account must remain in the Account.

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

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

1. The board of county commissioners in each county may apply to the Division for money to abate a dangerous condition resulting from mining practices which took place at a mine that is no longer operating.

2. The Division shall, within the limits of the money available pursuant to paragraphs (b) and (c) of subsection 2 of [NRS 513.103](#), provide counties with money to abate such dangerous conditions based on the relative degree of danger of those conditions.

3. If a county which receives money from the Division subsequently receives monetary compensation from the mine owner or other person responsible for the existence of the dangerous condition, it shall reimburse the Division to the extent of the compensation received. Any money received by the Division pursuant to this subsection must be deposited in the Account for the Division of Minerals created pursuant to [NRS 513.103](#). (Added to NRS by 1989, 141; A 1991, 1780; 1993, 1684)

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)

14. Appendix B

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 513.270 “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 \$4 per claim. (Added to NAC by Commission on Mineral Resources by R069 -99, eff. 8-19-99; A by R199-08, eff. 8-14-2008)

NAC 513.320 Assignment of points to dangerous condition. The administrator or his representative shall assign a dangerous condition one to five points for the location of the condition and an additional one to five points for the degree of danger associated with the condition. The condition must then be ranked according to the total number of points for location and degree of danger. (Added to NAC by Commission on Mineral Resources, eff. 12-21-88)

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

1. One point must be assigned to a dangerous condition located at least 5 miles from an occupied structure or a public road maintained by some governmental entity.
2. Two points must be assigned to a dangerous condition located between 1 and 5 miles from an occupied structure or a public road maintained by some governmental entity.
3. Three points must be assigned to a dangerous condition located 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.

The Administrator or his or her representative may assign a different rating to a dangerous condition in a location if other factors

affecting accessibility warrant the modification, but the rating for a dangerous condition in a single location may not be scored higher than five points.

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88; A by R127-15, 6-28-2016)

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 Ranking 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; A by R127-15, 6-28-2016)

NAC 513.380 Period after notification to secure dangerous condition. If notified by the Commission of the existence of a dangerous condition, the owner or responsible person shall:

1. Post within 180 days a warning sign in a prominent location near a dangerous condition ranked as a minimal hazard; and
2. In the manner prescribed in NAC 513.390:
 - (a) Secure within 180 days a dangerous condition ranked as a low hazard;
 - (b) Secure within 120 days a dangerous condition ranked as a moderate hazard; and
 - (c) Secure within 60 days a dangerous condition ranked as a high hazard .

(Added to NAC by Commission on Mineral Resources, eff. 12-21-88; A by R127-15, 6-28-2016)

NAC 513.390 Methods for securing dangerous condition; approval by Administrator to modification of method.

1. Except as otherwise provided in subsection 4, a dangerous condition ranked as a low, moderate or high hazard must be secured by one or more of the following:

- (a) A barricade or other structure, including, without limitation, a structure consisting of metal posts and four strands of barbed wire, or other durable materials, constructed to prevent a person or animal from accidentally exposing himself or herself to the dangerous condition.
- (b) 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.
- (c) Backfilling so that no void spaces remain.

2. In addition to securing a dangerous condition pursuant to subsection 1, if the dangerous condition ranked as a low, moderate or high hazard is secured only by the method set forth in paragraph (a) of subsection 1, the owner or responsible person must post a warning sign in a prominent location near the dangerous condition. The warning sign must be posted within the period set forth in subsection 2 of [NAC 513.380](#) for securing the dangerous condition.

3. Regardless of the method used pursuant to subsection 1 to secure a dangerous condition, the owner or responsible person shall maintain the integrity of that structure.

4. The Administrator or his or her representative may approve the modification of a method of securing a dangerous condition to accommodate features or characteristics that are specific to the location of the dangerous condition.

(Added to NAC by Comm'n on Mineral Resources, eff. 12-21-88; A by R127-15; 6-28-2016)

