

# Protecting Wildlife Habitat in Gold Butte National Monument

A photograph of a rugged, rocky landscape with reddish-brown and tan rock formations under a clear blue sky. The terrain is steep and rocky, with some sparse vegetation. The sky is a clear, bright blue.

2019 MSHCP Annual Project Progress  
Report Symposium  
August 28<sup>th</sup> 2019

Rob Ghiglieri  
Nevada Division of Minerals



# Overview

NDOM

Project Development

Key Factors

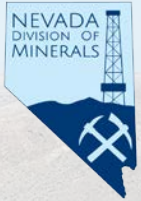
Wildlife Use

Results

Additional Work

Collaborative Effort





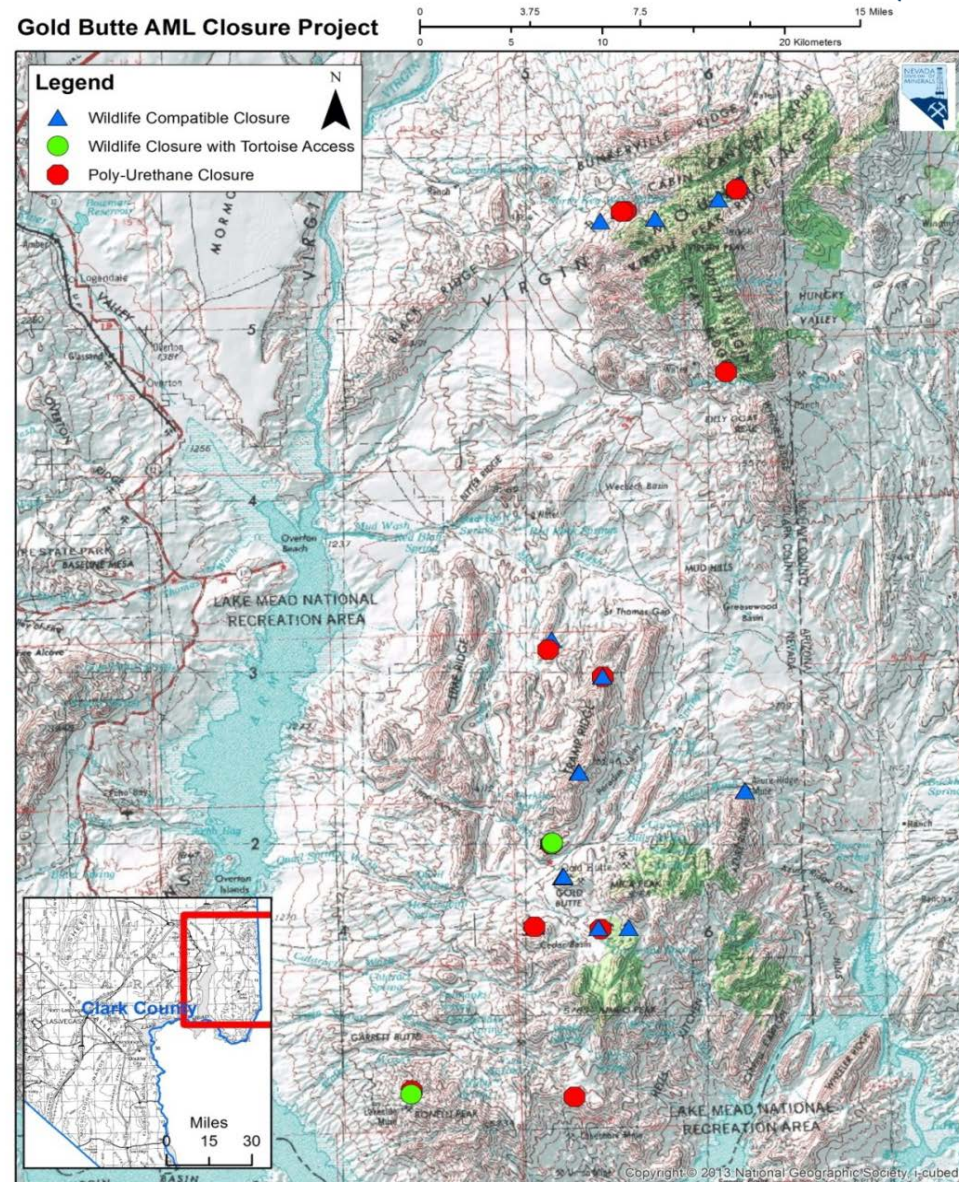
# Nevada Division of Minerals

- State Agency and part of the Commission on Mineral Resources (7 members)
- Offices in Carson City (8 employees) and Las Vegas (3 employees)
- No general fund money in budget, all revenue from fees on minerals industry
- What we Do:
  - Industry Relations and Government Affairs
  - Abandoned Mine Lands Program
  - Oil, Gas, and Geothermal Program
  - Minerals Education, including the Nevada Earth Science Workshops
  - Mines Registry (production and exploration data on mining, oil and gas, and geothermal)
  - State Reclamation Bond Pool



# Project Development

- Gold Butte National Monument Created in 2016
- 2016, NDOW identified key bat habitat in the Virgin Mountains
- 2017, DCP Received funding for protecting Bat habitat in Clark County
- 2018, DCP and NDOW Interlocal Agreement
- 2018, Categorical Exclusion from BLM





# Key Factors

- Project spans 220 square miles
- Accessibility
- 18 AML hazards with significant bat habitat
- 42 total known AML hazards within the Monument
- Desert Tortoise habitat found in three AML hazards
- BLM approval for closures





# Helicopter Needs





# Diverse Climates

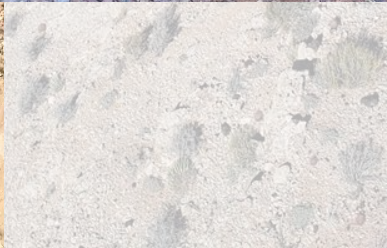


Left: An ore loadout associated with a hazard in the Virgin Mountains

Right: A view looking north from the southernmost hazard in the project with the Virgin Mountains in the far horizon showing the vast distance between hazard sites within the project



# Azure Ridge





# Tramp Complex





# Gold Butte





# Black Jack Mine

Photo Credit: Utah State Historical Society



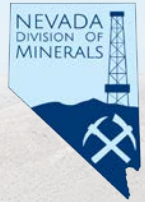




Left: Photos of the desert tortoise exiting the bat gate through the 8"x10" tortoise portal. Top right: Bats exiting the gate only days later. Bottom right: A small gray fox examining the new gate.







