



**STEVE SISOLAK**  
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STATE OF NEVADA  
COMMISSION ON MINERAL RESOURCES  
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Thursday May 4, 2023

10:30 A.M.

**MINUTES**

Commissioners	Staff	Public
Josh Nordquist	Mike Visher via Zoom	Dana Bennett
Mary Korpi (joined at 11:51)	Rob Ghiglieri	
Art Henderson	Rebecca Tims	
Bob Felder	Anthony Walsh, DAG	
Nigel Bain	Lucia Patterson	
Randy Griffin via Zoom	Jim Faulds	
Stephanie Hallinan	Eli Mlawsky	

**CALL TO ORDER**

10:32 AM

**ROLL CALL**

All Commissioners were present except Mary Korpi. Quorum noted.

**PLEDGE OF ALLEGIANCE**

**COMMENTS BY THE GENERAL PUBLIC**

There were no public comments.

**I. AGENDA**

- A. Approval of the Agenda -Josh Nordquist requested a revision to the agenda to hear item IV.A. immediately after item III.D.

Motion to approve changes made by: No motion required to approve the change.

Unanimously approved.

**II. MINUTES**

- A. Approval of the April 17, 2023, meeting minutes

Motion to approve the April 17, 2023, minutes made by: Nigel Bain

Seconded by: Bob Felder

Unanimously approved.

III. NEW BUSINESS

A. Introduction of New Staff

Administrator Visher introduced new staff member Rebecca Tims. Rebecca provided a brief introduction about herself.

B. NBMG Online Geothermal Web Application Demonstration

Eli Mlawsky (NBMG) provided a live demonstration of the new NBMG geothermal web application.

**Josh Nordquist:** Do you get the visitor metrics?

**Eli Mlawsky:** Yes

**Josh Nordquist:** Any questions?

**Nigel Bain:** Is there a population of views?

**Eli Mlawsky:** Yes, it gets about 200 hits per month. The number is steadily growing.

**Stephanie Hallinan:** Does this include DWR data?

**Eli Mlawsky:** Yes

C. Review and Status of CMR-Approved NBMG Projects

Jim Faulds (NBMG) provided an update regarding the status of CMR-approved NBMG projects.

**Arthur Henderson:** What is being done about the 8% indirect cost rate? Rob, are you working on that?

**Robert Ghiglieri:** We looked at that and the only thing we could find was the all-agency memo that gives the University authorization to charge up to 8%. I spoke with other states such as Arizona, New Mexico, Utah, and Wyoming. They all pay indirect costs as well. Wyoming pays almost 40%. The best way to approach changes would be to do it on a contract-by-contract basis.

**Arthur Henderson:** Says up to 8%, it doesn't say 8%?

**Robert Ghiglieri:** They are allowed to charge up to 8%

**Arthur Henderson:** I still disagree with that. So, I have talked to some people that report to Brian, I haven't talked to Brian Sandoval yet, but I am going to talk to him. I don't think we should pay for that.

**Arthur Henderson:** I'd like to revisit the projects. The Railroad Valley report is late. This is a report on history, that one doesn't have any impact on the division. But the lithium report was supposed to be ready before the legislative session.

**Robert Ghiglieri:** Yes: the previous legislative session.

**Arthur Henderson:** Also, the Mineral Industry reports. Didn't we want that finished by December before AEMA?

**Robert Ghiglieri:** Yes

**Arthur Henderson:** So those two delays have caused some issues with the Division. Is that correct to say that?

**Robert Ghiglieri:** It's limited our ability to get the lithium report for the legislature with the many talks of mining at the moment as well as the MI report getting the information out to the general industry as well.

**Arthur Henderson:** It's important for us to know that. Sorry for the delays but they do have impacts. It's a serious consequence. And then of course this 8%, I've already talked about it and I'm not in favor of any additional funding until that's settled. Those are my viewpoints today.

**Jim Faulds:** The delays in the MI report were associated due to details I cannot discuss due to personnel issues.

**Arthur Henderson:** Yeah, I know, Things happen everywhere. But when you count on something you count on them. It's just important to know we counted on it, and it doesn't matter what the excuse is.

**Jim Faulds:** I'll say this though, I am being proactive on that. There are some aspects that I could see coming about a year ago, and that's why we are interviewing now for a new position. If I hadn't been proactive on that, we would have had a whole other year.

**Arthur Henderson:** I know it's not easy, I know there's excuses, but it is impactful. There are impacts to the Division. Basically because of the MI report and the Lithium report. I see from the agenda this is for possible action, right Josh?

**Josh Nordquist:** There are a couple requests from Jim. One is the no cost extension through June of 2024 for the lithium report and a no cost extension to December of 2023 Railroad Valley report.

**Arthur Henderson:** For me, I don't want to approve of any projects until the current ones are completed.

**Robert Ghiglieri:** Contract needs to be finalized for the FY24 projects.

**Josh Nordquist:** I also see in the budget there the Soda Lake report, this project for FY23-24, that wasn't mentioned in this list.

**Jim Faulds:** It's FY24 so yeah, we haven't started that.

**Josh Nordquist:** We still need to finalize the contract on that one as well.

**Jim Faulds:** All the others are completed. The only thing not completed in the FY22-23 agreement is that lithium report.

**Robert Ghiglieri:** Railroad Valley is a separate contract.

**Arthur Henderson:** If we say no, we don't extend, the report goes away, and we lose our money?

**Jim Faulds:** The lithium report would go away.

**Arthur Henderson:** And the Railroad Valley would go away too?

**Jim Faulds:** Correct

**Arthur Henderson:** What does that mean to our budget?

**Robert Ghiglieri:** Yeah, so what we would do is a work program to push the money forward that was obligated for FY2023 into FY2024.

**Josh Nordquist:** It's reflected in the forecast in your packet.

**Jim Faulds:** Railroad Valley project has a lot of momentum. It's just a matter of being careful with what's actually published.

**Mike Visher:** A lot of data that they're utilizing is historic and not in a digital format. The historical nature of the data requires a lot of QA/QC which is being done. Until someone with a trained eye reviewed it, you couldn't see that there were issues. It took time and a lot of back and forth with Jerry and Don to go through the data. There were some wells that were misassigned and that took quite a bit of time and that wasn't just an hour or two, it was weeks to try to figure that stuff out. Lucia, Val, and I have been working a lot with that. There is now information that is accurate and will be beneficial to understanding Railroad Valley but also the historic production in that valley and the geology. So, we will

have a really good product. Don and Jerry are very pragmatic and pay close attention to the data which is really nice.

**Bob Felder:** On a different topic, I've heard from a number of exploration geologists that there is no convenient access to the topo maps. I think this is a project the Bureau should consider what it would take to restore access for online topo maps. What kind of project what it would to restore that access?

**Lucia Patterson:** I have heard from several people that the products the entities are looking for are not there. USGS does provide some maps.

**Bob Felder:** Is there a project to support that for the exploration community that could get support?

**Eli Mlawsky:** It's tricky with UNR IT to back up other institutions' products. The data would need to be backed up on servers. We might run into issues trying to direct things available elsewhere.

**Lucia Patterson:** If I remember correctly from a conversation with Rachel Micander, I do believe the problem was that the server for Keck was dated and trying to get that migrated over, there have been some roadblocks. But Rachel definitely knows the answer because I got that from her, but it's been a few years.

**Bob Felder:** There is significant interest in this functionality being restored.

**Arthur Henderson:** Can we separate these two proposals in 22/23? Do all have to be addressed as one motion?

**Josh Nordquist:** We can address them as we see fit as one motion or two motions or action on one or multiple.

**Anthony Walsh:** 24/25 projects might not fit in to the category of approved already. I would be more comfortable with that on another agenda item next meeting essentially. The 2022/2023 projects that have already been approved we can vote on those however you want but I think the future projects have been slotted into this agenda item might need to be discussed at a later meeting.

**Josh Nordquist:** Mineral Industry reports, where are they in our budget?

**Robert Ghiglieri:** In category 9.

**Josh Nordquist:** Are they included in the base; I don't see a separate item in my report?

**Robert Ghiglieri:** So, it is included in the base contract that 97.2K approved per year. One year for the MI report, each year is sample curation and the last two years one being lithium and the other being the exploration survey. Every other year would be the exploration survey and one special project would be the lithium project.

**Mike Visher:** If I can speak to the FY24/25 proposal I agree with Anthony that it is a little premature. The other part is the budget is still being considered in the legislature. While we have included a place holder for the \$194,000 as the biennial contract that is being considered at the legislature right now and until the session is closed, we don't know where that will land out. I think it would be more appropriate to address the existing contracts on this agenda item.

**Arthur Henderson:** Rob, the 2024 budget ends in June?

**Robert Ghiglieri:** 2023 ends in June, FY 2024 starts July 1.

**Arthur Henderson:** The no cost extension ends in June 2024?

**Robert Ghiglieri:** So that would be the end of FY 2024.

**Arthur Henderson:** The one for the Railroad Valley is December 2023?

**Robert Ghiglieri:** It would still be in FY 2024.

**Arthur Henderson:** So, that's my comment, why are we going to limit Railroad Valley to December 2023 when we could just say June of 2024. Those guys are working hard. Let's just say June of 2024 instead of December 2023. It doesn't affect the budget at all?

**Robert Ghiglieri:** No, it does not.

**Arthur Henderson:** And you're ok with that?

**Jim Faulds:** We're ok with that, but we only have so many people to do work internally, so we stagger and schedule them in a way.

**Arthur Henderson:** This is just an administrative detail to say because I don't want you to come back in December and say I need one more month. We can just cover it now and manage it.

**Jim Faulds:** Yeah, we can manage that.

**Robert Ghiglieri:** By Making the extensions to June of 2024 it still gives authority to pay at any point between July 1 of 2023 and June 30 of 2024.

**Nigel Bain:** There's an impact to the lithium side. The litigation that could potentially be going on. Would that report change people's outlook on the approval of that project?

**Jim Faulds:** I'll just say again, apologies for those delays, I never thought the folks that agreed to do the project would bail. So, excuses right, but there are impacts. I'll just say the lithium report is very unfortunate. I agree, it's not out there now but the sooner we get that out there we'll be ahead of the game. But if this report is available for the next legislative session and not too beyond that, that will be a positive. That one in particular, is very difficult to manage and I would say that we learned our lesson and that's why we want to regroup and make these special projects more internal.

