

# BLM NEVADA MINERALS PROGRAM

**THIS LAND WAS MADE FOR YOU AND ME**

*Responsible development of public land, energy and mineral resources*

BUREAU OF LAND MANAGEMENT



**GARY JOHNSON**

**DEPUTY STATE DIRECTOR – MINERALS**

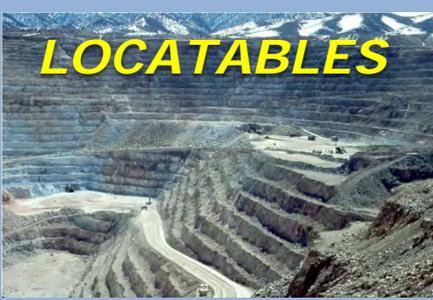
**775/861-6585 or [gjohnson@blm.gov](mailto:gjohnson@blm.gov)**

# NV BLM has the largest Minerals Programs in the following:

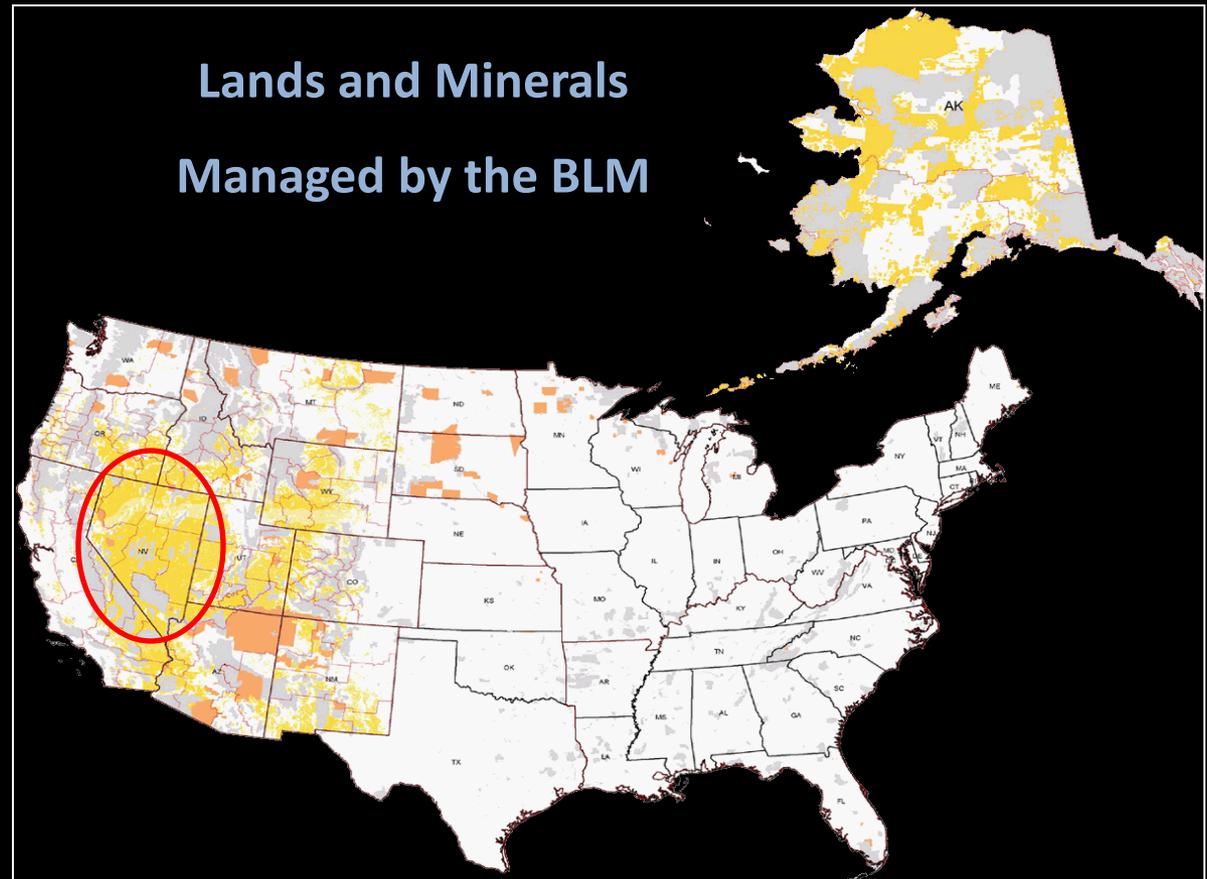
## SALEABLES



## LOCATABLES



## GEOHERMAL



-  BLM – Surface & Minerals (264 mil. acres)
-  Other Federal Lands – Mineral (300 mil. acres)
-  Non-Federal Surface – Federal Minerals (70 million acres) not shown
-  Indian Trust Lands within Reservations – Mineral Operations (56 mil. acres)
-  BLM administered boundaries



## ***SOLID MINERALS***

- ◆ ***LOCATABLES***
- ◆ ***LEASABLES***
- ◆ ***SALEABLES***
- ◆ ***AML***



## ***FLUID MINERALS***

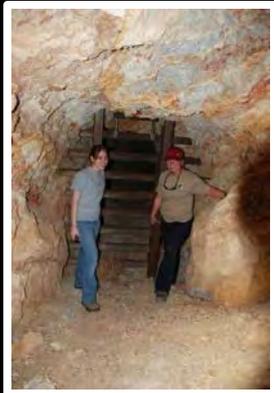
- ◆ ***GEO THERMAL***
- ◆ ***OIL & GAS***



◆ ***SALEABLE  
MINERALS***



◆ ***LEASABLE  
MINERALS***



◆ ***ABANDONED  
MINE LANDS***

# ✦ ***LOCATABLE MINERALS***



# **26 TYPES OF LOCATABLE MINERALS MINED ON PUBLIC LANDS IN NEVADA**

- ◆ **GOLD**
- ◆ **SILVER**
- ◆ **COPPER**
- ◆ **ALUMINUM**
- ◆ **ANTIMONY**
- ◆ **BARITE**
- ◆ **CALCIUM**
- ◆ **CLAY**
- ◆ **BENTONITE**
- ◆ **DIATOMITE**
- ◆ **FELDSPAR**
- ◆ **GEMSTONE**
- ◆ **GYPSUM**
- ◆ **LIMESTONE**

- ◆ **PERLITE**
- ◆ **RARE EARTHS**
- ◆ **SILICON**
- ◆ **SODIUM**
- ◆ **STONE**
- ◆ **TALC**
- ◆ **TUNGSTEM**
- ◆ **URANIUM**
- ◆ **ZEOLITES**
- ◆ **LITHIUM**
- ◆ **DOLOMITE**
- ◆ **MOLYBDENU  
M**

## **MAJOR USES:**

- ◆ **MONETARY STANDARD**
- ◆ **JEWELRY**
- ◆ **ELECTRICAL WIRING**
- ◆ **BATTERIES**
- ◆ **ALLOYS**
- ◆ **CONSTRUCTION  
MATERIALS**
- ◆ **CEMENT**
- ◆ **SEALANTS**
- ◆ **IRON & STEEL**

