A Smörgåsbord of Updates on Exploration Topics and A Rambling on Some Lessons Learned

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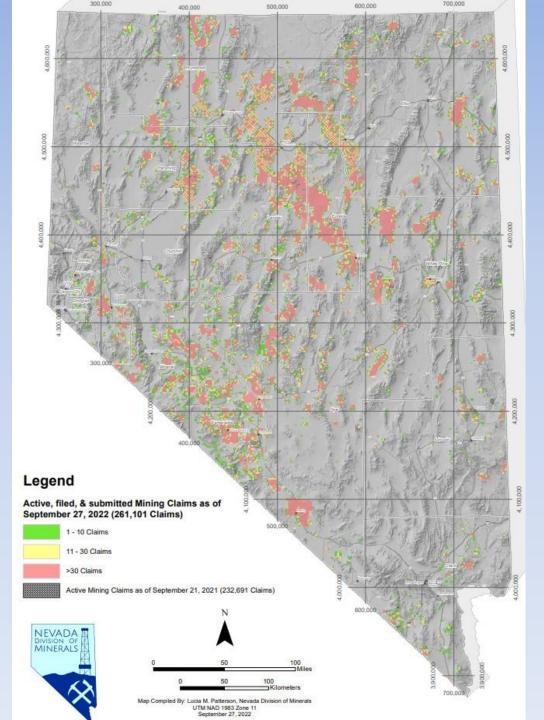
Nevada Mineral Exploration Coalition Annual Mineral Exploration Summit October 4, 2022 Mike Visher, Administrator Division of Minerals

NEVAE DIVISION

Minerals

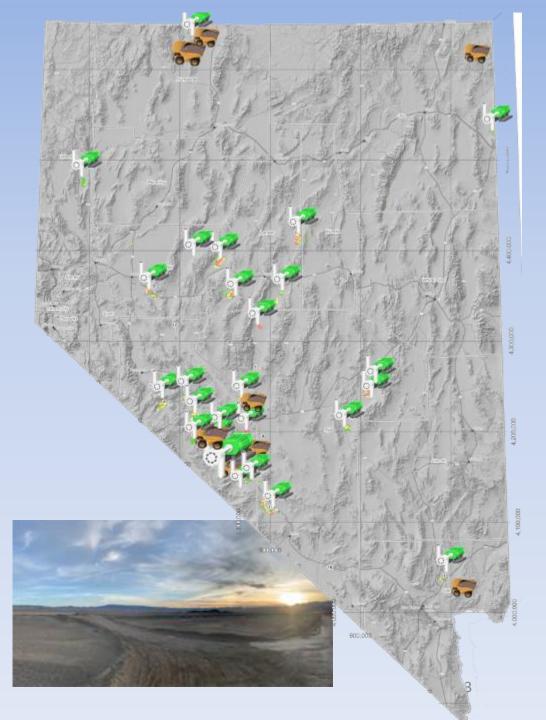
NEVADA MINING CLAIMS

- 261,101 Mining Claims in Nevada as of 9/27/2022
- Increase of 12% from Sep. 2021
- ≻>55% of all US mining claims
- Last year's annual maintenance fees:
 - ≻~\$39M to BLM (2021 AY)
 - ≻~\$2.8M to Nevada counties
- The trend in claims is a barometer for exploration interest, and largely the price of gold



