



# NDOM Open Data Site Update: New Applications and Tools for Exploring Data Pertaining to Mineral Production and Land issues in Nevada

Lucia M. Patterson, Nevada Division of Minerals



# Nevada Division of Minerals

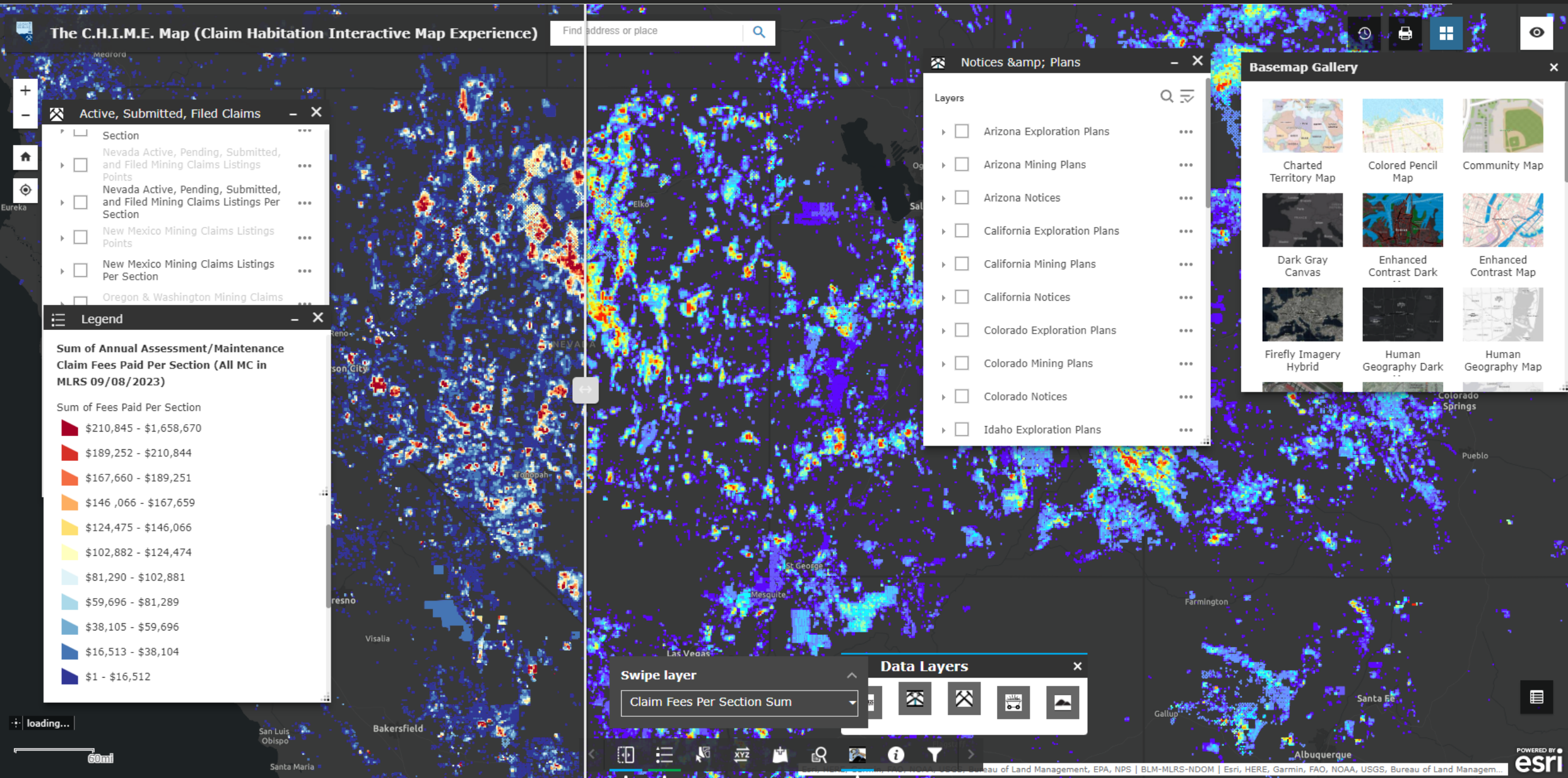
Open Data Site

Mission: To encourage and assist in the responsible exploration for, and the production of, minerals, oil, gas, and geothermal energy which are economically beneficial to the state. This is the Nevada Division of Minerals' public platform for exploring and downloading our open data.

## Updates/Review

- C.H.I.M.E.
- Nevada Mining and Land Withdrawal History Experience
- Lands with, or Having the Potential for, Mineral Entry Conflicts
- C.L.A.I.M.S.
- OGG Leases
- Next up?

# C.H.I.M.E.





# Nevada Mining and Land Withdrawal History Experience



## Minerals

## Land

### Disclaimer

- Pre 1850 M
- 1850s M
- 1860s M
- 1870s M
- 1880s M
- 1890s M
- 1900s M
- 1910s M
- 1920s M
- 1930s M
- 1940s M
- 1950s M
- 1960s M
- 1970s M
- 1980s M
- 1990s M
- 2000s M
- 2010s M
- 2020s M
- 2020s M ?

### Disclaimer

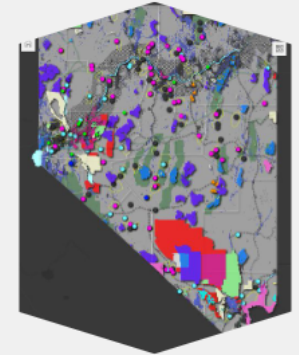
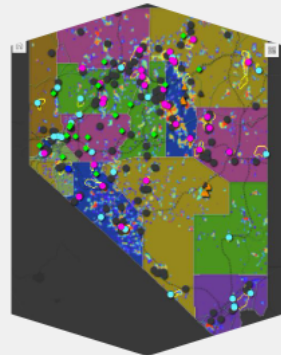
- Pre 1850 L
- 1850s L
- 1860s L
- 1870s L
- 1880s L
- 1890s L
- 1900s L
- 1910s L
- 1920s L
- 1930s L
- 1940s L
- 1950s L
- 1960s L
- 1970s L
- 1980s L
- 1990s L
- 2000s L
- 2010s L
- 2020s L
- 2020s L ?

## Disclaimer & Web Application Overview

**THE NEVADA DIVISION OF MINERALS** MAKES NO WARRANTIES OR GUARANTEES, EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS, ACCURACY, OR CORRECTNESS OF THE DATA PORTRAYED IN THIS PRODUCT NOR ACCEPTS ANY LIABILITY, ARISING FROM ANY INCORRECT, INCOMPLETE OR MISLEADING INFORMATION CONTAINED THEREIN. ALL INFORMATION, DATA AND DATABASES ARE PROVIDED "AS IS" WITH NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, FITNESS FOR A PARTICULAR PURPOSE. Users should also note that property boundaries included in any product do not represent an on- the-ground survey suitable for legal, engineering, or surveying purposes. They represent only the approximate relative locations. By accessing this website and/or data contained within the databases, you hereby release the Nevada Division of Minerals, its employees, agents, contractors, and suppliers from any and all responsibility and liability associated with its use. In no event shall the Nevada Division of Minerals or its officers or employees be liable for any damages arising in any way from the use of the application, or use of the information contained in the databases herein.

Historical narratives and data were obtained from several sources which can be found in the reference section at the bottom of this page. Direct links to the data sources were linked to the text of the source if available.  
 Edited by: Mike Visher, Jon Price, & Garrett Wake

In the map panels that will open, land withdrawn from mineral entry over time are displayed. Many, **THOUGH NOT ALL**, areas have been investigated, and the year in which the area was withdrawn form mineral entry (effectively or completely) has been interpreted by the Nevada Division of Minerals staff. We are not landmen, this is an interpretation meant to show general trends regarding lands withdrawn from mineral entry. **This continues to be a work in progress.** If you have any additional information you would like to add to the maps please email Lucia Patterson [lpatterson@minerals.nv.gov](mailto:lpatterson@minerals.nv.gov) Or submit information by [CLICKING HERE](#).



Click on a decade from the columns to the left to proceed! If using a laptop, drag two fingers down the right hand side of the mouse pad to scroll through the text.



# Nevada Mining and Land Withdrawal History Experience

## Minerals

## Land

Disclaimer

Pre 1850 M

1850s M

1860s M

1870s M

1880s M

1890s M

1900s M

1910s M

1920s M

1930s M

1940s M

1950s M

1960s M

1970s M

1980s M

1990s M

2000s M

2010s M

2020s M

2020s M ?

Disclaimer

Pre 1850 L

1850s L

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1970s L

1980s L

1990s L

2000s L

2010s L

2020s L

2020s L ?

### Minerals Thoughts - 2020s

So, what's next? Well, as we have seen until now, anything can happen, and production is dependent on many global variables; but here are some current considerations:

Inflation in the prices of fuel, personnel, and goods needed to mine and process is being felt by the minerals industry. The cost of sale has increased for most companies and production numbers look to be falling. The total impact of inflation within the minerals industry has yet to be seen.

Critical mineral exploration is on the rise in Nevada. This is in response to an unprecedented demand for key minerals critical to the transition to greener energy. Nevada is uniquely positioned to lead the U.S. in transitioning away from fossil fuels, so long as federal land is available for the environmentally responsible extraction of mineral commodities. The "not-in-my-back-yard" paradigm doesn't work for the environment, because it forces mineral mining and processing into countries with far less environmental (and humanitarian) regulation, and far less controls than are present here the U.S. For an overview on critical minerals in Nevada [CLICK HERE](#) to view a summary video put together by the Nevada Division of Minerals.