## PRICES

1/09/12

◆ **GOLD**

**\$1,610.80/OZ**

◆ **SILVER**

**\$28.95/OZ**

◆ **COPPER**

**\$3.39/LB**

## 2010 PRODUCTION

◆ **GOLD**

**5,339,000 OZ**

◆ **SILVER**

**7,361,000 OZ**

◆ **COPPER**

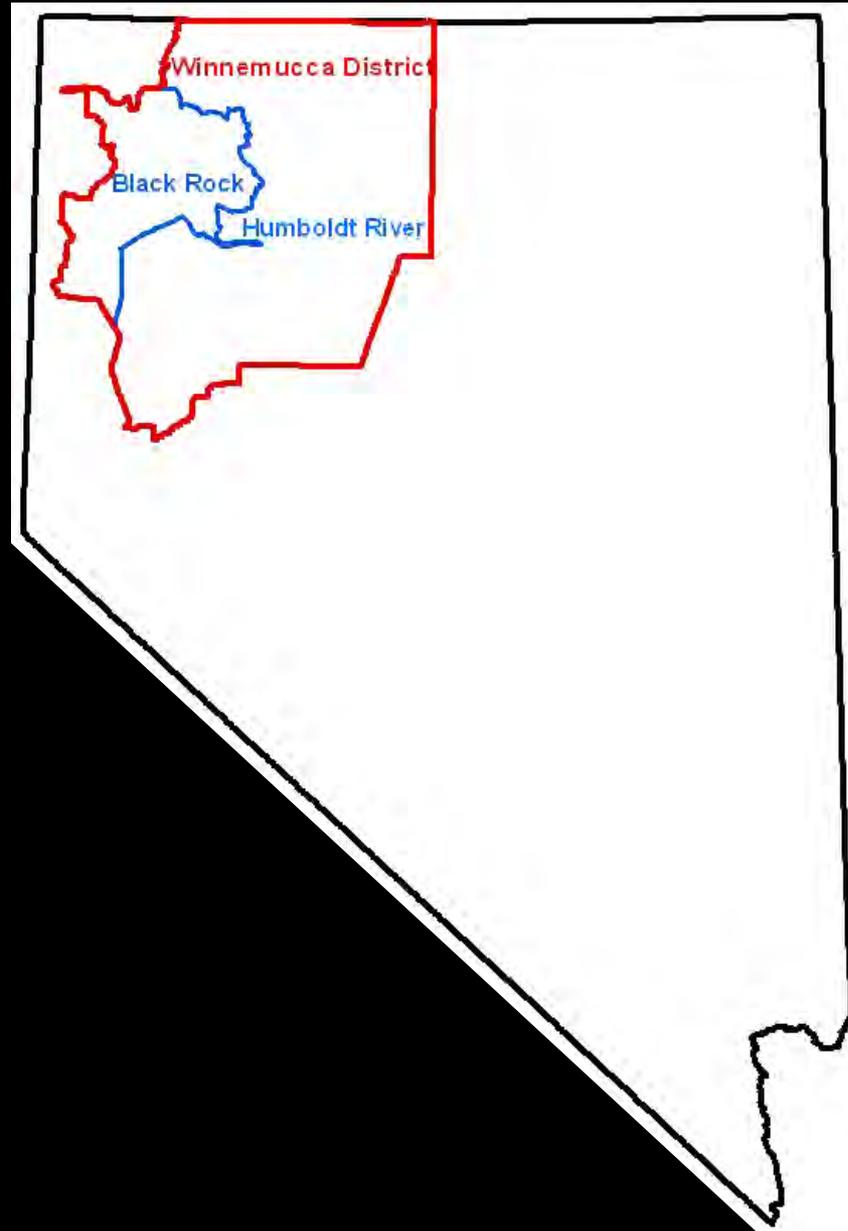
**127,976,000 LB**

# *MAJOR MINES IN NEVADA*



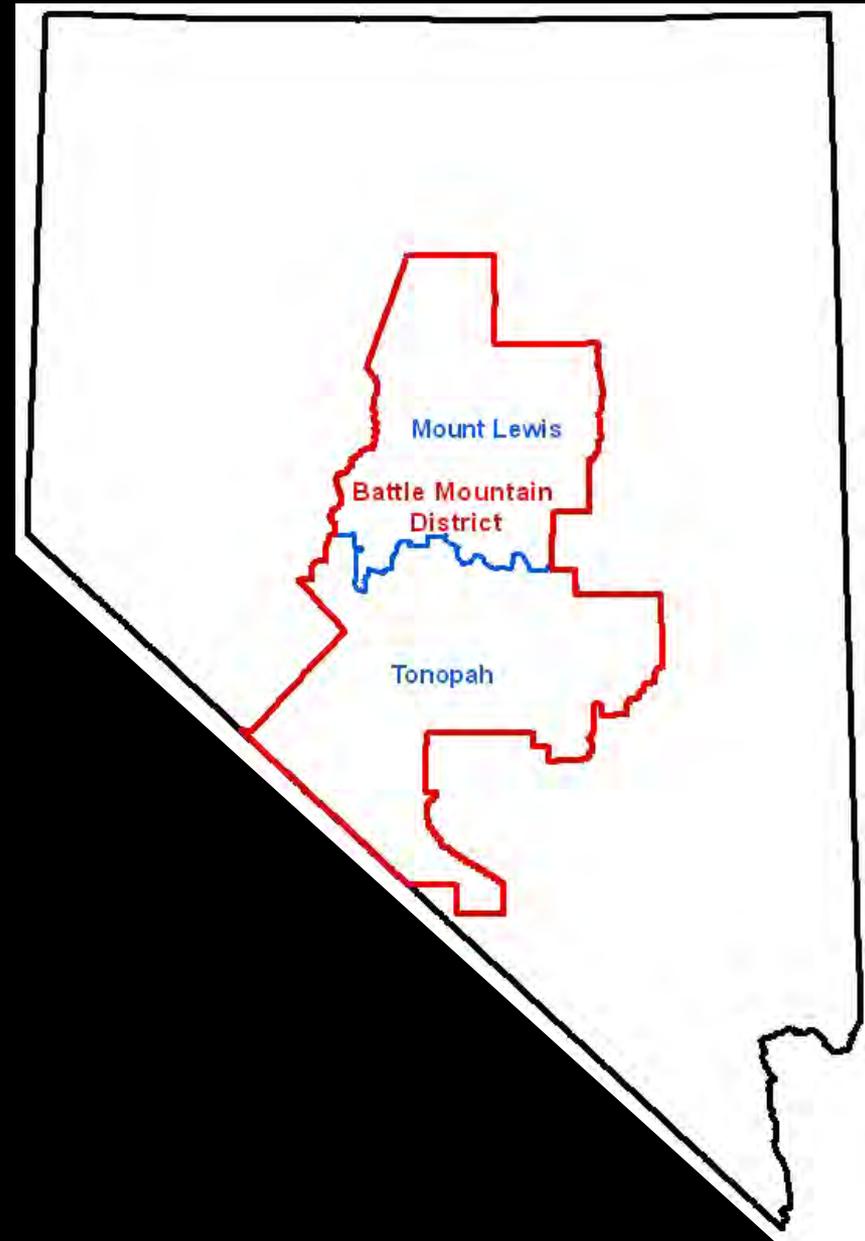
# WINNEMUCCA DISTRICT

**ASHDOWN MINE**  
**MARIGOLD MINE**  
**TURQUOISE RIDGE**  
**JOINT VENTURE**  
**TWIN CREEKS MINE**  
**COEUR ROCHESTER**  
**MINE**  
**FLORIDA CANYON**  
**MINE**  
**HYCROFT MINE**



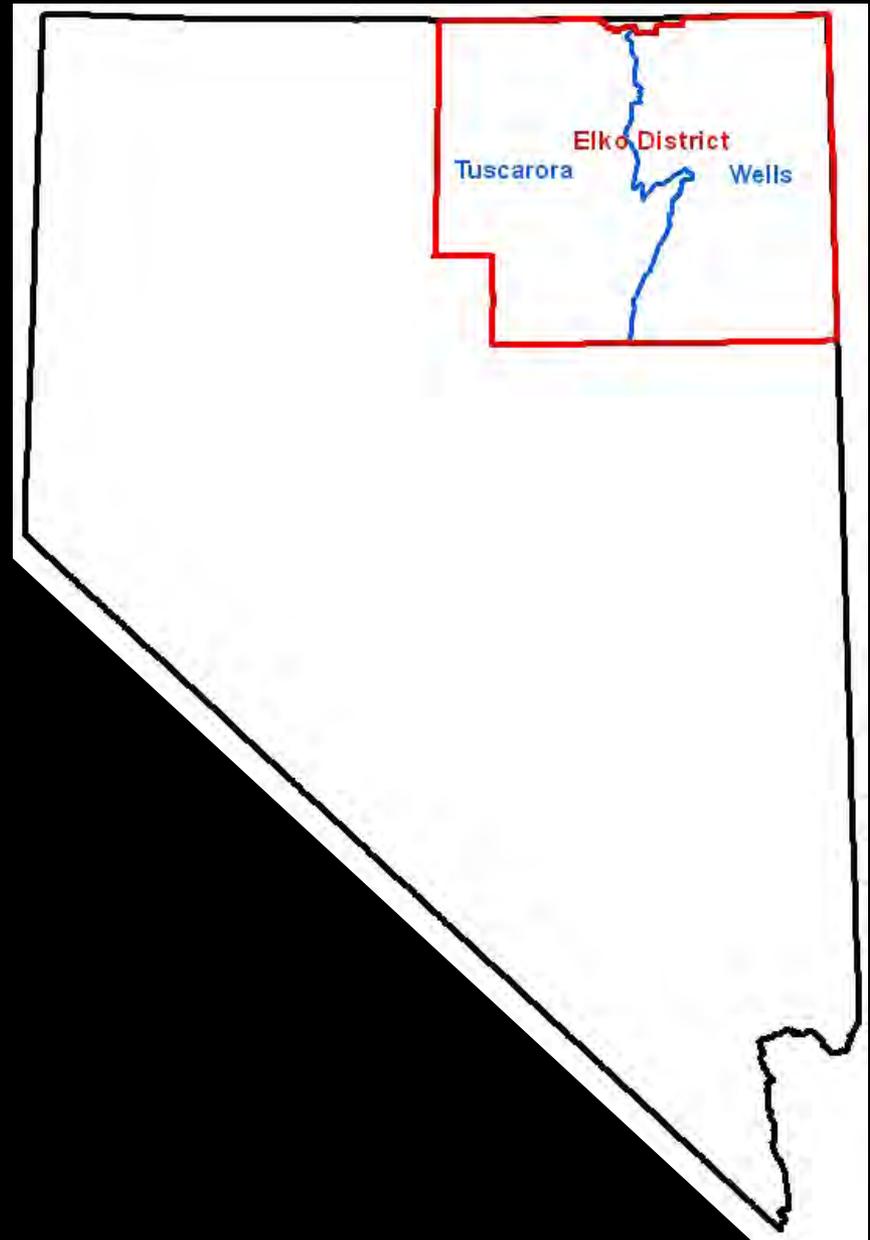
# **BATTLE MOUNTAIN DISTRICT**

**RUBY HILL MINE**  
**CORTEZ MINES**  
*(multiple mines)*  
**PHOENIX PROJECT**  
**SMOKY VALLEY**  
**COMMON**  
**OPERATIONS**



