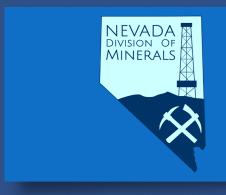
# 2023/2024 Nevada State of the State





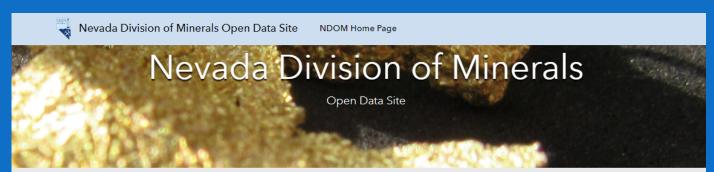
Rob Ghiglieri, Administrator Nevada Mineral Processors, SME August 22, 2024

# Nevada Division of Minerals

### NDOMDATA.COM

#### Free and Downloadable

- Mining Claims
- Active and Historic Notices & Plans
- Production Statistics
- Land Resource Issues
  - Sage Grouse
  - Solar
  - · Right of Ways
  - Withdrawals
- Oil & Gas
- Geothermal
- Lithium
- And Much More



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.

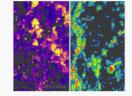
#### **Featured Content!**



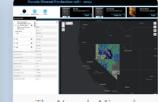
Sage-Grouse Alternative <u>Viewer</u>



2023/2024 Utility-Scale Solar Energy...



C.H.I.M.E. Claims
Habitation Interactive...

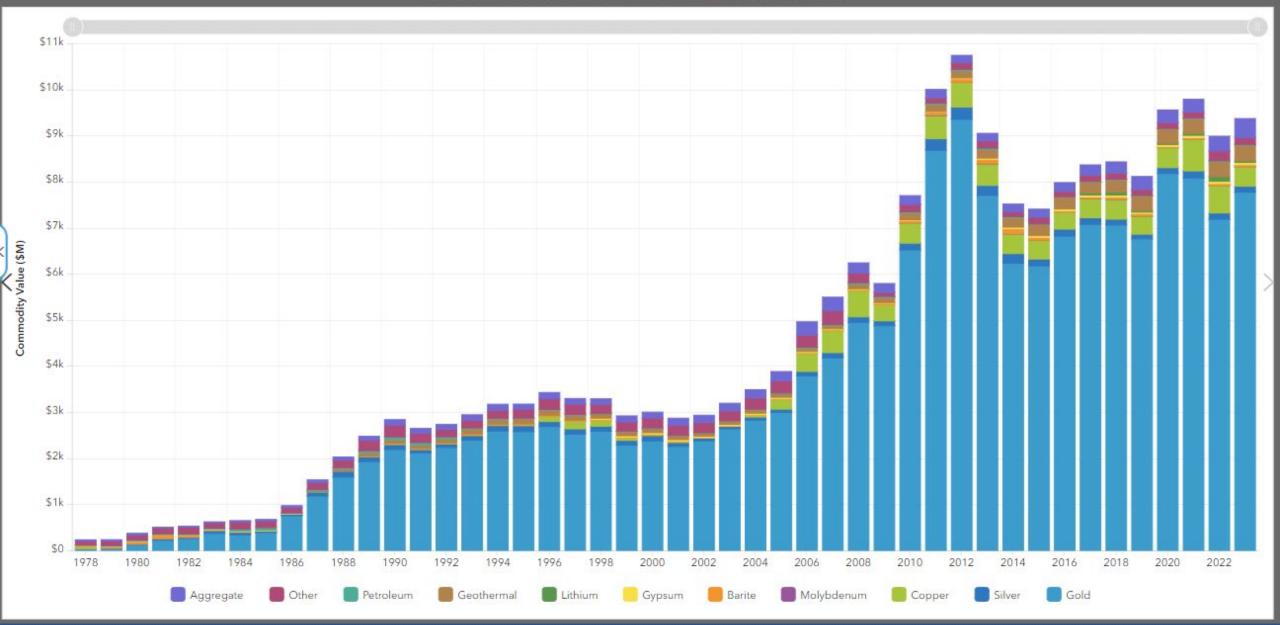


The Nevada Mineral Production Experience!!

2023 Commodity Values are Subject to Change (but shouldn't change too much)

Gold, Silver, Copper, and Moly values calculated from production amounts reported to NDOM\*Average Monthly Value for Year.

Nonmetal values derived from the Nevada Department of Taxation



### Nevada Mining Summary-2023

- NV produced 73% of U.S. Gold
- NV ranked 5<sup>th</sup> in world (behind China, Australia, Russia, and Canada)
- #2 mining jurisdiction based on the Investment Attractiveness Index (Fraser Institute, 2023)
- Continued interest in exploration for and production of critical minerals
- Employed >14,500 people with average yearly pay \$113,000

#### **Summary of 2023 Nevada Mineral Commodity Production**

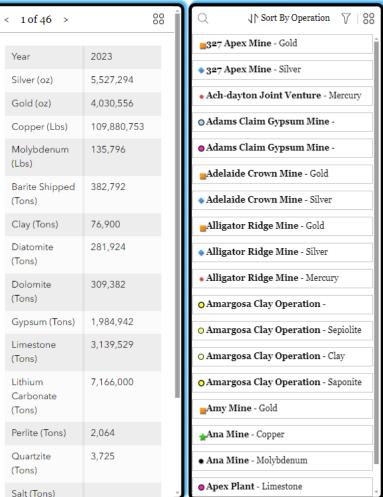
			YOY		
	Production		Change		YOY Value
Commodity	Amount	Unit	(%)	Value (\$)	Change (%)
Gold	4,030,556	ounces	-0.4%	\$7,790,419,859	8.2%
Silver	5,527,294	ounces	1.0%	\$130,603,988	8.7%
Barite (shipped from mills)	382,792	tons	-15.6%	\$40,835,574	13.8%
Copper	109,880,753	pounds	-22.5%	\$425,334,989	-16.2%
Diatomite	281,924	tons	-13.9%	\$58,797,196	-2.3%
Dolomite	59,382	tons	17.6%	\$5,678,533	23.3%
Gypsum	1,984,942	tons	-24.8%	\$47,345,465	-2.8%
Limestone (Incl. Lhoist Dolomite)	3,389,529	tons	-15.4%	\$35,081,882	12.1%
Lithium compounds (shipped)	7,166,000	pounds	-13.7%	\$172,197,316	65.2%
Magnesium compounds (shipped)	113,387	tons	-7.4%	\$9,816,903	4.4%
Molybdenite	135,796	pounds	-50.7%	\$2,512,226	30.3%
Perlite	2,064	tons	152.0%	\$132,600	61.9%
Salt (shipped)	19,626	tons	9.0%	\$1,138,040	-25.8%
Silica sand (mined)	752,158	tons	-2.5%	\$22,749,841	-2.4%
Specialty clays	99,592	tons	-7.8%	\$14,400,713	-4.3%
		megawatt			
Geothermal energy (sold)	4,376,769	hours	10.4%	\$341,604,265	5.9%
Oil (sold)	203,076	barrels	-13.3%	\$14,400,713	-25.4%
Aggregates	38,400,000	tons	18.2%	\$413,000,000	28.7%
				\$9,526,050,103	

