





PUBLIC INFORMATION MEETING

Capitol Dome Abandoned Mine Safeguarding Project

Wednesday, February 7th, 2024 Mimbres Valley Special Events Center



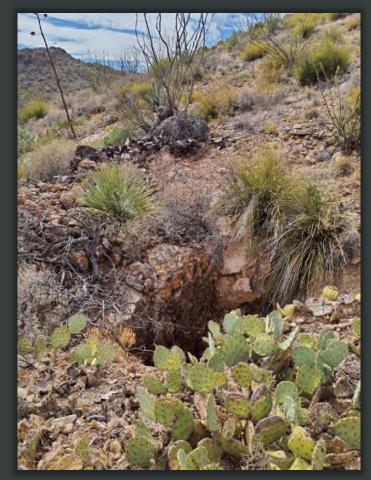






Public Information Meeting - Purpose





Capitol Dome Mining Feature— Photo Courtesy of Grouse Mountain

- Introduce Team Members from Agencies and Contractors
- Provide Overview of Capitol Dome Abandoned Mine Safeguarding Project
- Public Involvement: Comment session & Question/Answers with agency representatives



Project Team & Responsibilities



NEW MEXICO ABANDONED MINE LAND (AML) PROGRAM – Project Lead; project development, coordination, management, & construction oversight



OFFICE of SURFACE MINING RECLAMATION & ENFORCEMENT (OSMRE) – co-federal project funding source



BUREAU of LAND MANAGEMENT (BLM), LAS CRUCES DISTRICT OFFICE – land management agency for majority of project area; project review



NEW MEXICO STATE LAND OFFICE (SLO) – land management & project review

Project Team & Responsibilities



GROUSE MOUNTAIN ENVIRONMENTAL CONSULTANTS – conducting public outreach, conducting biological surveys and preparing Biological Evaluation, & will be preparing the Environmental Assessment (EA)



BAT CONSERVATION INTERNATIONAL (BCI) – conducting bat surveys & habitat assessments of mine features; prepared reports



CHRONICLE HERITAGE – conducted cultural resource surveys and reporting



SWCA ENVIRONMENTAL CONSULTANTS – conducted previous cultural resource surveys and reporting

Team Members



AML Team Members:

- > Mike Tompson, P.E.: Program Manager
- > Meghan McDonald, P.E.: Engineering Manager
- > Lloyd Moiola: Environmental Manager
- > James Hollen: NEPA Coordinator
- > Leeland Murray: Project Manager
- > Andrew Zink: Cultural Resource Manager



Grouse Mountain Environmental Consultants:

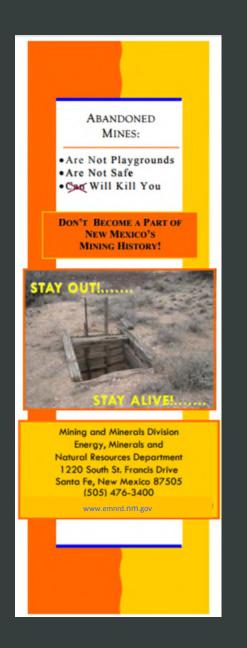
- > Hillary Robbie: NEPA Coordinator
- > Cristina Marciales: Project Assistant, Wildlife Biologist

Florida Mountains – Project Area



Capitol Dome APE— Photo Courtesy of Grouse Mountain

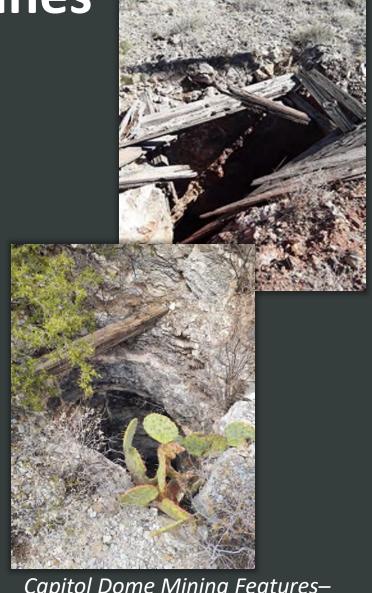
- 10 miles southeast of Deming, NM
- 12-mile-long isolated, north-south range with steep canyons and vertical cliffs
- No permanent streams
- Rocky or very shallow soils
- Florida Mining District- copper, silver, gold, lead, zinc, and manganese mostly between late 1800s and 1960s.
- Remaining mine features- shafts, adits, prospect pits, trenches, rock structures, tent pads, claim markers, refuse deposits



