



The Nevada Division of  
Minerals Open Data Site  
and the C.L.A.I.M.S. Hub:  
Utilities and Data for Land  
Research, Public  
Outreach/Education, and  
Land Withdrawal Analysis  
for Nevada and Beyond

Lucia Patterson M.S. C.P.G. R.L.  
(AKA the Nevada Data Miner),  
Nevada Division of Minerals



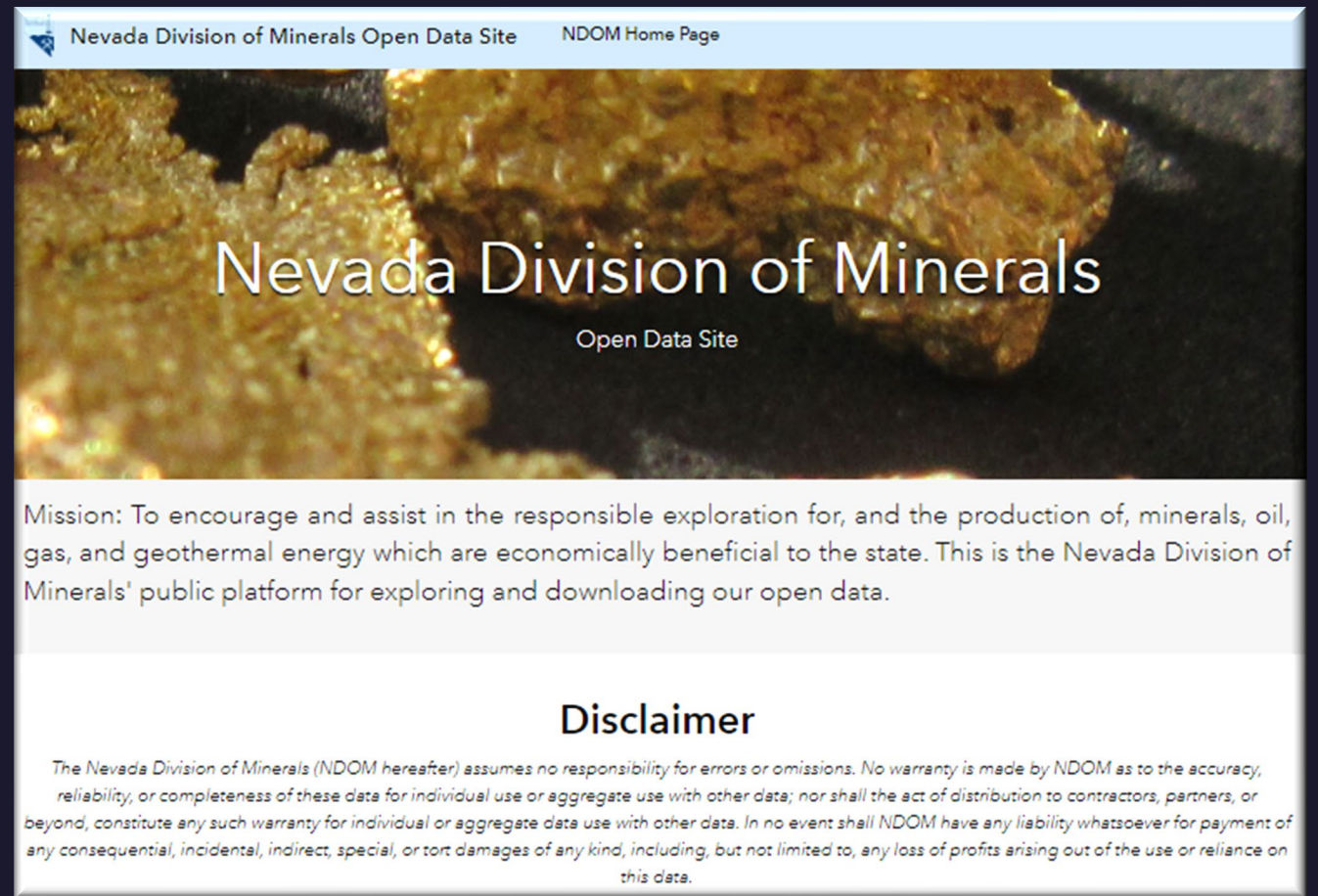
# Overview

- ⌘ Introduce the Open Data/Hub Sites
- ⌘ Web maps for basic land research
- ⌘ Mineral Rights Story Map
- ⌘ Nevada Mineral Explorer
- ⌘ Multiple Use Conflict Analysis Experience



# The Nevada Division of Minerals Open Data Site

- ✘ AML Program requires lots of land ownership research to contact owners/claimants, to let them know a dangerous condition exists, and to get the condition secured.
- ✘ NDOM strives to provide data on lands proposed for withdrawal from mineral entry in Nevada.
- ✘ As a result, we had several tools and data sets we used for land research.
- ✘ When open data sites were made available, we knew we could leverage the platform to assist the public by making the tools we had available to the public...so we staked a claim on an open data site in 2017.



Nevada Division of Minerals Open Data Site NDOM Home Page

## 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.

### Disclaimer


*The Nevada Division of Minerals (NDOM hereafter) assumes no responsibility for errors or omissions. No warranty is made by NDOM as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data; nor shall the act of distribution to contractors, partners, or beyond, constitute any such warranty for individual or aggregate data use with other data. In no event shall NDOM have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of the use or reliance on this data.*



**Mining Claims**

Active mining claims and other tools to assist in land research.


Explore



**Lithium Claims**

Inferred Li placer claims & DMRE data.


Explore



**Plan, Notice, & Mining Claim Data**

Historic and current plan, notice, and mining claim data.

Explore



**Claims Commodities, Occurrences &...**

Nevada commodities, occurrences & production data.

Explore



**Nevada Public Land Issues**

Nevada Public Land Issues and withdrawal statistics.


Explore



**Mining in Nevada**

Mining impacts in Nevada, employment and claims per...

Explore



**50,000 Watts of Power!!!**

Oil, Gas, and geothermal drilling, lease and production...