**Arthur Henderson:** I'm still not completely comfortable because you had some delays. Some experts in certain areas may not have been on your staff. We may need outside experts. It's a case by case, so I don't think we should put that into any kind of motion today.

**Jim Faulds:** In the future if we do external projects, we have to be very careful.

**Stephanie Hallinan:** Mentioned original outline for the lithium report project and the scope of the project was set up by Lisa (USGS) and there are some new objectives. What's the variability between those different scopes so the project can stay on target?

**Jim Faulds:** I don't think there's too much variability. I would say more focused, there would still be some significant discussion of Clayton Valley. I would say the general outline would be very similar but again rather than five pages on Clayton Valley and two on McDermitt it's five on McDermitt and two on Clayton Valley. That's very hypothetical.

**Stephanie Hallinan:** Individual scopes would be lined out?

**Jim Faulds:** I received agreement from Carolina (NBMG) to be the lead a couple weeks ago.

**Stephanie Hallinan:** I recommend going down that road might help repeating your scope and the management of that.

**Jim Faulds:** The necessary time they are saying yes, this whole process has taken a little bit longer. Everyone in this group has been very thoughtful.

**Josh Nordquist:** I suggest we focus on the extension requests for 2022/23 projects.

**Arthur Henderson:** I'd like to make a motion that we approve a no cost extension to put us through June 2024 for the Lithium report and the Railroad Valley report.

**Stephanie Hallinan:** seconded the motion.

Motion approved unanimously.

**Josh Nordquist:** I suggested to Jim we plan on coming back to the 2024 and 2025 requests at a later meeting. I think my note too is that there is some additional work in FY 2024 approved and we still have some work to get through and with this next year I think we need to see some performance improvements.

**Jim Faulds:** It's been quite a year. We lost directors and we are lucky to be where we are now.

**Bob Felder:** Art brings up a good point, and I am sure a hard one for you, in principle I agree to not pay any overhead to the University. I am not sure how realistic that is but, in the meantime, is there anything you can do to say to the public about pushback for future funding?

**Jim Faulds:** I did that from the get-go, and I went as high as I could and was told no, this is non-negotiable.

**Arthur Henderson:** This is kind of what we talked about last time, he's an employee, so they're not going to listen to him. What they say to him is different than what they say to us.

**Jim Faulds:** I think Rob and Mike might remember from a few years ago, I ran it up the ladder and to the extent that I could, but it was not negotiable from my side.

**Arthur Henderson:** We need to do something; I think in the last meeting we made more of a formal request that we propose some things, and we need to clarify. I'll have a meeting with Brian Sandoval. We will see what he thinks about that. It's hard for me to understand that when you're being given money and it's something you count on every year and for them to decide they get part of it with only a memorandum. Until we get a definitive answer that comes from the Governor or Brian Sandoval giving an explanation of why it's necessary, I'm going to stay opposed to it until we get something clearer.

**Jim Faulds:** I think when the conversation occurs then it might be important to emphasize that the assistance that we receive is essential to the State and many of our stakeholders in the State and essentially helps us keep the doors open for this fundamental facility.

**Arthur Henderson:** Email things to me that you would like me to reiterate to him. This 8% is crazy.

15-minute pause for lunch

**D. Update of NBMG Equipment Matching Funds Request to the Commission**

Jim provided a presentation on NBMG matching funds request (attached). The previously approved match was reduced from \$61,679 to \$31,000.

No questions or comments.

**E. NBMG Special Project for Consideration in FY 2024/2025 Biennium**

Jim Faulds provided a presentation (attached) for a special project for consideration for the 2024/2025 Fiscal Year

**Arthur Henderson:** Shouldn't this work be something that is done already?

**Jim Faulds:** If I had state funding we would. 1/3 of our staff is paid by external grants. State funding level is 50% of what it was in 2008.

**Arthur Henderson:** That's a problem for another person. Why did they do that to you? I don't know. The second comment is that I don't want to approve any projects until the old projects are finished. The third one is that the budget is still not approved.

**Josh Nordquist:** We will table this proposal for a subsequent meeting.

**F. Legislative Updates**

Administrator Visher provided a presentation on Legislative Updates (attached).

**Stephanie Hallinan:** Please refresh our memory on AB 313. What are the costs and impacts to the mines themselves?

**Mike Visher:** The Assembly Ways and Means Committee needs to look at how the bill would impact the State and counties, not necessarily the stakeholders. NACO is addressing that concern as well. There's some poor language in there that makes it seem like NDEP will have to determine whether the mining plan is economic or not and nobody was happy with that. I don't see a resolution on this bill that will satisfy enough folks to vote on it to take it to the next level, but we don't know because it's been declared Exempt.

**Robert Ghiglieri:** So, the two bills that Mike just referenced for the mining claims are actually HR1 under section 3. On the senate side, language was put out by Cortez-Masto and that is SB 1281 The Mining Regulatory Clarity Act of 2023.

**Stephanie Hallinan:** Did the wildlife commission have comments on SB 88?

**Robert Ghiglieri:** At the hearing in Senate Natural Resources, it was still pretty undefined, so it was hard to make comments on it. They're all very aware of what is the intent of the bill.

**G. Request for Support for the Nevada Earth Science Teacher's Workshop**

Deputy Administrator Ghiglieri presented a request for financial support for the teacher's workshop (attached).

**Bob Felder:** The decision was to support the teachers' travel completely. We raised as much money as we think we are going to need?

**Robert Ghiglieri:** Yes, so we have \$20,000 set aside. We felt that to encourage more turnaround, reimbursement will be provided for the teacher's travel expenses. There were 20 registered teachers as of last night. We are hoping to reach the 100 mark.

**Bob Felder:** Southern Nevada teachers might need an additional night, is it possible to reimburse them for the additional night?

**Robert Ghiglieri:** Yes, we are looking into this.

**Bob Felder:** Is it possible to charter a bus for the S. Nevada teachers?

**Robert Ghiglieri:** This will be brought up at the next meeting.

**Bob Felder:** Have you brought it to other companies for financial support?

**Robert Ghiglieri:** When I brought it up to Dana (NvMA), she felt that since the mining association members are already paying them, they should be the ones to pay for it. So, they are the ones that paid for the rest of the funding.

**Dana Bennett:** We felt that this made sense to build this into the Mining Association's budget for this year and \$15,000.00 was put in from the Mining Association. The rest came from GSN and Cyanco. If this turns out to be an effective way to get Southern Nevada teachers going, they can definitely build it in to future budgets.

**Motion to approve the request for the Nevada Earth Science Teacher's Workshop, made by:** Bob Felder

**Seconded by:** Mary Korpi

Unanimously approved.

**H. Review of the 2023 NDOM AML Summer Intern Program**

Deputy Administrator Ghiglieri provided a presentation (attached) reviewing the 2023 summer AML intern program.

There were no questions or comments.

**I. 2022 Annual Status and Mineral Production Overview**

Lucia Patterson provided a presentation (attached) on the 2022 Annual Status and Mineral Production.

There were no questions or comments.

**J. Nevada Mining and Land Withdrawal History Experience**

Lucia Patterson presented a live demonstration of the new “Nevada Mining and Land Withdrawal History Experience” web application.

**Nigel Bain:** Did you include the sources for all your information?

**Lucia Patterson:** Yes, those are located here at the bottom, with hyperlinks.

**Stephanie Hallinan:** This is absolutely great information, Lucia. I am definitely going to be sharing this because you’ve summarized so many of the things we deal with on public lands.

**Art Henderson:** I think we need to recommend to Mike that you keep your job.

**Mary Korpi:** This is absolutely amazing work with potential for so many areas of evaluation of past and future impacts.

**IV. OLD BUSINESS**

**A. Update on Fiscal Years 2023-2025 Budget and Forecast**

Rob provided a presentation (attached) on the FY 2023-2025 budget.

**Arthur Henderson:** Before we ask that you break that 8% out, I would like the 8% broken out.

**Robert Ghiglieri:** I reached out to Valerie Kneefel during this meeting for clarification. I want to point out that the memo states, that indirect cost rates may be less than those stated above but cannot be more.

**V. Commission Business**

**Monthly Staff Reports:**

No questions or comments.

**Next Commission meeting date:**

**Josh Nordquist:** Second week in August, week of the 14th?

**Bob Felder:** Can we do the week before?

**Josh Nordquist:** Thursday, August 10<sup>th</sup>. Location to be determined.

**COMMENTS BY THE GENERAL PUBLIC**

**Arthur Henderson:** Mike helped me resurrect some old reports on thorium, these were given to the new administration here in Nevada. Suggests that we revisit these.

**Mike Visher:** Tony, thanks for being our DAG, we wish you well in your next role.

**Anthony Walsh:** Today is my last meeting with the CMR/NDOM. I've accepted a new position with the Nevada Bureau of Consumer Protection.

**ADJOURNMENT**

**2:31 pm**

### **Matching Funds for NBMG Proposal to USGS Program**

NBMG submitted a proposal earlier this year to the National Geological and Geophysical Data Preservation Program (NGGDPP) administered by the USGS. The purpose of NGGDPP is to support the preservation, digitizing, rescue, organization, and dissemination of geologic and geophysical data. The program requires a 1:1 match on all funds awarded to a state geological survey. Thanks to enhanced funding, equipment purchases are now permitted with NGGDPP. However, match is difficult to come by for small to moderate sized state geological surveys, such as NBMG.

The NBMG 2023 proposal requested \$260,661 from the NGGDPP program. NBMG lacked match for the most of the equipment part of the request. The equipment request focused on enhancing the GBSSRL and expanding storage capacity in Stead. The request included:

1. **Stereo microscope with computer and LCD display** to facilitate education and analyses of rock samples, cuttings, and core; **\$6,300.**
2. **Handheld Laser Induced Breakdown Spectroscopy Analyzer (LIBS)** for analysis of critical mineral elements, including lithium, in core, cuttings, and rock samples; **\$41,375.**
3. **Digital storage and infrastructure** (dedicated network attached storage): Server to house tens of terabytes of data; **\$7,516.**
4. **Storage containers and construction** at Stead to house core, cuttings, and documents that cannot be stored at GBSSRL, which is near capacity; **\$102,804.**

The total request for equipment came to **\$157,995**. NBMG lacked **\$61,679** in match for this part of the proposal, and the Commission approved funds in February 2023 for that amount. However, the request for storage containers and construction at Stead was not awarded, reducing the equipment portion of the proposal to \$55,191 and also reducing the needed match. However, reduced staffing and inflation have led to additional challenges in meeting the match for this part of the proposal. NBMG therefore requests a total of **\$31,000** to fully cover the required match for this proposal and permit acquisition of the first three equipment items listed above, which is a significant reduction from the originally requested and approved \$61,679.

