

**To:** Mike Diem[mdiem@fs.fed.us]  
**From:** Ashcroft, Tyler  
**Sent:** 2017-12-08T16:37:52-05:00  
**Importance:** Normal  
**Subject:** Fwd: oil and gas potential  
**Received:** 2017-12-08T16:38:11-05:00  
[EnergyDev BENM.pdf](#)  
[1. Cursory Review of the Mineral Potential Occurrence within the Bears Ears NM BLM.pdf](#)  
[map17 Potential For Oil Gas.pdf](#)  
[BENM 12082017 OG EOI.pdf](#)  
[Oil gas cat b4 BENM.pdf](#)

mineral development potential in bears ears.

Mike here is some stuff I just sent to Ed. I have more, but this was a start.

Also both SUWA and the State of Utah has good information. Most of the maps were created using BLM data.

<https://suwa.org/oil-gas-coal-mining-interests-stand-gain-trumps-illegal-repeal-grand-staircase-escalante-bears-ears-national-monuments/>

<https://naturalresources.utah.gov/dnr-newsfeed/very-little-energy-potential-within-bears-ears-national-monument>

----- Forwarded message -----

**From:** Ashcroft, Tyler <tashcrof@blm.gov>  
**Date:** Fri, Dec 8, 2017 at 2:25 PM  
**Subject:** oil and gas potential  
**To:** Edwin Roberson <eroberso@blm.gov>

Ed,

Attached are a few maps showing oil, gas, and other mineral related potential in the Bears Ears National Monument. A description of each document is included below.

- EnergyDev BENM- This document was produced by the State of Utah in advance of the Secretary's visit to BENM. It shows mineral potential and historic development.
- Cursory Review of the Mineral Potential Occurrence within Bears Ears NM- Includes basic information regarding multiple mineral resources in original BENM, including oil and gas potential. Developed by the BLM Utah State Office immediately after the original designation.
- Map 17 Potential For Oil Gas- This map is from the 2008 Proposed RMP Final EIS. It shows oil and gas potential.
- BENM 12082017 OG EOI- This may shows oil and gas lease parcel nominations/expressions of interest received since 2012. These are areas industry has most recently been interested in.

- Oil gas cat B4 BENM- This map does not show potential, but does show the areas that were available for oil and gas development prior to establishment of the monument. The leasing categories come from the Monticello RMP (2008), as ammended by the Moab MLP (2016).

Please let me know if this information meets your needs or if additional information is needed.

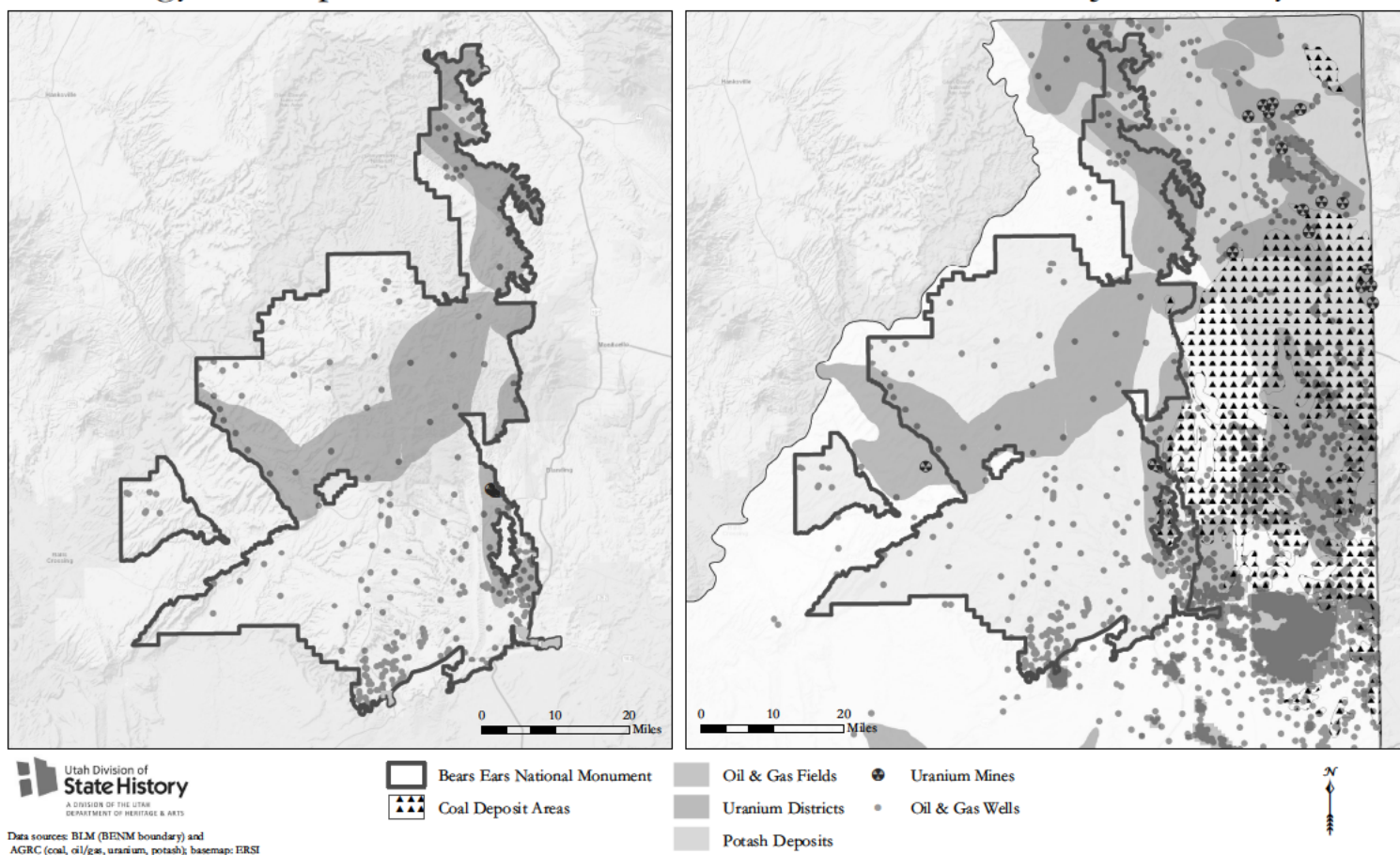
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Tyler Ashcroft  
Project Manager  
Bureau of Land Management  
(801)-539-4068

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Tyler Ashcroft  
Project Manager  
Bureau of Land Management  
(801)-539-4068

## Energy Development in Bears Ears National Monument & San Juan County





## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Utah State Office  
440 West 200 South, Suite 500  
Salt Lake City, UT 84101  
<https://www.blm.gov/utah>



IN REPLY REFER TO:  
(UT-9223-LG)

### INFORMATION MEMO

**TITLE:** Cursory Review of the Mineral Potential/Occurrence within the Bears Ears NM  
**AUTHOR:** Larry Garahana, Geologist (Certified Mineral Examiner 0147)  
**DATE:** January 31, 2017

### INTRODUCTION

The information within this memo gives an initial view through a series of maps showing mineral potential and occurrence within the newly designated Bears Ears National Monument, located within the Canyon Country District, Monticello Field Office, in San Juan County, Utah.

### MEMO INFORMATION

The maps that were created for this memo are ones that show past or present mineral history, mineral potential or minerals that may be prospectively valuable within and around the new designation.

Some of the attached maps include information taken from the USGS Mineral Resource Data System (MRDS). MRDS describes metallic and nonmetallic mineral resources throughout the world. Included in the MRDS are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. Their interactive map (<https://mrdata.usgs.gov/mineral-resources/mrds-us.html>) has information on more than 180 commodities and this memo depicts a static representation of those commodities, past and present near and within the new designation. Although there was no prospect or production information near or within the monument for lithium, a lithium map was included for informational purposes due to the thousands of newly staked unpatented mining claims that were located north northeast of the monument. The information on the remaining maps was gathered from the most current BLM GIS data and it depicts potential and prospectively valuable mineral information on specific solid, fluid and leasable minerals within the subject area.



Illustration 3  
(.34)

# 3031 - ENERGY AND MINERAL RESOURCE ASSESSMENT

## Mineral Potential Classification System\*

### I. Level of Potential

- O. The geologic environment, the inferred geologic processes, and the lack of mineral occurrences do not indicate potential for accumulation of mineral resources.
- L. The geologic environment and the inferred geologic processes indicate low potential for accumulation of mineral resources.
- M. The geologic environment, the inferred geologic processes, and the reported mineral occurrences or valid geochemical/geophysical anomaly indicate moderate potential for accumulation of mineral resources.
- H. The geologic environment, the inferred geologic processes, the reported mineral occurrences and/or valid geochemical/geophysical anomaly, and the known mines or deposits indicate high potential for accumulation of mineral resources. The "known mines and deposits" do not have to be within the area that is being classified, but have to be within the same type of geologic environment.
- ND. Mineral(s) potential not determined due to lack of useful data. This notation does not require a level-of-certainty qualifier.

### II. Level of Certainty

- A. The available data are insufficient and/or cannot be considered as direct or indirect evidence to support or refute the possible existence of mineral resources within the respective area.
- B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.
- C. The available data provide direct evidence but are quantitatively minimal to support or refute the possible existence of mineral resources.
- D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

For the determination of No Potential use O/D. This class shall be seldom used, and when used it should be for a specific commodity only. For example, if the available data show that the surface and subsurface types of rock in the respective area is batholithic (igneous intrusive), one can conclude, with reasonable certainty, that the area does not have potential for coal.

\* As used in this classification, potential refers to potential for the presence (occurrence) of a concentration of one or more energy and/or mineral resources. It does not refer to or imply potential for development and/or extraction of the mineral resource(s). It does not imply that the potential concentration is or may be economic, that is, ~~could~~ be extracted profitably.

