

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/



Las Vegas Office: 375 E. Warm Springs Rd. #205, Las Vegas, NV 89119 Phone: (702) 486-4343; Fax: (702) 486-4345

COMMISSION ON MINERAL RESOURCES

Nevada Division of Minerals Virtual meeting via Zoom

Join from a PC, Mac, iPad, iPhone or Android device: Please click this URL to join:

https://us02web.zoom.us/j/9712825638

Meeting ID: 971 282 5638

Pursuant to Governor Sisolak's Declaration of Emergency Directives 026 and 029, the requirement contained in NRS 241.023(1)(b) that there be a physical location is suspended in order to mitigate the possible exposure or transmission of COVID-19 (Coronavirus). Accordingly, anyone planning to participate in the meeting must participate by using the teleconference number.

Thursday, May 13, 2021 1:00 P.M.

AGENDA

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

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. AGENDA

A. Approval of the Agenda

FOR POSSIBLE ACTION

II. MINUTES

A. Approval of the March 11, 2021 meeting minutes.

FOR POSSIBLE ACTION

III. NEW BUSINESS

A. INTRODUCTION OF NEW FLUID MINERALS PROGRAM MANAGER FOR DISCUSSION ONLY

Following the retirement of Lowell Price, Cortney Luxford was hired to manage the agency's Fluid Minerals Program and will be introduced to the Commission.

Mike Visher and Cortney Luxford

B. UPDATE OF 81ST (2021) SESSION OF THE NEVADA LEGISLATURE FOR DISCUSSION ONLY

An update on bills with potential to impact the minerals industry will be provided along with a status report on the agency's biennial budget.

Mike Visher

C. NBMG 2019 MINERAL INDUSTRY REPORT AND 2019/2020 **EXPLORATION SURVEY**

FOR DISCUSSION ONLY

An overview of the Nevada Bureau of Mines and Geology's 2019 Mineral Industry Report and 2019/2020 Nevada Mineral and Energy Resource Exploration Survey will be presented. John Muntean

D. SUMMER AML PROGRAM PLANS

FOR DISCUSSION ONLY

A presentation will be provided on plans for this summer's fieldwork in the Abandoned Mine Lands Program including the hiring of interns and prioritization of work areas. Rob Ghiglieri

IV. **OLD BUSINESS**

A. SOLICITING DONATIONS FOR NBMG PROJECTS

FOR POSSIBLE ACTION

The process for outreach, coordination, and solicitation of donations from industry to the University of Nevada in support of Commissionapproved special projects performed by the Nevada Bureau of Mines and Geology will be presented along with specific contact information at the University. Mike Visher

COMMISSION BUSINESS

- A. Review of staff monthly activity reports.
- B. Set date for next Commission meeting.

FOR DISCUSSION ONLY FOR DISCUSSION ONLY

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. All public comments will be limited to 5 minutes for each person. **ACTION WILL NOT BE TAKEN**

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 89703 or contact Sherrie Nuckolls at (775) 684-7043 or Email SNuckolls@minerals.nv.gov

II. MINUTES



STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/



Las Vegas Office: 375 E. Warm Springs Rd. #205, Las Vegas, NV 89119 Phone: (702) 486-4343; Fax: (702) 486-4345

Thursday, March 11, 2021 2:00 P.M.

MINUTES

Commissioners	Staff	Public	
Rich DeLong	Mike Visher	Jim Faulds, NBMG	
Mary Korpi	Rob Ghiglieri		
Art Henderson	Sherrie Nuckolls		
Josh Nordquist	Rebecca Ely		
Nigel Bain	Garrett Wake		
Bob Felder	Anthony Walsh, DAG		
Randy Griffin			

CALL TO ORDER

2:00 PM by Richard DeLong

COMMENTS BY THE GENERAL PUBLIC

None

AGENDA

A. Approval of the Agenda

Motion to approve the agenda made by: Mary Korpi

<u>Seconded by:</u> Randy Griffin <u>Unanimously approved</u>

II. MINUTES

A. Approval of the January 14, 2021 quarterly meeting minutes

Motion to approve the January 14, 2021 minutes made by: Nigel Bain

<u>Seconded by:</u> Bob Felder Unanimously approved

III. NEW BUSINESS

A. Fiscal 2021 Budget Forecast and 2022-2023 Biennial Budget Planning

Mike Visher went over a PowerPoint presentation on the reserve balance for FY17-FY21, 2020-2023 budgets and forecasts as of 2/28/21 for the fiscal year cumulative mining claim revenue by month.

Rich DeLong: My takeaway is if we remain on the projected trajectory, we will have a little over \$100,000 in excess of our reserve guidance, potentially, a little over two years from now.

Mike Visher: Correct.

Nigel Bain: Are you getting any pressure to cut the budget even more and what's the Legislature stance?

<u>Mike Visher</u>: I think the fact that we did not have a budget hearing means that the Legislative budget folks have blessed our budget proposal. Our budget now goes straight to budget close and at that point that is where LCB will make the changes to wholesale allocations across the state for Fleet Services, Mail Services, Personnel, PERS, PEBP, those sorts of things. If there are any changes to what the Governor has proposed, that's where those would come into play.

<u>Nigel Bain</u>: Thanks.

B. NBMG Special Project

Jim Faulds went over a PowerPoint presentation pertaining to two proposed projects:

Project 1: Publish Geologic Map and Report of Railroad Valley, Nye County with a total cost of \$35,000.

<u>Project 2</u>: Publish Report on the 3D Stratigraphy, Structure, and Fluid Flow at the Soda Lake Geothermal Field, Fallon, Nevada with a cost of \$30,000.

<u>Rich DeLong and Jim Faulds</u>: Discussion on if the Soda Lake project will require approval for the release of any data from the prior or current holder of the geothermal leases. Jim said that they would not require approval and that they currently cooperate with the current holder of those leases, Cyrq Energy. Jim also mentioned all of the data that would be utilized in this report is public domain.

Nigel Bain and Jim Faulds: Discussion on if it's possible for the Bureau to do both projects since some of the same Bureau staff is listed on both projects. Jim mentioned that with staffing, the way it is now, it would be difficult to do both projects in the two-year timeframe. He stated they would request that the Railroad Valley project would probably be more time intensive and would prefer it be done in FY23. The Soda Lake project would be less time intensive and they would like to begin in January 2022 and complete it by the end of the calendar year 2022. For the Railroad Valley project, Jerry Walker and Don French are happy to get started on their part as soon as possible. That work by Jerry and Don could be done in FY22 but the time for the Bureau staff to put together the report that would be in FY23. NBMG took a look at what they could feasibly commit to and they can commit to one more project.

<u>Rich DeLong</u>: Mike, we're currently in FY21, can we approve a project in FY21 for work in FY22 at this point or even in FY23?

Mike Visher: Yes, this specific project will be a stand-alone contract outside of the other projects that the Bureau's doing; we would treat it as a separate one. We would put together the scope of work that would contain the start and end dates with the contract funding amount and that would go to the Board of Examiners. If it was something that could get started in FY22, July 1, 2021, we would do that as the start date and once our budget is approved, we'd have the money available. It would require a work program to increase the expenditure for this category but not until later in the year. Then the end date of the project is whatever the end date is. Typically, the contracts are two, or not to exceed four years but that is not an issue.

Rich DeLong: Mike, based on what Jim outlined, if both these projects were approved, that would take us through June 2023 which coincides with the end of the presentation on the forecast with the \$100,000 above the threshold. **Mike Visher**: Keep in mind, my intent was to just shows one of the two in this meeting and that's how it's agendized.

<u>Mike Visher</u>: Keep in mind, my intent was to just choose one of the two in this meeting and that's how it's agendized, just one of the two. It doesn't mean we can't come back and revisit this at a later Commission meeting when we feel better about our finances. I don't want to spend down to zero on our excess over the reserve guidance. I want some bit of a buffer and \$100,000 is really not that much of a buffer. I think we can absorb that \$35,000 over two years and still be able to maintain all the other expenditure obligations that we have. I am a little leery about taking on an additional project above and beyond what we've already budgeted for in the two-year cycle.

Rich DeLong: What I heard from Jim is his preference would be Soda Lake over Railroad Valley given his overall staff commitments over the next year or so.