## **Special Project: Geologic Mapping and Mineral Resources Showcase**

### **Nevada Bureau of Mines and Geology (NBMG)**

NBMG's research and mapping of natural resources are critical to Nevada's economy and improving public safety. This mapping helps to understand the origin and distribution of mineral deposits and energy resources around the state. The detailed geologic maps published by NBMG are commonly used for a variety of applications and over a period spanning decades.

The publications-communications-web team within NBMG Cartography & GIS proposes a collection of engaging communication pieces to showcase geologic mapping and recent mineral resources work in Nevada. This project involves organizing and synthesizing existing materials into meaningful and more effective communication media that reaches a broad audience, including a story map with integration of interactive features such as video snippets, animations/sliders, and maps, as well as an infographic-style dashboard of geologic mapping statistics. Publication of an educational poster, updates to static web content on the main NBMG website, updates to specific web applications, and organization and preparation for a future transition to a new NBMG website are additional outcomes of this project.

#### **Specific deliverables:**

##### Year 1:

- A. Multi-media story map focusing on 3 main topics: 1) "Applications of Geologic Mapping", highlighting recent Earth MRI mapping projects on critical minerals and other notable applications that benefit Nevada; 2) "Geologic Mapping in Nevada through Time", featuring an animation or time slider showing mapping progression over time; 3) "How Geologic Maps are Made", educating on the process to create a geologic map.
- B. An accompanying educational poster describing the process to create a geologic map would also be officially released as an NBMG publication, making it available for use at NMA teacher workshops or other outreach activities. A QR code pointing to the story map would be included on the poster.

##### Year 2:

- A. Dashboard designed for stakeholder engagement that displays current geologic map statistics, which could include 1) percentage of mapping in the state, counties, or other regions; 2) footprints of active mapping; 3) information about funding support from federal programs; 4) counts of new maps and GIS conversions; 5) percentage of mapping in the state supported with specific funding.
- B. NBMG white papers and rack cards pertaining to geologic mapping, economic geology, etc. would also be modernized further leveraging the content created for the story map, so that they are readily available for the next legislative session and other outreach opportunities.

Ongoing across both years: 1) The "Geologic Maps in Nevada" web application would be brought up to date; 2) stakeholder suggestions for improvement would be integrated into the "Nevada Geology" web application; 3) out-of-date content on static web pages of the main NBMG website related to geologic mapping and mineral resources would be updated, including development or consolidation of pages as required to organize and prepare for a larger website transition in the future; 4) cleanup of code and server files for static website in preparation for future website transition; 5) analysis of navigation paths to geologic maps and datasets in an effort to decrease the number of clicks to these resources in the future

NBMG website; 6) development of site map for NBMG website to document organization and navigation paths to prepare NBMG for transition into the University CMS.

**Benefits:**

- A tool for legislators and stakeholders to better understand how geologic mapping positively impacts Nevada.
- A showcase communication piece to be used for the 150th anniversary of the University, and later for the 100th anniversary of NBMG due to the time-visualization components integrated into the story map.
- A case study of what can be provided for other programs (i.e., critical minerals, geothermal, other mineral resources, economic geology, and geologic hazards).
- An outreach tool for NMA teacher workshops or other activities.
- A recruiting tool.
- Brings attention to the ramping up of geologic mapping efforts over time and new Earth MRI mapping efforts.
- Supports feedback provided during past NBMG Advisory Board meetings to improve web presence and produce communication pieces to better showcase how NBMG contributes to society, with legislators and general public in mind as a target audience.

**Project leads:** Jennifer Vlcan, Christina Clack

Jennifer Vlcan and Christina Clack will lead this project with support from Andrew Hauck. Collaborative input and feedback will be provided by Seth Dee and others within the NBMG Geologic Mapping Program. Funding would provide partial salary support to Jennifer Vlcan, Christina Clack, and Andrew Hauck to perform the tasks of this project. In addition, we request funding for two interns and travel for project staff to attend the ESRI Users Conference for related training and workshops.

**Budget:**

<b>Project Needs (2-year project period)</b>	<b>Requested Funding</b>
Salary (spread over 2 years)	
Jennifer Vlcan	\$19,297
Christina Clack	\$27,192
Andrew Hauck	\$14,442
Fringe @ 41.3% for classified staff	\$25,165
2 Interns @ \$1500/semester	\$3,000
Conference travel, 3 staff	\$7,000
<b>Total Direct Costs</b>	<b>\$96,096</b>
<b>Total Indirect Costs (8% F&amp;A)</b>	<b>\$7,688</b>
<b>GRAND TOTAL</b>	<b>\$103,783</b>

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

(As of April 26, 2023)

- **AB71 (Environmental Justice – Assemblywoman Peters)** – Requires the Division of Environmental Protection of the State Department of Conservation and Natural Resources to conduct an interim study concerning environmental justice. Amended once in first committee. **Declared Exempt.** Not yet voted on.
- **AB204 (Mill site claims – Assemblywoman Hansen)** – Revises provisions governing mill sites. Did not receive a hearing. No further action allowed.
- **AB219 (Open Meeting Law – Assemblywoman Considine)** – Makes various changes to the Open Meeting Law. Amended once in first committee. Makes changes to timing and frequency of public comment periods and means to provide public comment. Passed unanimously by Assembly 4/24.
- **AB312 (Environmental Justice - Assemblywoman Peters)** - Establishes provisions relating to environmental justice. Amended once in first committee. Proposes to create an Environmental Justice Advisory Council within the Department of Health and Human Services, defines its membership and reporting requirements. **Declared Exempt.** Not yet voted on.
- **AB313 (Pit Lakes – Assemblywoman Peters)** -Revises provisions relating to the reclamation of exploration projects and mining operations; revises requirements relating to a plan for reclamation; requires certain state agencies to prepare reports relating to certain impacts of pit lakes and mining. **Declared exempt.** Amended once in first committee. Not yet voted on.
- **AB315 (Geothermal Report – Assemblywoman Hardy)** – Requires Governor’s Office of Energy to coordinate with certain entities to recommend best practices for issuing a permit for geothermal energy and conduct an interim study relating to geothermal resources. **Declared exempt.** Amended once in first committee. Not yet voted on.
- **AJR3 (Environmental Justice – Assemblywoman Peters and Assemblyman Watts )** - Proposes to amend the Nevada Constitution by adding a new section which: (1) guarantees each person the right to a clean and healthy environment; (2) mandates a trust obligation of the State to conserve, protect and maintain certain environmental resources; (3) requires the State fulfill its trust obligation equitably for all beneficiaries regardless of race, ethnicity, gender, geography or wealth; and (4) prohibits the State, whether through action, inaction or the action of others, from causing the unreasonable degradation, diminution or depletion of the environment. Heard but not passed out of committee. No further action allowed.
- **SB88 (Study of Natural Resource Agencies – Assemblyman Watts)** - This bill requires the Joint Interim Standing Committee on Natural resources to conduct a study during the 2023-2024 interim concerning state agencies that regulate natural resources in this State. The study must include, without limitation, an examination of the composition, mission and scope of such state agencies. The Committee must examine, without limitation, the Board of Wildlife Commissioners, the Commission on Mineral Resources, the State Department of Conservation and Natural Resources and the State Environmental Commission. Further, the Committee must submit a report of its findings and any recommendations for legislation relating to the study to the 83rd Session of the Nevada Legislature. **Declared Exempt.** Not yet voted on.

- **SB210 (Revises provisions governing state Boards and Commissions – Government Affairs) –** Requires that appointments must, to the extent practicable and except as otherwise required by law, represent the diversity of the State. Section 3 of this bill requires boards, commissions and similar bodies to submit to the Governor a list of persons qualified for membership on such a board, commission or similar body within 60 days after a vacancy occurs. Passed by Senate 16-4.



NEVADAMINING.ORG

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April 25, 2023

Mike Visher, Administrator  
Nevada Division of Minerals  
400 W. King Street, #106  
Carson City, NV 89703

Re: Request for financial support of the Nevada Earth Science Teacher's Workshops

I am writing to request continued financial support for the Nevada Earth Science Teacher's Workshops from the Nevada Commission on Mineral Resources. The Workshop is co-sponsored by the Nevada Division of Minerals and the Nevada Mining Association.

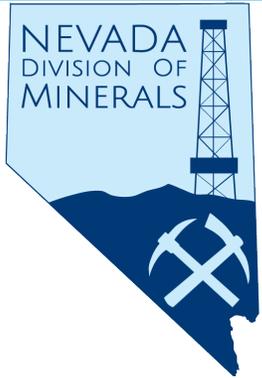
Previously, the Commission has generously agreed to multiple year financial commitments to help fund the teacher workshops, providing \$15,000 annually. This funding has been used to purchase necessary materials required to host earth science workshops for educators in both northern and southern Nevada each year. These materials include educational rock boxes, earth science reference books for each attendee and other educational materials that help teachers take what they have learned at the workshops back into their classrooms. Recognition is given to the Nevada Division of Minerals in all advertising opportunities to ensure that attendees are aware of the support received, and the partnership between the Division and Nevada Mining Association.

We are requesting funding, at the rate of \$15,000 per year for a period of two years, totaling \$30,000 in support of the Nevada Earth Science Teachers Workshops for fiscal years 24 and 25. This funding will be applied towards the same resources and materials as in previous years. The funds will be managed by the Division.

We appreciate your consideration of this request and look forward to your continued support.

A handwritten signature in blue ink, appearing to read "Allison Anderson", with a long horizontal flourish extending to the right.