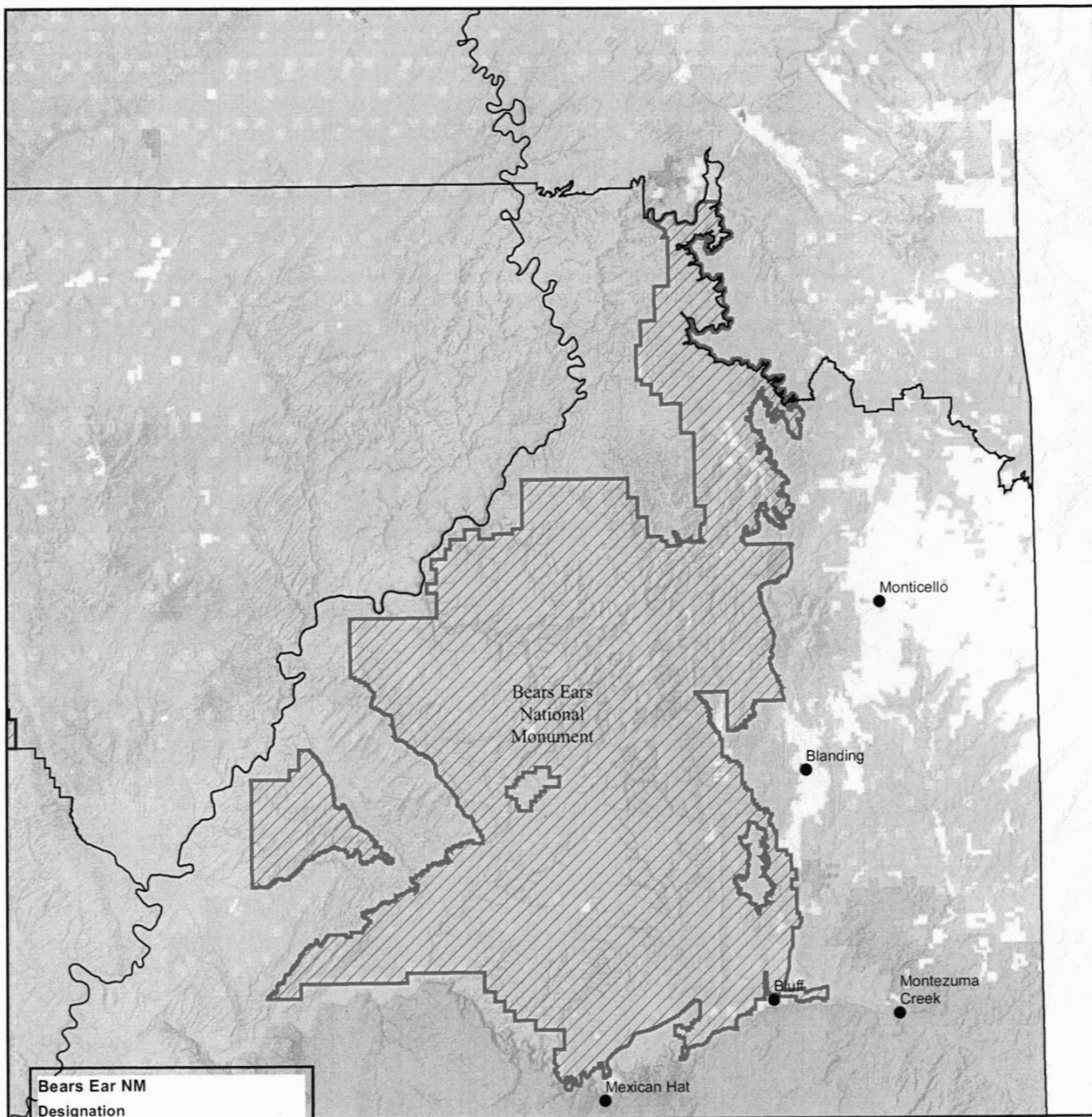
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UTAH STATE OFFICE

## BEARS EAR NATIONAL MONUMENT

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### Bears Ear NM

#### Designation

National Monument

#### Land Status

Bureau of Land Management (BLM)

Indian Reservation (IR)

National Park Service (NPS)

Other Federal

Private

State

State Parks and Recreation

State Wildlife Reserve/Management Area

US Forest Service (USFS)

USFS Wilderness Area



March 2, 2017

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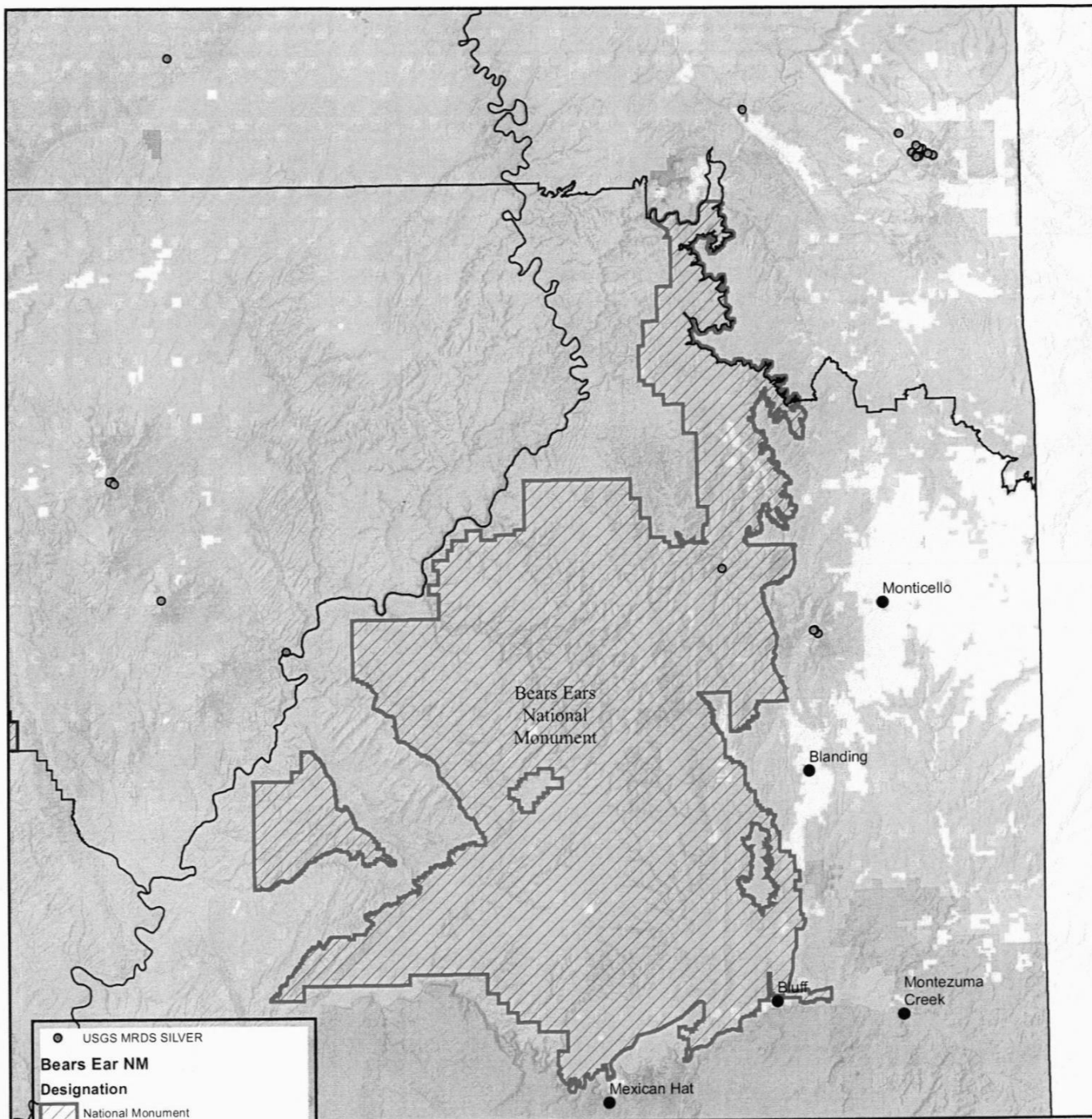
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# USGS MINERAL RESOURCE DATA SYSTEM SILVER

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● USGS MRDS SILVER

**Bears Ear NM**

**Designation**

- ▨ National Monument
- ▭ Field Office Boundary

**Land Status**

- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Other Federal
- Private
- State
- State Parks and Recreation
- State Wildlife Reserve/Management Area
- US Forest Service (USFS)
- USFS Wilderness Area



March 2, 2017

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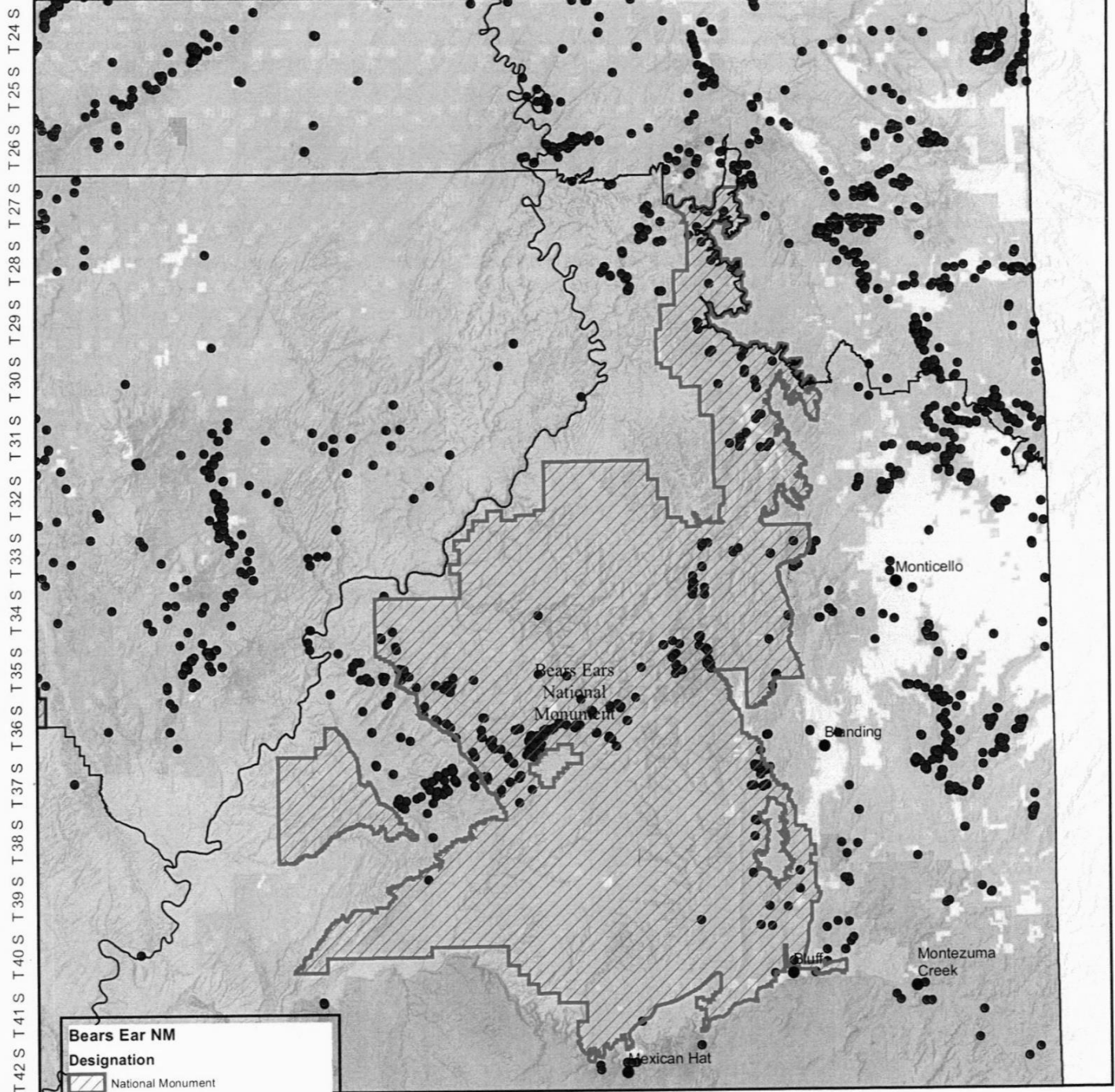