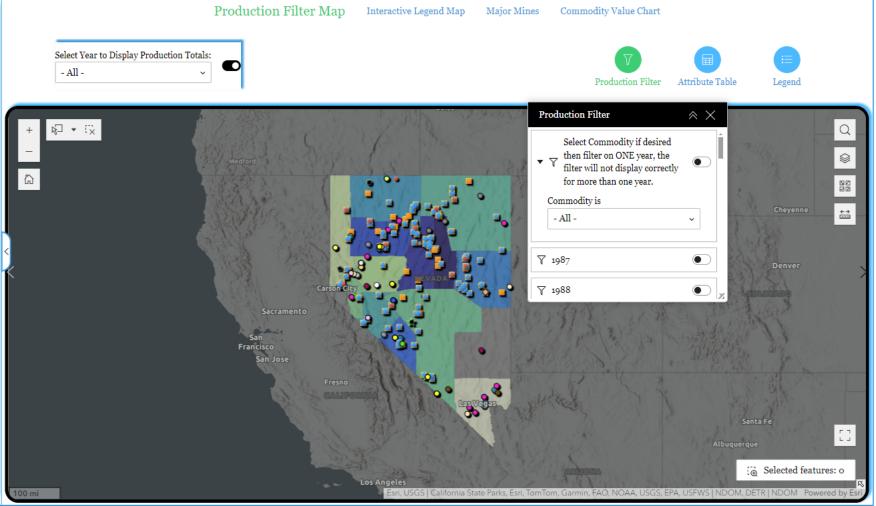
#### Nevada Mineral Production 1987 - 2023



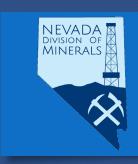




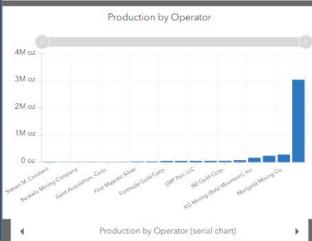




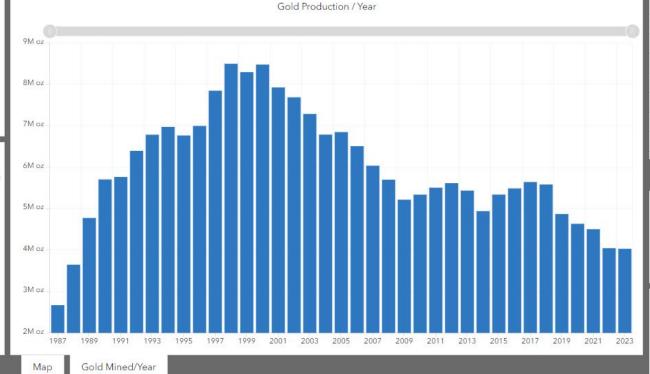
# Nevada Gold





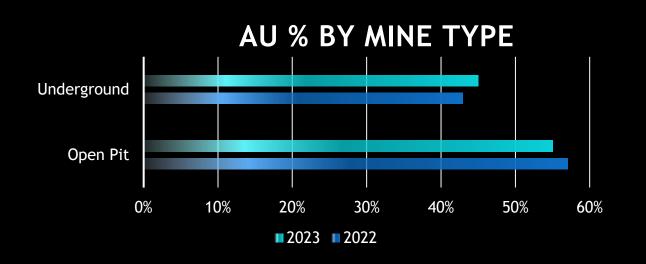




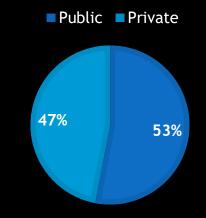




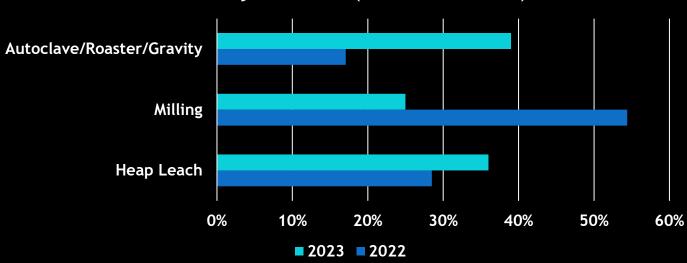
# Gold Production Statistics



# 2023 AU % BY LAND OWNERSHIP



% Au by Process (2022 vs. 2023)