Explore



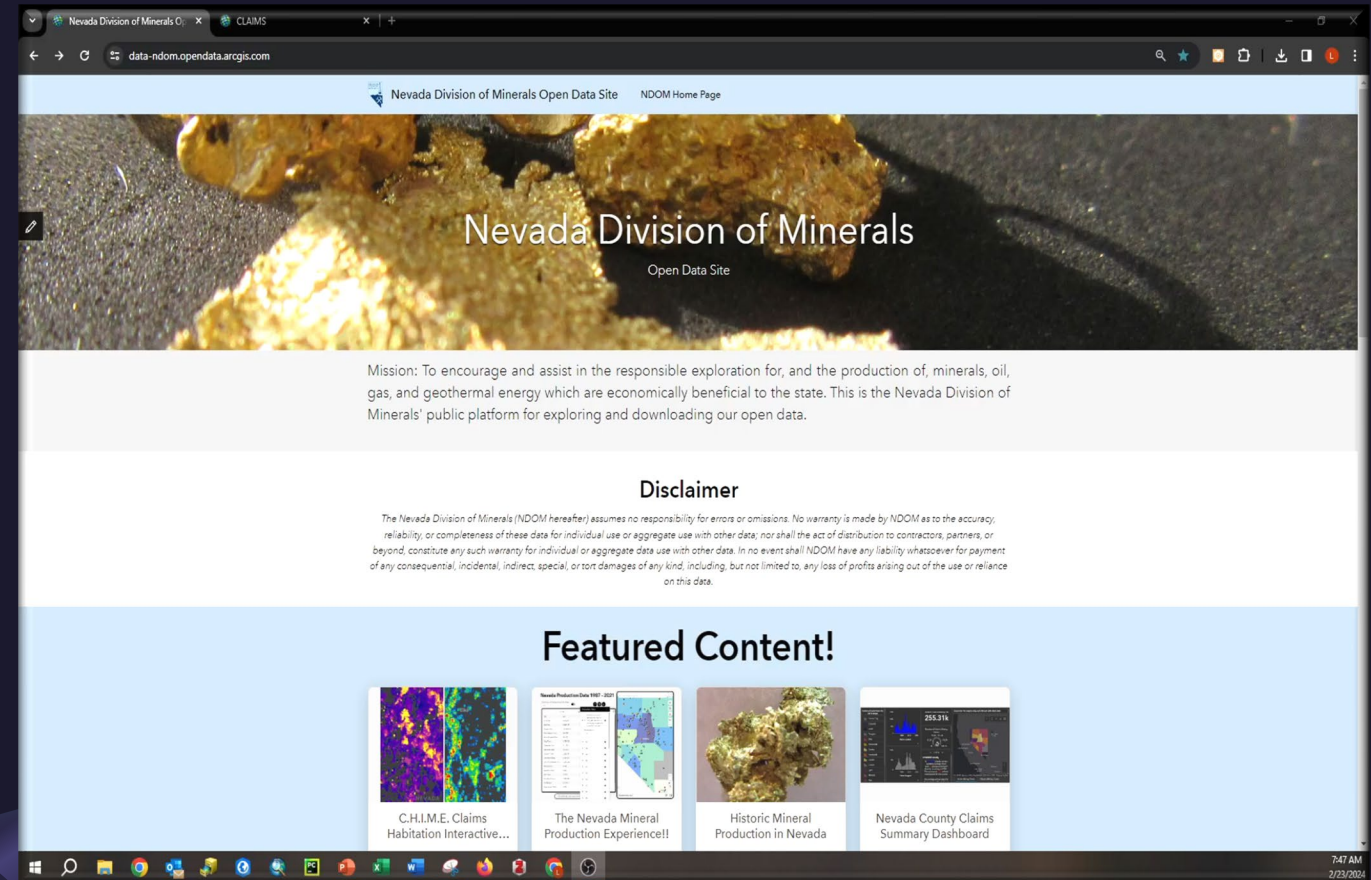
**Education And Outreach**

Geology-based educational videos, activities, story maps,...

Explore

Our open data site provides Nevada Centric free downloadable data for:

- ✂ Current & Historic mining claims
- ✂ Current & Historic plans & notices
- ✂ Dissolved mineral resources
- ✂ Oil/Gas & Geothermal Leases
- ✂ Mineral production (Metals, Nonmetals, Oil, Gas & Geothermal)
- ✂ Mineral occurrences
- ✂ Public land Issues
- ✂ Solar, Wind & Electrical Transmission ROW's
- ✂ Education and outreach videos and materials





## Nevada Mining and Land Withdrawal History...

Overview of Nevada's mining and land withdrawal history wit...

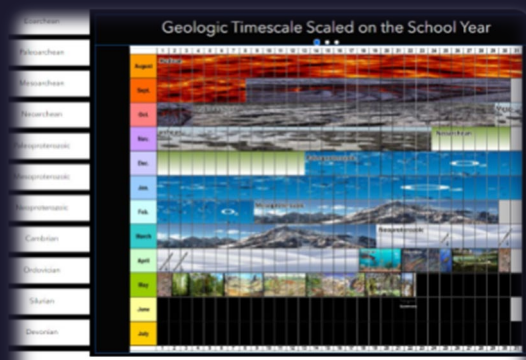
Explore



## Historic Mineral Production in Nevada

To spatially display historic mineral production in Nevada.

Explore

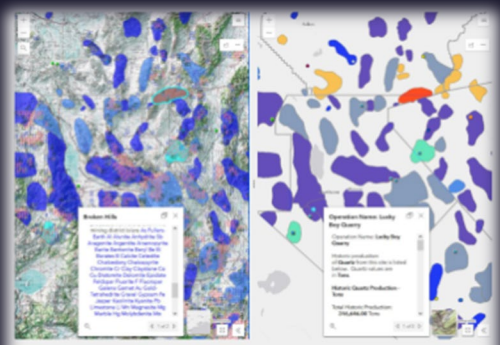


## The Geologic Time Application

A new experience to learn about geologic time and evolution....

Explore

Many customized applications data exploration and analysis



## Critical Minerals Comparative Map

Compare current and historic plan, notice and claim...

Explore



## OGG Production and Well Data Web Application

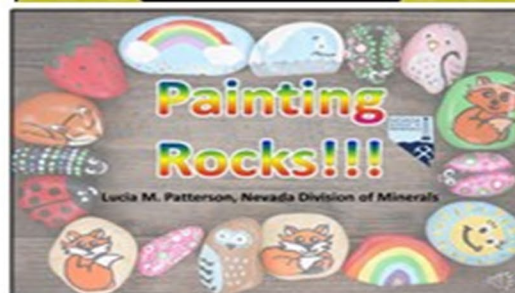
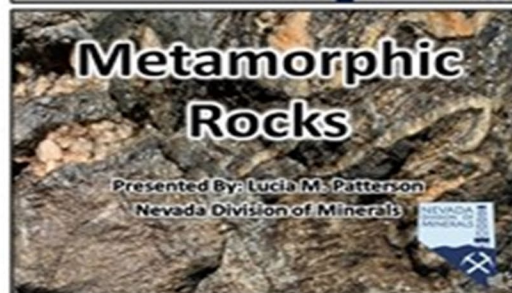
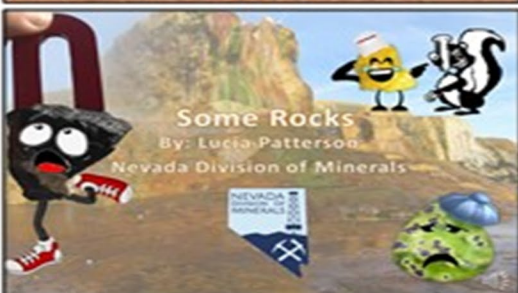
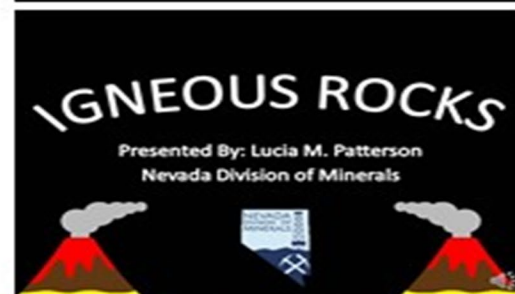
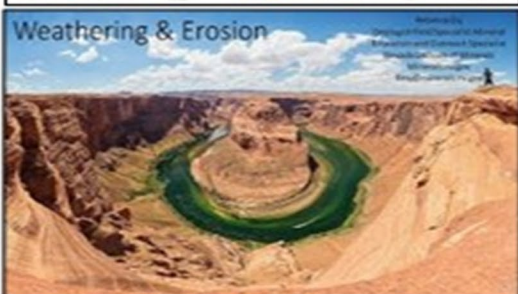
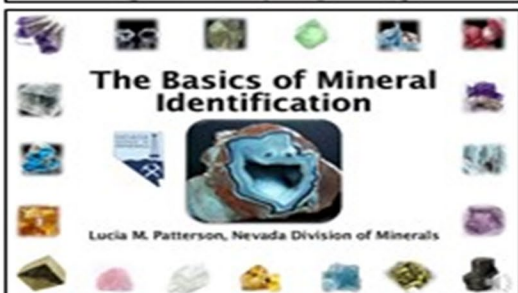
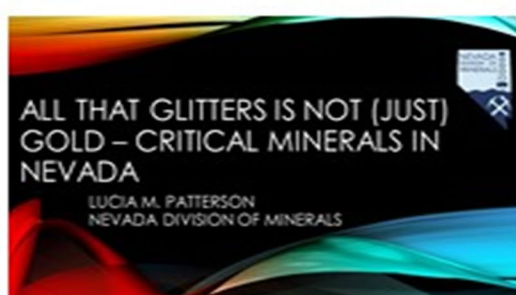
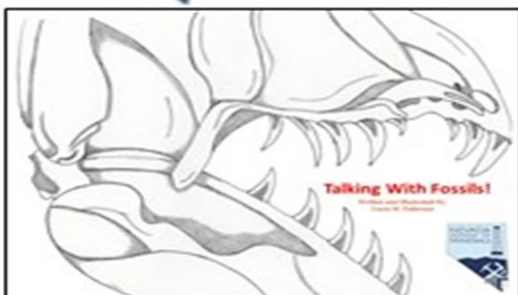
View and interact with oil, gas, and geothermal production, d...