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## POTENTIAL AML FEATURES

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### Bears Ear NM

#### Designation

- National Monument
- Potential AML Features

#### Land Status

- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Other Federal
- Private
- State
- State Parks and Recreation
- State Wildlife Reserve/Management Area
- US Forest Service (USFS)
- USFS Wilderness Area



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March 2, 2017

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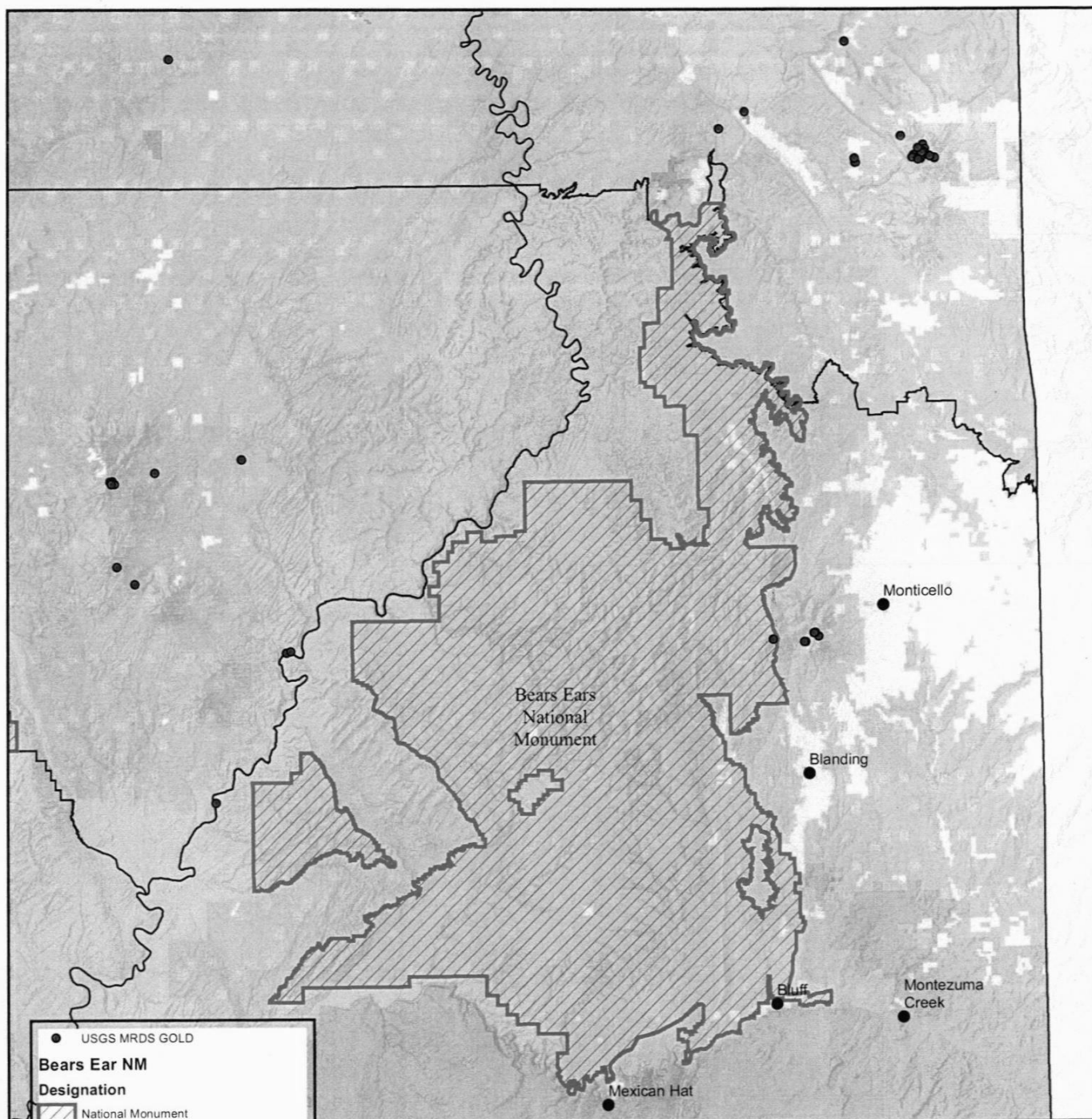


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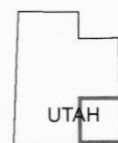
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- USGS MRDS GOLD
- Bears Ears NM**
- Designation**
- ▨ National Monument
  - ▭ Field Office Boundary
- Land Status**
- Bureau of Land Management (BLM)
  - Indian Reservation (IR)
  - National Park Service (NPS)
  - Other Federal
  - Private
  - State
  - State Parks and Recreation
  - State Wildlife Reserve/Management Area
  - US Forest Service (USFS)
  - USFS Wilderness Area



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March 2, 2017

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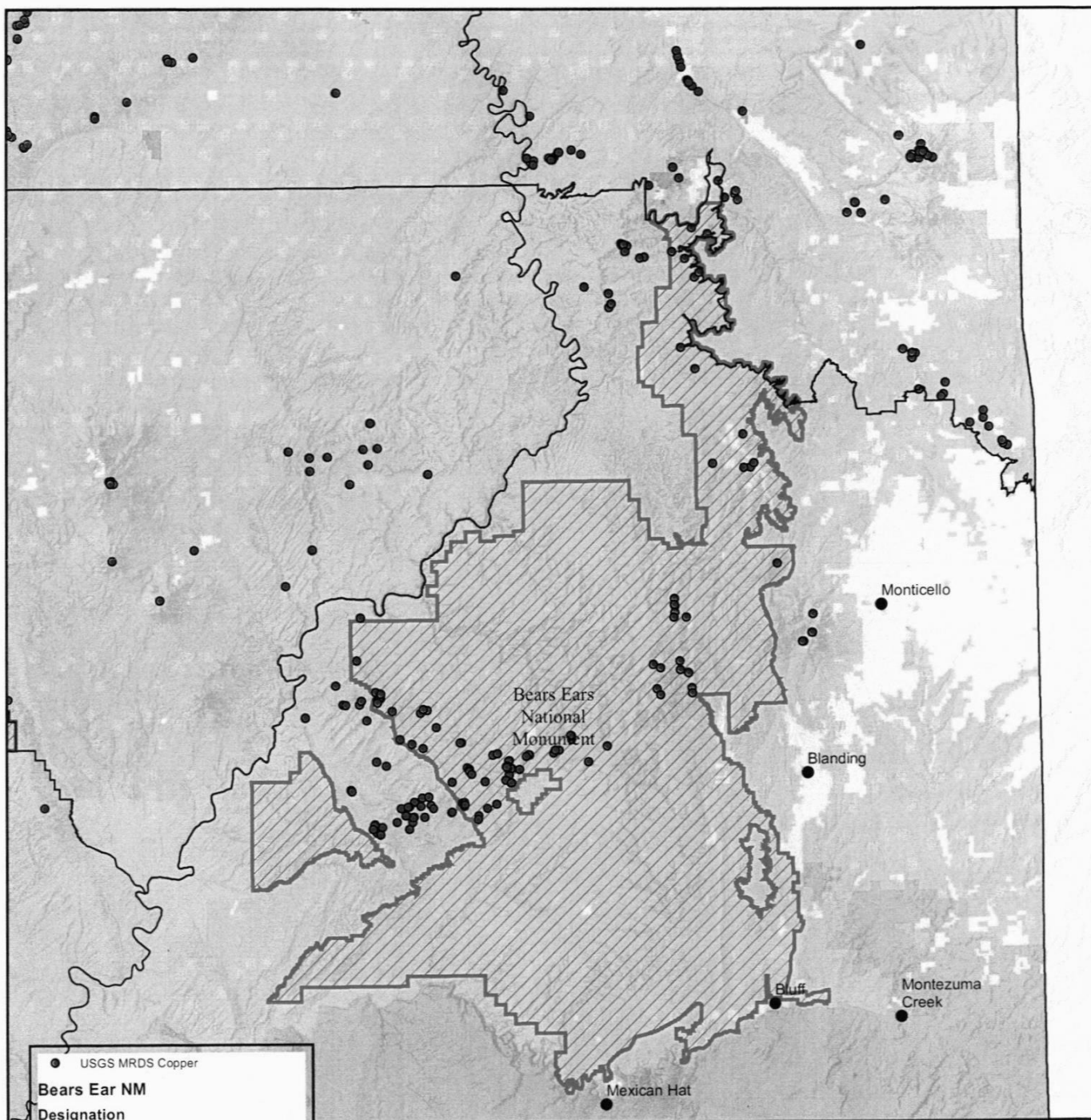
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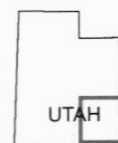
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- USGS MRDS Copper
- Bears Ear NM**
- Designation**
- ▨ National Monument
- Land Status**
- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Other Federal
- Private
- State
- State Parks and Recreation
- State Wildlife Reserve/Management Area
- US Forest Service (USFS)
- USFS Wilderness Area