Allison Anderson, Chair  
Nevada Mining Association Education Committee



# SUMMER 2023 INTERN PROGRAM



Target Location and Interns

Commission on Mineral Resources

May 4<sup>th</sup>, 2023

# INTERN FIELD WORK

## Current AML Statistics

24,681 Inventoried Hazards

20,434 Hazards currently Secured (82%)

127,350 Inventoried Non-Hazards

## 2022 Intern Statistics

235 Inventoried Hazards

3,000 Inventoried Non-Hazards

195 Hazards Secured

340 Hazards Revisited

## Intern Statistics avg. (2007-2022)

431 Inventoried Hazards

4,472 Inventoried Non-Hazards

219 Hazards Secured

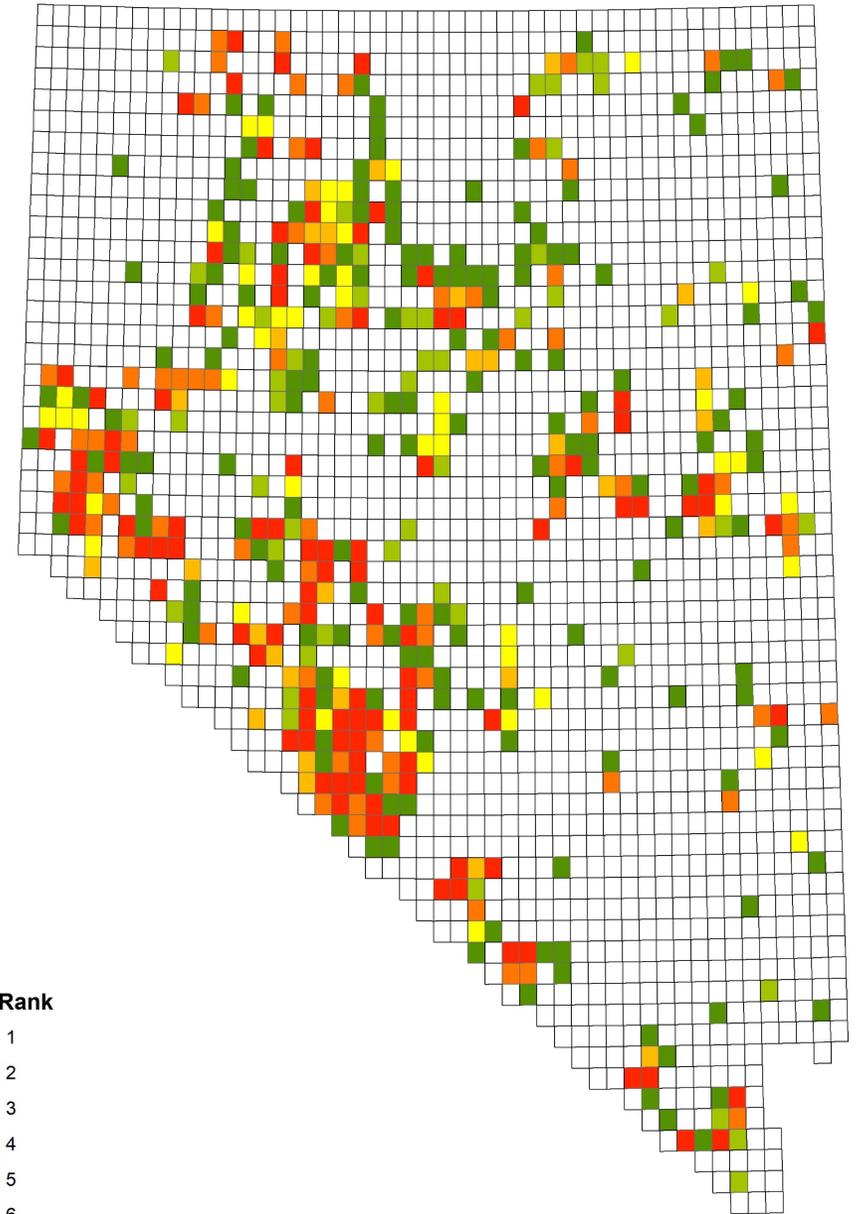
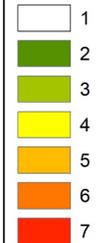
277 Hazards Revisited



# HAZARD RANKING

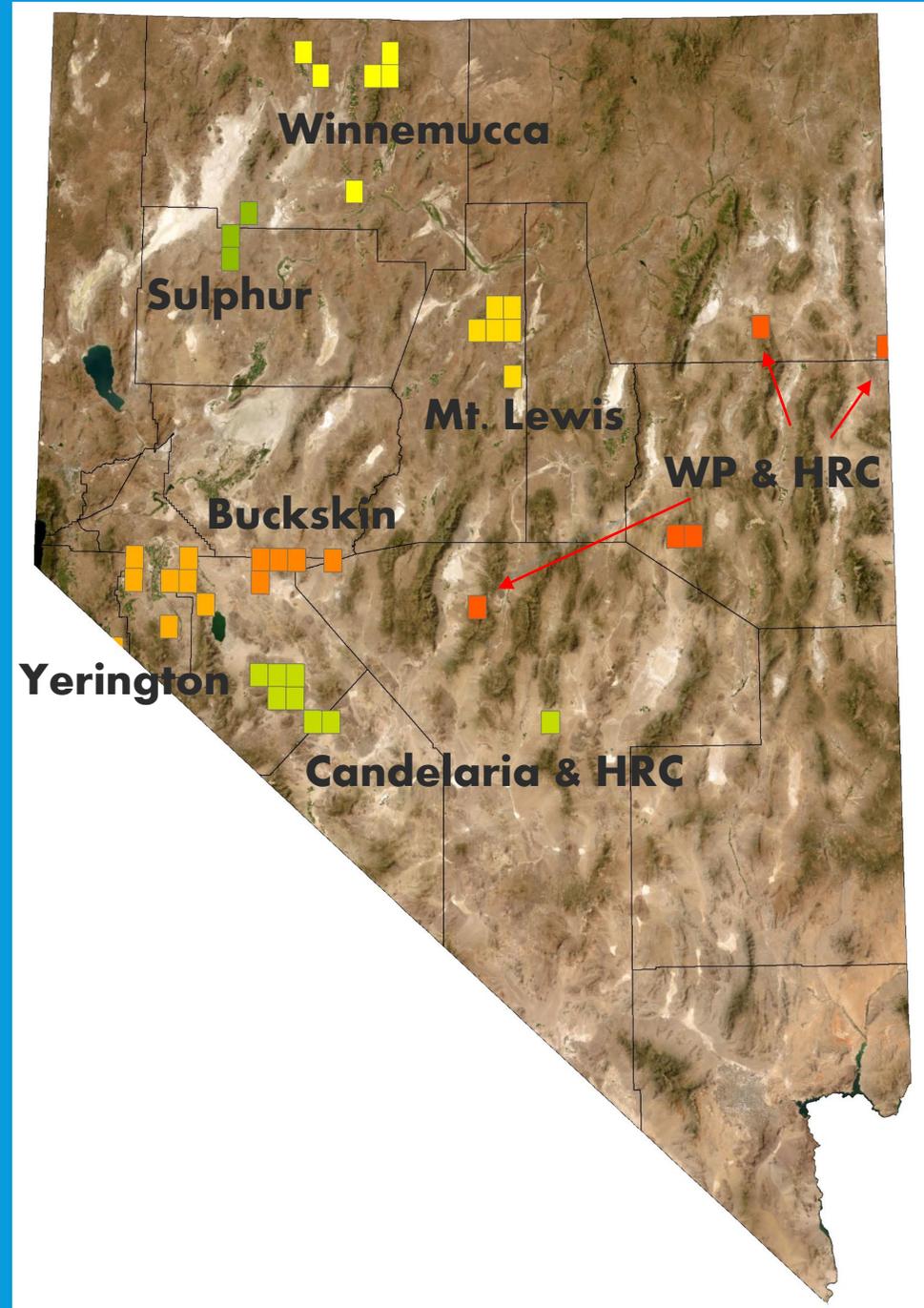


TopoRank



# REGIONAL TARGETS

Dates	Field days	Field areas
May 22 – 26	1	Local Training
May 30 – June 2	3	Sulphur
June 5 – 9	5	Candelaria
June 12 – 16	5	Mount Lewis (NDEP Project)
June 20 – 23	4	Winnemucca
June 26 – 30	5	Mount Lewis (Mop Up)
July 3 – 7	4	Yerington
July 10 – 14	5	Yerington (Mop Up)
July 17 - 21	5	Raw Hide
July 24 – Aug 2	10	White Pine County and HRC Vetting
Aug 7 - 11	5	Local Work - Clean up



# INTERNS

## *Lindsey Smith –*

University of Nevada, Reno  
Junior – Geological Engineering  
Relevant Background – Returning Intern,  
One of NDOM's Top Performing Interns  
Overall.

## *Tim Miller –*

University of Nevada, Reno  
Junior – Geological Engineering  
Relevant Background – GIS and Python  
Scripting, Avid Backpacker and Hiking

## *Maxime Arnault –*

University of Nevada, Las Vegas  
Junior – Geologist  
Relevant Background – Wilderness First Aid  
Cert, OSHA, MHSA, Rock Climber, and  
Hiking

## *Leroy Evans –*

College of Southern Nevada, Las Vegas  
Junior – Environmental Science  
Relevant Background – AML enthusiast,  
Professional Fence Building, and Hiking

# INTERNS

## **Juan Diaz –**

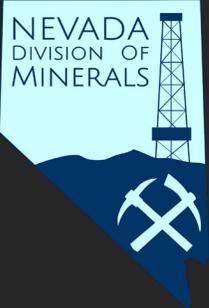
University of Nevada, Reno  
Junior – Environmental Science  
Relevant Background – Extensive Off  
Roding in Rural Nevada, National Guard,  
Fencing Building Experience,

## **Falan Rose –**

University of Nevada, Reno  
Sophomore – Metallurgical Engineering  
Relevant Background – ArcGIS, Off  
Roding Skills, Fence Building Experience,  
Hiking

## **Jake Cheney –**

University of Nevada, Reno  
Junior – Mine Engineering  
Relevant Background – Extensive Ranch  
Work and Fence Building, Off Roding  
Skills, and Backcountry Navigation  
Experience