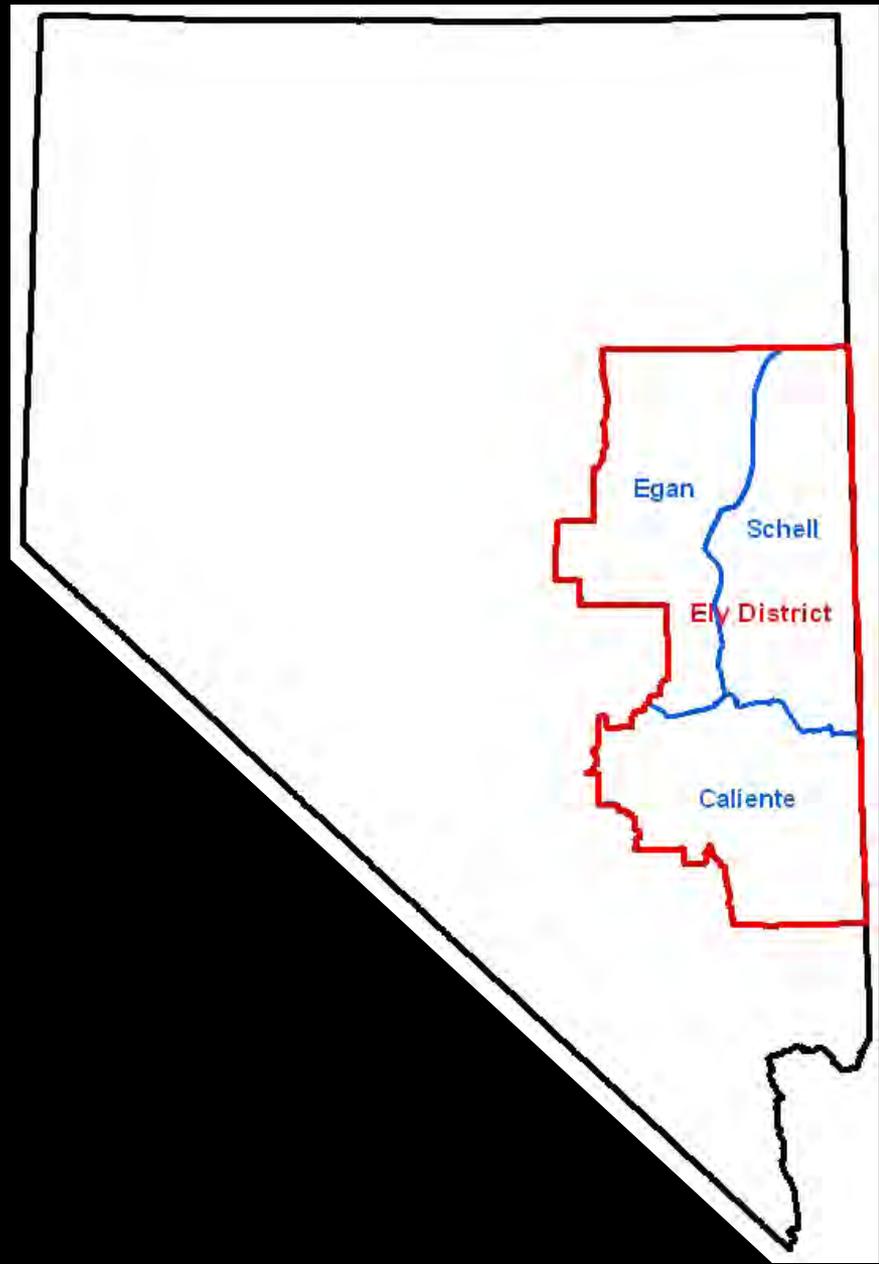
# ELKO DISTRICT

**BETZE-POST MINE  
EASTERN NEVADA OPERATION  
(INCLUDES CARLIN,  
GOLD QUARRY &  
LEEVILLE MINES)  
MEIKLE MINE  
MIDAS MINE**



# ELY DISTRICT

**BALD MOUNTAIN MINE**  
**ROBINSON MINE**





## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Las Vegas Field Office  
4701 N. Torrey Pines Drive  
Las Vegas, Nevada 89130-2301



In Reply Refer to:  
N-81369  
3809 (NV-053)

CERTIFIED MAIL NO.  
RETURN RECEIPT REQUESTED

Canyon Resources Corporation  
Attn: Joy Moseley  
14142 Denver West Parkway, Suite 250  
Golden, CO 80401-3119

Dear Ms. Moseley:

Mining notice, N-81369, to conduct exploratory work in sections 2, T. 13 S., R. 47 E., M.D.M., Nye County, Nevada was received complete in this office on April 19, 2006. The proposed work will disturb around 1.7 acres of public lands managed by the Bureau of Land Management (BLM). Disturbance will include the construction of new access routes, the construction of 20 drill pads and the drilling of 20 rotary drill holes.

This office has reviewed this notice and has determined that the document contains the required information as prescribed by regulation for surface disturbing activities. In addition, a reclamation bond has been posted with and accepted by the BLM, Nevada State Office. You may proceed with the proposed operations listed in your notice, according to Federal regulations at *43 CFR 3809* and *43 CFR 3715*. Please notify this office at least five working days prior to the initiation of operations and provide us with an estimate of your operating period.

This acknowledgment does not relieve the operator of the following obligations:

- Prevention of unnecessary or undue degradation of public lands and resources.
- Reclamation of lands disturbed by the proposed operations.
- Compliance with all applicable Federal, State and local laws and regulations. Obtain all appropriate Federal, State and local authorizations and permits.

◆ **NOTICES**  
**(5 ACRES**  
**OR LESS)**

**Round Mountain  
2006 Expansion  
Plan of Operations Amendment  
N-72662**



*Submitted to:*  
**United States Department of the Interior  
Bureau of Land Management**