Explore





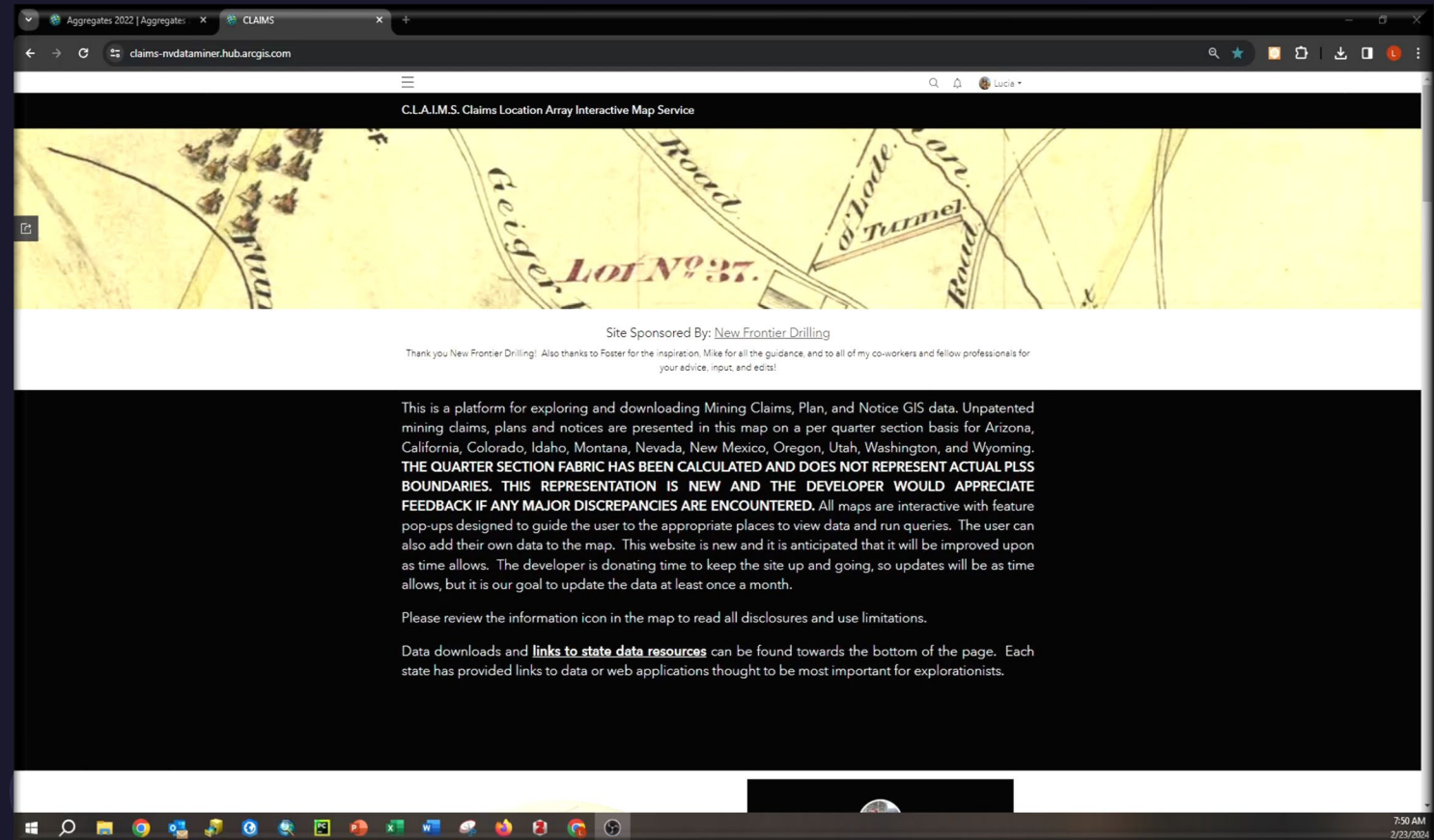
# Distance Learning Videos



# The C.L.A.I.M.S. Hub Site – The NV Data Miner



- ✂ This is a platform for exploring and downloading free Mining Claims, Plan, and Notice GIS data.
- ✂ Unpatented mining claims, plans and notices are presented in this map on a per quarter-section or 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.