LITHIUM EXPLORATION

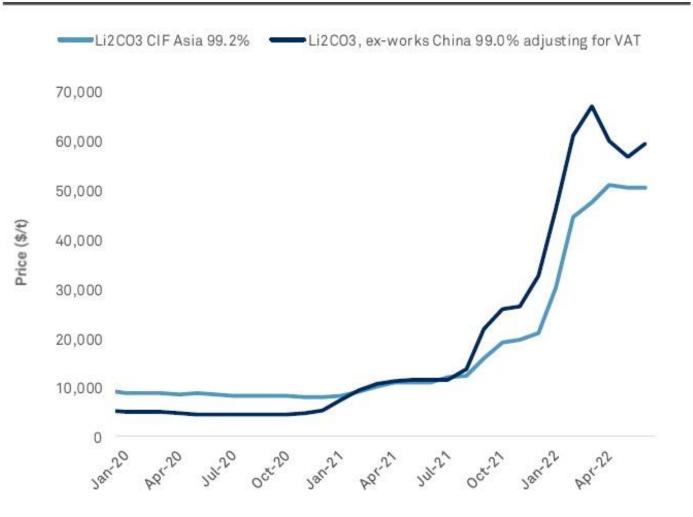
- > 40 companies in various stages of exploration; ~35,000 mining claims (~13% of total mining claims in NV)
- 28 current authorized or pending lithium notices, 10 in 2022 alone
 - Compared to 254 for Au and Ag
- 2 Exploration and 8 Mining Plans for lithium
 - Compared to 134 mining plans for Au and Ag
- > 17,135 placer claims for lithium, +58% YOY
- ~30 companies involved in Clayton Valley alone, with numerous joint ventures/agreements
- >~12 lithium in clay projects (open pit)
- >30 lithium brine projects



LITHIUM EXPLORATION

- Advancements in Direct Lithium Extraction (DLE) are critical to the future of lithium brine production in Nevada
- Pursuant to NRS 534B, the Division only regulates
 Dissolved Mineral Resource
 Exploration (DMRE)
- 14 approved DMRE Notices and
 6 Well permits in 2022
- * Coming Soon Joint NDOM/ NDEP/NDWR FAQ sheet to answer exploration through production regulatory questions

Lithium carbonate CIF Asia price stabilizes at \$50,500/t on recovering demand in June



Data as of July 25, 2022.

LiOH = lithium hydroxide; Li2CO3 = lithium carbonate; VAT = Value-added-tax Sources: S&P Global Market Intelligence; Benchmark Mineral Intelligence; Shanghai Metals Market

