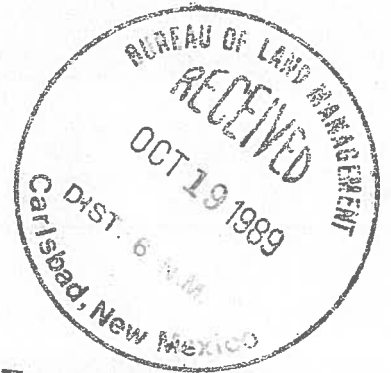


UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT
Roswell District Office Headquarters
P. O. BOX 1397
Roswell, New Mexico 88202-1397



OCT 18 1989

In Reply
Refer To:
2310 (067)

Memorandum

To: State Director (910)
From: District Manager (060)
Subject: Petition/Application Minerals Withdrawal for Carlsbad Area Caves

Attached for your review is the Petition/Application for the withdrawal of several cave Special Management Areas in the Carlsbad Resource Area. Upon approval, this action would withdraw 3,312.5 acres of public land from the operation of the public land laws, including the mining laws but not the mineral leasing laws, for a period of 20 years. This withdrawal would implement management decisions approved in the Carlsbad RMP. We would appreciate your forwarding this withdrawal package to the appropriate Washington Office with your recommendations for approval.

Orig. Sgd. Francis R. Cherry, Jr.

Attachment

067:JGOODBAR:sp:10-17-89:WANGID0001W/26

**PETITION/APPLICATION
FOR Mineral Withdrawal of
Significant Caves**

in Carlsbad Resource Area
Roswell, NM District
BLM



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240



APR 26 1990

IN REPLY REFER TO:
2310 (322)
NM NM 83404

Memorandum

To: Assistant Secretary - Land and Minerals Management

From: ~~Assistant Secretary~~ Director, Bureau of Land Management

Subject: Petition/Application for the Withdrawal of Public Lands for the Protection of Highly Significant Caves, Eddy County, New Mexico

We request your approval to file an application to withdraw 2,924.65 acres of public land from the operation of the public land laws including the mining laws, but not the mineral leasing laws, and 440 acres of federally reserved mineral interests underlying private surface estate from the operation of the mining laws, but not the mineral leasing laws, for a period of 20 years to protect highly significant caves and their associated resources. Your approval would temporarily close the land for up to 2 years until various studies and analyses are made to support a final decision.

The proposed withdrawal would serve to protect 25 caves in 10 different areas (see maps, Attachment 2). Each of the caves contains highly significant resources such as archaeological, paleontological, biological, geological, mineralogical, hydrological, or scenic values. These caves represent the very best examples of the above-stated resources on BLM-administered land in this region. The area contains over 200 known caves and many more are suspected. Cave environments by their very nature provide a unique, closed system, which is highly valuable for scientific study. Additionally, they provide excellent natural classrooms for environmental education of unique underground resources and the interrelationships between the surface and subsurface. These caves are regularly used for education by such national and international organizations as the Armand Hammer United World College, the National Outdoor Leadership School, the University of New Mexico, the University of Texas, and several other universities and civic groups, such as the Boy Scouts of America, Explorer Scouts, high school groups, and church groups.

Many of the mineral formations which occur in these caves are very rare, extremely fragile, and can only be found in caves. Examples of such formations include aragonite crystals, soda straw stalactites, helectites, selenite needles, gypsum flowers, and cave pearls (see photo, Attachment 3). These formations, as well as the more common variety of cave formations, are irreplaceable in human timeframes. Once broken, tens of thousands of years would be required for regrowth.

Many of the caves contain excellent examples of paleontological and archeological remains. The paleo bone deposits are extremely valuable for the scientific study of late pleistocene ecosystems of the entire southwest region

of the United States. These materials are irreplaceable. The archeological remains found in some of these caves are the best preserved and most useful for study. The stable cave environment has preserved these cultural and paleontological resources in near perfect condition.

Biologically, the caves provide totally unique ecosystems for troglobitic (totally cave adapted) species of animals. Three of the caves proposed for withdrawal contain rare species of cave life. One of these caves is suspected to contain an as yet unidentified species of fish; verification of this species is pending further academic investigation.

Geologically, these caves are nationally and internationally important for the study of Permian Age reef deposits, particularly the backreef facies. The caves provide the unusual opportunity to study geologic structure from inside the reef. The Guadalupe Mountains, in which most of these caves are located, are considered to be the textbook example of Permian Reef geology and are studied by geologists around the world.