<u>Jim Faulds</u>: Really no preference, I just wanted to describe two projects, Soda Lake could be completed probably a little more quickly rather than Railroad Valley, but really no preference. For this period of time, our commitment should be held to one additional project.

Rich DeLong: Okay, my concern is making sure we can record the knowledge the two geologists that you described have before they're no longer interested in doing the work.

Jim Faulds: I share that concern Rich.

<u>Art Henderson</u>: As I recall, we were going to have some people address private funding, did anybody contact any private funding for this project?

<u>Mike Visher</u>: No, that hasn't occurred Art. We are going to visit that at the next regular quarterly meeting, and we are still waiting on some additional guidance on the best pathway for that.

<u>Jim Faulds</u>: I did have some conversations with Don French and Jerry Walker a while ago, it's possible there could be a small amount of funding that Don can muster for this. If that happens it's probably going to help them in terms of their time dedicated to the report.

<u>Art Henderson</u>: Mike, for example, we're not allowed to select Soda Lake Project and then give a small amount of funding to the two geologists so that they can put their thoughts on the paper? That is not part of the agenda today where we cannot do both?

<u>Mike Visher</u>: There would be some difficulty in that because we're really looking for one project with one deliverable, that is a package. It would complicate things to fund both of these projects simultaneously especially if we couldn't come back and complete them. I wouldn't like to do that.

Art Henderson: How much is the compensation for the two geologists?

<u>Jim Faulds</u>: It's on the order of \$5,000 to possibly as much as \$7,000 maximum. If our staffing situation changes for the better, we could then re-evaluate the possibility of a second project. At this time, we can commit to one project but would be hesitant to commit to a second.

<u>Josh Nordquist</u>: Just to reiterate, the concern is with the geologists work in Railroad Valley, that's the key piece of work that we're concerned about losing. That is not the whole project but that is a crucial step in being able to keep this project moving before Don and Jerry decide they do not want to do the work, a short period of time from now.

<u>Jim Faulds</u>: Correct, they're willing to get going on this quickly. In terms of the Bureau, the part of digitizing the maps, etc., and putting the report together, that has to occur a little later in terms of what the Bureau is already committed to. In particular, Jerry has expressed concern that he doesn't know how much he could dedicate to this kind of project a couple years down the road. This is a nice window for Don and Jerry and their part could be completed up front. Then it would stagger a little but the information would come into the Bureau. We would probably get started on it, maybe a little of it in FY22 but realistically we cannot complete until FY23.

Bob Felder: If Jerry and Don do their work early can they just put it on the shelf and have it be a ready product for your staff to take on or does there need to be significant overlap in their efforts to produce the final products?

<u>Jim Faulds</u>: Yes, on both sides. They could provide most of the information to us and it could sit on the shelf for three to six months but once we tackle it, there will be a lot of back and forth, so they'll have to be available for that. These are anticipated to be peer-reviewed reports/bulletins, so we want to allow enough time at the end of these projects for that process.

Bob Felder: It seems like these are both good projects, but the availability of Don and Jerry might put this one in front of Soda Lake just for practical reasons. Is that a true statement?

Jim Faulds: Yes.

Motion to approve the Railroad Valley Project and add, as an agenda item, for next meeting to review the Soda Lake project made by: Nigel Bain

Seconded by: Josh Nordquist

<u>Josh Nordquist and Art Henderson</u>: It was discussed that reviewing the Soda Lake project at the next CMR meeting was not necessary, but they should consider it. Also, as discussed at the last meeting we need to follow through with asking for funding from the industry.

Nigel Bain: Withdrew his motion.

Motion to approve the Railroad Valley Project with a cost of \$35,000 made by: Mary Korpi

<u>Seconded by:</u> Josh Nordquist <u>Unanimously approved</u>

Jim Faulds: Thank you Mr. Chairman.

<u>Bob Felder</u>: Mike, in looking at the budget forecast noticing the excess above the reserve balance is on a downward trajectory from 20-21, 21-22 and 22-23, is that concerning to you and can you explain why it's happening we went from \$600,000 to \$400,000 to \$100,000 in the last three cycles?

Mike Visher: Yes, if you recall we created these targeted bites of the apple to bring down our reserve, but those targeted bites can be removed if we see that trajectory going too fast or being too steep. Those three additional \$50,000 projects were part of those bites of the apple; \$150,000 added each year. We can pump the breaks on those to get a smoother landing and to lessen that curve going downwards. It's really going to be dictated based on the number of mining claims. If the mining claims go down, we'll have to do something to accommodate that. We are just looking at the two-year budget cycle but it's something we'll have to revisit every year. We are not just going to do this exercise again two years from now, we will do this every year and a couple of times each year, just to make sure that we don't create a deficit of our own making. Those discretionary bites, whether it's these additional projects that we fund for the Bureau or enhancements to the AML program, those are discretionary, and we can pull back on those if we have to. I'm not too concerned about that, that was more or less as part of the design.

Bob Felder: Thank you.

COMMENTS BY THE GENERAL PUBLIC

None

ADJOURNMENT

2:51 p.m.



III. NEW BUSINESS

III. A <u>Introduction of New Fluid Minerals</u> <u>Program Manager</u>

III. B <u>Update of 81st (2021) Session of The</u> <u>Nevada Legislature</u>

Status of Nevada Legislative Bills Which May Impact Stakeholders in The Minerals Industry:

(As of May 6, 2021)

- **AB40 (Petroleum Storage Tanks)** Broadens current scope of liability of operators of leaking tanks and distribution piping and associated clean-up costs. Amended twice. House Floor.
- AB146 (Water pollution from diffuse sources) Authorizes NDEP to develop plans, recommendations and policies to address water pollution from diffuse sources. Amended. Passed House on party line vote. May 4th Hearing in Senate Natural Resources. Conceptual amendment added.
- AB148 (Reclamation "Bad Actor") Requires reclamation permit applicants to submit an
 affidavit stating that applicant and each person with a controlling interest in the business entity
 is in good standing agencies of other states and federal agencies. Amended. Passed House on
 party line vote. May 4th Hearing in Senate Natural Resources. NvMA testified in opposition but
 proposed a conceptual amendment for consideration. NDEP testified neutral but requested
 additional definitions for clarification. An additional amendment is likely.
- AB240 (Dissolution of Commission on Mineral Resources and Division of Minerals)
 Did not receive a vote in Assembly Natural Resources, no further action allowed. Bill sponsor,
 Assemblyman, has expressed interest in pursuing some bill concepts for introduction in next session.
- AB378 (Revising the Purpose of the State Land Office)
 Increases the authority of the State Land Office to provide guidance and make recommendations to local governments related to coordinated management of federal lands and the evaluation of State Lands proposed for disposal. Amended. Passed House on party line vote. Referred to Senate Government Affairs.
- AB433 (Authorizes Sagebrush Ecosystem Council to Establish a Participation Fee)
 Did not receive a vote in Assembly Natural Resources, no further action allowed.
- AJR1 (Constitutional Change from Taxation on Net to Gross Proceeds of Minerals Extracted)
 Has not yet received a vote.
- AJR2 (Constitutional Change of Taxation Cap on Net Proceeds from 5% to 12%)
 Has not yet received a vote.
- AJR3 (Urges Congress on the Protection and Conservation of Land and Water 30% by 2030)
 Passed House on party line vote. Referred to Senate Natural Resources.
- AJR5 (Urges Congress to Sell or Transfer Public Lands to Local Government and Non-Profits)
 Did not receive a vote in Assembly Natural Resources, no further action allowed.
- ACR3 (Requires the Legislative Commission to Appoint an Interim Committee to Conduct a Study Concerning Environmental Justice) — Potential precursor to development of a state environmental review process. Hearing held in Assembly Legislative Operations March 16th, no other meetings scheduled.
- SB351 (Charge on Sales of Renewable Energy)
 Did not receive a hearing. No further action allowed.

