

Nevada Division of Minerals

FRTC EXPANSION AND EFFECTS ON MINERAL EXPLORATION; DISSOLVED MINERAL RESOURCE EXPLORATION REGULATION DEVELOPMENT NDOM OPEN-DATA WEB SITE

NEVADA MINERAL EXPLORATION COALITION

October 10 2017

Rich Perry, Administrator





FALLON RANGE TRAINING COMPLEX MODERNIZATION:

**EXPANSION OF LAND RANGES, AIRSPACE MODIFICATIONS, AND
PUBLIC LAND WITHDRAWAL RENEWAL**



Environmental Impact Statement

Public Scoping Phase

www.FRTCMODernization.com

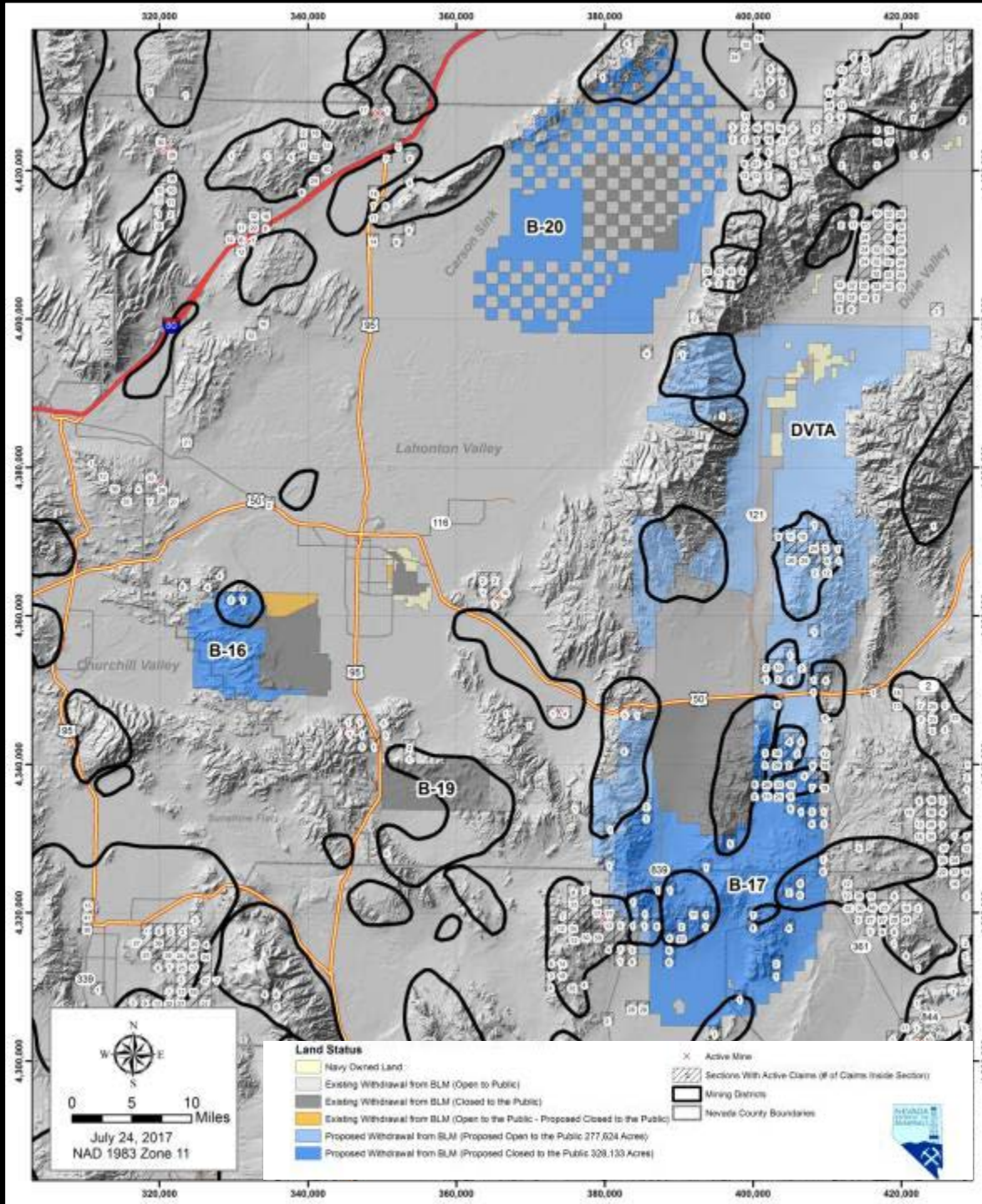
August 2016

Renew land withdrawal of 202,859 acres (expires in 2021)