# Nevada's newest national monument will soon have fewer holes to fall into.



## Work underway to close old mine shaft entrances at Gold Butte monument

By Henry Brean | Las Vegas Review-Journal

A small team of state contractors is about halfway through a nearly six-week effort to close off 42 abandoned mine openings scattered throughout Gold Butte National Monument, about 90 miles northeast of Las Vegas.

Most of the underground tunnels date back to the early 20th century. Several feature vertical shafts, primed to swallow unsuspecting visitors.

In the hills above the long-gone mining camp of Gold Butte, 20 miles from the nearest paved road, contract workers Brian Breiter and James Ryan spent Monday capping one such hole with about 2,500 pounds of crisscrossed steel.

"It's strong enough you could park a vehicle on it if you wanted to," Breiter said after securing the new grate with 18-inch pins drilled into solid rock.

State contractors Brian Breiter, left, and James Ryan secure steel across the opening of an abandoned mine last week.  
K.M. Cannon Las Vegas Review-Journal

See MINES 4A

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HEALTH Four breast cancer survivors talk about their experiences 1D ▶

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■ Talks between Britain and the European Union ended without a Brexit agreement. 10A

**NEVADA & THE WEST**  
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■ Nevada candidates are pulling out all the stops to court minority voters. 1B

**WASHINGTON REPORT**  
■ President Donald Trump threatened to impose another round of tariffs on China in an interview with '60 Minutes.' 6A

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Sunny and breezy  
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Nevada	3B	Weather	11A
Opinion	5B	World	10A

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## Still-suffering Floridians piece lives back together



Maureen O'Connell pulls a framed picture out of the rubble of her damaged home Sunday in Mexico Beach, Fla.

By Russ Berman and Brendan Farrington  
The Associated Press

MEXICO BEACH, Fla. — Crews with backhoes and other heavy equipment scooped up debris in hurricane-flattened Mexico Beach on Sunday as the mayor held out hope for the 250 or so residents who might have tried to ride out the storm.