- SJR1 (Constitutional Change from Taxation on Net to Gross Proceeds of Minerals Extracted)
 Has not yet received a vote.
- SJR4 (Urges Congress to Grant Additional School Trust Lands to NV)
 Did not receive a hearing. No further action allowed.
- SCR10 (Directs the Legislative Committee on Energy to conduct an interim study concerning the development of hydrogen and lithium as energy resources in this State) introduced

III. C MBMG 2019 Mineral Industry Report and 2019/2020 Exploration Survey



Special Publication MI-2019

The Nevada Mineral Industry 2019

Metals

Industrial Minerals

Oil and Gas

Geothermal

Exploration
Development
Mining
Processing







Starting in 1979, NBMG has issued annual reports that describe the mineral (precious and base metals and industrial minerals including aggregate), oil and gas, and geothermal activities and accomplishments. This report describes those accomplishments in Nevada for 2019, which includes production, reserve, and resource statistics; exploration and development—including drilling for petroleum and geothermal resources, discoveries of orebodies, new mines opened, and expansion and other activities of existing mines; and a directory of mines and mills.

Nevada System of Higher Education 2020

Board of Regents

Joseph C. Arrascada
Patrick. J. Boylan
Byron Brooks
Patrick R. Carter
Amy J. Carvalho
Carol Del Carlo, Vice Chairman
Mark W. Doubrava, Chairman

Jason Geddes Cathy McAdoo Donald S. McMichael Sr. John T. Moran Laura E. Perkins Lois Tarkanian Melody Rose, Chancellor

University of Nevada, RenoBrian Sandoval, *President*

College of Science Jeffrey Thompson, *Dean*

Mackay School of Earth Sciences and Engineering

Annie Huhta, Director

Nevada Bureau of Mines and Geology

James E. Faulds, Director/State Geologist

Scientific Research Staff

Economic Geology, Geologic Mapping, and Geologic Framework

Mike Darin, Assistant Professor
James E. Faulds, Professor
Matthieu Harlaux, Assistant Professor-Economic
Geologist
Christopher D. Henry, Research Geologist
John Muntean, Associate Professor-Research
Economic Geologist
Andrew Zuza, Assistant Professor-Structural Geologist

Geologic Hazards and Engineering Geology

Seth Dee, Geologic Mapping Specialist Craig M. dePolo, Research Geologist Rich Koehler, Assistant Professor

Nevada Geodetic Laboratory

Geoffrey Blewitt, *Research Professor* William C. Hammond, *Research Professor* Corné W. Kreemer, *Research Professor*

Great Basin Center for Geothermal Energy

Bridget Ayling, Director, Associate Professor Rozena Brecke, Administrative Assistant Cary Lindsey, Postdoctoral Scholar Eli Mlawsky, Geoscience Data Manager

Ralph J. Roberts Center for Research in Economic Geology

John Muntean, Director, Associate Professor-Research Economic Geologist

Cover Photos:
North wall of the Round Mountain open-pit gold mine (left), Nye County Nevada and large sample of Native Gold from Round Mountain Mine (right) (photographer, John Muntean) The Round Mountain open pit was put into production in 1977 to mine large tonnages of low grade gold ore that has grades of typically 0.02 opt gold (0.069 g/t). However, high grade veins also exist that include large masses of gold and specimen-quality gold. When such gold is recognized in the open pit, geologists use metal detectors to make sure it is mined and put into the gravity circuit at the mill of the mine or saved as specimen samples.

Research and Administrative Support Staff

Cartography and Publication Support

Jennifer Vlcan, Cartographic/GIS Manager Christina Clack, Graphic Designer Rachel Micander, Analyst - GIS and Cartography Irene Edgerton, Cartographer/GIS Specialist

Data Management

Emily O'Dean, Geoscience Data Manager

Publication Sales and Information

Emily O'Dean, GBSSRL Manager
David Davis, Geologic Information Specialist
Charlotte Stock, Sales Manager
Bret Pecoraro, Development Technician

Administration

Lora R. Robb, Business Manager

Suggested Citation:

Muntean, J.L., Davis, D.A., and Ayling, B., 2020, The Nevada Mineral Industry 2019: Nevada Bureau of Mines and Geology Special Publication MI-2019, 254 p.

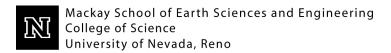
Nevada Bureau of Mines and Geology Special Publication MI-2019

The Nevada Mineral Industry 2019

Contents

3	Overview
	by John L. Muntean

- 15 Metals
 by David A. Davis and John L. Muntean
- 86 Major Precious-Metal Deposits by David A. Davis and John L. Muntean
- 160 Other Metallic Deposits
 by David A. Davis and John L. Muntean
- 171 Industrial Minerals by David A. Davis
- 198 Industrial Mineral Deposits by David A. Davis
- 208 Geothermal Energy by Bridget Ayling
- **Oil and Gas** by David A. Davis
- **240 Directory of Mining and Milling Operations** *by David A. Davis*



2020

Preparation supported by the Nevada Division of Minerals http://minerals.nv.gov

© Copyright 2020 The University of Nevada, Reno. All Rights Reserved

NEVADA BUREAU OF MINES AND GEOLOGY



JOHN L. MUNTEAN

RELEASED APRIL 2021









III. D Summer AML Program Plans



SUMMER 2021 INTERN PROGRAM



Target Location and Interns

MORE INFO TO COME

IV. A Soliciting Donations for NBMG Projects

SOLICITING DONATIONS FOR NBMG PROJECTS

- ➤ Project should have specific focus and deliverable of interest to industry.
- ➤ Identify/list specific companies/organizations and enumerate how/why they would benefit from the project.
- ➤ Create brief synopsis (talking points) of the project with benefits.
- ➤ Develop contact list and assignments.
- ➤ Not a sales job. Provide information on the project and name of contacts at UNR if they'd like to know more about the project and/or are interested in making a donation.
- ➤ Project details: Jim Faulds, <u>jfaulds@unr.edu</u> 775-682-6650
- ➤ Donation details: Donna Knotek, Director of Development, College of Science, dknotek@unr.edu 775-682-5952
- ➤ After providing contact information, neither the Division nor the Commission have any involvement or ongoing role.

COMMISSION BUSINESS



January 14, 2021

Nevada Division of Minerals Attn.: Garrett Wake Southern Nevada Programs Manager 375 E. Warm Spring Road, #205 Las Vegas, NV 89119

Dear Garrett,

The Las Vegas Natural History Museum (EIN 88-0256389) truly appreciates the Nevada Division of Minerals' assistance in developing the new Geology Exhibit that opened to the public in January within our 40,000-square-foot Museum.

This exhibit will educate Museum visitors of all ages about geology, minerology, rocks and mining and how they relate to Nevada. Exhibit components will also be featured in our Museum's virtual education presentations.

Nevada Division of Minerals' support will greatly enhance our nonprofit Museum's educational offerings that increase the understanding of thousands of visitors per year. Thank you again for supporting our Museum and all that you do in Nevada.

Sincerely,

Marilyn Gillespie

Executive Director

The Las Vegas Natural History Museum is a 501(c)3 tax exempt organization (Tax ID #88-0256389). Since you received no goods or services, your in-kind assistance in developing this exhibit may be tax deductible. This letter serves as your receipt for the IRS.

Seprell

STAFF REPORTS



STATE OF NEVADA **COMMISSION ON MINERAL RESOURCES**

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/



Las Vegas Office: 375 E. Warm Springs Rd. #205. Las Vegas. NV 89119 Governor Phone: (702) 486-4343; Fax: (702) 486-4345

JANUARY 2021 MONTHLY ACTIVITY REPORTS

Administrator

- 1. Provided a presentation and answered questions on geothermal history and regulations in Nevada as part of a panel discussion at the Nevada Water Resources Association annual meeting.
- 2. Provided a presentation on the Status of Mining in Nevada at the UNR College of Business Vision 2021 meeting.
- 3. Attended Fiscal Notes Training for the documenting of fiscal impacts to the agency from proposed bills.
- 4. Virtual meetings attended: CMR, LCB Meet'n'Greet, NvMA Public Policy Committee and Hard Hat Chats, AME Roundup Technical Sessions, Western Nevada Development District Mining Team, Interim Finance Committee, EITS, SMART21, PDAC planning, Governor's Cabinet, and Statewide PIOs.