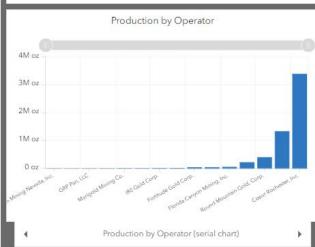


# Nevada Silver



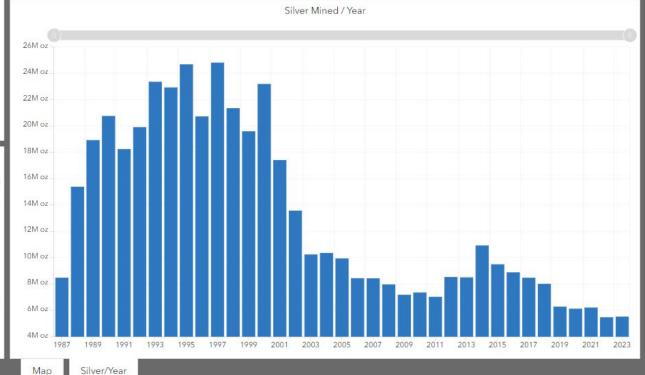


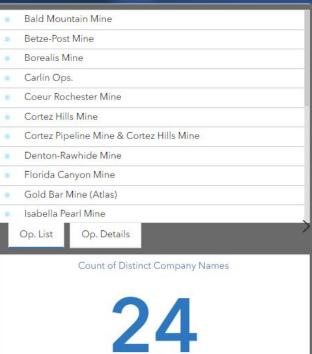
0.98%





5,527,294





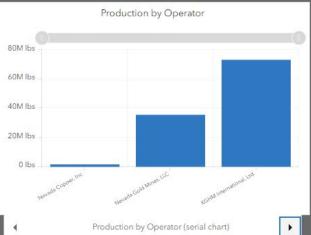
Count of Mining Operations

24

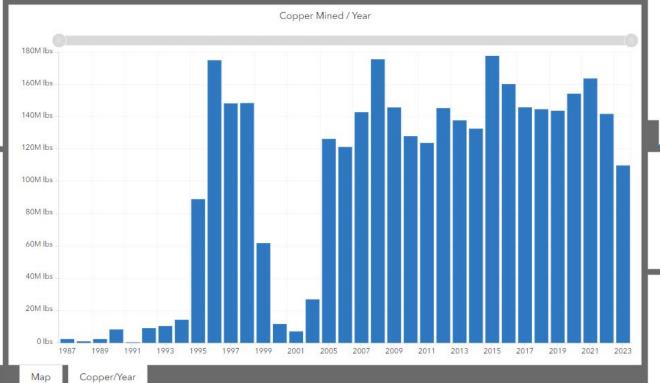
# Nevada Copper









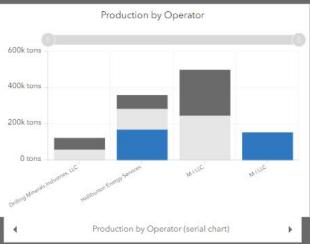


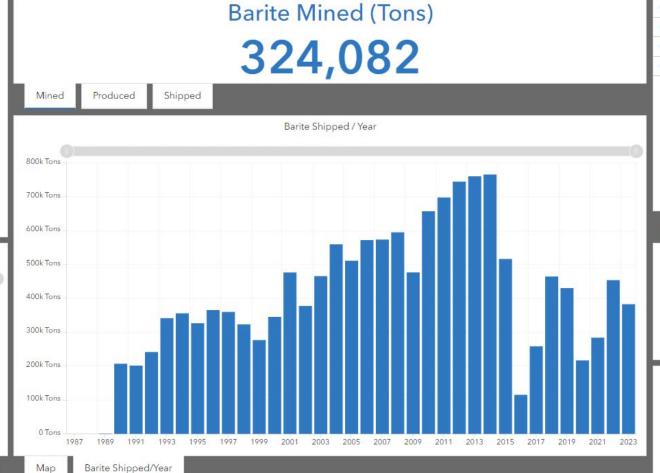


# Nevada Barite







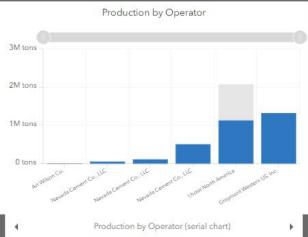




# Nevada Limestone









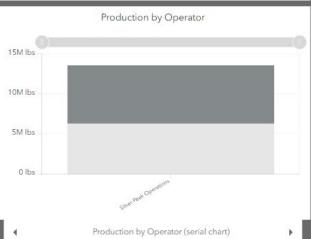


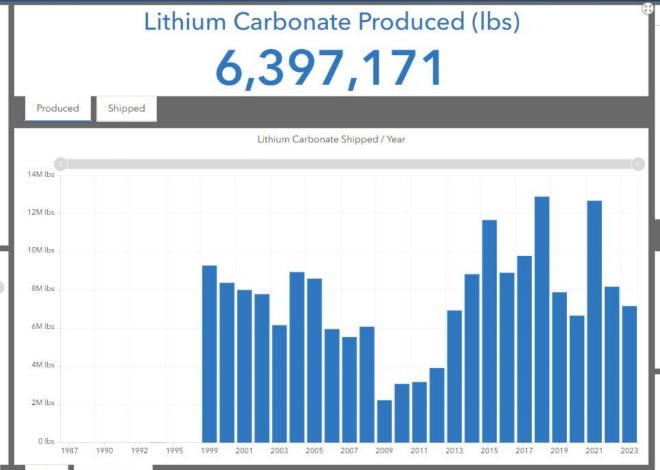
# Nevada Lithium

Li2CO3/Year

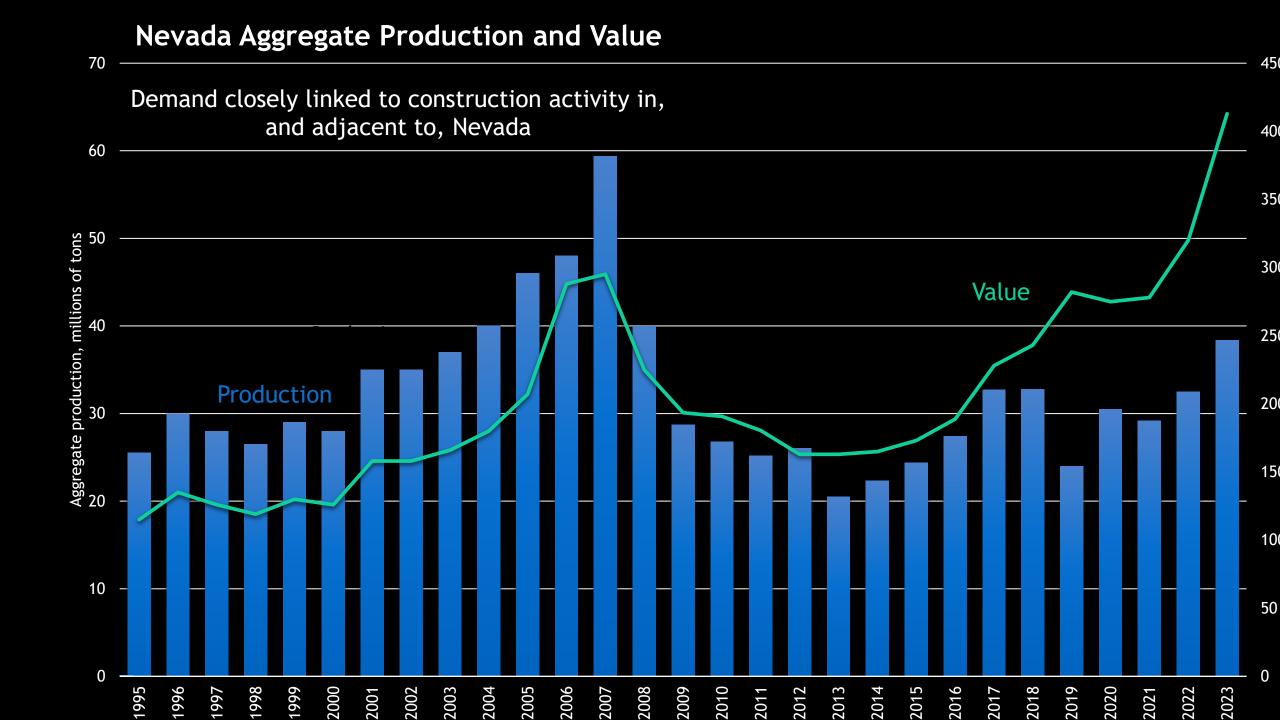










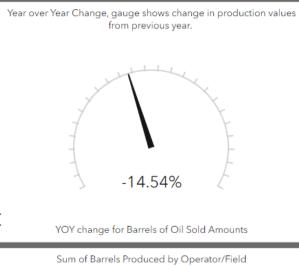


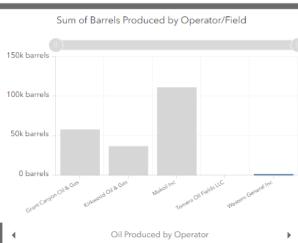
# Nevada Oil

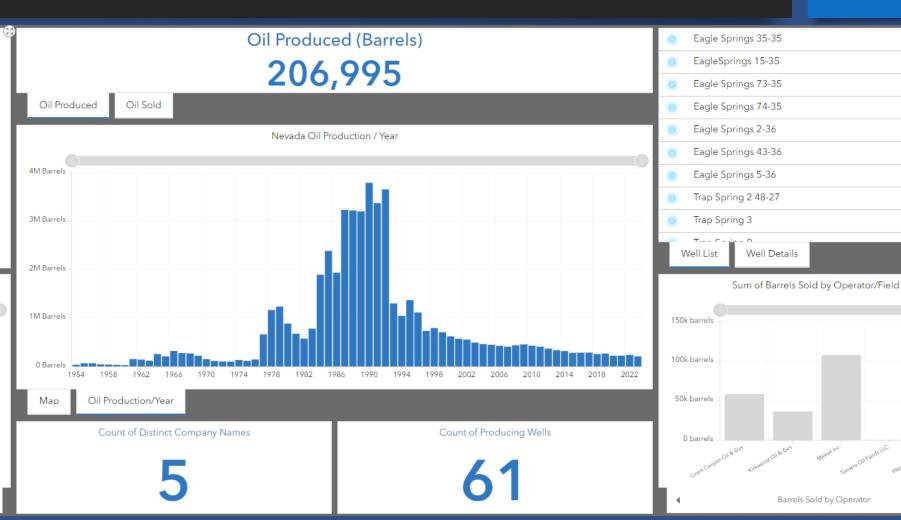


Well Details

Barrels Sold by Operator

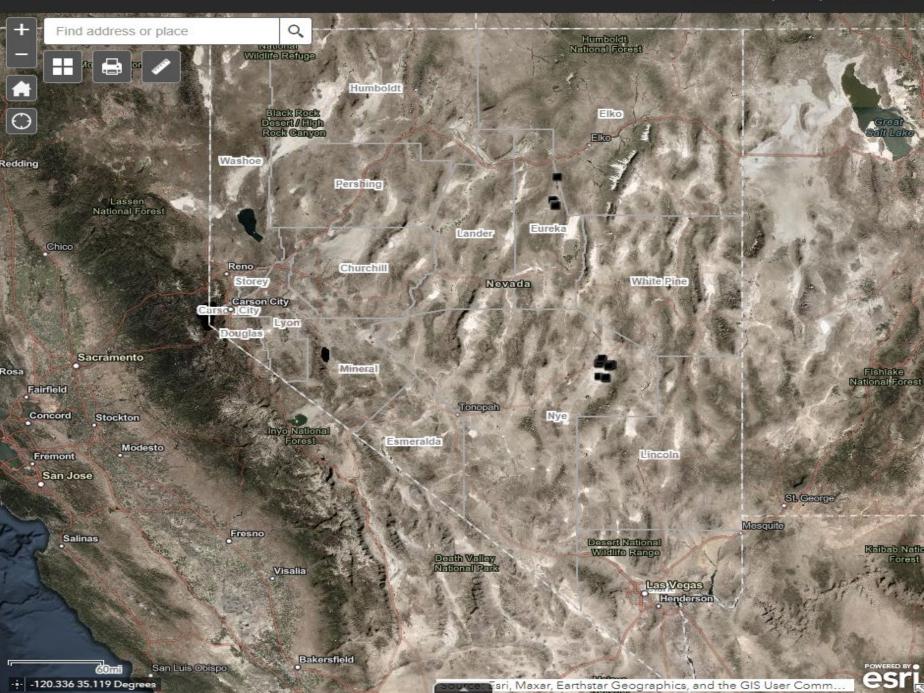








**OGG Production Map** 

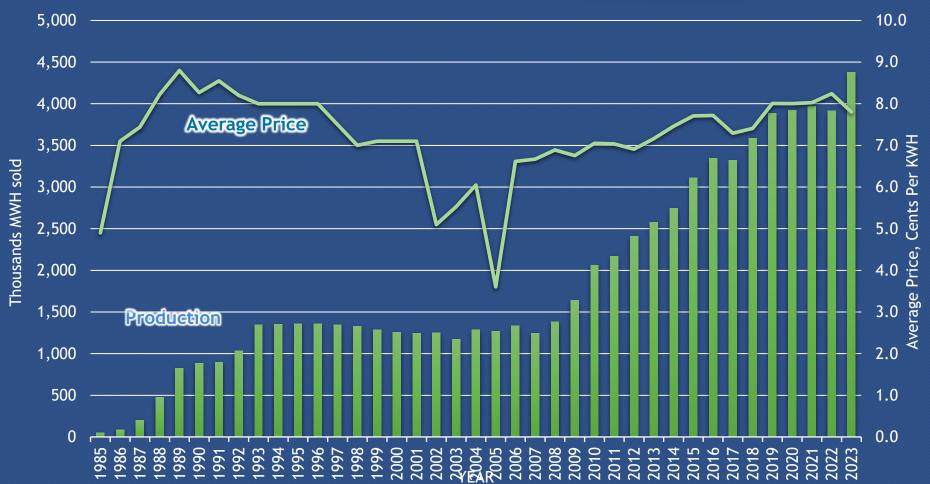


# Nevada Geothermal

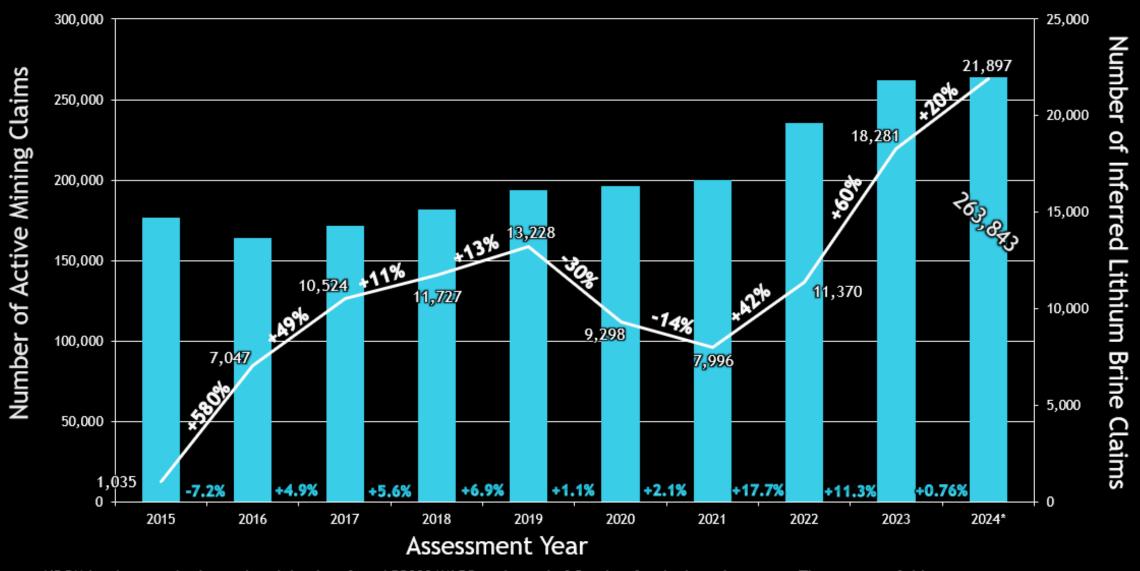
- 4.38 million megawatt hours sold
- 10.4% vs. 2022







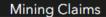