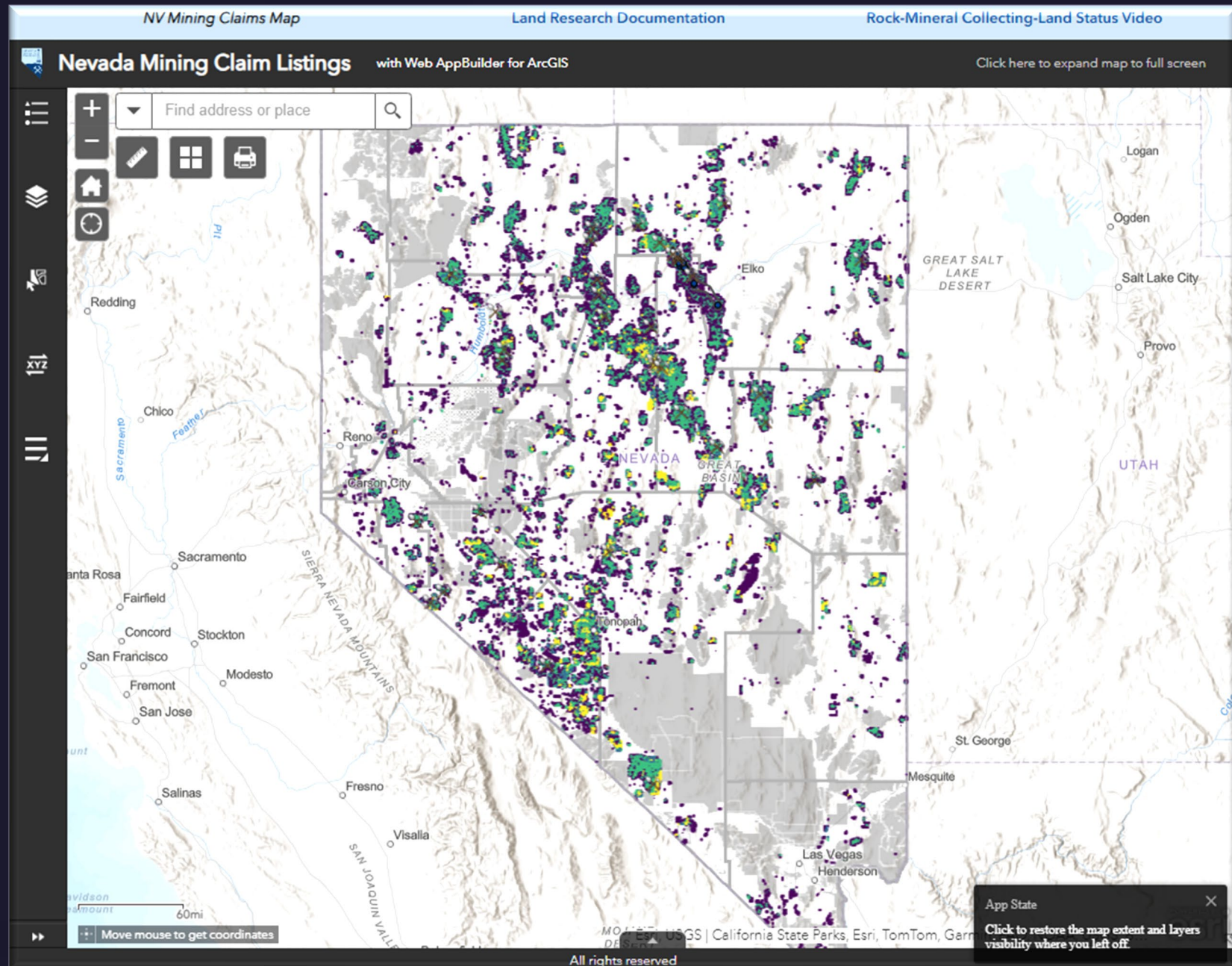


# Land Research

A Quick Tour



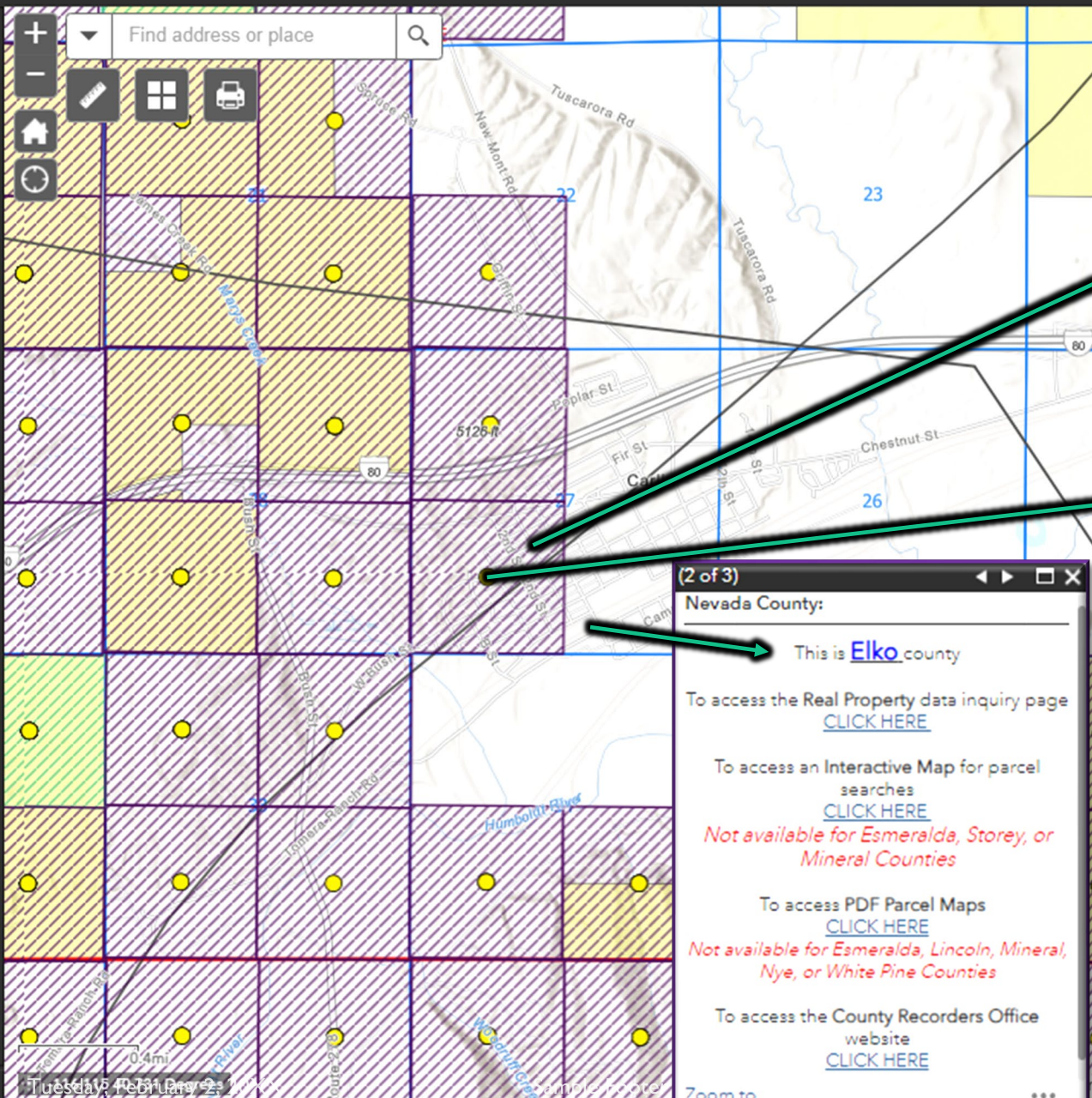
Free-User  
friendly *(or friendlier)*  
no special  
software  
needed



# Nevada Mining Claim Listings

with Web AppBuilder for ArcGIS

[Click here to expand map to full screen](#)



(1 of 3)  
Nevada Active, Filed, & Submitted Claims Per Section

This quarter section has **1** active mining claim(s) filing(s)

This is section number **027** which is located in Township **0330N** and Range **0520E**. The Meridian is 21

If you would like to find out more specific information about the **ACTIVE** claim(s) in this section:

Select the circles in the middle of the section and scroll through the pop-up that will appear or...

Search the BLM's MLRS database by [CLICKING HERE](#)

Admin State = **NV**  
Disposition = **Active**

Enter the following into the "Meridian Township Range Section" box  
**21 0330N 0520E 027**

This can be copied and pasted into MLRS

Then Select OK

To search the General Land office Records for Master Title Plats and Historical Indices  
[CLICK HERE](#)

(2 of 3)  
Claim Name: MAG 210

This claim is located in the **SW** portion of Township **0330N**, Range **0520E**, Section **027**

The **MAG 210** claim is a **LODE CLAIM** claim that was located on **1992-01-08**

The New (MLRS) **Serial Number** is **NV101610021** and the New **Lead File Number** is **NV101610021**

**NOTE: If the claim has a legacy lead file number USE IT to look up groups of claims both online or when requesting files at the BLM state offices. The new MLRS lead file numbers may not be correct!!! The BLM is working on fixing the issue.**

The Legacy (LR2000) Serial Number is: **NMC645051**

The Legacy Lead File Number is: **NMC644843**

The claim disposition was **ACTIVE** on the date the data was pulled from MLRS.

For More Information on the **individual claim or group of claims this claim is associated with** you can search the BLM's MLRS database by [CLICKING HERE](#)

Then... [To View Individual Claim Data:](#)

Copy this Serial Number **NV101610021** and paste it into the Serial Number box and press apply

[To view the group of claims this claim is associated with:](#)

Copy the Lead Serial Number **NV101610021** and paste it into the Serial Number box, set "Lead File Number" to **YES** and press apply.

