

Commission on Mineral Resources and Division of Minerals Concerns

Joint Interim Legislative Committee
on Natural Resources

April 5, 2024

Prepared by Great Basin Resource Watch
Western Shoshone Defense Project
Center for Biological Diversity
Progressive Leadership Alliance of Nevada

Presenting - John Hadder (GBRW) & Fermina Stevens (WSDP)

GBRW is a non-profit organization founded in 1994. We work with communities to protect their land, air, and water from the negative affects of mining and resource extraction. www.gbrw.org

WSDP To affirm Newe (Western Shoshone) decision making over Newe Sogobia (the people's earth mother) by protecting, preserving, and restoring Newe rights and lands for present and future generations based on cultural and spiritual teaching and traditions.

At the **CBD**, we believe that the welfare of human beings is deeply linked to nature — to the existence in our world of a vast diversity of wild animals and plants. Because diversity has intrinsic value, and because its loss impoverishes society, we work to secure a future for all species, great and small, hovering on the brink of extinction.
www.biologicaldiversity.org

PLAN was founded in 1994 to bring together diverse and potentially competing organizations into one cohesive force for social and environmental justice in Nevada, and continues to do so! www.planevada.org/

Duties of the Commission on Mineral Resources

NRS 513.063 Duties. The Commission shall:

- 1. Keep itself informed of and interested in the entire field of legislation and administration charged to the Division.**
- 2. Report to the Governor, the Mining Oversight and Accountability Commission created by NRS 514A.040 and the Legislature on all matters which it may deem pertinent to the Division, and concerning any specific matters previously requested by the Governor or the Mining Oversight and Accountability Commission.**
- 3. Advise and make recommendations to the Governor, the Mining Oversight and Accountability Commission and the Legislature concerning the policy of this State relating to minerals.**
- 4. Formulate the administrative policies of the Division.**
- 5. Adopt regulations necessary for carrying out the duties of the Commission and the Division.**

Duties of the Division of Minerals

NRS 513.073 Encouragement of exploration; collection and dissemination of educational information; maintenance of register of operations; record of annual production; administration of chapter 522 of NRS and regulations of Commission. The Division shall:

- 1. Encourage and assist in the exploration for and the production of oil, gas, geothermal energy and minerals within this State.**
- 2. Collect and disseminate throughout the State information calculated to educate persons engaged in those enterprises and benefit those enterprises in this State, and any information pertaining to any program administered by the Division.**
- 3. Maintain a register of all mining operations and operations for the production of oil, gas and geothermal energy in this State.**
- 4. Record annually the production of each registered mining operation and operation for the production of oil, gas and geothermal energy in this State.**
- 5. Administer the provisions of chapter 522 of NRS.**
- 6. Administer any regulations adopted by the Commission.**

Amount of Water Destined for Pit Lakes

(Compiled from largest expected and existing pit lakes – NDEP records past 5 years)

**Total ~1.5 to 1.7 million acre-feet of water
489 to 554 billion gallons**

A waste Nevada's precious water:

- Not reclaimed - no post mining use
- No designated "beneficial use" for the water
- Lower water quality than surrounding groundwater

Lake Lahontan – 102 billion gal (max)
Rye Patch Reservoir – 69.4billion gal (max)

Most Mining Pit Lakes Change Groundwater Flow

- acts like a large diameter well
- draws in groundwater
- competes for water with springs and streams

- Estimated loss of water from existing and the largest expected pit lakes is 10,000 to 11,000 acre feet
- In some basins the evaporative loss is a significant portion of the perennial yield – Maggie Creek Basin, PY = 4,000 AF; two largest pit lakes in that basin will remove about 2,860 AF annually

Dewatering Consequences

Cumulative Effects
Study Area

Groundwater
Drawdown

Mining
Boundary

Green (initial) and red (revised) lines are a
10 ft groundwater drawdown

**Creates a Vast Groundwater Deficit
Enormous Hole in the Deep Aquifer**

Source: Draft Supplemental Environmental
Impact Statement, Leeville Project, August
2007.

Sacred Landscapes

"It's really hurtful for me because this is where my family would come. My great grandparents, grandparents, aunts and uncles and cousins used this land all the time and then this happened, the destruction of a sacred mountain, a sacred place. We suffer culturally and it's really difficult to stand here and see what has become of this, of this mountain, a relative, with life and spirit...once again they are erasing us from the landscape"

- Mary Gibson, a citizen of the Te-Moak Tribe of Western Shoshone, Elko Band

Mt. Tenabo, NV

Permanently Damaged
Sacred Landscape

Indigenous communities say there is no mitigation for Sacred landscapes

Who Bares the Burden

"Denabo has significance for Western Shoshone, it means the writing on the rock walls of the mountain (White Cliffs) put there by our Creator. We go to pray to our Creator to give us strength to keep us going. How can we pray to our creator when the place is being blown up?"

**- Joyce McDade, Western Shoshone
Grandmother**

Western Shoshone Elders Carrie Dann (red shirt) and Barbara Ridley (with rod) at cultural site Shoshone Wells near Mt. Tenabo

"Under our religious beliefs, the water in Mt. Tenabo is unique and is connected to specific spirits that reside in the Mountain and in the water. These spirits will suffer greatly, and indeed will likely be eliminated altogether, when this water is lost through the Project's dewatering operations,"

- Joseph Kennedy, Former Chairman of Timbisha Shoshone Tribe.