# **Unpatented Mining Claims By Year**



NDOM has been gathering active claim data from LR2000/MLRS at the end of October for the last nine years. The purpose of this graph is to show claims data and statistics from the same snapshot in time.

\*In October of 2024, there were some issues with MLRS which resulted in many claims being set as "Closed" that were in fact still "Active". As a result, claim listing count data for AY 2024 came from a January 2024 claim pull.

# Mining Claims Distribution

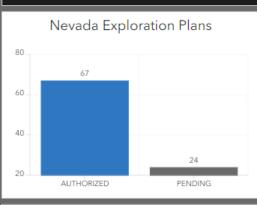




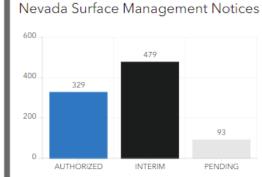
**Unpatented Mining Claims** 

281,207

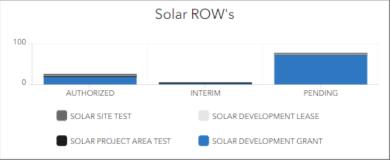
#### Surface Management Notices & Plans

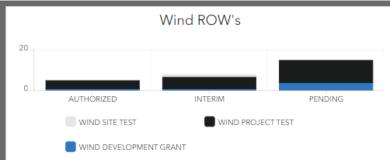


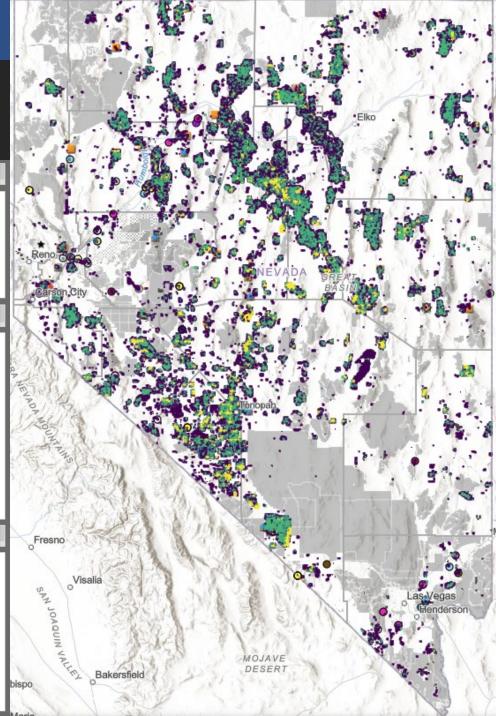




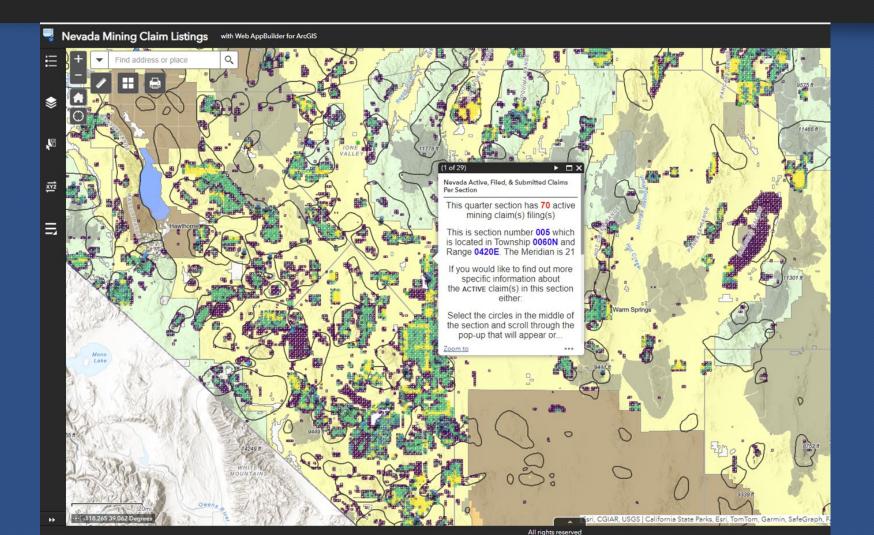
#### Solar & Wind Rights-of-Ways







# NDOM's Open Data Site: NDOMDATA.COM



- Mining Claims
- Plans and Notices
- Mineral Production
- Critical Minerals
- Historic production and claims
- Oil and Gas
- Geothermal
- Mineral Education
- ROW data (wind/solar/power transmission)
- Segregations
- Multiple use viewer