The Claimant is: **NEVADA GOLD MINES LLC**

For More information on the claimant you can search the BLM's MLRS database by [CLICKING HERE](#)

Admin State = **NV**

Claimant Name = **NEVADA GOLD MINES LLC HAS TO BE ALL CAPS**

(2 of 3)  
Nevada County:

This is **Elko** county

To access the Real Property data inquiry page  
[CLICK HERE](#)

To access an Interactive Map for parcel searches  
[CLICK HERE](#)

*Not available for Esmeralda, Storey, or Mineral Counties*

To access PDF Parcel Maps  
[CLICK HERE](#)

*Not available for Esmeralda, Lincoln, Mineral, Nye, or White Pine Counties*


To access the County Recorders Office website  
[CLICK HERE](#)

[Zoom to](#)

# Readily available How- to documentation

NV Mining Claims Map Land Research Documentation Rock-Mineral Collecting-Land Status Video

PowerPoint Presentation 1 / 121 73%



1


Table of Contents

2

Table of Contents

3

4



4


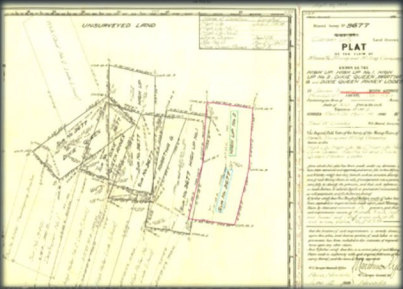


Table of Contents

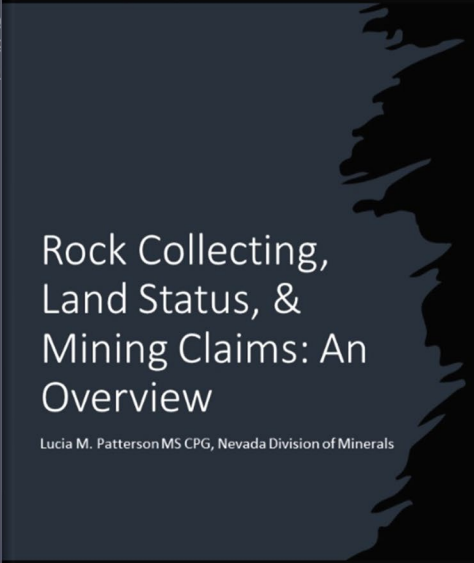
- What You Will Need - 4
  - Link to NDOM Open Data Site
  - Link to Nevada Mining Claims Listing
- Understanding PLSS or Township Range
- Adding Data to the Online Map - 6



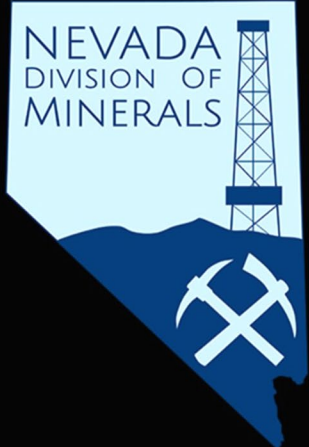
Land Research How-To

Lucia M. Patterson  
Nevada Division of Minerals

NV Mining Claims Map Land Research Documentation Rock-Mineral Collecting-Land Status Video



NEVADA  
DIVISION OF  
MINERALS



Rock Collecting,  
Land Status, &  
Mining Claims: An  
Overview

Lucia M. Patterson MS CPG, Nevada Division of Minerals



# Mineral Rights Story Map

A Quick Tour



# Mineral Rights Story Map

# Mineral Rights - An Overview

Please review this story map in its entirety before you click on Step 2 or topics discussed in steps 2-5 will not make sense.

Lucia Patterson, Nevada Division of Minerals  
July 20, 2023

### Mineral Rights Explorer

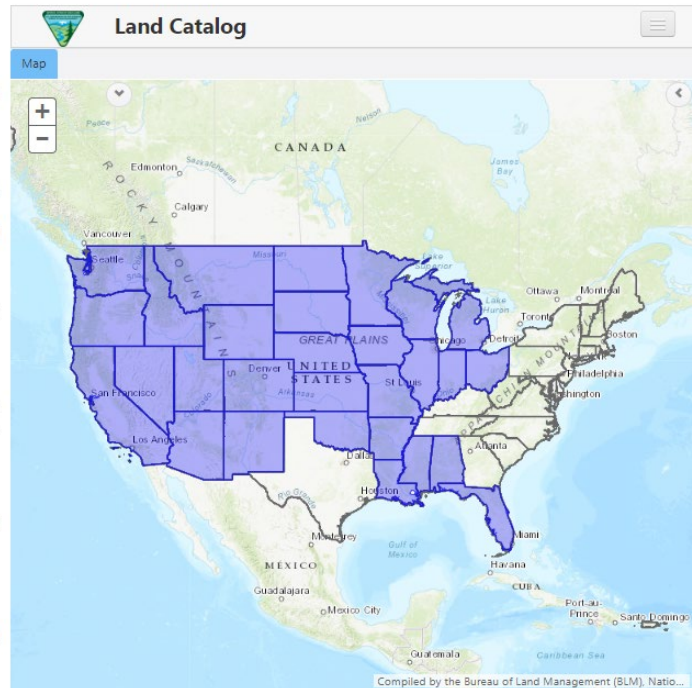
This is the landing page for the BLM's Land Catalog. This is a very helpful tool when doing land research. The [General Land Office \(GLO\) Reference Section](#) is full of information and is worth reviewing to understand this platform.

In the tool bar located at the top of the right hand side of the map, select the state and start to enter the PLSS description. Type the PLSS description in the following format, a list will again appear and begin to populate as you type.  
T15N R48E Sec 23 = 150N 480E  
Be aware: partial townships aren't obvious, users may only see two listings for the same township.

Select the section from the drop down after you have selected the township. The map will automatically pan to the section.

You will notice at the top of the screen a ribbon will expand displaying:  
Maps, Patents, Survey, LSR, CDI, Case Recordation, and Status (These are defined below).

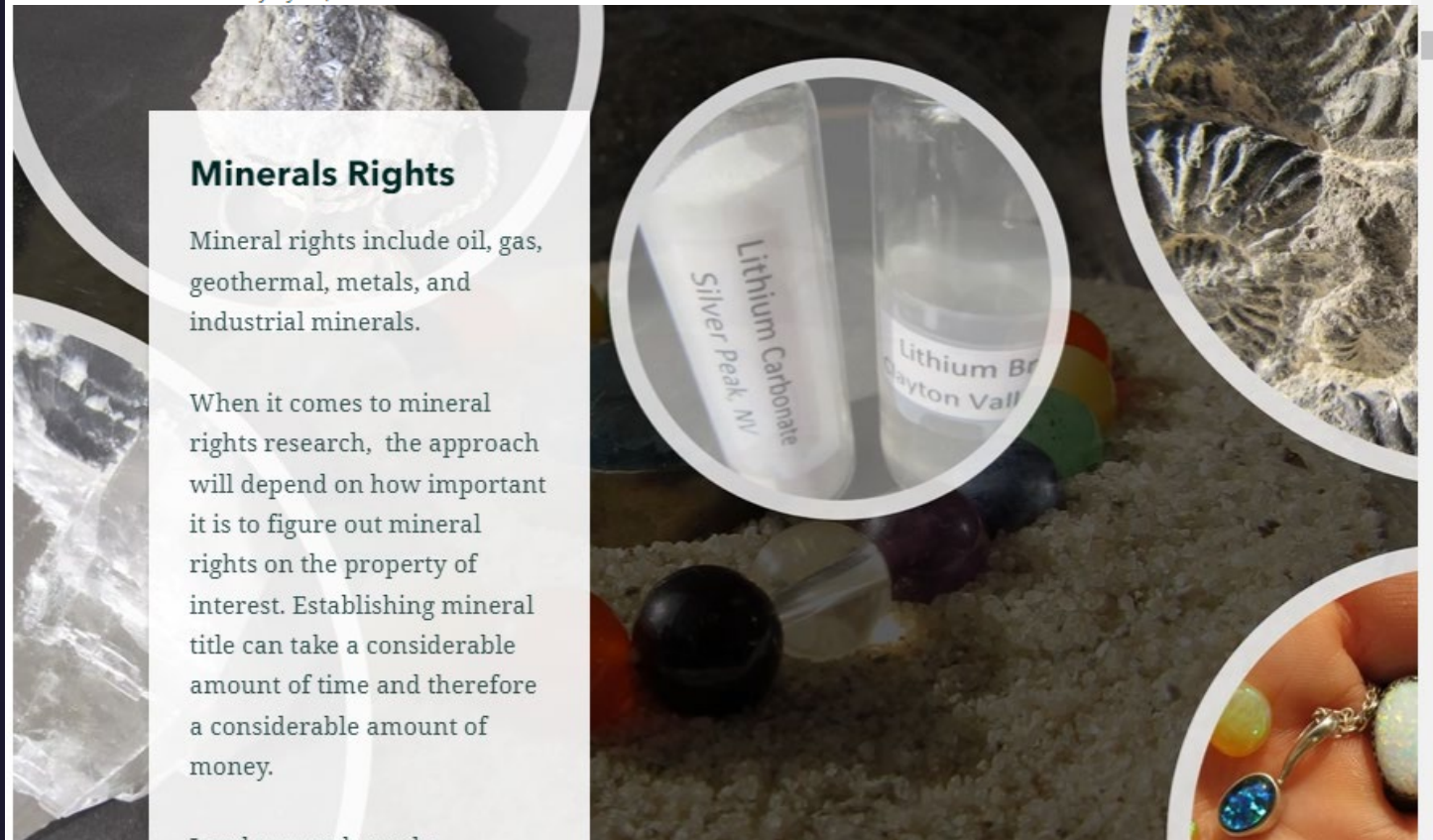
Click on the patents tab. In the Accession column find and click on the number associated with your parcel (the Serial/Patent/Order number you obtained from the MTP).