S&P Global

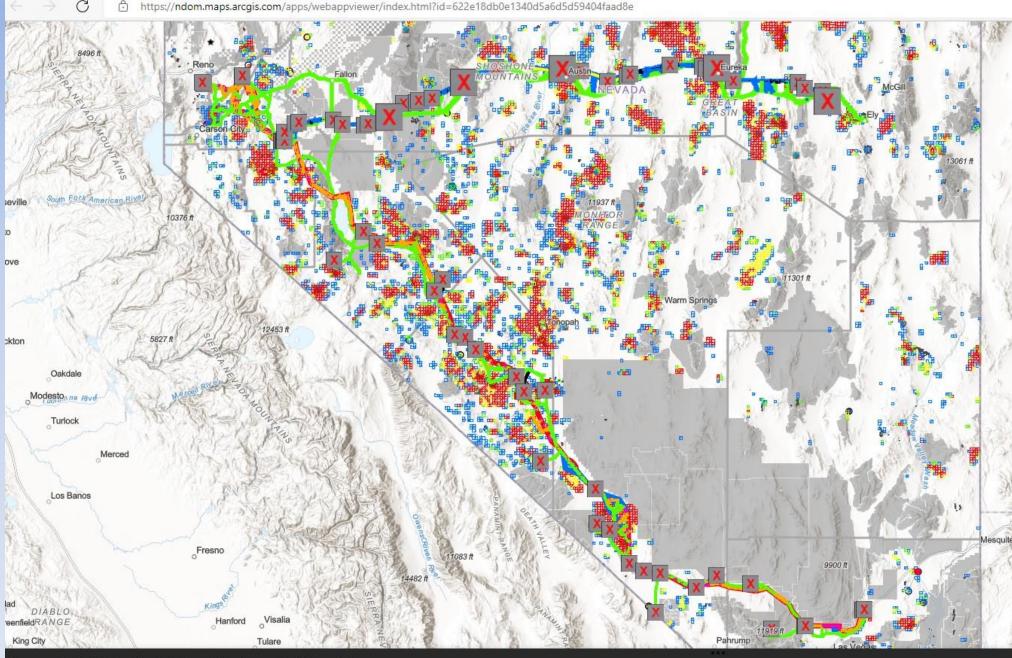
MINING LAW REFORM

- DOI issued a Request for Information to inform the Interagency Working Group on Mining Regulations, Laws, and Permitting; 8/30/22 deadline
- NDOM, NDEP, and GOED drafted letters which were unified by the Governor's office and the letter was signed and submitted by Jim Lawrence, Acting Director for NDEP.
- Wide spectrum of comments; IWG will focus more on those in the middle, especially those with recommendations for improvements.
- DOI has established 6 subgroups to the IWG, with meetings to be scheduled soon; IMCC facilitating representation from states:
 - Mining ops
 - Permitting
 - Access
 - Fiscal
 - Tribal Engagement
 - Best Management Practices
- Final Report from IWG to be released in mid-November, no draft for public review

NV ENERGY'S GREENLINK PROJECTS



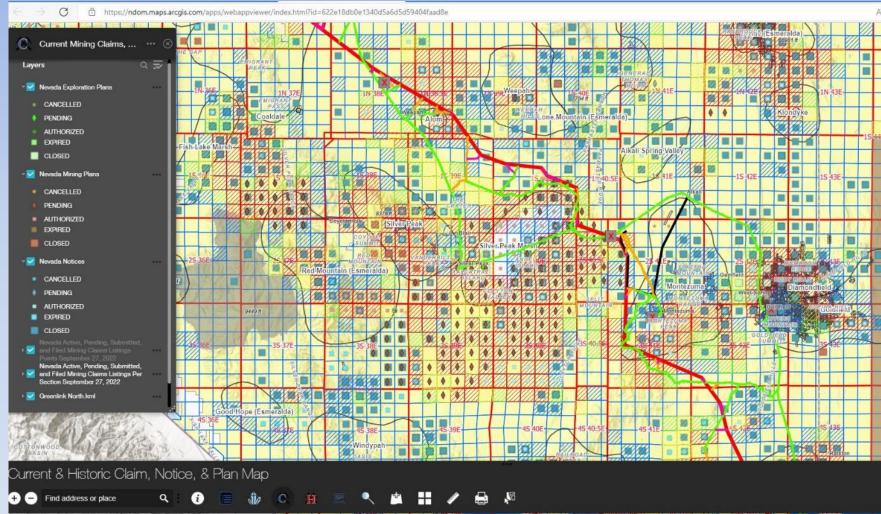
- Build transmission capacity for up to 4,000 MW of renewable energy
 Allow access to wind and hydro power to diversify Nevada's portfolio
- Increase system stability
- > Economic development opportunities for rural regions, including mining projects



Current & Historic Claim, Notice, & Plan Map

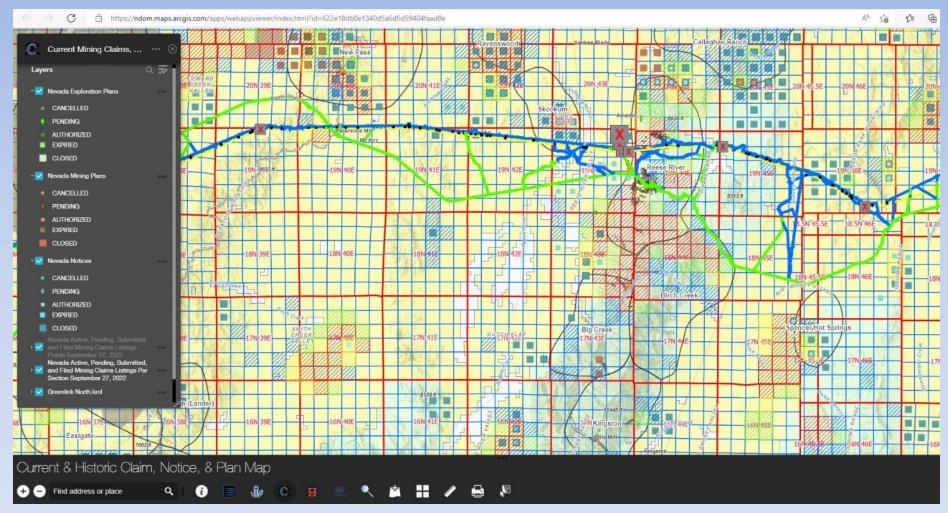
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GREENLINK WEST