- **Withdraw an additional 604,789 acres in Churchill, Pershing, Nye**
- **Acquire 65,160 acres of private land**
- **Expand airspace**
- **EIS led by Navy**
 - **Scoping comment period ended Dec 2016**
- **Cooperating agencies:**
 - **NDOW, NDOM, NDOT, NDA, NACO, Churchill, Mineral Eureka and Nye Counties**
 - **BLM, FAA, USFW, Tribes**
- **Compelling argument by Navy**
- **Requires Congressional approval and funding by late 2020**

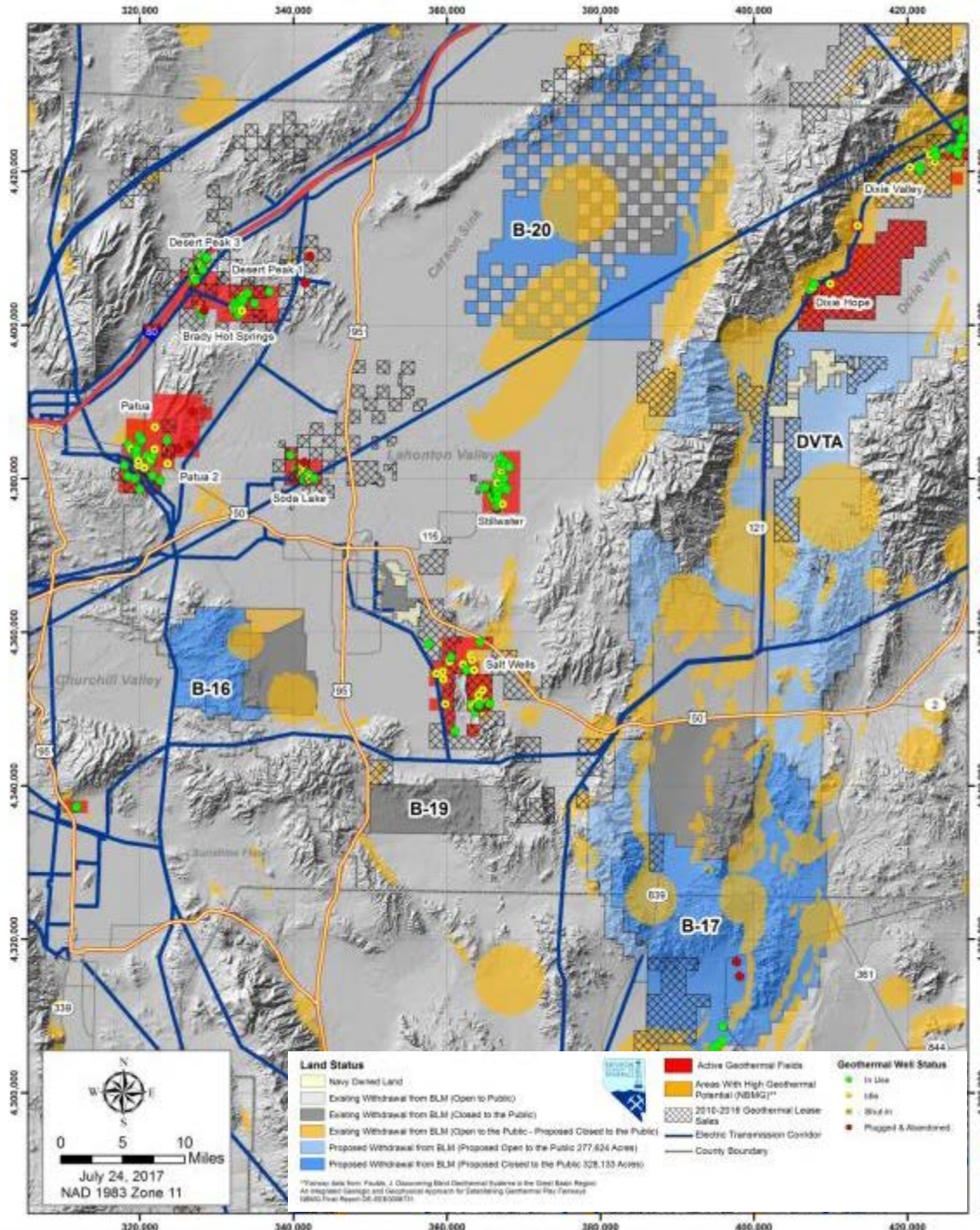
IMPACT ON MINERALS

- Expansion includes all or part of 18 historical mining districts, including the Fairview, Bell Mountain, Wonder and Eagleville Districts
- EIS proposes no access to dark blue (bombing) areas, limited public access in lite blue areas
- 688 active mining claims in proposed withdrawal area in 2017 assessment year
- Mineral and mining impact analysis required in EIS