## Minerals Rights

Mineral rights include oil, gas, geothermal, metals, and industrial minerals.

When it comes to mineral rights research, the approach will depend on how important it is to figure out mineral rights on the property of interest. Establishing mineral title can take a considerable amount of time and therefore a considerable amount of money.






# Nevada Mineral Explorer

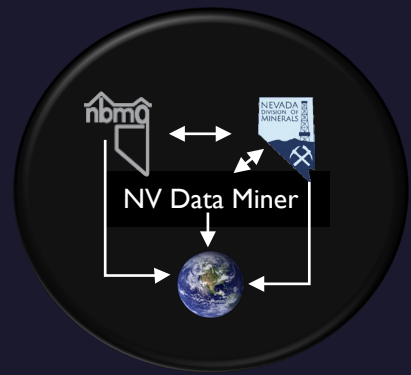
A Quick Tour

# Groups/Sharing

NDOM (Lucia) ↔ NV Data Miner (Lucia)



zoom



The ability to share data between organizations and individuals makes the online platform really powerful!

With a bit of collaboration layers can be configured and utilized in web maps/apps owned by individuals or organizations.



# Groups/Sharing – Nevada Mineral Explorer

**Nevada Mineral Explorer** | FAQ | Nevada Bureau of Mines and Geology | Nevada Division of Minerals

Find address or place

**Information**

## Nevada Mineral Explorer

This web application was developed as a tool for explorationists to identify and discover mineral resources throughout Nevada. Data in this web application are organized by category (upper right-hand side of map). Each category is indicated with a different symbol, which are outlined below.

[User's guide](#)  
[Video Presentation and Demo](#)  
[Presentation PDF](#)

To view different categories, click on the icon for category type

- Occurrences & Production** - active mines and energy producers, MRDS.
- Exploration & Development** - exploration plans, mining plans, and notices.
- Mineral Resources** - precious metals and other significant deposits.
- Geology** - geologic units, terranes and domains, geochron data, biostratigraphy, geologic map index.
- Geophysical** - CBA, isostatic gravity, magnetic anomaly.
- Geochemistry** - National Geochemical Database.
- Mining Claims** - mining claims (historical and current).
- Technical Reports** - 43-101 reports.
- Reference Data** - PLSS, land withdrawals (existing and proposed), land status, NAIP index, topographic map indices.

Each category features multiple layers from different sources that are used in analytical tools for the purpose of this application. These layers are used in analytical tools for the purpose of this application. These layers are used in analytical tools for the purpose of this application. These layers are used in analytical tools for the purpose of this application.

**Occurrences & Production**

**Layers**

- Active Mines and Energy Producers 2021 (NBMG)
- Active Mines and Energy Producers 2019 (NBMG)
- Historic Production (NDOM)
- Mineral Resources Data System (USGS, NBMG)
- USMIN Topo Mine Symbols (USGS)





# Multiple Use Conflicts

A Quick Tour



**General Information - PLEASE READ!**

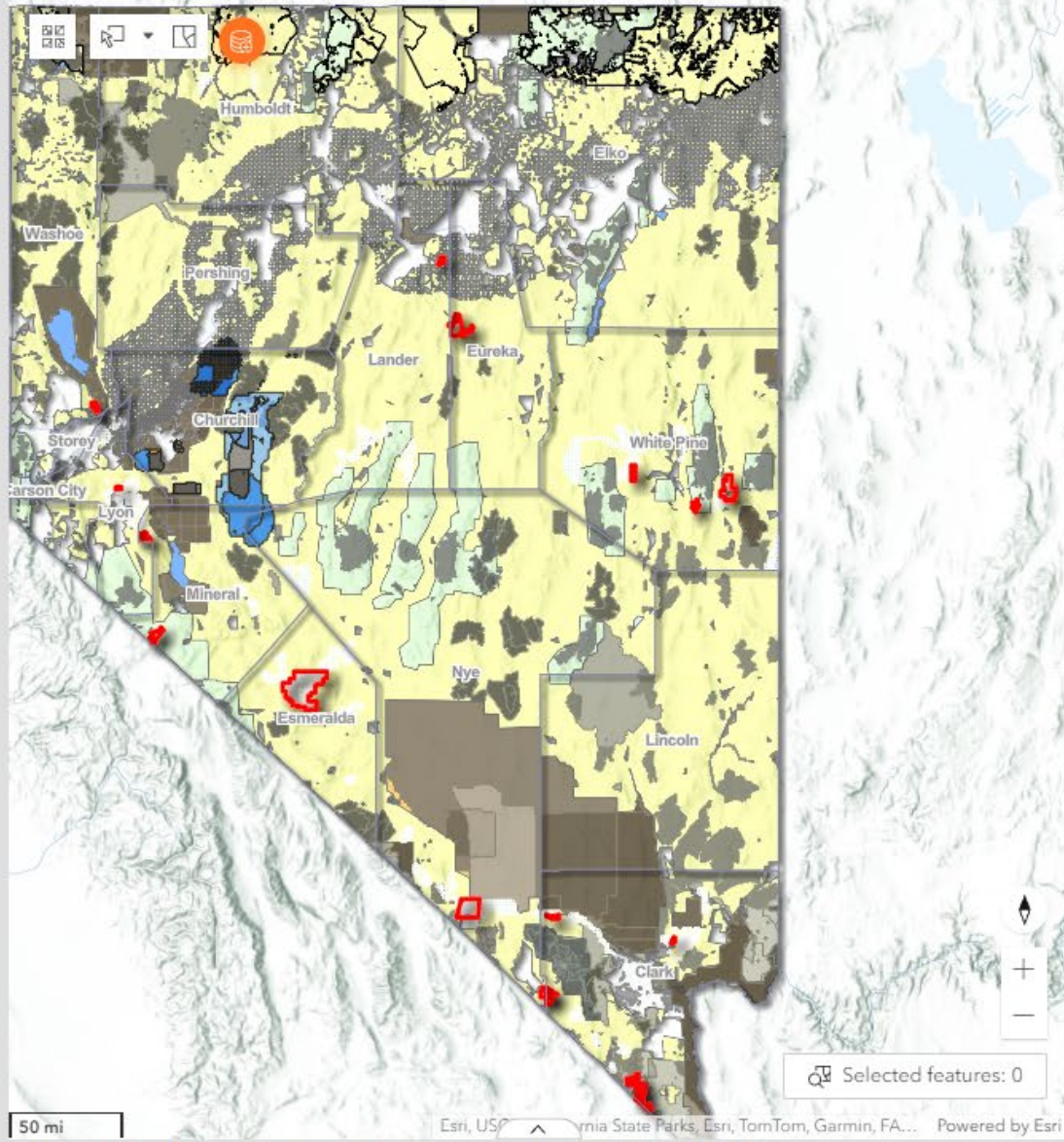
Claim data is presented on a per quarter section basis. If a claim falls in more than one quarter section it will have more than one listing. Therefore, counts and sums for areas selected/filtered will be **more than the actual value**.