Deputy Administrator

- 5. Bond pool activity in January was limited to one plan-level bond decrease.
- 6. Attended the AME Roundup virtual conference.
- 7. Attended the quarterly Commission meeting and provided updates on the Bond Pool and AML Enhancements.
- 8. The contract evaluation committee selected a new vendor, Broadbent & Associates, for the AML cultural survey contract.
- 9. Met virtually with the LCB staff that the Division will be working with this session and received Fiscal Note
- 10. Worked with IT contractor CTS to create the new Minerals' IT domain and servers. Full transition off the Business and Industry network will be completed mid-February.
- 11. Continued to work with EITS for the Microsoft O365 transition that is scheduled for February.
- 12. Continued to work with Sean and the AML program as needed.
- 13. End-of-January financial summary of bond pool:

							Premiums	% Bond
Plan-level Bonds -Company	Project	Entry Date	Bond Amount	% of Pool	Comments	Deposit	Paid	Whole
					Bond reduced from			
Custom Details	Bovie-Lew	11/17/2006	\$14,643.00	0.76%	\$24,364 5/20	\$7,328.32	\$18,345.43	175.3%
					bond reduced from			
New Gold Nevada (NV Rae)	Black Rock Canyon	4/15/2005	\$244,482.00	12.70%	\$611,204 1/21	\$127,992.84	\$232,941.95	147.6%
SNL Sand LLC	Money Pit	5/21/2004	\$430,088.00	22.34%		\$233,171.91	\$286,734.72	120.9%
Western Mine Dev.	Victorine Mine	5/24/2000	\$45,875.39	2.38%	terminated	\$0.00	\$0.00	
Western Mine Dev.	Kingston Mill	5/24/2000	\$100,450.00	5.22%	terminated	\$0.00	\$0.00	
Western Mine Dev.	Manhattan Mill	5/24/2000	\$0.00	0.00%	terminated (removed \$114,288 on 12/28/2021)	\$0.00	\$0.00	
TNT Venture	Big Canyon	1/27/2010	\$78,161.00	4.06%		\$39,615.03	\$49,366.44	113.8%
Dun Glen Mining	Dun Glen	8/11/2014	\$439,240.00	22.82%		\$238,536.99	\$200,012.64	99.8%
Statewide Notice-Level	Various	various	\$571,858.00	29.71%	54 Notice-level bonds			
Total Bond Amount			\$1,924,797.39	1				
Cash in Pool's Account (Fron	m BSR - 1/29/2021)		\$3,089,486.23	İ				
Unfunded Amount			-\$1,164,688.84					
Percent funded			160.5%					

Chief, Abandoned Mine Lands Program

- 1. The AML Winter Intern program ended January 25th with a heavy focus on local hazard inventory using locations generated from our expanding LIDAR program. The crew also completed securings in Beatty.
- 2. The Medford BLM Cultural team returned to work on the VC Grand Prix closure project during a joint field visit with BLM-CC archeological staff and Division contractors. Discussion including project execution methods contributed to Medford's final cultural survey report.
- 3. AML contractor EPS began a revisit and securing project in the Nelson area. EPS also performed inventory and fencing work near US 95 between Hawthorne and Tonopah.
- 4. AML staff responded to several public reports regarding new and vandalized hazards in Douglas and Mineral counties.
- 5. Deliverables from the new "Stay Out, Stay Alive" filming are now available on the NDOM website, YouTube, and through outlets at several partner agencies.
- 6. We received permission from Clark County and the BLM- SNDO to perform re-securing work at the Arden Mine complex and will be completing those in February.

	SITES INVENTORIED	SITES SECURED	% Secured
Since 1987	23,657	19,095	81%
CY 2021 To Date	39	67	172%

Preliminary Count subject to QA/QC

GIS/ Field Specialist

- 1. Updated Oil, Gas, Geothermal data contained on the Open Data Site.
- 2. Created a Critical Minerals map for the AME Roundup virtual exhibit.
- 3. Updated county DETR graphs on open data site to a more interactive format.
- 4. Created three educational bingo games for use by multiple age groups featuring topics of Prehistoric Fossils, Minerals, and AML.
- 5. Updated Geologic History Video with new data.
- 6. Processed wintern AML field data.
- 7. Worked on Oil and Gas historic production data to present on open data site.
- 8. Gave a presentation on the Open Data Site and the Nevada Mineral Explorer to the Nevada Landmen's Association.
- 9. Completed Sexual Harassment Prevention and IT Security Awareness training.

AML/Fluid Minerals Field Specialist

- 1. Completed data corrections on AML field work completed since September, 2020. Created method and finalized list of sites to delete from the AML database which have no spatial reference with southern office staff. Continued streamlining intern planning workflow by automation of tasks. Updated land research, claim and land status files to match newly available versions. Worked with LMP to set up collaboration board for AML tasks, to be introduced to AML team at next meeting.
- 2. Finished Lidar AML summary including projection of findings state-wide. Continued troubleshooting with USDA on NAIP imagery (missing county data) for field work tablet updates. Compiled Nevada 2020 Seismic Data for AML revisits, as per public interest in areas where surface rupture has recently occurred.
- 3. Continued planning for updates to Virginia City's 4th Ward School AML wall displays. Participated in introductory interview/discussion with NV Connects Education program to connect subject matter experts (mining/geology) with Nevada teachers. Created number generator for bingo cards to be used in education outreach efforts.
- 4. Finalized NDOM's AME Roundup Virtual Convention exhibit booth. Began planning for NAAMLP 2021 mobile and desktop web application options for conference program and possible virtual options.
- 5. Assisted Sean with AML Stay Out, Stay Alive outreach for Channel 2 news broadcast and created drone video for their use in delivering our public safety message.
- 6. Updated NDOM Operations Brochure with 2020 statistics, with help and edits from NDOM staff. Updated AML intern recruitment flyer for 2021 field season outreach.
- 7. Reviewed and reported on Information Security issues affecting the Division to staff. Updated Acceptable Use Agreement and embedded with Information Security Awareness training portal (KnowBe4). Worked with Valerie and Debbie on Disaster Recovery Plan and updates and cleanup. Submitted 2020 end-of-year Safety Report to Risk Management.

8. Attended: SANS 40-hour Information Security Training (in progress), IOGCC Inspector's Forum, RAMS AML database meeting, IT/O365 meeting concerning NDOM migration to new domain and O365 setup, ESRI remote sensing webinar, CMR quarterly meeting, NDOM Fluid Minerals Update Meeting, Geothermal Rising's Enhanced Geothermal Systems Webinar, State Information Security Committee Meeting.

AML/Public Outreach - Southern Nevada Programs Manager

- 1. Supervised three interns in the Beatty area for two weeks in January; 80 hazards visited-- 37 new hazards inventoried, 20 sites revisited, 23 sites secured, and 793 non-hazards logged.
- 2. Presented on the completion of the Las Vegas Natural History Museum exhibit to the Commission on Mineral Resources during the Q1 meeting.
- 3. Presented for a Facebook Live stream from the Las Vegas Natural History Museum on the unveiling of the new exhibit; more than 1,900 views as of 2/5/21.
- 4. Interviewed live on the Fox 5 More show from the Las Vegas Natural History Museum on the new exhibit.
- 5. Worked with the BLM SNDO and Clark County Real Property to obtain permissions for hard-closure re-securing at the Arden mine. Project scheduled for February.
- 6. Prepared six revisit projects for the upcoming EPS Southern Nevada Revisit contract. Project kickoff scheduled for mid-February.
- 7. Staffed the Division's virtual exhibit at the AME Roundup Conference.
- 8. Participated in the evaluation process for the NDOM cultural contract RFP.
- 9. Attended the one-day virtual UNESCO webinar series Earth Materials: The Foundation for Development.
- 10. Chaired a McCaw School of Mines board meeting.

AML/Public Outreach and Education – Southern Nevada Field Specialist

- 1. Participated in meeting with Nevada Mining Association, Colorado Mining Association Education Foundation, and members of NDOM team in planning a virtual mining course for teachers.
- 2. Completed interview to be a subject matter expert in Nevada Connects Project. This project pairs teachers with subject matter experts to create a high-quality lesson that supports Next Generation Science Standards to be shared with teachers around Nevada.
- 3. Continued working on quiz questions for virtual mining course for teachers.
- 4. Continued work on erosion video series by working on the final video segment.
- 5. Attended CMR meeting.
- 6. Attended and participated in CHOLLA meeting.
- 7. Participated in teleconference to present and lead an activity on Family Science Night.
- 8. Participated in "Ologist Live!" Facebook event at the Las Vegas Natural History Museum.
- 9. Completed four "Ask-A-Geologist" virtual presentations for Mannion MS.
- 10. Attended Nevada Mining Association's Hard Hat Chats- Nevada universities supporting STEM K-12 and Beyond.

