

BRIAN SANDOVAL Governor

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES **DIVISION OF MINERALS**

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COMMISSION ON MINERAL RESOURCES

Nevada Department of Wildlife 1100 Valley Rd (Conference Room) Reno, NV 89512

Friday, November 16, 2018

AGENDA

9:00 A.M.

CALL TO ORDER

The Agenda for this meeting of the Commission on Mineral Resources has been properly posted for this date and time in accordance with NRS requirement.

ROLL CALL

PLEDGE OF ALLEGIANCE

COMMENTS BY THE GENERAL PUBLIC

Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter itself has been specifically included on a successive agenda and identified as an item for possible action. Public comments may be limited to 5 minutes for each person. **ACTION WILL NOT BE TAKEN**

I. MINUTES

A. Approval of the August 23, 2018 meeting minutes

II. **NEW BUSINESS**

A. Planning for the 2019 Exploration Survey.

The Nevada Bureau of Mines and Geology produces a biennial Report Entitled "Nevada Mineral and Energy Resource Exploration Survey", which is released early in the State Legislative session to assist elected officials in understanding the economic impacts of the minerals industry. This agenda item is intended to allow NBMG authors to discuss with the Commission the content and methodology of the survey.

- B. NDOM's Open-Data Web Site and Claims Update Recent additions to the web site include interactive maps for researching active mining claims, maps showing wilderness and wilderness study areas, and story maps for educators. Lucia Patterson
- C. Task Force for Bond Pool Regulation Update The Task Force met on October 3rd and analyzed options for reducing the Bond Pool reserve over time. Options include reducing the 3 percent premium fee and rebating a portion of premiums paid

Nigel Bain; Large-Scale Mining Robert Felder; Exploration and Development John H. Snow; Geothermal Resources



Administrator

FOR POSSIBLE ACTION

FOR DISCUSSION ONLY

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for plan-level participants when exiting the bond pool. Mike Visher will present findings of the Task Force.

D. The Gold Butte Closure Project

40 hazards were secured using wildlife-compatible gates and PUF plugs at Gold Butte National Monument in Clark County. This project was made possible by partial funding from the Clark County Desert Conservation District. The work was performed from September 22 through October 16. AML Program Chief Rob Ghiglieri will present a recap of the project.

III. OLD BUSINESS

- A. <u>Release of Commission-funded report entitled "Opportunities for Precious</u> <u>Metals Toll Processing and Copper Concentrate Processing in Nevada"</u>. This report was funded through the 2-year contract with the Nevada Bureau of Mines and Geology, and will be published as Special Report #57 Dave Davis and Rich Perry will discuss the findings of the report.
- B. <u>Planning for AEMA and PDAC.</u> The Division will have trade booths at AEMA, which will be held December 5-7 in Spokane and at PDAC in Toronto on March 3-6, 2019. The Division is seeking input on messages and topics to deliver. Rich Perry
- C. Update on Proposed Land Withdrawals in Nevada Mike Visher
- D. Winter AML work program Rob Ghiglieri
- E. <u>The Nevada Excellence in Mine Reclamation Awards Program</u> 5 Awards were presented at the Nevada Mining Association annual conference on September 8th in Lake Tahoe. This State award is determined by a committee comprised of a representative from NDEP-BMRR, BLM, USFS, NDOW and NDOM. Rich Perry

IV. STAFF REPORTS

- 1) Mining and Reclamation Bond Pool Mike Visher
- 2) Administrator Report and correspondence

COMMISSION BUSINESS

A. Determination of time and place of next CMR meeting

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ADJOURNMENT

NOTICE TO PERSONS WITH DISABILITIES

Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to notify the Division of Minerals, 400 W. King Street, suite 106, Carson City, NV 89701 or contact Valerie Kneefel at (775) 684-7043 or Email <u>Vkneefel@minerals.nv.gov</u>

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I. MINUTES



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COMMISSION ON MINERAL RESOURCES Eureka County Courthouse Commission Chambers 10 South Main Street Eureka, Nevada 89316

Minutes

Thursday, August 23, 2018



RICHARD PERRY Administrator

1:00 P.M.

CALL TO ORDER

Rich DeLong called the meeting to order at 1:00 pm

ROLL CALL

Commission	<u>Staff</u>
Rich DeLong	Rich Perry
Dennis Bryan	Mike Visher
Mary Korpi	Valerie Kneefel
Nigel Bain	Bryan Stockton
Art Henderson	Rob Ghiglieri
John Snow	Courtney Brailo
	Garrett Wake
	Lowell Price

PLEDGE OF ALLEGIANCE

Pledge of Allegiance was led by Rich DeLong

COMMENTS BY THE GENERAL PUBLIC

Rich DeLong: stated that Dave Parker has resigned from the Commission. Nigel Bain: has resigned from Barrick Gold as of the end of May and joined Hycroft Resource & Development Company.

I. MINUTES

 A. Approval of the May 17, 2018 meeting minutes Motion: Approval of the minutes with no changes By: Dennis Bryan
Seconded: Mary Korpi
Unanimously passed

II. NEW BUSINESS

A. Northern Nevada Education Activities –

The northern Nevada Earth Science Teachers Workshop was held at Wooster High School on July 17, 2018. Four NDOM Staff presented classes at the workshop, which included a new activity entitled "Drilling For Energy in Nevada". Courtney Brailo will summarize the activities at the workshop and other NDOM education and outreach activities in northern Nevada.

Courtney Brailo: gave a PowerPoint presentation regarding oil and gas activity.

Development of New Activities-

- Oil, Gas & Geothermal Activity
 - Exploration to Production activity
 - Nevada based example
 - Geology-based
 - Includes resource feasibility understanding
 - Hydraulic Fracturing demonstration

Teacher's Workshops-

- Northern Nevada Workshop (Reno) July 16-18
- Day One: Mineral & Rock basics (R. Ghiglieri), with an advanced option (L. Patterson, C. Brailo)
 - Geology Tours
- Day Two: Mixed Mining & Geology Topics
 - Mining Tours
- Give away all classroom resources as prepackaged activities and each teacher gets a swag bag they can use in their classrooms

Classes & Sessions-

- Oil and Gas Session added this year
 - Outcrop mapping, basin analysis exploration to production methods at Railroad Valley, NV
 - Cupcake core drilling An exploration and mining activity very popular at schools and teacher's workshop (*L. Patterson*)
 - Mineral Uses
 - Drilling and drill rig types
 - Development of cross sections from drill hole samples
 - Mining in Nevada
 - Commodity Use
 - Number of people employed at Nevada's mines
 - Locating the major mines on a Nevada Map
- Other Notable Classes & Contributions-

NDOM

Tote Bags, Hand Lenses & Lanyards, Rock and Mineral Samples, Mineral Test Kits, Mineral ID Books, Lunch Bags, Posters, Pencils, Stickers, Buttons, Element Bookmarks, Prizes – Microscope, Build a Mine: Economics of Mining & Mine Development for younger grades (*R. Ghiglieri*) Geologic Time – Comprehensive instruction with multiple activities (*L. Patterson*) Plate Tectonics (*G. Wake*), Geothermal: Build a power plant (*replaced by OGG*) Other Contributors (NMA, volunteers, sponsors)
Gold Splatter, Sunscreen, Chap Stick, Water Bottles, Critical Elements of Energy, Nevada's Natural Resources History of Mining, Extraction: Where do Au, Ag, Cu come from?

Oil, Gas and Geothermal Activity-

- Introductory Presentation
 - Why do we need oil, gas and geothermal?
 - What do we use these resources for?
 - Products, energy and JOBS!
 - Where our resources come from
 - Heat/permeability Geothermal
 - Biologically rich 'cooked' deposits Oil and Gas
 - Methods by which we explore and produce from these resources
 - Geologic mapping, drilling and feasibility studies
 - Creation of Well Logs, Stratigraphic Columns, Cross Sections, 3D modeling
 - Types of Drill Rigs, Reverse Circulation vs Core Rigs
 - Conventional vs non-conventional resources and traps for oil and gas
 - Natural pressurized flow with minimal pumping
 - Well stimulation and hydraulic fracturing of low permeability reservoirs
 - Non-conventional benefits and misconceptions
 - Depths of resources
 - Use of water as compared to other practices
 - Minimal use of chemicals and NV regulator ability to not allow for use of any particular chemical
 - Efficiency and cleanliness of oil and gas as compared to coal
 - Induced seismicity rare and deep, can limit the rate of re-injection
 - Nevada's existing laws and regulations Cement bond logs & Plugging and
 - Abandonment
 - Hydraulic Fracturing
 - Where did the technology stem from? Need to minimize dependence of foreign oil oil crisis of 1973.
 - Perfected technique in the 1990s
 - We have many resources here in the US! Texas, North Dakota, Colorado and Pennsylvania

This year for the first time we are net exporters of petroleum and petroleum products! Exploration & Drilling Activity Railroad Valley, NV-

- Rock Identification
 - Limestones, Dolomites, Shales, Rhyolites, Basalts, samples in class and included in their rock boxes
- Creation of a Geologic Map and Locating Collection sites, Understanding and creating Well Logs from wells drilled at Bacon Flat, Understanding cross sections and making simple geologic interpretations. Feasibility studies, Costs of Drilling and Permitting, Price of oil/gas, Generated Revenue – Costs to Drill, How can you increase production? What if you don't have a permeable reservoir rock, what are you options for producing hydrocarbons from that reservoir?

Hydraulic Fracturing - Hands on Exercise-

- Understanding the basics behind the method
- Uses gelatin as medium (limestone, dolomites, shales)
- Straw = Core Rig, Casing String
- Syringe/Plunger = Hydraulic Fracturing Rig
- Plaster of Paris = Proppant and HF fluids

Railroad Valley Resources were discovered in this way-

- This kind of exploration and mapping is how we know there were inland seas in NV
- 1948 PhD Thesis by Walt Youngquist studied cephalopods, some of which contained oil pockets
- Shell became interested and in 1954 discovered oil
- Now the basin has 9 recognized oil fields and has produced over 47 million barrels of oil
- Early wells were the largest producers in the country at the time
- Due to new technologies and discoveries we are now the 27th of 30 oil producing states

Other NDOM outreach Northern Nevada-

- Classroom presentations (L. Patterson, C. Brailo)
 - Cupcake Core Drilling (~4th Grade)
 - Geologic Time Scale (2-5th grade)
 - The Rock Cycle ($\sim 2^{nd}$ Grade)
 - Weird Rocks (~K-1st grades)
 - High School Presentations
- 4th Grade Mail Out Project-based learning module (*R. Ghiglieri, C. Brailo, L. Patterson*)
 - Abandoned Mine Campaign
 - History of Mining in Nevada
 - Core Drilling
 - Best Campaign Project 4th grade class @ Alice Maxwell Elementary, Sparks
 - To be completed at new Sparks school
- Career Fairs / Career Days All Grades (All Staff)
- Special Events Farm Days, Nevada Day Celebrations, Association Meetings (All Staff)
- Northern Nevada Totals:
 - 2017: 128 presentations (5302 attendees)
 - 2018: 66 presentations (3540 attendees)

Dennis Bryan: under the hydraulic fracturing it says the techniques were perfected in 1990, is that a decade too early?

Art Henderson: The first frack was in 1947. Hydraulic fracturing in horizontal wells is all that changed.

Art Henderson: More horsepower has been developed with more pumps.

John Snow: The only suggestion I have is that one message these teachers should hear is that we emphasize the protection of fresh water by casing.

Courtney Brailo: It was in the original presentation. This is still a work in process.

Art Henderson: Did you have any negative feedback on Hydraulic Fracturing at all?

Courtney Brailo: no not at all.

Rich DeLong: Thank you, well done.

B. Summary of oil, geothermal and dissolved mineral resource drilling activities from January

2017 to July, 2018, updates to the oil and gas database, and results of the most recent oil/gas leasing on Federal lands in Nevada.

Lowell Price: Did a PowerPoint presentation. Geothermal Drilling - 2017: 29 Wells-**Temperature Gradient Wells: 15** City of Wells: 13 (GeoProbe) Ormat Nevada, Dixie Valley: 2 (Core) **Observation Wells: 4** US Geothermal, San Emidio: 3 (deepened reclassified TG wells) City of Wells: 1 Production Wells: 5 Ormat Nevada, Tungsten Mountain: 1 Ormat Nevada, McGinness Hills: 3 Homestretch Geothermal, Wabuska: 1 **Injection Wells: 3** Ormat Nevada, Dixie Meadows: 1 Ormat Nevada, McGinness Hills: 1 Ormat Nevada, Carson Lake: 1 Domestic Wells: 2, Reno Moana Area, 1 Production, 1 Injection Geothermal Drilling - 2018: 20 Wells-**Temperature Gradient Wells: 15** NBMG, Granite Springs Valley: 9 (GeoProbe) NBMG, Gabbs Valley: 6 (Rotary Drilled) **Observation Wells: 2** Ormat Nevada, Carson Lake (FORGE): 1 Ormat Nevada, Tungsten Mountain (P&A after conductor): 1 Production Wells: 3 Ormat Nevada, McGinness Hills: 2 Ormat Nevada, Tungsten Mountain: 1 Injection Wells: 0 **Domestic Wells: 0** Oil Exploration Drilling - 2017 and 2018: 2 Wells-True Oil, Railroad Valley: 1 Spudded DY Federal 13-31 in December 2017, P&A January 2018 Major Oil International, Hot Creek Valley: 1 Spudded Eblana 3 in April 2018, completed drilling May 2018 Currently in extended testing program Wells Permitted, Not Drilled: 3 Makoil, Railroad Valley, Munson Ranch 12-23X Major Oil International, Hot Creek Valley, Eblana 6 Envy Energy, Northern Railroad Valley, Black Point 1 Federal Leasing - Geothermal-Last annual statewide lease sale was held on October 24, 2017.

^{• 20} parcels totaling 38,208 acres were offered.

- No acreage was deferred from the preliminary list of parcels due to sage grouse.
- 10 parcels totaling 19,208 acres were sold.
- Total receipts for the October 24th sale were \$78,444
- Next lease sale will be on October 26, 2018.
- Sale notice and parcel listing for the October 2018 sale have not been published.

Federal Leasing - Oil and Gas-

- Last lease sale was held on June 12, 2018, for the Battle Mountain District.
- 166 parcels totaling 313,715 acres were offered.
- No acreage was deferred due to sage grouse.
- 40 parcels in total were sold. 22 parcels were sold in the competitive auction, covering 38,575 acres, along with 18 parcels, consisting of 36,755 acres, selling on a non-competitive basis, totaling 75,330 acres.
- Acreage for the June sale is located in Nye, Eureka, and Lander (one 614 acre parcel) counties.
- Total receipts for the June 12th sale were \$201,290.50.
- Next lease sale will be on September 11, 2018, and will cover 144 parcels, or 295,174 acres, within the Ely BLM District. The acreage is located in White Pine, Eureka, Lincoln, Elko, and northern Nye counties. Elko County has one 480 acre parcel.

Dissolved Minerals Activity - 2018-

Five dissolved minerals exploration well permits have been issued by the Division

- Sierra Lithium, Columbus Salt Marsh: two permits, one well was drilled and plugged
- Sierra Lithium, Clayton Valley: two permits, one well was drilled and plugged
- 3PL Operating, Railroad Valley: one permit, one well drilled and remains open for testing

Four borehole Notices of Intent (NOI) approved by the Division

- Mathers Lithium, Clayton Valley: drilled and plugged
- Bonaventure Nevada, Sarcobatus Flat: drilled and plugged
- Belmont Resources (two NOI's), Monte Cristo Valley, one of two boreholes was drilled during August 2018
- Upcoming activity: working with Lithium Ore on either their first borehole NOI or exploration well permit for their drilling project in Railroad Valley

*For inspections, please see the E-packet on the NDOM website. <u>www.minerals.nv.gov</u>

Dennis Bryan: How far back does this database go?

Lowell Price: Early 1950's they are included.... Goes back to permit # 1.

Rich DeLong: asked for clarification that he got all of the wells in the database?

Lowell Price: yes, all but 5 or 10 that I couldn't find on GoogleEarth.

Art Henderson: These oil and gas leases that keep bringing money to the state. Even though they are on Federal lands they still give money to the State, I think that's important.

Rich Perry: The distribution is defined in statute, the first 7 milion dollars goes to the State Distributive School Account. Beyond that it is split equally between the Distributive School Account and the County of origin. It is an equation started by Bill Raggio where the lease monies come from. That's production royalties as well. Art Henderson: as long as we continue to have fracturing we will have people interested in drilling for oil and gas.

John Snow: any compliance issues?

Lowell Price: no only a couple of sign issues or wet cellars. But, they were addressed right away.

Nigel Bain: have we seen a down turn in Lithium exploration?

Lowell Price: I haven't seen a down turn. Rich DeLong: Thank you.

C. Nevada Land Withdrawals from Mineral Entry-A Historical Perspective

This report and presentation was first developed in 2011 at the direction of the Commission on Mineral Resources by the Geography Department at UNR. Garrett Wake recently updated the maps and presentation to highlight changes in the past two years and pending actions which could reduce lands in Nevada available for mineral entry.

Garrett Wake: Gave a PowerPoint presentation.

Nevada Statistics-

- Became Territory of the United States in 1848 as part of the Treaty with Mexico following the Mexican-American War
- Part of Utah Territory originally then became Nevada Territory in 1860
- Established as the 36th state of the Union October 31, 1864 Population @ 50,000
- Total Area: 70,264,320 acres, 7th largest state

Who Manages/Owns Nevada Lands?-

BLM 66.86%, Water .51%, State Land .19%, Indian Reservation 1.53%, National Park 1.07%, Fish and Wildlife 2.14%, Military 5.99%, Forest Service 8.19%, Private land 13.52%

Total Land Area Withdrawn through 2010-

*To view the presentation maps and tables please go to the NDOM website meetings page for the E-Packet.

Recent Withdrawals: Jan, 2011 through May, 2018-

- Recent Locatable Mineral Withdrawals Summary
- National Monuments:
 - Tule Springs Fossil Beds (2014): 22,650 acres
 - o Basin and Range (2015): 704,000 acres
 - 15,075 acres already within ACEC area (Mt. Irish ACEC)
 - 30,623 acres already within Wilderness (Worthington Mountains Wilderness)
 - Net 658,302 additional acres withdrawn
- Gold Butte National Monument (2016): 296,941 acres
 - o 293,539 acres already within ACEC (multiple)
 - o Net 3,402 additional acres withdrawn
- BLM & USFS Wilderness Areas:
 - o Pine Forest Range Wilderness (BLM; 2014): 24,015 acres
 - 25,650 acres released from WSA
 - <u>Net release of 1,635 acres</u>
 - o Wovoka Wilderness (USFS; 2014): 48,981 acres

Areas of Critical Environmental Concern-

Ivanpah (Silver State South ROD; 2014): 31,857 acres Proposed Land Withdrawals as of May, 2018-

Washoe County Wilderness Proposals- 600,421 acres currently designated WSA

Washoe County Land Transfer- 8,735 acres converted from BLM/USFS to private

Fallon Range Training Complex Modernization Expansion- 649,504 acres of new withdrawal

Nellis Test and Training Range (NTTR)- 301,000 acres across all proposed alternatives

Las Vegas and Pahrump Field Office Draft Resource Management Plan – Alternative 2 (most restrictive) 608,942 acres to be withdrawn

Proposed Locatable Mineral Withdrawals Summary Washoe County Economic Development and Conservation Act: Wilderness, Wilderness Study Areas (WSAs) and National Conservation Areas (NCAs): 257,855 acres Washoe County Economic Development and Conservation Act: 8,735 acres converted from BLM/USFS to Private DOD Expansions: Nellis Test and Training Range (NTTR): 301,016 acres Fallon Naval Air Station: 649,504 acres Resource Management Plan Revision: Carson City RMP Revision, Alternative E (BLM Preferred): 470,603 acres withdrawn Las Vegas and Pahrump Field Office RMP Revision, Alternative 2: 608,942 acres withdrawn Net total proposed locatable-mineral-withdrawal acreage : <u>1,310,905 acres</u> Net increase as a percentage of current withdrawal acreage: <u>8.38%</u> Net proposed withdrawn acreage as a percentage of Nevada: 1.87%

Dennis Bryan: Is this available on the NDOM website?

Garrett Wake: yes as well as the Open Data Website.

Rich DeLong: The discussion about looking at WSA and Wilderness and trading those off is a disturbing trend. Because WSA's were put into place in the 1980's to be evaluated in Congress to act on those and now they are being used as bargaining chips. That is bad public policy.

Rich Perry: We've done this presentation to a few groups. Now that it's updated I think we should expand our presentation to more public groups. He was asked to do a presentation to State Public Lands and this presentation will be great for that group. If any of you know of a group that will benefit from this, give us a call

presentation will be great for that group. If any of you know of a group that will benefit from this, give us a call and we'll see about approaching them.

Rich DeLong: It would be good to get it to the congressional delegation.

Mary Korpi: I'd like to add with the public lands and potential new members of the Legislature, it would be very important to have them understand this.

Nigel Bain: State Senator Cancela has been fairly open to listening. It may be worthwhile to present this to her prior to the start of the next session given the vast size of the withdrawals.

D. Consideration of funding a minerals and geology display at the Las Vegas Natural History Museum.

The Las Vegas Natural History Museum is relocating to a larger space and is seeking support for interactive educational exhibits on Nevada minerals, geology and uses. The Museum has provided an example of an interactive exhibit and requested funding of up to \$50,000 and in-kind assistance with design, and a supply of Nevada minerals and rocks. This would be a one-time item in the current fiscal year and would require the Division to work with the museum on the exhibit design and a scope of work that would be put out to bid, and delivered to the museum by the end of the current fiscal year. The Division has funding available for this in FY 2019. If approved by the Commission, approval from IFC and /or the BOE would also be required.

Rich Perry: When we had our last meeting in Las Vegas, we had a tour of the Museum and its plans to relocate. After our return I had been asked by the museum if we would be interested in helping with the displays. This is obviously an expenditure that the Commission would have to approve. They are also talking to the mining industry regarding more specific displays. This would be a one-time direct involvement. Rich DeLong: is the \$50,000 for the materials and our time and effort on top of that? Rich Perry: Yes that would be for the materials, for constructing the displays.

Rich DeLong: Constructing, implying that would be the labor?

Rich Perry: I wasn't actually thinking that we would build it. We could help with the design. I was thinking we could check out other museums. We would contract out building these displays.

Nigel Bain: Does NDOM have a budget for special projects?

Rich Perry: this would be consistent with our statutes.

Dennis Bryan: One of our challenges down the road would be our reserve. We should defer the vote until after we have heard the budget.

Rich DeLong: As an example, we did some work at the Fourth Ward School some years ago. So there is a precedent for us doing this type of work.

Rich DeLong: One of our missions is to educate within the State on the importance of minerals and mineral resources, which is a pretty broad mandate.

Mary Korpi: I would assume the Nevada Mining Association would want these designed in concert with what they have done so they look and feel the same. We should get together as a group when designing.