OTHER POTENTIAL RESOURCE IMPACTS

- Withdrawal is in “heart” of geothermal development
- Red = active geothermal fields
- Cross-hatch = active Federal geothermal leases
- Blue lines = energy transmission corridors
- Tan = areas of high geothermal potential (DOE + NBMG study)





Current Status

- **State has a coordinated effort amongst agencies to analyze and mitigate impacts. Impacts include minerals, geothermal, wildlife, hunting, recreation, grazing, energy transmission and transportation.**
- **105 public comments on minerals and mining received in scoping phase. 7% of total comments.**
- **Governor has met with Navy to voice concerns on potential impacts to the State**
- **Draft EIS to public summer 2018**

DISSOLVED MINERAL RESOURCE EXPLORATION – REGULATION UPDATE

- A.B. 52, proposed by the CMR through the Governor's office, passed on the last day of the 2017 legislative session
- Signed by Governor and assigned as a new chapter, NRS 507
- NDOM, NDEP, NDWR jointly responsible for developing regulations: NAC 507
- Commission on Mineral Resources is body that adopts regulations
- Statute becomes effective on 1/1/2018





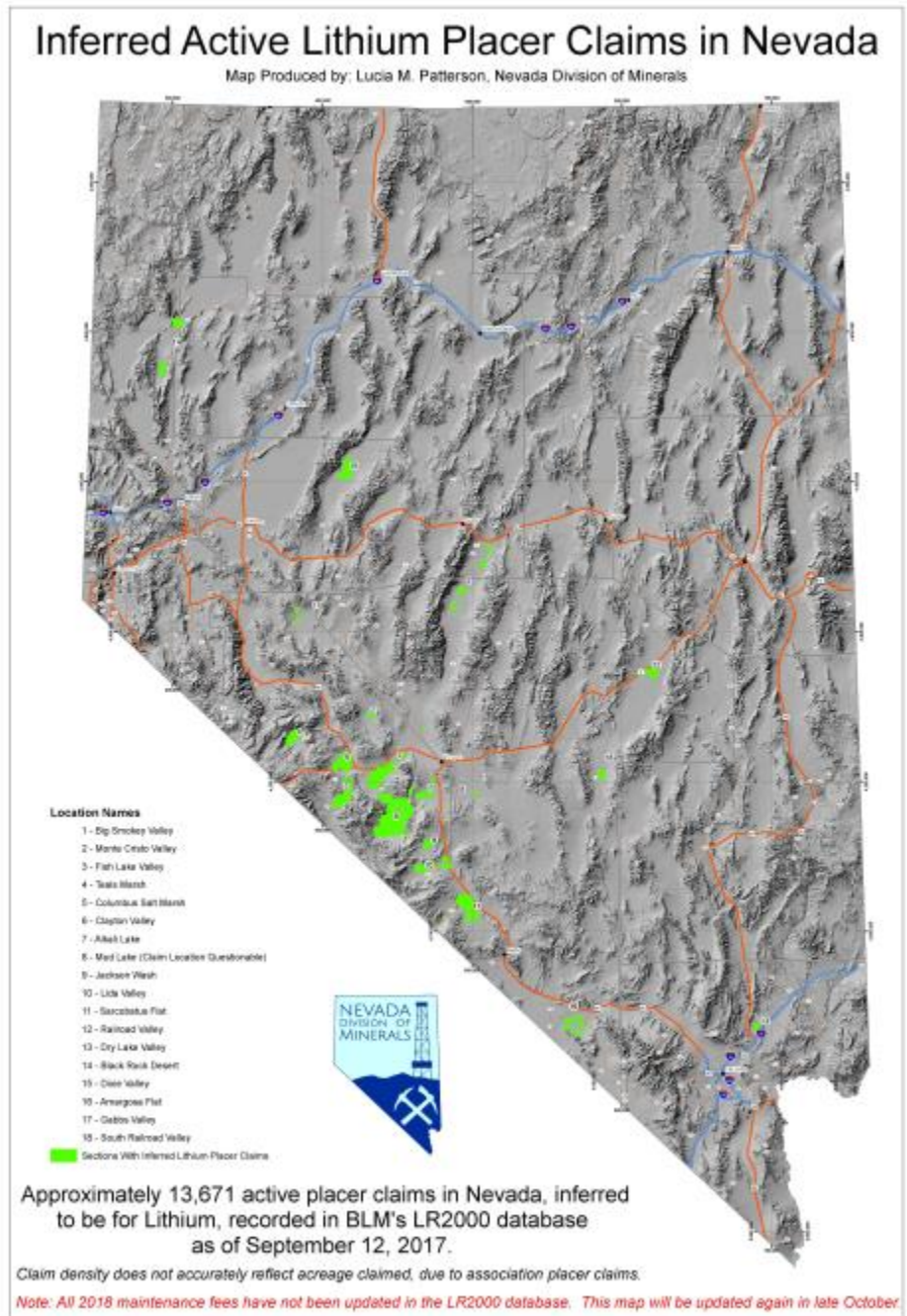
Why was A.B. 52 needed?