*Prepared by:*



**Round Mountain Gold  
Corporation**

**Round Mountain Gold Corporation  
P.O. Box 480  
#1 Smoky Valley Mine Road  
Round Mountain, NV 89045**

*and*



**1250 Lamoille Hwy, Suite 520  
Elko, NV 89801**

**June 2006**

**◆ PLAN OF  
OPERATIONS**

# ◆ ***INSPECTIONS***



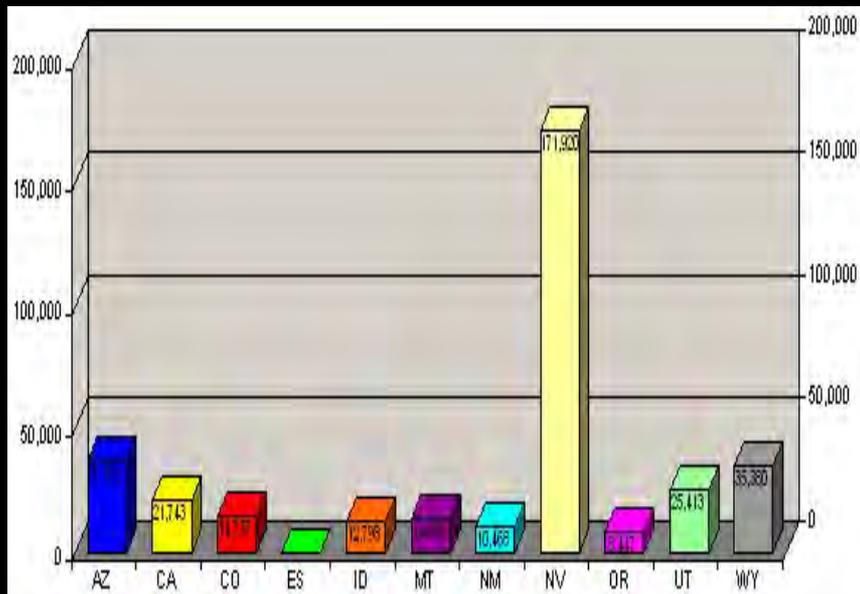
# BONDING



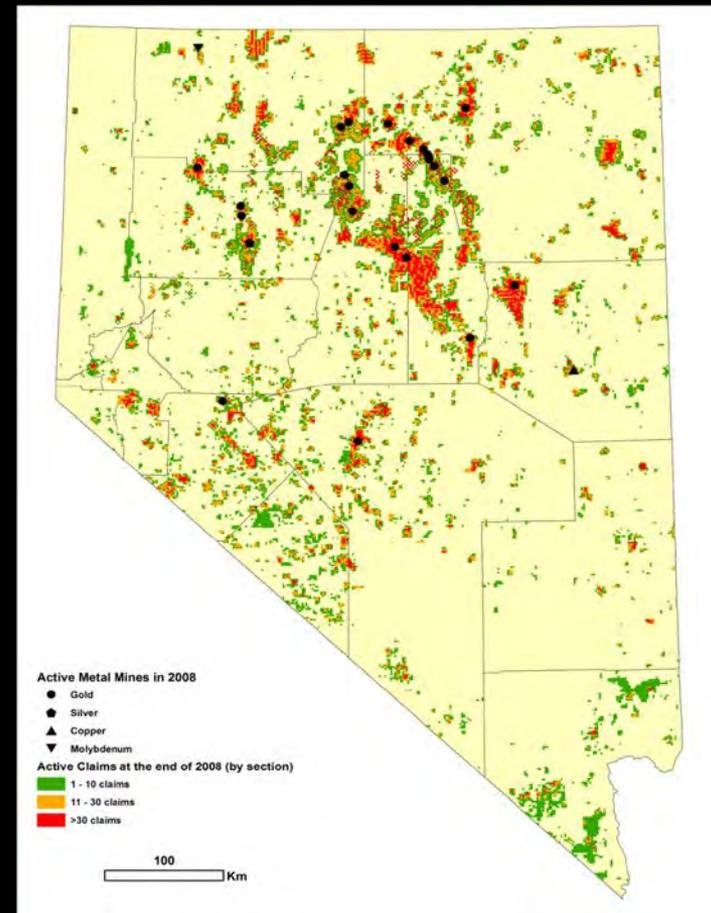
◆ **OVER**  
**\$1,714,000,000**  
**HELD IN BONDS FOR**  
**FINAL**  
**RECLAMATION**