Rich DeLong: Asked the Commission if they would like to vote on this or wait until they have heard the budget section first.

Mary Korpi: I prefer to wait until we go through the budget. All agreed.

Bryan Stockton: to the Chairman, suggested that he make it very clear that the vote will take place separately from the budget item.

Motion: approve funding a minerals and geology display at the Las Vegas Natural History Museum not to exceed \$50,000

By: Art Henderson

Second: Dennis Bryan

The vote was 5 to 1 approving the motion.

Nigel Bain: can we approach the NVMA to help with this project, in addition to our commitment? Rich Perry: Yes we can.

III. OLD BUSINESS

A. Presentation and possible approval of the NDOM 2020-21 biennium budget.

Division staff has prepared a budget for the next biennium that must be submitted to the Governor's finance office on August 31st. At the May CMR meeting, preliminary assumptions to build the budget were presented and discussed. Division staff will present the budget that was built since that meeting when the CMR provided guidance, and after closing of fiscal year 2018.

Rich Perry: Agency budget request we have put together to date for FY-20/21. Showed a PowerPoint presentation.

Budget Assumptions 2020-2021 biennium-

- Personnel No change; 11 F/T employees and 8 summer interns
- Special Projects Continue reports/archiving contract with NBMG at \$90,000/yr
 - PDAC trade booth + travel for 3: \$38,000/yr
 - Continue annual funding for Teacher Workshops at \$15K/yr
 - New professional Stay Out, Stay Alive video (HD) and Public Service Announcements (\$40,000)

Mike Visher: Talked about updating the AML video.

Dennis Bryan: commented that the drone video at the Arden site would be a perfect fit for something like this.

- Fleet Services for truck replacements (one new truck in 2021)
- AML Enhancements (contracted hard-closure work)
 - Estimate 5 projects per year at an average of \$100,000/project
- Hardware/Software/GIS \$22K in FY 2020, \$25K in FY 2021

2020-2021 Budget Assumptions- Revenues

Base budget built from FY 2018 actuals

–Minimum claim fee revenues based on statistical analysis and includes a reduction in actual claims of one std. dev. (10,912 claims) annually, with no change to statutory maximum \$10/claim filing for biennium.

-Oil permit and production fees at 2018 levels (\$46,516)

-Geothermal permit and production fees at 2018 levels (\$157,550)

–Dissolved Mineral Resource Exploration fees based on doubling of first 6 months of program (1/1/18 to 6/30/18) (\$10,000)

-New mine disturbance fee budgeted as average of past 3 years (\$51,567)

-Bond Pool Administrative fee at 2018 actuals (\$93,327)

-BLM and USFS assistance for AML - \$138,891('20), \$107,119 ('21)

Impact of Lithium Claims on Revenue-

-Placer claims located for exploration of lithium brine

-Many are speculative in nature

-Number of active claims peaked in 2017

-Based on current trends, forecasting a steady decrease of 13-16% per year

–If forecast is correct, there would be a 3-year cumulative loss of ~\$104,000 in mining claim filing revenue

Forecasting Mining Claim Revenue-

Active Mining Claims (BLM) vs. County Mining Claim Filings

-Utilized the number of Active Mining Claims at the end of each Federal Fiscal Year from 2000-2017 as published in BLM's annual Public Land Statistics.

-Assumed annual slight decrease in total active claims due to decrease in placer claims for lithium brine.

-To provide a conservative minimum for forecast, adjusted downward by one std. deviation (12 years of data).

-Annual Mining Claim Filings at county recorders averaged 10.5% higher than BLM count (9 yr. avg.). Contingency Plans-

If claim revenues are significantly less than budgeted:

- Reduce AML contracted work
- Defer the new "Stay Out, Stay Alive" video and/or PSAs

If claim fee revenues are significantly more than budgeted:

- Increase contracted AML closure activity
- Decrease claim fee below current \$10 through rulemaking

Art Henderson: If we don't increase the guidance and they decide to sweep away this extra like they've done in the past for their special projects, shouldn't we increase the guidance for the reserve?

Mike Visher: if we do that we would have to justify it appropriately with sufficient documentation.

Art Henderson: We made the \$950,000 reserve 2 or 3 years ago when we had the worst year for NDOM. Now our expenditures have increases as well, to me, it would justify an increase in the guidance.

Rich DeLong: I agree with you in principal, I think it would be good to have on the record for the Division to come to us with an assessment of that.

Rich Perry: we can go through that process. Today we need a blessing on the budget or if there is something fundamentally wrong for us to change. We can go through and see if there is a reason to change the guidance. Governor's office has already seen our budget and they see no red flags. They have in the past swept the interest in the bond pool accounts.

Rich DeLong: This reserve guidance limit, is that actually in the budget that gets presented to the Governor? Rich Perry: We present this to the Governor's Finance Office, yes.

Dennis Bryan: when they swept the reserves last time.

Rich Perry: they never swept the reserve of the Division of Minerals; they swept the interest from the Bond Pool accounts, around \$400,000.

Rich DeLong: they went through the budgeting process, not through the Legislature.

John Snow: I have been through a lot of these discussions on reducing fees. We eliminated the Mackay fee and enhanced the AML enhancement but we should talk about it.

Dennis Bryan: if we keep increasing the reserve, someone is going to start noticing. The exploration and mining community is going to notice.

Rich DeLong: This is a similar issue we went through 10 or 12 years ago when we had large reserves. We were able to do additional special projects with one time projects that meet our statutory mission.

Art Henderson: If we wanted to reduce the money in our reserve, how much would we have to reduce it? Just off the top of your head?

Mike Visher: for example, if we reduce the claim fee by \$1. We would reduce the revenue to the Division by about \$180,000 per year. At the last commission meeting we talked about having this discussion again at the next meeting. It's easier to play with the reserve than to play with the mining claim fees.

Rich DeLong: We might want to touch on doing additional AML enhancement. Rob mentioned they could handle more with the staff we have.

Nigel Bain: We need to recognize the growing issue of the excess, The lithium prices have dropped by 50%. We run the risk of losing money from lithium claims.

Rich Perry: I recommend that the Commission approve the budget. Direct staff recommendation on a new reserve limit or the next meeting we can make a decision.

Art Henderson: I suggest not decreasing special projects from \$484,000 to \$160,000, leave it at \$484,000 for 2019 and we come up with special projects. We're showing a \$300,000 decrease every year, just leave it at \$484,000 which has been historical for the past 5 to 10 years and we'll come up with projects.

Rich DeLong: I hear what you are saying, though a question for Rich or Mike, is the 2019 forecast that is in here is that submitted to the Governor's Office?

Art Henderson: the 2018 is the base and that shows \$484,000

Rich Perry: Special Projects is not AML money.

Mike Visher: Mackay, for example, is a contract that ended. That's why there is excess money in expenditures for special projects and when that contract ended, we no longer have a base in the Category with that amount of money. It would automatically decrease.

Rich Perry: It would be easier to increase AML enhancements by a certain yearly dollar amount. It would be easier to justify that.

Rich DeLong: say \$200,000?

Motion: Approve modifying the budget to include the \$50,000 to the LV Natural History museum and to move \$200,000 from balance forward reserve to AML enhancements for budget FY20 and 21.

Approved by: Art Henderson

Seconded by: Nigel Bain

Unanimously passed

Dennis Bryan: Reminder to NDOM about the task force for Bond Pool is to report next meeting.

B. AML Program: Broken Hills Mine Closure Project, Gold Butte Project and AML Summer intern work completed

Rob Ghiglieri: showed a PowerPoint presentation. Showed a video of the Broken Hills AML Hard closure project.

Broken Hills-

- 40 hazards inventoried from 1994-2016
- Multiple stopes over 40' long x 20' wide x 150' deep and vehicle access only feet away
- Public (family with small children) seen using the ladder on the headframe and entering the mine
- Identified as a potential closure project in 2010 by Mike Visher
- Finished inventories in 2015 & 2016 and started wildlife and cultural surveys in 2016
- 19 Bat Compatible Closures
- 528 bars of 2"x2" 20' long square tube steel used on the stopes alone
- Total cost of \$155,072.33

Gold Butte-

- 42 hazards within the entire Gold Butte National Monument
 - Managed by LV BLM
 - CX in approval process
- Interlocal contract with Clark County Desert Conservation
 - Anticipated contract approval dates
 - BOE on 8/14/2018
 - IFC on 8/16/2018
 - \$193,000 total funding available
 - Must be used for wildlife compatible closures only in Clark County
 - 18 hazards determined to have significant wildlife habitat
 - 3 hazards including tortoise habitat
- Anticipated construction 9/10/2018 10/31/2018

2018 Summer Intern Tentative Numbers-

- 7 Interns
- 13 Weeks
- 50 Field days
- >4,500 Field man hours
- 10 Counties
- Over 25,000 miles traveled
- 557 Inventories
- 413 Revisits
- 209 Securings
- 7,359 Non-Hazards
- 0 Safety incidents
- 2 Truck incidents with damage

Future Closure Projects-

- Gunmetal Mine (10)
- Nevada Eagle (43)
- Double O (round 2, 81)
- Walker River State Park (107)
- VC Grand Prix (21)
- Mullen Pass (30)
- Como (26)

Art Henderson: What is the cost of this program?

Rob Ghiglieri: I don't have that number off the top of my head

Art Henderson: this is such an efficient 13 week program, that we should expand 13 more weeks during the school year.

Rob Ghiglieri: we did start a 3 week winter intern program.

Rich DeLong: what were the 2 truck incidents?

Rob Ghiglieri: One of the trucks, the interns hit a rock which damaged the front differential and separated the plate: it then leaked all the fluid out. They drove it down the hill to get closer for a tow truck and during that drive destroyed the front differential. The other truck was during the first week in the field; they took the truck too far on a road and got it high centered. It damaged the parking break line. There were no accidents. No broken widows this year. There were the usual tire replacements.

IV. STAFF REPORTS

1.) Mining and Reclamation Bond Pool –

Mike Visher: Bond Pool is in good health. We currently are 130% funded. I met with BLM and NDEP last week, went out to Fallon Bentonite they are going to be requesting monies to spend on reclamation. It will probably be less than \$100,000.

2.) Administrator Report and Correspondence

Rich Perry: Last 3 days I've been on the Reclamation awards team, this is the second year we have had a presence out in the field. We are getting more and more applications for this award program every year.

COMMISSION BUSINESS

Determination of time and place of next CMR meeting Date: November 16, 2018 in the morning. Location: Reno area

COMMENTS BY THE GENERAL PUBLIC

Joel Lenz: Introduce himself as the new Mining Industry Specialist with the Governor's Office of Economic Development and gave a brief background of his education and work history.

Meeting Adjourned. Time: 5:05 pm

II. NEW BUSINESS

II. A <u>Planning for the 2019 Exploration</u> <u>Survey.</u>

SURVEY OF NEVADA'S MINERAL AND ENERGY EXPLORATION INDUSTRY



- A minimum of \$325 million was spent on exploration in Nevada in 2016, down 6% from 2015's \$348 million and down more than half from 2011's record \$675 million, which was the peak of the commodities boom.
- Exploration spending in Nevada since 2012 mimics global trends and is directly linked to lower commodity prices in the current downcycle.
- 86% of Nevada exploration expenditures in 2016 went toward precious metals, the remaining was spent on lithium (6%), geothermal (5%), and copper and zinc (3%).
- 51% of companies indicated they plan to spend more on exploration in Nevada in 2017 than they did in 2016. Another 37% of companies indicated they will spend about the same in 2017 as 2016.
- Direct exploration employment rose 8% in 2016 to 808 from 2015's 746.
- In 2016, 63% of exploration expenditures went toward actual exploration (mainly drilling), 11% was spent on land holding costs, 8% on permitting, and 12% was directed to corporate expenses.
- About 61% of expenditures in 2016 went toward resource expansions at existing sites, whereas 39% was spent on locating new resources (grassroots exploration) through discovery.
- Nevada's prospective geology, its potential for new discovery, and its access to public lands are the most important factors that attract companies to explore in Nevada.
- Negative factors include the time and cost for permitting, threats to withdraw or limit access to public lands—including the proposed sage grouse and military withdrawals—and the high cost of mining claims.

The Nevada Bureau of Mines and Geology conducted a survey of 242 companies thought to be actively exploring for minerals and energy resources in Nevada in 2015 and 2016. The survey's purpose was to gauge exploration activities and assess the economic impacts of exploration, including expenditures and employment. Survey responses were received from 86 companies and expenditures for another 54 companies were obtained from corporate financial filings, for a total of 140 companies. Expenditures and employment reported here are minimum estimates. Survey results are published in Nevada Mineral and Energy Resource Exploration Survey 2015/2016, available from the Nevada Bureau of Mines and Geology at www.nbmg.unr.edu.



II. B <u>NDOM's Open-Data Web Site and</u> <u>Claims Update</u>



Nevada Division of Minerals Open Data Site

Lucia M. Patterson, GIS/Field Specialist – Geologist

Nevada Division of Minerals



Why Open Data

- TO PROVIDE DATA
- To fulfill data requests without consuming significant time
- To provide interactive maps for consumers without the need for specialized software





Public Workshop(s) and Hearings(s)

- Commission on Mineral Resources
 - Date: November 16, 2018, TBA
 - Location: TBA
 - Link: See "Meetings Page" for Additional Information

Employment Announcement(s)

- Field Specialist; Las Vegas; Full-time; Unclassified &
- Public Service Intern 1; Carson/Minden/Gardnerville/Genoa; Full-time; Seasonal
- How To Apply for a State Job

Education Workshop(s)

- 30th Annual Southern Nevada Earth Science Education Workshop 2019
 - Date(s): (tentative) April 16 and 17, 2019
 - Location: (tentative) Faith Lutheran Jr/Sr High School, Las Vegas, Nevada.
 - Registration Direct Link: (registration not available at this time)
- Nevada Mining Association's Mineral Education Workshops page: <u>https://www.nevadamining.org/mineral-education-workshops/</u>

Request for Public Records

NDOM Request for Public Records form &

Important Links

- Nevada Division of Minerals Open Data Site-GIS files
- State and Federal Permits Required Before Mining or Milling Can Begin February 2015
- NDOM YouTube Channel
- Nevada Bureau of Mines and Geology

Programs



 $m{\mathfrak{E}}$ Request ADA document remediation for individuals using assistive technology devices

Open Data Site

Open data sites are websites that /ision of Minerals are hosted by ESRI in which you can host maps and data.

Open data sites have not only opened the door to a new public data resource, but have also created a nexus where many pieces of data can be placed in one location and formatted to meet the needs of, and assist people in, specific industries.

The



ble exploration for, and the production of, minerals, oil, gas, and ficial to the state. This is the Nevada Division of Minerals' public lata.

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Pages



Other Sources of Information and Data

Hover over any of the photos below and click on text box that appears



Dissolved Mineral Resource Exploration

To access the Oil, Gas, and Geothermal Resources and Groundwater Basins with High Temperature Gradients Map

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Education and Outreach

To access an interactive map with points of interest and tour logs





Inferred Active Lithium Placer Claims in Nevada







Other Sources of Information and Data

Hover over any of the photos below and click on text box that appears



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"Unbelievable as it may seem, an area larger than that encompassing 25 of the 27 states east of the Mississippi River is no longer accessible Our open data site is intended to not to mention development for mining"

provide data to the public as it relates to minerals exploration and production in Nevada. One major topic which has found a home on our open data site is land issues within the Who Manage_{state},ns Nevad<u>a Land</u>s?

On this particular page interested parties can find statistical information on land withdraws as well as a presentation which gives the historical perspective on land withdrawals from mineral entry in Nevada.

J. Allen Overton, Jr

President

American Mining Congress

1975

Overview

Nevada Statistics:

Became Territory of the United States in 1848 as part of the Treaty with Mexico Following the Mexican-American War

Part of Utah Territory originally then became Nevada Territory in 1860

Established as the 36th State of the Union October 31, 1864 - Population 50,000

Total Area: 70,264,230 acres 7th largest state

Approximately 22% of the state has been withdrawn from mineral entry.

58.4 Million acres are Federal Surface Lands (FSL) in Nevada where mineral rights exist (BLM Public Land Statistics, 2015) of which 16.3 million acres or 28% of FSL have been withdrawn from mineral entry.

For an overview of Nevada land withdraws please view the presentation below.

Nevada Land Withdrawal Overview



Pages

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



Sign In

Nevada Land Withdrawals Vs. Historic Mining Districts



Click Here

To view interactive map on a mobile device



Click Here



To Return to NDON



This map is intended to show interested parties land withdrawals and how they affect mining districts throughout the state. All interactive map viewers have navigation, selection, and querying com Data home capabilities. Michaeled

Notice, that on each page there is a ribbon across the top which provides links for viewing the interactive link on a mobile device, help with the interactive map viewer, NDOM's home page, and the Open Data Site's home page.

It is highly recommended that users select the link for mobile devices to interact with the maps. The maps are much more responsive as the user will be dealing with the app itself, not an app embedded into a website.



😽 Nevada Land Existing and Proposed Land Withdrawals Vs. Historic Mining Districts 🔰 with Web AppBuilder for And

3

Legend

Historic Mining Districts Affected by Land Withdrawal

Proposed Land Releases

Proposed Land Withdrawals



Nevada Test and Training Range



Washoe County Land Transfer

Existing Land Withdrawals





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😽 Nevada Land Existing and Proposed Land Withdrawals Vs. Historic Mining Districts 🛛 with Web AppBuilder for AreG







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Nevada Land Withdrawals Vs. Historic Mining Districts



Click Here

To view interactive map on a mobile device



Click Here For help with the interactive map viewer



Click Here

To Return to NDOM's Open Data home page



Click Here To go to NDOM's home page



Download The Data

Anyone can use this data at no cost. Download data in the format you use.



Click Here



To download KMZ files for use with Google Earth



Feature layers can also be downloaded as shapefiles, or KML/KMZ files (Mining claim points is too large for Google Earth to handle).

Pages

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





Download The Data

Anyone can use this data at no cost. Download data in the format you use.

Mining claim data presented in this map:



To download shapefiles



Habitat Management Area Abbreviations:

Additional habitat management areas in Nevada only include OHMA (Other habitat Management areas). Important Habitat Management Areas (IH) for Idaho/SW Montana, Restoration Habitat Management Areas (RH) for Montana, Linkage Connectivity Habitat Management Areas (LCHMA) for NWCO, Other Habitat Management Areas (OH) for NV & CA, and Anthro Mountain (AM) for Utah.

For the Key Components of the Nevada and Northeastern California GRSG ARMPA Addressing COT Report Threats Click Here

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FRTC withdrawal data presented in this map:



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Mining claim data presented in this map:



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Historic mining district data presented in this map:





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Surface management agency data presented in this map:





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Oil, Gas, and Geothermal data presented in this map:





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Washoe County withdrawal data presented in this map:





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Mining claim data presented in this map:

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Historic mining district data presented in this map:





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Surface management agency data presented in this map:





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Fallon Training Complex Modernization





What's Next



Visit Our Main Website

😽 Nevada Wilderness and Wilderness Study Areas 🛛 with Web AppBuilder for Arc615



Nevada Wilderness Study Areas

WSA Non-Suitable for Wilderness 1,870,341 Acres

WSA Suitable for Wilderness 837,626 Acres

Nevada BLM Wilderness Areas 2,084,047 Acres



Nevada USFS Wilderness Areas 1,136,861 Acres



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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



Other Sources of Information and Data

Hover over any of the photos below and click on text box that appears



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

To report broken links email: 🔯 Impatterson@minerals.nv.gov

"Claims Per Section" and "Claim Points" are linked to appropriate reports on the BLM's LR2000 Database, just select a section or a claim. "Mining Districts" are linked to their corresponding Mineral Connection Sheet on the BLM's Land Records Search, just select a mining district.



Performing land research prior to staking a claim has been challenging and indirect. This does not result from lack of data but rather from poor presentation of, challenging input parameters for, and unclear locations of the data.

The Nevada Division of Minerals open data site has evolved not only to be a source of data but also a utility for research which does not require any specialized software, additional data files, or knowledge of reports and query designs. The open data site was constructed to assist prospectors, exploration entities, county recorders, government land managers, and the public, who need information on mining claims utilizing-public facing BLM databases.

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Nevada Mining Claims

Find address or place

ns with Web AppBuilder for ArcGi

Claim data has been pulled from the BLM LR2000 database in October, January, and June.



Nevada Mining Claims

with Web AppBalldenfor ArcG





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Refresh

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Pub MC Geo Index Report

Ouser Guide
 Reference Codes

Purpose

This index is used to list claims by geographic area. The report includes geographic information (meridian, township, range, section, subdivision), geographical state, county, field office, serial number, lead serial number, case type, claim name/number, claimant(s), county book/page, location date, last assessment year, and a case closed date when applicable.

Report

MINING CLAIM GEOGRAPHIC INDEX REPORT

Mining Claims Geographic Index Report ▼ Click on the down arrow to select the view you would like.

Geo State:	NV
County:	STOREY
Field Office:	SIERRA FRONT FIELD OFFICE
Meridian Township Range:	21 0170N 0220E

Section	Subdiv	Serial Number	Lead Serial Number	Case Type	Claim Name	Claimant Name	County Book;Page	Loc Date	Last Assmt Yr	Closed Date
030	NW	NMC155515	NMC155515	LODE	DREAMER # 1	MILLIM DARWIN A	46788;22;538	04/30/1980	2019	
	NW					MILLIM ROBERTA L	46788;22;538	04/30/1980	2019	
	NW	NMC155516	NMC155515	LODE	DREAMER # 2	MILLIM DARWIN A	46789;22;539	04/30/1980	2019	
	NW					MILLIM ROBERTA L	46789;22;539	04/30/1980	2019	
	NW	NMC319246	NMC319246	LODE	DREAMER # 3	MILLIM DARWIN A	55406;44;618	08/18/1984	2019	
	NW					MILLIM ROBERTA L	55406;44;618	08/18/1984	2019	
	NW	NMC319247	NMC319246	LODE	DREAMER # 4	MILLIM DARWIN A	55407;44;619	08/18/1984	2019	
	NW					MILLIM ROBERTA L	55407;44;619	08/18/1984	2019	
	NW	NMC319248	NMC319246	LODE	DREAMER # 5	MILLIM DARWIN A	55408;44;620	08/18/1984	2019	
	NW					MILLIM ROBERTA L	55408;44;620	08/18/1984	2019	
	NW	NMC319249	NMC319246	LODE	DREAMER # 6	MILLIM DARWIN A	55409;44;621	08/18/1984	2019	
	NW					MILLIM ROBERTA L	55409;44;621	08/18/1984	2019	
	NW	NMC319250	NMC319246	LODE	DREAMER # 7	MILLIM DARWIN A	55410;44;622	08/18/1984	2019	
	NW					MILLIM ROBERTA L	55410;44;622	08/18/1984	2019	
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Land Records Search BLM > Nevada > Land Records Search

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Return to search screen






il, Gas, and Geothermal Resources and Groundwater Basins with High Temperature Gradients 🔬 🕬

with Web AppBuilder for ArcGIS



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Dil, Gas, and Geothermal Resources and Groundwater Basins with High Temperature Gradients 🤍 with Web A



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Unpatented Mining Claims By Year



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

Questions/Comments/Suggestions

If you have any suggestions or comments please contact me. There are many more widgets that have not been used in these maps that may help you complete a task.