Dangers of Abandoned Mines

- Hazards are not always obvious!
 - Unstable ground, loose rock, decayed timbers, & potential for collapse
 - Serious fall &/or entrapment hazards in open or inadequately sealed features such as shafts, highwalls, adits/portals, & deteriorated structures
 - ➤ Within mines: falls into winzes & water bodies, collapses, cave-ins, poor air circulation, poisonous gases, insufficient oxygen, deteriorated explosives, wildlife, & potential to become disoriented or lost within mine workings





Capitol Dome Mining Features— Photos Courtesy of Grouse Mountain

Capitol Dome Abandoned Mine Safeguarding Project— Project Purpose & Need



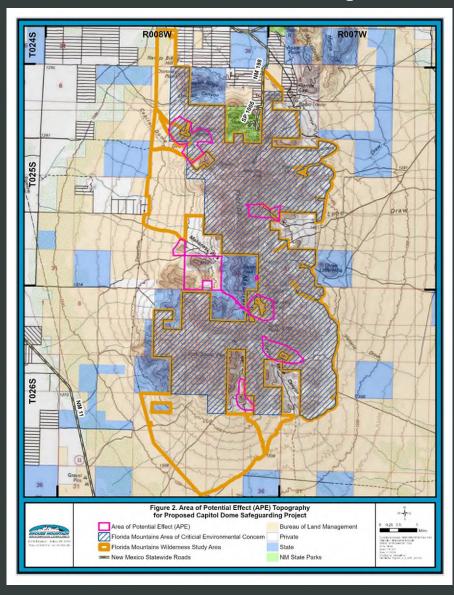
Vertical mine in Capitol Dome APE

- Photo Courtesy of Grouse Mountain



To safeguard the general public from hazards associated with historical mining features, including adits, shafts, subsidence features, & other mine openings, while protecting cultural resources & preserving wildlife habitat

Capitol Dome Project Area



1,922-acre Area of Potential Effect (APE)



- > 1,439 acres managed by BLM
 - 1006 acres within the Florida Mountains Wilderness Study Area



> 469 acres of privately owned land



> 13 acres managed by NM State Land Office

Figure 2. Area of Potential Effect (APE) Topography for Proposed Capitol Dome Safeguarding Project Florida Mountains Area of Criticial Environmental Conce Florida Mountains Wilderness Study Area New Mexico Statewide Roads NM State Parks

Capitol Dome Project Area

Estimated 210 mines within APE

- > 67 extreme risk
- > 29 high risk
- > 37 medium risk
- > 62 low risk
- > 15 none

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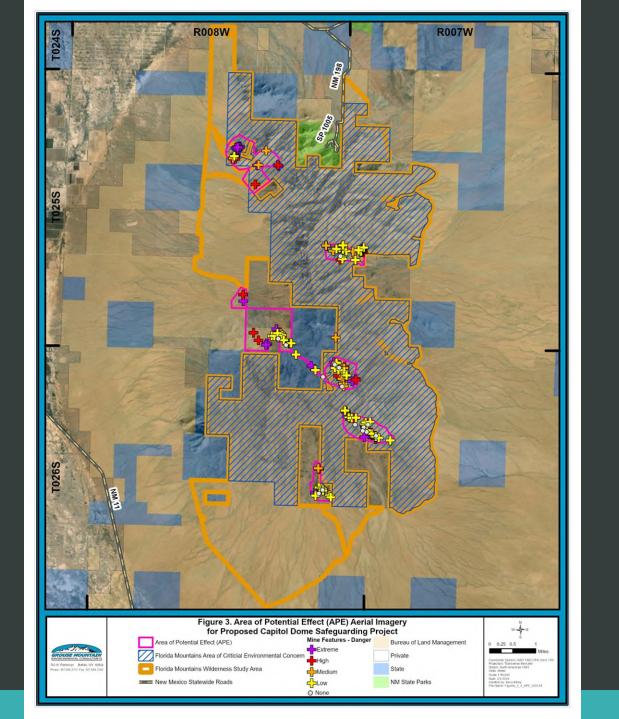
BLM Danger Level Definitions