# 2022 Nevada Mineral, Oil and Geothermal Production



Lucia Patterson, GIS specialist-geologist

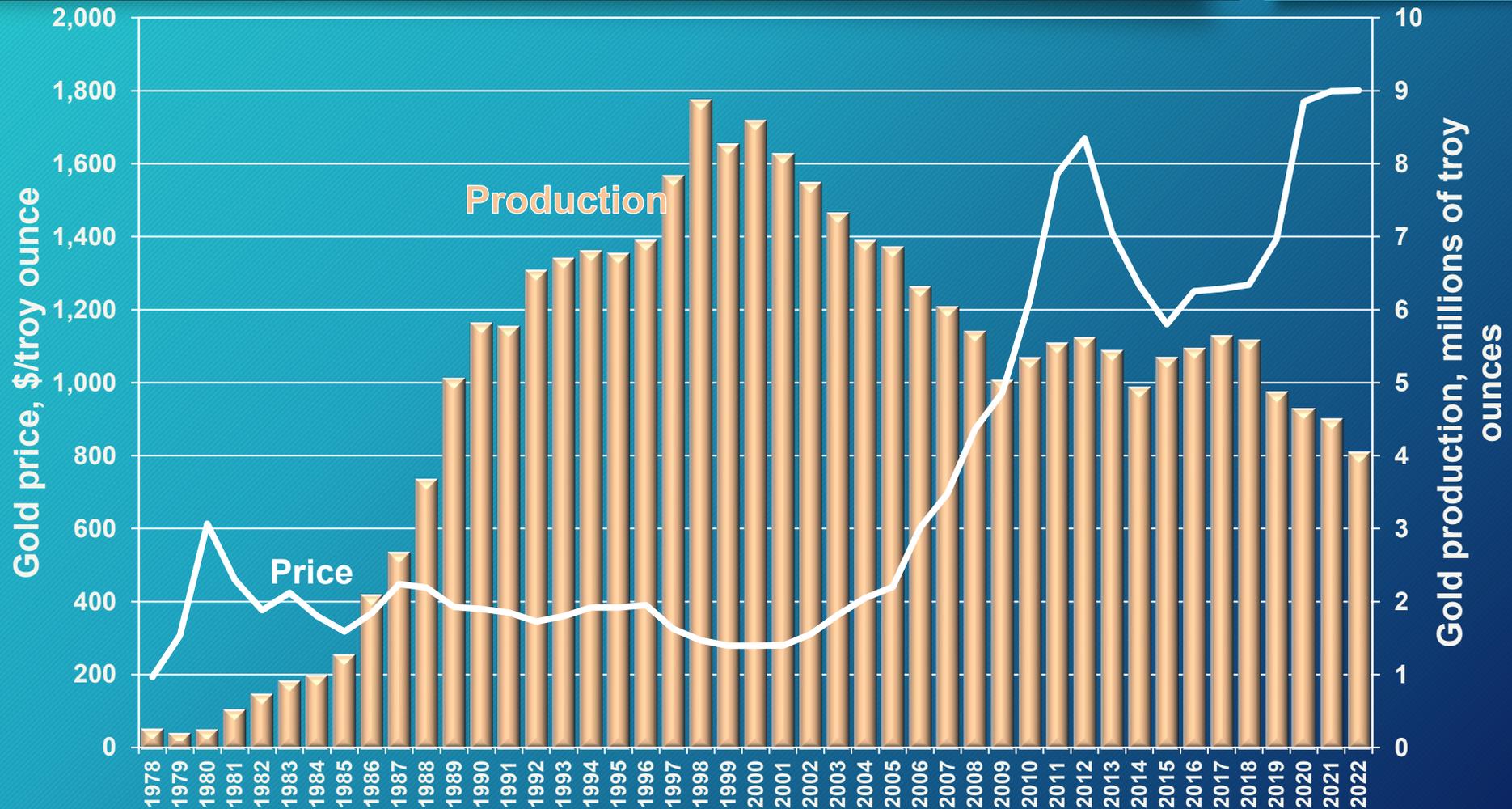
Nevada Division of Minerals

# Nevada Gold



## 2022 Production:

- ✘ 4.04 Million ounces
- ✘ -10.2% vs. 2021
- ✘ 30 mining operations
- ✘ 17 operators
- ✘ 39% of production from the Carlin Trend (Carlin ops, Betze-Post, Meikle, Arturo)



All data is preliminary and is subject to change

# 2022 Production By Operator

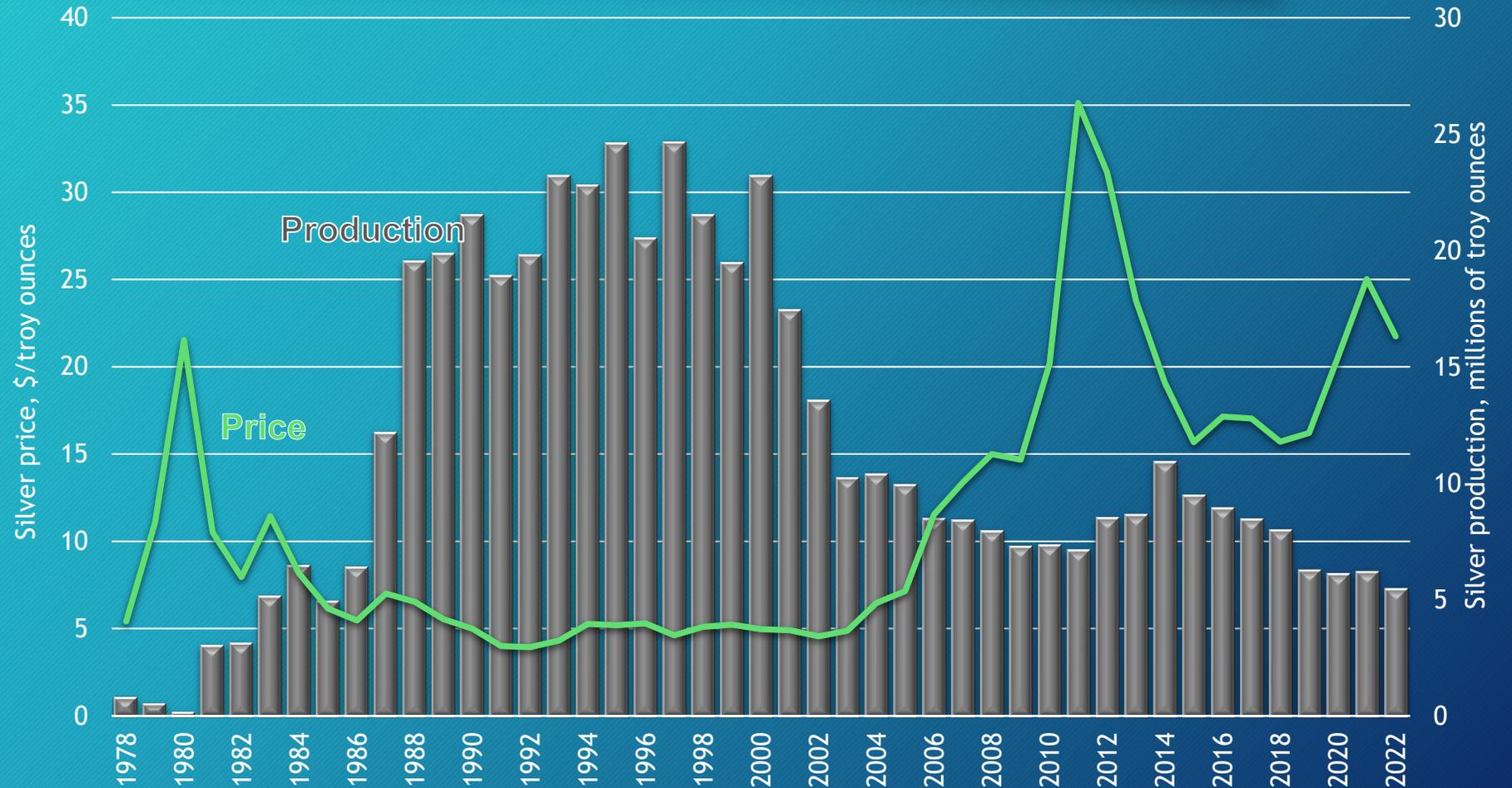
<b>2022 NEVADA METAL PRODUCTION, BY PRODUCER</b>				
Ranked by gold production				
<b>Operator</b>	<b>Gold (ozs)</b>	<b>Silver (ozs)</b>	<b>Copper (lbs)</b>	<b>Moly (lbs)</b>
Nevada Gold Mines	3,035,337	1,315,547	31,341,857	
Kinross	433,033	619,651		
SSR Mining	194,668	2,619		
First Majestic Silver	72,411	NR		
Florida Canyon Mining (Argonaut Gold)	49,440	30,414		
Calibre Gold	43,186			
KGHM International	41,346	256,312.00	108,416,295	275,620
Walker Lane Minerals	41,232	57,058		
Coeur	34,735	3,061,924		
i-80 Gold	27,236	9,000		
McEwen Mining	26,663	648		
Hycroft Mining	15,837	38,744		
Rawhide Mining	13,441	56,847		
Borealis Mining	11,957	19,815		
Gold Acquisition Corp.	2,246	5,193		
Hecla (Klondex)	2,205	NR		
Geo-Nevada	4	4		
Mineral Ridge Gold	0	0		
Nevada Copper	NR		2,011,000	
<b>Totals:</b>	<b>4,044,977</b>	<b>5,473,776</b>	<b>141,769,152</b>	<b>275,620</b>

# Nevada Silver



## 2022 Production:

- ✂ 5.47 Million ounces
- ✂ -12% vs. 2021
- ✂ 24 mining operations
- ✂ 14 operators