Also, maybe there are other resources we can link to!!

THANK YOU!

II. C <u>Task force for Bond Pool Regulation</u> update

Bond F	Pool Financial	s 2000 - 2018							
Fiscal	Total Bonded	Net Premium	Total Deposits	Treasurer's		Total in BP	Admin Fee	Account Funded	Premiums as % of bond
Year	Amount	Received	Received	Interest	Refunds	Account	Transferred	%	total
2000	\$1,081,239.69	\$28,538.64	\$39,092.12	\$43,137.74	\$0.00	\$817,350.06	\$27,894.47	75.6%	2.64%
2001	\$1,166,829.10	\$39,975.23	\$0.00	\$52,078.53	\$0.00	\$921,590.37	\$17,059.00	79.0%	3.43%
2002	\$1,252,418.50	\$22,692.93	\$11,582.42	\$35,075.23	\$0.00	\$976,323.42	\$50,720.00	78.0%	1.81%
2003	\$1,272,802.70	\$82,939.69	\$197,011.29	\$28,092.48	\$206,102.39	\$1,036,406.61	\$42,739.75	81.4%	6.52%
2004	\$1,158,542.40	\$34,180.83	\$115,348.64	\$19,743.66	\$160,868.00	\$1,027,448.18	\$17,363.56	88.7%	2.95%
2005	\$2,105,773.93	\$72,276.95	\$499,679.96	\$26,884.44	\$0.00	\$1,614,424.81	\$11,864.72	76.7%	3.43%
2006	\$2,480,964.76	\$159,140.79	\$455,543.97	\$71,394.04	\$122,455.71	\$2,178,047.90	\$0.00	87.8%	6.41%
2007	\$3,253,203.96	\$117,412.07	\$679,290.78	\$111,877.70	\$367,080.92	\$2,683,818.53	\$35,729.00	82.5%	3.61%
2008	\$4,025,443.16	\$132,573.86	\$1,436,796.91	\$145,264.29	\$137,954.59	\$4,214,972.70	\$45,526.30	104.7%	3.29%
2009	\$4,158,187.16	\$233,831.40	\$256,494.22	\$98,291.01	\$292,890.65	\$4,362,988.93	\$39,382.75	104.9%	5.62%
2010	\$4,290,931.16	\$208,258.22	\$478,028.21	\$41,925.35	\$319,214.44	\$4,302,690.20	\$41,479.07	100.3%	4.85%
2011	\$4,423,676.16	\$102,884.93	\$667,090.03	\$14,706.06	\$289,539.08	\$4,758,851.14	\$38,981.00	107.6%	2.33%
2012	\$5,315,381.16	\$189,576.09	\$1,168,467.50	\$10,947.31	\$498,685.12	\$5,588,094.04	\$41,062.88	105.1%	3.57%
2013	\$3,272,602.16	\$95,080.42	\$206,698.68	\$11,245.03	\$1,659,042.44	\$4,139,649.73	\$102,426.00	126.5%	2.91%
2014	\$2,932,286.16	\$81,999.07	\$104,445.49	\$9,048.14	\$422,653.00	\$3,821,630.43	\$90,859.00	130.3%	2.80%
2015	\$2,971,131.16	\$107,627.49	\$308,294.15	\$13,844.23	\$350,825.55	\$3,814,072.75	\$86,498.00	128.4%	3.62%
2016	\$3,186,571.16	\$111,459.14	\$401,466.38	\$18,793.90	\$303,608.00	\$3,953,915.18	\$88,268.99	124.1%	3.50%
2017	\$3,138,068.16	\$133,602.14	\$224,969.67	\$32,389.01	\$305,329.00	\$3,944,706.02	\$94,840.98	125.7%	4.26%
2018	\$3,237,760.16	\$104,341.07	\$379,802.97	\$40,064.65	\$273,759.00	\$4,101,828.47	\$93,327.24	126.7%	3.22%
		\$108,336.37	\$270,946.22	\$43,410.67	\$331,234.91		\$92,703.37		3.72%
									Historical avg



Bond Poo	ol Account Status und	ler various Pro	emium % Scei	narios					
Forecast Yea	ar Assumptions:								
	ond amount								
	age for Bond Refunds								
			duain Facture notes						
	ages for Net Premiums, Bor	la Deposits and A	umin Fee transfer						
19-year aver	rage for Interest								
Bond Pool A	Account Status with 3% Pre	mium (Current)							
Donaroori		Net Premiums	Total Deposits			Admin Fee	Total in BP	Account	Bond Pool
Fiscal Year	Total Bonded Amount	(3%)	Received	Interest	Bond Refunds	Transferred	Account	Funded %	Excess
2018	\$3,237,760	\$104,341	\$379,803	\$40,065		(\$93,327)			
2018		\$97,133	\$270,946	\$43,411					
	\$3,237,760					(\$92,703)			
2020	\$3,237,760	\$97,133	\$270,946	\$43,411	(\$331,235)	(\$92,703)			. ,
2021	\$3,237,760	\$97,133	\$270,946	\$43,411		(\$92,703)			1 1
2022	\$3,237,760	\$97,133	\$270,946	\$43,411		(\$92,703)			
2023	\$3,237,760	\$97,133	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,132,913		
2024	\$3,237,760	\$97,133	\$270,946	\$43,411		(\$92,703)		127.3%	\$882,704
2025	\$3,237,760	\$97,133	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,108,016	126.9%	\$870,256
2026	\$3,237,760	\$97,133	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,095,567	126.5%	\$857,807
Bond Pool A	Account Status with 2% Pre							-	
		Net Premiums	Total Deposits			Admin Fee	Total in BP	Account	Bond Pool
	Total Bonded Amount	(2%)	Received	Interest	Bond Refunds	Transferred	Account	Funded %	Excess
2018	\$3,237,760	\$104,341	\$379,803	\$40,065	(\$273,759)	(\$93,327)	\$4,195,156	129.6%	\$957,396
2019	\$3,237,760	\$64,755	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,150,330	128.2%	\$912,569
2020	\$3,237,760	\$64,755	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,105,503	126.8%	\$867,743
2021	\$3,237,760	\$64,755	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$4,060,677	125.4%	\$822,917
2022	\$3,237,760	\$64,755	\$270,946	\$43,411		(\$92,703)		124.0%	
2023	\$3,237,760	\$64,755	\$270,946	\$43,411		(\$92,703)			
2024	\$3,237,760	\$64,755	\$270,946	\$43,411	(\$331,235)	(\$92,703)			
2025	\$3,237,760	\$64,755	\$270,946	\$43,411		(\$92,703)			
2025	\$3,237,760	\$64,755	\$270,946	\$43,411	(\$331,235)	(\$92,703)			\$598,786
	.,,,			. ,			.,,,		. ,
Bond Pool A	Account Status with 1% Pre	emium							
		Net Premiums	Total Deposits			Admin Fee	Total in BP	Account	Bond Pool
Fiscal Year	Total Bonded Amount	(1%)	Received	Interest	Bond Refunds	Transferred	Account	Funded %	Excess
2018	\$3,237,760	\$104,341	\$379,803	\$40,065	(\$273,759)	(\$93,327)	\$4,195,156	129.6%	\$957,396
2019	\$3,237,760	\$32,378	\$270,946	\$43,411				127.2%	
2020	\$3,237,760	\$32,378	\$270,946	\$43,411					
2021	\$3,237,760	\$32,378							
2022	\$3,237,760	\$32,378							
2022	\$3,237,760	\$32,378							
2023	\$3,237,760	\$32,378	. ,	\$43,411					
2024	\$3,237,760	\$32,378	\$270,946						
2025	\$3,237,760	\$32,378	\$270,946	\$43,411		(\$92,703)			
2020	<i>\(\)</i>	<i>\\</i>	<i>\[\]</i>	<i>\(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	(\$001)2007	(+>=)::::)	<i>\\\</i>	110.070	<i><i>\\\\\\\\\\\\\</i></i>
Bond Pool A	Account Status with 0% Pre	emium							
		Net Premiums	Total Deposits			Admin Fee	Total in BP	Account	Bond Pool
Fiscal Year	Total Bonded Amount	(0%)	Received	Interest	Bond Refunds	Transferred	Account	Funded %	Excess
2018	\$3,237,760	\$104,341	\$379,803	\$40,065	(\$273,759)	(\$93,327)	\$4,195,156	129.6%	\$957,396
2019	\$3,237,760	\$0	\$270,946			, ,	. , ,		
2020	\$3,237,760	\$0							
2021	\$3,237,760	\$0	\$270,946						
2021	\$3,237,760	\$0	\$270,946			(\$92,703)			
2022	\$3,237,760	\$0	\$270,946						
2023		\$0 \$0							
	\$3,237,760		\$270,946						
2025	\$3,237,760	\$0 ¢0		\$43,411					
2026	\$3,237,760	\$0	\$270,946	\$43,411	(\$331,235)	(\$92,703)	\$3,318,505	102.5%	\$80,744

Bond Pool Premium Refund Analysis

Assumptions - BP account as of 10/31/18, no change to Premium rate of 3%

Scenario if 50% of premiums paid are refunded to plan-level participants upon exit										
					Resultant	Cumulative				
					Cumulative BP	Resultant BP	Resultant Unobligated			
Participant	Bond Amount	Deposit	Premiums Paid	Total Refund	Obligations	Account Total	Amount (Capacity)			
Custom Details	\$24,364.00	\$12,217.11	\$20,801.51	\$22,617.87	\$3,093,913.16	\$4,019,333.74	\$925,420.58			
New Gold Nevada	\$727,087.00	\$415,856.34	\$332,213.99	\$581,963.34	\$2,366,826.16	\$3,437,370.40	\$1,070,544.24			
So. NV Liteweight	\$430,088.00	\$233,171.91	\$263,079.88	\$364,711.85	\$1,936,738.16	\$3,072,658.55	\$1,135,920.39			
TNT Ventures	\$78,161.00	\$39,615.03	\$44,461.80	\$61,845.93	\$1,858,577.16	\$3,010,812.62	\$1,152,235.46			
Dun Glen Mining	\$373,981.00	\$200,648.22	\$143,800.64	\$272,548.54	\$1,484,596.16	\$2,738,264.08	\$1,253,667.92			

Scenario if 75% of premiums paid are refunded to plan-level participants upon exit

					Resultant	Cumulative	
					Cumulative BP	Resultant BP	Resultant Unobligated
Participant	Bond Amount	Deposit	Premiums Paid	Total Refund	Obligations	Account Total	Amount (Capacity)
Custom Details	\$24,364.00	\$12,217.11	\$20,801.51	\$27,818.24	\$3,093,913.16	\$4,014,133.36	\$920,220.20
New Gold Nevada	\$727,087.00	\$415,856.34	\$332,213.99	\$665,016.83	\$2,366,826.16	\$3,349,116.53	\$982,290.37
So. NV Liteweight	\$430,088.00	\$233,171.91	\$263,079.88	\$430,481.82	\$1,936,738.16	\$2,918,634.71	\$981,896.55
TNT Ventures	\$78,161.00	\$39,615.03	\$44,461.80	\$72,961.38	\$1,858,577.16	\$2,845,673.33	\$987,096.17
Dun Glen Mining	\$373,981.00	\$200,648.22	\$143,800.64	\$308,498.70	\$1,484,596.16	\$2,537,174.63	\$1,052,578.47

Conclusion

Because the total refund amount < bond amount, the BP capacity increases by that difference

If all plan-level particpants exited:

Under 50% refund scenario, BP capacity would increase by \$330k

Under 75% refund scenario, BP capacity would increase by \$130k

Bond Pool Premium Refund Analysis

Assumptions - BP account as of 10/31/18, no change to Premium rate of 3% New participant (XYZ Mining) with \$750,000 bond exits after 1 year

Scenario if 50% of premiums paid are refunded to plan-level participants upon exit										
					Resultant	Cumulative				
					Cumulative BP	Resultant BP	Resultant Unobligated			
Participant	Bond Amount	Deposit	Premiums Paid	Total Refund	Obligations	Account Total	Amount (Capacity)			
Custom Details	\$24,364.00	\$12,217.11	\$20,801.51	\$22,617.87	\$3,843,913.16	\$4,515,738.42	\$671,825.25			
New Gold Nevada	\$727,087.00	\$415,856.34	\$332,213.99	\$581,963.34	\$3,116,826.16	\$3,933,775.08	\$816,948.92			
So. NV Liteweight	\$430,088.00	\$233,171.91	\$263,079.88	\$364,711.85	\$2,686,738.16	\$3,569,063.23	\$882,325.07			
TNT Ventures	\$78,161.00	\$39,615.03	\$44,461.80	\$61,845.93	\$2,608,577.16	\$3,507,217.30	\$898,640.14			
Dun Glen Mining	\$373,981.00	\$200,648.22	\$143,800.64	\$272,548.54	\$2,234,596.16	\$3,234,668.76	\$1,000,072.60			
XYZ Mining	\$750,000.00	\$430,685.62	\$65,719.06	\$463,545.15	\$1,484,596.16	\$2,771,123.61	\$1,286,527.45			

Scenario if 75% of premiums paid are refunded to plan-level participants upon exit

					Resultant Cumulative BP	Cumulative Resultant BP	Resultant Unobligated
Participant	Bond Amount	Deposit	Premiums Paid	Total Refund	Obligations	Account Total	Amount (Capacity)
Custom Details	\$24,364.00	\$12,217.11	\$20,801.51	\$27,818.24	\$3,843,913.16	\$4,515,738.42	\$671,825.25
New Gold Nevada	\$727,087.00	\$415,856.34	\$332,213.99	\$665,016.83	\$3,116,826.16	\$3,850,721.58	\$733,895.42
So. NV Liteweight	\$430,088.00	\$233,171.91	\$263,079.88	\$430,481.82	\$2,686,738.16	\$3,420,239.76	\$733,501.60
TNT Ventures	\$78,161.00	\$39,615.03	\$44,461.80	\$72,961.38	\$2,608,577.16	\$3,347,278.38	\$738,701.22
Dun Glen Mining	\$373,981.00	\$200,648.22	\$143,800.64	\$308,498.70	\$2,234,596.16	\$3,038,779.68	\$804,183.52
XYZ Mining	\$750,000.00	\$430,685.62	\$65,719.06	\$479,974.92	\$1,484,596.16	\$2,558,804.77	\$1,074,208.61

Conclusion - Because the refund amount < bond amount, the BP capacity increases by that difference

If all plan-level particpants exited:

Under 50% refund scenario, BP capacity would increase by \$612k

Under 75% refund scenario, BP capacity would increase by \$400k

From Nevada Administrative Code (NAC) Chapter 519A

DUTIES OF DIVISION OF MINERALS

General Provisions

NAC 519A.510 Definitions. (<u>NRS 513.063</u>, <u>519A.250</u>, <u>519A.290</u>) As used in <u>NAC 519A.510</u> to <u>519A.635</u>, inclusive, unless the context otherwise requires, the words and terms defined in <u>NAC 519A.512</u> to <u>519A.555</u>, inclusive, have the meanings ascribed to them in those sections.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A 3-4-92; A by Comm'n on Mineral Resources by R069-99, 8-19-99; R066-02, 8-23-2002)

NAC 519A.512 "Administrator" defined. (<u>NRS 519A.250</u>, <u>519A.290</u>) "Administrator" means the Administrator of the Division.

(Added to NAC by Dep't of Minerals, eff. 10-9-90) — (Substituted in revision for NAC 519A.530)

NAC 519A.515 "Bond pool" defined. (<u>NRS 519A.290</u>) "Bond pool" means the program for the pooling of reclamation performance bonds that collects, holds and distributes money paid to the pool by its participants to assist those participants to comply with:

1. The bonding and surety requirements of <u>chapter 519A</u> of NRS;

2. The requirements for financial guarantees set forth in the regulations adopted pursuant to 43 U.S.C. § 1740; or

3. The bonding requirements imposed pursuant to an ordinance adopted by a county in this State.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97)

NAC 519A.520 "Commission" defined. (<u>NRS 519A.290</u>) "Commission" means the Commission on Mineral Resources.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.525 "Division" defined. (<u>NRS 519A.250</u>, <u>519A.290</u>) "Division" means the Division of Minerals of the Commission on Mineral Resources.</u>

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.535 "Exploration project" defined. (NRS 519A.250, 519A.290) "Exploration project" means all activities conducted in this State by a person on or beneath the surface of land for the purpose of, or in connection with, determining the presence, location, extent, depth or grade of any mineral, which affects the surface.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A 3-4-92)

NAC 519A.540 "Mining operation" defined. (<u>NRS 519A.250</u>, <u>519A.290</u>) "Mining operation" means all activities conducted in this State by a person on or beneath the surface of land for the purpose of, or in connection with, the development or extraction of any mineral. The term does not include an aggregate or sand pit.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A 3-4-92)

NAC 519A.545 "**Operator**" **defined.** (<u>NRS 519A.250</u>, <u>519A.290</u>) "Operator" means any person who owns, controls or manages an exploration project or a mining operation. (Added to NAC by Dep't of Minerels, eff. 10.0, 00)

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.550 "Participant" defined. (<u>NRS 519A.290</u>) "Participant" means an operator who has paid money to the bond pool to cover his or her bonded liability and who is in good standing in the bond pool.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.552 "Plan" defined. (<u>NRS 513.063</u>, <u>519A.250</u>, <u>519A.290</u>) "Plan" means a plan of operation filed with and approved by the United States Bureau of Land Management or the United States Forest Service.

(Added to NAC by Comm'n on Mineral Resources by R066-02, eff. 8-23-2002)

NAC 519A.555 "Responsible regulatory authority" defined. (<u>NRS 519A.290</u>) "Responsible regulatory authority" means the governmental agency that has authority to require, modify, release or require forfeiture of a reclamation performance bond for a mining operation or an exploration project.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

Program for the Pooling of Reclamation Performance Bonds

NAC 519A.570 Administration by Division; application for participation. (<u>NRS</u> 519A.290)

1. The Division will administer the bond pool.

2. A person who wishes to participate in the bond pool must complete an application on a form provided by the Division.

3. The application to participate in the bond pool must include a statement by the applicant and documentation that:

(a) Indicates whether the applicant has ever forfeited a bond or surety held for the reclamation of mined land and, if so, the location of the operation for which the bond or surety was forfeited and the circumstances of the forfeiture.

(b) Lists the location, scale and any other pertinent details of the previous mining or exploration activities of the applicant that required reclamation performance bonding during the preceding 10 years.

(c) Shows the structure of the business organization and the financial status of the applicant at the time of application. Except as otherwise provided in subsection 4, the documentation must include:

(1) An organizational chart naming any parent company;

(2) Current and long-term assets;

(3) Current and long-term liabilities;

(4) The net worth of the business organization; and

(5) Evidence that the financial statements have been reviewed by a certified public accountant and are a fair representation of the financial status of the applicant.

4. The Administrator may waive the requirements of subparagraph (5) of paragraph (c) of subsection 3 for an applicant who:

(a) Applies for bond coverage of \$10,000 or less; and

(b) Submits to the Administrator a signed and notarized affidavit stating under penalty of perjury that the information provided by the applicant pursuant to subparagraphs (2), (3) and (4) of paragraph (c) of subsection 3 is true.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A 9-16-92; A by Div. of Minerals, 11-14-97)

NAC 519A.575 Submission of information by applicant; prequalification of applicant. (NRS 519A.290)

1. An applicant may submit any part of the information required by <u>NAC 519A.570</u> before submitting the remaining required information.

2. The Administrator or his or her designee may prequalify an applicant for participation in the bond pool, subject to receipt and final review of any materials required to complete the application.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.580 Notification of applicant; right to appeal denial of application. (NRS 519A.290) The Division will notify the applicant within 20 business days after receipt of an application that:

1. The applicant has been accepted to participate in the bond pool subject to payment of the entry deposit and the first installment of the premium due the first year;

2. The application is incomplete and identify what additional information is required; or

3. The application has been denied and the reasons for the denial. An applicant may appeal this decision pursuant to <u>NAC 519A.630</u>.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.585 Establishment of amount of bond; amount of coverage by bond pool. (NRS 513.063, 519A.290)

1. The responsible regulatory authority shall establish the amount of the reclamation performance bond.

2. A participant is subject to a maximum bond amount for which the bond pool may be liable. The maximum amount may be reached by bonding more than a single mining operation or exploration project or a combination thereof.

3. A participant may participate in the bond pool with greater bond coverage than is required by the responsible regulatory authority with the approval of the Administrator or a person designated by him or her. Any coverage in excess of the coverage required by the responsible regulatory authority must be identified and may not be used to cover reclamation costs in the event of the forfeiture by the participant. The Administrator or a person designated by the Administrator will include any such coverage in determining the amount of the deposit and premiums the participant is required to pay pursuant to NAC 519A.595.

4. The maximum bond coverage for a participant who is the operator of one or more mining operations or exploration projects, or any combination thereof, is \$3,000,000.

5. A participant may request a change in his or her bond pool coverage. The Administrator or a person designated by the Administrator may require additional information before increasing the bond coverage of a participant.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A 3-4-92; A by Div. of Minerals, 11-14-97; A by Comm'n on Mineral Resources by R066-02, 8-23-2002) **NAC 519A.590 Indemnification of bond pool.** (<u>NRS 519A.290</u>) Before acceptance into the bond pool, the applicant must execute a general agreement of indemnity on a form provided by the Division. After acceptance into the bond pool, the applicant must indemnify and keep indemnified and save and hold harmless the bond pool against all loss, costs, expenses and attorney's fees incurred by the bond pool as a result of his or her participation in the bond pool or forfeiture of any part of his or her bond.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.595 Payment of entry deposit and premiums. (NRS 513.063, 519A.290)

1. Each participant must pay the entry deposit and premiums required by this section to maintain participation in the bond pool.

2. If an operator becomes a participant before August 23, 2002, the participant must pay a deposit equal to 15 percent of his or her bond coverage at the time of entry into the bond pool. The amount of the deposit will be adjusted if the bond coverage provided by the pool increases or decreases solely because of a recalculation of the amount of the bond so the deposit is equal to 15 percent of the bond coverage. If the bond coverage provided by the pool increases because the plan is amended, the deposit for the bond will be calculated in the manner provided in subsection 3. The deposit and any addition to the original deposit must remain in the bond pool until the participant has been released by the responsible regulatory authority from further reclamation liability. The deposit will not be released in the event of a forfeiture.

3. If an operator becomes a participant after August 23, 2002, the amount of the deposit for:

(a) A bond that is less than \$10,000, is 100 percent of the amount of the bond; and

(b) A bond that is \$10,000 or more, is a percentage of the amount of the bond calculated using the following formula:

3

299,000 (amount of bond - 10,000) +50

4. Annual premiums, established as an equal percentage of each participant's bond coverage, must be paid by the participant:

(a) In quarterly installments on or before March 31, June 30, September 30 and December 31; or

(b) Annually in accordance with a schedule approved by the Administrator or a person designated by him or her.