- ***Answer: To allow for sampling of brines in exploration boreholes and wells, and to develop regulations to ensure drilling for dissolved minerals is protective of groundwater and geothermal resources.***
 - Only statutory reference in NRS to “dissolved or entrained minerals” in geothermal resources chapter
 - Nevada did not have statutes or regulations for exploration of dissolved mineral brines, it has been regulated under water law and water well drilling regulations
 - Litigation between adjacent land/claimholders
 - BLM, which permits exploration project surface disturbance on Federal lands, has no statutory authority on water and asked for guidance from the State

NEVADA'S LITHIUM EXPLORATION ACTIVITY

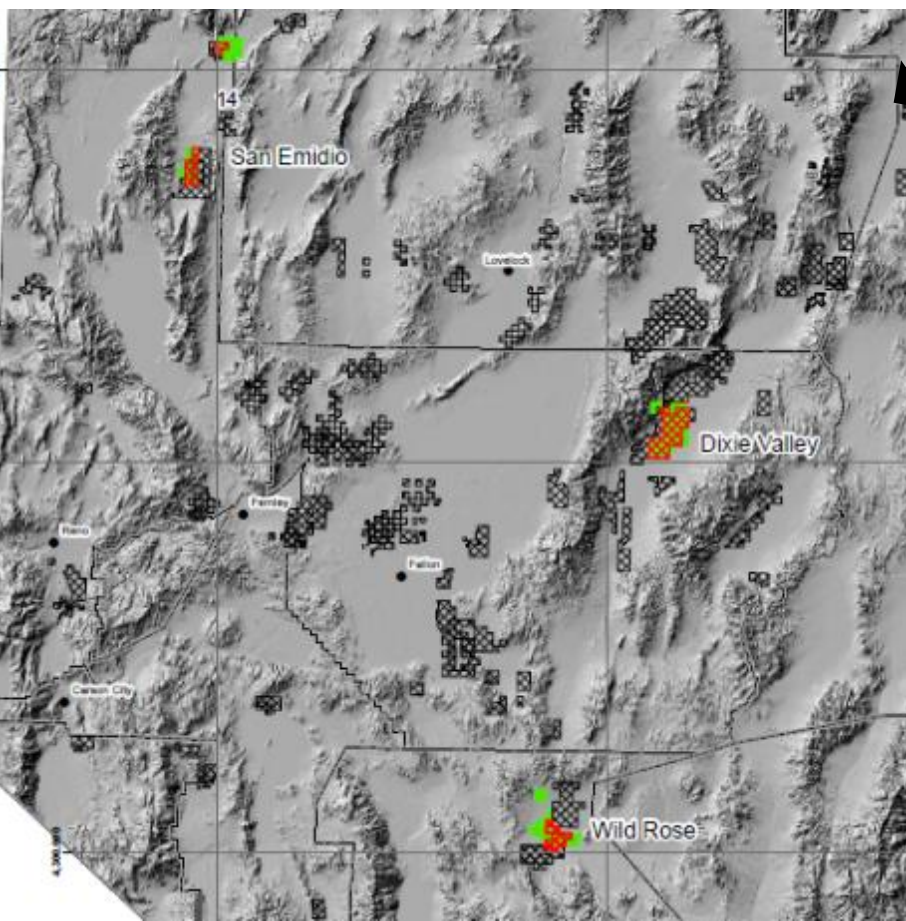
- 13,671 claims staked in playas
- 18 different hydrographic basins
- 27 different exploration entities and one producer