- > BLM draft EIS expected early 2023, with ROD by October 2023
- > Transmission line scheduled to be in service Dec. 2026
- More info <u>https://eplanning.blm.gov/eplanning-ui/project/2017391/510</u>

GREENLINK NORTH



BLM collecting info, public scoping to start May 2023, with ROD by August 2024
 Transmission line scheduled to be in service Dec. 2028
 More info: <u>https://eplanning.blm.gov/eplanning-ui/project/2017033/510</u>

MINERALS ESSENTIAL TO ADVANCED ENERGY TECHNOLOGY



INFRASTRUCTURE Copper, Iron Ore, Molybdenum

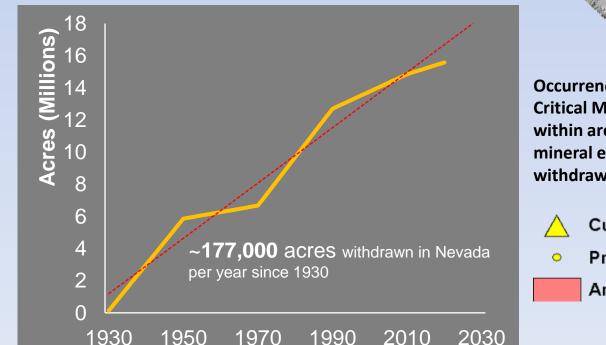


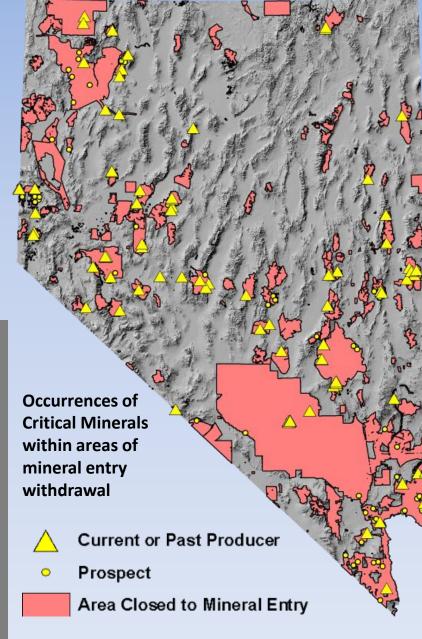
AUTOMOBILES/ ELECTRIC VEHICLES Copper, Nickel, Lithium, Cobalt



RENEWABLE ENERGY Gold, Silver, Zinc

- Renewed exploration in NV for cobalt, copper, graphite, lithium, nickel, REE, tungsten, vanadium, and zinc while conservation efforts continue to remove land from development.
- Nevada is uniquely positioned to lead the US in transitioning away from fossil fuels <u>so long as</u> federal land is available for the environmentally responsible extraction of the commodities needed to electrify the nation.





FRTC Modernization

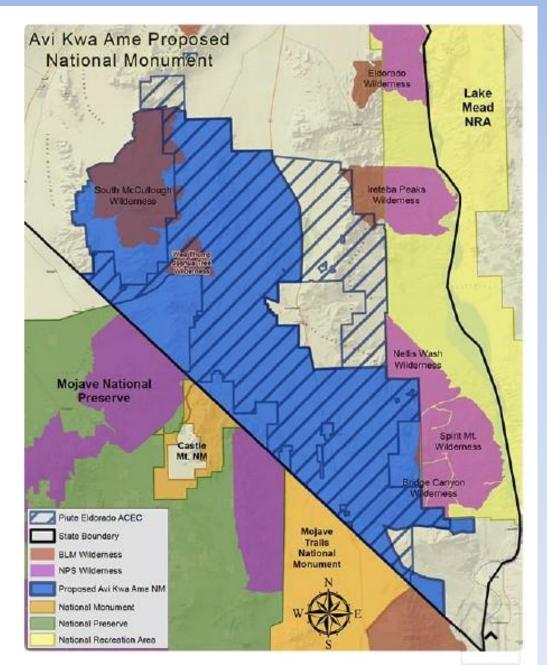
- Segregation from mineral entry still in place
- Congress approved extension of existing withdrawal but not expansion
- Captain Shane Tanner is the new commander at Naval Air Station Fallon
- Slow but steady progress on agreements with 17 tribes
- Cultural inventory work ongoing
- Paraphrasing from the Intergovernmental Agency Committee(IEC) meeting minutes (7/11/22):
 - The Navy has submitted a legislative proposal to modernize the FRTC for the fiscal year 2023 National Defense Authorization Act. At the Nevada Congressional delegation's request, the Office of Management and Budget has taken the unprecedented step of including the Congressional delegation in the discussion of the administration's legislative proposal prior to transmitting to Congress. The Navy is supportive of mitigation measures and is mindful of the potential unintended consequences of modernization. Acknowledged there are still hard issues to work through, but the Navy remains committed to working with Tribes and stakeholders to find winwin solutions for both the Navy and Northern Nevada.
- Next IEC meeting planned for late October