5. Upon entry to the bond pool, the participant must, based on the date of entry, pay a prorated amount of the first:

(a) Quarterly premium; or

(b) Annual premium, if the participant pays the premium in accordance with a schedule approved by the Administrator or a person designated by him or her pursuant to subsection 4.

 \rightarrow After entry to the bond pool, the participant must pay the regular quarterly or annual amount on or before the date the premium is due.

6. The annual premium will be calculated as follows:

(a) Except as otherwise provided in paragraph (b), for bonds that were issued before August 23, 2002, the annual premium is 5 percent of the bond coverage of a participant.

(b) For bonds that are issued on or after August 23, 2002, or for bonds that have increased because the plan is amended, the annual premium:

(1) Except as otherwise provided in subparagraph (3), for bonds whose total amount is less than \$10,000, is 3 percent of the amount of the bonds.

(2) Except as otherwise provided in subparagraph (3), for bonds whose total amount is at least \$10,000, is a percentage of the amount of the bond calculated using the following formula:

(3) If the amount of the deposit and the premiums paid by a participant equal or exceed the amount of the bond, is 3 percent of the amount of the bond. For the purposes of this subparagraph, any late penalty paid by a participant will not be considered in determining the amount of the annual premium.

7. Except as otherwise provided in <u>NAC 519A.610</u> and <u>519A.615</u>, the annual premium is nonrefundable.

8. If a change occurs in the required premium as a percentage of the bond coverage of a participant, the Administrator or a person designated by him or her will notify the participant not less than 30 days before the due date of the next:

(a) Quarterly premium; or

(b) Annual premium, if the participant pays his or her premium in accordance with a schedule approved by the Administrator or a person designated by the Administrator pursuant to subsection 4.

 \rightarrow The Administrator or a person designated by him or her will base any change in the percentage of the premium on the recommendation of an actuary who is approved by the Commissioner of Insurance to review the status of the bond pool. The findings of the actuary must show that a change in percentage allows the bond pool to remain self-sustaining under statistically expected forfeiture rates and forecasted administrative costs.

9. The Administrator or a person designated by him or her will:

(a) Consult with the Risk Management Division of the Department of Administration to determine the availability and cost of obtaining insurance to insure against exposure to a risk that would cause the liability of the bond pool to exceed the amount of money in the bond pool.

(b) Consult with the Commission to determine whether to obtain such insurance. If the insurance is obtained, the Administrator or a person designated by him or her will establish a schedule for payment of the premiums for each participant based on the participant's portion of the total liability of the bond pool.

(c) Notify each participant of the amount of the premium the participant owes not less than 30 days before the premium is due.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97; A by Comm'n on Mineral Resources by R066-02, 8-23-2002)

NAC 519A.600 Use of money held in bond pool; interest earned on money; transfer of administrative expenses. (NRS 519A.290)

1. All money held in the bond pool must be used only for the purposes of the bond pool, including administrative expenses.

2. All interest earned on money held in the bond pool must be added to the bond pool and be used solely for the purposes of the bond pool. Participants are not entitled to receive any interest on deposits or premiums paid into the pool.

3. Except as otherwise provided in this subsection, administrative expenses, calculated at a rate of 3 percent of the average total active bond amount held in the bond pool at the end of each of the 4 immediately preceding fiscal quarters, may be transferred annually from the bond pool to the Account for the Division of Minerals created pursuant to <u>NRS 513.103</u>. The amount transferred must be based on the actual administrative expenses incurred by the Division and may not exceed the amount resulting from the calculations made pursuant to this subsection.

4. As used in this section, "total active bond amount" means the total amount of money held in the bond pool that has not been requested to be returned to a participant.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals by R108-13, 10-24-2014)

NAC 519A.605 Failure to pay premiums: Penalty; termination of participation; liability of bond pool. (<u>NRS 519A.290</u>)

1. If a participant fails to pay the premiums in the amount and by the time required by \underline{NAC} 519A.595, the participant shall pay a penalty of 5 percent of the amount of:

(a) His or her quarterly premium; or

(b) His or her annual premium, if the participant pays the premium annually in accordance with a schedule approved by the Administrator or a person designated by the Administrator pursuant to that section.

2. If a participant fails to pay the quarterly or annual premium and the 5 percent penalty specified in subsection 1 within 30 calendar days after the date on which the premium is due, the Division will notify the participant that his or her participation in the bond pool will be terminated if full payment of the quarterly or annual premium and penalty is not received within 70 calendar days after the date on which the premium was due. The notice will be sent to the participant and the responsible regulatory authority by certified mail, return receipt requested, at least 30 calendar days before any action concerning termination is taken by the Administrator or a person designated by the Administrator.

3. If full payment of the quarterly or annual premium, including any penalty, is not received within 70 calendar days after the date on which it is due, the Division will send a notice to the responsible regulatory authority and the participant by certified mail, return receipt requested, that his or her participation in the bond pool is terminated. If a participant's participation in the bond pool is terminated pursuant to this section, the Division will not return the deposit paid by participant pursuant to <u>NAC 519A.595</u>.

4. The bond pool:

(a) Is liable for the coverage of the participant for reclamation of land that is disturbed until the date of termination.

(b) Is not liable for the reclamation of any land that is disturbed after the date of termination. (Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97)

NAC 519A.610 Release of deposit and unused premium. (<u>NRS 519A.290</u>) The Administrator or a person designated by the Administrator will request the State Treasurer to release the deposit of a participant and any unused premium paid by him or her, less any outstanding penalties or premiums, within 5 business days after receipt of written notification from the responsible regulatory authority that the participant:

1. Has satisfied the requirement to reclaim land disturbed by a mining operation or exploration project and the bond may be released; or

2. Has obtained a surety which replaces the bond coverage of the participant by the bond pool.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97)

NAC 519A.615 Partial release of deposit and unused premium. (<u>NRS 519A.290</u>) The deposit of a participant and any unused premium paid by him or her may be partially released in the same manner described in <u>NAC 519A.610</u> if the responsible regulatory authority notifies the Division that:

1. The required amount of the bond has been reduced; or

2. The participant has partially substituted another form of surety for a portion of the coverage provided by the bond pool.

 \rightarrow The reduction in the amount of the deposit required is the same percentage as the percentage decrease in the coverage provided by the bond pool.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97)

NAC 519A.620 Forfeiture of bond: Action by Administrator; liability and exoneration of bond pool. (NRS 519A.290)

1. Upon notification from the responsible regulatory authority that a participant has failed to complete the required reclamation and that the responsible regulatory authority, in accordance with all applicable laws and regulations, requires forfeiture of the bond, the Administrator will:

(a) Immediately notify the participant that his or her participation in the bond pool is terminated and his or her deposit will not be returned; and

(b) Request that the State Treasurer transfer to the responsible regulatory authority an amount of money from the bond pool determined by the Administrator or his or her designee to be equal to the estimated cost of reclamation less any other bonds or surety held in favor of the State of Nevada or the United States relating to the mining operation or exploration project of the participant to which the forfeiture applies.

2. The maximum liability of the bond pool is the coverage provided to the participant relating to the mining operation or exploration project of the participant at the time of the forfeiture.

3. If the responsible regulatory authority exonerates the participant from any portion of bonded liability, the bond pool is exonerated of an equal amount of bonded liability.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

NAC 519A.625 Forfeiture of bond: Action against participant or former participant. (NRS 519A.290) In the event of a forfeiture by a participant or a former participant whose participation in the bond pool is terminated pursuant to NAC 519A.605, the Administrator or a person designated by the Administrator will immediately notify the Attorney General and request that action be taken against the participant or former participant in the name of the State of Nevada in any court of competent jurisdiction to recover the full costs incurred by the bond pool as a result of the forfeiture. Any money recovered must be deposited in the bond pool and used for the general purposes of the bond pool.

(Added to NAC by Dep't of Minerals, eff. 10-9-90; A by Div. of Minerals, 11-14-97)

NAC 519A.630 Appeal of denial or termination of participation in bond pool. (NRS 519A.290)

1. Any person who is denied participation in the bond pool pursuant to <u>NAC 519A.580</u> or whose participation in the bond pool is terminated pursuant to <u>NAC 519A.620</u> may appeal the denial or termination.

2. Written notice of the appeal must be received by hand delivery or certified mail, return receipt requested, by the Division within 20 calendar days after receipt of the notice of denial or termination.

3. The appeal must state the grounds for the appeal of the denial or termination.

4. Within 30 calendar days after receipt of a notice of appeal, the Division will send a notice of the hearing to the person appealing the denial or termination. The notice will include the time, place and nature of the hearing, the legal authority and jurisdiction under which the hearing is to be held, and a statement of the matters asserted.

5. The hearing will be held before a panel composed of:

(a) The Administrator who is the chair of the panel and hearing officer;

(b) A member of the Commission who is designated by the Chair of the Commission; and

(c) A representative of the current participants in the bond pool who is selected by the Chair of the Commission and the Administrator.

6. The person appealing the denial or termination may present evidence and has the burden of proving that the denial or termination should be modified or reversed.

7. The panel shall render a written decision which must be served personally or by certified mail upon the person appealing the denial or termination. The decision of the panel is a final decision for the purposes of judicial review.

(Added to NAC by Dep't of Minerals, eff. 10-9-90)

II. D The Gold Butte Closure Project

Gold Butte AML Project

IN THE SUN: BETTORS SEE 7 TEAMS CAPABLE OF TAKING NBA TITLE LAS VEGAS SUN reviewjournal.com SPORTS Raiders enter bye week to regroup after pummeling by Seahawks 1C **HEALTH** Four breast cancer survivors talk about their experiences 1D > Still-suffering Floridians October 15, 2018 piece lives back together MUSTREADS along with the rubble from sed section of the beachfrom The death toll from Michael's destructive march from Florida to Virgir ith the worst damage. "If we lose only one life, to me that's a stood at 17, with just one confirmed leath in this Florida Panhandle town ing to be a miracle." Cathey sai of about 1,000 people that took a direct hit from the hurricane and its 155 mph NEVADA & THE WEST Nevada's newest national We're going to be on the ikes proactive si harassment. 1B monument will soon have Once we graduate we're ut all the stops to nority voters. 18 poing to be the people that other educators WASHINGTON REPORT fewer holes to fall into. look at for advice on how to run their classrooms Makenzi Solis ada Institute for Teaching cond time this yea **Top Gun** teamwork to goose

NATION apter 11 bankruptcy

off the win that salvage longest road trip of the The host Red Sox won Game 2 of the ALCS 7-5 ove the Astros. 1C The bost Datricts defeats chiefs with a last-goal, 43-40. 3C



REVIEW-JOURNAL

program

Cohort of 10 students guides

its inauguration By Natalie Bruzda

Ideas are brewing for Makenzi Solis. She wants to research

general education

And she'll have the

and Educ tor Prepa

ration.

"I think it's really cool

because we're going to be on the forefront of

ducation," Solis, 18, said 'Once we graduate, we're

Work underway to close old mine shaft entrances at Gold Butte monument

By Henry Brean | Las Vegas Review-Journa

See MINES 44

small team of state contractors is about halfway through a nearly six effort to close off 42 abandoned mine openings scattered throughou Butte National Monument, about 90 miles northeast of Las Vegas.

Most of the underground tunnels date back to the ariy 20th century. Several feature vertical shafts, timed to swallow unsuspecting visitors. primed to wainow attractopecting variants. and the second second

Nevada's newest national monument will soon have fewer holes to fall into.



Work underway to close old mine shaft entrances at Gold Butte monument

By Henry Brean | Las Vegas Review-Journal

small team of state contractors is about halfway through a nearly six-week effort to close off 42 abandoned mine openings scattered throughout Gold Butte National Monument, about 90 miles northeast of Las Vegas.

Most of the underground tunnels date back to the early 20th century. Several feature vertical shafts. primed to swallow unsuspecting visitors.

In the hills above the long-gone mining camp of Gold Butte, 20 miles from the nearest paved road, contract workers Brian Breiter and James Ryan spent State contractors Brian Breiter, left, and James Ryan secure steel across the opening of an abandoned mine last week.

Monday capping one such hole with about 2,500 pounds of crisscrossed steel.

K.M. Cannon Las Vegas Review-Journal

It's strong enough you could park a vehicle on it if you wanted to? Breiter said after securing the new grate with 18-inch pins drilled into solid rock.

III. OLD BUSINESS

III. A <u>Release of Commission-funded</u> <u>report entitled "Opportunities for Precious</u>

Metals Toll Processing and Copper

Concentrate Processing in Nevada".







Nevada Bureau of Mines and Geology Report 57

Opportunities for Precious Metals Toll Processing and Copper Concentrate Processing in Nevada



Thomas J. DeMull, David A. Davis, Lucia M. Patterson, and Joel Lenz

III. B Planning for AEMA and PDAC

Technical Sessions

MORNING SESSIONS | WEDNESDAY DECEMBER 5

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

STATE & PROVINCE REPORTS (Part 1)

Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **Rich Perry,** Administrator, Nevada Division of Minerals, Carson City, NV

Session Description:

Want to hear about exploration and mining activities for the past year in Western States and Provinces? In this all-day session, Economic Geologists from Western US States and Canadian Provinces will report on the exploration and development activities in metals and industrials for the past year in their respective areas. These specialists will also provide their insight into new mineral commodities and areas which are experiencing activity, and opportunities and challenges.

- Alaska Exploration and Mining Update, Steve Masterman, Director, Alaska Division of Geological & Geophysical Surveys, Fairbanks, AK
- British Columbia Exploration and Mining Overview, 2018, Bruce Northcote, BC Mineral Development Office, British Columbia Geological Survey, Vancouver, BC CANADA
- Idaho Mining and Exploration, 2018, Virginia Gillerman, Associate Research Geologist, Idaho Geological Survey, Boise, ID
- Oregon Exploration and Mining Update, Ian Madin, Deputy Director and Chief Scientist, Oregon Department of Geology and Mineral Industries, Portland, OR
- Yukon Geology, Exploration and Mining Overview, 2018, Scott Casselman, Head, Mineral Services, Yukon Geological Survey, Whitehorse, YT CANADA

LITHIUM AT AEMA- ROUND 2

Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: Ruth A Carraher, Geologist, C&M Consultants

Session Description:

Description – This session will have 6-7 presentations covering both development/production and exploration for brines, pegmatites and Li-bearing clays. Discussion of the sources of Li and, why and how Li is concentrated, along with geologic settings of the various deposit types will provide food for thought.

Interested in being an Exhibitor?

Contact Mike Heywood for booth availability and pricing. Email: mheywood@miningamerica.org Phone: 509.624-1158 × 110

This year's exhibitors have 1st choice for booth space in Reno next year.

GROWTH COMPANIES – HAS GROWTH REPLACED SURVIVAL?

Area of Interest – Business & Finance

Chaired by: **Bob Felder**, *President & CEO*, *Renaissance Gold*, *Inc.*, *Reno*, *NV and*

Ron Parratt, Executive Chairman, Renaissance Gold, Inc., Reno, NV

Session Description:

With the long downturn in the market finally showing signs of stability, this session will showcase companies that have emerged through this difficult time with significant exploration results, material progress on the development of mineral resources or expansion of operating properties. Their efforts demonstrate that Nevada and the Great Basin continues to deliver new discoveries through exploration yielding material value for investments made even during difficult times. And lastly, that the opportunities created over the past several years have created acquisition opportunities for corporate growth by those with a forward looking vision.

- Corvus Gold's New Gold Discoveries in the Beatty Area, Southwest Nevada, Jeff Pontius, President, CEO & Director, Corvus Gold, Inc., Reno, NV
- "It's Not Every Day You Get to Open a Mine", The Isabella Pearl Project, Walker Lane Mining District, Nevada, Barry Devlin, Vice President Exploration, Gold Resource Corp., Denver, CO
- Liberty Gold First Movers in Historic Gold Districts in the Great Basin, Moira Smith, Vice President Exploration & Geoscience, Liberty Gold Corp., Elko, NV
- Nevada Copper: Development of the Pumpkin Hollow Project, Lyon County, Nevada, David Swisher, Vice President Operations, Nevada Copper, Inc., Yearington, NV
- Advancing the Relief Canyon Mine, Pershing County, Nevada, Steve Alfers, President & CEO, Pershing Gold Corp., Lakewood, CO
- Premier Gold and the Cove Project, Tim George, Manager, Engineering Services, Premier Gold Mines USA, Inc., Reno, NV

SOLVING METALLURGICAL CHALLENGES AND PROBLEMS

Area of Interest - Operations

Chaired by: Melanie M Bond, PE, Owner/Principal Engineer, Bond Minerals Services and Engineering, PLLC, Lead, SD, and

> **Courtney Young,** Department Head Metallurgical and Material Engineering, Lewis S Prater Distinguished Professor, Montana Tech, Butte, MT

Session Description:

A selection of presentations focusing on mineral processing and extractive metallurgy solutions for the successful advancement of projects. Ideally this session will include contributions from industry and academia on topics ranging from diagnostic metallurgical tools and programs to equipment and process improvements – all the way from exploration through production.

- Using Process Mineralogy for Flowsheet Development, Sarah Prout, Senior Mineralogist, SGS Canada, Inc., Burnaby, BC CANADA
- Letting the Tail Wag the Dog: How the Need for Improved Tailings Management can be Integrated into Process Design, Laurie Reemeyer, Principal Consultant, Resourceful Paths, Vancouver, BC CANADA
- The Volatilization and Fixation of Arsenic, Corby Anderson, Harrison Western Professor, Department of Metallurgical & Materials Engineering, Colorado School of Mines, Golden, CO

Technical Sessions

MORNING SESSIONS | WEDNESDAY DECEMBER 5... (Cont'd.)

SESSION TIMES: 8:00 - 11:30 COFFEE BREAK 9:35 - 10:20

SOLVING METALLURGICAL CHALLENGES AND PROBLEMS... (Cont'd.)

- **TBA**, Michael Nelson, Chair Department of Mining Engineering, University of Utah, Salt Lake City, UT
- Reducing Metallurgical Waste Streams Though Pyrometallurgical Slag Processing, Natalie Deringer, Masters Student, Montana Tech, Butte, MT

BASELINE SUCCESS:

Successful permitting in a changing environment

Area of Interest - Environmental

Chaired by: Benjamin Veach, P.E., Principal, Stantec Consulting Services, Inc., Reno, NV

Session Description:

From Exploration to Mine Expansion Projects, the only consistency in mine permitting is change. From Eagles to the Executive Order, there are no two projects that are the same. Exploration and Mining must navigate changing waters to meet the demands of federal and state regulators.

This session will explore hot current topics in mining such as: Secretarial and Executive Orders for NEPA, USFWS Permitting Requirements, Groundwater Success's and Failures, and Adventures in Section 106 Cultural Resource surveys. A panel of experts from consulting, mining, and the regulatory sides will present examples of the changing roadmap to permit success. Join us for a comprehensive look at the permitting process and speak directly with experts in their respective fields.

- Cultural Resources and the Role in Permitting for Exploration and Mining, *Speaker TBD*
- Mine and Range Planning with the Sage Grouse, Christopher Jasmine, Ecologist @ Elko Land & Livestock Co., Newmont, Elko, NV
- The Evolution of NEPA, Current Status, Michele Lefebvre, NEPA Specialist, Stantec, Hilo, HI
- Effective Groundwater Planning for Mining, Rachel Peavler, Senior Hydrogeologist, WMH, Salt Lake City, UT
- Planning to Close from the Beginning, Speaker TBD

LAND AND LEGAL ISSUES FOR MINERS

Area of Interest - Legislative & Public Affairs

Chaired by: Cathy Suda, Manager, US Land & Assets, Teck American Incorporated, Spokane, WA and

> **Tracy O. Guinand**, Professional Consultant, Tracy Guinand Land, LLC, Reno, NV

Session Description:

The session will discuss permitting and land issues in several western states and BC as well as cross-border issues. Invited speakers include Wells Parker, Ben Machlis (Dorsey & Whitney), Rolf Schmitt (ERM, Canada), Ramona Monroe (Stoel Rives) and others.

AFTERNOON SESSIONS | WEDNESDAY DECEMBER 5

SESSION TIMES: 2:00 - 5:30 COFFEE BREAK 3:35 - 4:20

STATE & PROVINCE REPORTS (Part 2)

Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **Rich Perry,** Administrator, Nevada Division of Minerals, Carson City, NV

Session Description:

Want to hear about exploration and mining activities for the past year in Western States and Provinces? In this all-day session, Economic Geologists from Western US States and Canadian Provinces will report on the exploration and development activities in metals and industrials for the past year in their respective areas. These specialists will also provide their insight into new mineral commodities and areas which are experiencing activity, and opportunities and challenges.

- Mineral Resource Potential in New Mexico, 2018, Virginia McLemore, Principal Senior Economic Geologist, New Mexico Bureau of Geology and Mineral Resources, Socorro, NM
- Carlin-Type Gold in Yukon: Detailed Geology and Pyrite Chemistry, Patrick Sack, Economic Geologist, Yukon Geological Survey, Whitehorse, YT CANADA
- Nevada Mineral Exploration and Production Update, John Muntean, Director, Center for Research in Economic Geology, Nevada Bureau of Mines and Geology, University of Nevada Reno, Reno, NV
- Results of a Study on Ore Tolling and Copper Concentrate Processing in Nevada, Richard Perry, Administrator, Nevada Division of Minerals, Carson City, NV
- USGS Mineral Resources Program and Critical Minerals Activities Update, Thomas Crafford, USGS Mineral Resources Program Coordinator, U.S. Geological Survey, Reston, VA

CRITICAL MINERALS 2018: RESOURCE NATIONALIZATION, TRADE WARS AND OBSTACLES AND CHALLENGES FOR IMPROVING DO-MESTIC SUPPLY CHAINS

Area of Interest - Mineral Deposits, Geology & Exploration

Chaired by: **Peter Vikre,** U.S. Geological Survey, Reno Office, Geology, Minerals, Energy and Geophysics Science Center, Mackay School of Earth Sciences and Engineering, University of Nevada, Reno, Reno, NV and

Christopher Dail, *Manager, Exploration, Midas Gold Idaho, Inc.*

Session Description:

This session will focus existing and potential future domestic Critical Minerals occurrences, prospects and resources and the challenges to improving domestic production and supplies for our manufacturing base given the backdrop of: significant known critical mineral deposit endowment and distribution; trade wars and resource nationalism; subsidization and stockpiling; and political and environmental obstacles.

Possible solutions from a national perspective, such as encouraging exploration, stockpiling, comprehensive assessments and regulatory aspects as they apply may be explored.