Extreme: 20' -> 100' deep; Extreme danger to public health, safety and property due to but not limited to: easily accessible unguarded open mines; occupied structures, public use facilities, improved public roads, or public use parks or recreational areas located within the vicinity of the feature; and/or evidence of frequent visitation or easy access roads capable of carrying vehicles within the vicinity of the feature.

High: 8' - 20' deep; High danger to public health, safety and property.

Moderate: 5' - 8' deep, Limited danger to public health, safety and property.

Low: Less than 5' deep; Low danger to public health, safety and property.





Capitol Dome – Project Description

SAFEGUARD APPROXIMATELY 210 HAZARDOUS ABANDONED MINE FEATURES

- Manually/mechanically fill mine features with waste material or polyurethane foam
- Build wildlife-compatible closures with structural barriers to restrict human access (locked gates, cupolas, steel mesh coverings, etc.)
- > Use backhoes, trucks, other small equipment
- Due to access, helicopters will be used during construction to limit surface disturbance



Capitol Dome Mining Feature— Photo Courtesy of Grouse Mountain

Abandoned Mine Closure Examples





Airflow Structure



Bat Cupola



New Mexico Abandoned Mine Land Program





Bat Gate with Mesh



Bat Gate



Bat Gate



Steel Mesh



Bat Gate in Rock Bulkhead



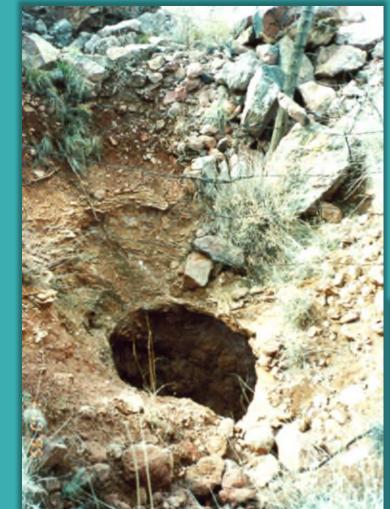
Culvert with Bat Gate

Photo Credits: N.M. AMLP Staff



Abandoned Mine Closure Examples







Polyurethane Foam Plug

- Photo Courtesy of AML



Before/After stope closure with rock-lined basin: Socorro West Mine Safeguarding

- Photos Courtesy of AML





Before/After adit closure with bat gate: Cleveland Mine Safeguarding – Photos Courtesy of AML



Abandoned Mine Closure Examples











Natural Resources Surveys

Biological surveys in 2023 and 2024

- No wetlands
- All drainages ephemeral
- > Federally threatened or endangered species
- Migratory Bird Treaty Act
- > 114 State threatened, endangered, species of greatest conservation need (SGCN), and/or BLM Sensitive species
 - Orcutt's pincushion (State S3, NMRPTC list)
 - Rock rattlesnake (SGCN)
 - Loggerhead shrike (SGCN)



Orcutt's pincushion

– Photo Courtesy of Grouse Mountain



Surveys & Bat Habitat Assessments

- Comprehensive biological surveys completed at each mine feature; emphasis on bat use
- Mine feature closure recommendations based on habitat assessments
 - Features with No/Poor/Marginal Bat Habitat: typically recommended for destructive closures
 - Features with Marginal/Good/Excellent Bat Habitat: typically recommended for bat/wildlife-friendly closures
- Townsend's big-eared bats, big brown bats, & unidentified species were observed
- Other wildlife use: wood rats/small mammals, ringtail cat, javelina, large mammal, owls and other birds, snakes including rattlesnakes, bees