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March 2, 2017

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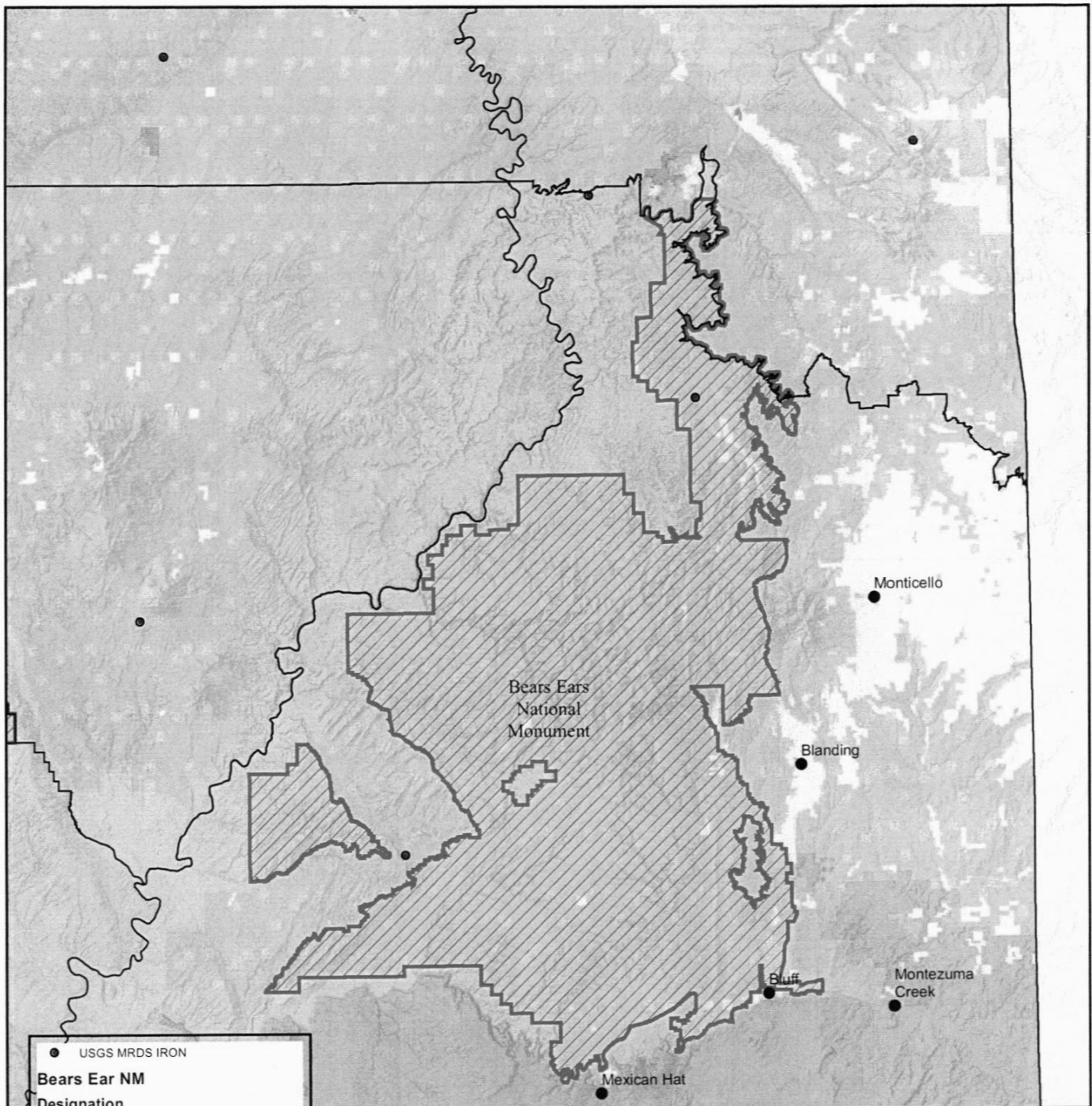


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UTAH STATE OFFICE

# USGS MINERAL RESOURCE DATA SYSTEM IRON

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● USGS MRDS IRON

## Bears Ear NM

### Designation

▨ National Monument

### Land Status

■ Bureau of Land Management (BLM)

■ Indian Reservation (IR)

■ National Park Service (NPS)

■ Other Federal

■ Private

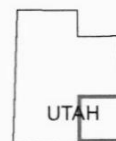
■ State

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■ State Wildlife Reserve/Management Area

■ US Forest Service (USFS)

■ USFS Wilderness Area



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March 2, 2017

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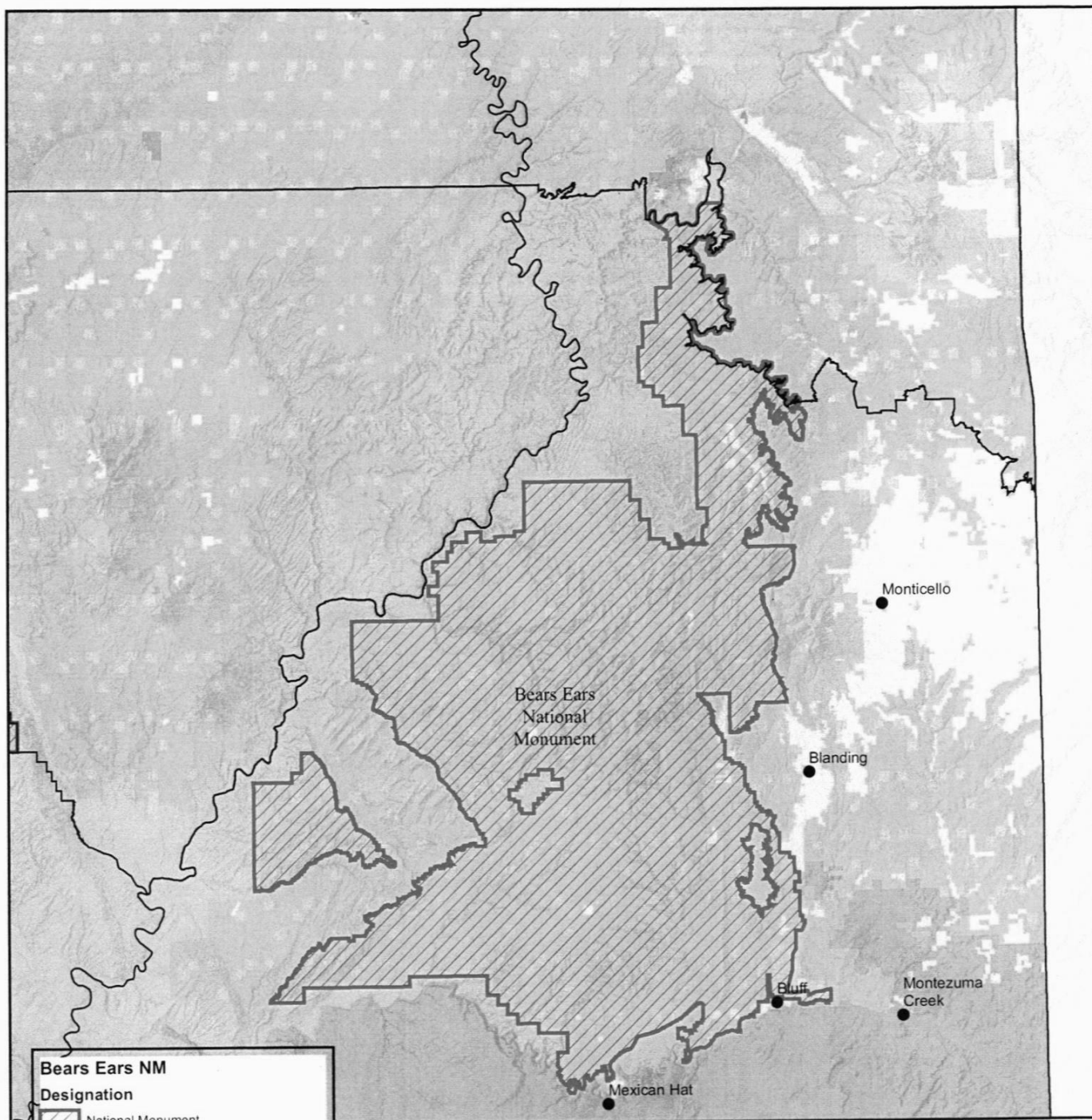


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## Bears Ears NM

### Designation

National Monument

### Land Status

Bureau of Land Management (BLM)

Indian Reservation (IR)

National Park Service (NPS)

Other Federal

Private

State

State Parks and Recreation

State Wildlife Reserve/Management Area

US Forest Service (USFS)

USFS Wilderness Area



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March 2, 2017

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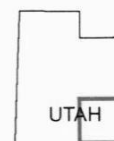
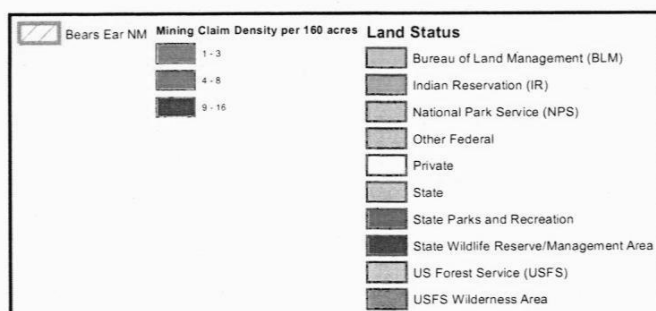
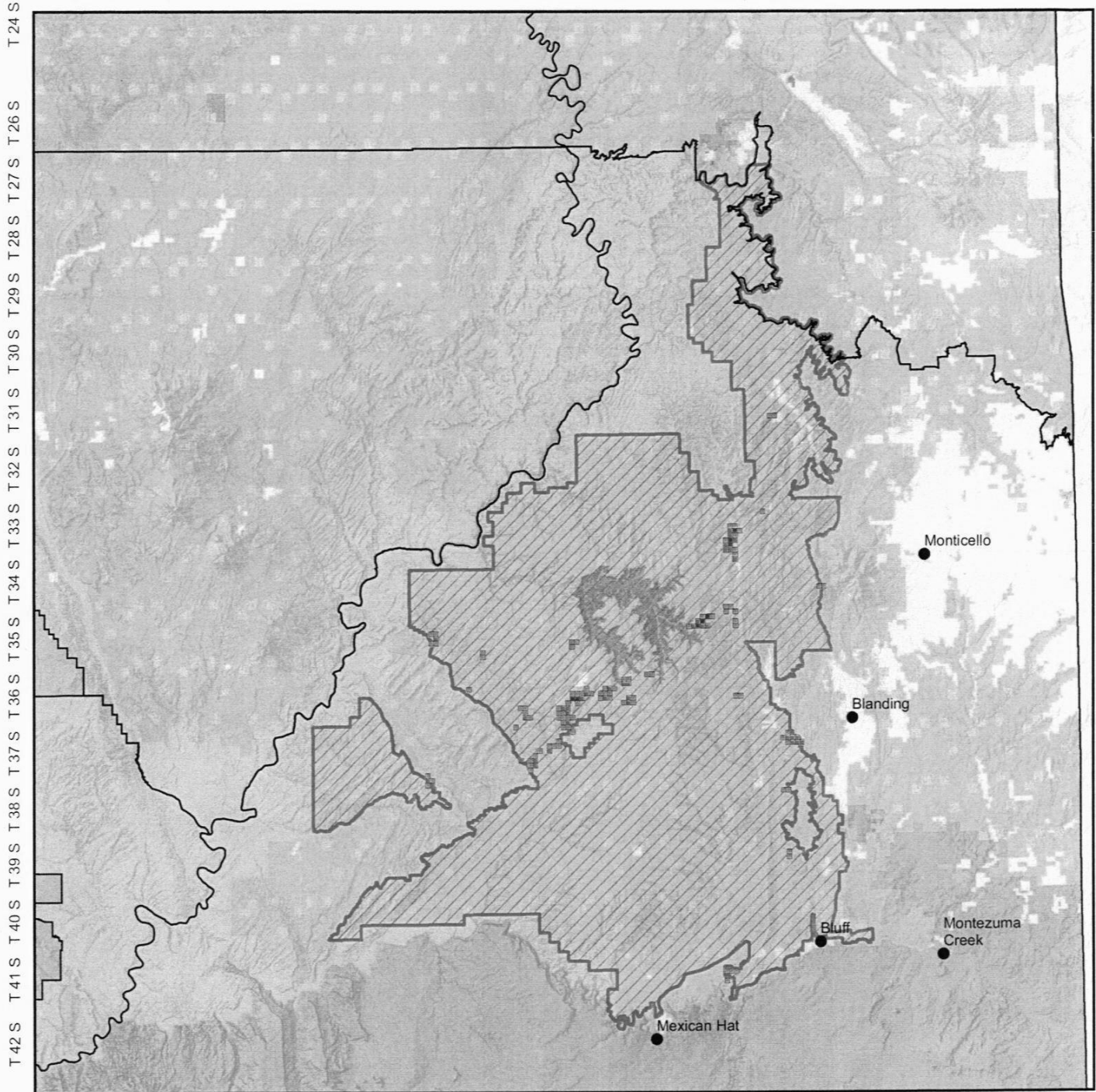