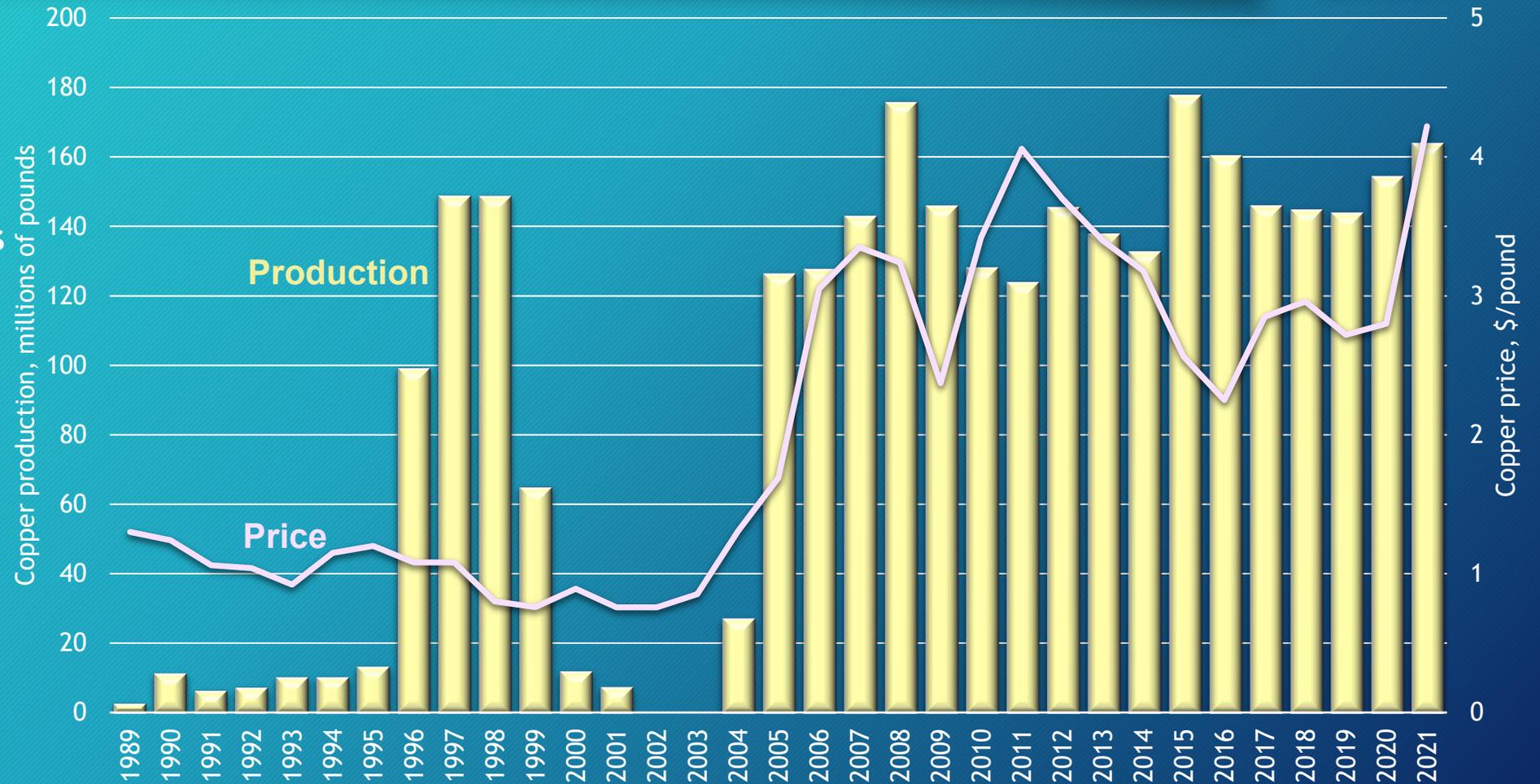


# Nevada Copper



## 2022 Production:

- ✂ 141.77 Million pounds
- ✂ -13.4% vs. 2021
- ✂ 3 mining operations
- ✂ 3 operators

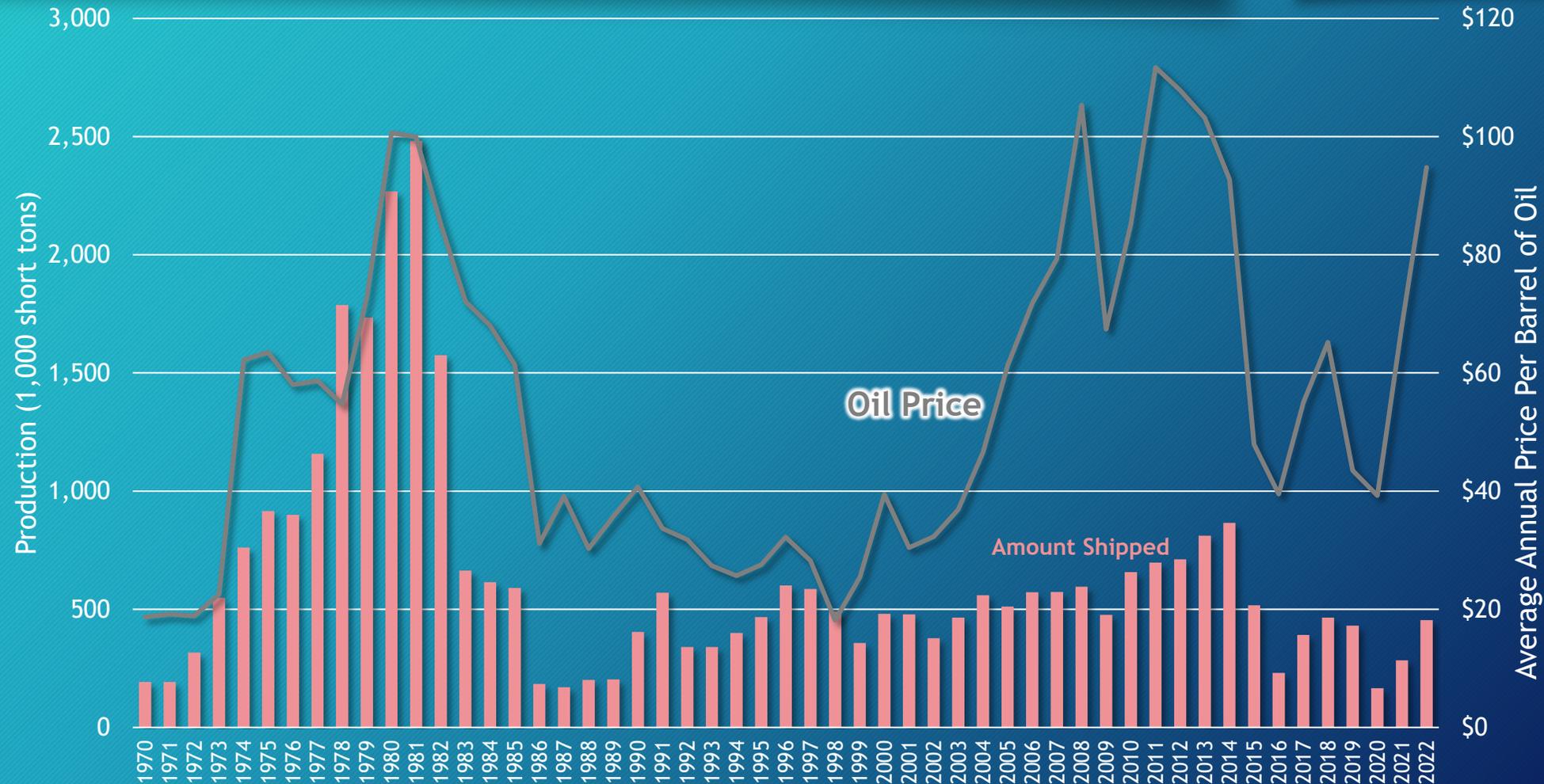


# Nevada Barite



## 2022 Production:

- ✂ 453,746 tons of barite shipped
- ✂ +60% vs. 2021
- ✂ 4 operations
- ✂ 4 operators

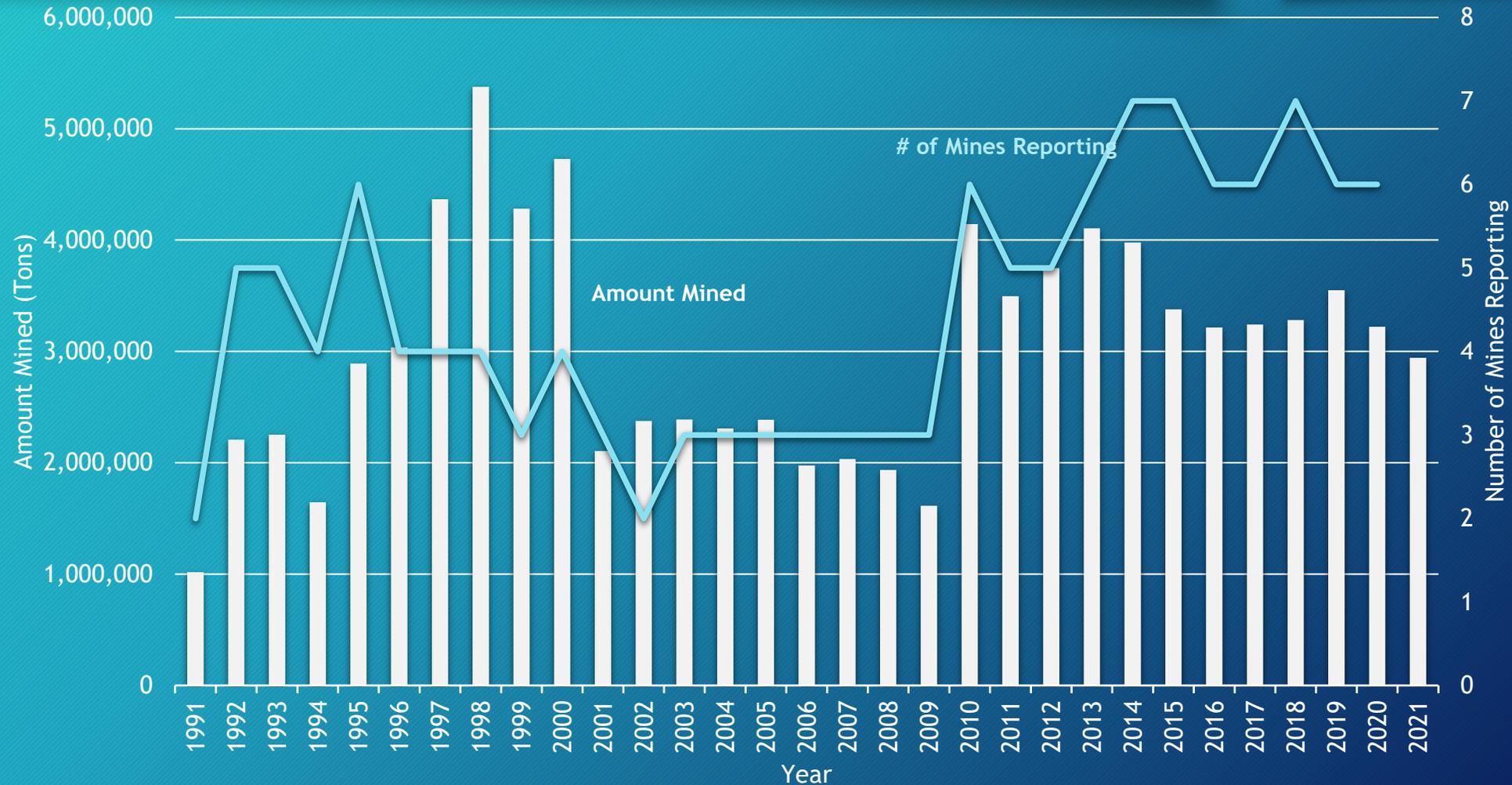


# Nevada Limestone - Waiting for 2022 data



## 2021 Production:

- ✘ 2.94 Million tons of limestone
- ✘ -8.7% vs. 2020
- ✘ 6 mining operations
- ✘ 4 operators