Over the past several years the digging efforts of interested cavers have resulted in the discovery of significant new caves and new sections of known caves. Such discoveries show that there can be much more as yet undiscovered cave passage in these areas. One group of caves are found in the gypsum plains out in front of the reef escarpment. Caves which are formed entirely in gypsum bedrock are very uncommon. Additionally these gypsum caves provide point sources for groundwater recharge and are highly significant to regional hydrology.

Because of their notoriety, an average of 350 cave entry permits for recreational use are issued each year. Ninety percent of these permits are issued to people outside of this region (150 miles away or more).

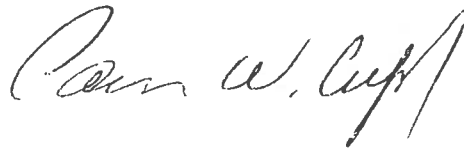
The recently completed Carlsbad Resource Area's Resource Management Plan (RMP) has designated each of these cave areas as Special Management Areas. Two of them have been designated as Areas of Critical Environmental Concern (ACEC), and two of the areas are designated as Research Natural Areas (RNA) due to highly significant cultural and paleontological remains. One of the areas is designated as a Special Recreation Management Area (SRMA). The management intent of these designations is to protect the important environmental research while providing for recreational, educational, and scientific research opportunities, and increased public awareness of the values, significance, and fragility of caves. There are mitigative measures outline in the Carlsbad RMP to protect cave resources from many types of impacts; however, there is no protection against disturbance associated with mineral location allowed pursuant to the regulations in 43 CFR 3809.1-3. Any surface disturbance on or adjacent to these cave areas could cause irreversible damage to the geological, mineralogical, cultural, paleontological, biological and hydrological values and would be incompatible with the scientific research, educational, and recreational uses of these cave areas.

In 1970 the BLM published in the Federal Register (Vol. 35 No. 128, July 2) a listing of several caves and classified them under the Classification & Multiple Use Act as segregated from the mining laws. Later that year these segregations were amended to include more caves. (See F.R. & maps attachment 4) These segregations were an attempt to provide adequate

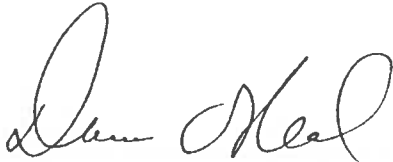
In 1970, the BLM published a listing of several caves in the Federal Register (FR) (Vol. 35, No. 128, July 2, 1970) and classified them under the Classification and Multiple Use (C&MU) Act as segregated from the mining laws. Later that year, these segregations were amended to include more caves (see FR, Attachment 4). These segregations were an attempt to provide adequate administrative protection for the cave resources. The C&MU designation does not provide adequate protection for these critical cave resources.

Caves have further been recognized as important and valuable natural resources with the passage of the new Federal Cave Resources Protection Act. The Act protects caves on Federal land from many things, but leaves them quite vulnerable to impacts from mining claims.

Attached is the information required for submission of a petition/application. Your approval is recommended.



Approved



Assistant Secretary - Land and Minerals Management

5-1-90

Date

Attachments

ATTACHMENT #1

Items Required by 43 CFR 2310.1-2(c) for an Application

- (1) Bureau of Land Management, New Mexico State Office, P.O. Box 1449, Santa Fe, New Mexico 87504-1449
- (2) Not Applicable
- (3) Not Applicable
- (4) This application is for the making of a withdrawal of public lands from entry under the public land laws, including the mining laws, but not the mineral leasing laws.
- (5) The lands proposed for the withdrawal are described as follows:

New Mexico Principal Meridian

<u>Cave</u>	<u>Acres</u>	<u>Description</u>
Chosa Draw Caves	1,190 acres	T25S., R25E. Sec. 20, E1/2SE1/4 Sec. 21, S1/2SE1/4NE1/4, S1/2 Sec. 22, SW1/4SW1/4NW1/4 W1/2W1/2SW1/4 Sec. 27, W1/2NW1/4NW1/4 Sec. 28, N1/2NE1/4 SE1/4NE1/4 W1/2 W1/2SE1/4 Sec. 29, E1/2NE1/4 E1/2W1/2NE1/4 NE1/4SE1/4 E1/2NW1/4SE1/4
Fence Canyon Cave Area	340 acres	T24S., R26E. Sec. 17, NW1/4NW1/4 Sec. 18, E1/2 of Lot 3 E1/2NE1/4NE1/4 S1/2NE1/4 N1/2SE1/4 NE1/4SW1/4 SE1/4NW1/4 N1/2SE1/4SW1/4