Current to 9-12-2017



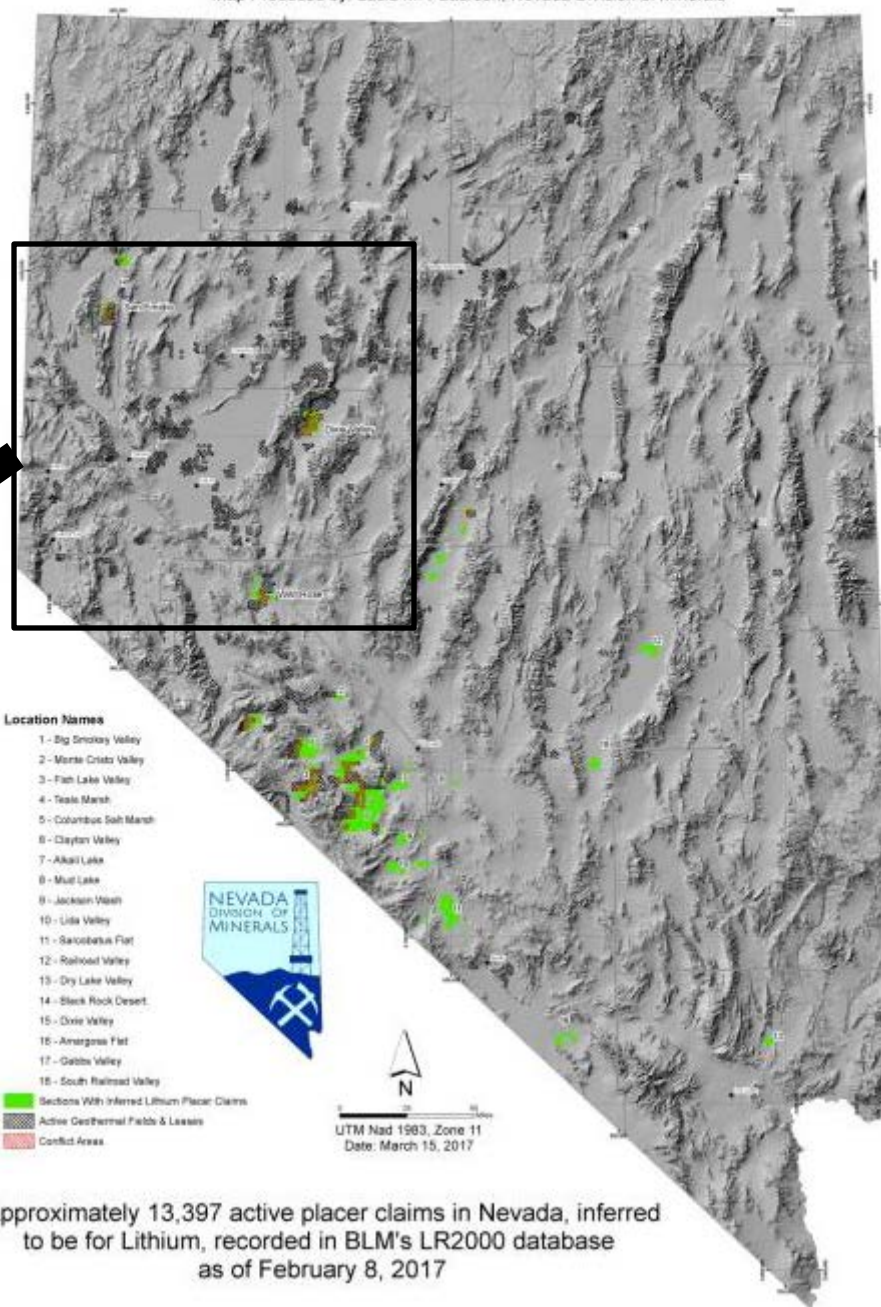
POSSIBLE RESOURCE CONFLICT AREAS

24% or 65,244 acres of inferred active lithium placer claims have cross over with active geothermal leases/fields



Inferred Active Lithium Placer Claims Vs. Geothermal Fields/Leases

Map Produced by: Lucia M. Patterson, Nevada Division of Minerals



Approximately 13,397 active placer claims in Nevada, inferred to be for Lithium, recorded in BLM's LR2000 database as of February 8, 2017



What does A.B. 52 address ?

- **A.B. 52 places regulation of dissolved mineral brine exploration boreholes and exploration wells within the Division of Minerals, which has expertise in fluid minerals and deep well drilling and completion.**
 - **This new statute, initially designated at NRS Chapter 507, has**
 - **Definitions of DMRE boreholes and wells distinct from hard-rock exploration boreholes and water wells**
 - **Allows for solution sampling of exploration boreholes**
 - **Defines “DMRE Projects” as a single notice or plan-level project on federal land or a designated project on non-federal lands**