# ADJUDICATION

## ACTIVE MINING CLAIMS BY BLM STATE



## Active Claims 2008 (by Section)



# SUSTAINABLE DEVELOPMENT



**BLM**  
**MINING INDUSTRY**  
**LOCAL COMMUNITIES**  
**OTHER PARTNERS**



## ***SOLID MINERALS***

- ◆ ***LOCATABLES***
- ◆ ***LEASABLES***
- ◆ ***SALEABLES***
- ◆ ***AML & HAZ MAT***



## ***FLUID MINERALS***

- ◆ ***GEO THERMAL***
- ◆ ***OIL & GAS***

# ✦ OIL & GAS



**1954**

**FIRST PRODUCING WELL  
IN NEVADA – SHELL #1**

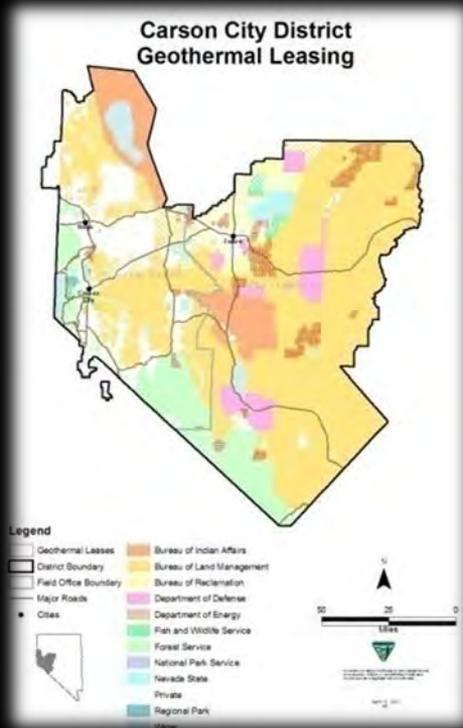


**2008**

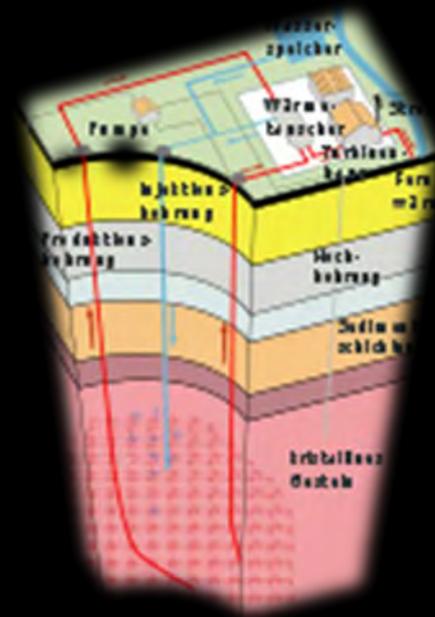
**DRY HOLE**

# GEO THERMAL

## LEASING



## EXPLORATION





◆ ***PRODUCTION***

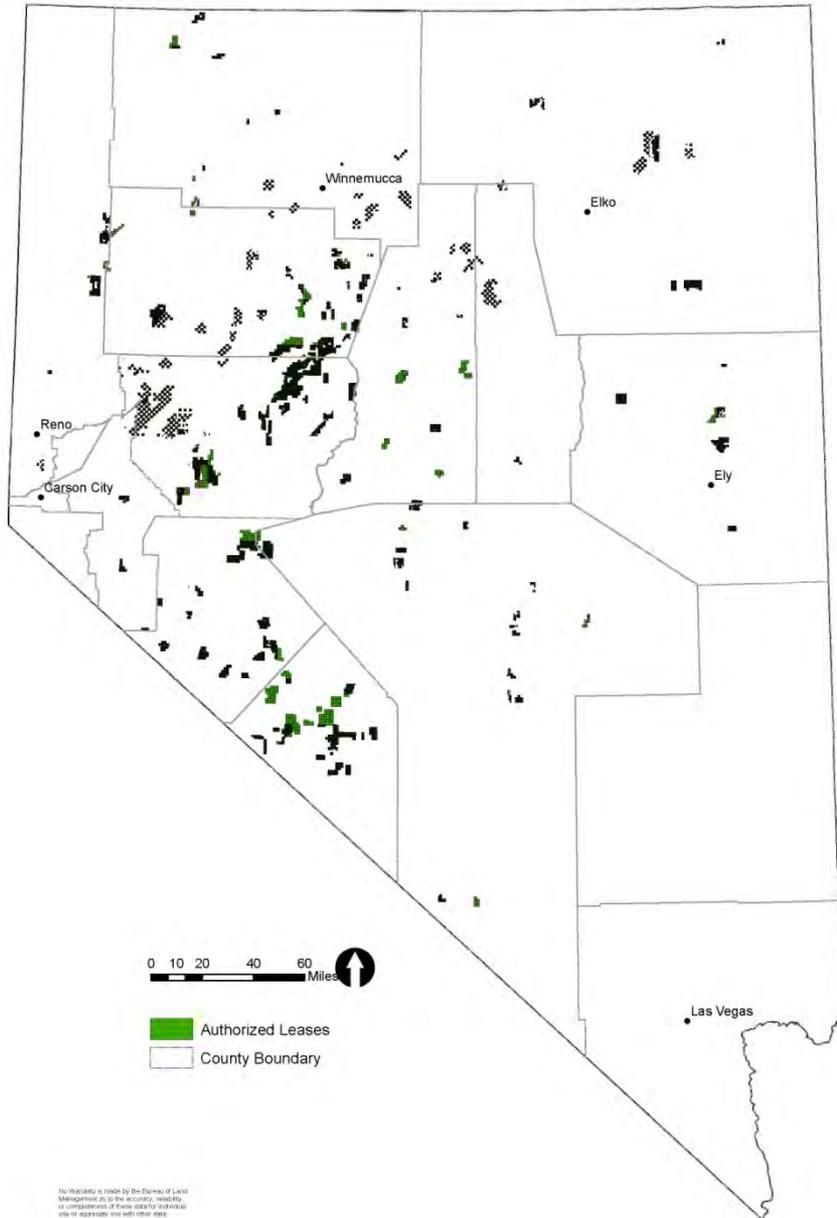


◆ ***POWER PLANT  
& FINAL  
RECLAMATION***

# BLM NV - 3 TIER ORGANIZATION



## Geothermal Leasing 2011

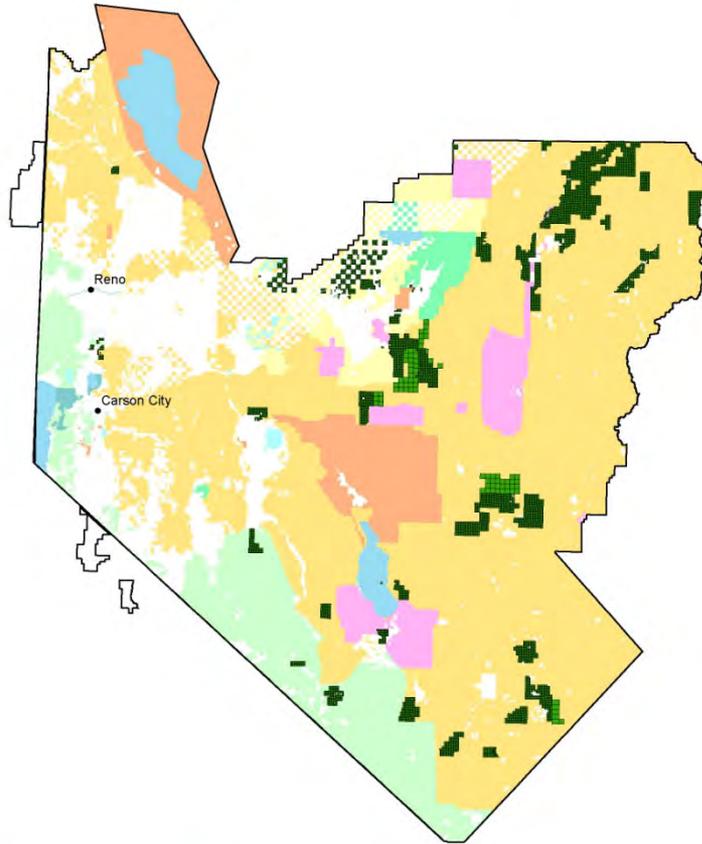


◆ **563 LEASES**

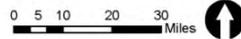
◆ **1,187,190 ACRES LEASED**

◆ **26 PRODUCING LEASES**

## Carson City District Geothermal Leasing

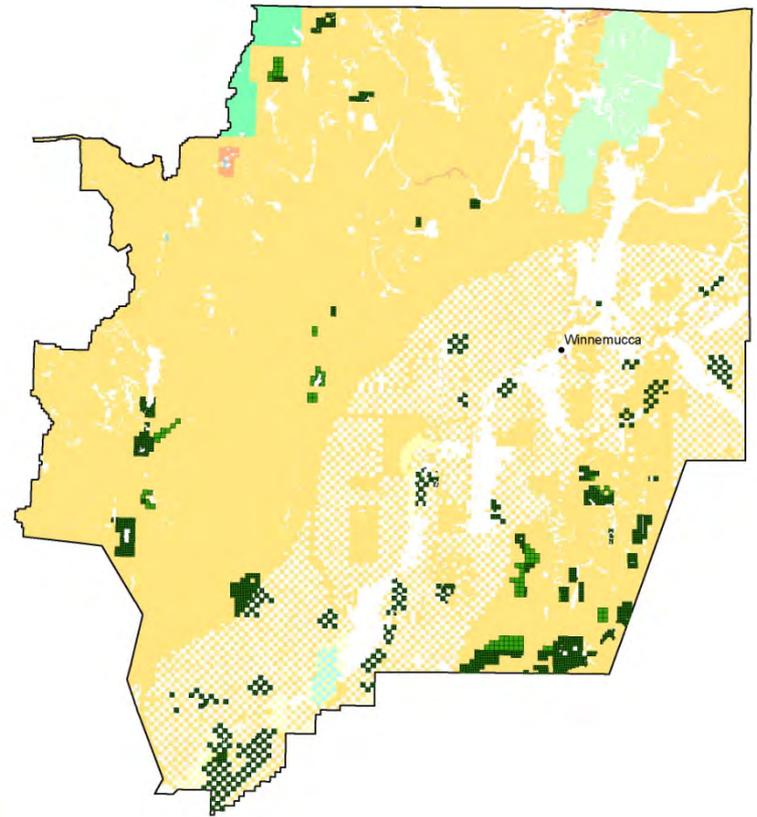


- |                          |                           |
|--------------------------|---------------------------|
| Authorized Leases        | Bureau of Indian Affairs  |
| District Office Boundary | Bureau of Land Management |
|                          | Bureau of Reclamation     |
|                          | Department of Defense     |
|                          | Department of Energy      |
|                          | Forest Service            |
|                          | Fish and Wildlife Service |
|                          | National Park Service     |
|                          | Nevada State Lands        |
|                          | Park                      |
|                          | Private                   |
|                          | Water                     |

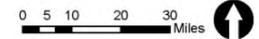


No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.  
BLM 10/2011

## Winnemucca District Geothermal Leasing

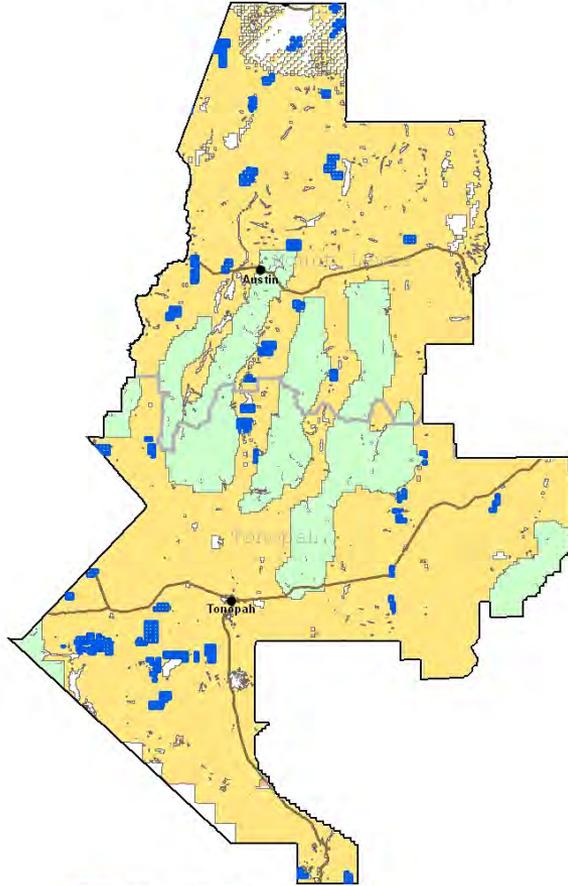


- |                          |                           |
|--------------------------|---------------------------|
| Authorized Leases        | Bureau of Indian Affairs  |
| District Office Boundary | Bureau of Land Management |
|                          | Bureau of Reclamation     |
|                          | Department of Defense     |
|                          | Department of Energy      |
|                          | Forest Service            |
|                          | Fish and Wildlife Service |
|                          | National Park Service     |
|                          | Nevada State Lands        |
|                          | Park                      |
|                          | Private                   |
|                          | Water                     |



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BLM 10/2011

# Battle Mountain District Geothermal Leasing



## Legend

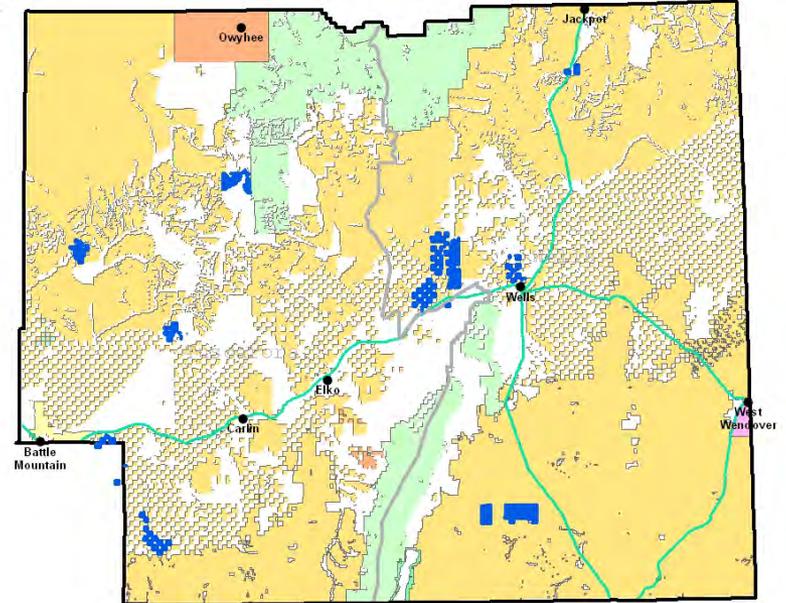
- Cities
- Geothermal Leases
- District Boundary
- Field Office Boundary
- Major Roads
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- Forest Service
- National Park Service
- Nevada State
- Private
- State Park
- Water



Boundaries shown by the Bureau of Land Management are to the accuracy, reliability or completeness of these data for navigation or appropriate use as shown on this map.