# Public Lands Rule (Conservation Rule)



- Significant number of comments received
  - 216,000 in total 22,000 being substantive
- Press Release April 18, 2024
  - "The Public Lands Rule will help safeguard the health of our public lands for current and future generations by helping ensure we protect our clean water and wildlife habitat, restore lands and waters that need it, and make wise management decisions based on science and data, including Indigenous Knowledge."
  - BLM Press Release



# Public Lands Rule (Conservation Rule)



 Area of Critical Environmental Concern (ACEC) – "ACECs must meet three criteria: relevance, importance, and need for special management attention. The rule clarifies that an ACEC can be designated to protect ecological intactness and habitat connectivity, emphasizing the role of ACECs in maintaining resilient lands and waters."



• Restoration & Mitigation Leases – "To sustain the health of public lands, the BLM is working to protect lands where they are healthy and to restore those that are not. Offering leases for restoration or mitigation will support durable land restoration and provide a long-sought tool for developers to offset their impacts by protecting and improving the health of public lands."

# Public Lands Rule (Conservation Rule)



- House Bill H.R. 3397 or Western Economic Security Today (WEST) Act passed house on April 30, 2024
  - This bill requires the Bureau of Land Management (BLM) to withdraw a proposed rule relating to conservation and landscape health and prohibits the BLM from finalizing, implementing, or enforcing the proposed rule or any substantially similar rule.
  - Received in the Senate and Read twice and referred to the Committee on Energy and Natural Resources (May 2024).



# CEQ NEPA Rule



- 1978 CEQ first guidelines
- 2020 was first change under Trump
- 2023 "Bipartisan Permitting Reform Implementation Rule" to revise its regulations for implementing the procedural provision of NEPA
- Letter submitted on Draft Rule Governor's office
- Press Release of Final Draft April 30<sup>th</sup>, 2024

The press release states:

"These updates will help industry by speeding up environmental reviews and providing more certainty when they are designing projects."

- Effective July 1, 2024
- BLM Guidance out now

# CEQ NEPA Rule



- Implies agencies must consider selecting the Environmentally Preferred Alternative
- Allows for public comment after the comment period, but they should not be accepted after ROD.
- 2 years for EIS and 1 Year for EA
- Agencies to use projections including climate related effects where appropriate
- Agency must ID authority for enforceable mitigation and be published
- 2 years for EIS and 1 Year for EA and 150/300 page limit with the requirement more information

# Rosemont Case



- 2019 Federal Judge in Tucson faulted the USFS for assuming that that Rosemont Copper Company had valid claims to the mineral rights in the proposed dumping area and, therefore, could use the land "in connection with" mining operations.
- Affirmed in May 2022 by 9<sup>th</sup> Circuit Court of Appeals
- Restricts the rights to use public lands for mineral purposes to claims that contain a discovery of a valuable mineral deposit



# Rosemont Case



- The Rosemont interpretation of the Mining Law has already affected proposed mining projects in Nevada
- Currently the BLM is operating under a Solicitors Opinion for determining rights associated with a "valid" claim.
- The Rosemont case ruling states "But amendment of the Mining Law is a task for Congress, not for the Service, and certainly not for us."
  - H.R. 2925 Mining Regulatory Clarity Act of 2024; Rep. Amodei
  - S. 1281 Mining Regulatory Clarity Act of 2023; Sen. Cortez Masto



### Rosemont Case



- According to the Greater Sage-Grouse Draft Resource Management Plan Amendment-Appendix 13-3-15, A validity exam could take several years to compete and cost at least \$50,000 per claim.
- The BLM has indicated that there are 11 Certified Mineral Examiners in the entire U.S. Currently there is over 270,000 claims in Nevada alone and over 450,000 in the western US.
- Even if we only set a goal of validating 10% of the claims in Nevada only, it would cost over \$1.3 billion to complete and consume over 600 years.
- Using existing State Guidance and Solicitor opinion to validate proposals



# Security Exchange Commission - Natural Asset Company Rule



#### The NAC Rule defines a NAC as:

"Corporations that hold the rights to the ecological perfect to a defined area and have the authority to manage the areas for conservation, restation, res

The exchange states that these rights could be come other rights including "run with the land" rights such as mineral rights, you be also rights[.]"

NAC Rule clearly conveys that the care formance rights would be inclusive of public lands stating:

"If the NAC has ertaged it as a light seagreement with respect to public lands, shares representing at least 50% (at the sames), the NAC's outstanding shares as of the closing of the IPO must be distributed and all communities." (FR at 68815)

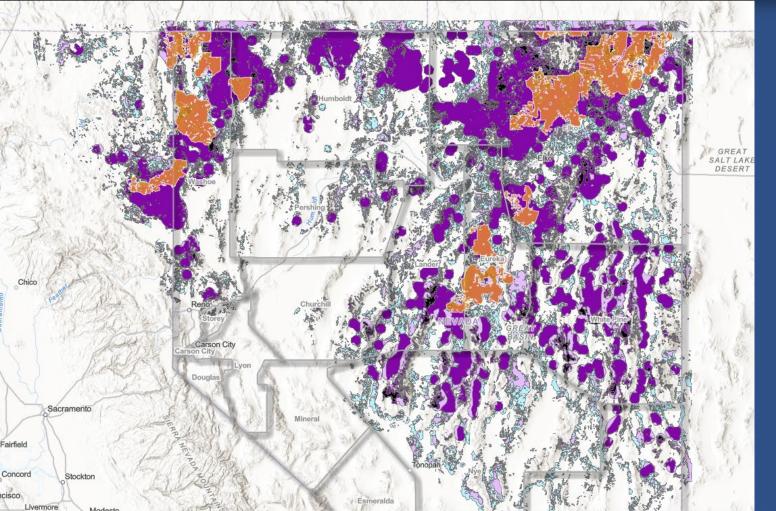
# Truckee Meadows Public Lands Management Act: Proposed **Development and Conservation**

# TRUCKEE MEADOWS PUBLIC LANDS MANAGEMENT ACT

- 1,053,895 acres proposed for withdrawal within the act including wilderness and NCA designations
- NCA's and wilderness overlap existing WSA designations but not entirely
- It is not clear if WSAs become NCA/WSA and if the "leftover" WSA designations stay "as is". There is no specification of any WSA release (but read this again)

# Sage Grouse AMRPA







- Alternative 1
   2015 HMA Boundaries (18.6 M Ac\*)
   Includes SFA and withdrawal recommendation

- Alternative 2
   No Action Alt.
- 2015 HMA Boundaries (18.6 M Ac\*)

- Alternative 3
   2024 HMA Boundaries (28.8 M Ac\*)
   Rec. Withdrawal of ALL 28.9 M Ac
   ACEC designation (11.1 M Ac)

#### Alternative 4

- 2024 HMA Boundaries (28.8 M Ac\*)
  More restrictions on Mitigation and less flexibility for fluid mineral and disturbance caps.