Fluid Minerals Program Manager:

No geothermal or oil permits were issued in January. Eleven geothermal and three oil permits have not yet been drilled. Ormat Nevada has nine geothermal permits, five at Wild Rose, three at Crescent Valley, and one at Dixie Meadows. Open Mountain Energy has two open TG well permits on a federal lease in the Wabuska area. Kebo Oil and Gas and West Grant Canyon Development each have one open drilling permit in Railroad Valley. Western Oil Exploration has one open permit in Newark Valley.

- 1. Open Mountain was planning on drilling one of the two TG wells on a federal lease at Wabuska in January. However, no spud notification or drilling reports were submitted to NDOM.
- 2. Three geothermal sundries were approved during January.
- 3. Finished the review of three permit applications for production, injection, and observation wells at Blue Mountain. The production and injection wells are proposed for stimulation. The observation well will be put in place to 'listen' to the production and injections wells during stimulation activities. Still waiting on the BLM's input and approvals.
- 4. The ORNI 43 Tungsten Mountain 86(85)-21, San Emidio 84-20 and 25(46)-28 injection wells are still waiting on BLM approval.
- 5. Worked on a new bonding table for the geothermal database.

6. No oil or geothermal wells were inspected during January. Steamboat, Brady, Desert Peak, Jersey Valley, Beowawe, and McGinness Hills are anticipated to be inspected during February and March.

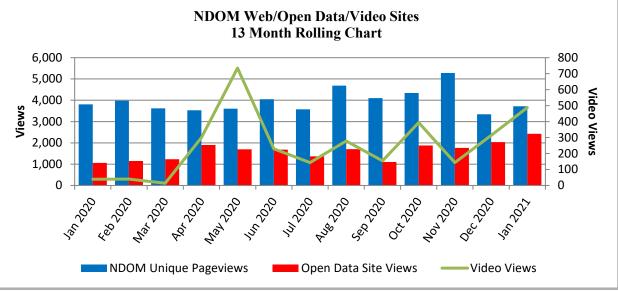
7. Well inspection status remains unchanged.

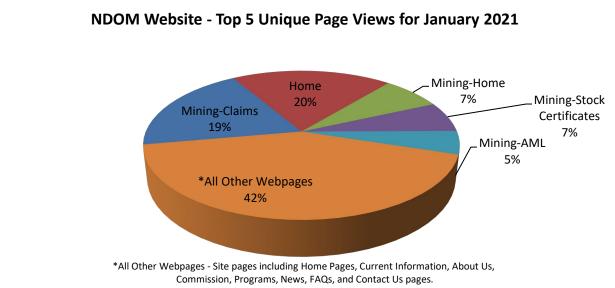
FY 2021 Well Inspections	Total Wells	Wells Needed for FY21	Wells Inspected	% of Total Needed	Wells Remaining
Geothermal (6 Locations)	455	152	86	56.7%	66
Oil	120	40	0	0%	40
Totals	575	192	86	45%	106

Website Activity

Website/Open Data Site/Video Views Monthly Report for January 2021

Period	NDOM Website Pageviews	NDOM Website Unique Pageviews		NDOM Open Data Site Views	NDOM Video Views
Jan 2021	5,144	3,720	Mining Claims, Home, Mining-Home,	2,428	488
			Mining-Stock Certificates, Mining-AML		
Jan 2020-					
Jan 2021	71,951	51,654		21,000	3,269





	Country	United States, Cana	ada, (unknown), United Kingdom, and India.		
Jan-2021	State	Nevada, California,	evada, California, Colorado, Texas, and Utah.		
	City	Las Vegas, Reno, (unknown), Carson City, and Sacramento.			
Number of	Video Viev	vs in January 2021	<u>Top 5 Video Views</u>		
488		8	Building a Web Mapping Platform, SOSA 2021 Full, Weathering & Erosion Part 1, Nevada Mineral Explorer Web Application Demo, & Minerals Education 1.		



STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/

MICHAEL VISHER Administrator

NEVADA

MINERALS

Las Vegas Office: 375 E. Warm Springs Rd. #205, Las Vegas, NV 89119 Phone: (702) 486-4343; Fax: (702) 486-4345

FEBRUARY 2021 MONTHLY ACTIVITY REPORTS

Administrator

- 1. Conducted analyses and submitted fiscal notes on three bills found not to have a significant fiscal impact on the agency.
- 2. Daily review of introduced bills to determine if they may have an impact on the agency or the mineral industry; currently tracking 71 bills or bill drafts.
- 3. Submitted Justification-to-Fill to Governor's Finance Office for approval to begin recruitment for new Fluid Minerals Program manager. The recruitment was posted on 2/16 with 15 applications received to date.
- 4. Solicited preliminary feasibility analysis of using foam cement, from Resource Cementing, for future AML hard closure project.
- 5. Updated agency financial status and FY22/23 forecast for update to the CMR.
- 6. Attended the twice-weekly Assembly and Senate Natural Resources Committee virtual meetings.
- 7. Virtual meetings attended: BLM Geothermal Permitting, NvMA Public Policy, Environmental, and Education Committees and Legislative Day, Nevada State Rail Summit, Mackay Executive Advisory Board, NPGS, EITS, SMART21, PDAC planning, Governor's Cabinet, and Statewide PIOs.

Deputy Administrator

- 1. Bond pool activity in February was limited to one new notice-level bond.
- 2. Continuously tracked proposed legislation that may pertain to the Division or minerals industry.
- 3. Attended the virtual NAAMLP winter business meeting. Received updates on proposed federal legislation pertaining to AML. The NAAMLP membership is polling its members and partners to determine the likelihood of an in-person conference for this September.
- 4. Worked with IT contractor CTS to continue the development of the new Mineral's IT domain and servers and made a full transition off the B&I IT network. The Division of Minerals is now a stand-alone agency, regarding IT, with help from CTS and EITS for emails.
- 5. Received training from CTS on basic domain, PC, and Local Area Network (LAN) IT troubleshooting and have been providing support to the Division staff.
- 6. Executed the Microsoft O365 transition with EITS. The Division is now utilizing the Microsoft 365 software package supported by EITS.
- 7. Continued to work with Sean and the AML program as needed.
- 8. End-of-February financial summary of bond pool:

Reclamation Bond Pool Status	Report	Current to:	3/1/2021					
Plan-level Bonds -Company	Project	Entry Date	Bond Amount	% of Pool	Comments	Deposit	Premiums Paid	% Bond Whole
					Bond reduced from			
Custom Details	Bovie-Lew	11/17/2006	\$14,643.00	0.75%	\$24,364 5/20	\$7,328.32	\$18,345.43	175.3%
					bond reduced from			
New Gold Nevada (NV Rae)	Black Rock Canyon	4/15/2005	\$244,482.00	12.57%	\$611,204 1/21	\$127,992.84	\$232,941.95	147.6%
SNL Sand LLC	Money Pit	5/21/2004	\$430,088.00	22.11%		\$233,171.91	\$286,734.72	120.9%
Western Mine Dev.	Victorine Mine	5/24/2000	\$45,875.39	2.36%	terminated	\$0.00	\$0.00	
Western Mine Dev.	Kingston Mill	5/24/2000	\$100,450.00	5.16%	terminated	\$0.00	\$0.00	
					terminated (removed			
Western Mine Dev.	Manhattan Mill	5/24/2000	\$0.00	0.00%	\$114,288 on 12/28/2021)	\$0.00	\$0.00	
TNT Venture	Big Canyon	1/27/2010	\$78,161.00	4.02%		\$39,615.03	\$49,366.44	113.8%
Dun Glen Mining	Dun Glen	8/11/2014	\$439,240.00	22.58%		\$238,536.99	\$200,012.64	99.8%
Statewide Notice-Level	Various	various	\$592,194.00	30.44%	54 Notice-level bonds			
Total Bond Amount			\$1,945,133.39					
Cash in Pool's Account (From	BSR - 2/26/2021)		\$3,112,155.83					
Unfunded Amount			-\$1,167,022.44					
Percent funded			160.0%					

Chief, Abandoned Mine Lands Program

- 1. The NDOM AML Summer Internship recruitment and hiring effort is underway with 30 qualifying applicants to date. Interviews are planned for late March.
- 2. AML staff and EPS completed a revisit and securing project in the Nelson area, as well as at two hazards called in by the public in Clark and Nye counties. Permanent closure and repair work at the Arden area is ongoing.
- 3. BLM Medford has submitted a final cultural survey for the VC grand prix and operational planning with NDOT and the BLM has the project on track for an August start date.
- 4. Deliverables from the new "Stay Out Stay Alive" filming are now available through several commercial online portals at Scheels and Sportsman's Wearhouse. AML staff reached a contract agreement regarding terms and content for a billboard in downtown Tonopah featuring photos from last year's filming.

