



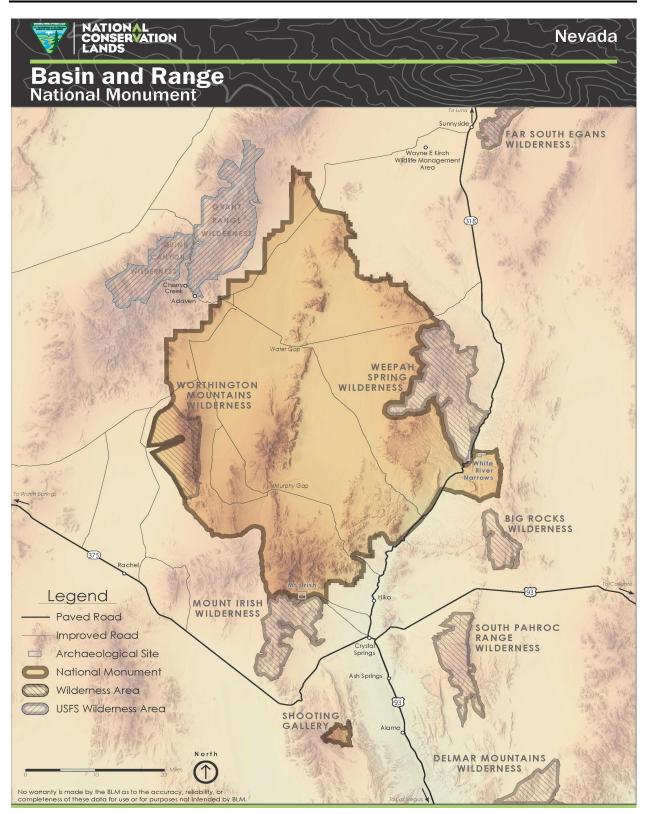
**Nevada** 2022: Annual Manager's Report

# **Basin and Range**

**National Monument** 



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### Accomplishments

The Basin and Range National Monument celebrated many successes in 2022. The Friends of Basin and Range and Bureau of Land Management (BLM) held a successful National Public Lands Day event in September. Volunteers installed signs at three locations across the monument and participated in an educational hike. Partnerships like this one are critical to the monument. A blackbrush study by Desert Research Institute continued as part of the National Conservation Lands Management Studies Support Program. Visitation this year was similar to the numbers in 2021. Through Round 13 of Special Legislation Lincoln County Archaeological Initiative, cultural resource projects were awarded funding in 2022. Outcome Based Grazing Land Health Assessments were an area of focus in Basin and Range National Monument. Outreach and education programs were delivered to the public in 2022 including a career day at the local high school, a sheep shearing demonstration at schools, and an outreach booth at a Labor Day event.



# Challenges

Abandoned Mine Lands within the Freiberg Mining District prompted a proposal for funding under the Bipartisan Infrastructure Law (BIL) to perform necessary clearances and surveys followed by hazard abatement. Abandoned features in Freiberg include concrete leach pads and catchment basins as well as open mine shafts and adits. Drought conditions in Nevada were extreme in 2022. Many grazing permittees in the monument reduced their season of use and numbers of livestock and worked to increase livestock distribution across the allotments in response to the drought.



Open mine shaft in the Freiberg Mining District

#### Visitors

The estimated visitation for Basin and Range National Monument in 2022 was 5,308 visits and 3,140 visitor days. These numbers are similar to 2021 and 2019. The numbers in 2020 were significantly higher, potentially due to the influence of the COVID-19 pandemic. More than half of all monument visitors in 2022 spent time at public cultural sites, such as White River Narrows and Mt. Irish. Recreation activities (both motorized and non-motorized) such as sightseeing, hunting, trapping, rock climbing, caving, camping, photography, and hiking are popular activities in the monument. To obtain estimated visitation statistics, staff gather data from traffic counters placed throughout the monument.



White River Narrows Archaeological District

# Partnerships

BLM continued partnerships with Friends of Basin and Range, the U.S. Geological Survey (USGS), Desert Research Institute, and the Eastern Nevada Landscape Coalition in 2022. Volunteer hours totaled 309 hours from 41 volunteers in 2022. Volunteers participated in National Public Lands Day, monitored cultural sites through the Nevada Site Steward Program, removed abandoned mining claim markers, and removed graffiti.



Volunteers helping with graffiti removal.

#### Science

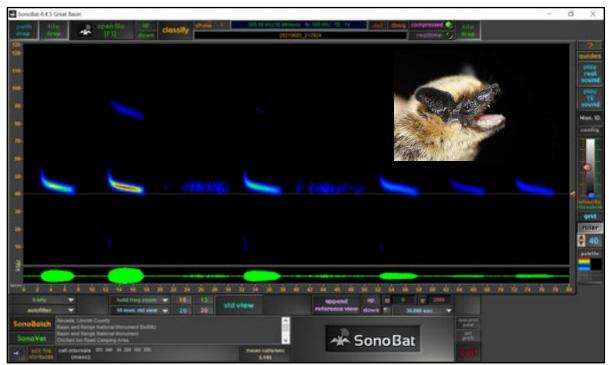
In 2018, BLM and the USGS entered into an interagency agreement to model and map habitat for wildlife species listed in the proclamation that established Basin and Range National Monument. This effort spurred a BioBlitz in 2021 with many partners participating in the citizen science event. In 2022, BLM provided additional funding to USGS for the habitat model. The modeling effort uses an iterative approach of resampling and targeting certain areas for field work and citizen science efforts. The goal is to refine models for habitat for species like the Great Basin Collared Lizard. The models identify habitat hot spots, based on occurrence data and environmental variables, for wildlife species in the monument. These efforts were highlighted as a case study in a bureau-wide Citizen Science Plan in 2022.