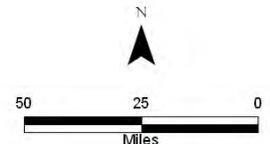
October 27, 2010  
JPT

# Elko District Geothermal Leasing



## Legend

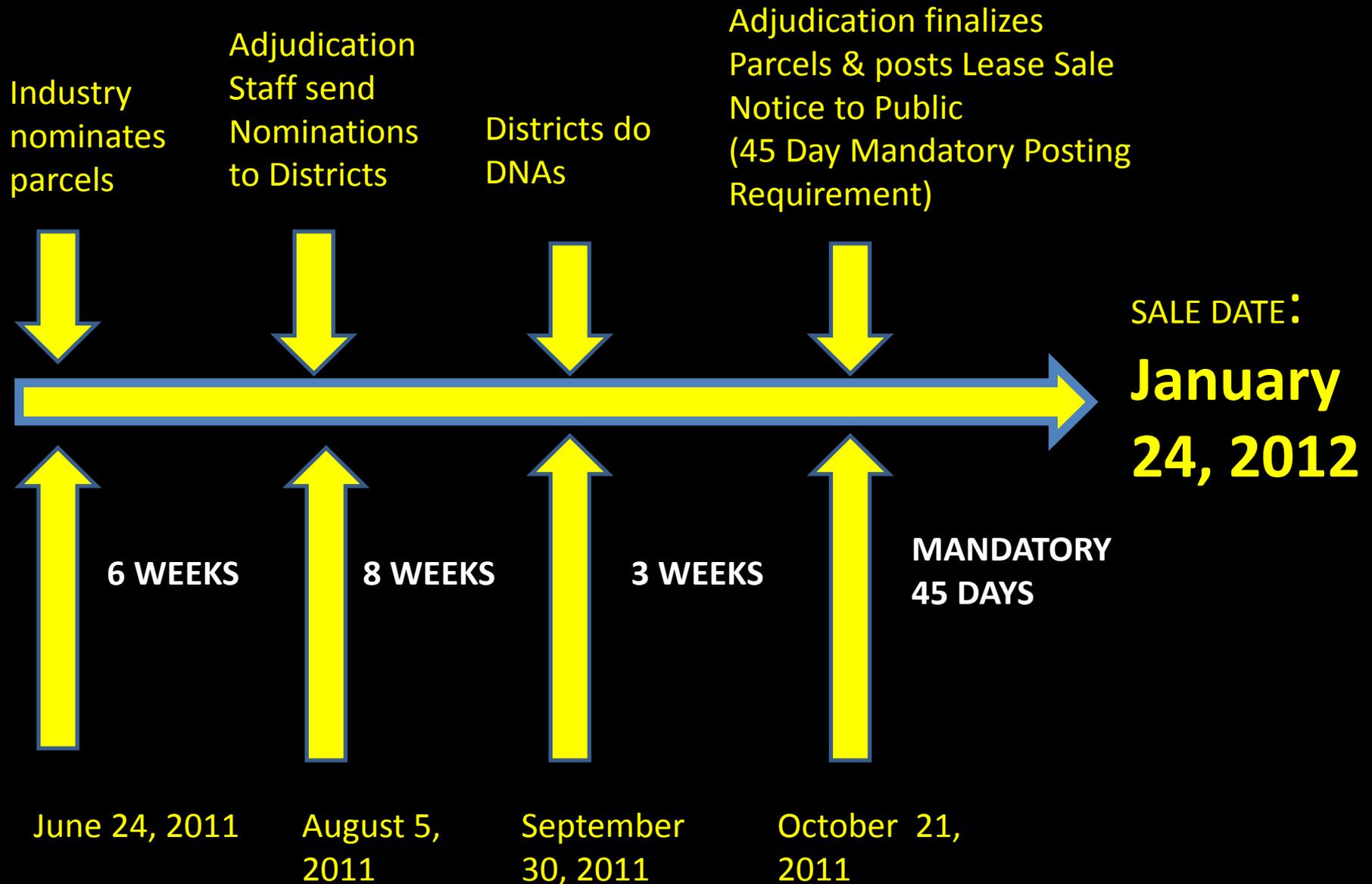
- Cities
- Geothermal Leases
- District Boundary
- Field Office Boundary
- County Boundary
- Major Roads
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Department of Energy
- Fish and Wildlife Service
- Forest Service
- National Park Service
- Nevada State
- Private
- State Park
- Water



Boundaries shown by the Bureau of Land Management are to the accuracy, reliability or completeness of these data for navigation or appropriate use as shown on this map.

October 28, 2010  
JPT

# THE LEASING PROCESS



BLM Nevada News  
NEVADA STATE OFFICE NO. 08-77  
FOR RELEASE: August 5, 2008  
CONTACT: JoLynn Worley, 775-861-6515

**BLM Geothermal Sale Nets \$28 Million**

Reno, Nev. — A geothermal lease sale held by the Bureau of Land Management today brought in a record-breaking \$28.2 million. The state will receive about \$14 million and the counties of Churchill, Elko, Esmeralda, Humboldt, Lander, Mineral, Nye and Pershing, where the leases are located, will receive more than \$7 million, which will be distributed by bid amount and acre.

The high bonus bid per acre was for a 2,707 acre parcel in Churchill County at \$1,000 per acre by ENEL Geothermal LLC, Reno, Nev. The highest bid paid for a parcel was \$3,214,000 by Standard Steam Trust, LLC, Denver, Colo. Three parcels in Churchill County, consolidated and offered as a block, sold for \$585 per acre, bringing in \$6,934,005 from Magma Energy US Corp, Reno, Nev.

Leases are for 10 years. In addition to the bonus bids, rental costs are \$2 per acre for the first year, plus a one-time \$140 per lease fee. The annual rental fee increases over the 10 year lease to \$5 per acre.

According to regulations and a competitive leasing process implemented under the Energy Policy Act, proceeds from the sale of geothermal leases are distributed 50 percent to the state, 25 percent to the county and 25 percent to the Federal government.

Today's sale is the second Nevada geothermal sale since passage of the Energy Policy Act of 2005. The last geothermal sale in Aug. 2007, offered 122,850 acres in 43 parcels which sold for nearly \$11.7 million—\$8.5 million of which went to the state and counties where the parcels are located. Last year's high bid per acre was \$526.

A complete list of the Nevada sale winning bids is available at [www.blm.gov/nv/st/en.nml](http://www.blm.gov/nv/st/en.nml).

-BLM-

**\$28,000,000**

**\$28,000,000**  
**GEOHERMAL**  
**LEASE SALE**  
**(Aug 08)**

**\$ 9,000,000**  
**GEOHERMAL**  
**LEASE SALE**  
**(JUL 09)**

**\$2,300,000**  
**GEOHERMAL**  
**LEASE SALE**  
**(May 10)**

**\$456,353**  
**GEOHERMAL**  
**LEASE SALE**  
**(March 2011)**

**NEXT GEOHERMAL LEASE SALE:**  
**January 24, 2012**

If the  
Exploration  
proves the  
resource, then  
the Company  
will build a  
Power Plant

Q?

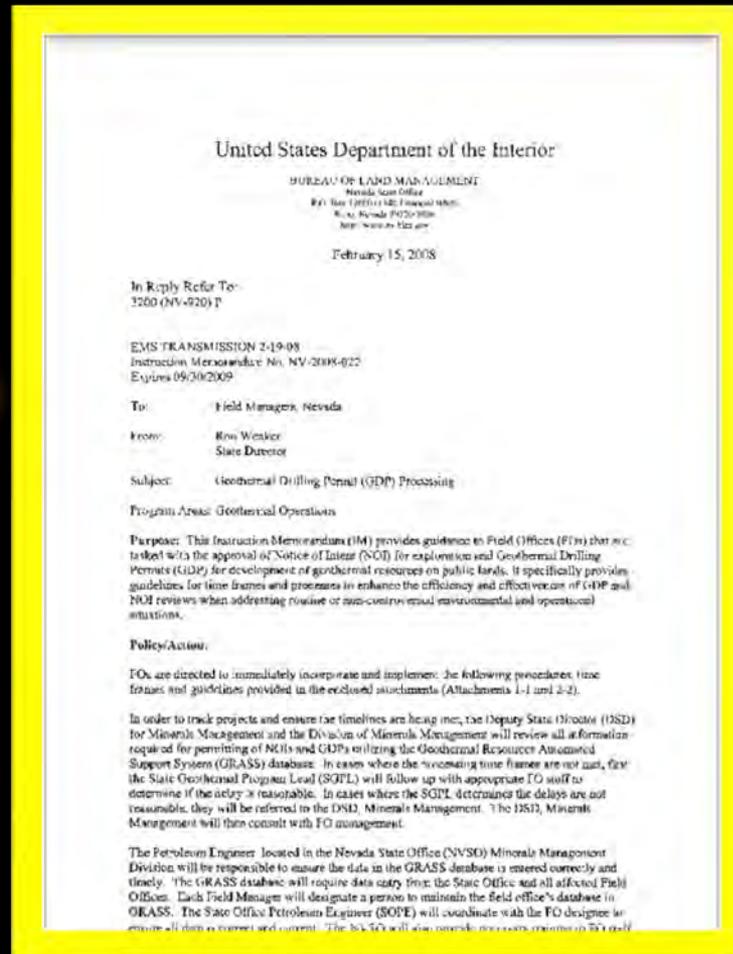


## ***ON FEDERAL LAND:***

- ◆ ***NEPA***
- ◆ ***NOIs***
- ◆ ***GDPs***
- ◆ ***OPERATIONS PLAN***
- ◆ ***UTILIZATION PLAN***
- ◆ ***COMMERCIAL USE PERMIT***