	SITES INVENTORIED	SITES SECURED	% Secured
Since 1987	23,667	19,196	81%
CY 2021 To Date	40	101	253%

Preliminary Count subject to QA/QC

GIS/ Field Specialist

- 1. Updated Oil, Gas, Geothermal leasing information on the Open Data Site.
- 2. Developed Bingo games on the topics of AML, Minerals Education, Mineral Identification, and Rock Identification. The bingo games all included four themes by which to play which took a decent amount of research and created 60 randomized bingo cards.
- 3. Worked on various AML tasks with staff including the AML database and land research.
- 4. Updated land withdrawal information for calculating how much publicly available land has been withdrawn for conservation, how much land has been withdrawn as a whole, and for update on the open data site.
- 5. Completed SMART 21 training.

AML/Fluid Minerals Field Specialist

- 1. AML: Continued work on multiple AML data entry and cleanup projects, deleted sites with no spatial reference, updated sites missing elevation data, pulled new land research list for cleanup, helped in database entry by creation of new upload process, contributed to new planning methods for AML team using Trello project board, contributed to discussion concerning latest database improvement (AML notification table), reviewed NAAMLP virtual/in-person meeting apps for consideration for Fall 2021 Conference.
- 2. Fluid Minerals: Met with Fluid Minerals team to discuss program, review forms and database entry process.
- 3. Remote Sensing: Reviewed UAS program, conducted maintenance review of all equipment/batteries in northern fleet, and shared changes & training guide with appropriate staff, collected UAS video of 4th Ward School for use in future outreach.

- 4. Education/Outreach: Continued planning for updates to Virginia City's 4th Ward School AML wall displays, continued collaboration with NV Connects Education program to provide subject matter experts (mining/geology) to Nevada teachers for the development of new material.
- 5. Information Security/IT: Reviewed and reported on Information Security issues affecting the agency to staff, installed O365 and updated software/hardware to accommodate for changes to NDOM server setup, confirmed Confidential Document Reporting edits with NDOM staff and state information security office.
- 6. Attended: SANS 40-hour Information Security Training (completed), NMA Education Committee Meeting, UNR Career Fair, AML database meeting (TerraSpectra Geomatics), Workplace Violence State Course, NDOM Staff Meeting, AGI Critical Minerals Workshop, SMART21 State Training, NGPS meeting talk on San Emidio geothermal field geophysical study, State Defensive Driving Course.

AML/Public Outreach - Southern Nevada Programs Manager

- 1. Prepared maps and data for the southern Nevada revisit contract. Created a training plan and scheduled a two-day in-person training session with EPS to familiarize them with the Mesa units and NDOM standards for site visits. Ordered supplies and coordinated with EPS for pick-up and storage. Training and fieldwork are scheduled to commence in March.
- 2. Researched options for conducting the NAAMLP 2021 conference virtually. Participated in two platform demonstrations and selected the one which provided the best value. Presented information to Rob G. who will then present at the next NAAMLP meeting and decide how to move forward.
- 3. Led four PDAC committee meetings to prepare our exhibit for the 2021 conference. Collected data from eight partner organizations and worked with Joe Riney/NvMA on building the Nevada PDAC website (pdacnv.com.) Created a one-minute introduction video for the PDAC landing page.
- 4. Minor modifications needed to the LVNHM CMR exhibit were completed by 3saurus in mid-February.
- 5. Participated in an AML RAMS Webex meeting. Met separately with NDOM staff on two occasions to advance the planned SOSA notification system overhaul.
- 6. Supervised hard-closure work conducted by EPS at the Arden Mine complex west of Las Vegas. Completion scheduled for March 4th, 2021.
- 7. Conducted an office inspection and fire drill with all southern NV NDOM staff.
- 8. Led an NDOM quarterly safety committee meeting.
- 9. Viewed several NvMA Digital Legislative Day presentations.

AML/Public Outreach and Education - Southern Nevada Field Specialist

- 1. Participated in two meetings with Nevada Mining Association, Colorado Mining Association Education Foundation, and members of NDOM team in planning All About Mining, a virtual mining course for teachers.
- 2. Completed training for subject matter experts (SME) in the Nevada Connects Project.
- 3. Completed homework for Nevada Connects project that was used to match SME with teachers to develop lessons that supports NGSS.
- 4. Attended SME Regional Group meeting to discuss homework and receive additional training.
- 5. Attended AML planning meeting.
- 6. Delivered career presentations to second, third, and fourth grade at Paradise Professional Development ES.
- 7. Attended American Geoscience Institute webinar, Critical Minerals Forum: Americas The role of geological survey organizations to advance critical mineral research.
- 8. Attended and participated in NvMA Education Committee meeting.
- 9. Attended UAS Review and Program Summary Meeting.
- 10. Participated in two teleconferences in preparation of Southern Nevada RDPD's Community Family Science Night.
- 11. Presented at Community Family Science Night and led an activity for 200 Nevada families.
- 12. Prepared 5-minute video of career presentation to be shared with elementary schools.
- 13. Prepared materials and demonstrations about tectonic processes to be used in the All About Mining, virtual teacher course.
- 14. Completed required training for SMART 21.

Fluid Minerals Program Manager:

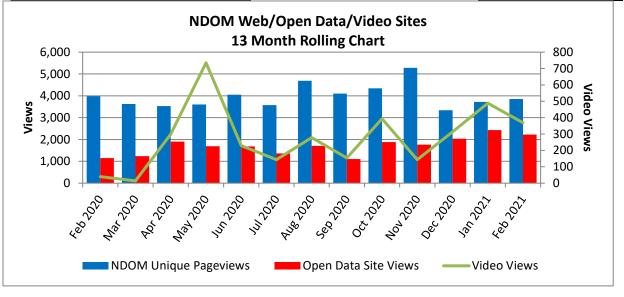
1. Two geothermal permits were issued in February to NGP Blue Mountain 1 LLC. One permit is for an observation well, and the second permit is for an injection well. The injection well will be the first geothermal well to be drilled horizontally in Nevada and is proposed for stimulation. A production well permit was issued to NGP Blue

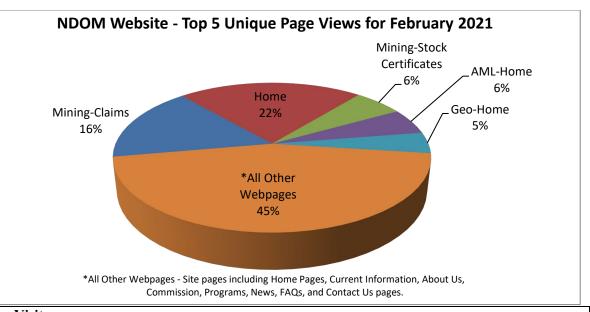
- Mountain 1 LLC on March 1st. The production well will be drilled horizontally and stimulated as well. The observation well will be the first of the three wells to be drilled and is expected to be spud by mid-March. The observation well will be put in place to 'listen' to the production and injections wells stimulations. No oil permits were issued in February.
- 2. Fourteen geothermal and three oil permits have not been drilled. NGP Blue Mountain 1 has the three permits discussed above. Ormat Nevada has nine geothermal permits, five at Wild Rose, three at Crescent Valley, and one at Dixie Meadows. Open Mountain Energy has two open TG well permits on a federal lease in the Wabuska area. Kebo Oil and Gas and West Grant Canyon Development each have one open drilling permit in Railroad Valley. Western Oil Exploration has one open permit in Newark Valley.
- 3. NDOM is waiting on additional bonding from Whitegrass No. 1 LLC to convert a TG well to an observation well and deepen it at the Wabuska Field.
- 4. One geothermal and one oil sundry notice were approved during February.
- 5. The ORNI 43 Tungsten Mountain 86(85)-21 and San Emidio 84-20 and 25(46)-28 injection wells are still waiting on BLM approval. Approval is being delayed at San Emidio while the EA is being completed.
- 6. All of the geothermal wells at Brady and Desert Peak were inspected during February. Wells at Jersey Valley, Beowawe, and McGinness Hills are anticipated to be inspected during March to early April. I anticipate inspecting all oil wells in early to mid-April. Well inspection status at the end of February:

FY 2021 Well Inspections	Total Wells	Wells Needed for FY21	Wells Inspected	% of Total Needed	Wells Remaining
Geothermal (8 Locations)	455	152	140	92%	12
Oil (0 Locations)	120	40	0	0%	40
Totals	575	192	140	73%	52

Website Activity

Period	NDOM Website Pageviews	NDOM Website Unique Pageviews	NDOM Website Top 5 Pageviews	NDOM Open Data Site Views	NDOM Video Views
Feb 2021	5,172	3,852	Mining Claims, Home, Mining-	2,228	369
			Stock Certificates, AML-Home,		
			and Geo-Home		
Feb 2020-					
Feb 2021	71,869	51,695		22,170	3,599





Top Visitor	<u>rs</u>				
	Country	United	d States, Canada, United Kingdom, Denmark, and (unknown).		
Feb-2021	State	Nevac	Nevada, California, Colorado, Texas, and Kansas.		
	City	Las Vegas, Reno, (unknown), Carson City, and Sacramento.			
Number of	f Video Vie	ews in			
Febr	uary 2021		Ton 5 Video Views		
	uar y 2021		Top 5 Video Views		



STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/

Las Vegas Office: 375 E. Warm Springs Rd. #205, Las Vegas, NV 89119 Phone: (702) 486-4343; Fax: (702) 486-4345



MONTHLY ACTIVITY REPORTS March 2021

Administrator

- 1. Conducted analyses and submitted required fiscal note responses on 11 bills found not to have a significant fiscal impact on the agency. Submitted fiscal note for AB240.
- 2. Continued daily review of introduced bills to determine if they may have an impact on the agency or the mineral industry; currently tracking 53 bills or bill drafts.
- 3. Recorded hour-long video presentation on the Nevada mineral industry for the Mining and Land Resources Institute (MALRI) for airing during their national conference.
- 4. Coordinated with NDEP and DCNR regarding responses to and testimony on AB240.
- 5. Meetings attended: twice-weekly Assembly and Senate Natural Resources Committees, NvMA Public Policy, CMR, Statewide PIOs, MALRI, PDAC, BLM Oil and Gas Forum, Mackay Board, and several annual updates from mine operators to NDEP.

Deputy Administrator

- 1. Bond pool activity in March was limited to one notice-level bond release
- 2. Continuously tracked proposed legislation that pertains to the Division or the Minerals industry. Helped compile and provide information to Mike for AB240.
- 3. Attended the CMR meeting to select a new NBMG special project.
- 4. Interviewed four candidates with Mike and Sherrie for the replacement of Lowell's position as the Fluid Mineral Program Manager.
- 5. Compiled and sent out the Plan of Operations disturbance fees associated with NAC 519A.250. In total, 20 projects from 18 companies were invoiced for a total of \$81,220. This year's plan of operation disturbance fee is \$24,080 above the prior 4-year average of \$57,140.
- 6. Worked with the NAAMLP membership on polling its members and partners to determine that we are moving forward with an in-person conference this September at MontBleu Resort. Started coordinating and planning for the conference.
- 7. Continued training from IT Contractor CTS on basic domain, PC, and Local Area Network (LAN) IT troubleshooting, and have been providing IT support to Division staff.
- 8. Continued to work with Sean and the AML program as needed.
- 9. End-of-March financial summary of bond pool:

Reclamation Bond Pool Status Report (Current to:	4/1/2021					
Plan-level Bonds -Company	Project	Entry Date	Bond Amount	% of Pool	Comments	Deposit	Premiums Paid	% Bond Whole
					Bond reduced from			
Custom Details	Bovie-Lew	11/17/2006	\$14,643.00	0.75%	\$24,364 5/20	\$7,328.32	\$18,418.65	175.8%
New Gold Nevada (NV Rae)	Black Rock Canyon	4/15/2005	\$244,482.00	12.59%	bond reduced from \$611,204 1/21	\$127,992.84	\$232,941.95	147.6%
, ,	· · · · · · · · · · · · · · · · · · ·						. /	
SNL Sand LLC	Money Pit	5/21/2004	\$430,088.00			\$233,171.91	· ·	
Western Mine Dev.	Victorine Mine	5/24/2000	\$45,875.39	2.36%	terminated	\$0.00	\$0.00	
Western Mine Dev.	Kingston Mill	5/24/2000	\$100,450.00	5.17%	terminated	\$0.00	\$0.00	
					terminated (removed			
Western Mine Dev.	Manhattan Mill	5/24/2000	\$0.00	0.00%	\$114,288 on 12/28/2021)	\$0.00	\$0.00	
TNT Venture	Big Canyon	1/27/2010	\$78,161.00	4.02%		\$39,615.03	\$49,366.44	113.8%
Dun Glen Mining	Dun Glen	8/11/2014	\$439,240.00	22.61%		\$238,536.99	\$200,012.64	99.8%
Statewide Notice-Level	Various	various	\$589,694.00	30.36%	53 Notice-level bonds			
Total Bond Amount			\$1,942,633.39					
Cash in Pool's Account (From BSR - 3/31/2021)			\$3,115,362.86					
Unfunded Amount			-\$1,172,729.47					
Percent funded			160.4%					

Chief, Abandoned Mine Lands Program

- 1. AML staff selected 8 outstanding applicants for the coming 2021 summer intern season and completed annual hazard ranking GIS work contributing to the intern field calendar.
- 2. Contractor EPS finished revisit and securing project work on US95, including 46 enclosure type securings. EPS was also tasked with hard closure repair of 30 vandalized sites in Clark, Douglas, Carson, and Lyon Counties. Repair work commenced in the last week of March.
- 3. AML staff completed a second round of helicopter-aided survey stemming from the Tonopah 38 program in 2019. Survey work will contribute to inventory confirmation for a large number of hazards and non-hazards in Esmeralda, Mineral, and Nye counties.
- 4. Staff awarded Broadbent LLC a contract for statewide AML cultural survey work to begin in April.
- 5. SOSA awareness efforts included content sharing and program development with Corvus Gold company. Corvus staff will be doing AML public awareness outreach in Beatty area schools in March and April.

	SITES INVENTORIED	SITES SECURED	% Secured
Since 1987	23,667	19,243	81%
2021 To Date	40	148	370%

GIS/ Field Specialist

- 1. Re-calculated Land Withdrawal Acreage for use in presentations and the open data site.
- 2. Calculated how much public land has been withdrawn for conservation in Nevada.
- 3. Compiled and recorded a Cupcake Core drilling Video.
- 4. Compiled and recorded six intro videos for activities to be used in the "All About Mining" virtual classes.
- 5. Worked with Courtney to automate the AML photo processing process.
- 6. Interviewed with PBS Reno for a STEM video they are compiling.
- 7. Presented Mining in Nevada to a few Clark County schools.
- 8. Entered all Annual Status and Production data submitted to this point.
- 9. Completed the 40-hour SANS training.
- 10. Put mine fact sheets from BMRR into interactive pop-ups on the open data site, specifically the map that can be found on the Nevada Claims, Notices, & POO page.
- 11. Participated in the Carson City School District's virtual Career Fair.
- 12. Finished processing historic oil production data given to the Division and uploaded it into the database.
- 13. Updated geothermal production, injection, and MWh produced on open data site.

AML/Fluid Minerals Field Specialist

- AML: Contributed to intern interview process and to discussions on hiring, continued work on multiple AML data entry and cleanup projects, finished land research for hazards visited in 2020 with help from southern office, contributed to discussion concerning latest database improvements, continued discussions concerning virtual/inperson NAAMLP 2021 Conference, started compilation of annual temporary securing report to BLM, created script to aid in database photo upload process.
- 2. Fluid Minerals: Reviewed permit application process and approval checklist with FMR team, reviewed and researched chemicals suggested for use in geothermal applications, field work at Blue Mountain including well inspections and witness of cement job.
- 3. Education/Outreach: Continued collaboration with NV Connects Education program to provide subject matter experts (mining/geology) to Nevada teachers.
- 4. Information Security/IT: Reviewed and reported on Information Security issues affecting the agency to staff, contributed to server clean up and planning for NDOM user role and server access.
- 5. Attended: AML database meeting (Terraspectra Geomatics), NDOM Quarterly Safety Meeting, AML Cultural Survey Meeting with Contractor and AML staff, Blue Mountain Cement Log evaluation meeting, NV Mining Association Hard Hat Chat, NJMAC Military Update Meeting.