<u>Cave</u>	<u>Acres</u>	<u>Description</u>
Honest Injun Cave	10 acres	T22S., R25E. Sec. 28, W1/2NE1/4 of Lot 6 E1/2NW1/4 of Lot 6
KFFC (Elliott's)	130 acres	T24S, R25E. Sec. 23, SE1/4NE1/4SE1/4 E1/2SE1/4SE1/4 Sec. 24, W1/2NE1/4SW1/4 NW1/4SW1/4 N1/2SW1/4SW1/4 SW1/4SW1/4SW1/4 NW1/4SE1/4SW1/4
Lost	22.5 acres	T22S., R26E. Sec. 22, NE1/4NE1/4NE1/4 N1/2SE1/4NE1/4NE1/4 Sec. 23, W1/2NW1/4NW1/4NW1/4 NW1/4SW1/4NW1/4NW1/4
Big Manhole/ Little Manhole Caves	100 acres	T24S., R24E. Sec. 22, W1/2NE1/4SW1/4 E1/2SW1/4SW1/4 SE1/4SW1/4 W1/2SW1/4SE1/4
McKittrick Hill	1,210 acres	T22S., R24E. Sec. 14, S1/2SW1/4 SW1/4SE1/4 W1/2SE1/4SE1/4 Sec. 22, S1/2SW1/4NE1/4 SE1/4NE1/4 SE1/4SE1/4NW1/4 E1/2E1/2SW1/4 SE1/4 Sec. 23, W1/2 W1/2E1/2 W1/2E1/2E1/2 Sec. 26, W1/2NE1/4NE1/4 NW1/4NE1/4 N1/2NW1/4 Sec. 27, N1/2NE1/4 E1/2NE1/4NW1/4
Mudgett's/Little Mudgett's Caves	50 acres	T24S., R24E. Sec. 21, SE1/4SW1/4NW1/4 SW1/4SE1/4NW1/4 N1/2NE1/4SW1/4 NE1/4NW1/4SW1/4

<u>Cave</u>	<u>Acres</u>	<u>Description</u>
Yellow Jacket & Lair Caves	260 acres	T23S., R25E. Sec. 14, S1/2SE1/4SE1/4 S1/2SW1/4SE1/4 S1/2SE1/4SW1/4 Sec. 23, NE1/4 NE1/4NW1/4

The area described contains 3,312.9 acres in Eddy County (See Maps Attachment #2).

- (6) Not applicable.
- (7) The purpose of the withdrawal is to protect the mineralogic, geologic, hydrologic, archaeologic, paleontologic, biologic, recreational, scientific and educational integrity of highly significant cave areas.
- (8) All of the lands applied for are to be withheld from settlement, sale, location, or entry under the general land laws and from location and entry under the United States Mining Laws. The maximum segregation period of two years is requested.
- (9) Licenses, permits, cooperative agreements, or non-surface-disturbing discretionary land use authorizations of a temporary nature may be allowed but only with the approval of an authorized officer of the Bureau of Land Management during the segregative period.
- (10) A right-of-way, interagency or cooperative agreement would not adequately contain nondiscretionary uses which could irrevocably destroy the fragile and irreplaceable cave resources and eliminate their usefulness for scientific research purposes. Other unique cave features could be irreversibly damaged.
- (11) The duration of the withdrawal requested is 20 years. At the end of this period, a re-evaluation will be made concerning the desirability of extending the withdrawal.
- (12) There are no suitable alternative sites as the land described contains the natural resources to be protected.
- (13) No water rights will be needed to fulfill the purposes of this withdrawal.
- (14) Records relating to this application can be examined by interested parties at the following location:

Bureau of Land Management
Carlsbad Resource Area
101 E. Mermod
Carlsbad, New Mexico 88220

(15) A preliminary identification of mineral resources indicates a low potential for discovery of valuable locatable minerals. Our records indicate that no mining claims are presently on any of the areas being petitioned for withdrawal. A search of the county records revealed that numerous placer and lode mining claims were placed in the area of the McKittrick Hill Caves Complex between the years of 1919 and 1971, however the specific mineral or minerals that were being claimed were not specified. It is assumed that the claims were for limestone or travertine since abundant physical evidence exists that cave formations were mined in many areas of Endless, McKittrick, and Sand caves. Mining claims were placed on Mudgetts cave beginning in 1909 and bat guano is now considered a phosphate and falls under the solid leasable minerals program. The only other minerals which could possibly be of value in the areas near the caves would be limestone and dolomite, of sufficient quality to be used for rip-rap and building stone. These minerals would be better classified as common variety, since rock of this type and quality is abundant throughout the Guadalupe Mountains.