- Alternative 5 (Preferred Alt.)
  2024 HMA Boundaries (25.7 M Ac\*)
  Fewer restrictions on Mitigation opportunities and more exceptions to fluid mineral stipulations and disturbance cap.

Alternative 6 (No Action)

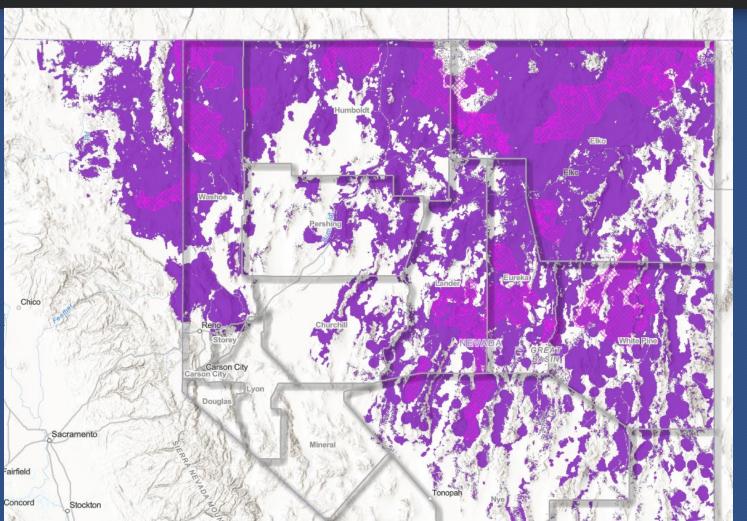
Same as 5 but ACEC (11.1 M Ac)

Anticipated ROD in December 2024

# Sage Grouse AMRPA

Alternative 2 (no action) Alternative 5 (preferred) Alternative 6 **USGS Example HMA** Alternative 4





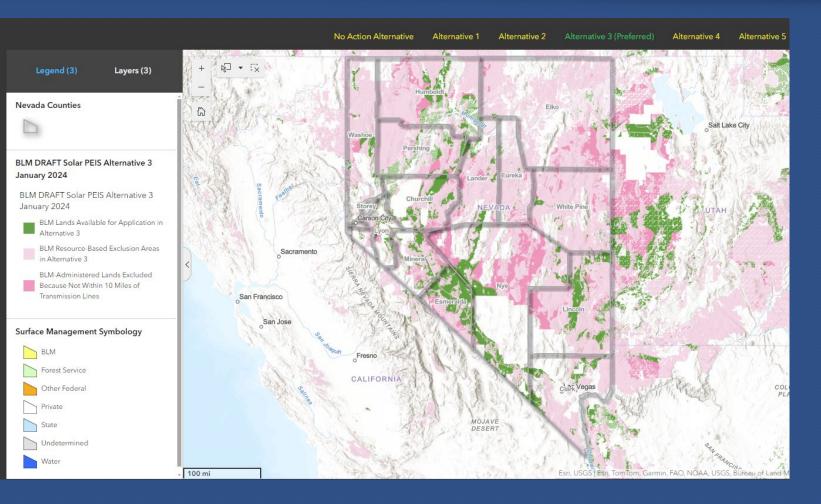
State Agencies and local government have provided comments to the DEIS

- NDOM
- NDA
- NDOW
- Counties

Concerns with: Data Maps State Management Disturbance Caps Wildfire Restrictions

# 2023/2024 Utility Scale Solar Energy Development PEIS/RMPA





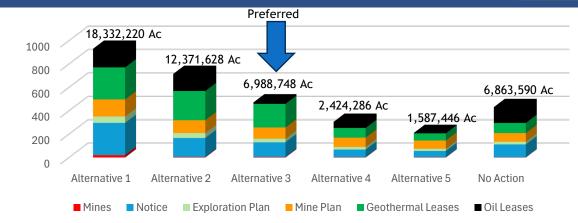
NDOM Submitted a Letter with 4 main points of concerns

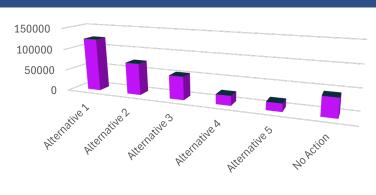
- 1. Deficient and inaccurate review of impacts to existing mineral resource activities
- 2. The absence of a current Mineral Potential Report
- 3. Deficient economic analysis with respect to mineral exploration, development, and extraction
- 4. Conflicts with concurrent Resource Management Plan (RMP) amendment efforts.

# 2023/2024 Utility Scale Solar Energy Development PEIS/RMPA



On Lands Available for Solar Application	Alternative 1	Claimant/Customer	Alternative 2	Claimant/Customer	Alternative 3	Claimant/Customer	Alternative 4	Claimant/Customer	Alternative 5	Claimant/Customer	No Action	Claimant/Customer
Acres	18,332,220		12,371,628		6,988,748		2,424,286		1,587,446		6,863,590	
Mines	20	14	5	5	5	5	3	3	3	3	2	2
Mining Claim	123,212	678	73,752	526	53,950	396	22,266	309	18,312	233	43,501	364
Pending Exploration Notice	56	42	33	24	28	20	13	11	12	10	25	21
Authorized Exploration Notice	219	143	129	98	97	77	52	46	41	36	85	66
Pending Exploration Plan	14	13	12	11	8	8	5	5	4	4	9	9
Exploration Plan	41	36	30	29	23	22	17	16	15	14	14	13
Pending Mine Plan	54	48	43	37	36	31	24	21	21	19	37	31
Authorized Mine Plan	92	75	67	58	60	51	56	49	50	43	37	34
Geothermal Leases	274	61	250	57	202	55	83	37	61	32	87	35
Oil Leases	159	31	146	29	12	5	52	19	3	2	135	29

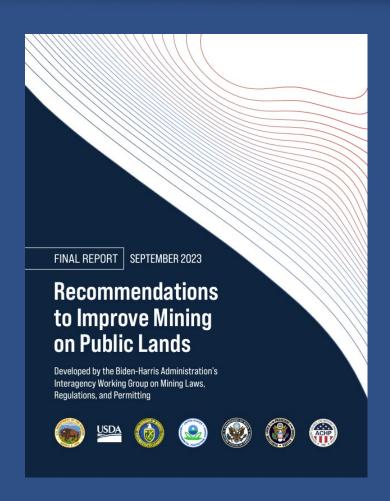




■ Mines ■ Mining Claim ■ Notice ■ Exploration Plan ■ Mine Plan ■ Geothermal Leases ■ Oil Leases

# Biden-Harris IWG Mining Reform Report

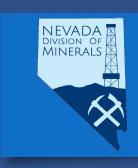


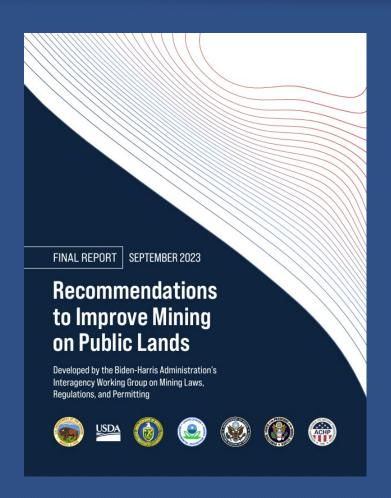


Contains 60 Recommendations for reform of mining laws, regulations, and the permitting process

- Good -
  - Reestablish Bureau of Mines
  - Funds mining schools
  - Highlights Nevada as Gold Standard
  - Creates funding mechanism for abandoned hardrock mines
- Bad -
  - Increased mining claim fees
  - Identify areas suitable for mining
  - Transition to leasing system
  - 4-8% net royalty
  - 7 cents/ton fee for mined material.