It also appears that geothermal development will continue to increase as well, due to t

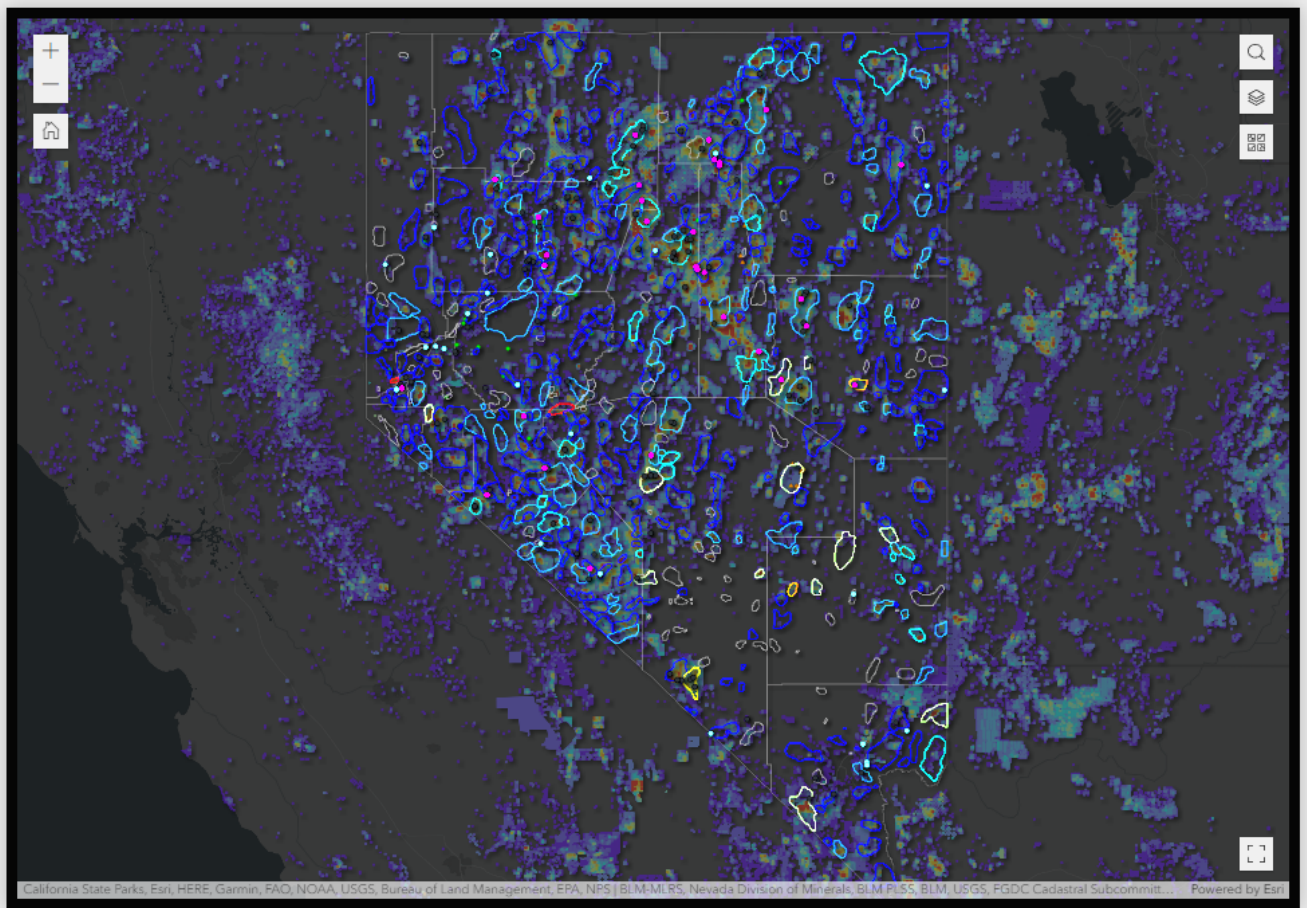
#### Mine Points Early 2020s

- Precious Metal
- Base Metal
- Industrial Mineral
- Inactive Mine

#### All Nevada Historic Mining Districts - 2022 (NDOM update)

Critical Mineral Count

- 22 - 24
- 18 - 21
- 15 - 17
- 12 - 14





# Nevada Mining and Land Withdrawal History Experience



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1980s L

1990s L

2000s L

2010s L

2020s L

2020s L ?

### Land Thoughts - 2020s

With so many hands in the pot and so many interests at stake (natural resource conservation, climate change, materials production, supply and demand, green energy, international environmental concerns) it is important to keep a watchful, holistic, and integrated eye on land issues that arise. It is equally important to monitor legislation, as pointed out in a report prepared for the Division of Minerals in 2010, "Once the initial legislation has been enacted, it paves the way for future legislative acts that solidify its foundation". By reading the historical land narrative it becomes abundantly apparent that once the legislation is in place land withdrawals can come quickly, and from many directions. However, concerns also need to be evaluated from many directions to make balanced land decisions for our future.

So what's up next?

On April 3, 2023 a proposed rule was published to the Federal Register by the BLM titled "Conservation and Landscape Health". This proposed rule would make conservation a "use" within FLPMA's multiple use framework, would require the application of the Fundamentals of Rangeland Health across all program areas and all BLM-Managed public

SFA

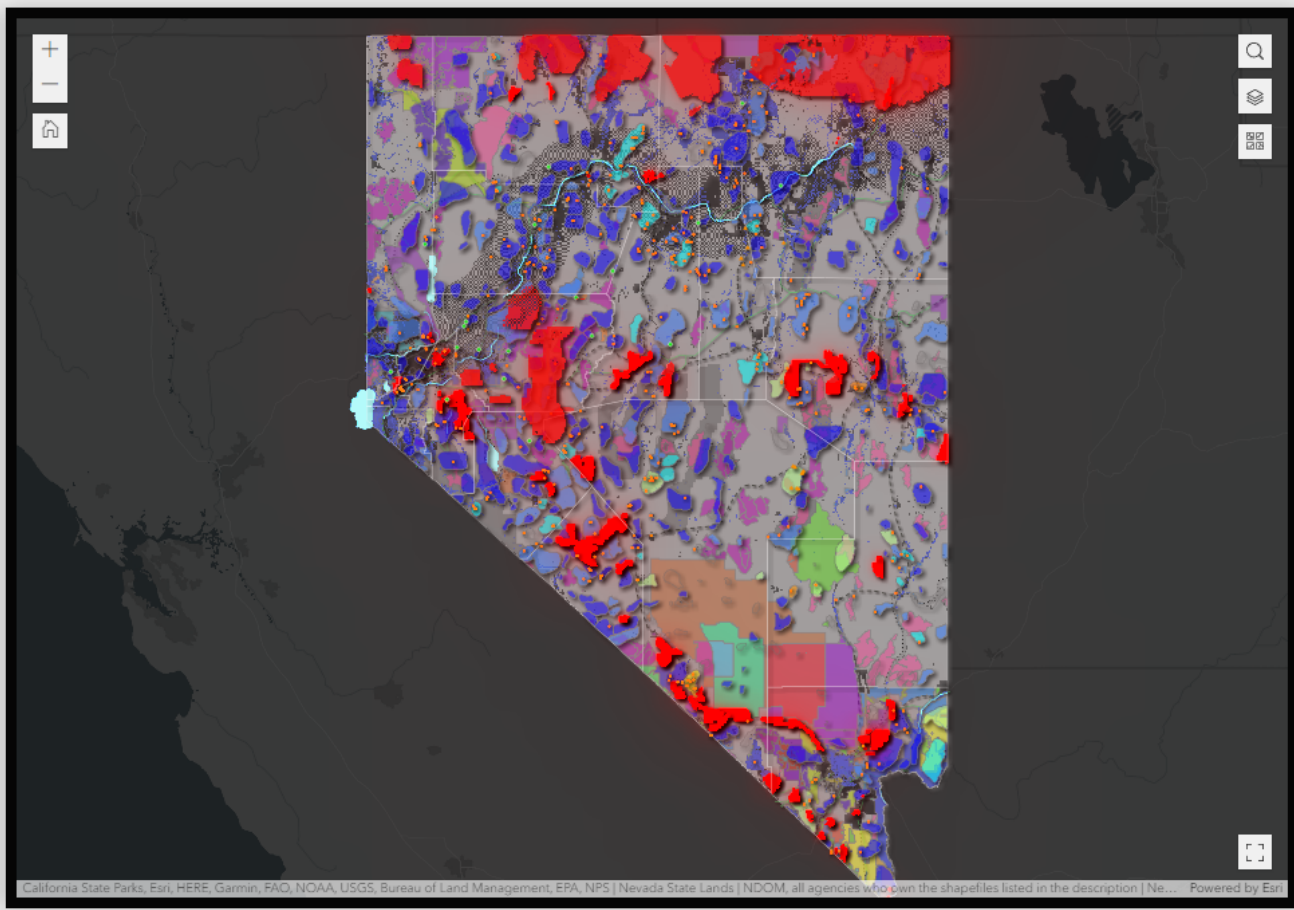
ADPP USFSDData



BLM NVCA ARMPA GRSG Sagebrush Focal Area 2015



FRTC Boundary - LandStatus

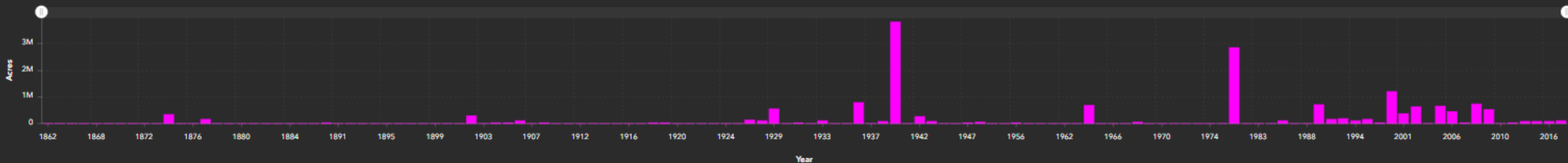




## Land Withdrawal Dashboard

Lands Completely or Effectively Withdrawn from Mineral Entry Statistics, and a Few Extra Numbers for Thought

Annual Acres of Federal Land Withdrawn (Effectively or Completely) from Mineral Entry Over Time



~64,500 acres without an interpreted mineral withdrawal date assignment, (mostly Bureau of Reclamation and County) this is a work in progress.