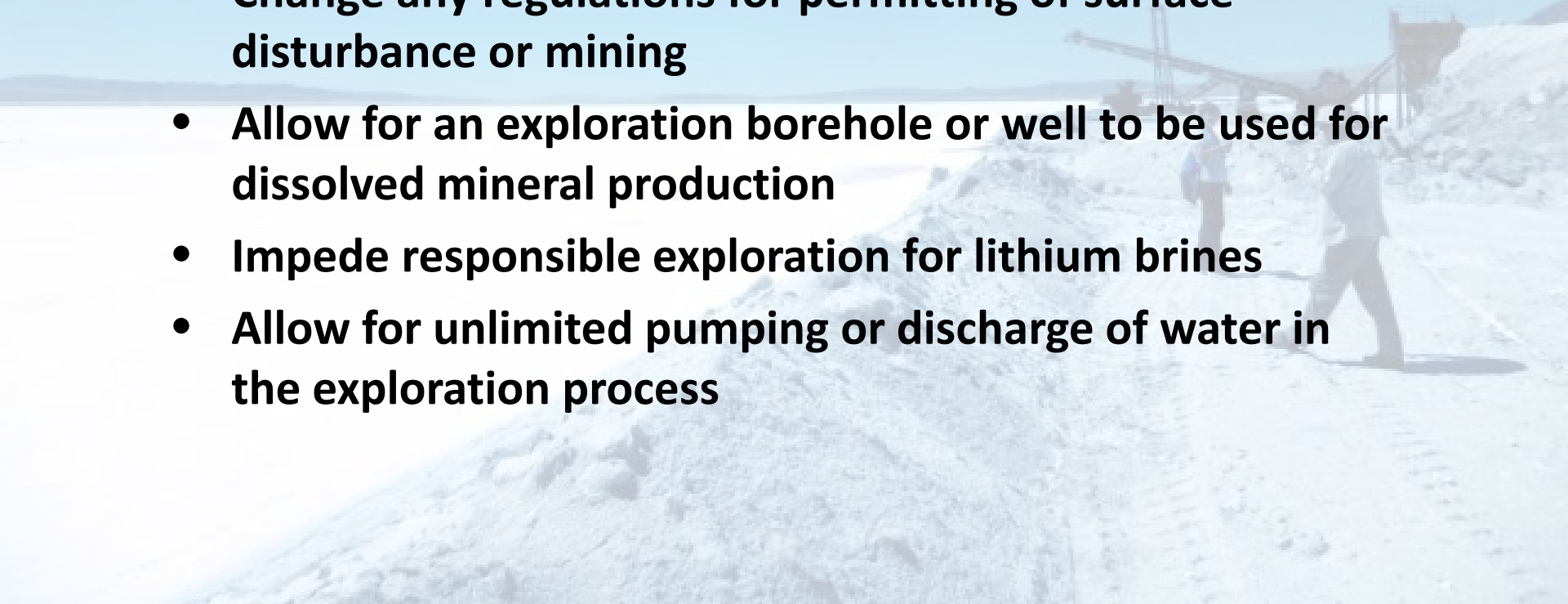
What does A.B. 52 address ?

- Each “project” can have any number of boreholes
- Each “project” can have any number of wells, but a project is limited to 5 acre-feet of sampling and pump testing before a water right is required.
- Consultation with NDOM triggered when proposing boreholes or wells beyond a certain depth in areas of possible oil or geothermal resource conflicts.
- Requires a licensed water well driller to drill boreholes or wells to ensure protection of fresh water aquifers and plugging of boreholes/wells



A.B. 52 does not:

- **Change procedures for appropriating water or create permanent water rights**
- **Determine who owns mineral rights**
- **Regulate production of dissolved mineral brines**
- **Change any regulations for permitting of surface disturbance or mining**
- **Allow for an exploration borehole or well to be used for dissolved mineral production**
- **Impede responsible exploration for lithium brines**
- **Allow for unlimited pumping or discharge of water in the exploration process**



Lithium brine exploration, 2016



LITHIUM BRINE EXPLORATION, 2017



Lithium brine exploration, 2017



Lithium Exploration in Nevada

Legend

Exploration Company Name

- Altair Resources Inc (?)
- American Lithium Corp
- Belmont Resources Inc
- Caeneus Minerals Ltd
- Cypress Development Corp
- Dajin Resources Corp
- Enertopia Corp
- Global Geoscience Ltd
- Iconic Minerals Ltd
- Lithion Energy Corp
- Lithium Consolidated Mineral Exploration Ltd
- Lithium Corp
- Lithium X
- Marquee Resources Ltd
- Nevada Energy Metals
- Nevada Sunrise Gold Corp
- Noram Ventures Inc
- Oroplata
- Pure Energy Minerals Ltd
- Rascal Lithium LLC
- Reedy Lagoon
- Richard Kern
- Sienna Resources
- Ultra Lithium Corp
- Urania Resources Corp
- West Water Resources Inc
- Zenith Minerals Ltd

