

Environmental Assessment

Prepared by
U.S. Department of the Interior
Bureau of Land Management

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Chapter 1. Introduction

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1.1. Identifying Information:

1.1.1. Title, EA number, and type of project:

Title: Anabat Detector Temporary Installation — Worthington Mountains Wilderness

EA Number: DOI-BLM-NV-L030–2012–0048–EA

1.1.2. Location of Proposed Action:

At the entrance to Leviathan Cave in the Worthington Mountain Wilderness, within the Caliente Field Office of the Ely District.

1.1.3. Name and Location of Preparing Office:

BLM Office: NV - Caliente Field Office (LLNVL03000)

1.1.4. Applicant Name:

BLM

1.2. Purpose and Need for Action:

The purpose for the proposed action is to gather data regarding bat populations and use patterns in Leviathan Cave, which lies within the Worthington Mountains Wilderness. The proposed action is needed at this time to aid in the development of the Leviathan Cave Management Plan. Further, the need for this NEPA action is established by BLM Wilderness Policy Manual 6340.

1.3. Scoping, Public Involvement and Issues:

An Interdisciplinary team informally scoped the proposed action for extraordinary circumstances in the Caliente Field Office from October 11, 2012. A Notice of Proposed Action will be issued concurrently with the announcement for review and public comment for this EA.

Chapter 2. Proposed Action and Alternatives

2.1. Description of the Proposed Action:

The BLM is proposing to set up a temporary bat monitoring station (Anabat Detector) in the Worthington Mountains Wilderness, in the Caliente Field Office. The Anabat detector would be in place for approximately one year at the entrance to Leviathan Cave. This would allow for one full year of bat use of the cave to be recorded, and to gain an understanding of seasonal bat use. The detector would be carried to the site on foot by BLM and NDOW employees. The site location within the large opening of the entrance of the cave would take advantage of natural screening in the area, possibly using vegetation to make the detector less noticeable to visitors.

The monitoring station would consist of the following equipment: a box to hold the unit components, a cable, microphone and solar panel. The station would occupy an area of roughly 4' x 4'. See photo of a similar unit below. After the initial set-up, the detector would be visited on the normal cave monitoring schedule in the spring of 2013, at which time data could be downloaded, and to ensure the equipment is functioning properly. The site would be re-visited in the fall of 2013, to remove all components of the detector.



Example of an Anabat Detector

2.2. Description of Alternatives Analyzed in Detail:

The No Action Alternative would be not installing the bat monitoring device.

2.3. Alternatives Considered but not Analyzed in Detail

No other alternatives were considered.

2.4. Conformance

The EA is in conformance with the goals, objectives, and decisions of the following BLM Land Use Plans:

- Ely District Approved Resource Management Plan (August, 2008)

REC-1: Manage for the protection of cave resources in the planning area according to the Ely District Office Cave Management Plan.

SD-5: Manage 22 designated wilderness areas in accordance with the Wilderness Act of 1964; the Nevada Protection Act of 1989; the Lincoln County Conservation, Recreation and Development Act of 2004; the White Pine County Conservation, Recreation and Development Act of 2006.

The EA is in conformance with the goals, objectives, and decisions of the following Wilderness Management Plan:

- Weepah Spring and Worthington Mountains Final Wilderness Management Plan and Environmental Assessment (October, 2011)

The Weepah Spring and Worthington Mountains Final Wilderness Management Plan (WMP) states “Given the complexity of management and need for additional data for Leviathan Cave, the BLM will develop a separate Cave Management Plan.” The bat detector will provide data for this planning effort.

Also, the WMP states under Research: “Research proposals investigating indigenous plant communities, wildlife, cultural resources, and the human dimensions of wilderness would be considered. Research may also be permitted in Leviathan Cave, on a case-by-case basis. Proposals must contribute to the enhancement of wilderness character or the improvement of wilderness management.” This section goes on to state “Research and other studies must be conducted without use of motorized equipment or construction of temporary or permanent structures. Exceptions may be approved for projects that are essential to managing the specific wilderness areas when no other feasible alternatives exist. Such use must be necessary to meet the minimum requirements for administration of the area as wilderness and must not degrade wilderness character.”