- **TBD**, Steven Fortier, Director, National Minerals Information Center, U.S. Geological Survey, Reston, VA
- The National Defense Stockpile as Part of the U.S. Critical Minerals Strategy, Thomas (Tom) Rasmussen, Director Strategic Planning and Market Research Defense Logistics Agency - Strategic Materials, U.S. Department Defense, San Antonio, TX



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Job No.: 53422

III.C Update on Proposed Land Withdrawals in Nevada





Proposed FRTC Modernization Overview




Legislative Environmental Impact Statement

EXECUTIVE SUMMARY

October 2018 • FINAL

ES.1 INTRODUCTION

The U.S. Air Force proposes to withdraw and reserve public lands for military use to support the utilization and modernization of the Nevada Test and Training Range (NTTR) by enhancing range capability for improved training and testing. The NTTR is the preeminent range for testing and evaluation of weapons systems, tactics development, and advanced combat training. However, the range and its infrastructure are quickly becoming outdated as rates of technological development of new weapons systems and electronic warfare systems accelerate. Since enemy technology has become increasingly advanced and complex, more space is needed to replicate threat configurations. The NTTR can no longer replicate this threat environment.

The *Military Land Withdrawal Act of 1999* (MLWA), Public Law No. 106-65, withdrew approximately 2.9 million acres of land from public use for the current NTTR land base. The current withdrawal will expire on November 6, 2021, unless Congress enacts legislation to extend it. As a result of the evolving mission, this Legislative Environmental Impact Statement (LEIS) programmatically evaluates alternatives that would extend or expand the current military land withdrawal in order to safely execute its missions in a more realistic and operationally relevant manner. The Final LEIS will be submitted as part of the legislative proposal for the future NTTR military land withdrawal. Congress will make the final decision on whether to extend the withdrawal and/or expand the boundaries of the current NTTR land withdrawal through legislation. The Air Force is also following the applicable procedures set forth in Bureau of Land Management (BLM) regulations at Title 43 Code of Federal Regulations (CFR) Part 2300 that implement the U.S. Department of the Interior's authority to process federal land withdrawal applications.

The Air Force is the lead agency for the LEIS, while cooperating agencies are the BLM; Department of Energy (DOE); National Nuclear Security Administration (NNSA); U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuges and Ecological Services programs; Nevada Department of Wildlife; and Nevada Association of Counties. The Air Force also initiated government-to-government consultation with federally recognized tribes potentially affected by the NTTR land withdrawal, as well as appropriate Nevada state agencies and local counties, towns, and cities.

The NTTR is part of the U.S. Air Force's Major Range and Test Facility Base enterprise and is operated by the U.S. Air Force Warfare Center's (USAFWC's) Headquarters NTTR. As a national security infrastructure asset, the NTTR is managed by the Air Force but hosts activities associated with all Department of Defense (DoD) entities, the DOE, NNSA (including Sandia National Laboratories), and Homeland Security. The NTTR is located in southeastern Nevada and includes both the land and overlying airspace. The NTTR airspace comprises roughly 12,000 square nautical miles (NM) and is about 150 NM wide at its widest point (west to east) and 110 NM long (north to south). Figure ES-1 shows an outline of the NTTR land and airspace and its relationship to the city of Las Vegas to the south, Nellis Air Force Base (AFB), and Creech AFB. Figure ES-2 depicts the North and South Ranges of the NTTR.





FINAL EXECUTIVE SUMMARY | LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT NTTR LAND WITHDRAWAL







LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT | FINAL EXECUTIVE SUMMARY NTTR LAND WITHDRAWAL

OCTOBER 2018

ES-4

As shown in Figure ES-2, the NTTR is split into the North and South Ranges to facilitate overall management of Air Force operations and test and training opportunities on each range. The major facilities are Creech AFB and airfield, Tolicha Peak, and the Tonopah Test Range and airfield. Facilities also include roads, radar sites, other communication systems, and range electronic measuring devices.

The North Range contains mountain ranges oriented to the north and south with wide valleys, where most of the target areas are located. The North Range is approximately 1.8 million acres of withdrawn land and contains approximately 1,263 targets within 63 tactical target complexes (Figure ES-2). The type of weapons authorized for delivery depends on the target selected. There are multiple and dispersed facilities that support three Electronic Combat Ranges (ECRs), including Tonopah ECR, Tolicha Peak ECR, and Electronic Combat South Range (hereinafter referred to as "EC South").

The South Range is approximately 1.2 million acres of withdrawn land located in the southeastern portion of the NTTR. Mountain ranges in the South Range are north/south oriented with narrow valleys that contain dry lakebeds. The South Range contains five weapons-delivery areas, which are subdivided into 74 target complexes containing approximately 1,363 targets.

The Desert National Wildlife Refuge Complex is one of the largest wildlife refuges in the United States, with approximately 1.6 million acres of land, and consists of three geographically separated refuges (Ash Meadows National Wildlife Refuge [NWR], Moapa Valley NWR, and Pahranagat NWR) and the Desert National Wildlife Range (DNWR). About half of the DNWR (approximately 826,000 acres) overlaps the lands withdrawn for the South Range (Figure ES-3). Almost 90 percent of the DNWR (about 1.4 million acres) has been proposed as wilderness by the USFWS since 1971, and about 590,000 of those acres are in the South Range. Generally, areas proposed for wilderness areas in the South Range correspond to elevations above 4,000 feet above mean sea level. The areas proposed for wilderness on the South Range are managed as de facto wilderness by virtue of USFWS land management policy, which results in significant restriction on Air Force activities to areas below 4,000 feet. Existing roads (mountain roads/passages) other than those used below 4,000 feet are off limits, as is troop movement, ground disturbance, and the development of new locations such as emitter sites and communication sites. Previously used targets that are located in areas that were proposed as wilderness in 1971 are also off limits. Targets in the South Range are restricted to the playas (dry lakebeds) within the 60-series ranges and accommodate live and inert ordnance.

The MLWA (1999) directs that the Secretary of the Interior is to manage the USFWS portion of the DNWR in coordination with the Secretary of the Air Force through a Memorandum of Understanding that was renewed in 1997 and describes how the management responsibilities of each agency will be implemented. The memorandum delineates how the Air Force is able to use ground areas in the South Range below the 4,000-foot contour line, which includes the target impact areas. Primary jurisdiction of these impact areas, also referred to as the "60-series" ranges, was transferred to the Air Force, and the Secretary of the Interior (via the USFWS) maintains secondary jurisdiction for wildlife conservation purposes.



LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT | FINAL EXECUTIVE SUMMARY NTTR LAND WITHDRAWAL

ES-6

ES.2 PURPOSE AND NEED

The Air Force's purpose and need for action is to sustain and enhance the military testing and training capacity, capability, and functionality of the NTTR through the land withdrawal process to meet current and future mission requirements while continuing environmental stewardship of the lands entrusted to it. Mission requirements include, without limitation, the following:

- Increase Major Combat Operations (MCO) test/training capability to meet the demands of strategic guidance and alleviate competition for critical MCO electronic assets
- Enhance Irregular Warfare (IW) test/training capability
- Increase NTTR operational security and safety

As a result of the DNWR and areas proposed for wilderness overlapping the NTTR South Range, there are significant restrictions on Air Force activities. New land management practices would allow for improved use of the South Range and efficient utilization of the associated airspace to better support military testing and training activities. In addition, the NTTR and its current infrastructure are quickly becoming outdated as rates of technological development of new weapons systems and electronic warfare systems accelerate. The NTTR can no longer replicate relevant threat environments. Thus, the Air Force proposes to withdraw and reserve public lands for military use to support the utilization and modernization of the NTTR by enhancing range capability for improved training and testing.

ES.2.1 INCREASE MCO TEST/TRAINING CAPABILITY TO MEET THE DEMANDS OF STRATEGIC GUIDANCE AND ALLEVIATE COMPETITION FOR CRITICAL MCO ELECTRONIC ASSETS

The NTTR must increase MCO capabilities to meet current and future MCO test/training requirements. Section 1.4.1 of the LEIS describes the NTTR's current capacity and future requirements, based on DoD Strategic Guidance. Increasing testing and training capacity will also reduce ongoing scheduling conflicts and alleviate competition between the various users, which will improve the efficiency of conducting NTTR operations.

ES.2.2 ENHANCE IRREGULAR WARFARE TEST/TRAINING CAPABILITY

IW operations have had an expanding role in developing aircrew and airborne systems, highlighting the critical need to integrate special operations forces and battlefield Airmen. Typical IW training includes ground training supported by air and vehicle operations. To increase the realism of the training events, some training ammunition (blank small arms), hand flares, smoke grenades, or other training munitions (such as paint balls) are expended during certain operations. As described in Section 1.4.2 of the LEIS, IW operations include air and vehicle IW operations support, insertion/extraction

(drop zone/landing zone) and overland navigation, and combined unmanned aerial system (UAS) and IW training.

Air and Vehicle IW Operations Support

Airborne operations include the use of rotary- or fixed-wing aircraft for the insertion, extraction, movement, or supplying of ground troops. Ground support vehicles occasionally deliver and retrieve the participating troops or provide support and logistics. Ground vehicle movement is normally restricted to the existing road and trail network, but some training activities use all-terrain vehicles or "dune buggies." To accommodate the very important role NTTR plays in training combat units, the following capabilities at the NTTR are required:

- Development of unique insertion and extraction points
- Overland navigation (areas with and without mountainous terrain)
- UAS coordinated efforts with overland navigation

Insertion/Extraction (Drop Zone/Landing Zone) and Overland Navigation

The NTTR's current capability to replicate a full battle spectrum for IW training is severely constrained and limited to the North Range. Keno Airfield in the North Range is highly utilized by Air Mobility Command, Special Operations Forces, and Marine Amphibious Forces to maintain combat mission-ready status because it is the only location on the NTTR with insertion and extraction training capabilities. Insertion and extraction activities and overland navigation cannot be conducted in the South Range because of land management restrictions associated with the overlapping areas of the DNWR and safety hazards in the impact areas under the Air Force's primary jurisdiction.

Combined UAS and IW Training

Similar to MCO test and evaluation and training, intelligence surveillance reconnaissance (ISR) has become a key component in IW strategies training programs. Creech AFB is at the center of UAS training and is located on the NTTR in close proximity to the South Range, making it the ideal location to test and train these assets. However, as mentioned previously, IW training in the South Range is limited due to access restrictions.

ES.2.3 INCREASE NTTR OPERATIONAL SECURITY AND SAFETY

Over the last 20 years, the population in Clark County (Las Vegas metropolitan area) has grown significantly, primarily in the northern half of the county, which abuts the NTTR. Consequently, NTTR managers have encountered public encroachment onto the range. The USAFWC believes that increasing the buffer and adjoining it to major infrastructure, such as roads or fencing, would help the public more readily recognize the true boundaries of the NTTR and limit the potential for public intrusions, thereby increasing public safety.

ES-8

ES.3 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This LEIS evaluates alternatives that would extend or expand the current NTTR land withdrawal. As detailed in Sections 2.1 and 2.2 of the LEIS, the Air Force developed a detailed screening process to identify the alternatives carried forward in the analysis that meet the selection standards developed for each of the operational requirements summarized above in Sections ES.2.1 through ES.2.3 of this Executive Summary.

The programmatic analysis in this LEIS focuses mainly on the proposed use of the area from a conceptual and qualitative perspective, and site-specific NEPA analyses will be necessary in the future for specific locations and routes once a decision on withdrawal has been made and information becomes more mature. Details regarding the actions that are currently known are outlined in Section 2.3 of the LEIS. These conceptual details were the basis of analysis for the LEIS.

Conceptual plans are used to characterize types of impacts on a programmatic level. Site-specific NEPA analyses will be necessary in the future once a decision on withdrawal has been made. Sections ES.3.1 through ES.3.5 below provide a summary of the alternatives considered, while Section 2.3 of the LEIS provides more detailed discussion.

ES.3.1 ALTERNATIVE 1 – EXTEND EXISTING LAND WITHDRAWAL AND MANAGEMENT OF THE NTTR (NORTH AND SOUTH RANGE) – STATUS QUO

Under Alternative 1, there would be no changes to the current NTTR boundary, operational activities, or land management practices. The "status quo" would meet a limited portion of the purpose and need, and the military test and training missions conducted at the NTTR would become increasingly constrained moving into the future. Although Alternative 1 significantly restricts test and training missions, it was evaluated and also used as a baseline for a comparative programmatic evaluation contrasted with all other alternatives.

ES.3.2 ALTERNATIVE 2 – EXTEND EXISTING LAND WITHDRAWAL AND PROVIDE READY ACCESS IN THE NORTH AND SOUTH RANGES

The NTTR boundary under Alternative 2 would be the same as with Alternative 1, but the Air Force would have "ready access" in both the North and South Ranges. Section 1.4.1 of the LEIS defines "ready access" as it pertains to the LEIS. Alternative 2 analyzes the potential impacts from increasing range utilization by applying a 30 percent increase in test and training activities, including aircraft operations, munitions expenditures, and motorized vehicular activities. In addition, it is assumed that there would be approximately a total of 11.5 acres of total ground disturbance.

ES.3.3 ALTERNATIVE 3 – EXPAND WITHDRAWAL OF PUBLIC LANDS FOR THE NTTR

There are three subalternatives analyzed under Alternative 3, shown in Figure ES-4. Each of the subalternatives includes ready access and a 30 percent increase in aircraft operations, munitions expenditures, and motorized vehicular activities. The land boundary under all subalternatives includes the current NTTR boundary and various expansion options needed for operational and safety requirements. Each of the subalternatives associated with Alternative 3 would require fencing but the fencing would be constructed to meet BLM fencing requirements, dependent on the topography and wildlife present, as outlined in BLM Handbook H-1741-1: Fencing, and the objective of the fencing would be to provide a physical barrier to prevent public access while allowing wildlife passage.

The Air Force recognizes that various cooperating agencies conduct ongoing studies and survey activities that are not related to this LEIS. Valuable data has been assimilated as a result of these long-term efforts, which specifically assist in managing biological and cultural issues in the areas associated with Alternative 3. Thus, the Air Force shall seek avenues with USFWS and BLM to continue long-term study and survey efforts, through the INRMP, and will continue operating within the Air Force procedures currently in place and outlined in Section 2.2.1 of the LEIS.

ES.3.3.1 Alternative 3A – Range 77 – EC South Withdrawal

As indicated in Section ES.2.2 of this Executive Summary, the Air Force has identified ISR as a key component in IW strategies and has incorporated a robust training program to implement those strategies. Creech AFB is at the center of UAS training and is located on the NTTR. This provides a seamless opportunity to test and train crews and systems that are currently required for any IW operation. Ground personnel must be able to integrate ISR strategy into operations.

Alternative 3A would increase the NTTR boundary by approximately 18,000 acres and would be used to add buffer area to the safety footprint of the EC South area (redesignated as "Range 77"). In addition, approximately 25 miles of fencing would be constructed to preserve the safety of the public and provide wildlife passage. Munitions would not be used in this area.

ES.3.3.2 Alternative 3A-1 – Amended Range 77 – EC South Withdrawal

Alternative 3A-1 reduces the expansion area of Alternative 3A so that the total expansion area of Alternative 3A-1 is approximately 15,000 acres (Figure ES-5). This subalternative was created in response to public input regarding potential impacts to recreational and economic resources as well as concerns related to the proposed routes of the Section 368 energy Corridor 18-224 and Interstate 11.



ES-10



FINAL EXECUTIVE SUMMARY | LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT NTTR LAND WITHDRAWAL OCTOBER 2018 ES-11



Figure ES-5. Alternative 3A and 3A-1 Locations and Acreages

LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT | FINAL EXECUTIVE SUMMARY NTTR LAND WITHDRAWAL

OCTOBER 2018

ES-12

ES.3.3.3 Alternative 3B – 64C/D and 65D Withdrawal and Administrative Incorporation

As discussed in Section ES.2.3, to address unauthorized public access incidents that have occurred in the overlap of the northern portion of Clark County and NTTR's South Range, the USAFWC evaluated those areas where the most incidents have occurred to minimize the amount of buffer area to be requested. In addition, areas that were administratively omitted by BLM during the previous land withdrawal were included so they could be formally included as part of the security buffer. The USAFWC used roadway infrastructure to establish a recognizable boundary along with airspace maps.

Alternative 3B would withdraw approximately 57,000 additional acres along the current NTTR boundary of the South Range, including nearly 49,000 acres of area designated as 64C/D and 65D along the southern border of the NTTR and about 6,500 acres parallel to the current NTTR boundary and the U.S. Route 95 Nevada Department of Transportation right-of-way. The remaining area along the eastern edge of range areas 63B and 63 rectifies the omission of this area during the 2001 land withdrawal. Approximately 30 miles of fencing would be constructed to reduce public access while providing wildlife passage.

ES.3.3.4 Alternative 3C – Alamo Withdrawal

For Alternative 3C, the Air Force is requesting the withdrawal of approximately 227,000 acres of the DNWR, which corresponds with potential weapons safety footprints associated with moving targets within the existing target impact areas. Live munitions would only be used specifically in the target impact areas.

During public scoping, concerns were raised about the loss of public access to the DNWR. As a result, the Air Force proposed to maintain public access to key recreational areas such as Hidden Forest Cabin, Corn Creek Field Station, Cow Camp trailhead, and Joe May trailhead, as well as springs such as Corn Creek, Cow Camp, Upper Deadman, Lower Deadman, and Sawmill, among others. Limited access to the remaining areas under this subalternative expansion, based on current practices, would be granted on a case-by-case basis.

In addition, Alternative 3C would include the construction of two austere runways (one active and one as a "mock-up" used for training) and approximately 60 miles of fencing. Proposed training activities would be associated with various aircraft, and Forward Area Arming and Refueling Points would be used in austere areas such as a dry lake bed. Consequently, it is anticipated that there would be 24.5 acres of total ground disturbance for Alternative 3C, which was the upper limit used in analyses of the affected resources in Chapter 3. It should be noted that there will be no new target impact areas created in any proposed expansion areas. However, small arms blank munitions and inert weaponry activities would occur in the proposed expansion area associated with Alternative 3C.

ES.3.4 ALTERNATIVE 4 – ESTABLISH THE PERIOD OF WITHDRAWAL

There are three subalternatives analyzed under Alternative 4. The only difference among the three subalternatives is the length of the new withdrawal period, which would begin upon the conclusion of the existing withdrawal period that is currently scheduled to expire on November 6, 2021. In order to implement any of the Alternative 4 subalternatives, it would have to be paired with one or more of the other alternatives or subalternatives presented above.

ES.3.4.1 Alternative 4A – 20-Year Withdrawal Period

Under Alternative 4A, the new withdrawal would expire after 20 years.

ES.3.4.2 Alternative 4B – 50-Year Withdrawal Period

Under Alternative 4B, the new withdrawal would expire after 50 years.

ES.3.4.3 Alternative 4C – Indefinite Withdrawal Period

Under Alternative 4C, the new withdrawal would not expire.

ES.3.5 NO ACTION ALTERNATIVE

Under the No Action Alternative, Congress would exercise its constitutional authority to not take action to extend the withdrawal legislation. The proposed withdrawal duration of the No Action Alternative would end on November 6, 2021. Section 2.4 of the LEIS describes the management implications for the former NTTR lands and the various actions that could be taken by the Secretary of the Interior and Secretary of the Air Force to establish future uses of the land area. Management of and access to all other lands would be under jurisdiction of the BLM or USFWS and subject to the multiple resource management objectives dependent on the managing agency. In addition, prohibitions previously placed in effect by the MLWA would expire and appropriative land uses such as mining, mineral leasing, or livestock grazing could potentially be reintroduced. Management of the former NTTR lands would continue as currently directed until new management planning under Federal Land Policy and Management Act (FLPMA) and NEPA regulations could be completed. Existing land use management objectives of BLM lands on the perimeter or the vicinity of the NTTR would continue. Implementation of the No Action Alternative would require the Secretary of the Interior and the Secretary of the Air Force to undertake various actions to establish future uses of the former NTTR lands.

Home » Community Services Department » Planning » Lands Bill

Washoe County Economic Development and Conservation Act

Bill Language

Overview: YouTube / WCTV Draft Language House Report No. 101-405

Economic Development

Public Meeting: YouTube / WCTV PowerPoint from Meeting: Download Economic Development Disposal Map Gerlach Economic Development Boundary map Transfer Use List Letter on Incline Village General Improvement District Request Federal Land Sale and Exchange Fact Sheet Economic Disposal Boundary Constraints Map

Conservation

Public Meeting: YouTube / WCTV PowerPoint from Meeting: Download Countywide Conservation Map Conservation Fact Sheet Explanation of the Designations Sheldon Contiguous WSA Map Massacre Rim WSA Map

https://www.washoecounty.us/csd/planning_and_development/conservation-act.php

11/5/2018

Wall Canyon WSA Map Buffalo Hills WSA Map Buffalo Hills Wilderness Map Poodle Mountain WSA Map Twin Peaks & Five Springs WSA Map Dry Valley Rim & Skedaddle WSA Map Fox Range WSA Map Granite Banjo Wilderness Map Burro Mountain Wilderness Map

Additional Supporting Information

Water and Population Projections

Washoe County and its citizens are feeling the growing pains associated with the economic growth that has occurred in Washoe County. The steady growth that we have seen is impacting available housing, and infrastructure needs are projected to continue with a potential population increase of 100,000 residents by 2030. The benefit of the bill is to help support and give options for sustained growth while also maintaining the lifestyle that draws and keeps so many people in our beautiful region. The Washoe County Economic Development and Conservation Act (Lands Bill) offers solutions by authorizing:

- · land conveyances for public purposes;
- · land sales and land exchanges within the disposal boundary for potential development
- the designation of areas as Wilderness Areas
- the designation of areas as National Conservation Areas
- the designation release of Wilderness Study Areas

Benefits to Washoe County:

Eighty-three percent (83%) of Washoe County is owned by the Federal Government. This slows our ability to grow and does not allow local government to determine where land is sold and limits our role in where developments occur. This Lands Bill gives the local governments a say in where land is sold and developed to ensure it is sustainable and supportable growth.

Land conveyances and sales proposed in this Bill will bring increased economic development to the County, by:

https://www.washoecounty.us/csd/planning_and_development/conservation-act.php

11/5/2018

- 1. Directing where growth will occur in our region.
- Increased private ownership will lead to:
- · increased economic development in the County,
- encouraging growth to occur where it can be supported
- sales will occur in a more reasonable amount of time
- 2. Sale proceeds for the lands within the disposal boundary are:
- 10% of land sale proceeds will be paid directly to the County.
- 5% of land sale proceeds will be paid to the State of Nevada for education.
- 85% of land sale proceeds will stay in Nevada BLM as opposed to being sent to Washington DC which will be used for:
 - land exchange facilitation,
 - drought mitigation,
 - wildfire prevention,
 - sage grouse restoration and
 - other conservation efforts now and in the future
- 3. Authorizing conveyance of other lands identified by the legislation to the following bodies;
- Washoe County
- City of Reno/ Reno City Land Trust
- City of Sparks
- Incline Village General Improvement District
- Nevada Department of Wildlife
- Regional Transportation Commission
- Sun Valley General Improvement District
- Truckee Meadows Water Authority
- Truckee Meadows Water Reclamation Facility
- Truckee River Flood Management Authority
- University of Nevada, Reno
- Washoe County School District

Conservation Designations:

Washoe County had determined that there was a strong desire from many to address Wilderness Study Areas, these designation were made to be temporary. They were created with the intent that they would be reviewed to determine which meet the requirements to become wilderness and which did not. However it takes an act of Congress to change those designations, so Washoe County looked at each individual wilderness study area and those requested to be wilderness to ensure that each area was qualified, appropriate, responsible and manageable.