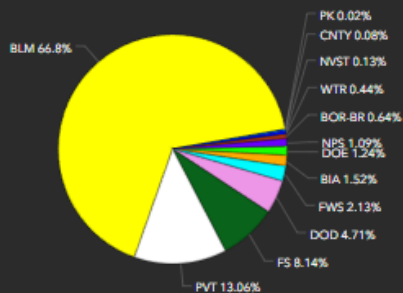
Annual Withdrawal Totals

Cumulative Withdrawal Totals

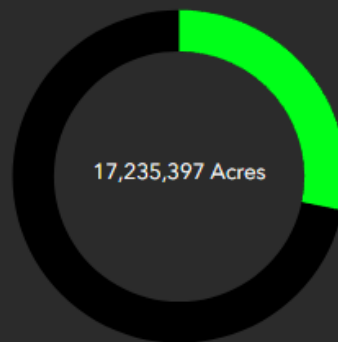
Nevada Surface Management Agency (Data as of August, 2022)

Total Acres in Nevada: 70,722,119

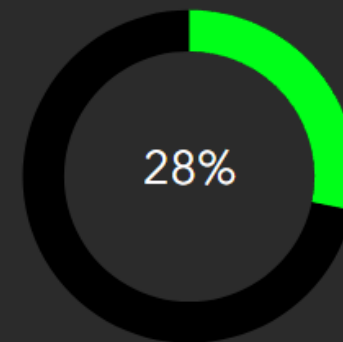
Total Acres of Federal Lands in Nevada: 61,011,792



Total Federal Lands Withdrawn (Effectively or Completely) from Mineral Entry



Total Federal Lands Withdrawn (Effectively or Completely) from Mineral Entry





YTD Sum - Select Year  
less than 2023

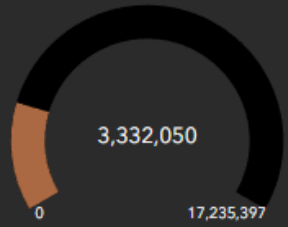
Select a Range of Years  
1850 - 2023

Values shown in the gauges will exceed the total land withdrawal acreage reported here. Special land management designations commonly overlap and each gauge is querying all features that include the land designation shown in the gauge title.

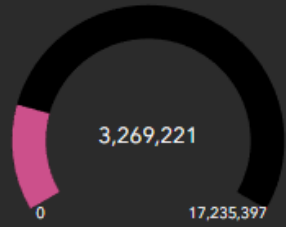
### All Values in Acres



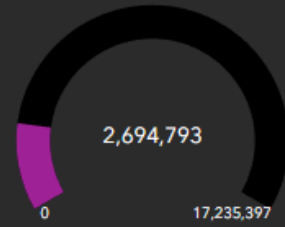
Department of Defense



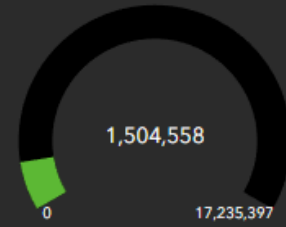
Wilderness



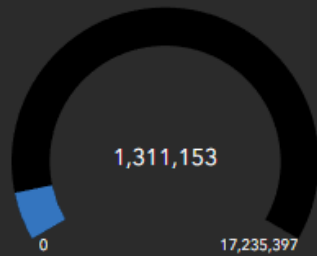
WSA



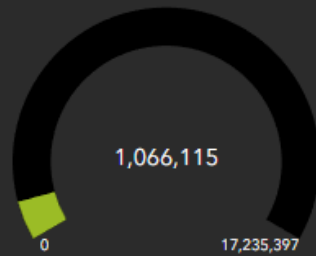
National Monument



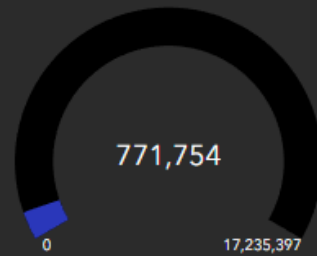
Areas of Critical Environmental Concern



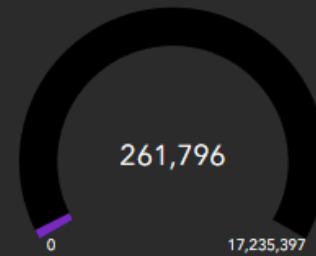
National Conservation Area



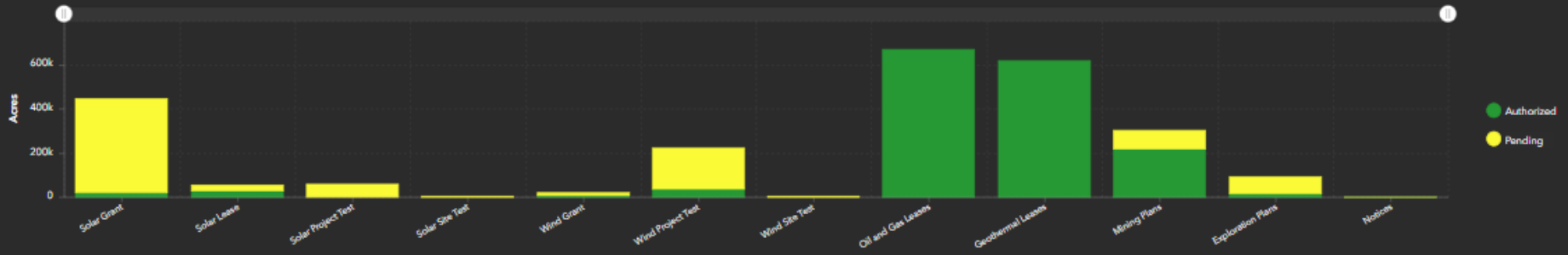
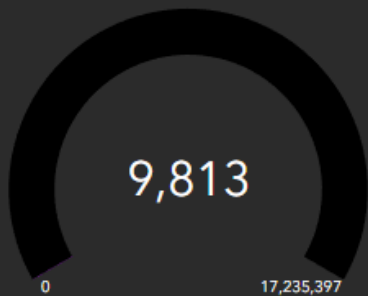
National Parks Service



National Recreation Area

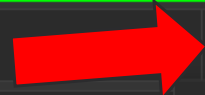


Fish and Wildlife Service



None of these multiple uses withdraw federal lands from mineral entry. FLPMA allows the BLM to segregate lands from mineral entry by publication of a Federal Register notice of lands that are included in a pending wind or solar energy generation right-of-way (ROW) application, and public lands that the BLM identifies for potential future wind or solar energy generation. After approval of the application any new mining claims in the area covered by the ROW would be subject to the authorized ROW use.