AML/Public Outreach - Southern Nevada Programs Manager

- 1. Conducted nine minerals education & AML school presentations at six different schools reaching over 380 students and teachers.
- 2. Trained two EPS staff over two days on the AML program, use of field tablets and software, data collection & QA/QC, and reporting requirements to begin the Southern Nevada AML Revisit contract. Revisited 15 sites with the EPS crew during the field training day.
- 3. Travelled to Jean and Gold Butte to investigate two public AML call-ins. Cataloged and fenced one hazard and logged the second as a non-hazard.
- 4. Participated in three days of interviews for the AML internship program consisting of 24 applicants.
- 5. Designed and staffed the virtual Nevada Booth over four days at the PDAC conference. The exhibit was staffed by members of NvMA, GSN, NMEC, State BLM office, and GOED. The Nevada PDAC website, PDACNV.COM, created by Joe Riney and me, was viewed by 129 unique visitors between March 8th and March 31st. Approximately 79 unique visitors entered the virtual Nevada Booth during the same timeframe.
- 6. Continued to update the NAAMLP 2021 conference website.
- 7. Studied for and passed the FAA Part 107 (Remote Pilot) recertification examination
- 8. Created an AML tabletop safety training interactive presentation to better help prepare NDOM staff and interns for possible emergency situations.
- 9. Participated in several meetings with TerraSpectra on the SOSA notification system overhaul and prioritization of work for the remainder of the current contract.
- 10. Evaluated RFP bid submissions as a part of the NDEP Three Kids Mine RFP Evaluation Committee.
- 11. Assisted Valerie in reviewing and updating portions of the NDOM internal controls policy.
- 12. Completed the required State of NV SMART 21 modules for supervisors.
- 13. Participated in a quarterly NDOM safety committee meeting.
- 14. Participated in a quarterly NV Veteran Peer Mentor Group meeting.
- 15. Participated in a PDAC committee meeting.
- 16. Participated in NDOM server cleanup day.

AML/Public Outreach and Education - Southern Nevada Field Specialist

- 1. Participated in a meeting with Nevada Mining Association, Colorado Mining Association Education Foundation, and members of NDOM team in planning All About Mining, a virtual mining course for teachers.
- 2. Started compiling background information on energy resources to be used for Nevada Connects Project that matched subject-matter-expert (SME) with a teacher to develop a lesson that supports NGSS.
- 3. Attended Nevada Connects meeting that combined teachers and SME's for an introduction to the project.

- 4. Presented Earth and Human Activity to a fourth-grade class at Wilhelm ES.
- 5. Presented Earth and Human Activity at Stanford ES.
- 6. Attended Commission on Mineral Resources Special meeting.
- 7. Presented Minerals in Society to kindergarten students at Rowe ES.
- 8. Attended and participated in CHOLLA (Connecting Hands Offering Lifelong Learning Adventures) meeting.
- 9. Presented to four second-grade classes on Minerals in Society at Scott ES.
- 10. Met with Green Valley High School's College and Career Center to discuss information about careers in mining. Also discussed plans to visit the school's career fairs in the future.
- 11. Participated in server clean-up day.
- 12. Shared 5-minute video of career presentation on with five elementary schools and published video on YouTube.
- 13. Presented Earth and Human activity to two fourth-grade science classes at Conners ES.
- 14. Presented Earth and Human Activity to fifth graders at Wolff ES.
- 15. Completed Whistleblower Training on Smart 21.
- 16. Assisted with land research for AML.
- 17. Started work on making a Tectonic video for distance learning.

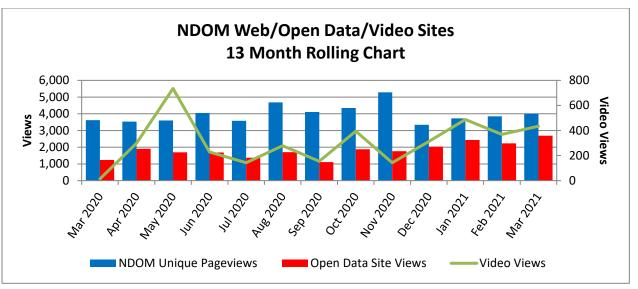
Fluid Minerals Program Manager:

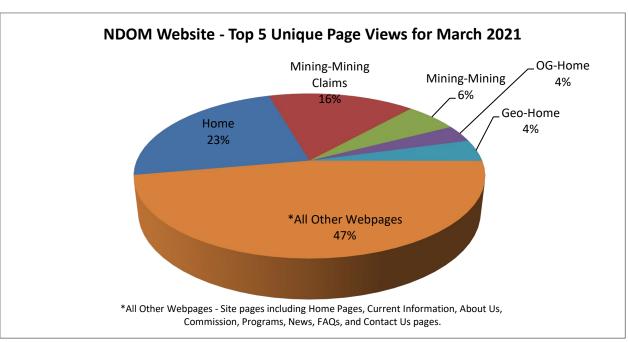
- 1. One geothermal permit was issued in March to NGP Blue Mountain 1 LLC for the Blue Mountain 34(31-23)-22 production well. NGP Blue Mountain 1 LLC is currently drilling the 11(73-22)-23 observation well, which will be used to 'listen' to the stimulation procedures of the upcoming injection and production wells to be drilled.
- 2. Thirteen geothermal and three oil permits have not been drilled. NGP Blue Mountain 1 has the two remaining permits discussed above. Ormat Nevada has nine geothermal permits, five at Wild Rose, three at Crescent Valley, and one at Dixie Meadows. Open Mountain Energy has two open TG well permits on a federal lease in the Wabuska area. Kebo Oil and Gas and West Grant Canyon Development each have one open drilling permit in Railroad Valley. Western Oil Exploration has one open permit in Newark Valley.
- 3. Five geothermal and two oil sundry notices were approved during March.
- 4. The ORNI 43 Tungsten Mountain 86(85)-21 and San Emidio 84-20 and 25(46)-28 injection wells are still waiting on BLM approval. Approval is being delayed at San Emidio while the EA is being completed.
- 5. 3PL Operating is currently establishing their Notice and bonding with the BLM for drilling up to four DMRE exploration wells in Railroad Valley.
- 6. All but one oil related wells were inspected during March. Due to extremely muddy conditions, I was unable to access one well south of the Pan Mine in the Pancake Range. The Tuscarora, Beowawe, Jersey Valley, and Blue Mountain Fields were also inspected. Rob, Courtney and I inspected the Tungsten Mountain Filed in early April. Courtney and I inspected the McGinness Hills Field the following day.

FY 2021 Well Inspections	Total Wells	Wells Needed for FY21	Wells Inspected	% of Total Needed	Wells Remaining
Geothermal (19 Locations)	456	152	263	173.0%	-111
Oil (22 Locations)	120	40	119	298%	-79
Totals	576	192	382	199%	-190

Website Activity

Period Mar 2021	NDOM Website Pageviews 5,661	NDOM Website Unique Pageviews 4,006	NDOM Website Top 5 Pageviews Home, Mining Claims, Mining, OG-	NDOM Open Data Site Views 2,693	NDOM Video Views
	- ,	,,,,,	Home, and Geo-Home	, , , , ,	
Mar 2020- Mar 2021	72,001	51,717		23,711	3,993





Top Visitors				
	Country	United States, Canada, India, (unknown), China, and United Kingdom.		
Mar-2021	State	Nevada, California, Texas, Colorado, and Kansas.		
	City	Las Vegas, Reno, (unknown), Carson City, and Parsons (Kansas).		

Video Views in March 2021	Top 5 Video Views		
434	Building a Web Mapping Platform, Mining in Nevada 18:22 mins., Weathering & Erosion Part 1, Nevada Mineral Explorer Web Application Demo, & SOSA 2021 Full.		