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# MINING CLAIMS WITHIN THE BEARS EARS NM AS OF SEPTEMBER 2016

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February 22, 2017

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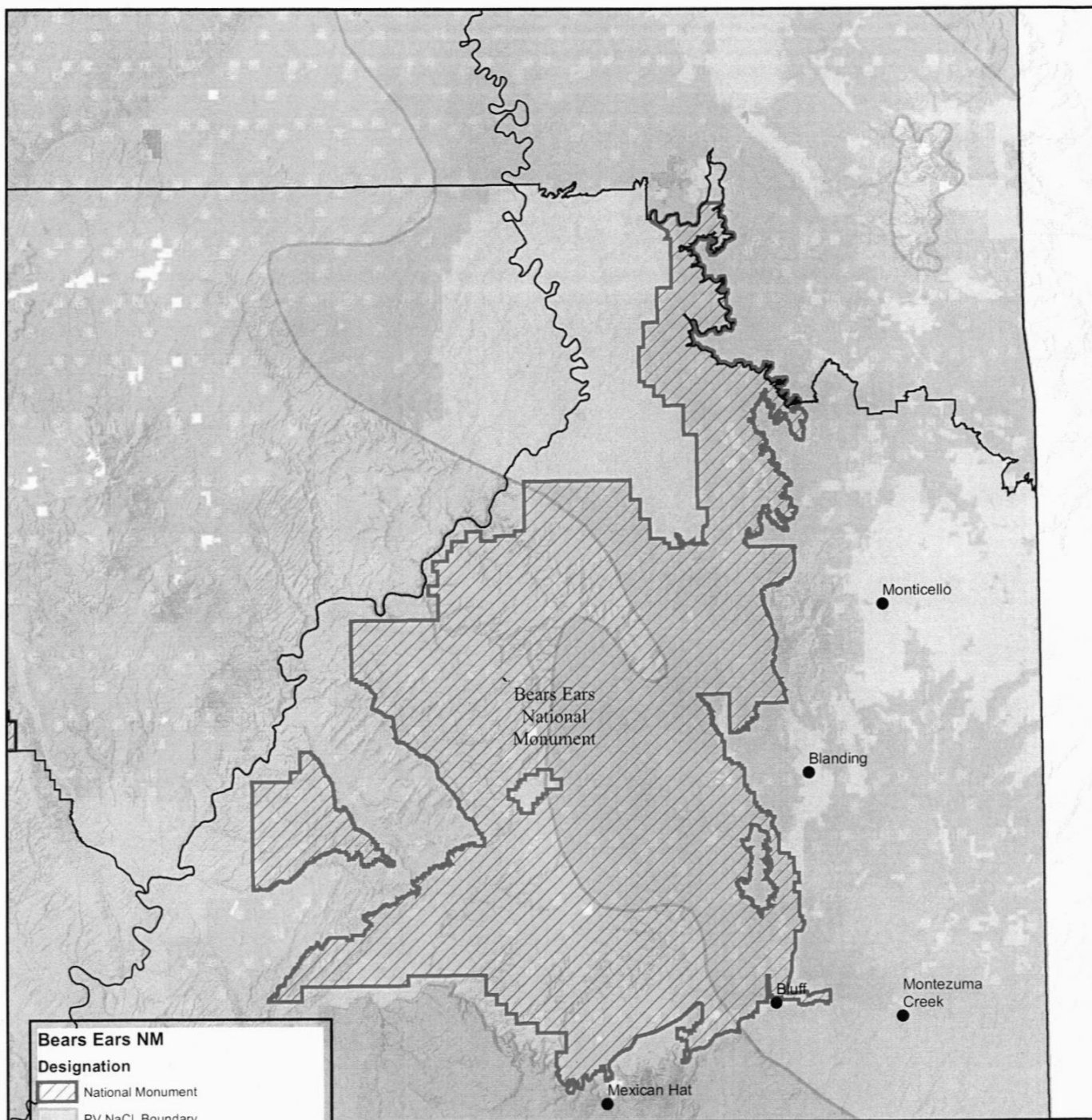
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UTAH STATE OFFICE

# **PROSPECTIVELY VALUABLE FOR SODIUM CHLORIDE**

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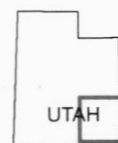
## **Bears Ears NM**

### **Designation**

- National Monument
- PV NaCl Boundary

### **Land Status**

- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Other Federal
- Private
- State
- State Parks and Recreation
- State Wildlife Reserve/Management Area
- US Forest Service (USFS)
- USFS Wilderness Area



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March 2, 2017

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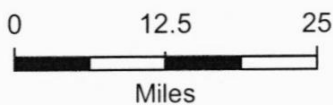
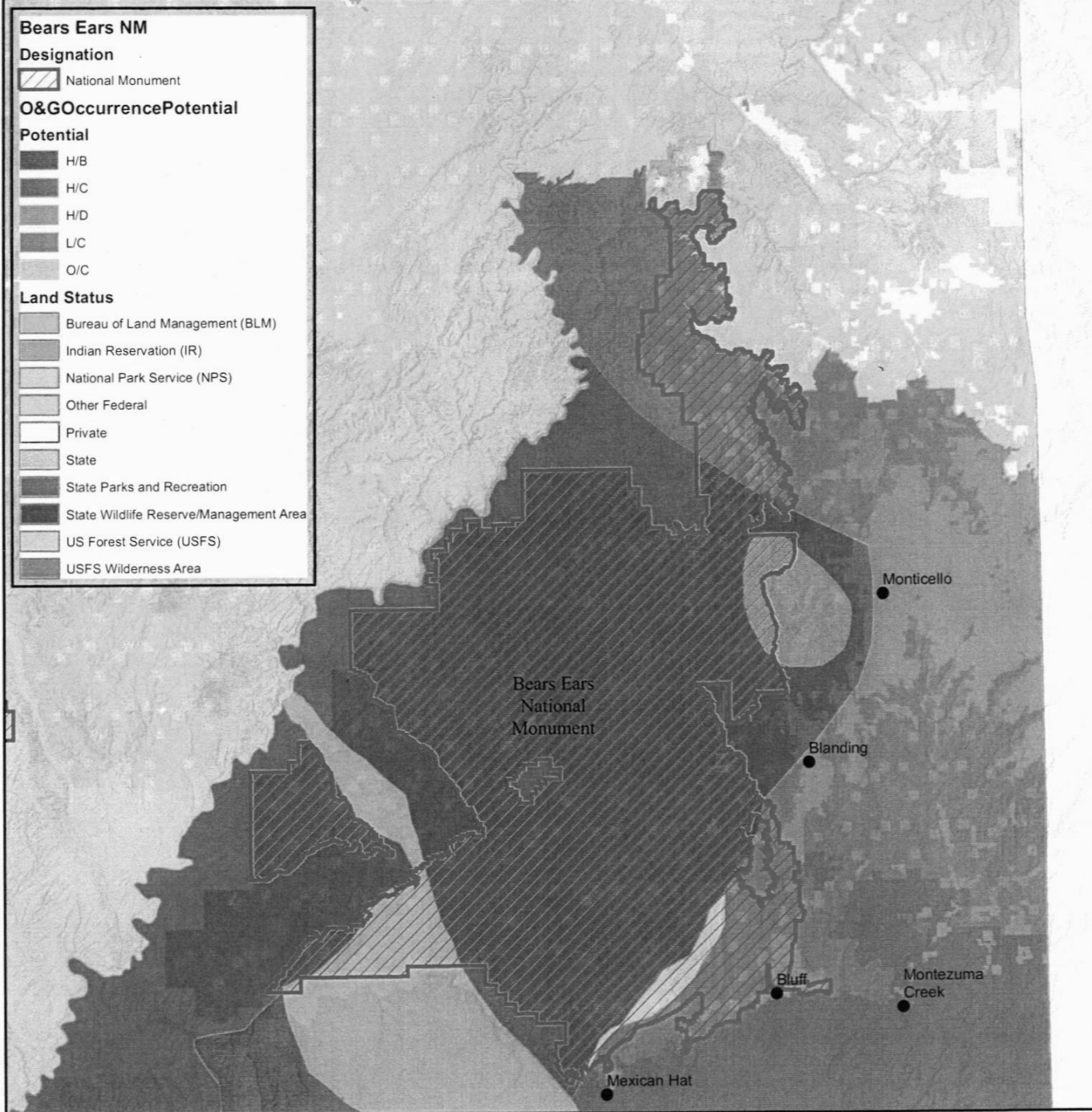