The death toll from Michael's destructive march from Florida to Virginia stood at 17, with just one confirmed death in this Florida Panhandle town of about 1,000 people that took a direct hit from the hurricane and its 135 mph winds last week.

Crews worked to clear building debris along with the rubble from a collapsed section of the beachfront highway. Mayor Al Cathey estimated that 250 residents stayed behind when the hurricane struck, and he said he remained hopeful about their fate. He said search-and-rescue teams in the beach town had already combed areas with the worst damage.

"I've lost only one life, to me that's going to be a miracle," Cathey said.  
See STORM 2A

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See MINES 4A

“We’re going to be on the forefront of education... Once we graduate, we’re going to be the people that other educators look at for advice on how to run their classrooms.”

Makenzi Solis  
Nevada Institute for Teaching and Educator Preparation

## Top Gun teamwork to goose program

Cohort of 10 students guides its inauguration

By Natalie Bruzda  
Las Vegas Review-Journal

Ideas are brewing for Makenzi Solis. She wants to research new ways to help special education students learn in general education classrooms.

And she'll have the opportunity to do so as part of the first cohort at the Nevada Institute for Teaching and Educator Preparation.

"I think it's really cool because we're going to be on the forefront of education," Solis, 18, said.

"Once we graduate, we're going to be the people

See EDUCATION 11A

<https://www.reviewjournal.com/local/local-nevada/dangerous-gold-butte-monument-mine-shaft-entrances-being-closed/>



# Project Results

- 40 Hazards
  - 28 BCCs
    - 3 with Tortoise Door
  - 12 PUFs
- 29 total days
  - Spread across an area greater than 220 square miles
- Total Construction Cost = \$269,349
  - Clark County Desert Conservation Program (DCP) funded \$129,955
- Partnering Agencies
  - NDOM
  - DCP
  - NDOW
  - BLM
- National Association of Abandoned Mine Land Programs
  - 2019 Hard Rock Award Winner





# Wildlife Benefitting from Mine Habitat

- Bats that regularly, or occasionally, use mines in the Mojave: (Identified by NDOW)
  - *Macrotus californicus*, California leaf-nosed bat
  - *Antrozous pallidus*, pallid bat
  - *Corynorhinus townsendii*, Townsend's big-eared bat
  - *Eptesicus fuscus*, big brown bat
  - *Euderma maculatum*, spotted bat
  - *Idionycteris phyllotis*, Allen's big-eared bat
  - *Lasionycteris noctivagans*, silver-haired bat
  - *Myotis californicus*, California myotis
  - *Myotis ciliolabrum*, western small-footed Myotis
  - *Myotis evotis*, long-eared myotis
  - *Myotis lucifugus*, little brown bat
  - *Myotis thysanodes*, fringed myotis
  - *Myotis yumanensis*, Yuma myotis
  - *Parastrellus hesperus*, Canyon bat
  - *Tadarida brasiliensis*, Brazilian free-tailed bat
  - *Myotis velifer*, Cave myotis
- Other potential wildlife habitat:
  - Desert Tortoise
  - Woodrats
  - Other small desert mammals
  - Ringtail cats
  - Barn owls
  - Say's phoebe
  - Rabbits
  - Bobcats



# Valley of Fire State Park

- Magnesite Mine
  - Identified by NDOW
  - Maternity colonies of 50-60 Yuma Myotis (*myotis yumenensis*)
  - Just inside Park boundary
    - High visitation



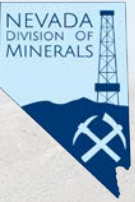


# Goodsprings

- A part of a larger closure project of 100+ hazards
- Remaining 6 BCC within project
  - 5 require helicopter work
- Over a dozen species of bat are in the area







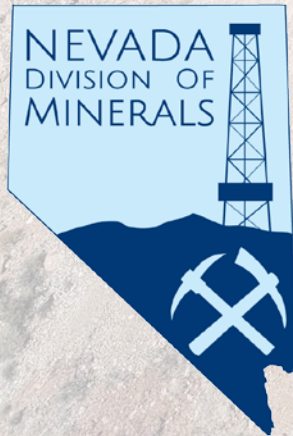
# Collaborated Effort



Stefanie Ferrazzano  
Heather Green



Connor Murphy  
Stephanie Clark



Minerals' AML Staff



AML Contractor



Christy Klinger  
Jason Williams



# Questions

