

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

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COMMISSION ON MINERAL RESOURCES

Eureka County Courthouse Commission Chambers 10 South Main Street Eureka, Nevada 89316

NEVADA DIVISION OF MINERALS

RICHARD PERRY Administrator

Thursday, August 23, 2018

1:00 P.M.

Minutes

CALL TO ORDER

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

ROLL CALL

CommissionStaffRich DeLongRich PerryDennis BryanMike VisherMary KorpiValerie KneefelNigel BainBryan StocktonArt HendersonRob GhiglieriJohn SnowCourtney 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 (~2nd 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

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?

^{*}For inspections, please see the E-packet on the NDOM website. www.minerals.nv.gov

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:
 - o 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)
 - 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
 - Net release of 1,635 acres
 - 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: 1,310,905 acres

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 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