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## OIL AND GAS POTENTIAL

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March 2, 2017

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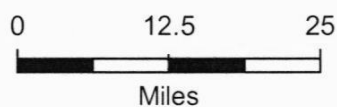
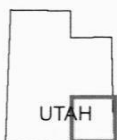
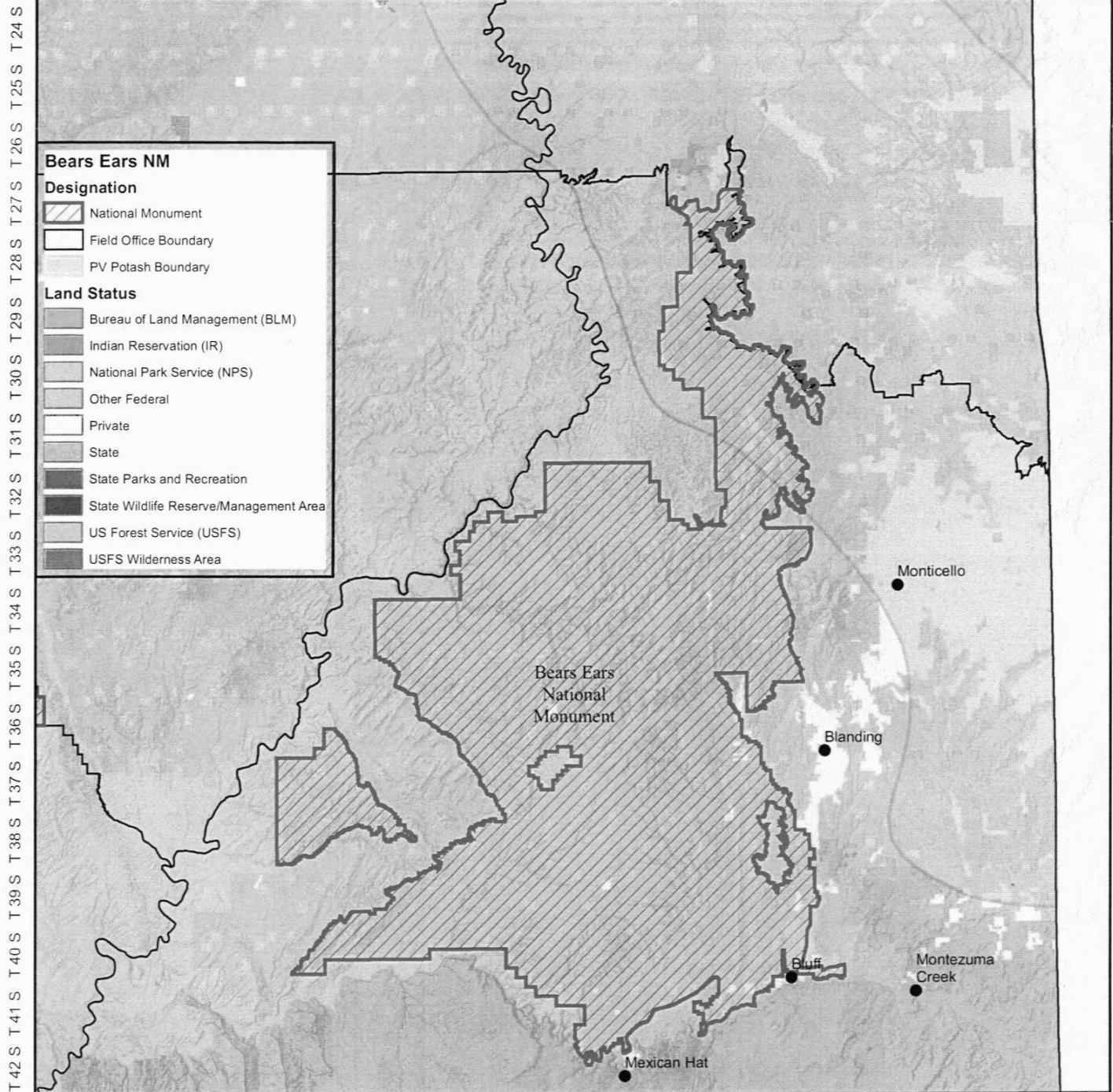




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## PROSPECTIVELY VALUABLE FOR POTASH

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March 2, 2017

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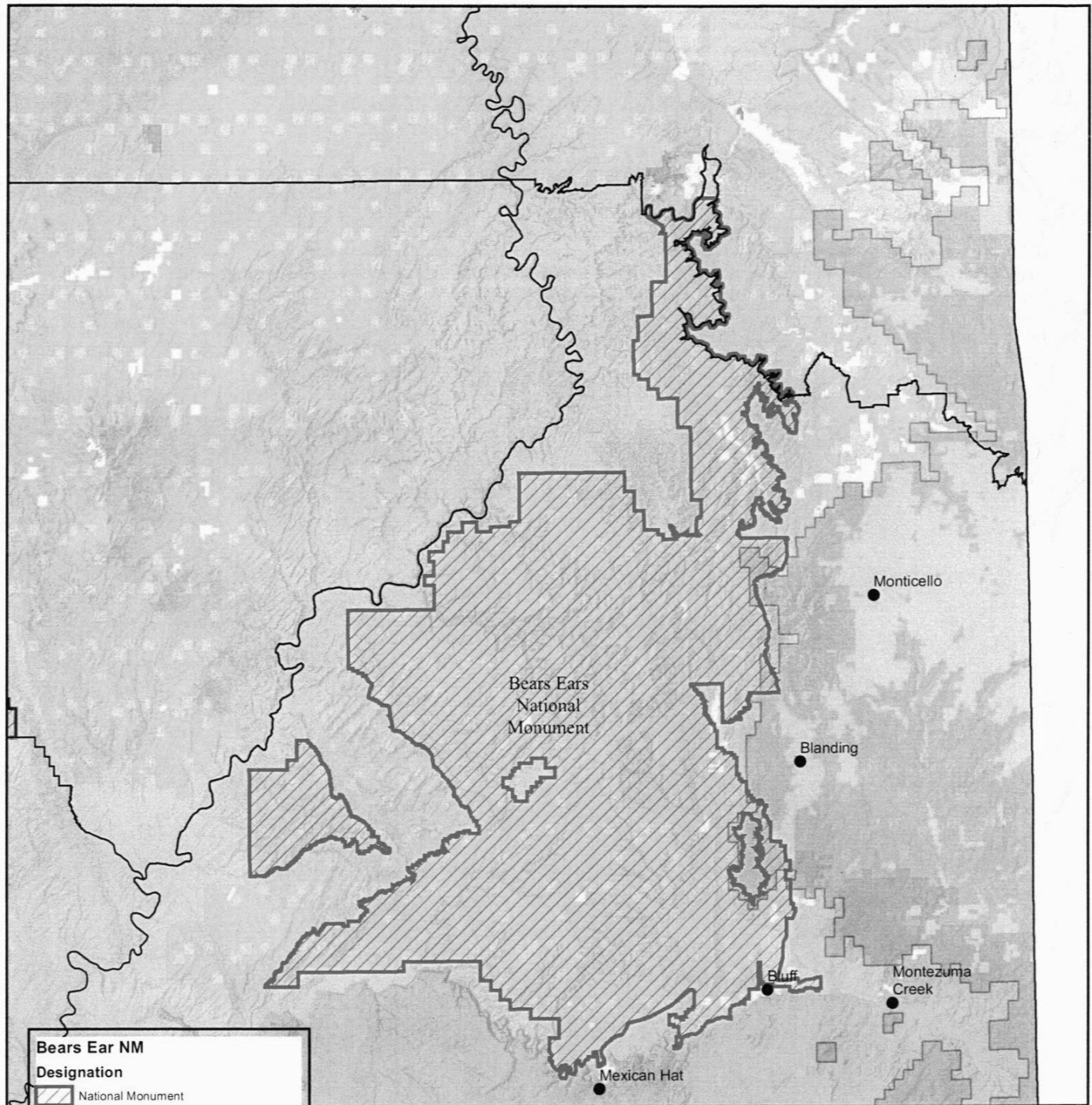


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# PROSPECTIVELY VALUABLE FOR COAL

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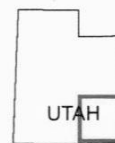


## Bears Ear NM Designation

- National Monument
- PV Coal Boundary

## Land Status

- Bureau of Land Management (BLM)
- Indian Reservation (IR)
- National Park Service (NPS)
- Other Federal
- Private
- State
- State Parks and Recreation
- State Wildlife Reserve/Management Area
- US Forest Service (USFS)
- USFS Wilderness Area



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Miles



March 2, 2017

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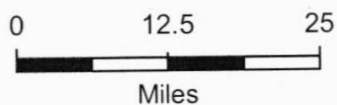
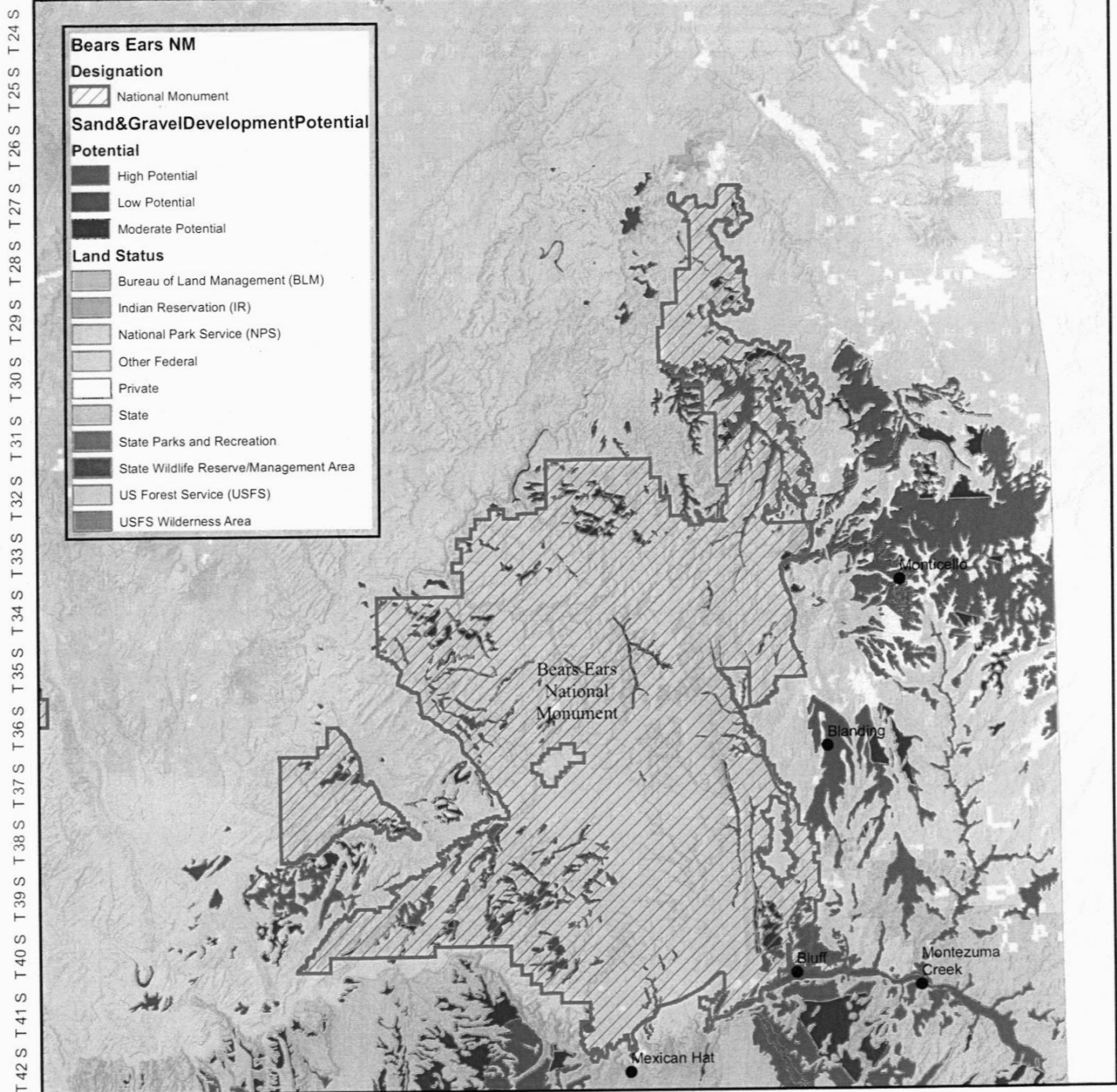
DOI-2019-08 00062