YTD Sum - Select Year  
less than 1981

Select a Range of Years  
1850 - 2023

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### All Values in Acres

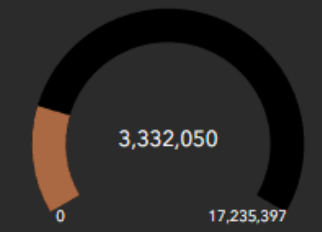
1850  2023

1981

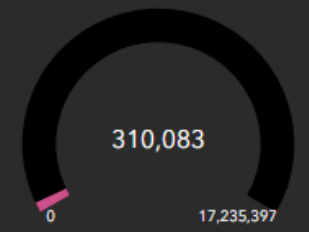
Set to minimum Set to maximum

Reset

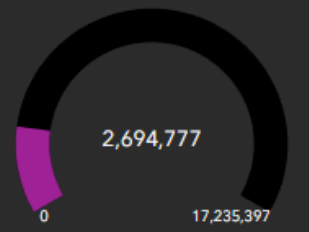
Department of Defense



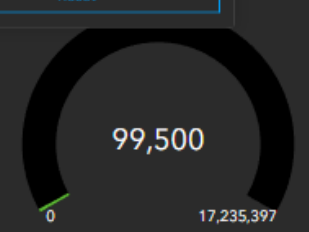
Wilderness



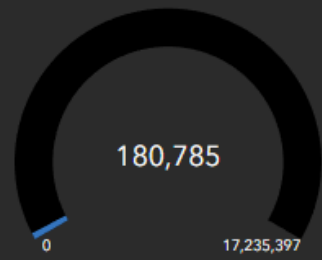
WSA



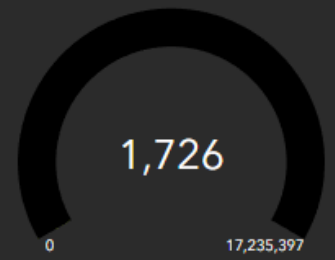
National Conservation Area



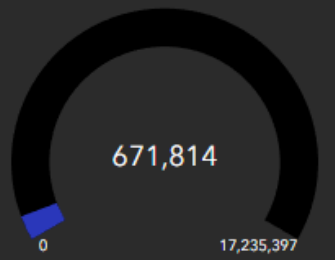
Areas of Critical Environmental Concern



National Conservation Area



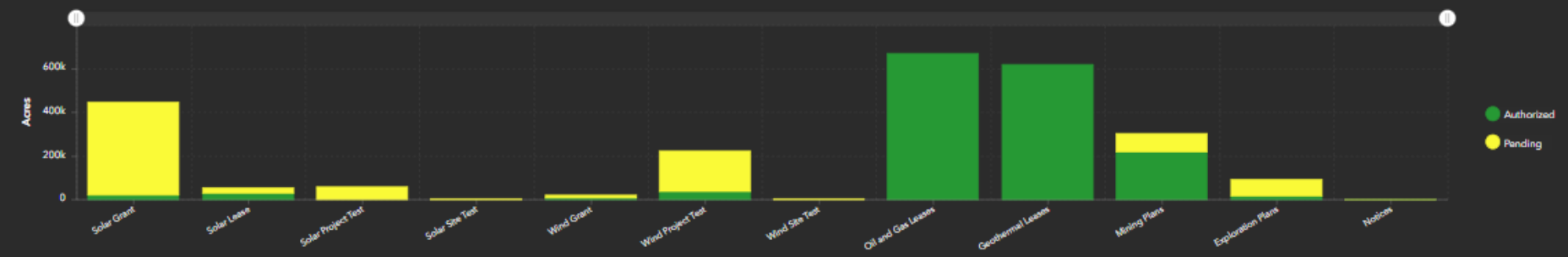
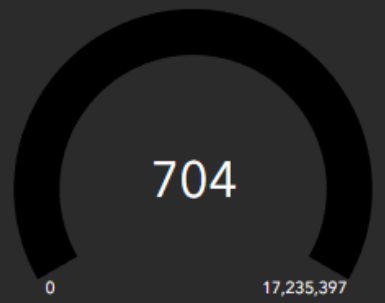
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## Mineral & Land Records System Reports

**\*\*\*\*ATTENTION\*\*\*\*** On Monday June 26, 2023 MLRS Release 3 was deployed, representing the rest of the products from the legacy system, frozen on 6/16/2023 5pm EST.

The MLRS reports shown should contain all cases after June 26,2023.

**\*\*\*\*\*ATTENTION\*\*\*\*\*** These reports have Privacy Act redactions. If you would like to view unredacted reports, please click [here](#) to view instructions on creating a Login.gov account.

The Bureau of Land Management (BLM) has developed the Mineral & Land Records System (MLRS) to replace:

- Legacy Rehost 2000 (LR2000) case management system
- Alaska Land Information System (ALIS) (please note that ALIS will become read-only for 2800 and 2900 cases upon Release 3 of MLRS. ALIS will continue to be the system of record for all remaining cases until the next MLRS release)
- LR2000 official land status records (e.g. Master Title Plats, Tract Books, but not Historical Index, which is scheduled for the next MLRS release).

MLRS is a customer-centric, geospatially-enabled Land Information System that employs nationally standardized business processes, ensuring the quality and accuracy of land and mineral records and data, while securely delivering land records information to relevant BLM employees, customers, and the public.

For more information on the MLRS project and implementation schedule, visit <https://www.blm.gov/services/land-records/mlrs>.

Please note that some columns in the MLRS reporting site have changed from the preceding LR2000 output; however, all information previously reported is available.

### Need help?

Click here to [Contact Us](#) or [Submit a Helpdesk Ticket](#)



### Public All Products Reports

Serial Number Crosswalk by Customer (All Products)

Serial Number Crosswalk by Product and Admin State (All Products)

+ CR Serial Register Page - All Other Products

+ CR Serial Register Page - Oil and Gas & Geothermal

CR Serial Register Page - Other Query Parameters - all CR Products



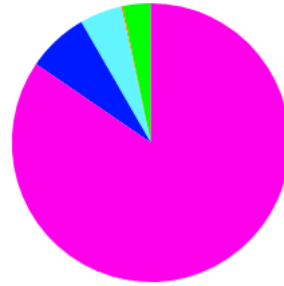
### All Values in Millions

Select a by typing in a year value or using the slider from the box in the upper right hand corner. A scroll bar is available at the top of the Nevada Mineral Production Values chart that can be used to zoom in on the chart. Hover above a column to view values.

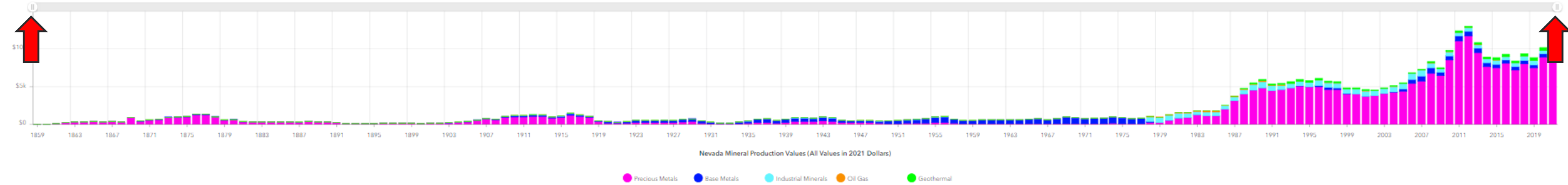
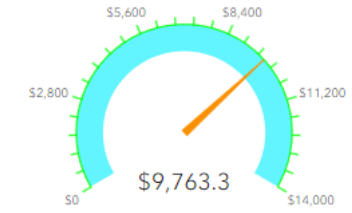
[See references section for data sources](#)

Search...

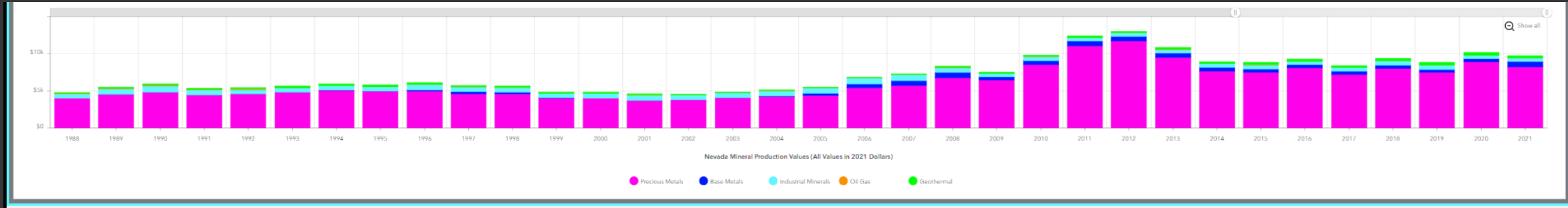
- Cement \$/mt
- Diatomite \$/mt
- Fluorspar \$/mt
- Gypsum \$/mt
- Lime \$/mt
- Perlite \$/mt
- Sand & Gravel (Construction) \$/mt
- Sand & Gravel (Industrial) \$/mt
- Crushed Stone \$7.83/mt
- Oil \$65.84/Barrel
- Geothermal \$80.25/MWh
- Salt \$/mt



- Precious Metals \$8.3k
- Base Metals \$694.9
- Industrial Minerals \$480.8
- Oil Gas \$15.2
- Geothermal \$318.7



Production value amounts were taken from Nevada Bureau of Mines and Geology Special Publication 15 1993, Outline of Nevada Mining History and production records maintained by the Nevada Division of Minerals. All value amounts were converted to 2021 dollars using the CPI Inflation Calculator provided by the U.S. Bureau of Labor Statistics. From 1859-1977 the percentage of the total amount of mineral production value were generated by measuring the amounts represented by precious metals, base metals, and industrial minerals from the charts presented in the USGS Open-File Report 2004-1244.



**General Information PLEASE READ!**

Claim data is presented on a per section basis. If a claim falls in more than one section it will have more than one listing. Therefore, counts and sums for areas selected/filtered will be more than the actual value.

There are several layers in this map, please visit the **"Map Layers"** tab and turn off any unnecessary layers to your analysis to simplify the view.