LAND WITHDRAWALS

Welcome to Spirit Mountain Avi Kwa Ame is a national treasure

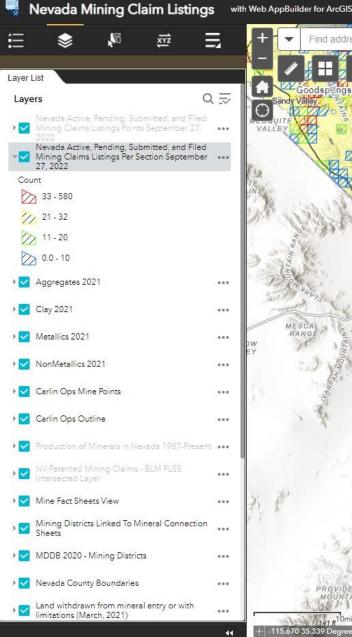
The proposed Avi Kwa Ame (Ah-VEE kwa-ah-may) National Monument in Southern Nevada contains some of the most visually stunning, biologically diverse, and culturally significant lands in the entire Mojave Desert.

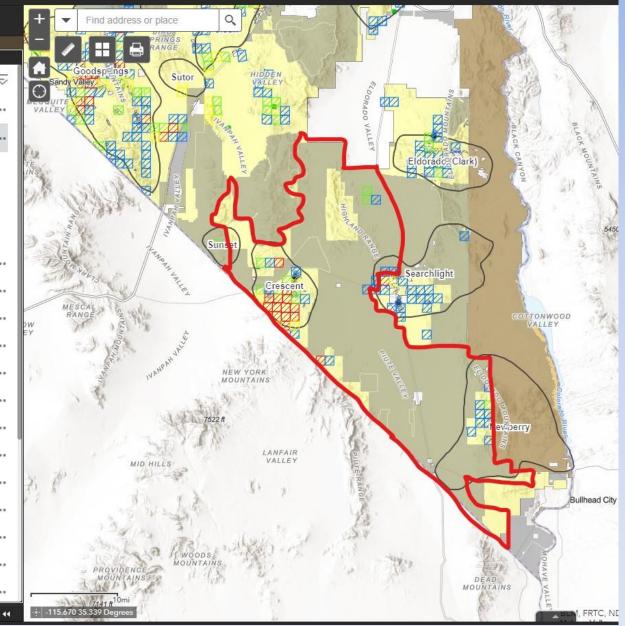
Stretching from the Newberry mountains in the east to the New York, South McCullough, Castle, and Piute mountains in the west, these lands feature dramatic peaks, scenic canyons, natural springs, sloping bajadas covered with ancient Joshua tree forests, unique grasslands, and a rich history of rock art and other cultural sites.