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UTAH STATE OFFICE

## MINERAL POTENTIAL FOR SAND AND GRAVEL

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March 2, 2017

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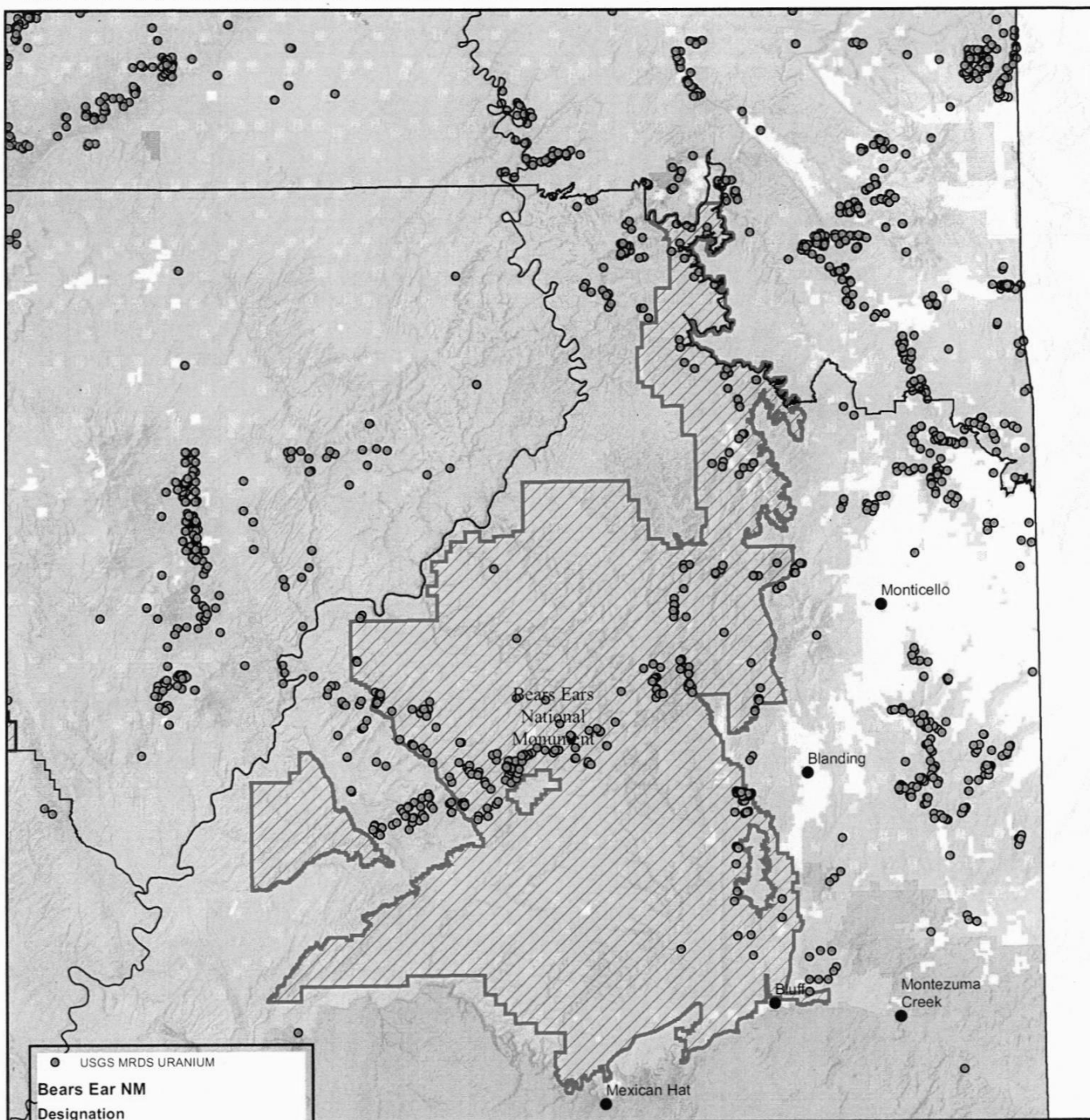


BUREAU OF LAND MANAGEMENT  
UTAH STATE OFFICE

# USGS MINERAL RESOURCE DATA SYSTEM URANIUM

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● USGS MRDS URANIUM

**Bears Ear NM**

**Designation**

▨ National Monument

**Land Status**

■ Bureau of Land Management (BLM)

■ Indian Reservation (IR)

■ National Park Service (NPS)

■ Other Federal

□ Private

■ State

■ State Parks and Recreation

■ State Wildlife Reserve/Management Area

■ US Forest Service (USFS)

■ USFS Wilderness Area



0 5 10  
Miles



March 2, 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



DOI-2019-08 00064

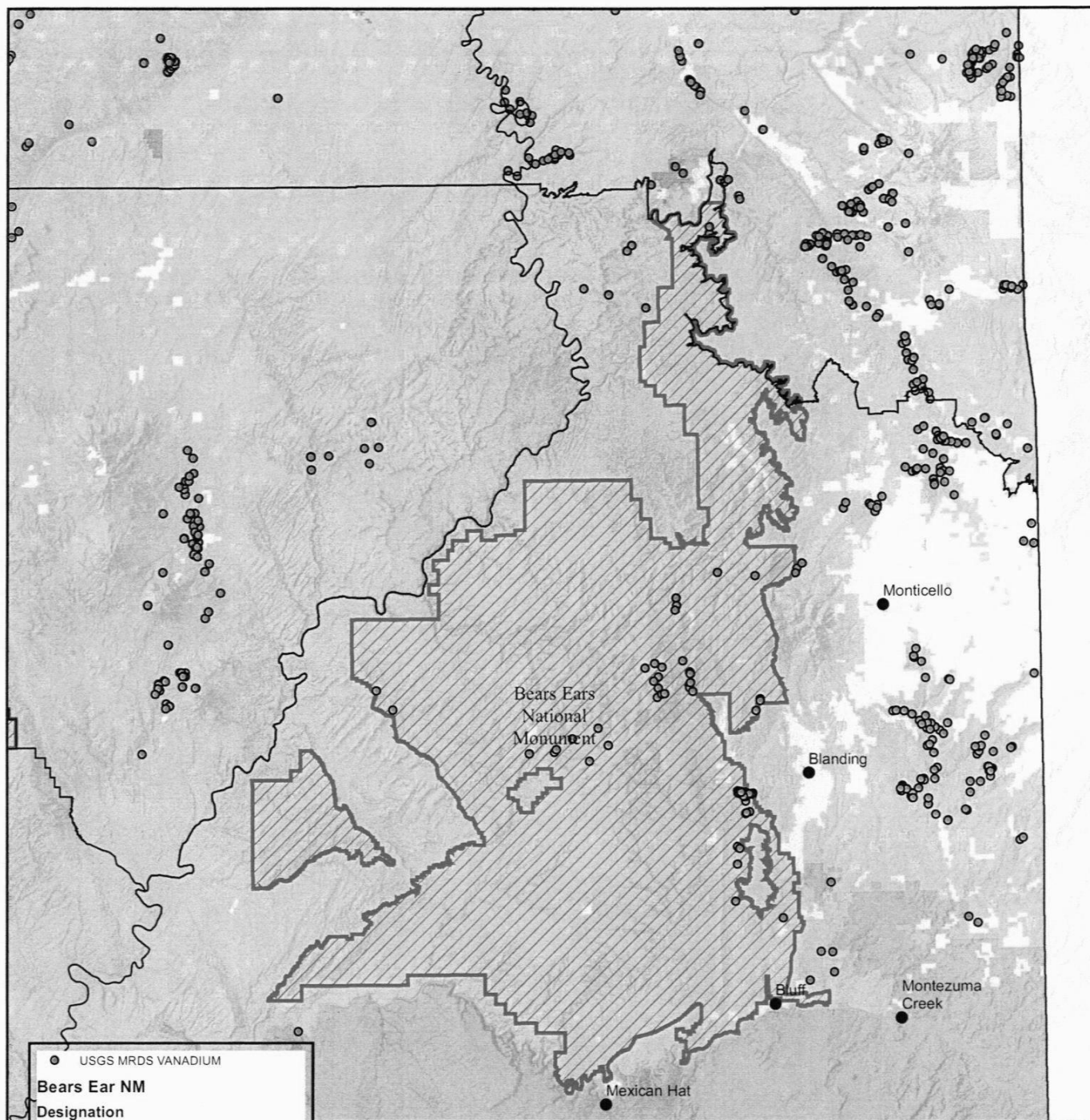
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BUREAU OF LAND MANAGEMENT  
UTAH STATE OFFICE

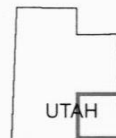
# USGS MINERAL RESOURCE DATA SYSTEM VANADIUM

R 9 E R 10 E R 11 E R 12 E R 13 E R 14 E R 15 E R 16 E R 17 E R 18 E R 19 E R 20 E R 21 E R 22 E R 23 E R 24 E R 25 E

T 24 S  
T 25 S  
T 26 S  
T 27 S  
T 28 S  
T 29 S  
T 30 S  
T 31 S  
T 32 S  
T 33 S  
T 34 S  
T 35 S  
T 36 S  
T 37 S  
T 38 S  
T 39 S  
T 40 S  
T 41 S  
T 42 S



- USGS MRDS VANADIUM
- Bears Ear NM**
- Designation**
- ▨ National Monument
- Land Status**
- Bureau of Land Management (BLM)
  - Indian Reservation (IR)
  - National Park Service (NPS)
  - Other Federal
  - Private
  - State
  - State Parks and Recreation
  - State Wildlife Reserve/Management Area
  - US Forest Service (USFS)
  - USFS Wilderness Area