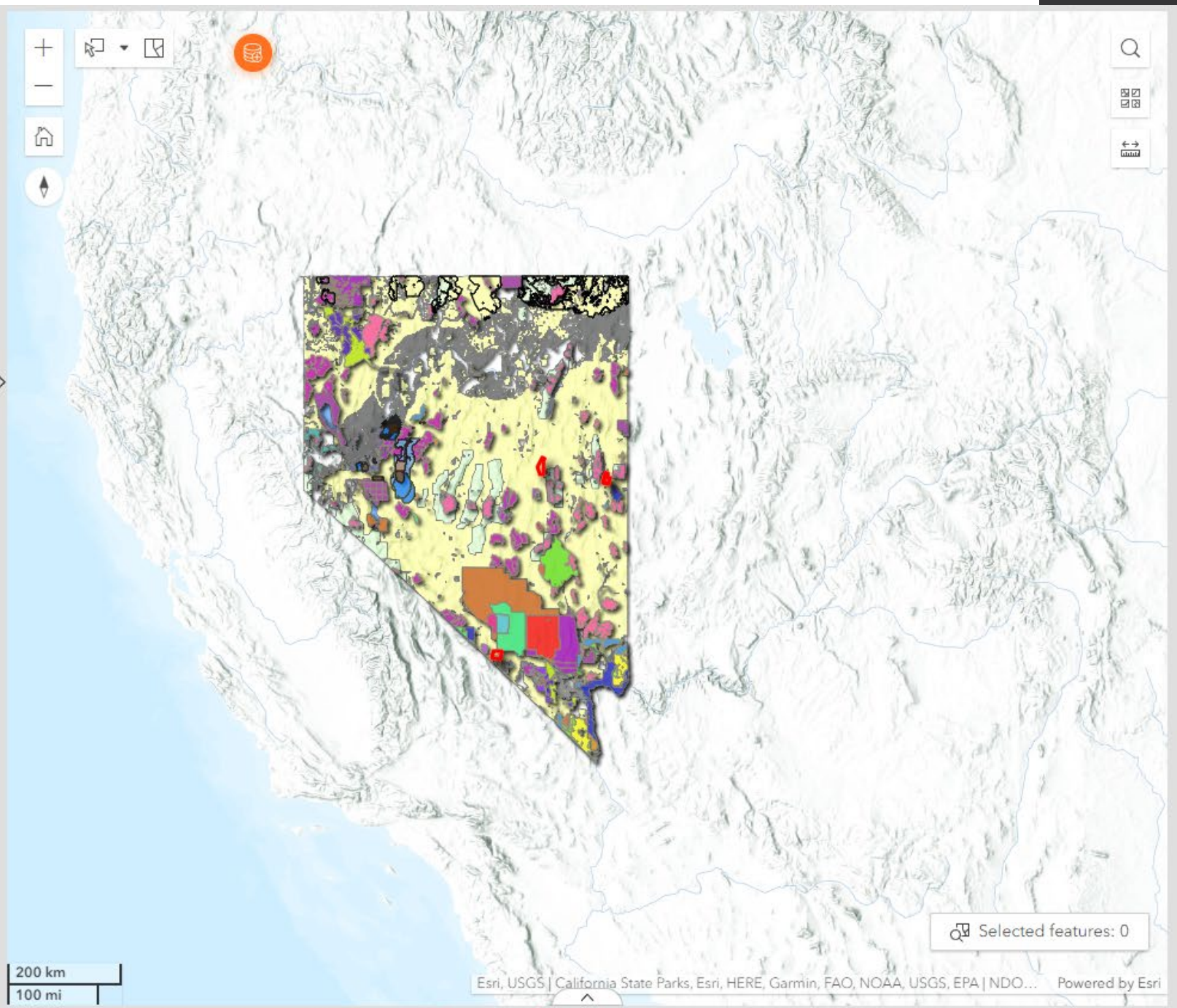
**Filtering the Data**

Click on the **"Filter the data"** tab above. Click on the data category you want to analyze then choose the filter type. You can either use "Selecting features from the data source", select the layer you want to filter on from the second drop down, and then **use the select tool located in the map (square with an arrow)** and pick the area you wish to analyze, or use the "drawn graphic" to draw your own area. Apply buffers as needed. After filtering the data, you can export the results to a .csv file by clicking on the 4 circles in the upper right hand corner of the list. On the data tab in Excel, choose remove duplicates and use the "SerialNumber" field to remove duplicates. You can also export the data to a GeoJSON file and add to ArcGIS or QGIS

Instructions for importing GeoJSON files  
[Click Here to view in full screen mode](#)

**BR, National Monument**

**Polygon ID:** 3  
**Interpreted Withdrawal Year (effective or complete):** 1902  
**Withdrawal Type(s):** BR, National Monument *(Scroll down to see the list of abbreviations)*  
**Acreage:** 1,229.73  
**ACEC Name:**  
**National Monument or National Conservation Area Name:** Ave Kwa Ame



- Nevada Active, Pending, Submitted, and Filed Mining Claims Listings Po... >
- \*Claims point listings with annual assessment/maintenance fee calculati... >
- \*\*Claims per section density and annual assessment/maintenance fees ... >
- Nevada Notices >
- Nevada Exploration Plans >
- Nevada Mining Plans >
- Historic mining districts - 2022 (NDOM update) >
- Production of Minerals in Nevada 1987-Present >
- Authorized Geothermal Lease Points >

*You must filter the appropriate layer in order for these values to populate. The asterixis correspond to the layer you must filter from above.*

\*Sum of claim fees paid for selected CLAIM LISTINGS: \$ 3,657,215

\*\*Average fees paid per section for SELECTED SECTIONS: \$ 786.104

\*\*Sum of claim listings for SELECTED SECTIONS: 5,345

< 1 of 2660 > ☰

### BR, National Monument

Polygon ID: 3

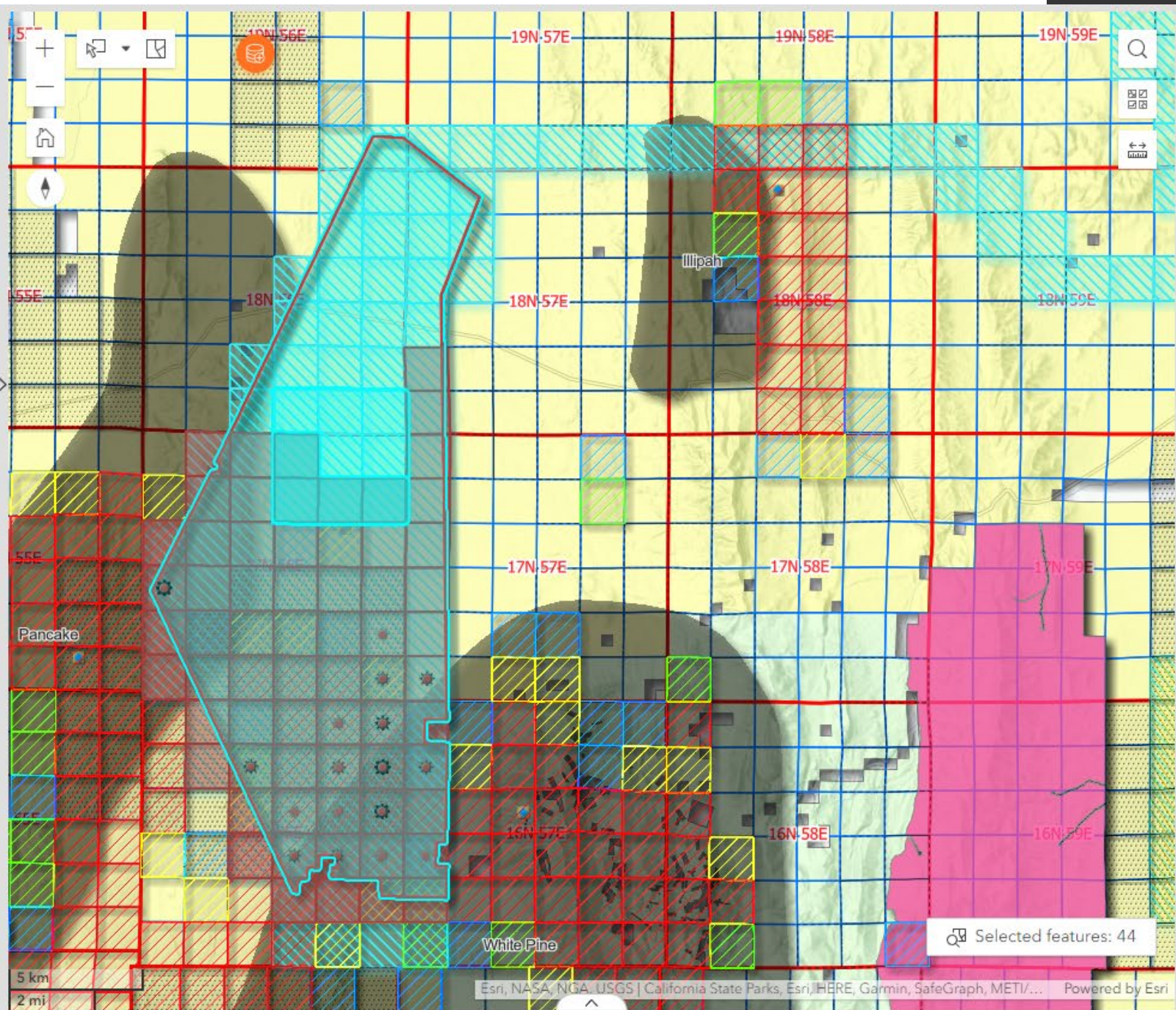
Interpreted Withdrawal Year (effective or complete): 1902

Withdrawal Type(s): BR, National Monument (Scroll down to see the list of abbreviations)

Acreage: 1,229.73

ACEC Name:

National Monument or National Conservation Area Name: Ave Kwa Ame



← Results

Features displayed: 1 - 100 / 1118

- ▶ Claim Name: MONTE # 99
- ▶ Claim Name: NC 105
- ▶ Claim Name: NC 106
- ▶ Claim Name: CY 220
- ▶ Claim Name: CY 222
- ▶ Claim Name: CY 224

< 1 2 ... 12 > 100 /page ▾

*You must filter the appropriate layer in order for these values to populate. The asterix correspond to the layer you must filter from above.*