Jason Corbett descending into mine shaft – *Photo Courtesy of BCI/BLM Erinn Shirley*

Biological Assessment/Biological Evaluation

- MINIMAL EFFECTS to vegetation
 - > Existing roads will be utilized & disturbed areas will be seeded with native seeds & mulched
- NO IMPACTS to wetlands or waters of the U.S.
- NO EFFECT determination for all federally threatened & endangered (T&E) species
 - > Lack of critical habitat, general habitat, or occurrence
- Migratory Bird Treaty Act- nests present
- Out of 114 State threatened, endangered, SGCN, and/or BLM Sensitive species
 - > 76- *No Effect*, no habitat or presence
 - > 38- May Affect individuals but not likely to contribute to federal listing
 - > Potential mitigation measures- timing, clearance surveys, biological monitor, wildlife friendly closures
- <u>TEMPORARY EFFECTS</u> to wildlife
 - > Short-term & localized displacement during construction
 - May impact individuals, not likely to affect population



Wildlife Use of Mine Features













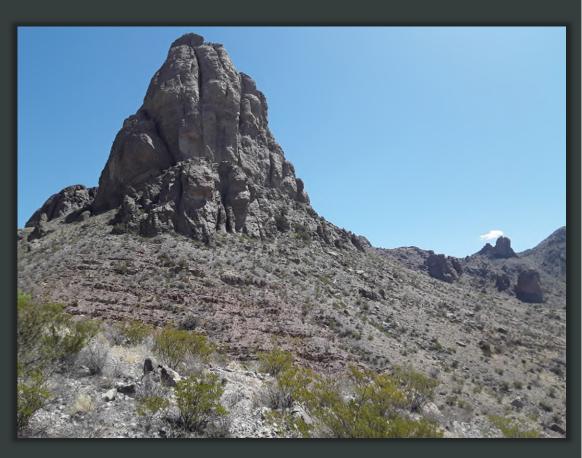
– Photos Courtesy of AML Program



Cultural Resources Inventory/Evaluation



- National Historic Preservation Act, National Cultural Properties Act, New Mexico Prehistoric and Historic Sites Preservation Act, and New Mexico Cultural Properties Act
- 1,619-acre inventory in 2014
 - > 41 total sites
 - > 6 historic properties
 - > 138 isolated occurrences
 - ➤ Of these, 38 recommended eligible for National Register of Historic Places (NRHP)
- 130-acre inventory in 2023
 - > 5 newly recorded sites
 - > 13 isolated occurrences
 - ➤ Of these, 2 recommended eligible for NRHP
- 173-acre inventory planned in 2024



Capitol Dome – Environmental Assessment (EA)

National Environmental Policy Act (NEPA)

Requires public involvement

Addresses a Purpose and Need

To safeguard the general public from hazards associated with historical mining features, including adits, shafts, subsidence features, & other mine openings, while protecting cultural resources & preserving wildlife habitat

Requires assessing environmental impacts from alternatives that meet the Purpose and Need and a No Action Alternative:

- No Action Alternative- no work would be done, acts as a baseline
- Proposed Action Alternative- AML Program preferred alternative, close/safeguard all mine features
- Other Alternatives?

Capitol Dome Abandoned Mine Safeguarding – Project Schedule

February 7-March 6, 2024: Receive public scoping comments

March 2024: Compile & summarize public comments & contributions

February-March 2024: Additional biological & cultural studies

May-July: Environmental Assessment preparation

Estimated August: Public Meeting for EA

Estimated Early 2025: Project Implementation



Capitol Dome Mine Feature

– Photo Courtesy of Grouse Mountain







Question/Answer & Comment Session

PLEASE SUBMIT ADDITIONAL COMMENTS OR QUESTIONS BY MARCH 6, 2024 TO:

Hillary Robbie

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Santa Fe, NM 87507

Phone: 505.930.5166

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