0 5 10  
Miles



March 2, 2017

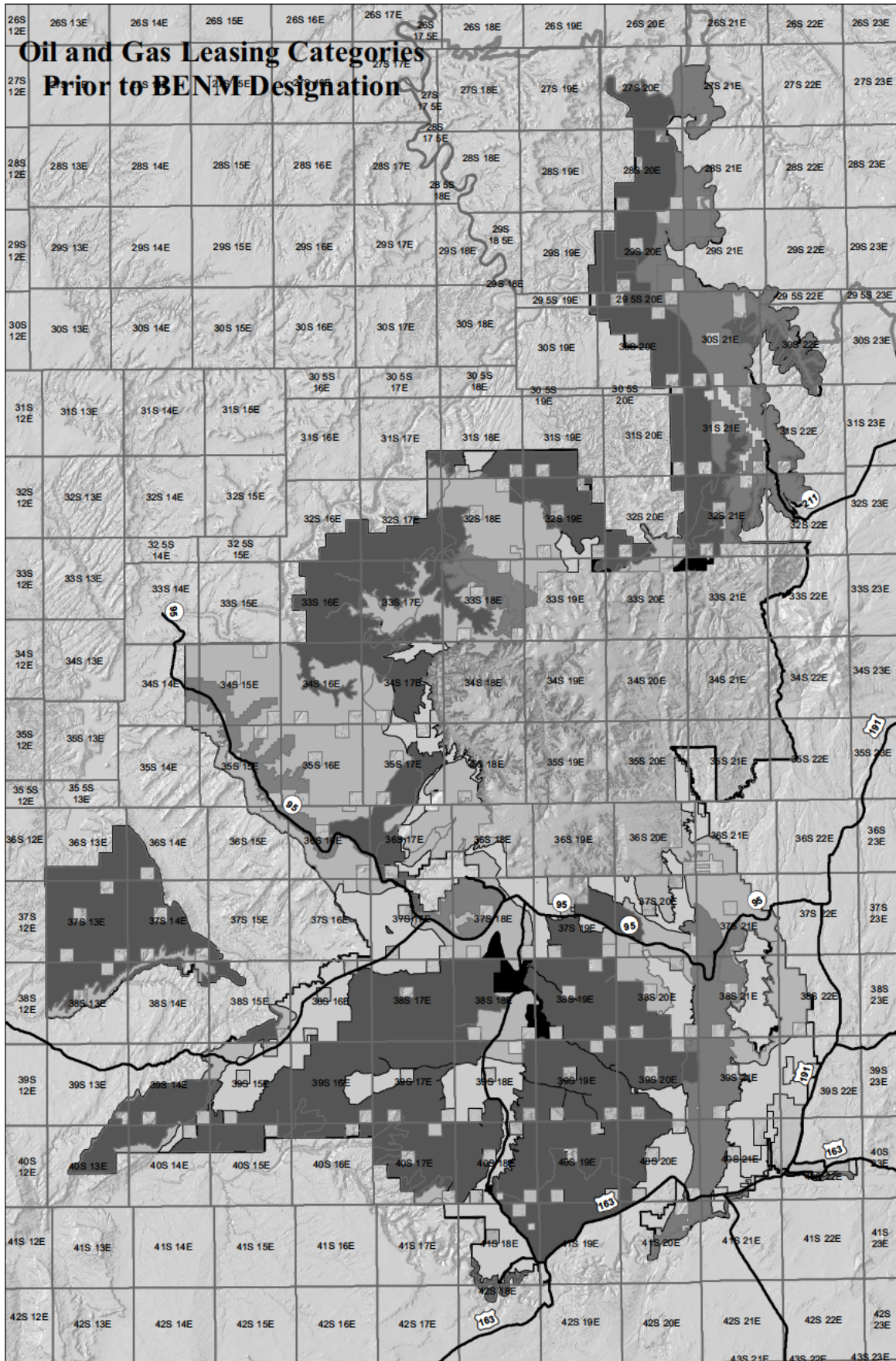
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



DOI-2019-08 00065

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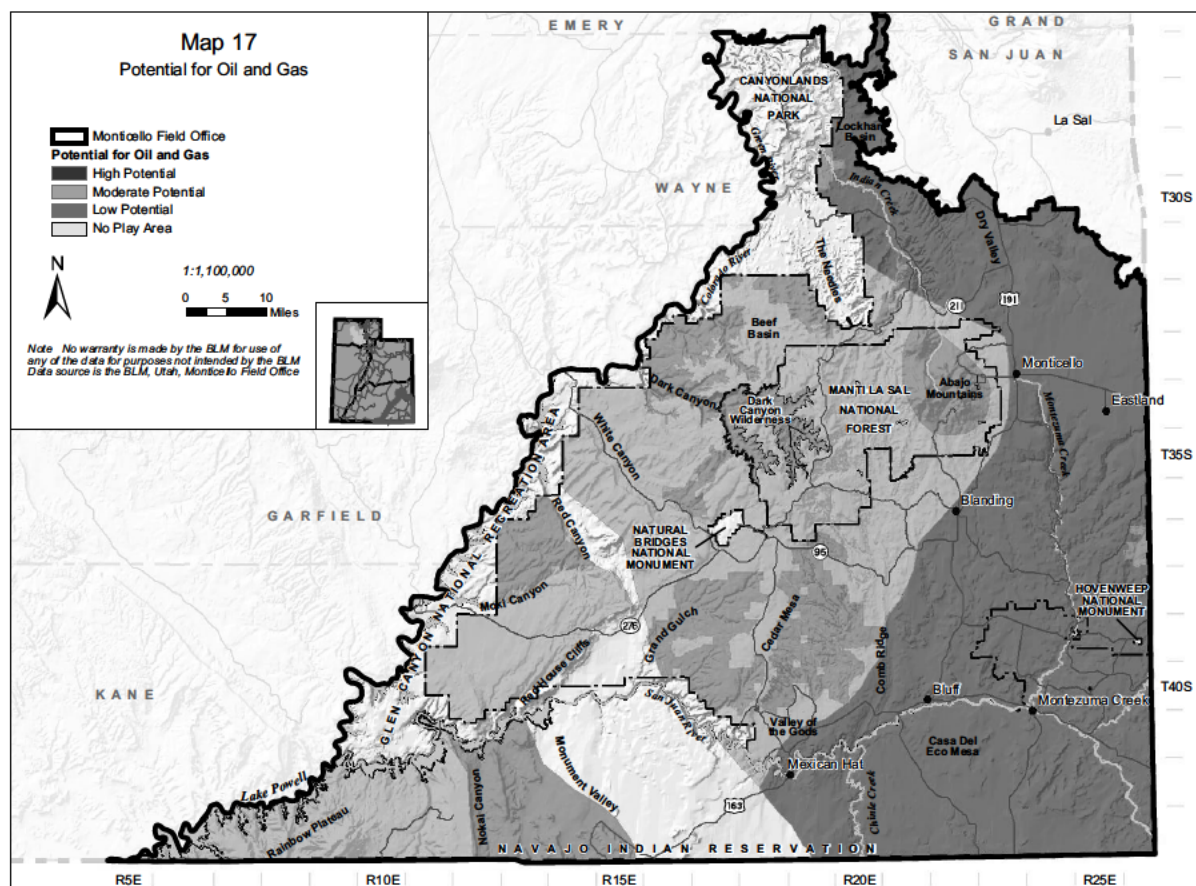
**Legend****Oil Gas Leasing Categories**

	used		SU/TL
	SO		ming
	SU		Standard
	Field Office Boundary		



DOI-2019-08 00066

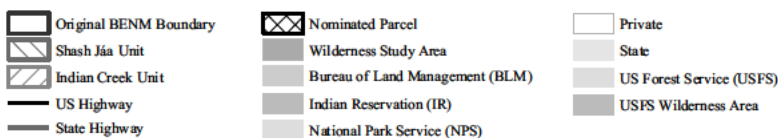
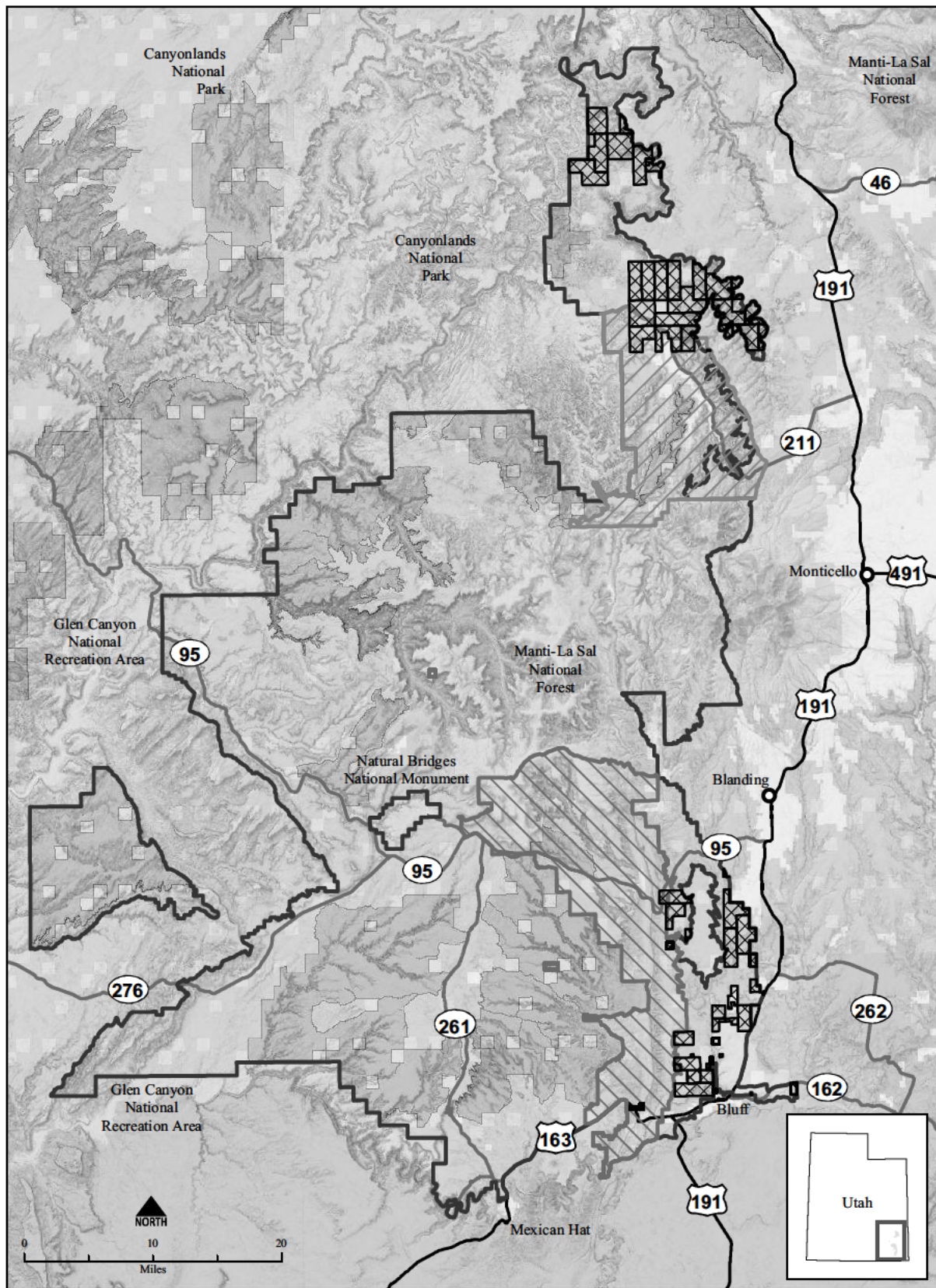
0 2.5 5 10 15 20 Miles





# Bears Ears National Monument Boundary Modification

## Nominated Oil and Gas Parcels



Coordinate System: NAD 1983 UTM Zone 12N  
 Projection: Transverse Mercator  
 Units: Meter

DOI-2019-08-00068

December 8, 2017