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< 1 of 2660 >

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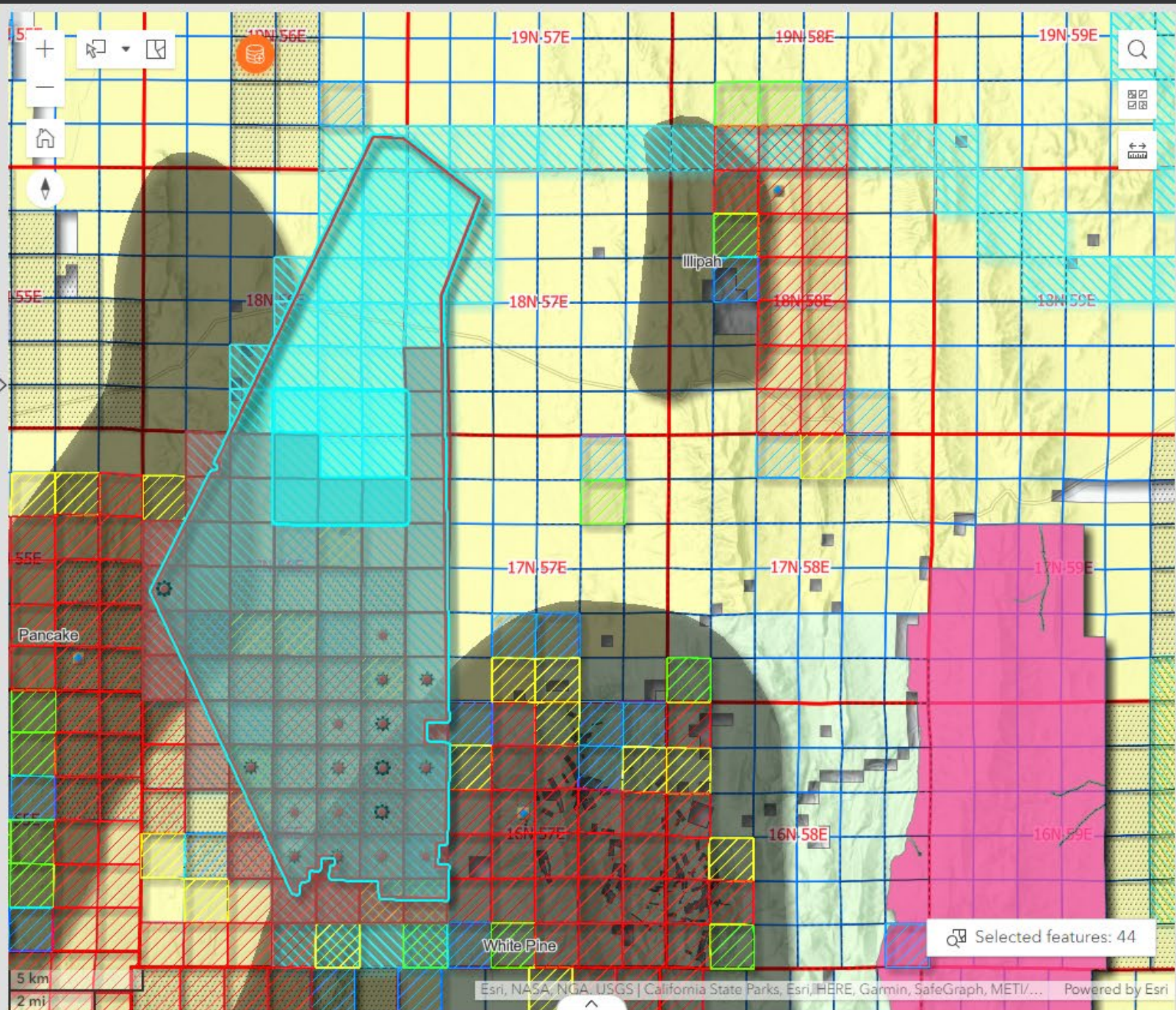
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Acreage: 1,229.73

ACEC Name:

National Monument or National Conservation Area Name: Ave Kwa Ame



← Nevada Mining Plans

Attribute filter

Case Disposition is

AUTHORIZED

Spatial filter

Choose the filter type

Selecting features from data source

Choose a filter layer

Land Use Proposals/Special Designations

1 records are selected for the filter

Apply Reset

*You must filter the appropriate layer in order for these values to populate. The asterixis correspond to the layer you must filter from above.*

\*Sum of claim fees paid for selected CLAIM LISTINGS: \$ 3,657,215

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< 1 of 2660 >



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Polygon ID: 3

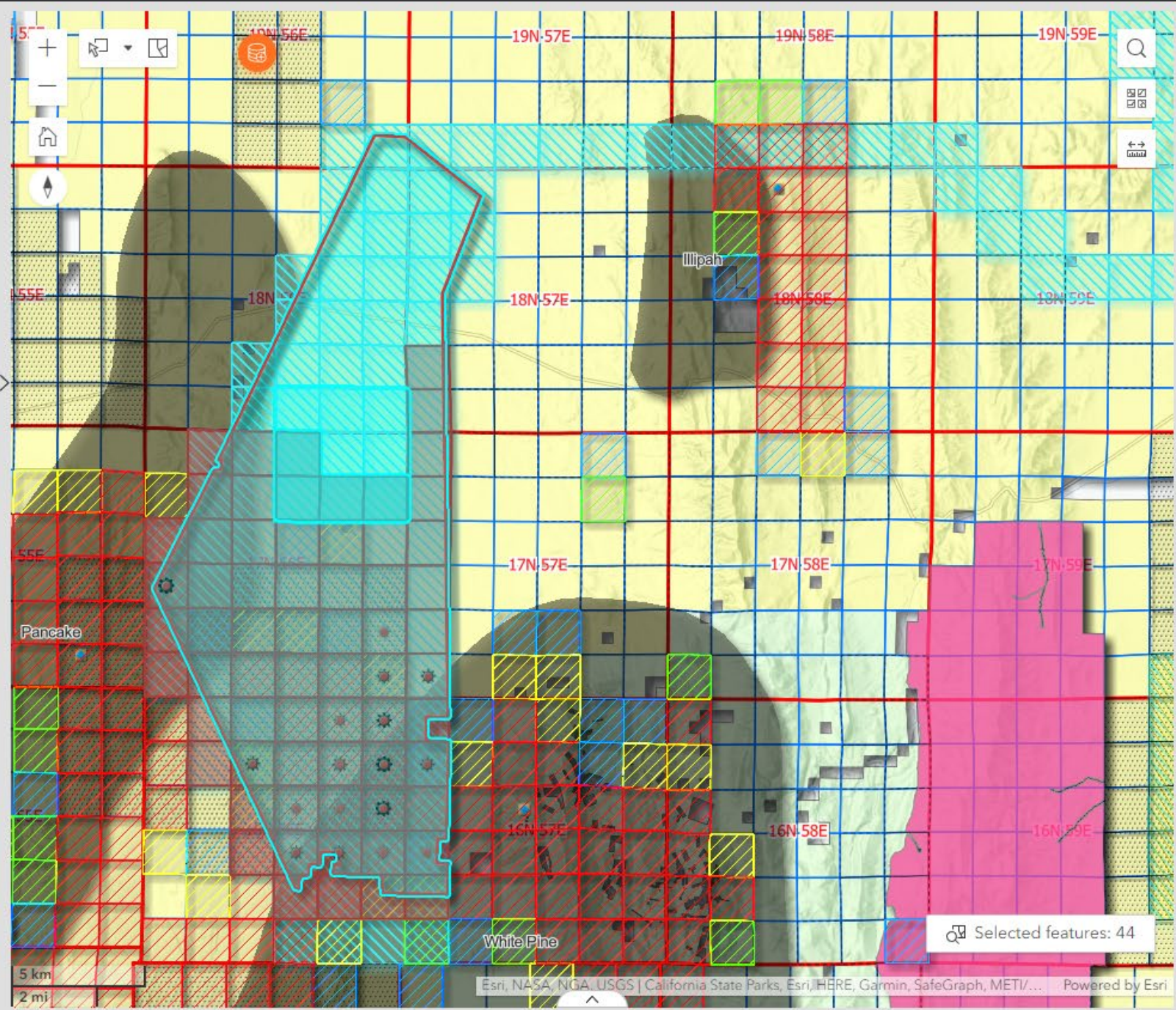
Interpreted Withdrawal Year (effective or complete): 1902

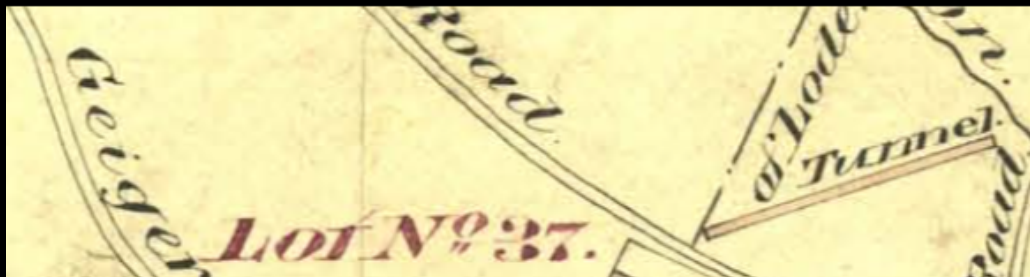
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Site Sponsored By: [New Frontier Drilling](#)

Thank you New Frontier Drilling! Also thanks to Foster for the inspiration, Mike for all the guidance, and to all of my co-workers and fellow professionals for your advice, input, and edits!

This is a platform for exploring and downloading Mining Claims, Plan, and Notice GIS data. Unpatented mining claims, plans and notices are presented in this map on a per section basis for Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. All maps are interactive with feature pop-ups designed to guide the user to the appropriate places to view data and run queries. The user can also add their own data to the map. This website is new and it is anticipated that it will be improved upon as time allows. The developer is donating time to keep the site up and going, so updates will be as time allows, but it is our goal to update the data at least once a month.

Please review the information icon in the map to read all disclosures and use limitations.

Data downloads and [links to state data resources](#) can be found towards the bottom of the page. Each state has provided links to data or web applications thought to be most important for explorationists.

# miningclaim.org



Click on the image above to enter the data download zone!