LR2000 Exploration Data*

- Sections with Inferred Lithium Placer Claims
- Sections with "Lithium Brine" PGO or NOI
- Section with "Lithium" PGO or NOI
- Sections with "Suspected Lithium" PGO or NOI

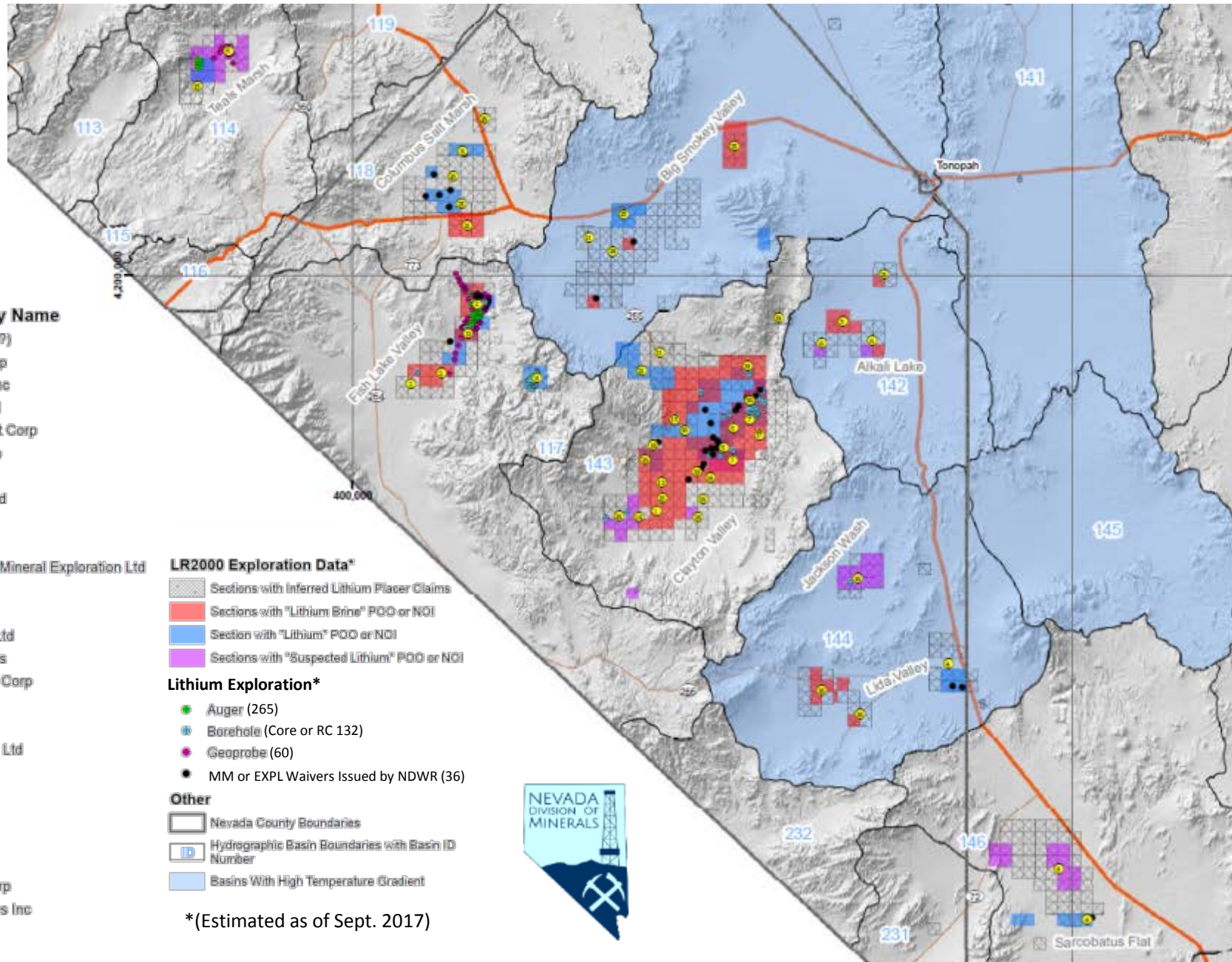
Lithium Exploration*

- Auger (265)
- Borehole (Core or RC 132)
- Geoprobe (60)
- MM or EXPL Waivers Issued by NDWR (36)

Other

- Nevada County Boundaries
- Hydrographic Basin Boundaries with Basin ID Number
- Basins With High Temperature Gradient