The proposed action and alternatives are in compliance with the following laws:

- The Wilderness Act of 1964 (16 U.S.C. §§ 1131-1136, September 3, 1964, as amended 1978).
- The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996).
- The Lincoln County Conservation, Recreation and Development Act of 2004 (Public Law 108-424).
- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994).
- Management of Designated Wilderness Areas (43 CFR Part 6300).

The proposed action and alternatives are in conformance with the following guidelines and manuals:

- Wildlife Management Guidelines (House Report No. 101-405, Appendix B).
- Management of Designated Wilderness Areas (BLM Manual 8560).

Chapter 3. Affected Environment:

3.1. Potentially Affected Resources

Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed in the H-1790-1 NEPA Handbook (2008) to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes, or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Resource/Concern	Issues Analyzed (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	The proposed action and alternatives are not expected to cause air quality to exceed National standards.
Areas of Critical Environmental Concern	N	This resource is not present within this project location.
Cultural Resources	N	Cultural resources would be avoided as there are no ground disturbing activities.
Environmental Justice	N	This project is not anticipated to disproportionately affect any minority or economically disadvantaged population.
Fish and Wildlife	N	Individual wildlife may be temporarily displaced or disturbed during implementation. However, this project will have no overall effects on populations.
Prime and Unique Farmlands	N	Resource not present.
Threatened or Endangered Species or Critical Habitat	N	There are no Threatened or Endangered Species listed or proposed for listing known to occur within the project area.
Floodplains	N	No floodplains occur within the project area.
Forest Health	N	Project location occurs outside of forest and/or woodland areas.
Lands and Realty	N	There are no conflicting rights-of-way within the project area.
Migratory Birds	N	Project implementation would not take place during the migratory bird nesting period, May 15 to July 15. The proposed action would not affect migratory birds.
Mineral Resources	N	No mineral operations occur within the project area.
Native American Religious and other Concerns	N	There are no Native American traditional religious sites or cultural sites of importance within the proposed project area.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered.	N	There are no Special Status Plant Species within the project area.
Noxious and Invasive Weed Management	N	No impacts are anticipated to occur from this project.
Paleontological Resources	N	The project would not affect any paleontological resources.
Wastes, Hazardous or Solid	N	No known hazardous or solid wastes exist on the project area, nor would any be introduced.
Recreation Uses	N	The project would have no effect on recreation resources.
Rangeland Health		No impacts would occur to rangeland health as a result of this project.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered	N	Resource not known to be present.
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	N	No effects to special status species are anticipated.
Soil Resources	N	No impacts will occur from this project.
Vegetative Resources	N	No impacts will occur from this project.
Visual Resource Management	N	No direct or cumulative impacts would occur.

Wilderness	Y	Project occurs within wilderness and includes a nonconforming use. Detailed analysis below.
Wastes, Hazardous or Solid	N	The proposed action or alternatives would not produce hazardous or solid wastes.
Water Quality, Surface/Ground	N	No surface water is present in the project area. No water in the project area is used for human drinking purposes.
Water Resources (Water Rights)	N	The proposed action is not expected to lead to a measurable change in the surface and subsurface water sources, water rights, and quantity of water that occurs in the analysis area. The appropriation of water is the responsibility of the Nevada State Water Engineer.
Wild Horses	N	The project is not within a Herd Management Area.
Wild and Scenic Rivers	N	No Wild and Scenic Rivers occur within or adjacent to the project area.
Wetlands/Riparian Zones	N	These resources are not present within this project area.
Wild and Scenic Rivers	N	This resource is not present within this project area.

Chapter 4. Environmental Effects:

4.1. Wilderness

Affected Environment

The United States Congress established the National Wilderness Preservation System to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States. Wilderness designation is intended to preserve and protect certain lands in their natural state. Only Congress, with Presidential approval, may designate public lands as Wilderness. The Wilderness Act of 1964 identifies wilderness uses and prohibited activities. Although wilderness character is a complex idea and is not explicitly defined in the Wilderness Act, wilderness characteristics are commonly described as:

- **Untrammeled** — area is unhindered and free from modern human control or manipulation.
- **Natural** — area appears to have been primarily affected by the forces of nature.
- **Undeveloped** — area is essentially without permanent improvements or human occupation and retains its primeval character.
- **Outstanding opportunities for solitude or a primitive and unconfined type of recreation**— area provides outstanding opportunities for people to experience solitude or primeval and unrestricted recreation, including the values associated with physical and mental inspiration and challenge.
- **Supplemental values** — complementary features of scientific, educational, scenic or historic values.