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 **simply click on the map (The only way in mobile view) or 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



- Nevada Counties

---

- Power Transmission ROW Buffer January 18, 2024
- Land Use Proposals/Special Designations (Solar-Wind Projects - Land Withdrawals)

---

- Nevada Mining Claims

No legend

- Nevada BLM Notices and Plans

No legend

- Production of Minerals in Nevada 1987-Present
- \*Claims point listings with annual assessment/maintenance fee calculations (September 2023)

\*\*Claims per section

Instructions for importing GeoJSON files

[Click Here to view in full screen mode](#)

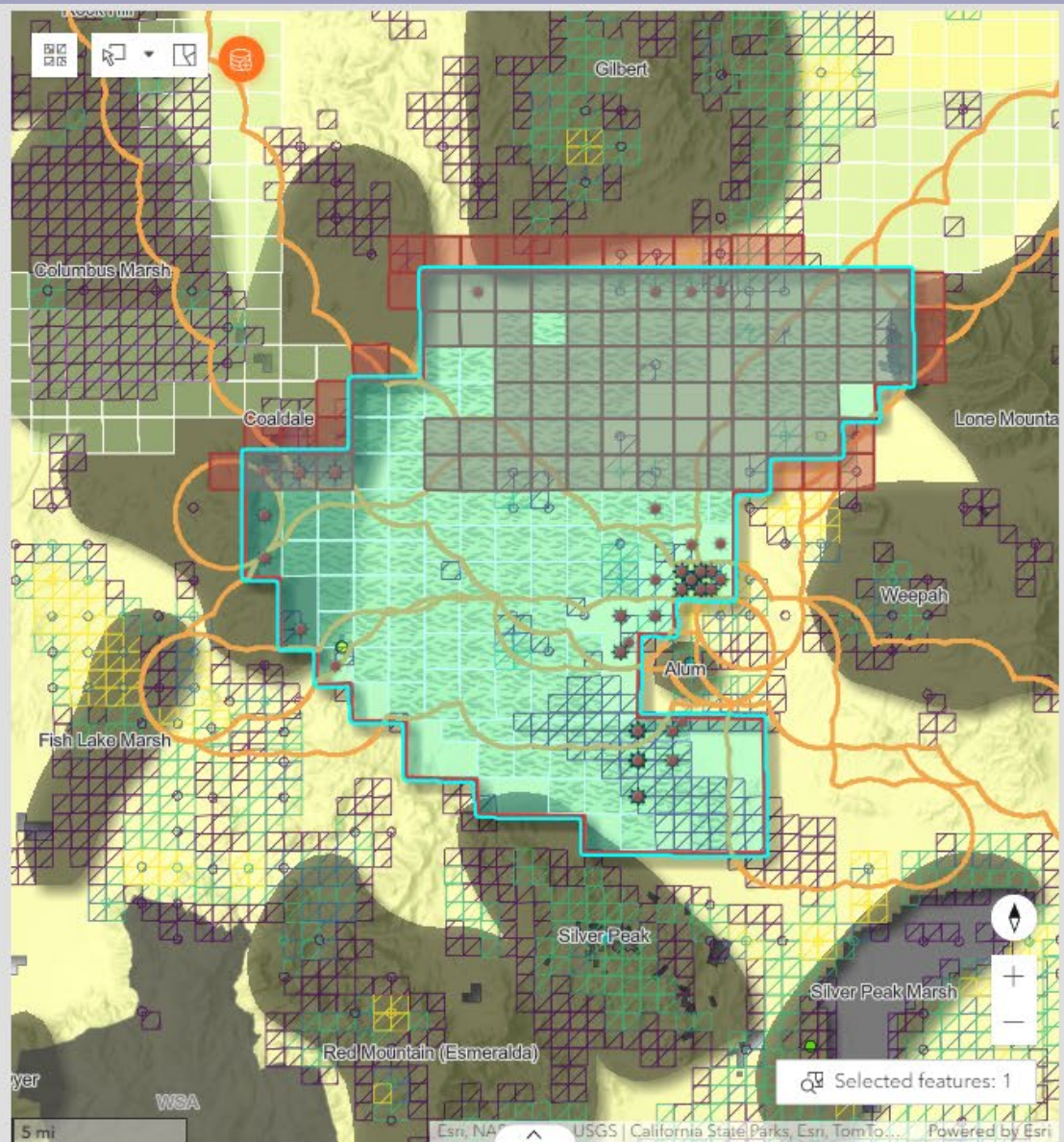
View Simplified Maps - Along with maps depicting some grazing and wildlife data

Active Mining Claims	Historic Mining Claims	Plans & Notices	OGG Leases	BLM ROW's
Land Status	Segregations	Sage Grouse	NDOW Big Game	ACEC's
View Attribute Table/Export Selected Data			Build Your Own Map!	

To suggest filter options or layers for this map or to submit proposal polygons please email the data source to [Impatterson@minerals.nv.gov](mailto:Impatterson@minerals.nv.gov)

General Overview Disclaimer Demo Video **Filter the Data** Map Layers >

- Nevada Active, Pending, Submitted, and Filed Mining Claims Listings Points >
- \*Claims point listings with annual assessment/maintenance fee calculations (Marc... >
- \*\*Claims per section density and annual assessment/maintenance fees paid sum a... >
- 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 >
- Authorized Oil and Gas Lease Points >
- NDOW Big Game Distributions >



- Nevada Counties
- Power Transmission ROW Buffer January 18, 2024
  - AUTHORIZED
  - PENDING
  - INTERIM
- Land Use Proposals/Special Designations (Solar-Wind Projects - Land Withdrawals)
- Nevada Mining Claims

**Nevada Active, Pending, Submitted, and Filed Mining Claims Listings Per Section**

Count

- 31 - 148
- 21 - 30
- 11 - 20
- 1 - 10

*You must filter the appropriate layer in order for these values to populate. The asterixis correspond to the layer you must filter from above. The sums include claims of all dispositions not just "Active" and are max values.*

\*Sum of claim fees paid for selected CLAIM LISTINGS: \$ 2,546,765

\*\*Average fees paid per section for SELECTED SECTIONS: \$ 539.052

\*\*Sum of claim listings for SELECTED SECTIONS: 8,200

**View Simplified Maps - Along with maps depicting some grazing and wildlife data**

- Active Mining Claims
- Historic Mining Claims
- Plans & Notices
- OGG Leases
- BLM ROW's
- Land Status
- Segregations
- Sage Grouse
- NDOW Big Game
- ACEC's
- View Attribute Table/Export Selected Data
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← Results

Features displayed: 1 - 100 / 1202

- ▶ Claim Name: AL 1
- ▶ Claim Name: AL 1
- ▶ Claim Name: AL 10
- ▶ Claim Name: AL 10
- ▶ Claim Name: AL 10
- ▶ Claim Name: AL 10
- ▶ Claim Name: AL 11
- ▶ Claim Name: AL 11
- ▶ Claim Name: AL 12

< 1 2 ... 13 > 100 /page ▾

Loaded (100)