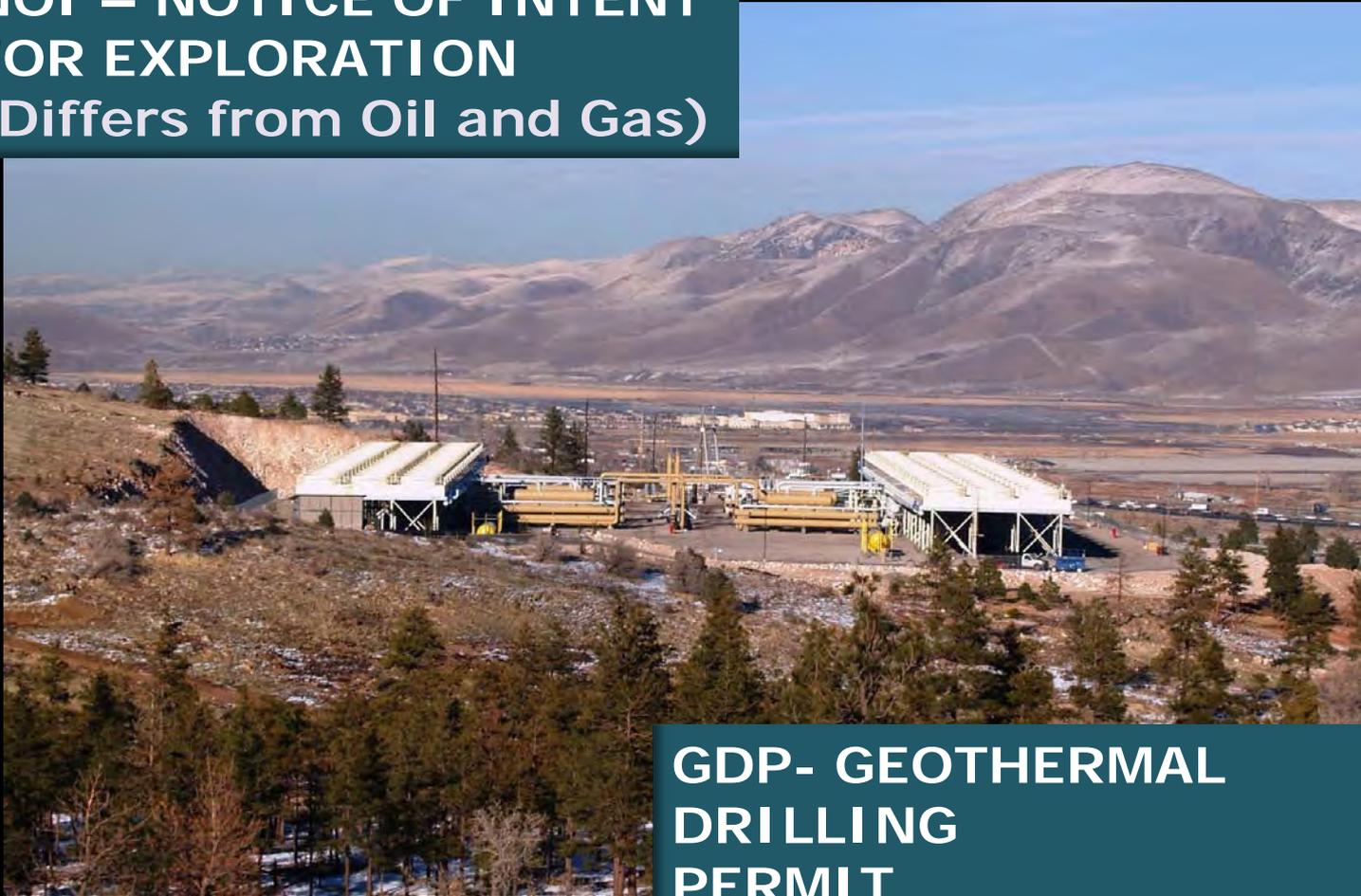
## ◆ **BLM's CHALLENGES**



## ◆ **WHAT WE HAVE DONE SO FAR...**

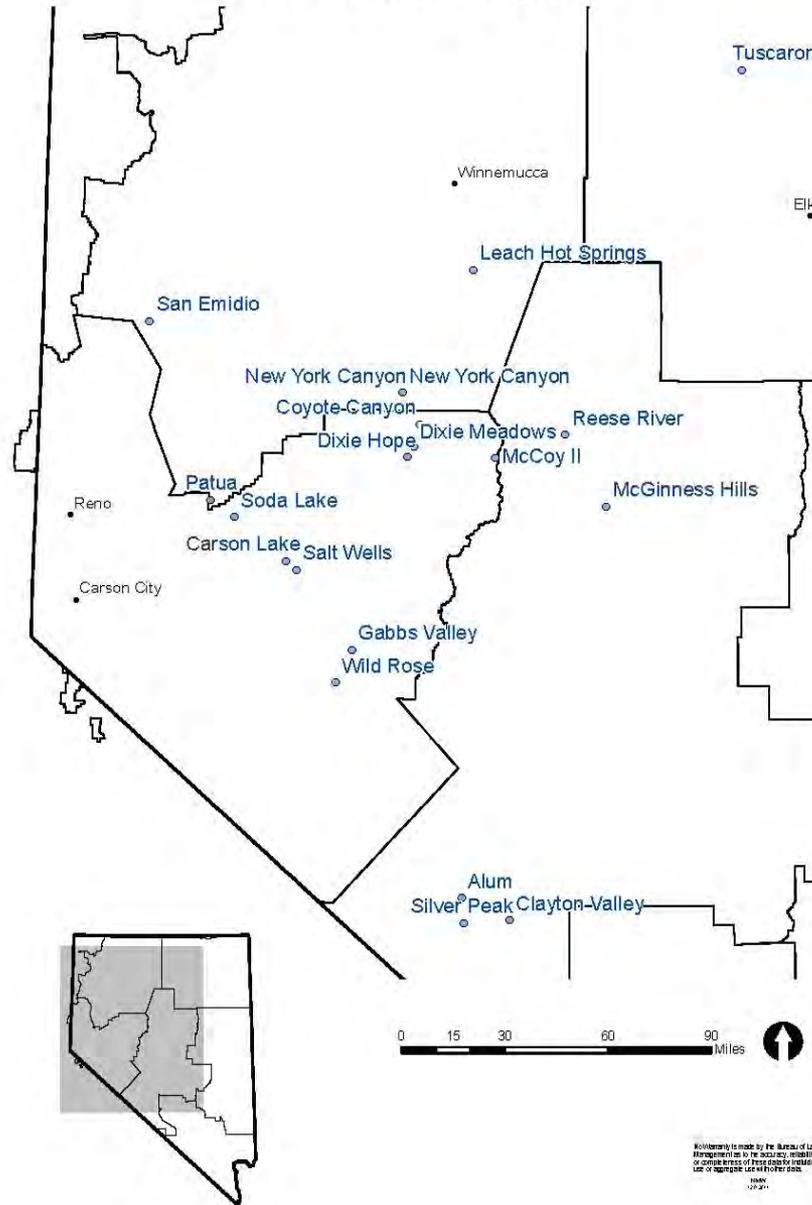
# ***CURRENTLY WORKING ON 140 PERMITS***

**NOI – NOTICE OF INTENT  
FOR EXPLORATION  
(Differs from Oil and Gas)**



**GDP- GEOTHERMAL  
DRILLING  
PERMIT**

# Geothermal Projects



Accuracy is made by the Bureau of Land Management as to the accuracy, reliability, or complete terms of these data for individual use or appropriate use for the data.