# Other Industrial Minerals Mined/Produced in 2022



- ✂ 8,301,221 lbs of lithium carbonate shipped
- ✂ 1,758,184 tons of gypsum
- ✂ 771,800 tons of silica sand shipped
- ✂ 122,483 tons of magnesium oxide shipped\*
- ✂ 327,293 tons of diatomite
- ✂ 18,000 tons of salt shipped
- ✂ 819 tons of perlite

\* Only producer in US

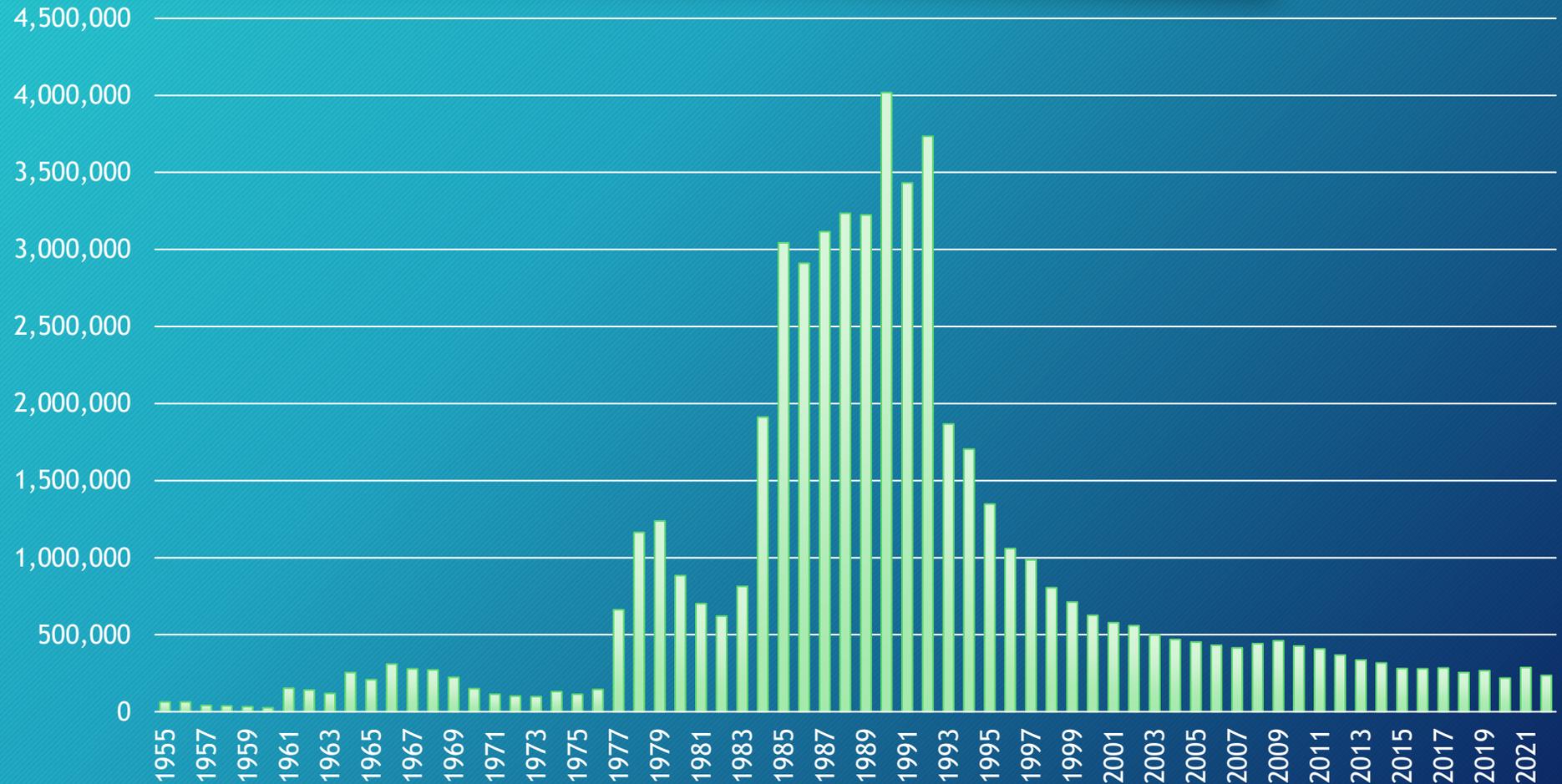


# Nevada Oil



## 2022 Production:

- ✂ 223,233 barrels
- ✂ -17.9 vs. 2021
- ✂ 1955-2022 cumulative production 55,209,810 barrels



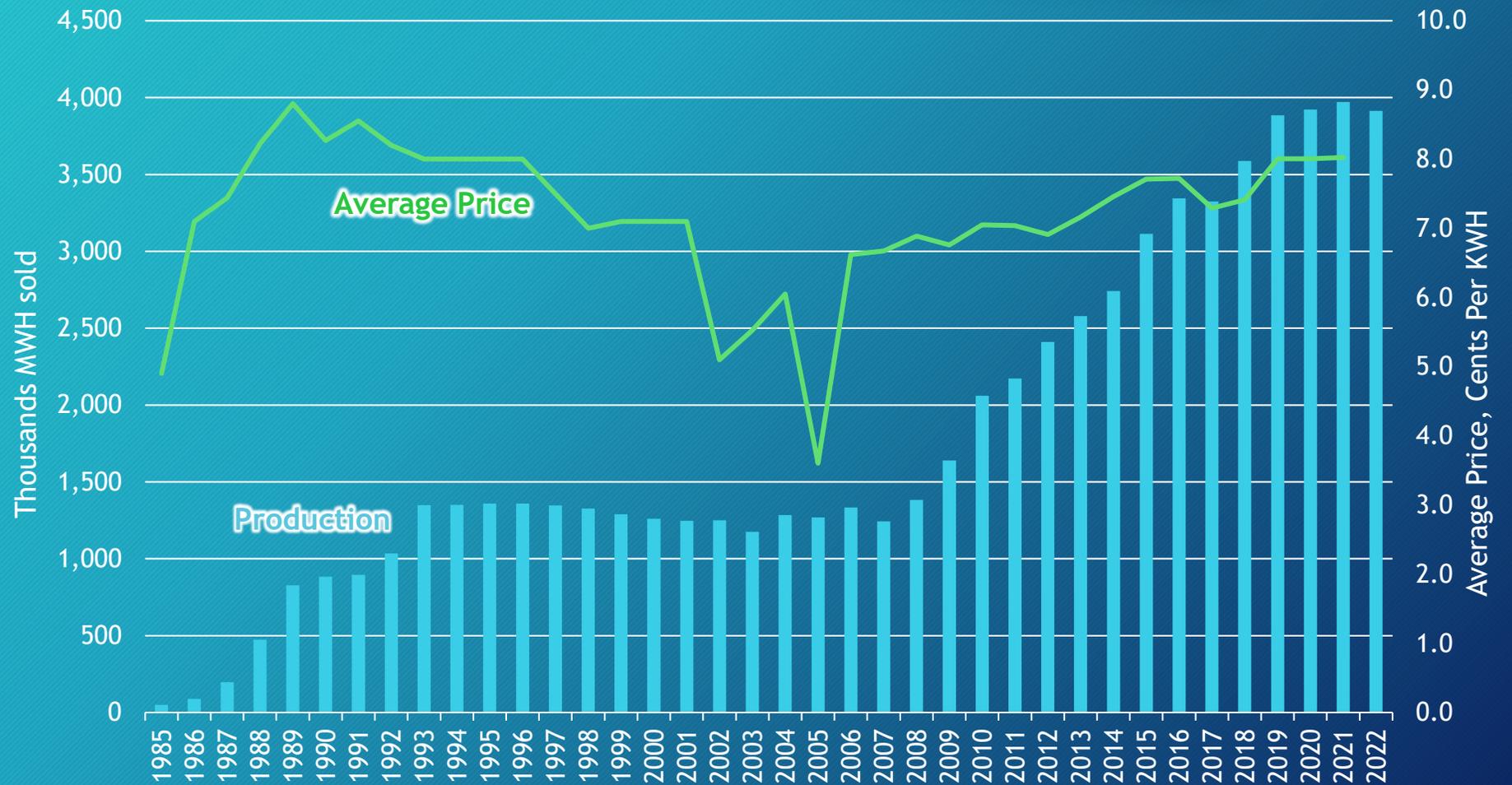
# Nevada Geothermal



## 2022 Production:

✂ 3.9 million megawatt hours sold

✂ -1.6% vs. 2021



# Nevada Production Application

## Nevada Production Data 1987 - 2021

Select Year to Display Production Totals:

- All -

< 1 of 44 >

Year	2021
Silver (oz)	6,218,814
Gold (oz)	4,502,365
Copper (Lbs)	163,732,694
Molybdenum (Lbs)	240,000
Barite Shipped (Tons)	283,779
Clay (Tons)	1,259,728
Diatomite (Tons)	311,700
Dolomite (Tons)	339,175
Gypsum (Tons)	2,538,598
Limestone (Tons)	2,941,577
Lithium Carbonate (Tons)	12,693,382
Perlite (Tons)	3,728
Quartzite (Tons)	5,300
Salt (Tons)	16,000
Silica Sand (Tons)	1,000,000
Oil (Barrels)	223,233
Geothermal K MWh	3,972

Search

- 327 Apex Mine - Gold
- 327 Apex Mine - Silver
- Ach-dayton Joint Ve
- Adams Claim Gypsu
- Adams Claim Gypsu
- Adelaide Crown Mir
- Adelaide Crown Mir
- Alligator Ridge Mine - Gold
- Alligator Ridge Mine - Silver
- Alligator Ridge Mine - Mercury
- Amargosa Clay Operation - Bentonite
- Amargosa Clay Operation - Sepiolite
- Amargosa Clay Operation - Saponite
- Amy Mine - Gold
- Ana Mine - Copper
- Ana Mine - Molybdenum
- Apex Plant - Limestone
- Apex Quarry And Plant - Dolomite

### Production Filters 2

Select Commodity if desired then filter on ONE year, the filter will not display correctly for more than one year.