- Zoom to
- View in table
- Pan to
- Show on map
- Export >

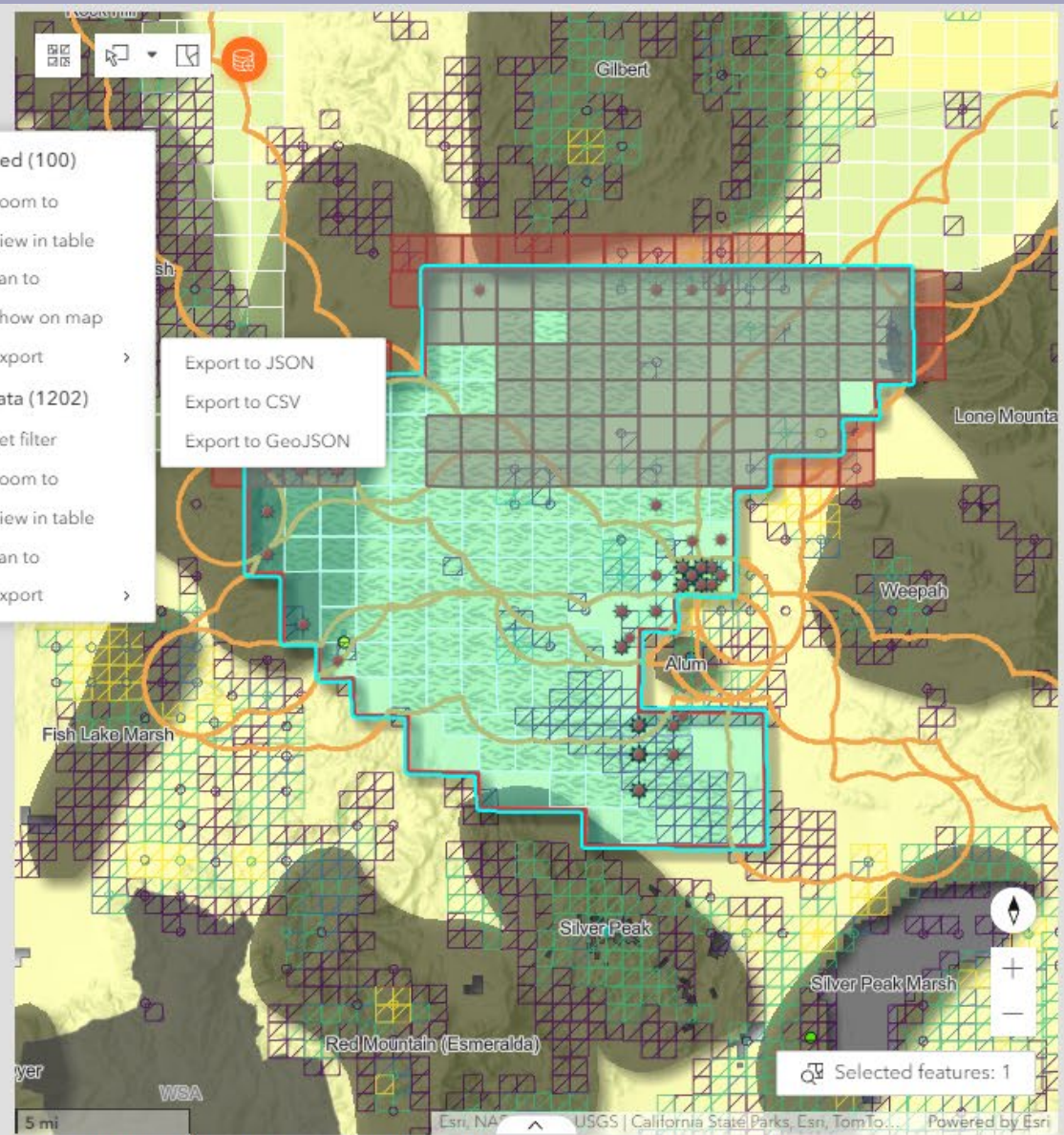
All data (1202)

- Set filter
- Zoom to
- View in table
- Pan to
- Export >

Export to JSON

Export to CSV

Export to GeoJSON



Nevada Counties

---

Power Transmission ROW Buffer January 18, 2024

- AUTHORIZED
- PENDING
- INTERIM

---

Land Use Proposals/Special Designations (Solar-Wind Projects - Land Withdrawals)

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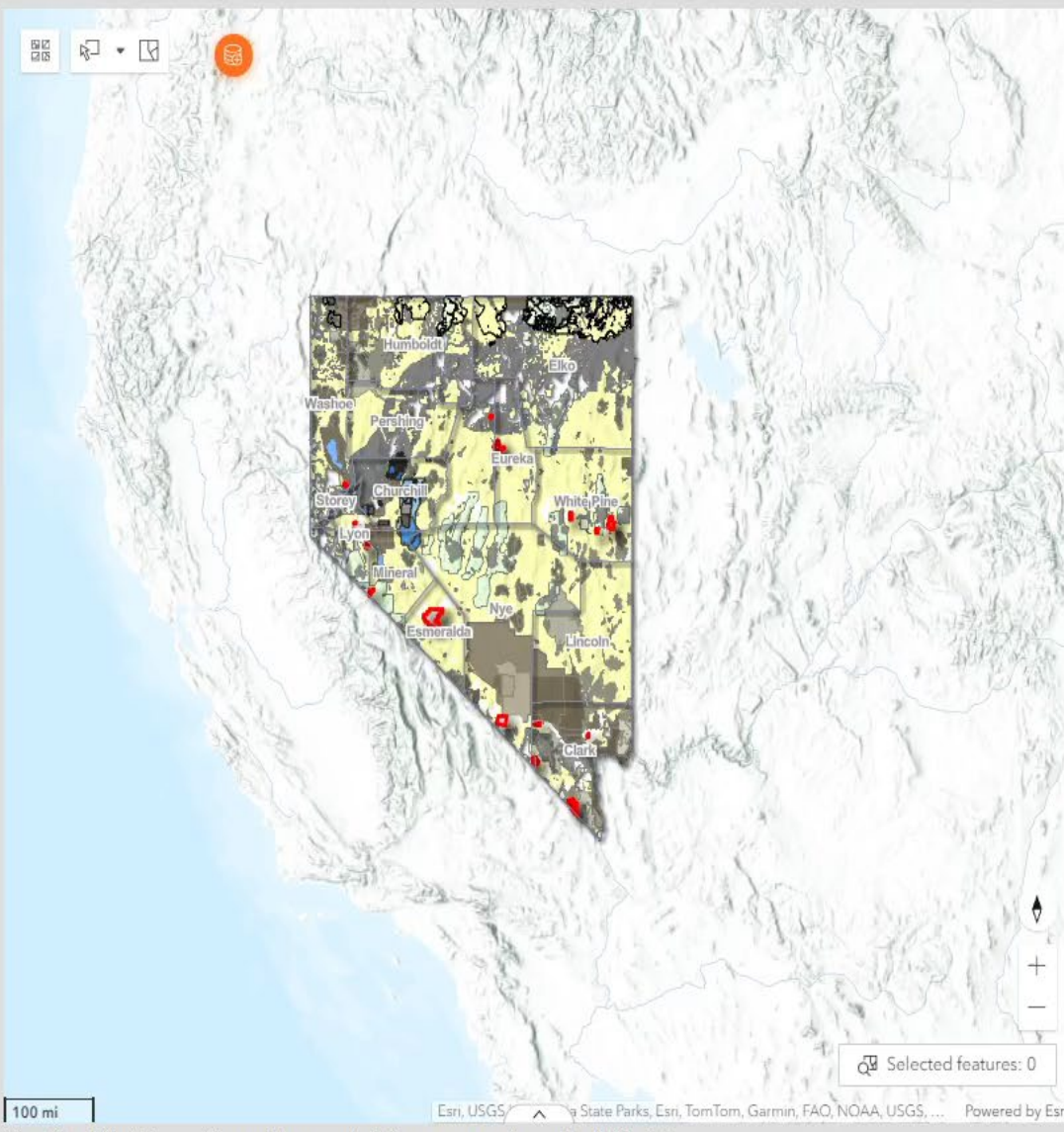
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- MI RS Mineral/Land Segregations

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Land Status	Segregations	Sage Grouse	NDOW Big Game	ACEC's
View Attribute Table/Export Selected Data				Build Your Own Map!



# Summary

This is what there is so far! Technology coupled with the creative ideas from the wonderful people I work and collaborate with make it easy to say...who knows what lies down the road ahead. The sky is the limit!

# Thank You

Lucia Patterson – NDOM

[lpatterson@minerals.nv.gov](mailto:lpatterson@minerals.nv.gov)

<https://data-ndom.opendata.arcgis.com/>