# Biden-Harris IWG Mining Reform Report



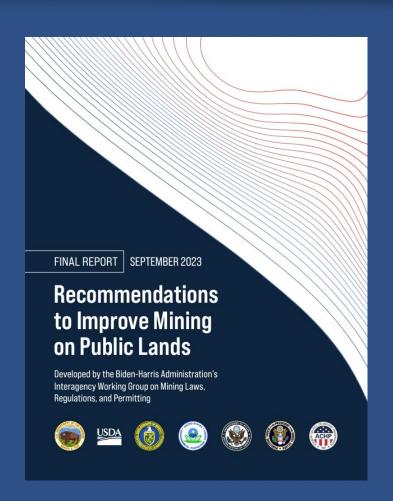


On March 29<sup>th</sup>, 2024, the DOI Office of Inspector General (OIG) rendered a report to Interior Secretary Deb Haaland. The OIG examined the IWG report to Congress for compliance with Section 40206 of the IIJA. It found:

- The report missed the November 15, 2022 deadline by nearly 10 months, thus delaying federal agencies and Congress from having the information needed to adopt changes
- The report failed to:
  - quantify the time typically needed to complete each step in the federal permitting process
  - address three of nine specific components of the required examination of federal permitting and performance improvements.

# Biden-Harris IWG Mining Reform Report





Existing IWG working on implement some of the recommendations

- Mining Claim Increase
- Excess mining claim fees to fund hardrock AML
- Tribal notifications for Notice level activity
- Three Performance Measures were released by the BLM in April 2024
  - % of Operators that engage in per-plan coordination
  - % of milestones met from pre plan coordination
  - Median time to complete NEPA
- AML Good Sam

# Geothermal



- H.R. 8665 (Rep. Lucas), "Supercritical Geothermal Research and Development Act";
- New Geothermal Technologies
  - Deep
  - Mobile unit on spent wells
  - Enhanced Geothermal Systems (EGS)
  - Single well designs
  - Others
- Increased traditional permitting





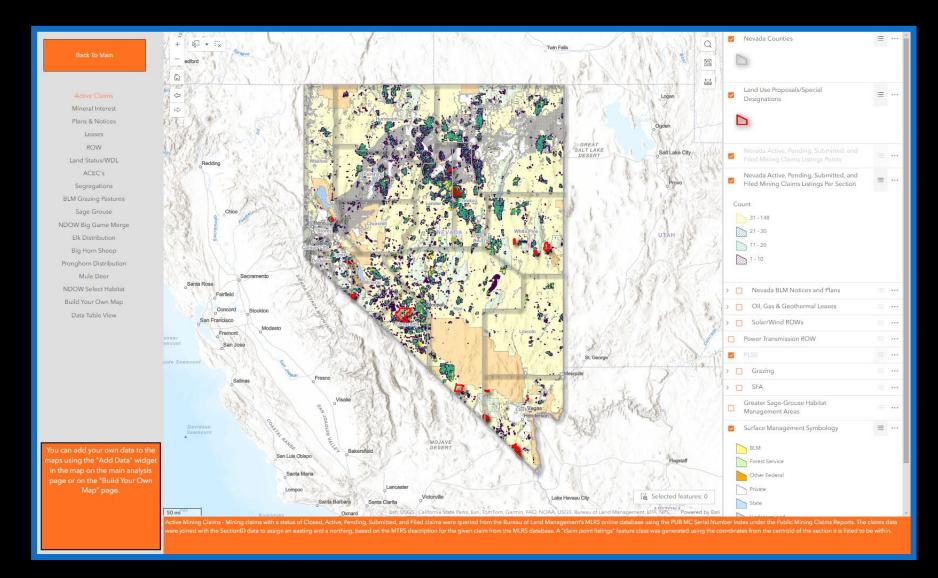
- H.R. 8954 (Rep. Gosar), "Public Lands Renewable Energy Development Act of 2024"
  - Implements fees on Solar and wind Similar to Geothermal
- S.4753 (Manchin, Barrasso), "Bipartisan Energy Permitting Reform Legislation"
- Rosen Pershing County Lands Bill

### Items to Watch



- Water
- Claims
- Endemic Species NGO petitions
  - Thiem's Buckwheat
  - Dixie Valley Toad
  - Kings River Pyrg
  - Railroad Valley Toad
  - Oasis Valley DPS of the Amargosa Speckled Dace
  - Amargosa Toad
  - Ash Meadows, etc.

# Recent Land Issues

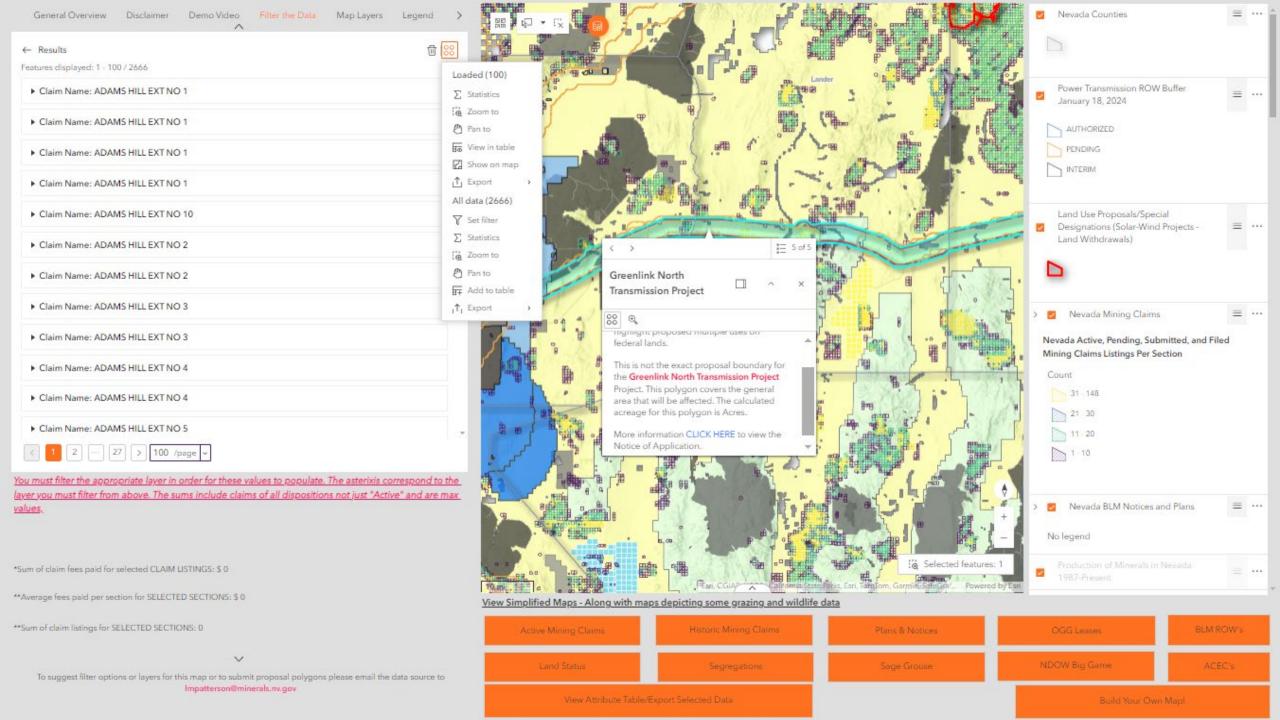


Renewable Energy/Multiple Use

ROW data (wind/solar/power transmission)

Segregations

Multiple use viewer (work in progress)