LAND WITHDRAWALS

- Proposed Avi Kwa Ame National Monument
- H.R. 6751 (Sponsored by Rep. Titus)
- ≻~445,000 acres
- Expands existing Piute-Eldorado ACEC
- 516 mining claims at risk,
 347 by two companies
 with REE projects
- 3,668 historic and current mining claims
- Sum of all federal mining fees = \$3,211,810

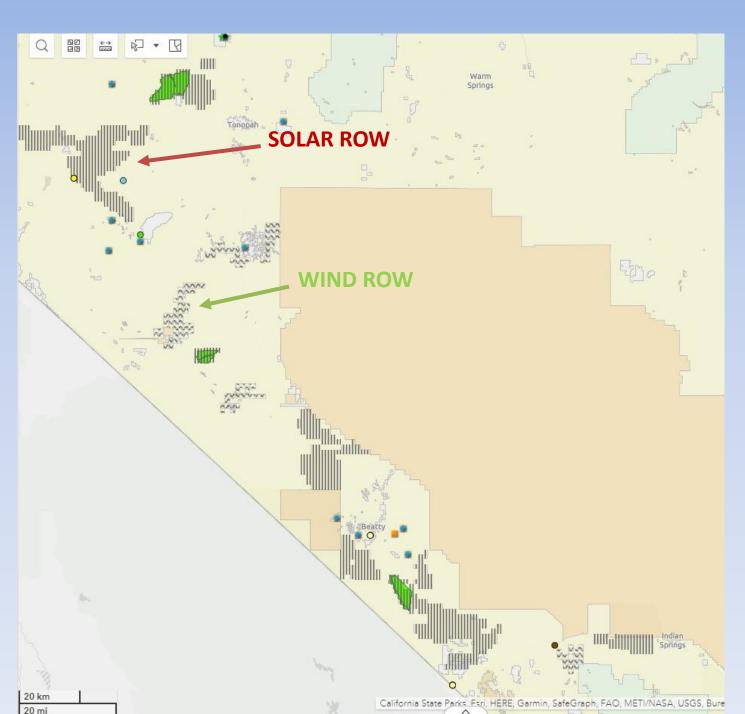




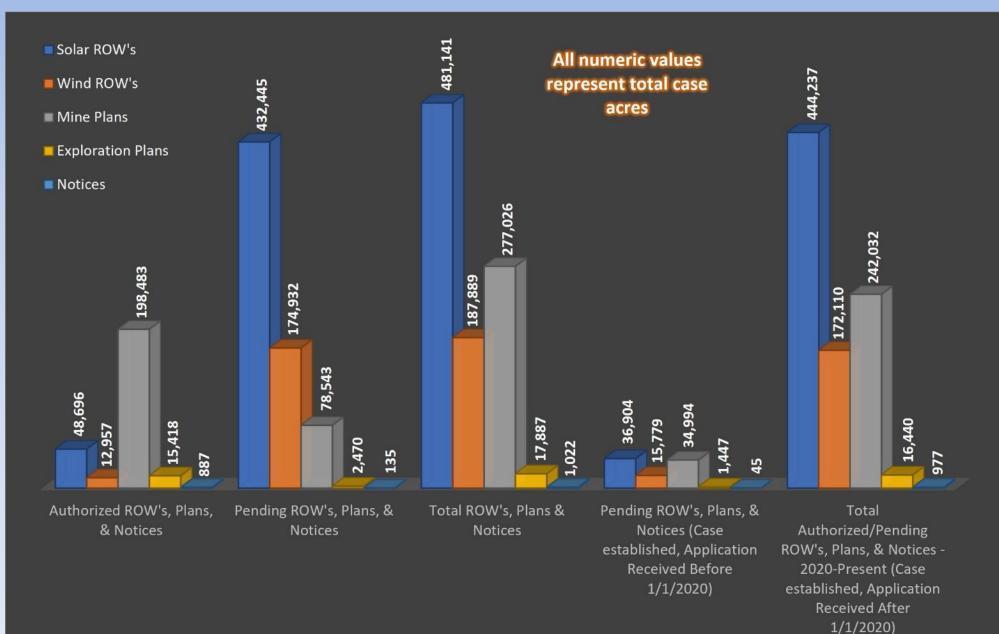
RIGHT-OF-WAY (ROW)

- A land withdrawal in disguise
 Current BLM Wind ROW

 (auth./pend./test/grant/lease)
 - = **187,888** acres
- Current BLM Solar ROW
 (auth./pend./test/grant/lease)
 = 481,141 acres
- For comparison, sum of BLM Mining Notices and Plans (auth./pend.) = 228,048 acres