15. Appendix C

Table 1: History of Nevada AML Incidents Since 1961

Date	Incident	County
May '20	Dog fell down shaft, rescued two days later	Pershing
Sep. '13	17 year old male received minor injuries in fall down 60-foot deep mine shaft (rider on	Lyon
Nov. '12	Adult male (33) received moderate injuries after falling 35' down a winze	Clark
Jul. '11	Dog fell down shaft, rescued 8 days later	White Pine
Mar. '11	Adult male (28) suffered fatal injuries after falling 190 feet down a shaft	Pershing
May. '09	Dog fell down inclined shaft, rescued 10 days later	Esmeralda
Oct. '08	Adult male (62) suffered fatal injuries after falling 60' down a winze	Lyon
Sep. '08	Dog reportedly fell down 100' shaft, not recovered	Washoe
Aug. '08	Adult male (58) injured in 50' fall down inclined winze	Esmeralda
May. '07	Adult male (mid-20's) injured in fall down ~200' inclined winze	Clark
May. '07	Adult male (63) suffered fatal injuries after rolling his jeep ~450' into the Loring Pit in Virginia	Storey
May. '06	Dog rescued from 22 foot-deep mine shaft	Washoe
May. '05	Woman of unknown age, received cuts and bruises from fall down a 35 ft. winze	Carson
Apr. '04	30 year-old man received moderate injuries from fall down 25 ft. winze near Las Vegas	Clark
Jan. '03	Dog fell down shaft	Humboldt
Jan. '03	62 year-old man received minor injuries from fall down 25 ft. winze (same as 10/2002)	Clark
Oct. '02	37 year-old CA male received severe injuries from fall down 25 ft. winze	Clark
Jul. '02	41 year-old male drowned swimming in open pit lake	Storey
Dec. '00	Dog rescued from fall down 60 ft. winze. Minor injury to hip	Pershing
Nov. '00	Dog rescued from fall down 40 ft. mine shaft. Moderate injury to hip	Storey
Oct. '99	Adult male (62) killed in mine cave-in	Lyon
Oct. '99	Female juvenile (11) killed in fall down 130 ft. deep mine shaft near Beatty	Nye
Jun. '99	Male juvenile (15) drowned swimming in open pit lake	Lander
Oct. '98	Two male adults seriously injured in fall down 50 ft. winze near Las Vegas	Clark
Sep. '98	Dog rescued from 20 ft. deep mine shaft	Douglas
Jul. '98	Male adult (20's) slightly injured in fall down mine winze in Brougner Divide Mine near	Esmeralda
Apr. '97	Two male adults (50's) injured in fall down hand dug well in town of Luning	Mineral
Oct. '96	Male juvenile (16) injured in fall down 19 ft. deep hole in concrete at American Flats millsite	Storey
Sep. '96	Two male adults (35) killed in mine adit near Virginia City by suffocation	Storey
May. '96	Male adult (44) fatally injured in fall off ATV at American Flats millsite	Storey
Mar. '96	Male adult (31) injured in fall down mine winze on west side of Las Vegas	Clark
Jun. '95	Male adult (30) killed scuba diving in mine shaft filled with water at the old Crown Copper	Humboldt
Nov. '93	Dog rescued from 30 ft. deep mine shaft near Iron Mtn. Estates	Storey
Jan. '93	Dog rescued from 25 ft. deep shaft	Humboldt
Oct. '92	Male adult (27) news reporter injured in dynamite blast at Happy Creek in the Jackson	Humboldt
Sep. '92	Female adult (28) injured (cuts and bruises) in fall down mine shaft Hot Springs Mtn.	Douglas
Dec. '91	Male adult (44) killed in fall down a mine winze at an abandoned copper mine in the Malachite	Lyon
May. '91	Male juvenile (13) injured (minor) in fall down 20 ft. deep mine shaft	Washoe
Feb. '91	Male adult (40) killed in fall down mine winze	Douglas
May. '90	Dog killed in mine shaft at the MGI Mine near Winnemucca Dry Lake	Pershing
Mar. '90	Male juvenile lost for 19 hours in mine shaft at Mizpah mine in Tonopah	Nye
Sep. '89	Male adult seriously injured in fall down a mine winze near Henderson	Clark
Sep. '88	Body of elderly male found at bottom of mine shaft	Lyon
May. '87	Female child (5) injured in fall down 35 ft. deep mine shaft	Washoe
Feb. '86	Young adult male (20) killed in fall down a mine winze	Lyon
Apr. '79	Two teenagers killed in fall down mine shaft at the Oest Mine	Lyon
Dec. '78	Juvenile killed in fall down mine shaft (Ninety-Nine Mine), body never recovered	Clark
Apr. '75	Two male juveniles killed when motorcycles fell into mine shaft near Searchlight	Clark
May. '71	Male juvenile (15) injured in fall down 200 ft. deep mine shaft on Duck Hill	Carson
Nov. '70	Male juvenile (12) injured in fall down 110 ft. deep mine shaft	Washoe
Jan. '61	Male juvenile (15) injured in 50 ft. fall down mine ventilation shaft	Storey

16. Appendix D

State of Nevada
Abandoned Mine Lands
Report of Abandoned Mine Land Hazard

Person Reporting the Hazard:

Name: _____

Please keep my name confidential:

Phone #: _____

E-mail: _____

Date Found: _____

County Hazard is Located In: _____

Hazard Location _____ UTM E/Long. _____ UTM N/Lat.

(Coordinate Type - Select One): UTM NAD27 UTM NAD83 (WGS84)

Longitude/Latitude Do Not Know

Photo or Image of Hazard is Enclosed/Attached

Additional Comments or Information (if desired):

Please send this form along with any photos (if available) to:

Attention: Abandon Mine Lands

Nevada Division of Minerals

400 W. King St. #106

Carson City, NV 89703

Phone: 775-684-7040

Fax: 775-684-7052

Email: ndom@minerals.nv.gov

or

or

or

375 E. Warm Spring Rd. #205

Las Vegas, NV 89119

702-486-4343

702-486-4345

ndomlv@minerals.nv.gov