Molybdenum Mine at Mt. Hope would Threaten Nevada's Protected Water and its Environs

"Our ranch and farm (since 1864) are located close enough to Mount Hope (proposed Molybdenum Mine) to be adversely affected by toxic dust, drainage, toxic smoke, traffic, noise, and the very real possibility of damage to our business from any drawdown, cone of depression, or any drop in the static level from the added use and evaporation of water by the project. Our water supply is not infinite."

– Carolyn Bailey, Diamond Valley.

above

Recommendation 1

Change the Composition of the Commission

Amend NRS 513.023

- ✓ Commission should have representation from directly affected communities
- ✓ The majority of seats on the Commission are not held by people who derived their income directly or indirectly from the mineral industry
- ✓ There be at least two Indigenous seats - the most affected peoples
- ✓ Two seats from non-Indigenous affected community people
- ✓ There can be up to 3 mineral derived income seats with technical expertise
- ✓ Appointments are to be made in the same manner as the Mining Oversight and Accountability Commission (NRS 514A.040)

Recommendation 2

NRS 513.073 be amended to remove the following duty:

“Encourage and assist in the exploration for and the production of oil, gas, geothermal energy and minerals within this State.”

A fundamental regulatory principle requires that an agency that is regulating a business or activity should not also be advocating for that business or activity - this violates neutrality and objectivity that is needed of the agency.

Acid Mine Drainage

**Acid Mine Drainage = "reactive ore" + water + air
bacteria catalyzed**

- The acid then dissolves other metals out of the rock, which can runoff into nearby streams and rivers, if not controlled.
- Hardrock mines generate 17-27 billion gallons of polluted water each year (2013 study).
- Acid mine drainage can result in a perpetual pollution. It is legal in Nevada to open a mine knowing it will perpetually pollute through proposing indefinite treatment

Top - John Hadder pointing out Acidic Drainage at the Rio Tinto mine site in northeastern Nevada near the Owyhee River- 2007

Right - Kassandra Lisenbee at the same location - 2023

Intergenerational Water Pollution - Phoenix Mine Site

- Treatment in Perpetuity - BLM definition - 500 years or more
- *Nevada has no specific regulations on perpetuity treatment*
- *However, NAC 445A.429 requires that*

"The holder of the permit must institute appropriate procedures to **ensure that all mined areas do not release contaminants that have the potential to degrade the waters of the State."**

- Under both the existing plan and the proposed there will be "mined areas" that will result in degrading the waters of the State unless actively treated.
- Bonding is required – current surety for Phoenix is at least \$569,500,000
- NGM is proposing to pump and treat contaminated water (315 million gallons annually) for at least 500 years.
- Catastrophic failure of active treatment needs to be considered.

Lone Tree Pit Lake - 2015

Humboldt River

Treatments have been required to control acidity

- In 2008 ~1,914 tons caustic soda added* - an amount needed to neutralize the acid in ~ 2 million average car batteries
- Slaked lime treatments ~ 74,000 tons as of 2016**
- Trona (sodium carbonate) treatments ~ 10,000 tons as of Jan. 2017**
- Between 19 and 20 tons of acid enter the pit lake daily**

Interstate 80

Final EIS in 1996:

"Pit lake water is predicted to be alkaline (pH=8.7-9.1) at all times during pit lake development"

Photo: Bruce Gordon, Ecoflights.

*State of Nevada, Bureau of Mining Regulation and Reclamation, correspondence to Newmont, Sept 10, 2008.

** Newmont, North America, "Lone Tree Pit Lake, 2016 Trona Test Update," November 2 2016.

***“When the Earth Mother, your land, is gone,
your walking towards a slow spiritual death.”***

***- Carrie Dann,
Western Shoshone
Land Rights Protector***

Inadequate Consultation with Indigenous Communities

"State and federal regulations and permitting continue to ignore Indigenous rights to Free Prior Informed Consent and devalue Indigenous Knowledge and Science. My people have been the caretakers and stewards of the Great Basin for at least a millennia until colonization. Our unique and deep relationship with the lands and intuitive understanding of the ecological connections provides a vital assessment of how a mining project will affect the Great Basin. Had there been meaningful consultation and valuation of Indigenous perspectives on these projects we would not see losses of biodiversity, cultural landscapes, water and air pollution that we do see today."

Joe Kennedy
Timbisha Shoshone of the Western Shoshone
Nation

Recommendation 3

Remove the education bias

We have two possible suggestions:

- A. Remove from NRS 513.073 section 2: "Collect and disseminate throughout the State information calculated to educate persons engaged in those enterprises and benefit those enterprises in this State, and any information pertaining to any program administered by the Division."

Thus, the Division will have no educational responsibility. This means that much of the information will need to be housed elsewhere.

- B. Amend NRS 513.073 section 2: "Collect and disseminate throughout the State information regarding all aspects and consequences of mineral exploration and extraction and any information pertaining to any program administered by the Division."

This option would allow the Division to continue much of the information gathering that it has been doing, but also require the Division to present all consequences of mineral exploration and extraction including damages done. Reaching out people and entities in addition to the Nevada Mining Association, UNR Mining faculty, USGS, etc. will be needed to fulfill this charge.