The Worthington Mountain Range rises like a ship 4,000 rugged feet above dry valleys of central Nevada to almost 9,000 feet. The Worthington Mountains Wilderness Area encompasses the majority of the range. The severe limestone backbone of the mountain presents a difficult challenge to visitors with heavily dissected canyons, precipitous cliffs, knifelike limestone surfaces, and no surface water. Those who persevere will be rewarded by endless vistas, natural arches, ancient forests, and limestone caves, the largest being Leviathan Cave.

The Worthington Mountains feature a unique blending of flora and fauna from both the Great Basin and Mohave deserts. Wildlife species inhabiting this wilderness area include mountain lions, bobcats, mule deer, desert bighorn sheep, kit foxes, coyotes, and raptors, as well as smaller common mammal and reptile species. The vegetation includes cholla and other cactus at the lower elevations through densely forested slopes to a rocky ridgeline. Forest cover in the mountains vary juniper and pinyon pine at lower elevations while ponderosa, limber and bristlecone pines cling to the jagged peaks (the oldest tree dated at 2,100 years old).

The wilderness area allows for solitude, whether you are tucked in a cave, or are hiking up one of the drainages. Recreational opportunities include nature study, technical rock climbing, rock scrambling, hiking, backpacking, and camping. The spelunking opportunities in Leviathan Cave are extraordinary with its huge entrance (100 feet x 180 feet), cave formations, enormous chambers, narrow constricted passageways, and large ice formations during winter and spring

Environmental Consequences

Impacts to wilderness can be described by the affects to each of the four qualities of wilderness character:

Untrammeled: The proposed action would not result in manipulation of the natural processes of wilderness by modern humans. Therefore, there are no impacts to this quality of wilderness character.

Undeveloped: The installation, though temporary, of the bat monitoring device would impair the undeveloped character of wilderness while it is in place. There would be no long term affects to the undeveloped character.

Natural: The proposed action – temporary bat monitoring device installation – would help with the management of bats and the cave resource in the wilderness, however the method of data collection would not affect naturalness, positively or negatively.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation: Impacts to opportunities for solitude may be affected on the day of installation, monitoring the data collection device about 6 months after installation, and on the day of removal of the unit. These days would coincide with standard cave monitoring trips, so the impact would not be any greater than typically occurs. Furthermore, with the difficult access to the cave, and the fact that the cave would be visited on weekdays to avoid other users, encounters with visitors is highly unlikely.

Other unique components that reflect the character of this wilderness Management of the cave resource would be improved with the collection of this data, as it will lead directly into development of the cave management plan.

Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted:

The BLM posted the EA on the EPlanning website for public comment for two weeks. The BLM sent out tribal consultation letter on 10-17-12. Notification of the EA was sent to the Ely District Wilderness mailing list.

Chapter 6. List of Preparers

Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Lisa Domina	Outdoor Recreation Planner	Recreation, Travel Management, Visual Resources
Travis Young	Planning and Environmental Coordinator	Project Lead, Air Quality, Environmental Justice, NEPA
Daniel Condie	Rangeland Management Specialist	Rangelands Standards and Guidelines, Livestock Grazing Riparian/Wetlands, Noxious and Invasive Species
Mark D'Aversa	Hydrologist	Water Resources, Soil Resources, Watershed
Alicia Styles	Wildlife Biologist	Fish and Wildlife, Special Status Species
Benjamin Noyes	Wild Horse Specialist	Wild Horses
Nick Pay	Archaeologist	Cultural Resources, Paleontological Resources
Tye Chamberlain	Realty Specialist	Lands/Energy
Alan Kunze	Geologist	Mineral Resources
Kyle Teel	Fire Ecologist	Fuels, Forest Health, Forest/Woodland Products
Erica H Husse,	Rehabilitation Manager	Emergency Stabilization and Rehabilitation
Emily Simpson	Wilderness Planner	Wilderness
Melanie Peterson	Environmental Protection Specialist	Wastes, Hazardous and Solid, Human Health and Safety
Elvis Wall	Native American Coordinator	Native American Concerns