Great Basin Collard Lizard in the monument.

### **Climate Impacts**

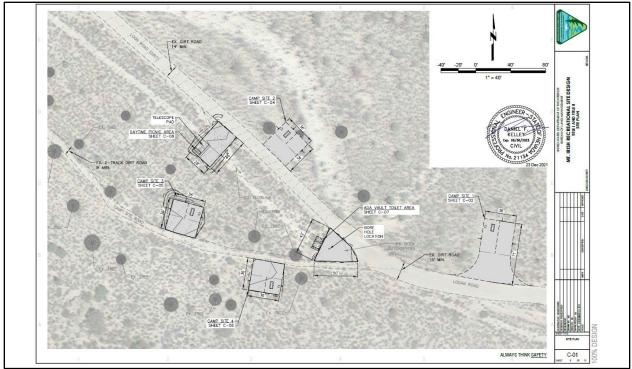
Several species of bats are known to live in Basin and Range National Monument and are referenced in the monument's proclamation. Extensive surveys and inventories for bats have not been completed in the area. During the 2021 BioBlitz, small amounts of acoustic data were collected, including the recording of a Canyon Bat (formerly known as Western Pipistrelle). In 2022, Eastern Nevada Landscape Coalition and BLM entered into an assistance agreement to undertake a multi-year acoustic inventory of bats within the monument. Data like the acoustic signature shown below will be collected at different times of year in multiple locations across the monument. The establishment of a baseline of bat species and occurrence data will prove useful for understanding future trends. Bat's sensitivity to climate impacts and habitat quality alterations makes them a meaningful bio-indicator of change in the monument.



An acoustic signature for a canyon bat, recorded in Basin and Range National Monument.

# **Climate Resiliency**

The Mt. Irish Cultural Resource Protection Project aims to focus camping and visitor use in an area a short distance from, rather than concentrated at, sensitive cultural areas in the Mt. Irish Area of Critical Environmental Concern. Four primitive campsites and a vault toilet will be installed to make the area more resilient to changing landscapes and climate and provide for visitor use that minimizes resource impacts. The Architecture and Engineering contract and geotechnical report were completed December 2021. The construction phase of the project was awarded special legislation funding in May 2022 with construction slated for fall 2023.



Mt. Irish ACEC improved recreation site engineering design.

# Social and Environmental Justice

In April 2022, staff from Desert Research Institute (DRI) demonstrated an Uncrewed Aerial System (UAS, aka drone) to students in Lincoln County, Nevada. Students from prekindergarten through middle school learned about drone technology in the classroom and then witnessed the drones in action during 30-mph winds in the school yard. DRI and the BLM have partnered on several Lincoln County Archaeological Initiative projects that use drones with a variety of sensors like thermal imaging. The projects use drones at archaeological sites to test sensor technology for feature identification and mapping, finding areas with potential depth, analysis of spatial characteristics, and site monitoring indicators. BLM and DRI hope that presentations like this inspire youth in underserved communities in rural Nevada to further pursue science, technology, engineering, and math.



Desert Research Institute drone demonstration for school kids.

# **Events**

In addition to the National Public Lands Day event in September, staff from the Basin and Range National Monument hosted an outreach and environmental education booth at Labor Day festivities in Pioche, Nevada. This year's booth focused on pollinators, ancient art, Nevada mining history, and paleontology. Outreach programs were presented at local elementary, middle, and high schools. Michael Heizer's land artwork *City* opened to the public with small docent-led tours beginning in 2022. The artwork is in Garden Valley within the monument on private land managed by Triple Aught Foundation. Rangeland Management Specialists demonstrated sheep shearing at local schools in May 2022.



The always popular sheep shearing demonstration.

# Words from the staff

Partnerships with federal, state, local, and non-profit organizations continue to support the monument and promote responsible recreation in this remote area of Nevada. Recreation, research, rangeland management, outreach programs, and cultural resource protection were primary areas of focus in 2022. As of the writing of this report, we would like to honor the memory of botanist Greg Gust. Greg worked tirelessly for Eastern Nevada Landscape Coalition and as a volunteer on a botanical inventory of the monument for many years. His contributions to eastern Nevada ecology and the bright light he brought to this world live on in our memories.





#### **Basin and Range**

#### **National Monument**

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Flickr photo album link: <u>https://www.flickr.com/photos/mypubliclands/albums/72157655302466798/</u>

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