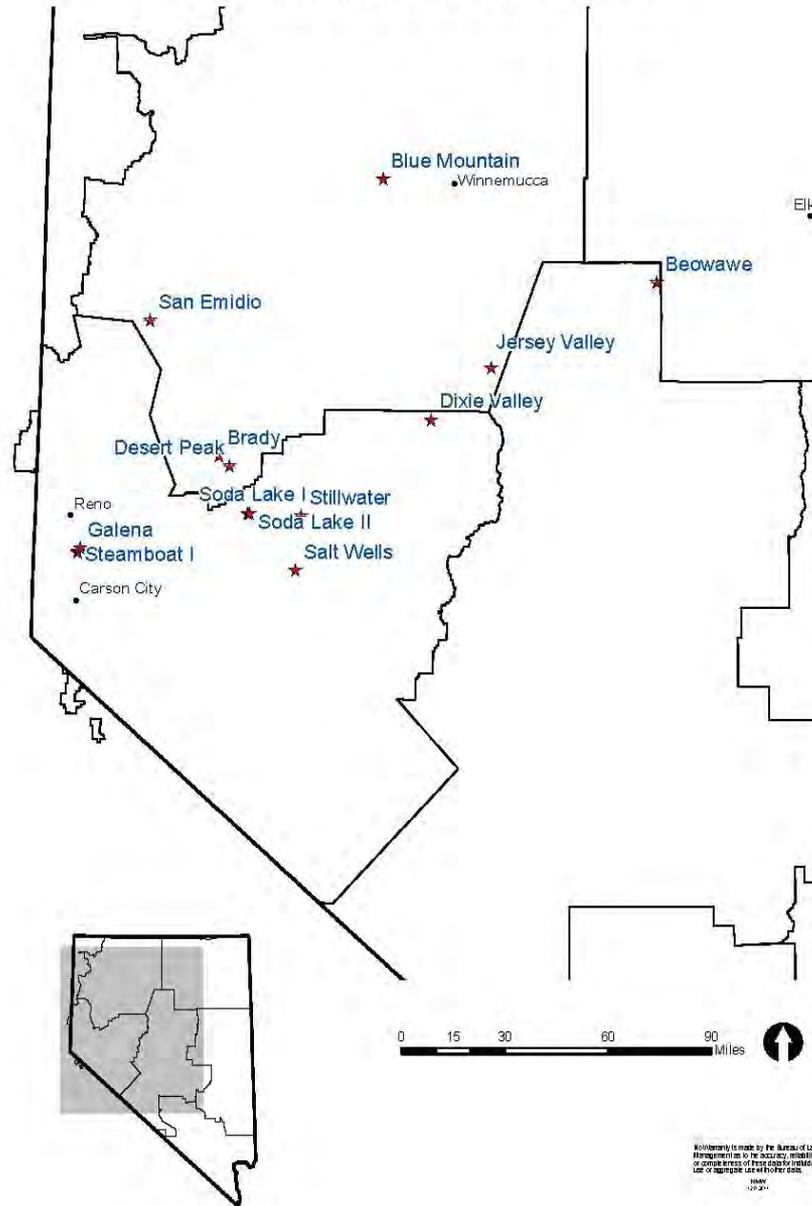
12/21

<b>Project Name</b>	<b>Project Type</b>	<b>BLM District Office</b>
<b>McCoy II</b>	<b>Exploration Project</b>	<b>Carson City</b>
<b>Coyote Canyon</b>	<b>Development Project</b>	<b>Carson City</b>
<b>Wild Rose</b>	<b>Exploration Project</b>	<b>Carson City</b>
<b>Dixie Hope</b>	<b>Exploration Project</b>	<b>Carson City</b>
<b>Dixie Valley</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Gabbs Valley</b>	<b>Exploration Project</b>	<b>Carson City</b>
<b>Galena 2</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Galena 3</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Patua I</b>	<b>Power Plant under construction</b>	<b>Carson City</b>

<b>Project Name</b>	<b>Project Type</b>	<b>BLM District Office</b>
<b>Blue Mountain</b>	<b>Existing Power Plant</b>	<b>Winnemucca</b>
<b>Brady Hot Springs</b>	<b>Existing Power Plant</b>	<b>Winnemucca</b>
<b>Desert Peak 1 &amp; 2</b>	<b>Existing Power Plant</b>	<b>Winnemucca</b>
<b>Leach Hot Springs</b>	<b>Exploration Project</b>	<b>Winnemucca</b>
<b>New York Canyon</b>	<b>Development Project</b>	<b>Winnemucca</b>
<b>Jersey Valley</b>	<b>Existing Power Plant</b>	<b>Battle Mountain</b>
<b>Silver Peak</b>	<b>Exploration Project</b>	<b>Battle Mountain</b>
<b>McGinness Hills</b>	<b>Power Plant under construction (anticipate online March, 2012)</b>	<b>Battle Mountain</b>
<b>San Emidio (Empire)</b>	<b>Existing Power Plant</b>	<b>Winnemucca</b>

<b>Project Name</b>	<b>Project Type</b>	<b>BLM District Office</b>
<b>Salt Wells</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Salt Wells</b>	<b>Development Project</b>	<b>Carson City</b>
<b>Soda Lake Complex (1 &amp; 2)</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Steamboat Hills</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Stillwater</b>	<b>Existing Power Plant</b>	<b>Carson City</b>
<b>Beowawe</b>	<b>Existing Power Plant</b>	<b>Elko</b>

# Geothermal Power Plants



Material is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data or the actual use of appropriate use in other states.  
May 2014

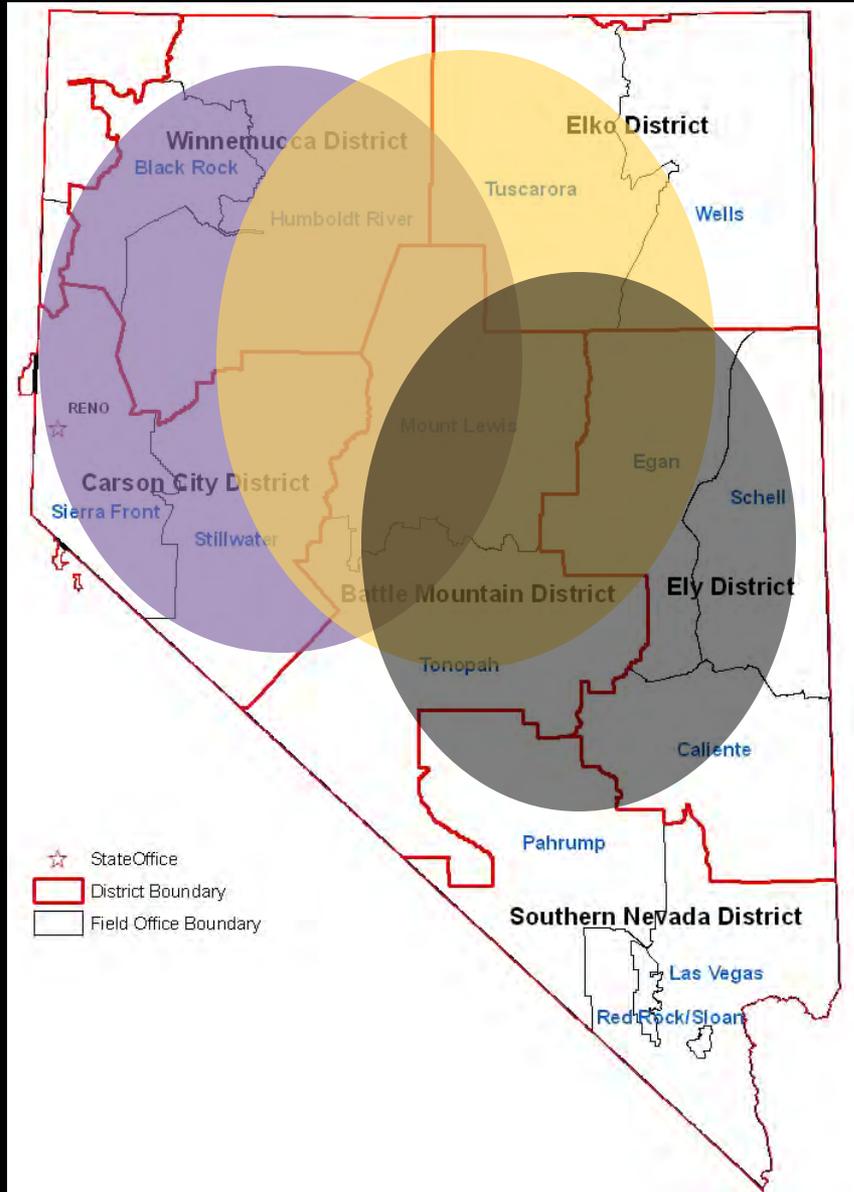
***BLM & INDUSTRY'S ULTIMATE GOAL:***

# **GEOHERMAL POWER PLANT**



***12.5 Megawatts supports approximately 12,500 homes***

# WHERE THEY'RE AT



# THE END



**Any  
Questions ?**