Active Claims

Mineral Interest

Plans & Notices

Leaves

ROW

Land Status/WDL

ACEC's

Segregations

BLM Grazing Pastures

Sage Grouse

NDOW Big Game Merge

Elk Distribution

Big Horn Sheep

Pronghorn Distribution

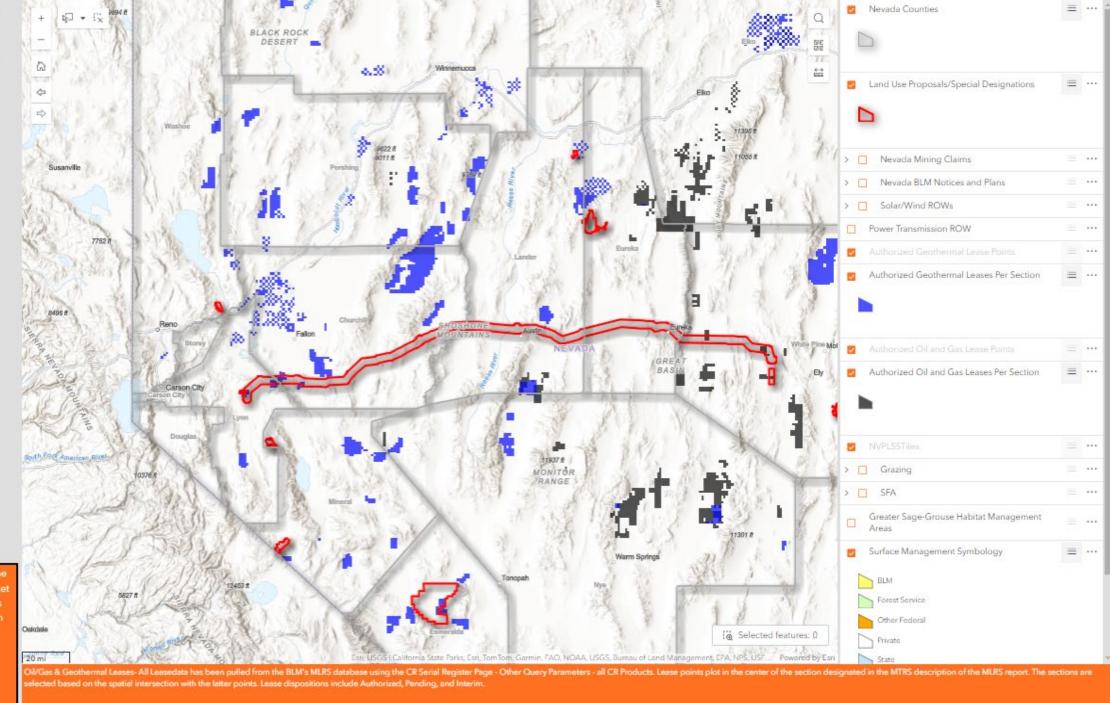
Mule Deer

NDOW Select Habitat

Build Your Own Map

Data Table View

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# Nevada's Lithium Loop & Governor Lombardo Climate Innovation Plan



Nevada Governor's Office of ECONOMIC DEVELOPMENT

**Empowering Success** 

Lithium Capital of North America

**STAGE** 

Exploration. Extraction and Processing



#### COMPANIES Albemarle

- American Battery Technology Company
- Century Lithium (Exploration)
- HeliosX/Dajin US Corp.
- Luna Lithium (Exploration)
- loneer · Lilac Solutions/
- Western Ceramics
- Lithium Americas/ Thacker Pass
- Redwood Materials (Processing)
- Rover Metals
- Schumberger/ NeoLith Energy (SLB)
- · Tonopah Lithium

**STAGE** 

Refined Chemical







#### COMPANIES Albemarle

- American Battery Technology Company
- loneer Lilac Solutions/ Western Ceramics Company Lithium Americas/
- Thacker Pass · Redwood Materials

#### **STAGE**

Cell Components





STAGE

Battery Cells

#### COMPANIES

- Altairnano
- Entek Lithion Battery
- NexTech Batteries Redwood Materials
- Tesla Ultion Technologies

#### COMPANIES Altairnano

- DragonFly Energy
  - DragonFly Energy Entek K2 Energy Solutions
  - Lithion Battery NexTech Batteries Panasonic
  - Quantum Copper Tesla
    - · Ultion Technologies

#### STAGE

#### STAGE

#### 6

Battery Packs EV Application

#### STAGE





COMPANIES

Technology

Aqua Metals

Company

Tesla

American Battery

LiNiCO Corporation

Redwood Materials

· Ultion Technologies

#### COMPANIES

- Altairnano
- · DragonFly Energy K2 Energy Solutions Lithion Battery
- NexTech Batteries Quantum Copper Rechargeable
- Power Energy North America Tesla

#### Ultion Technologies

#### COMPANIES

#### · Halo · NexTech Batteries

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- Quantum Copper
- Ultion Technologies

#### **GREEN**WIRE







Gift article

Mining of critical minerals eligible for \$72B in loans, DOE says

The clarification from the Biden administration means mining projects for minerals like lithium can tap a key pot of federal money.



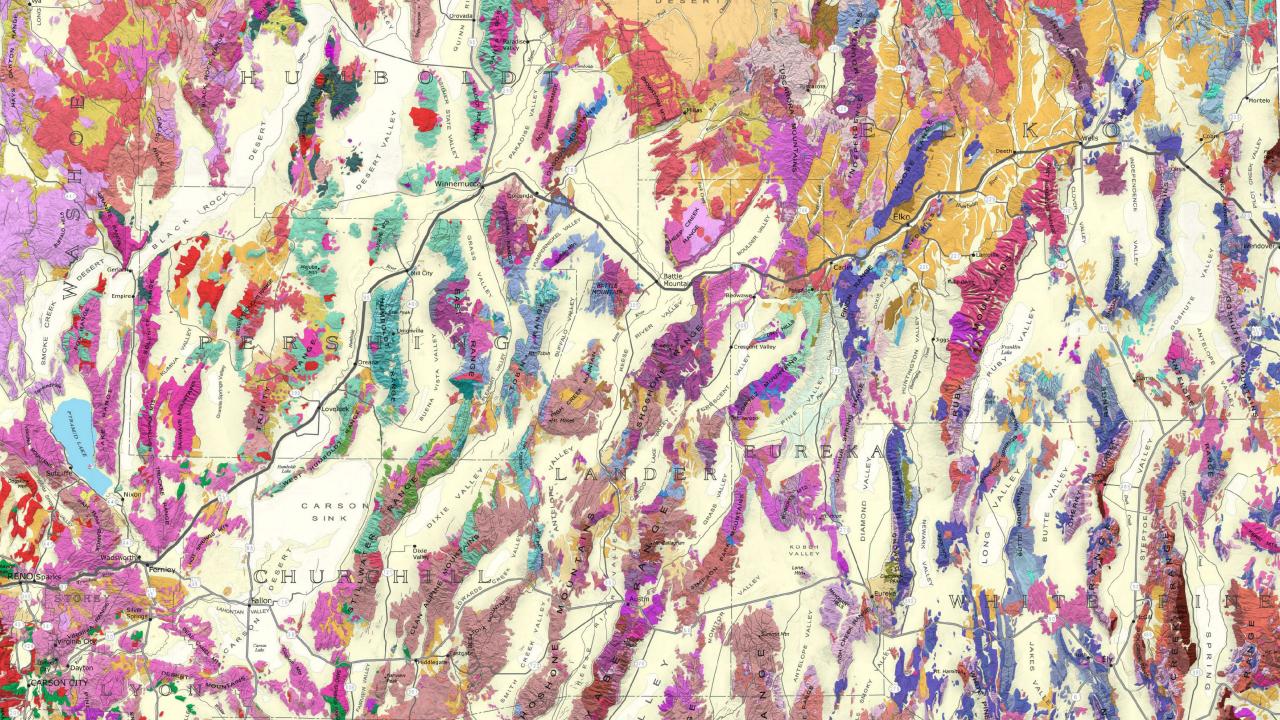
HANNAH NORTHEY | 04/30/2024 01:24 PM EDT | UPDATED 04/30/2024 01:49 PM EDT

Loan Programs Office

**LPO Announces Conditional Commitment** to Lithium Americas Corp. to Help Finance the Construction of a Lithium **Processing Plant in Nevada** 

MARCH 14, 2024

Lithium Americas Receives Conditional Commitment for \$2.26 Billion ATVM Loan from the U.S. DOE for Construction of Thacker Pass





# Thank you!

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