Commodity is

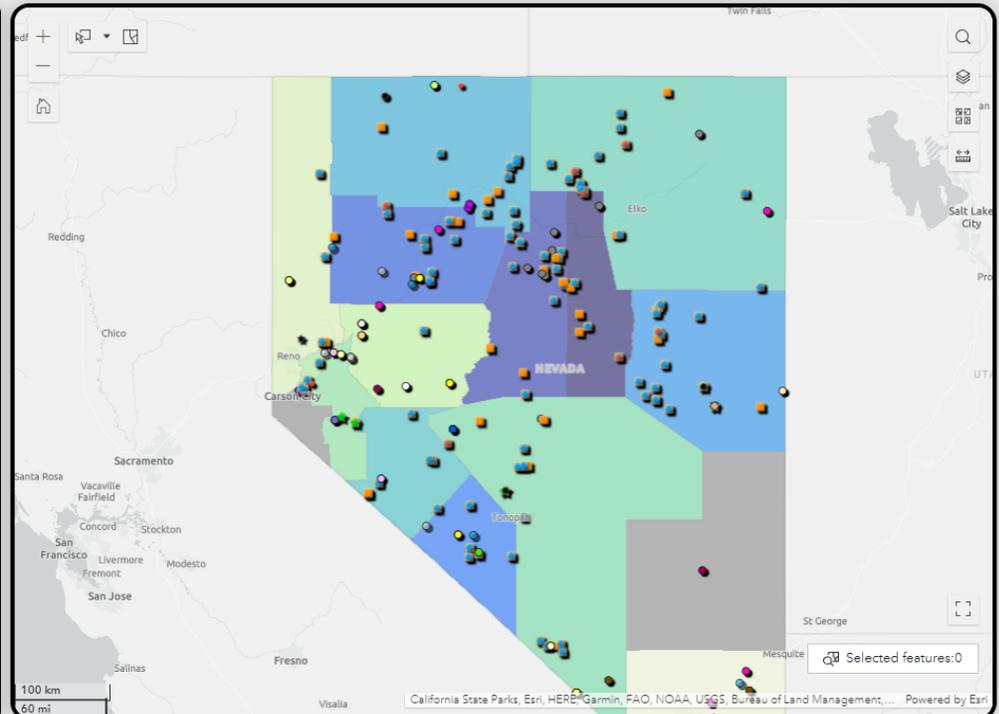
- All -

1987

1988

1989

[Click Here to view Major Mine Publications](#)



**CMR-Division of Minerals - 2022-2025 Budgets and Forecasts (as of 4/26/2023)**

**Revenue**

GL #	Description	FY22 Actuals	FY23 Authority	FY23 YTD	FY23 Forecast	FY24 Forecast	FY25 Forecast	Remarks
2511	Balance Forward Previous Year	2,624,665	3,031,285	3,031,285	3,031,285	2,641,937	2,259,452	
3578	BLM Grant	200,000	200,000	155,425	200,000	350,000	350,000	BLM grant funding AML work. \$200k grant awarded 9/6/21, anticipate similar amount thru FY25
3580	USFS Assistance Agreement	80,349	150,000	0	25,000	80,000	80,000	USFS assistance funding AML work
3584	NPS Grant	77,787		0	0	0	0	National Park Service funding for AML work (unknown future funding)
3654	Oil Production Fee	22,668	37,907	24,609	36,000	36,000	36,000	\$0.15 per bbl fee for oil production annually (\$0.05 from 12/20 - 10/21)
3717	Oil Permit Fees	4,400	3,300	3,000	3,000	3,000	3,000	Permit fees for new oil and gas wells
3718 & 3727	Mining Claim Fees	2,644,100	2,114,150	2,485,110	2,750,000	2,640,000	2,534,400	Mining Claim fees @ \$10/claim filing, forecast for FY23, -4% for FY24, -4% for FY25
3736	Geothermal Fees	156,550	160,800	179,300	180,000	180,000	180,000	Annual fee and permit fees for geothermal wells and permitting
3740	Dissolved Mineral Resource Fees	8,000	2,000	4,000	8,000	8,000	8,000	Permit fees for DMR (lithium brine) well permits
3770	Surface Disturbance Fee (AML)	92,080	81,740	14,380	16,980	80,000	80,000	\$20 per acre fee for new mine surface disturbance, FY23=12-year avg.
4011	Copy Machines - Sales to Public	0	27	0	0	0	0	Copying charge for Public Records Request
4027	Publication Sales (AML signs)	2,937	1,210	3,196	4,000	4,000	4,000	AML signs sold at office
4218	Credit Card Rebate	294			294	294	294	
4311	Medallion Royalty Fee	253	1,304	0	253	253	253	Fee for minting of medallions with State seal remitted to NDOM
4326	Treasurer's Interest	24,971	40,990	29,631	40,000	40,000	40,000	Interest we receive for money deposited with Treasurer
4611	Furlough Reimbursement		13,434	13,434	13,434	0	0	One-time ARPA reimbursement for FY22 furloughs
4620	Transfer from Recl. Bond Pool	58,057	80,793	0	30,000	30,000	30,000	Fee from Bond Pool for NDOM Management
4669	CARES Act Reimbursement	0			0	0	0	Federal funds used to offset pandemic related expenditures
<b>REVENUE TOTAL</b>		<b>\$5,997,111</b>	<b>\$5,918,940</b>	<b>\$5,943,370</b>	<b>\$6,338,246</b>	<b>\$6,093,484</b>	<b>\$5,605,399</b>	

**Expenditures**

CAT #	Description	FY22 Actuals	FY23 Authority	FY23 YTD	FY23 Forecast	FY24 Forecast	FY25 Forecast	Remarks
01	Personnel (Sal.,WC, PERS,OT)	1,183,314	1,315,261	836,928	1,342,893	1,545,613	1,635,150	FY22/23 is as in Leg-Approved Budget plus \$40k (OT), 1% COLA (FY23), 10% COLA in FY24, 4% COLA in FY25, FY24 +86k new GIS (9 mos.), FY25 +114k (GIS)
02	Out-of-State Travel (Staff, CMR)	16,381	28,605	24,512	27,000	33,642	38,357	FY23 as in budget, FY24/25 as proposed
03	In-State Travel (Non-AML)	11,966	12,900	9,195	12,900	15,425	15,425	Travel, lodging and per-diem within State, as in budgets
04	Carson Operating Expenses	105,272	113,134	97,259	113,134	122,992	122,992	Rent, Operating supplies, as in budgets
05	Equipment	1,210	1,706	860	1,706	3,960	3,999	Desks, chairs, as in budget
08	CMR Travel (In-State)	1,712	7,128	307	7,128	7,128	7,128	As in Budget
09	Special Projects (Mackay, NBMG)	152,016	539,207	199,254	307,952	477,842	144,200	FY23 \$97.2k (NBMG-base contract), \$27k (PDAC), \$5k (AME), \$15k (NvMA Ed), \$15k (McCaw), \$18,262 (NBMG Mining District Files Scanning), \$125,490 SOSA Marketing, \$10k YESCO billboards FY24-\$97.2k (NBMG base), \$19,970 (NBMG Scanning), \$43.2k (NBMG Soda Lake Geo), \$37.8k (NBMG-RRV), \$37.8k (NBMG-Li); \$146k MCoE; \$47k (PDAC/AME/NvMA Ed); \$10k YESCO billboards; \$61,679 (GBSSRL equipment match) FY25-\$97.2k (NBMG base), \$47k (PDAC/AME/NvMA Ed)
14	Las Vegas Operating Expenses	41,420	46,442	40,267	46,442	41,552	42,479	As in budgets
17	Fluid Minerals	12,986	16,983	12,791	11,983	18,955	18,955	Field expenses for OGG and DMRE, as submitted in State Budget
18	AML Support (per diem, trucks, fuel, AML supplies and travel, SOSA supplies)	134,367	239,174	198,194	239,174	263,091	220,091	Up to 8 summer interns and 4 winters FY23-25; includes one new truck FY24
26 & 82	Computer and IT	34,411	30,429	26,102	30,429	45,113	24,132	Computer hardware/replacements; EITS services and support
30	Training	5,075	6,764	2,155	6,764	8,225	8,225	ESRI and other training
39	AML Enhancements(contracts, equip.)	1,133,857	1,076,806	630,000	1,076,806	1,159,800	1,158,600	\$960.5k/yr contracted AML closure and related work. \$50k/yr CL Cty revisits (thru 23), \$50k/yr geo analysis, \$100k/yr cultural surveys, \$20k/yr helicopter surveys, \$24.5k/yr wildlife surveys
42	Public Agency AML Securing		400,000	0	400,000	0	0	Any unspent funds from FY23 would be transferred to FY24
87 & 88 & 89	Cost Allocations (State, Purchasing, AG)	90,693	71,998	43,717	71,998	90,693	90,693	Purchasing assessment, AG cost allocation, State cost allocation
<b>EXPENDITURE TOTAL</b>		<b>\$2,924,679</b>			<b>\$3,696,309</b>	<b>\$3,834,032</b>	<b>\$3,530,426</b>	
86	Reserve - Balance Forward to Next Year	\$3,072,432			\$2,641,937	\$2,259,452	\$2,074,973	
		<b>\$1,467,809</b>			<b>\$793,783</b>	<b>\$342,436</b>	<b>\$309,760</b>	Reserve Amount in excess of "50% of Expenditures" guidance