## FREE



Lucia Patterson MS CPG



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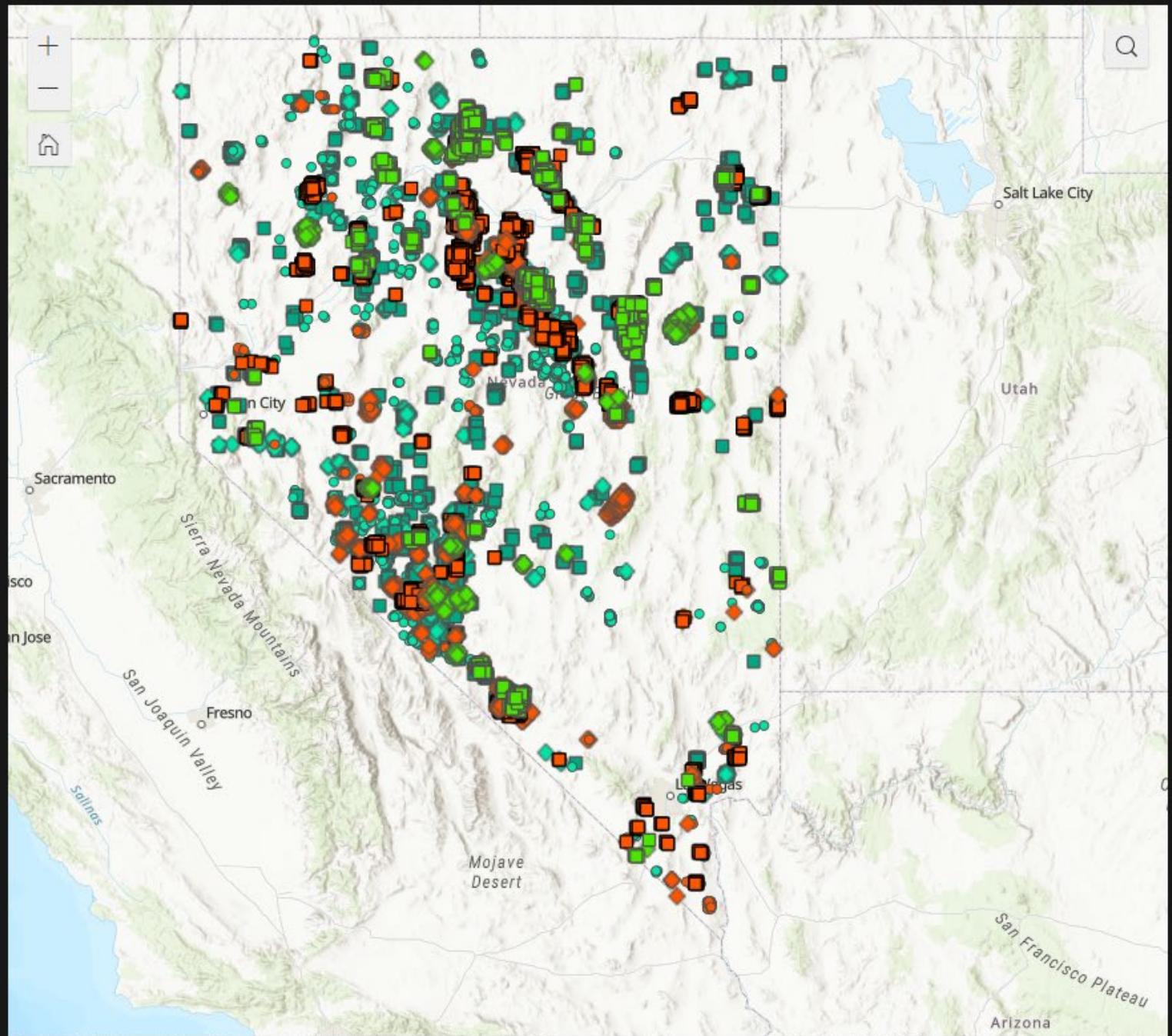
What's Next?

- Land Status
- Current Mining Claims
- Notices & Plans
- OGG Leases
- ROW's
- Sage Grouse

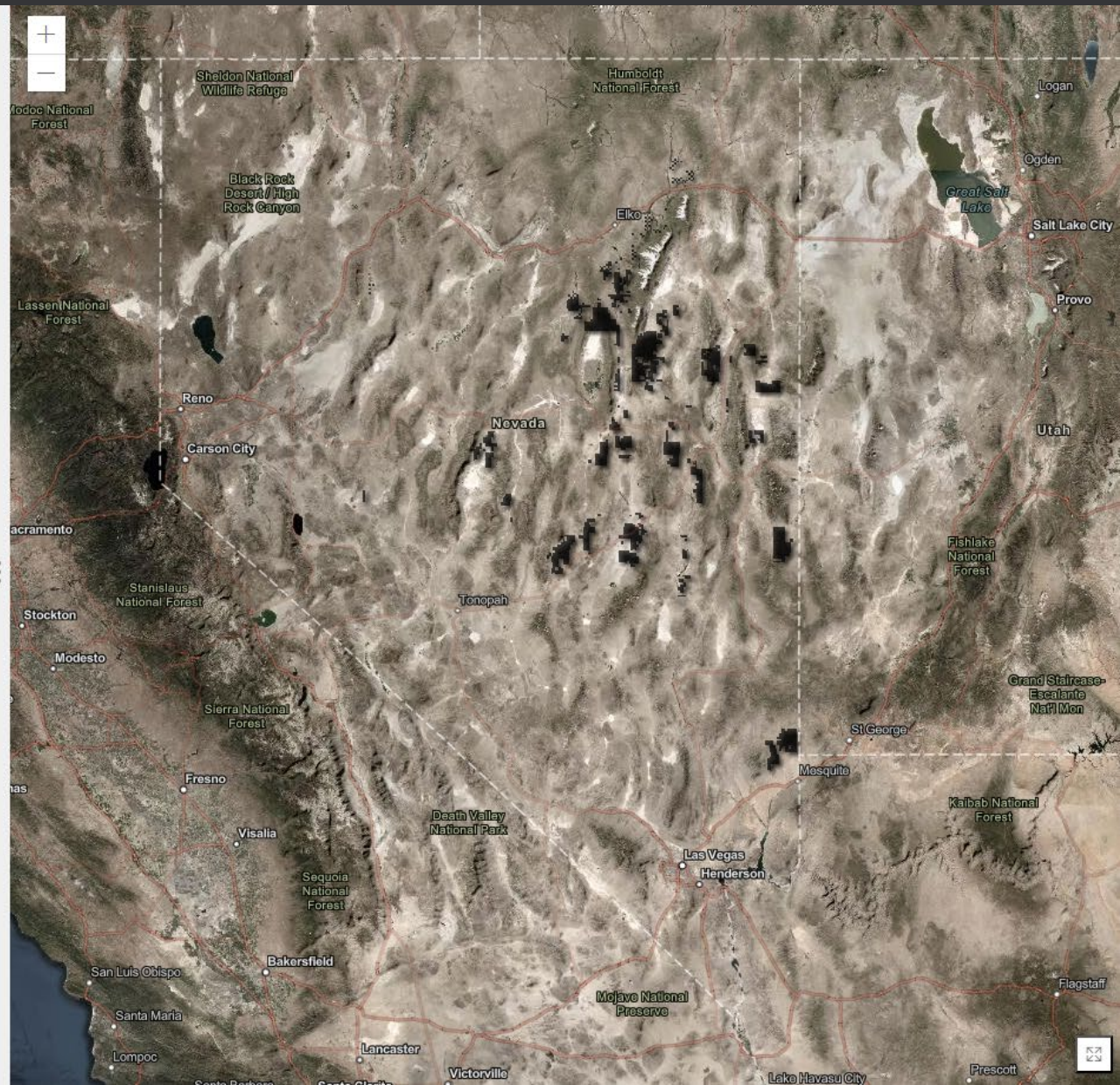
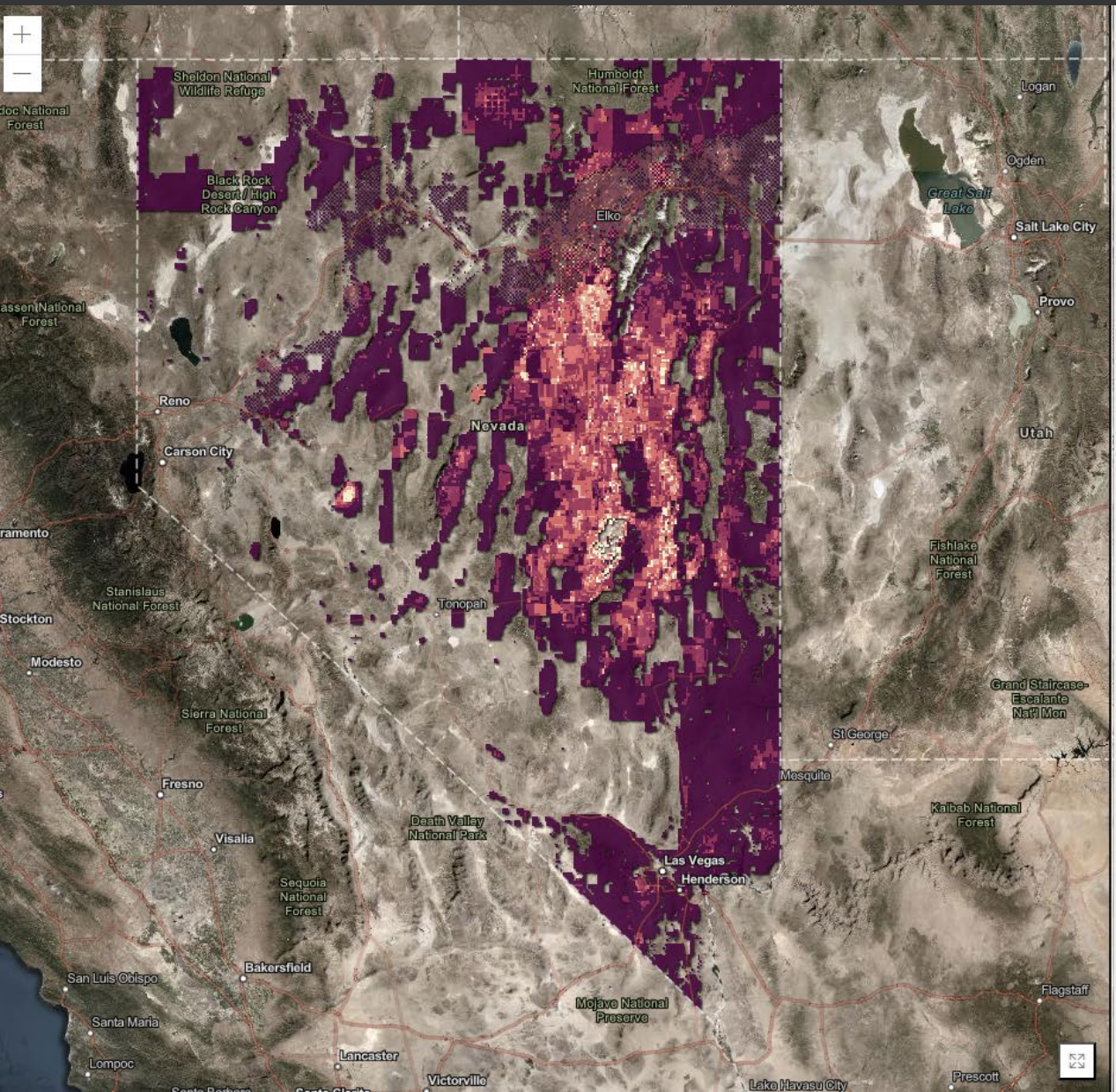