*(Estimated as of Sept. 2017)



Schedule for regulation development

- *Regulation development team began meeting July 11th.*
- *Working draft of Regulations and relevant forms presented at Stakeholder meeting – Aug. 23rd.*
- *Request for review of relevant sections by Commission – Aug 24th.*
- *Second stakeholder meeting for input – Sept 8th*
- *Submitted to LCB for legal review – September 27th*
- *Public Workshop – mid- late Nov. (?)*
- *Public Hearing and possible adoption by CMR – Dec ?*
- *Interim Legislative Committee Possible Adoption – tbd*
- *Current draft of regulations (draft #4) and forms on NDOM web site at <http://minerals.nv.gov/Programs/DMRE/DMRE/>*
- *Statute becomes effective: 1/1/2018*
- *Roll-out and education to Industry, BLM, and licensed well drillers – 1st quarter of 2018*



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.

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Pages

Visit one of our pages to view interactive maps and download data.



Inferred Active Lithium Placer
Claims in Nevada



Active mining claims in Nevada



Nevada Public Lands Issues



Visit Our Main Website

Nevada Mining Claims

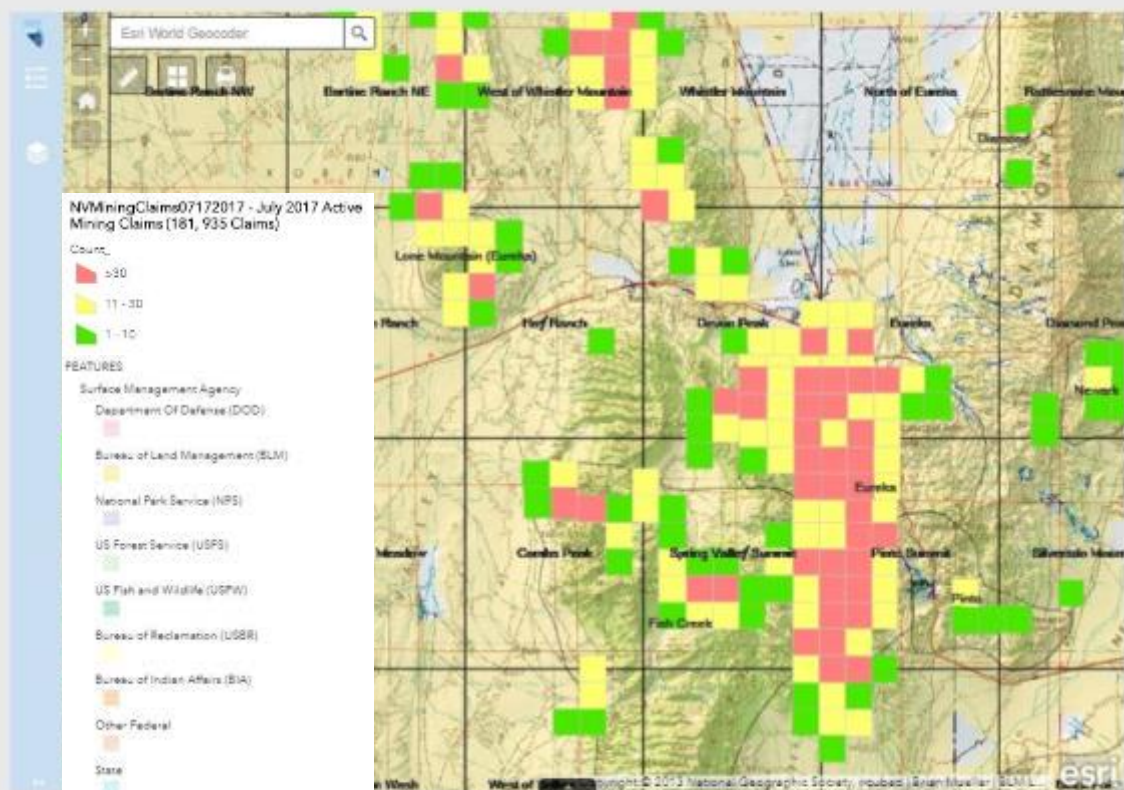
Mining has played a significant role in Nevada's history and continues to be a major contributor to Nevada's economy. Over one million mining claims have been located in the state since the mining law of 1872 was passed. As of July, 2017 there were 181,935 active mining claims within the state.

Mining Claims and Land Status Interactive map

Claim density does not accurately reflect acreage claimed, due to association placer claims.

To report broken links email: impatterson@minerals.nv.gov

For help with land research methods click here



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NDOM Nevada Mining Claims Map