Qualified:

There was a strong desire to ensure that any areas nominated to become wilderness met the requirements laid out in the 1964 Wilderness Act and as used by BLM. If an area did not meet the requirements, it should not be managed as Wilderness.

Appropriate:

The area needed to be appropriate; this means that the areas were looked at individually to see if the designation being proposed was best for the area and the management of the land today and in the future. For this we looked at things like sage grouse habitat, resistant and resilience qualities as well as fire management or fire rehabilitation that is occurring or needs to occur due to recent fires.

Responsible:

Is the designation responsible, are we ensuring people who make a living on these lands can continue to do so? Those who use these lands for recreation, will they still be able to do so? Use and access to our public lands is very important for the management of the environment to the quality of life that many in our region love and that brings visitors here.

Manageable:

Lastly manageable, there was much time taken on this point, it defeats the purpose of any designation if the boundaries or language make it so that the land cannot be managed as outlined. For this we worked with those who are familiar with the area, those impacted in the area, the resource agencies and those who manage the area for the different purposes. This was to ensure that the boundaries as well as the language can be managed and used for the purposes intended in the legislation.

Washoe County is confident that the areas recommended in this legislation are all qualified, appropriate, responsible, and manageable.

- The legislation will designate **175,063** acres of Wilderness under the 1964 Wilderness Act.
- The legislation will designate **83,570** acres to a National Conservation Area
- The legislation will also release **364,734** acres of BLM wilderness study areas.
- Wilderness Study Areas are permanent until Congress acts through legislation (in this case, through the Lands Bill).
- Wilderness study areas can be **<u>much more restrictive</u>** than designated Wilderness.
- Under the Bill, grazing within designated Wilderness Areas is protected under the law.
- Grazing is not protected under wilderness study status, but through the legislation is protected in wilderness and national conservation areas
- Hunting and other recreational activities are allowed to continue
- Motorized vehicle use is only permitted on marked roads in Wilderness Areas

Please share thoughts about the proposed bill at Open Washoe

Washoe County held the first public meetings on November 2, 2016. After receiving much input additional meetings were held on April 24, 2018 and April 26, 2018. The 2018 meetings were live streamed with access to those videos above.

If you have questions or comments please reach out to the Washoe County Management Analyst for Government Affairs Ms. Jamie Rodriguez, you can reach her by email at JARodriguez@washoecounty.us or by phone at (775) 328-2010.





SOURCE : Regional Services/GIS

Conservation Fact Sheet Washoe County Lands Bill

The Washoe County Economic Development and Conservation Act would:

- Designate 7 areas as wilderness totaling 175,063 acres. These wilderness areas would be managed under the provisions in the 1964 Wilderness Act, as outlined in the legislation.
- Designate 3 areas as National Conservation Areas totaling 83,570 acres. These areas would be managed by the Bureau of Land Management in accordance with the bill language.
- Release 364,734 acres of BLM wilderness study areas for multi-use without designation. This would include all of the Wall Canyon, Fox Range and Pole Creek Wilderness Study Areas. The portions of Selenite, Skedaddle and Five Springs Wilderness Study Areas that are in Washoe County. Some of the Sheldon Contiguous, Massacre Rim, Buffalo Hills, Poodle Mountain, Twin Peaks and Dry Valley Rim Wilderness Study Areas.
- The wilderness language in the draft bill is the same as has been used in all other successful Nevada public land legislative efforts.

Wilderness Areas		
Macy	744 Acres	
Bitner	21,859 Acres	
Buffalo Hills	57,310 Acres	
Twin Peaks	41,093 Acres	
Burro Mountain	5,021 Acres	
Dry Valley Rim	27,256 Acres	
Granite Banjo	21,780 Acres	

National Conservation Areas		
Buffalo Hills	22,908 Acres	
Poodle Mountain	37,572 Acres	
Dry Valley Rim	23,090 Acres	

- Without legislation all 585,996 acres of the twelve Wilderness Study Areas, or portions within Washoe County will remain and be managed as wilderness study areas.
- Wilderness Study Areas were created to be studied to determine if they meet the requirements of Wilderness designations. The Bureau of Land Management did the study which was published in 1991, however no federal legislation has been brought forward to make those appropriate changes.
- This legislative effort allows Washoe County to settle the issues of Wilderness Study Areas once and for all.
- The BLM cannot change the designation of Wilderness Study Areas nor can they "release" any portion of a Wilderness Study Area. The only way such designations can change is through an act of Congress. This bill allows those changes to occur.
- Once the 364,734 acres of wilderness study areas have been released as a result of this legislation, they would be available for multi-use the same as the surrounding BLM lands.

The guidelines and policies for grazing in wilderness are as follows:

- 1. There shall be no curtailments of grazing in wilderness areas simply because an area is, or has been designated as wilderness, nor should wilderness designations be used an excuse by administrators to slowly "phase out" grazing. Any adjustments in the numbers of livestock permitted to graze in wilderness areas should be made as a result of revisions in the normal grazing and land management planning and policy setting process, giving consideration to legal mandates, range condition, and the protection of the range resource from deterioration.
- 2. The maintenance of supporting facilities, existing in an area prior to its classification as wilderness (including fences, line cabins, water wells and lines, stock tanks, etc.), is permissible in wilderness. Where practical alternatives do not exist, maintenance or other activities may be accomplished through the occasional use of motorized equipment. This may include, for example, the use of backhoes to maintain stock ponds, pickup trucks for major fence repairs, or specialized equipment to repair stock watering facilities. Such occasional use of motorized equipment should be expressly authorized in the grazing permits for the area involved. The use of motorized equipment should be based on a rule of practical necessity and reasonableness.
- 3. The construction or new improvements or replacement of deteriorated facilities in wilderness is permissible if in accordance with these guidelines and management plans governing the area involved. However, the construction of new improvements should be primarily for the purpose of resource protection and the more effective management of these resources rather than to accommodate increased numbers of livestock.
- 4. The use of motorized equipment for emergency purposes such as rescuing injured persons, sick animals or the placement of feed in emergency situations is permissible. This privilege is to be exercised only in true emergencies, and should not be abused by permittees.

In summary, grazing management in wilderness should be that activities or facilities established prior to the date of an area's designation as wilderness will remain in place and may be replaced when necessary for the permittee to properly administer the grazing program. Meaning, if livestock grazing activities and facilities were established in an area at the time Congress determined that the area was suitable for wilderness and placed the specific area in the wilderness system, they will be allowed to continue. With respect to areas designated as wilderness prior to the date of this Act, these guidelines shall not be considered as a direction to reestablish uses where such uses have been discontinued.

Questions and Answers

How will these areas be managed for grazing?

Under the Bill, grazing within designated Wilderness Areas where established prior to the passage of the Washoe County bill shall continue to be permitted. Further, the legislation gives direction to the BLM on how grazing will be managed. These are called the Congressional Grazing Guidelines and they are cited in the legislation as House Report No. 101-405.

Can changes still be made to the Wilderness boundaries?

Yes, there is still an opportunity for ranchers and other stakeholders to help adjust boundaries to ensure access, even after the bill has been introduced.

What about wildfire and invasive weeds in Wilderness?

The legislation says: "Wildfire, Insect, and Disease Management.—In accordance with section 4(d)(1) of the Wilderness Act, the Secretary may take such measures in the wilderness areas as are necessary for the control of fire, insects, and diseases (including, as the Secretary determines to be appropriate, the coordination of the activities with a State or local agency)."

Will I still be able to hunt in Wilderness?

The legislation says: "In accordance with section 4(d)(7) of the Wilderness Act, nothing in this Act affects or diminishes the jurisdiction of the State with respect to fish and wildlife management, including the regulation of hunting, fishing, and trapping, in the wilderness areas. In furtherance of the purposes and principles of the Wilderness Act, the Secretary may conduct anymanagement activities in the wilderness areas that are necessary to maintain or restore fish and wildlife populations and the habitats to support the populations..." Many hunters believe that their highest quality hunting experiences take place in wilderness.

What if I have a mining claim or lease in an area that is designated for Wilderness?

Once areas are designated as wilderness, they are subject to valid existing rights but the remainder of the area will be withdrawn from mineral leasing laws.

Why are there areas being considered that are not wilderness study areas?

There are 2 areas in the Washoe County proposal that are not currently Wilderness Study Areas, those are Burro Mountain and Granite-Banjo. These areas have both been designated as "Lands with Wilderness Characteristics". This means that the areas do meet the qualification for wilderness and we felt it was appropriate and responsible to recommend the designation of Wilderness.

Can areas that aren't wilderness study areas be designated as Wilderness?

Yes, there are several examples of this in Nevada including in Clark County (Wee Thump Joshua Tree

Wilderness), Lincoln County (Big Rocks Wilderness), White Pine County (Becky Peak and Bristlecone Wilderness) and Lyon County (Wovoka Wilderness). Congress is the only entity that can make a qualitative and factual determination of what should and should not be designated as Wilderness.

Some of the areas proposed for Wilderness were recommended "non-suitable" by the BLM. Why are they being considered for Wilderness?

The BLM made their wilderness suitability recommendations in 1991 as part of the Wilderness Recommendations Final Environmental Impact Statement (EIS). These recommendations are over 30 years old and many things have changed since they were made. The current Washoe County legislative process gives everyone a chance to re-look at the issues and the original WSA boundaries. When BLM made their recommendations it was a onetime shot and those recommendations cannot be changed by the BLM. Only Congress can designate or release areas from wilderness study area status.

There is often confusion on "non-suitable" recommendations. As a part of the EIS effort in the 1991 Record of Decision by BLM, looked at all the wilderness study areas and weighed their wilderness values against other resource values and made recommendations on which wilderness study areas or portions of the wilderness study areas should be recommended to Congress as "suitable or non-suitable" for Wilderness designation. Some of these areas meet the requirements for Wilderness; however there were management concerns that lead them to ultimately designate the area as "non-suitable". However, much time has gone by, and due to land transfers and acquisitions many of those management concerns have been alleviated and therefore changes to the final maps from Washoe County have reflected those changes.

During the process sponsored by Washoe County Commission over the period of time from 2015-2018, conservation was a topic that we wanted to include. After a many meetings and field trips, Washoe County has proposed that 7 areas (Macy, Bitner, Buffalo Hills, Twin Peaks, Burro Mountain, Dry Valley Rim and Granite Banjo) equaling 173,783 acres to be considered for wilderness. The compromise was to release of 3 Wilderness Study Areas (Wall Canyon, Fox Range and Pole Creek) and well as large portions of 5 Wilderness Study Areas (Sheldon Contiguous, Massacre Rim, Buffalo Hills, Poodle Mountain, Twin Peaks and Dry Valley Rim) as well as the small portions of 3 Wilderness Study Areas in Washoe County that primarily exist in California and Pershing County (Selenite Mountain, Skedaddle and Five Springs). The creation of National Conservation Areas was determined for Buffalo Hills, Poodle Mountain and Dry Valley Rim because they do not meet the qualifications and requirements to be wilderness but do rise to the need of a higher standard of protection than a full release to multi-use would offer.

CLARK COUNTY BOARD OF COMMISSIONERS RESOLUTION URGING THE NEVADA DELEGATION TO ADVANCE FEDERAL LEGISLATION THAT WOULD EXPAND CONSERVATION OF PUBLIC LANDS AND ECONOMIC DEVELOPMENT OPPORTUNITIES IN CLARK COUNTY

WHEREAS, Clark County is comprised of approximately 5.12 million acres of land; and WHEREAS, 2.9 million acres (57%) of the land in Clark County is administered by the Bureau of Land Management (BLM); and

WHEREAS, Clark County works well with the BLM and local needs related to conservation and economic development can generally be met through administrative channels that do not necessitate federal legislative action; and

WHEREAS, at times the opportunities envisioned by Clark County and local government agencies for expanded conservation of public lands and economic development can best be achieved through federal legislation; and

WHEREAS, Clark County has a proud and robust history of complying with the Endangered Species Act and has completed more than 500 conservation projects benefitting private and public land totaling more than \$123 million to minimize and mitigate the unintended negative impacts of development on native species, which has resulted in unprecedented conservation outcomes in the Mojave Desert; and

WHERAS, Clark County wishes to continue this regional approach to habitat conservation planning; and

WHEREAS, Clark County has a strong track record of supporting and championing federal lands legislation that balances economic development opportunities with additional preservation and conservation of public lands. NOW THEREFORE, BE IT RESOLVED by the Board of Commissioners of Clark

County, Nevada, that we call upon the Nevada Congressional Delegation to advance federal

legislation that achieves the following principles:

- 1. Designate the portion of Mt. Stirling Wilderness Study Area in Clark County as a Wilderness Area; designate additional wilderness contiguous with the existing Muddy Mountains, South McCullough, Eldorado and Ireteba Peaks Wilderness Areas; and
- 2. Designate additional Areas of Critical Environmental Concern (ACEC) and amend the Clark County Multiple Species Habitat Conservation Plan (MSHCP) for mitigation credit; prioritize management of the additional ACECs for protection and conservation of species listed in the MSHCP or its amendment; increase permitted development in the endangered species take permit on an acre for acre basis; and extend the term of the endangered species permit; and
- 3. Revise the boundary of the Ivanpah Area of Critical Environmental Concern in order to extend a critical tortoise connectivity corridor between Ivanpah Valley, CA and Paiute Eldorado, NV and decrease potential conflicts with necessary infrastructure for a future supplemental airport; and
- 4. Designate additional BLM disposal areas throughout Clark County to meet the needs of economic development and infrastructure; remove the West Valley Disposal Area from the BLM's 1998 resource management plan; and
- 5. Authorize the County to use a concession approach for the development and management of the Southwest Ridge Recreation Area acquired in 2002; and
- 6. Make minor adjustments to the Red Rock National Conservation Area boundary and Rainbow Gardens ACEC to exclude critical flood control infrastructure; and
- 7. Transfer BLM Recreation & Public Purpose leased lands, rights-of-ways, and land contracts on which permanent public infrastructure has been built to local units of government and authorize the transfer of current and future reservations; and
- 8. Convey federal land to the Moapa Band of Paiutes to restore lands that were once part of its Reservation for economic development, housing, and conservation; and
- 9. Convey federal land to the Moapa Valley Water District for critical water infrastructure projects for rural northeast areas of Clark County; and
- 10. Convey U.S. Forest Service land known as "Camp Lee Canyon" to Clark County in exchange for the portion of Lee Meadows owned by Clark County; and

- 11. Convey federal land to Clark County for a Mt. Charleston public safety complex for joint state and local government emergency response facilities; and
- 12. Authorize the collection of a public safety fee at Red Rock National Conservation Area and transmit the revenues generated from the fee to Clark County to offset police and fire emergency response costs; and
- 13. Directs the Secretary of the Interior to grant right-of-way for the Eastern Nevada Transmission Project to the Southern Nevada Water Authority, in perpetuity and without rental, as critical power supply infrastructure for southern Nevada; and
- 14. Directs the Secretary of the Interior to complete the remaining six erosion control structures (weirs) on the lower Las Vegas Wash within the Lake Mead National Recreation Area within the next 8 years, to protect upstream infrastructure and residential community; and
- 15. Transfer of the Recreation & Public Purpose lease lands associated with the Jean State Prison from the BLM to Clark County and direct the Secretary to allow the County to buy out the reversionary interest.

BE IT FURTHER RESOLVED a copy of this resolution be mailed to the Nevada

Delegation.

PASSED, ADOPTED AND APPROVED by the Clark County Commission, Nevada, on

this _____ DAY OF _____, 2018.

STEVE SISOLAK, CHAIRMAN BOARD OF COUNTY COMMISSIONERS CLARK COUNTY, NEVADA

ATTEST:

LYNN GOYA, COUNTY CLERK



Federal Lands Bill Map Clark County, Nevada (5/24/2018)





NATIONAL SYSTEM OF PUBLIC LANDS U.S. DEPARTMENT OF THE INTERIO BUREAU OF LAND MANAGEMENT

US Department of the Interior Bureau of Land Management Carson City District, Nevada

Draft Resource Management Plan and Environmental Impact Statement

VOLUME I: EXECUTIVE SUMMARY AND CHAPTERS I, 2 AND 3

NOVEMBER 2014











EXECUTIVE SUMMARY

ES.I INTRODUCTION

The United States (US) Department of the Interior (DOI), Bureau of Land Management (BLM), Carson City District (CCD) has prepared this draft resource management plan (RMP) and environmental impact statement (EIS) for managing public lands administered by the CCD. This document provides:

- Consolidated direction for managing public lands under the jurisdiction of the CCD
- An analysis of the environmental effects that could result from the implementation of the alternatives addressed in the RMP

This RMP will replace the 2001 Carson City District Consolidated RMP (BLM 2001c), including amendments.

ES.2 PLANNING AND DECISION AREA

The CCD RMP/EIS planning area is composed of approximately 9 million acres of public and private lands in Carson City, Churchill, Douglas, Lyon, Mineral, Nye, Storey, and Washoe Counties in western Nevada, and portions of Alpine, Lassen, and Plumas Counties in eastern California. The BLM administers nearly half (4.8 million acres) of the land in the planning area. The remaining area is composed of US Department of Agriculture, Forest Service (Forest Service), Bureau of Reclamation (Reclamation), US Fish and Wildlife Service (USFWS), Department of Defense (DOD), State of Nevada, State of California, and private lands as well as tribal lands governed by sovereign Native American tribes in consultation with the Bureau of Indian Affairs (BIA). See **Figure ES-I**, Carson City District RMP Planning Area, and **Table ES-I**, Land Status within the Carson City District RMP Planning Area.



Carson City District Draft Resource Management Plan and Environmental Impact Statement

Agency	Acres
Bureau of Land Management	4,803,300
Forest Service (Nevada and California)	866,900
Bureau of Reclamation	304,000
Bureau of Indian Affairs	653,900
US Fish and Wildlife Service	103,900
Department of Defense	360,100
State of Nevada (including Nevada	24,200
Department of Wildlife)	
State of California	2,300
Private	1,507,900
Other (local, regional, water bodies)	312,600
Total	8,939,100

Table ES-I Land Status within the Carson City District RMP Planning Area

Source: BLM GIS 2014a

Management direction and actions provided in the RMP apply only to the decision area, which includes BLM-administered surface lands in the planning area and federal mineral estate lying beneath other surface ownership but administered by the BLM (split estate). A split estate can be either federal surface overlying private minerals or private surface overlying federal minerals. When it comes to BLM-administered surface and private minerals, the BLM has limited authority relating to public access for mineral exploration and development. On split estates where the surface is managed by another federal agency, the surface-managing agency establishes the mineral leasing requirements, which the BLM subsequently adopts.

ES.3 AUTHORITIES

The RMP is being prepared in accordance with the Federal Land Policy and Management Act (FLPMA) of 1976 (43 US Code [USC] 1701 et seq.), BLM Planning Regulations (43 Code of Federal Regulations [CFR] 1601-1610), and BLM Land Use Planning Handbook, H-1601-1 (BLM 2005a). This RMP provides planning-level guidance for the management of resources and designation of uses on BLM-administered lands. The RMP was developed in coordination with federal, state, and local governments, Native American tribes, and interested members of the public. Rather than providing entirely new management direction, this RMP carries forward existing management strategies where appropriate, while incorporating updated information and regulatory guidance made available since the adoption of the previous RMP. New management direction in the RMP also addresses land use issues and conflicts that have emerged since the previous RMP and RMP amendments were adopted.

The EIS incorporated as part of this document meets the requirements of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations for implementing the NEPA (40 CFR 1500-1508), the BLM's

Land Use Planning Handbook, H-1601-1 (BLM 2005a), and the requirements of BLM NEPA Handbook, H-1790-1 (BLM 2008a).

ES.4 PURPOSE OF AND NEED FOR THE RESOURCE MANAGEMENT PLAN

According to the FLPMA, the BLM shall "develop, maintain, and, when appropriate, revise land use plans" (43 USC 1712 [a]). Accordingly, the purpose of this RMP is to ensure that BLM-administered lands in the planning area are managed in accordance with the multiple use and sustained yield principles mandated by the FLPMA. With the support of new data, this RMP provides planning-level management strategies that are expressed in the form of goals, objectives, allowable uses, and management actions necessary to achieve the preferred conditions for resources and resource uses. The need for the RMP is to address policies and resource issues that have arisen since the adoption of the previous RMP and amendments. Major issues prompting the need for this RMP include the following:

- Management of energy resources, including renewable resources such as geothermal, wind, and solar
- Management of resources for which there is a high demand but limited supply, such as water or fish and wildlife
- Management for the protection of sensitive resources, such as cultural or paleontological artifacts
- Management of increased conflicts between competing resource values and land uses, particularly as a result of increased off-highway vehicle (OHV) use
- Management of the urban interface in light of expanding urban areas throughout the planning area

The BLM prepared this document using a collaborative planning process that included an interdisciplinary approach for fulfilling the need for new planning data. The BLM prepared the following plans, studies, and reports to support this RMP:

- CCD RMP/EIS Preparation Plan (March 2012)
- CCD RMP/EIS Collaboration and Communication Plan (May 2012)
- Scoping Summary Report (December 2012)
- Travel Management Workshop Report (January 2013)
- Socioeconomic Baseline Report (January 2013)
- Socioeconomic Report and Addendum (February 2013)
- Wild and Scenic River Eligibility Report (February 2013)
- Areas of Critical Environmental Concern Report (March 2013)

- Analysis of the Management Situation (April 2013)
- Mineral Potential Report (June 2013)
- Reasonably Foreseeable Development (RFD) Scenario for Solar, Wind, and Biomass Report (June 2013)
- Air Analysis Framework Report (June 2013)
- Ethnographic Report (December 2013)
- Cultural Overview/Synthesis Report (draft; April 2014)
- Lands with Wilderness Characteristics Report (July 2014)

As new policy requirements, planning issues, and scientific information emerge over time, the BLM may review the RMP and consider the need for updated management prescriptions and resource allocations. Per 43 CFR 1610.4-9, the BLM is required to monitor and evaluate land use plans (LUPs) such as RMPs to determine if LUP decisions remain relevant, remain effective, need revision, should be dropped, or require new decisions. The LUP evaluation process is described in BLM Planning Handbook H-1601-1. The BLM may only change adopted LUP decisions through the amendment or revision process, which includes adherence to the environmental review requirements under the NEPA.

The planning process consists of developing, approving, maintaining, and amending or revising an RMP. The BLM carries out this process under the authority of Section 202(f) of the FLPMA and Section 202(c) of the NEPA. The process, which includes a land use planning tier and implementation tier, follows BLM planning regulations codified in 43 CFR 1600 and the CEQ regulations codified in 40 CFR 1500.