SOLAR AND WIND ACREAGE VS. EXPL. & MINING PERMITTED DISTURBANCE



NEW GEOLOGICAL ANALYSIS PROGRAM

- Conducted at all new NDOM-proposed AML Hard Closure projects to characterize geology and mineral potential
- > \$150k contract with McGinley & Assoc.
- Bob Thomas performing literature research and conducting field work including collection of diagnostic rock samples for assay
- Two projects completed to date, Pine Nut and Olinghouse regions
- Report and assay results will be available on NBMG Mineral Explorer open data page

NEW PUBLIC AGENCY AML CLOSURE PROGRAM *<u>COUNTIES TAKE NOTICE*</u>

- The purpose of this program is to allow public agencies within the state of Nevada to apply for funding from the Division of Minerals (the Division) to close dangerous abandoned mines lands (AML) hazards on land they own or control.
- The Division has limited manpower to prepare and manage additional closure projects throughout the state; however, public agencies that have the capability to prepare, manage and successfully complete AML hardclosure projects may apply for funding from the Division.

Requests will be assessed and approved based on a variety of factors, including: the ability to plan, investigate and prepare a scope of work for projects; manage projects; provide funding and/or in-kind resources towards projects; project proximity to population centers, highways, and recreation areas; relative danger of project hazards; and project timeline.

Commission has approved total program funding up to \$400,000

NEW COMMISSION-FUNDED EDUCATIONAL ROCK AND MINERALS EXHIBIT AT RENO DISCOVERY MUSEUM *PARENTS TAKE NOTICE*

Minerals-side of exhibit

Mineral samples (most are mined in NV); minerals light up when flip-board is interacted with

Nevada counties – Light up when flip-board is interacted with

Mineral identification tools and properties; // Moh's Scale of Hardness Interactive (touch screen) mining tour (NvMA)

> Ammonite fossil and graphic discussing mineralization of organic remains

Flip-board graphic showing common minerals used in things around a home

NEW COMMISSION-FUNDED EDUCATIONAL ROCK AND MINERALS EXHIBIT AT RENO DISCOVERY MUSEUM *PARENTS TAKE NOTICE*

Rocks-side of exhibit

Rock-forming environments graphic; lights up when interacted with (NBMG)

Rock samples with information on identification, formation, and use in society; interactive buttons light up graphic above



ROCKS ARE EASY, BUT PEOPLE? (AN OVERLY-OPTIMISTIC OVERSIMPLIFICATION)

- Mineral exploration: find occurrence, secure position, find grade, drill out deposit, hand off to mine planning, done...next
- Abandoned Mine Lands: find public safety hazard, research ownership, temporarily secure, permanently close to protect the public...next
- >Not so fast, there are some complicating factors:
 - ►NEPA
 - ➢ Bats − passionate biologists
 - > Historical artifacts SHPO, passionate archaeologists
 - ➤Tribal concerns sovereign nations

LESSONS LEARNED TIME TO BROADEN THE SCOPE AND FORGE RELATIONSHIPS

- Perform a robust conflict assessment take off your geologist cap
- Educate yourself, spend time with, listen to, learn from, and educate (lightly) your fellow 'ologists, they're scientists too
- ► Respect is a two-way street
- Assist with collecting information beneficial to their job
- Collaborate and share data when you can
- >Partner with those who can view the entire landscape
- > Be prepared to modify your plans, yes, even mine plans
- The goal is not a quid pro quo, rather knowledge sharing and compromise to minimize impacts resulting from your completed project

RESOURCES

>Your friendly NDEP-BMRR, BLM Field, and USFS Ranger District Offices

- Invite them out to your project early and often
- Understand and respect that those managers are the "authorized officers"
- County Boards of Commission
 - Give them a presentation early and provide regular updates
- Western Association of Wildlife Agencies Crucial Habitat Assessment Tool (CHAT) - <u>https://www.wafwachat.org/</u>
- Inter-Tribal Council of Nevada <u>http://itcn.org/</u>
 - Annual meeting Dec. 11-15th, Grand Sierra Resort
 - Learn who is, and meet with, the natural resources representative for the tribe