There is currently no added data.

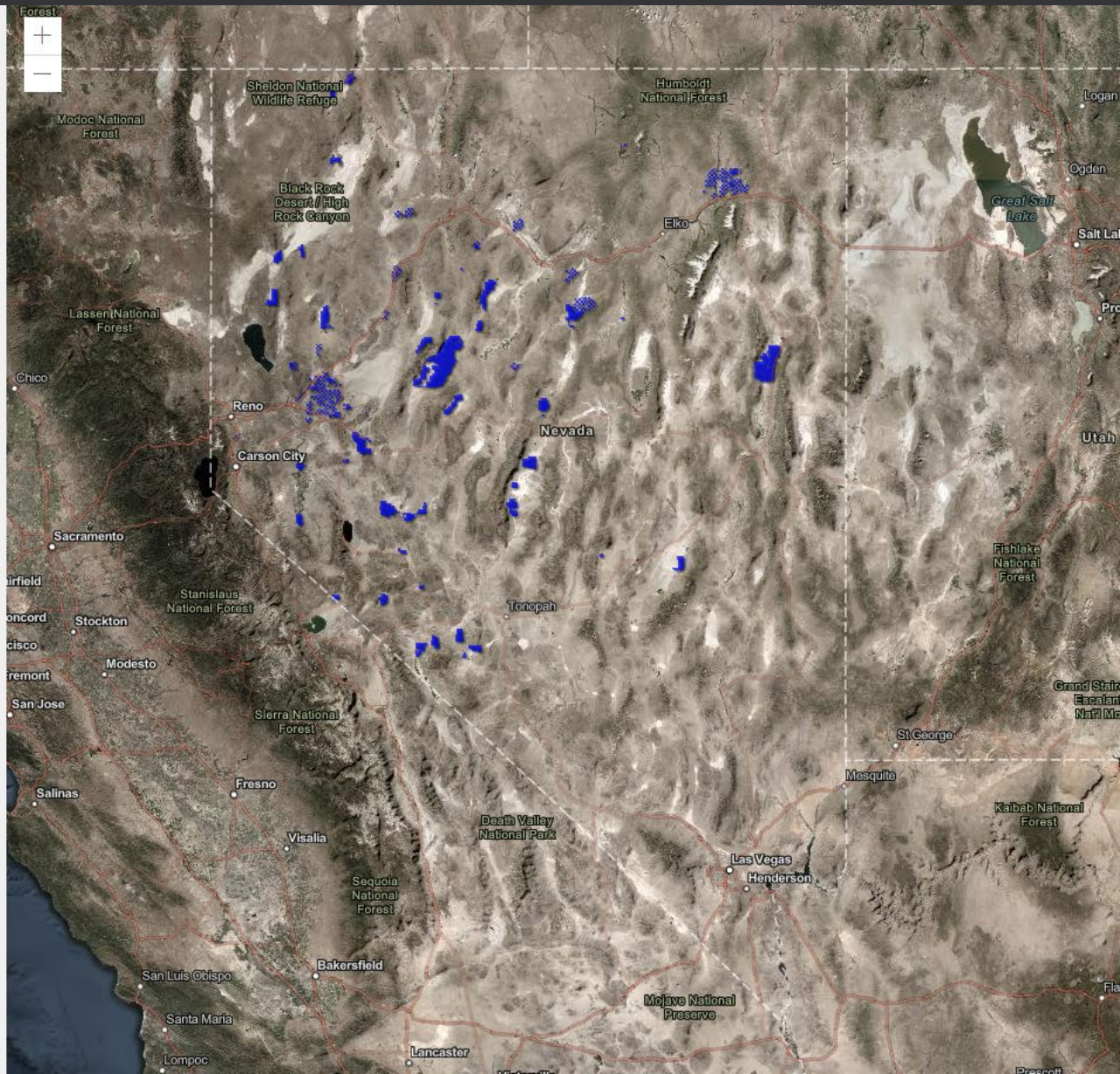
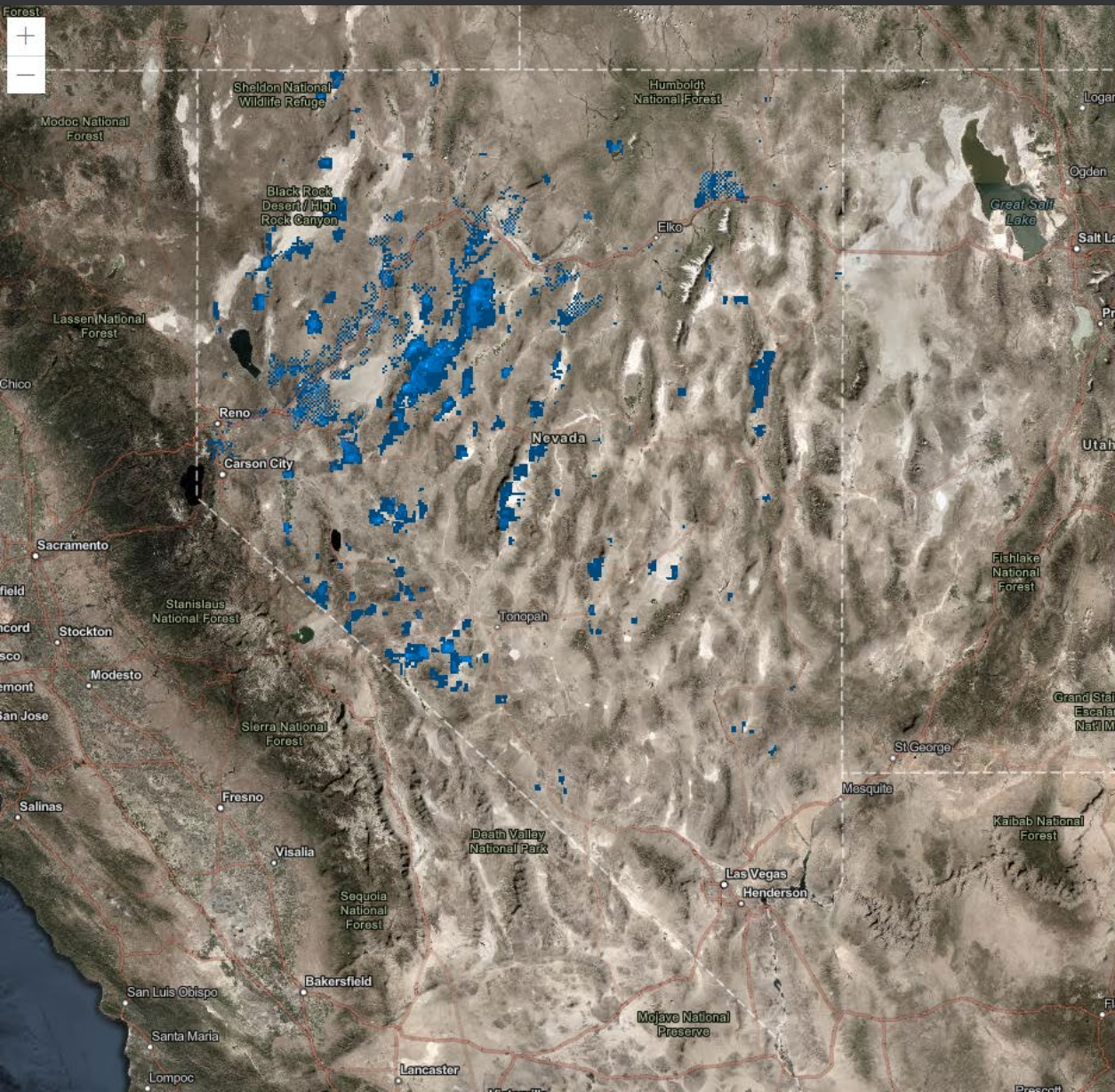
+ Click to add data



# Oil



# Geothermal





Thank You!

Questions?

Ideas?