Making decisions on land use planning involves identifying and clearly defining goals and objectives (desired outcomes) for resources and resource uses, followed by developing the allowable uses and management actions necessary to achieve the goals and objectives. These critical determinations guide future land management actions and subsequent site-specific implementation actions to meet multiple use and sustained yield mandates while sustaining land health. Adaptive management may result in adjustments of goals, objectives, management area prescriptions, and standards and guidelines constraining land uses. This process is discussed in more detail in **Section 1.8.4**, Adaptive Management and Regional Mitigation Strategies. The BLM may also establish criteria in the LUP to guide the identification of site-specific use levels for activities during plan implementation.

The BLM develops and maintains the RMP, which will guide BLM management decisions for BLM-administered lands in the CCD planning area. Subsequent site-specific management decisions will require implementation plan decisions at a smaller geographic scale. Accordingly, implementation consists of the more detailed activity- or implementation-level planning that takes place as part of the
BLM's daily operations. Activity planning can include the development of recreation management plans, allotment management plans (AMPs), and the implementation of other similar plans that authorize, limit, or restrict the use of resources on BLM-administered lands. Implementation planning requires public outreach and NEPA compliance. Unlike LUP decisions, implementation decisions are not subject to protest under the planning regulations. Instead, implementation decisions are subject to various administrative remedies, particularly appeals to the Interior Board of Land Appeals. The Proposed RMP/Final EIS will outline LUP and implementation decisions, if necessary (and clearly distinguish between the two types of decisions).

This Draft RMP/EIS includes sage-grouse habitat management allocations consistent with the Nevada and Northeastern California Greater Sage-Grouse Draft LUP Amendment/EIS and the Bi-State Sage Grouse Draft Forest Plan/LUP Amendment. These plan amendment documents have been released as public drafts and no decisions have been made. Decisions on these documents are expected prior to issuance of the Proposed RMP/Final EIS, and decisions for the Greater Sage-Grouse and bi-state sage grouse efforts will help inform the Proposed RMP/Final EIS. To facilitate district-level planning during the interim period, the CCD has developed a range of alternatives for analysis.

ES.5 ALTERNATIVES

RMP decisions consist of identifying and clearly defining goals and objectives (desired outcomes) for resources and resource uses, followed by developing allowable uses and management actions necessary for achieving the goals and objectives. In accordance with the FLPMA, these determinations guide future land management actions and subsequent site-specific implementation actions to meet multiple use and sustained yield mandates while sustaining land health.

ES.5.1 Purpose of Alternative Development

Alternative development is the cornerstone of the RMP/EIS process. Land use planning and NEPA regulations require the BLM to formulate a reasonable range of alternatives. Established planning criteria, as outlined in 43 CFR Section 1610, guide the alternative development process.

The basic goal of alternative development is to produce distinct potential management scenarios that:

- Address the identified major planning issues
- Explore opportunities to enhance management of resources and resource uses
- Resolve conflicts among resources and resource uses
- Meet the purpose of and need for the RMP

The NEPA regulation at 40 CFR 1501.2(c) states in part that federal agencies shall, "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." Alternative development provides the BLM and the public with an understanding of the diverse ways in which conflicts regarding resources and resource uses might be resolved, and offers the BLM State Director a reasonable range of alternatives from which to make informed decisions. The components and broad aim of each alternative considered for the Carson City District RMP are discussed below.

ES.5.2 Alternative Development Process

Between January 16, 2013, and May 9, 2013, the BLM interdisciplinary team met to develop management goals while small teams met to identify objectives and actions to address the goals within their fields of expertise. The various groups met numerous times throughout this period to refine their work. The interdisciplinary team developed one no action alternative (Alternative A) and four action alternatives. The action alternatives were designed to:

- Address the 27 planning issues compiled from public input, cooperating agency feedback, and Resource Advisory Council input
- Fulfill the purpose and need for the RMP (outlined in **Section 1.1**, Purpose of and Need for the Resource Management Plan)
- Meet the multiple use and sustained yield mandates of the FLPMA

ES.5.3 Alternatives Considered for Detailed Analysis

Summary of Alternatives

The four action alternatives (Alternatives B, C, D, and E) offer a range of possible management approaches. Alternative B generally emphasizes resource use and economic development. Alternative C emphasizes strategies to preserve and protect ecosystem health and resource values. Alternative D includes strategies that address increased demand on BLM-administered lands within urban interface areas. Alternative E is the agency preferred alternative and includes a mix of management actions to resolve issues and offers an intermediate level of protection, restoration, and enhancement of resources. While the goals are the same across alternatives, each alternative contains a discrete set of objectives and management actions constituting separate RMP management scenarios. Each alternative addresses resource program goals to varying degrees, with the potential for different long-range outcomes and conditions. Table 2-2, Description of Alternatives A, B, C, D, and E, describes the proposed decisions for each alternative, including goals, objectives, management actions, and allowable uses for individual resource programs (see Chapter 2, Alternatives). Figures in Appendix A, Alternatives A, B, C, D, and E Figures, provide a visual representation of each alternative.

The relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives.

In some instances, varying levels of management from different resource programs overlap. For example, the BLM proposes management for Hidden Cave, which is within the proposed Grimes Point Archeological Area of Critical Environmental Concern (ACEC). The ACEC management prescribes a no surface occupancy stipulation for fluid mineral leasing under Alternative B; however, the Hidden Cave prescription calls for a controlled surface use stipulation. In such instances where varying management levels overlap, the stricter management prescriptions would apply. However, if the Authorized Officer makes an exception to the stricter prescription, then the less strict management prescription would prevail.

ES.6 MANAGEMENT COMMON TO ALL ALTERNATIVES

Certain allowable uses and management actions from the existing RMPs remain valid and do not require revision. All of the proposed alternatives carry these forward, while other decisions are common only to the action alternatives (Alternatives B, C, D, and E).

Although each alternative is distinct in the resources and resource uses it emphasizes, all five alternatives do the following:

- Comply with state and federal laws, regulations, policies, and standards, including the FLPMA multiple use and sustained yield mandates.
- Implement actions originating from laws, regulations, and policies and conform to day-to-day management, monitoring, and administrative functions not specifically addressed.
- Preserve valid existing rights, which include any leases, claims, or other use authorizations established before a new or modified authorization, change in land designation, or new or modified regulation is approved. Existing fluid mineral leases are managed through Conditions of Approval outlined in the RMP.
- Offer diverse recreational opportunities that foster outdoororiented lifestyles and enhance quality of life.
- Apply best management practices (BMPs), standard operating procedures (shown in Appendix B, Best Management Practices and Standard Operating Procedures), and other site-specific mitigation measures to all resource uses to promote rapid reclamation, maximize resource protection, and minimize soil erosion.

- Make every effort to avoid adverse impacts if cultural or paleontological sites are found at project locations. Consult with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation in accordance with the State Protocol Agreement between the BLM and the SHPO, dated January 2012.
- Seek to enhance collaborative opportunities, partnerships, and communications with other agencies and interested parties to implement the RMP, including education and outreach and project-specific activities.
- Follow the procedures outlined in the Air Quality Memorandum of Understanding Among the US Department of Agriculture, US Department of the Interior, and US Environmental Protection Agency, Regarding Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions Through the National Environmental Policy Act Process.
- Apply the exceptions, modifications, and waivers for fluid mineral leasing stipulations outlined in **Appendix C**, Fluid Mineral Leasing Stipulations, unless otherwise stated under a specific action.
- Identify and apply mitigation measures and conservation actions in order to achieve land use plan goals and objectives. The sequence of mitigation action will be the mitigation hierarchy (avoid, minimize, rectify, reduce or eliminate over time, compensate), as identified by CEQ (40 CFR 1508.20) and the BLM's Draft Manual Section 1794, Regional Mitigation.
- The ROW avoidance and exclusion areas for renewable energy in this plan are in conformance with the Final Programmatic EIS for Solar Energy Development in Six Southwestern States, as reflected in the acres below in **Table ES-2**, Comparative Summary of Alternatives.

ES.7 DESCRIPTION OF ALTERNATIVES

ES.7.1 Alternative A: No Action

Alternative A meets the NEPA requirement in 40 CFR 1502.14 that the BLM consider a no action alternative. This alternative provides the baseline against which to compare the other alternatives. This alternative would continue present management direction and practices based on existing LUPs and LUP amendments. Direction contained in existing laws, regulations, policies, and standards would also continue to be implemented, sometimes superseding provisions of the 2001 Consolidated RMP and subsequent LUP amendments. The current levels, methods, and mix of multiple use and sustained yield management of BLM-administered lands in the CCD decision area would

continue, and resource values would continue to receive attention at present levels.

ES.7.2 Alternative **B**

Alternative B emphasizes resource use and economic development (e.g., livestock grazing, energy, mineral development, and recreation) in the planning area. This alternative has the fewest restrictions to development and land use. Potential impacts on sensitive resources (e.g., soils and sensitive plant habitat) would be mitigated on a case-by-case basis. Sustainable development concepts are included to maintain economic productivity.

ES.7.3 Alternative C

Alternative C would develop management strategies to preserve and protect ecosystem health and resource values across the planning area, while providing multiple use and sustained yield. Resource development would be more constrained than under Alternatives B, D, or E, and in some cases and in some areas, uses would be excluded to protect sensitive resources. This alternative includes the most special designations, with specific measures to protect or enhance resource values within these areas. This alternative emphasizes active and specific measures to protect and enhance vegetation and habitat for special status species, fish, and wildlife. Likewise, this alternative would reflect a reduction in resource production goals for forage, renewable energy, and minerals. Resource production would generally be secondary to restoring and protecting important habitats, such as sagebrush and riparian areas. Sustainable development principles would focus on preserving ecological functions and environmental values.

ES.7.4 Alternative D

Alternative D emphasizes the increased demand on BLM-administered lands within the urban interface area. The interface is a set of conditions that affect resources and how they can be managed, rather than a geographic place. It is an area or zone where human infrastructure and urban development meet or intermingle with undeveloped BLM-administered land. Enhanced community development through a change in land tenure would be reflected. Alternative D provides for increased management of recreational opportunities in areas of high use while reducing conflict between use of the BLM-administered land and adjacent private landowners. Specific measures would also be applied to manage for increased pressures on the land and a higher demand from the public while minimizing adverse effects on the local communities. Where management is not specified for the urban interface areas, the current management (represented by Alternative A) would continue.

ES.7.5 Alternative E: Agency Preferred

Alternative E, Agency Preferred, represents a mix of management actions that best resolve the issues identified from the assessment of need for changing management, concerns raised during public scoping, and future management considerations. This alternative would reflect a combination of goals and objectives for all values and programs. This alternative emphasizes an intermediate level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses. The management strategy would be accomplished by using a variety of proactive and prescriptive measures that would protect vegetation and habitat and would promote the continuation of multiple-use management. Vegetation and special status species habitat would be restored and enhanced to provide for the continued presence of an ecologically healthy ecosystem using a suite of proactive and specific prescriptive management tools and implementation measures. Commodity and development-based resources such as livestock grazing and minerals production would be maintained on BLM-administered lands through specific actions to meet resource goals and protect ecosystem health. Management strategies would continue to provide for recreational opportunities on and access to BLM-administered lands and would take into consideration the result of management actions on the economies of communities within the region and user conflicts.

ES.8 COMPARISON OF ALTERNATIVES

Table ES-2, Comparative Summary of Alternatives, provides a comparative summary of alternatives and compares meaningful differences in allocations among the five alternatives. Figures in **Appendix A** provide a visual representation of the differences between alternatives.

Resource or Resource Use Resources	Alt A	Alt B	Alt C	Alt D	Alt E
Wild Horses and Burros					
Herd Areas/Herd Management Areas	1,235,200	996,500	1,090,000	996,500	1,070,200
Visual Resource Management (VRM) (acr	·es)				
VRM Class I	564,100	564,100	981,900	564,100	564,100
VRM Class II	38,300	56,800	733,900	66,400	513,600
VRM Class III	320,600	1,379,400	213,400	185,900	1,383,900
VRM Class IV	385,700	2,803,000	2,874,100	3,986,900	2,341,700
Undesignated	3,494,900	0	0	0	0
Total	4,803,300	4,803,300	4,803,300	4,803,300	4,803,300
Resource Uses					
Livestock Grazing (acres)					
Available for livestock grazing	4,796,600	4,797,200	2,101,300	4,792,600	4,797,200
Not available for livestock grazing	6,700	6,100	2,702,000	10,700	6,100
Special Recreation Management Areas (S	SRMAs) (ac	res)			
Alpine	7,600	5,800	10,700	7,400	7,700
Dead Camel Mountain	N/A	16,800	N/A	37,400	37,400
Hungry Valley	N/A	21,600	N/A	21,800	16,200
Sand Mountain	N/A	7,400	3,900	N/A	19,700

Table ES-2 Comparative Summary of Alternatives¹

Resource or Resource Use	Alt A	Alt B	Alt C	Alt D	Alt E
Walker Lake	60,100	24,000	60,100	N/A	24,600
Wilson Canyon	N/A	500	N/A	500	520
Total	67,700	76,100	74,700	67,100	106,100
Extensive Recreation Management Areas	(ERMAs) (acres)			
Bagley Valley	N/A	N/A	2,600	N/A	2,600
Dry Valley	N/A	N/A	84,100	N/A	83,000
Faye-Luther	N/A	N/A	40	600	110
Middlegate	N/A	268,700	195,300	N/A	268,700
Mina	N/A	824,700	486,400	N/A	824,700
Mustang	N/A	400	400	400	400
Pah Rah	N/A	20,000	20,000	20,000	20,000
Peterson	N/A	N/A	42,200	N/A	42,200
Pine Nut	N/A	201,100	201,100	201,100	201,100
Reno Urban Interface	N/A	70,600	91,000	70,400	70,600
Salt Wells	N/A	292,700	113,700	N/A	280,400
Singatse	N/A	N/A	174,900	N/A	174,900
Virginia Mountains	N/A	N/A	68,100	N/A	68,100
Virginia Range	N/A	N/A	48,800	N/A	48,800
102 Ranch	N/A	120	120	120	120
Total	0	1,678,320	1,528,760	292,620	2,085,730
Comprehensive Travel and Transportation	on (acres)				
Open to motorized and mechanized travel	3,840,300	95,300	1,300	22,700	55,700
Closed to motorized and mechanized travel	6,900	4,300	598,000	1,600	6,200
Closed to motorized travel (mechanized	31,800	26,700	1,190,500	30,600	24,100
limited to existing routes)	51,000	20,700	1,170,500	50,000	24,100
Limited to existing routes for motorized and	924,300	4,677,000	3,013,500	4,748,400	4,717,300
mechanized travel	72 1,500	1,077,000	5,015,500	1,7 10, 100	1,717,500
Fluid Mineral Leasing (acres)					
Closed to fluid mineral leasing	839,100	768,500		737,000	1,007,200
Open to fluid mineral leasing	3,964,200	4,034,700	2,721,500	4,066,200	3,796,000
Open with no surface occupancy (NSO)	700	404,600	1,039,200	864,800	935,900
stipulations	/ 00	10 1,000	1,037,200	001,000	/55,/00
Open with controlled surface use (CSU)	N/A	2,120,200	1,242,800	2,071,400	1,844,900
stipulations		_,:_0,_00	.,,	_,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Nonenergy Leasable Minerals (acres)					
Closed to nonenergy leasable mineral	738,800	981,900	2,960,800	981,900	1,785,900
exploration and development	,	,	,,	,	, ,
Open for consideration of nonenergy leasable	4,064,500	3,821,300	1,842,400	3,821,300	3,017,400
mineral exploration or development					
Locatable Minerals (acres)	104.000	104000	104000	104.000	104000
Withdrawn from locatable mineral entry	194,900	194,900	194,900	194,900	194,900
Petitioned for withdrawal from locatable	3,700	439,600	117,500	440,800	470,600
mineral entry					

 Table ES-2

 Comparative Summary of Alternatives¹

-	-				
Resource or Resource Use	Alt A	Alt B	Alt C	Alt D	Alt E
Mineral Materials (acres)					
Closed to mineral material entry	564,200	807,200	3,004,800	807,700	1,778,700
Open to mineral material entry	4,239,100	3,996,100		3,995,600	3,024,600
Lands and Realty (acres)	1,257,100	5,770,100	1,770,100	3,775,000	5,02 1,000
Right-of-way (ROW) exclusion areas	564,100	580,000	2,675,800	564,100	605,900
ROW avoidance areas	N/A	1,195,800		1,226,100	1,448,200
Identified for disposal	179,700	273,500	0	332,500	267,200
Renewable Energy (Solar and Wind) (acr		2:0,000		002,000	
Variance areas for utility-scale solar (greater					
than 20 megawatts)	905,900	773,400	578,400	672,100	629,900
Exclusion areas for wind energy development	N/A	N/A	2,073,200	N/A	629,900
Avoidance areas for wind energy development	N/A	1,220,200	0	1,228,100	956,900
Special Designations		, ,		, ,	,
Areas of Critical Environmental Concern	(ACECs) (a	acres)			
Black Mountain/Pistone Archaeological District		2 400	2 400	3,100	N1/A
ACEC (Proposed)	N/A	3,400	3,400	3,100	N/A
Carson Wandering Skipper ACEC (Existing)	330	N/A	330	N/A	N/A
Churchill Narrows Buckwheat Botanical	N/A	6,600	6,600	6,600	6,600
ACEC (Proposed)		6,600	0,000	0,000	0,000
Clan Alpine Greater Sage-Grouse ACEC	N/A	N/A	98,400	N/A	N/A
(Proposed)			70,700		IN/A
Desatoya Greater Sage-Grouse ACEC	N/A	N/A	105,100	N/A	N/A
(Proposed)					
Dixie Valley Toad ACEC (Proposed)	N/A	N/A	410	N/A	N/A
Fox Peak Cultural ACEC (Proposed)	N/A	48,400	48,400	48,400	49,000
Greater Sand Mountain ACEC (Proposed)	N/A	17,000	17,000	N/A	N/A
Grimes Point Archaeological District ACEC	N/A	15,900	15,900	15,900	2,100
(Proposed)					
Incandescent Rocks Scenic ACEC (Existing)	1,100	1,100	1,100	1,100	1,100
Lassen Red Rock Scenic ACEC (Proposed)	N/A	N/A	800	N/A	N/A
Namazii Wunu Cultural ACEC (Proposed)	N/A	158,300	158,300	N/A	N/A
Pah Rah High Basin Petroglyph ACEC	3,900	5,300	5,300	5,300	5,300
(Existing)	,		,		,
Pine Nut Bi-State Sage-Grouse ACEC	N/A	N/A	100,400	N/A	N/A
(Proposed)					
Ruhenstroth Paleontological ACEC	N/A	2,300	2,300	2,300	2,300
(Proposed) Pine Nut Mountains Williams Combleaf					
Botanical ACEC (Proposed)	N/A	N/A	330	330	N/A
Sand Springs Desert Study Area ACEC	<u> </u>				
(Proposed)	N/A	N/A	50	N/A	N/A
Steamboat Buckwheat Botanical (Proposed)	N/A	N/A	80	N/A	N/A
Steamboat Hot Springs Geyser Basin (Existing)	40	N/A	N/A	N/A	N/A
Stewart Valley Paleontological (Existing)	15,900	15,900		N/A	15,900
Stewart valley raleontological (Existing)	15,700	15,700	15,700	IN/A	15,700

Table ES-2Comparative Summary of Alternatives1

Resource or Resource Use	Alt A	Alt B	Alt C	Alt D	Alt E
Tag i m aša Cultural ACEC (Proposed)	N/A	81,800	81,800	81,800	N/A
Virginia City National Landmark Historic	N/A	14,700	14,700	14,700	N/A
District (Proposed)	IN/A	14,700	14,700	14,700	IN/A
Virginia Mountains Greater Sage-Grouse	N/A	N/A	109,200	N/A	N/A
ACEC (Proposed)			107,200		
Virginia Range Williams Combleaf Botanical	470	470	470	470	470
(Existing)					
Total	21,800	371,170	786,270	180,000	82,770
Wilderness Study Areas (WSAs) (acres)					
Augusta Mountains	46,400	46,400	46,400	46,400	46,400
Burbank Canyons	12,700	12,700	12,700	12,700	12,700
Carson Iceberg	500	500	500	500	500
Clan Alpine	195,700	195,700	195,700	195,700	195,700
Desatoya Mountains	42,200	42,200	42,200	42,200	42,200
Gabbs Valley Range	80,500	80,500	80,500	80,500	80,500
Job Peak	89,400	89,400	89,400	89,400	89,400
Slinkard	2,400	2,400	2,400	2,400	2,400
Stillwater Range	94,200	94,200	94,200	94,200	94,200
Total	564,000	564,000	564,000	564,000	564,000
National Trails on BLM -administered lan	d (miles)			· · ·	
Pony Express National Historic Trail	92	92	92	92	92
California National Historic Trail	25	25	25	25	25
Eligible or Suitable Wild and Scenic River administered land) ²	· (WSR) Stud	dy Segmen	ts (acres c	crossing BLM	-
East Fork Carson River Segment I	N/A	N/A	400	400	400
East Fork Carson River Segment 2	N/A	N/A	400	400	400
East Fork Carson River Segment 3	N/A	N/A	600	600	600
Total	N/A	N/A	1,400	1,400	1,400
Back Country Wildlife Conservation Area				.,	.,
Gillis West	N/A	N/A	42,500	N/A	N/A
Gillis East	N/A	N/A	63,900	N/A	N/A
Gabbs Valley Range North	N/A	N/A	50,800	N/A	N/A
Gabbs Valley Range South	N/A	N/A	154,400	N/A	N/A
Pilot Mountains	N/A	N/A	93,700	N/A	N/A
Excelsiors	N/A	N/A	125,800	N/A	N/A
Fairview	N/A	N/A	131,400	N/A	N/A
Sand Springs	N/A	N/A	53,700	N/A	N/A
Clan Alpine	N/A	N/A	101,600	N/A	N/A
Total	N/A	N/A	817,800	N/A	N/A
Lands with Wilderness Characteristics (a			- ,		
Agai Pah Hills	N/A	N/A	27,200	N/A	27,200
Chukar Ridge	N/A	N/A	29,100	N/A	29,100
•					
Excelsior North	N/A	N/A	54,400	N/A	54,400

 Table ES-2

 Comparative Summary of Alternatives¹

Resource or Resource Use	Alt A	Alt B	Alt C	Alt D	Alt E
Finger Rock	N/A	N/A	41,500	N/A	N/A
Job South	N/A	N/A	77,400	N/A	77,400
Lyon Peak	N/A	N/A	16,300	N/A	N/A
Monte Cristo North	N/A	N/A	9,800	N/A	N/A
Peterson Mountain	N/A	N/A	16,300	N/A	N/A
Rawe Peak	N/A	N/A	39,800	N/A	39,800
Stillwater Additions	N/A	N/A	19,100	N/A	19,100
Tule Peak	N/A	N/A	36,400	N/A	36,400
Total	N/A	N/A	416,500	N/A	332,600

Table ES-2 Comparative Summary of Alternatives¹

¹Acres were GIS generated and rounded to the nearest hundred acres. Includes BLM-administered and non-BLMadministered land in the CCD and outside of the CCD where the associations make up larger geographic areas for managing wild horses and burros.

²Alternative A identifies three segments of the East Fork Carson River as eligible for inclusion in the National Wild and Scenic River System (NWSRS) whereas Alternatives C, D, and E would determine these three river segments as suitable for inclusion in the NWSRS. Alternative B would determine that the eligible segments are not suitable for inclusion in the NWSRS and release them from interim management afforded to eligible segments.

ES.9 ALTERNATIVES ELIMINATED FROM DETAILED ANALYSIS

The following alternatives were considered but eliminated from detailed study because they do not meet the purpose of and need for the RMP (see **Section I.I**) or because they do not fall within technical, legal, or policy constraints for BLM resources and resource uses.

Implement Recreation-Centered Alternative

An alternative that proposes to meet increased demand for motorized recreation on BLM-administered lands within the planning area was considered but dismissed from detailed analysis. Because the FLPMA mandates that BLM-administered lands be managed for multiple use and sustained yield, alternatives that promote exclusive use or maximum development, production, or protection of one resource at the expense of other resources or resource uses were eliminated from further consideration.

Each proposed alternative allows for some level of support, protection, or use of all resources in the planning area. In some instances, the alternatives include various considerations for eliminating or maximizing individual resource values or uses in specific areas where conditions warrant. In addition, one of the main considerations for Alternative D is enhanced recreational opportunities within the urban interface area where the majority of the recreation use is occurring in the CCD.

Close Entire Decision Area to Livestock Grazing

The BLM considered but did not analyze in detail an alternative that would make all acres of BLM-administered land in the planning area unavailable for livestock grazing because such an alternative is not reasonable, viable, or necessary in light

III. D Winter AML work program

THIS SECTION IS INTENTIONALLY LEFT BLANK. HAND OUTS AND PRESENTATION WILL BE GIVEN AT THE MEETING.

III. E. <u>The Nevada Excellence in Mine</u> <u>Reclamation Awards Program</u>







Nevada Reclamation Awards

The Nevada Excellence in Mine Reclamation Award Committee

is seeking nominations for outstanding mining or exploration projects

in Nevada which exhibit excellent mitigation of the environmental impacts from mineral industry activities.





For more information, please contact the Nevada Division of Minerals at:

775-684-7040

OR

Mail your submission to: Nevada Division of Minerals 400 West King Street Ste 106 Carson City, NV 89703 or by email to: ndom@minerals.nv.gov The basis of the award is reclamation success, but areas of innovation for the protection of air and water quality, offsite mitigation, wildlife habitat enhancement, cultural preservation and cooperative partnerships will also be considered.

NDEP

Deadline for the 2019 award year is: June 28th, 2019



2018 Award Winners

Coeur Rochester, Inc. Marzen House Museum Exhibit on Rochester Mining District

Award Category: Cooperative Partnership in Preservation of Mining History

Coeur Rochester, Inc. (CRI) has long been involved with conserving and interpreting the significance of the historical sites that have been disturbed by its operations and conveying this history to the public. CRI has assisted the BLM annually during its Lovelock Cave Days event for over thirteen years, and contributed a permanent Historic Rochester Mining District exhibit to the Marzen House Museum. The event educates students on their local cultural and natural resources while promoting stewardship and conservation. Fourth grade students from Humboldt, Pershing, and Washoe County schools participate in a hands-on learning experience at the Museum, one of the most important archeological sites in the Great Basin located on public land managed by the BLM.



Award Category:

Leadership in Reclamation

KGHM Robinson Mine Reclamation through Mining



Robinson is part of a district where mining dates back to the mid-1860s, long before waste rock facility (WRF) liners were used to prevent soil and groundwater contamination. Corrective measures from these past practices involved a change in methodology of WRF construction and deliberate remediation and environmental controls. WRFs at Robinson are now constructed so that neutralizing waste rock is placed on the exterior surfaces of facilities, providing a buffering capacity to interior acid-generating rock. The second approach to protection of ground and surface water from historic seeps is the use of lined evaporation ponds used to catch and contain acidic seep flows originating from old WRFs. Both measures have reduced seep flow rates and degradation to groundwater or nearby surface waters to almost negligible amounts in some areas.

Kinross Gold U.S.A, Inc. Nevada Conservation Credit System Credit Transfer at Bald Mtn. Mine

Kinross Gold U.S.A, Inc. (Kinross) voluntarily enrolled into the Nevada Conservation Credit System (CCS) to mitigate impacts to Greater Sage-Grouse and its habitats for their mine expansion at the Bald Mountain Mine. The unique and innovative CCS program was created by the State of Nevada to preserve and enhance Greater Sage-Grouse habitats by trading credits to offset environmental impacts from land use. The CCS aims to maintain the multiple-use concept on public land and to enhance habitats on private and public lands. Conservation actions include limiting new disturbance and infrastructure, removal of pinyon and juniper trees, prohibiting conversion from rangeland to cropland, maintaining fencing, and implementing grazing management to preserve habitats. Kinross Bald Mountain is expected to undertake and maintain conservation actions for the next 30 years. By volunteering into the CCS, Kinross has laid the foundation for the efficient and effective implementation of future industry initiatives.

Leadership in Conservation Planning



Award Category:

Award Category:

Exploration Project Reclamation

Lithium Nevada conducted a mineral exploration drill program in the Montana Mountains between 2008 and 2009. This project included the creation of approximately 17,450 linear feet of access roads, totaling 3.87 acres of disturbance within BLM-identified Greater Sage-Grouse Primary Habitat Management Area. Other sensitive species in the vicinity include bighorn sheep, pronghorn antelope, Lahontan cutthroat trout, and golden eagle. The disturbed areas were raked and reseeded in the fall of 2009 and later inspected by Lithium Nevada, the BLM and Nevada Department of Wildlife. Implementation of the Upper Basin Exploration Project and the subsequent successful reclamation demonstrates that mineral exploration can occur concurrently in sensitive habitat with favorable results.

Newmont USA Ltd. North Area Leach Phase I-II Closure

Newmont's North Area Leach Facility (NAL) has been undergoing concurrent reclamation since 2017, with several years of planning prior to work commencing. While concurrent reclamation is being conducted on NAL, Newmont continues to add material and actively leach to achieve production goals. NAL's Water Pollution Control Permit requires that 225 acres of reclamation be completed on NAL prior to placing liner for the approved Phase IX expansion. A water balance model was used to determine the cover performance necessary to store and evaporate water within permit compliance of the operating ponds. The design consists of nine engineered stormwater channels across the 225 acre reclamation section, riprap in the sloped portions of the channels for erosion control, and a toe channel running along the bottom of the slope. Stage 1 completed in 2017 and totaled 50 acres. Stage 2 is in progress with 60 acres in total. Stage 3, the remaining 115 acres, is scheduled to be completed in 2019.

Award Category:



Lithium Nevada Corporation **Upper Basin Exploration Project Reclamation**



IV. STAFF REPORTS

Reclamation Bond Pool Statu	s Report		Current to:	10/31/2018							
New Josef Daw Ja, Comment		Desired	E-t D-t-	Bond Amount	% of Pool	Comments	Denerit	Premiums Paid	% Bond	Premium Schedule	Current thru
Plan-level Bonds -Company Custom Details		Project Bovie-Lew	Entry Date 11/17/2006	\$24,364.00	% of Pool 0.78%	Comments	Deposit \$ 12,217.11		135.5%		12/31/201
	7 D	Black Rock Canyon	4/15/2005	\$24,364.00 \$727,087.00	23.32%		\$ 12,217.11 \$ 415,856.34			\$182.73 quarterly	9/30/201
New Gold Nevada (formerly N	(Rae)									\$5,453.15 quarterly	
So. NV Liteweight		Money Pit	5/21/2004	\$430,088.00	13.79%		\$ 233,171.9			\$3,225.66 quarterly	12/31/201
Western Pacific Clay		Fallon Bentonite	12/11/1997	\$209,900.00	6.73% 1.47%	terminated	\$ 31,485.00	\$185,648.94	103.4%		
Western Mine Dev.		Victorine Mine	5/24/2000 5/24/2000	\$45,875.39	3.22%	terminated	\$ - \$ -				
Western Mine Dev. Western Mine Dev.		Kingston Mill Manhattan Mill	5/24/2000	\$100,450.00 \$114,288.77		terminated					
TNT Venture		Big Canyon	5/24/2000	\$114,288.77 \$78,161.00	2.51%	terminated	\$ - \$ 39,615.03	\$44,461.80	107.6%	\$586.21 quarterly	9/30/201
Dun Glen Mining		Dun Glen	8/11/2014	\$78,181.00			\$ 200,648.22			\$386.21 quarterly \$8,780.45 quarterly	9/30/201
Statewide Notice-Level		Various	o/11/2014	\$1,014,082.00		73 Notice-level bonds	\$ 200,048.22	\$145,800.04	92.1%	\$6,760.45 qualterly	9/30/201
Statewide Notice-Level		Various	various	\$1,014,082.00	32.3276	75 Nouce-level bonus				Premiums due	
Total Bonded Amount				\$3,118,277.16	100.00						
Cash in Pool's Account				\$4,041,951.60							
Unfunded Amount				-\$923,674.44							
Percent funded				129.6%							
	# of New		# of Bond			Notice-Level Bor	ad Actions I	Synculted M			
Date	Bonds	# of Bond Increases				Notice-Level Bor	a Actions	xecuted v			
FY12 Q1	24	0	21		50						-
FY12 Q2	16	0	14								
FY12 Q3	5	2	8		45		# of Bond Re	ductions			-
FY12 Q4	8	7	10								
FY13 Q1	4	7	11		40		# of Bond Inc	reases			-
FY13 Q2	2	3	7		35 —						
FY13 Q3	0	0	13		55		# of New Bo	ıds			
FY13 Q4	6	4	18		30				_		
FY14 Q1	0	2	22								
FY14 Q2	2	1	8		25 —	- I					-
FY14 Q3	0	3	8			1. 11					
FY14 Q4	3	0	7		20 — —						·
FY15 Q1	2	0	9								
FY15 Q2	3	3	9		15 — —						·
FY15 Q3	1	1	12 8		10 — —						. –
FY15 Q4	4	1 2	-								
FY16 Q1 FY16 Q2	4	1	16 12		5 — —					▖▖▖▖▖	. –
FY16 Q2	1	0	2								
FY16 Q3	6	1	8		0 +	╷ ╸╷╸╷╸╷╸╷╹╷╹╷╹╷╹╷╹	, , , , , , , , , , , , , ,				1
FY17 Q1	3	1	10		FYJZ	01 FV12 Q3 FV13 Q1 FV13 Q3 FV14 Q1 FV1	10 FYIS FYIS	FY16Q1 FY16Q3	FYIS FY	⁷ >Q3 ^{FY} 18Q1 ^{FY} 18Q3 ^{FY}	(19 _{Q1}
FY17 Q2	9	4	10		~ (EX12 Q3 EX13 Q3 EX13 Q3 EX14 Q1 EX1	14 Q3 FY15 Q1 FY15 Q	^{FY} 16Q1 ^{FY} 16Q3	FYJ PY	$Q_3 Q_7 Q_3$	~Q ₂
FY17 Q3	0	2	5								
FY17 Q4	5	3	13	ł				+	-		
FY18 Q1	4	0	3	ł					1		
	10	6	9						1		1
EY18()2		3	4								
FY18 Q2								1	1		1
FY18 Q3	2										
	2 4 3	0	11 5								

OIL, GAS, AND GEOTHERMAL ACTIVITY

Permit Type	Issued	Drilled	Issued	Drilled	Issued	Drilled	Issued	Drilled
	2015	2015	2016	2016	2017	2017	2018	2018
Geothermal - Ind Production	10	7	9	10	6	4	3	3
Geothermal - Ind Inj	1	2	3	1	4	4	1	1
Geothermal - Observation	1	1	2	4	3	1	3	2
Geothermal - TG	5	5			19	15	17	14
Geothermal - Com								
Geothermal - Dom	8	5		4	2	2		
Geothermal - Project Area	1				1			
Geothermal - Total	26	20	14	19	35	26	24	20
Oil & Gas	4	2	3	1	0	1	3	1

2018 Permitting and Drilling Activity (through November 2, 2018)

		Ormat Nevada	Ormat Nevada began commissioning the McGinness Hills 3 in October. Five production wells support the 54 MW plant. Ormat Nevada completed the drilling of the fifth McGinness Hills 3 production well, the Carson Lake 21-31 observation well (for FORGE), the Tungsten Mountain 24(23)-23 production well, and the Steamboat 42A-32 injection well during 2018.
	Geothermal	Ormat Nevada (US Geothermal)	Ormat Nevada officially acquired US Geothermal and its subsidiaries in April. Ormat is currently drilling the San Emidio 25A-21 production well in the field's southwest extension, permitted by USG in February.
Activity		Homestretch Geothermal – Open Mountain Energy	Open Mountain Energy entered into a partnership with Homestretch Geothermal, where Open Mountain is built a new efficient power plant at Wabuska. Homestretch will supply the plant with geothermal fluid. The new plant is generating 30 to 40% more electricity with essentially the same volume of fluid.
		Star Peak Geothermal	Star Peak Geothermal is currently permitting two wells at Rye Patch with NDOM and the BLM. The wells are expected to be drilled in the 1 st quarter of 2019.
		Nevada Bureau of Mines and Geology	The Nevada Bureau of Mines and Geology (NBMG) permitted 11 TG wells in Granite Springs Valley in 2018, 1 in 2017. Nine wells (geoprobe) were completed and plugged. NBMG will 'drill' the remaining 3 permits in November, along with three more to be permitted. NBMG drilled 6 TG wells in southern Gabbs Valley.
		Major Oil International	Major Oil drilled and tested the Eblana 3 exploration well in Hot Creek Valley. Major will be plugging Eblana 1 & 3.
	Oil	Envy Energy	Envy Energy is permitted the Black Point 1 well in White Pine County, south of Mt. Hamilton, in February. It is not known when this exploration well will be drilled.
		Grant Canyon	Grant Canyon LLC is planning on drilling an exploration well one in their new federal lease northwest of the Blackburn Field, near the abandoned Three Bar Field. A permit applications has not been received.

Type of Activity	Permits Issued 2018	Permits Drilled 2018	NOI Approved 2018	NOI Drilled 2018
Exploration Well Permits	5	3		
Notice of Intent Approvals			5	3

Summary of 2018 Dissolved Minerals Activity (through November 2, 2018)

Sierra Lithium LLC has been issued four dissolved mineral exploration well permits, two in Columbus Salt Marsh and two in Clayton Valley. Sierra Lithium LLC drilled one of the permitted locations like a borehole in Columbus Salt Marsh to 3,280 feet. The hole was sampled for fluids, and then plugged and abandoned on April 26th, rather than being completed as a well. Sierra Lithium LLC's second permit in Columbus Salt Marsh has not been utilized to date. Sierra Lithium LLC also drilled one of two permitted locations in Clayton Valley. The well reached a total depth of 1,316 feet before being plugged on June 13th.

3PL Operating Inc. drilled an exploration well approximately four miles southwest of the Sans Spring Oil Field in Railroad Valley. The well was permitted to 2,300 feet and was drilled to 1,807 feet and tested. This well has remained open.

Mathers Lithium submitted a Notice of Intent (NOI) to drill a borehole in Clayton Valley on February 1st. The Division approved the NOI on February 2nd. Drilling operations started on February 23rd, in which the borehole was drilled to 1,200 feet. The borehole was plugged and abandoned on March 21st.

Bonaventure Nevada submitted an NOI to drill a borehole in Sarcobatus Flat, located between Goldfield and Beatty, on March 27th. The Division approved the NOI on March 27th, with an approved total depth of 2,000 feet. This borehole was drilled during May and June and plugged on September 10th.

The Division approved two NOI's submitted by Belmont Resources in June, for boreholes to be drilled in Kibby Basin (Monte Cristo Valley). The approved total depth of both boreholes is 2,500 feet. One borehole was drilled to 1,800 feet, and plugged in August.

Lithium Ore LLC has finalized there BLM notice for claims they hold in Railroad Valley. Lithium Ore is currently working with NDOM to obtain a DMRE exploration well permit. The proposed location is on an existing drill pad previously used for oil exploration. The drill pad is located approximately 3.8 miles south-southeast of the Foreland Refinery.

FY 2019 Well Inspections	Total Wells	Wells Needed for FY18	Wells Inspected	% of Total Needed	Wells Remaining
Geothermal (8 Locations)	458	153	94	61.6%	59
Oil (1 Locations)	119	40	2	5%	38
Totals	577	192	96	50%	96

Summary of Geothermal and Oil Well Inspections for Fiscal Year 2018

Well inspections performed include all geothermal wells in the Jersey Valley, Blue Mountain, Soda Lake, Patua, and Wabuska Fields. Wells not related to geothermal producing fields were inspected in Fish Lake Valley (Fish Lake Power and Esmeralda Energy) and near Denio (Ormat Nevada's Baltazor Project). Upcoming geothermal well inspections will be at Enel's Stillwater Field and Ormat Nevada's Steamboat, Brady, and Desert Peak Fields. The two Major Oil International wells in Hot Creek Valley have been inspected. The remaining oil wells will be inspected during the first half of 2019. The wells inspected to date have been found to be in excellent condition.

Sundry Notice Activity (through November 2, 2018)

Forty-eight geothermal and ten oil sundry notices have been approved during the 2018 calendar year.

BLM Lease Sales

The BLM Elko and Ely Districts held an oil and gas lease sale on September 11th. A total of 144 parcels, totaling 295,174.3 acres, were offered. The parcels were protested by The Wilderness Society and Center for Biological Diversity, et al. No parcels were removed from the sale as a result of the protests. The sale had eight bidders. No parcels received bids. One presale offer was issued noncompetitively on September 12th, where 1037.9 acres were put under lease. The next oil and gas lease sale is scheduled for December11th, where the Ely and Winnemucca Districts will offer 17 parcels totaling 32,923.96 acres in Nye, White Pine, and Pershing Counties.

The annual BLM Statewide Geothermal lease sale was held on October 23rd. Ten parcels totaling 27,136.48 acres were offered in the sale. An eleventh parcel was removed from the sale due to its proximity to the Stillwater Wilderness Study Area. This parcel, 194 acres, will have further review by the Stillwater Filed Office of the Carson City District. There were four bidders for the online auction, where two parcels, totaling 2321.05 acres, received bids. Total receipts for the two parcels was \$26, 422.00. The highest bid per parcel was \$18, 240.00 (Federal Abstract Company), for Parcel NV-18-10-001 (1520.0 acres, T15N, R25E) in Lyon County, where it sold for \$12.00 per acre. Ormat Nevada was the high bidder for Parcel NV-18-10-004 (801.05 acres, T23N, R35E) in Churchill County.

<u>Geothermal Resource Council Annual Conference in Reno (October 14th through 17th)</u>

The Geothermal Resource Council held its annual conference in Reno this year. The Division of Minerals shared a booth in the Expo Hall with the Governor's Office of Energy. I estimate the booth received a moderate amount of traffic, as compared to previous years of being at the conference. Courtney and Lucia worked at the booth as well, along with Laura Wickham and Mark Brady of the Governor's Office of Energy.



September 28, 2018

Richard M. Perry Administrator Nevada Division of Minerals 400 West King Street, Suite 106 Carson City, Nevada 89703

Dear Mr. Perry:

The Nevada Water Resources Association would like to formally and sincerely thank you for taking part in our **2018 Fall Symposium** this week! Your talk on Lithium Update and NDOM's Open Data Website was well received by the attending audience. It was an honor for NWRA to have you as one of our speakers for this event.

We believe that the knowledge you shared will help immensely in developing and fulfilling our mission to educate and assist people in Nevada with water-related issues.

We truly appreciate the information and expertise that you shared with our symposium attendees during your presentation. It is our speakers who draw interest and attendance to our events each year, including professionals from Nevada and across the country, and contribute so greatly to the success of the event.

On behalf of all of us at Nevada Water Resources Association, the 2018 Fall Symposium Planning Committee, the NWRA Board of Directors and the entire Nevada water community, thank you!

We know your time is precious and we are grateful you shared some of it with us. We look forward to your participation in upcoming events. It was a pleasure seeing you, and I look forward to collaborating together in the future.

Sincerely,

Tilla "Inplett

Tina Triplett Executive Director Nevada Water Resources Association P.O. Box 8064 Reno, NV 89507



DIVISION OF MINERAL®

Cheers & Kudos: Students thank Nevada Division of Minerals for lesson

October 7, 2018

STUDENTS THANK NEVADA DIVISION OF MINERALS FOR LESSON

Ms. Potter and her class would like to thank Lucia Patterson from the Nevada Division of Minerals. We learned about fossils and geological time. We also enjoyed learning about what Earth was like 4.6 billion years ago. There was lava in the Hadean time period then Earth was full of ice. Earth cycled through these extreme weather patterns for a long time. In addition, we found out that Earth has been around for a long time where humans have not. We further learned how our state was a sea at some point. We also talked about why the moon has dents in it. Lastly, we enjoyed looking at different fossils and making our own fossil.

We appreciate you coming into our classroom. We hope to see you again soon.

Thank you!

Sincerely,

Ms. Ashleigh Potter and her class

2010-2018

Carson City

8/17/2012-Tour in Yerington 12/11/2014 5/19/2016 11/1/2016 11/30/2017-ACG Materials 02/20/2018

<u>Elko</u>

08/29/2014-Newmont LeeVille Mine 08/27/2015-Noble Energy's Huntington K1L Well & General Molly Mt. Hope

Reno

5/12/2010 10/19/2010 4/29/2011 7/27/2011 – Tour of Bat Cupola in VC 11/2/2011 5/03/2012- Virginia City 11/09/2012 5/03/2013- Hazen and Olinghouse 10/10/2013 05/09/2014- EP Minerals; Nevada Cement Plant and Mine. 05/01/2015 11/05/2015-Bishop Manogue H.S. 05/04/2017-Tour of Tesla 11/16/18- Reno

<u>Las Vegas</u>

2/11/2010 – Tour of the McCaw School of Mines - Henderson 2/07/2011 – Tour of Molycorp Mine 2/27/2012 – Searchlight Area 2/21/2013 2/14/2014- Tule Springs Park 2/24/2015 2/03/2016- Simplot Silica 3/02/2017 5/17/2018- Arden Mine

Battle Mountain

July 30, 2010 – Tour of Newmont Phoenix Mine

<u>Tonopah</u>

8/15/2013 - Solar Reserve Plant
8/16/2013 - Tonopah Mining Park
8/25/2017 - Mineral Ridge Mine and Uranium Resources Inc.

Wendover

8/25/2016- Graymont's Pilot Peak, Newmont Long Canyon Mine

