

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES**

**Eighty-Second Session
February 20, 2023**

The Committee on Natural Resources was called to order by Chair Lesley E. Cohen at 4 p.m. on Monday, February 20, 2023, in Room 3143 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda [[Exhibit A](#)], the Attendance Roster [[Exhibit B](#)], and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/82nd2023.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Lesley E. Cohen, Chair
Assemblywoman Natha C. Anderson, Vice Chair
Assemblywoman Shannon Bilbray-Axelrod
Assemblywoman Tracy Brown-May
Assemblywoman Venicia Considine
Assemblyman Rich DeLong
Assemblywoman Bea Duran
Assemblyman Bert Gurr
Assemblywoman Alexis Hansen
Assemblywoman Selena La Rue Hatch
Assemblyman Howard Watts
Assemblyman Toby Yurek

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None



STAFF MEMBERS PRESENT:

Becky Peratt, Committee Policy Analyst
Erin Sturdivant, Committee Counsel
Connie Barlow, Committee Manager
Nancy Davis, Committee Secretary
Cheryl Williams, Committee Assistant

OTHERS PRESENT:

Joe Frey, Private Citizen, Fallon, Nevada
Jake Tibbitts, representing Eureka Conservation District; and Nevada Association of Conservation Districts
Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation
Davy Stix, Chair, Legislative Affairs Committee, Nevada Cattlemen's Association
Kelli Kelly, Private Citizen, Fallon, Nevada
Douglas Martin, President, Nevada Association of Conservation Districts
Melissa Gilbert, Board Member, Reno Food Systems
Christi Cabrera-Georgeson, Deputy Director, Nevada Conservation League
Patrick Donnelly, Nevada State Director, Center for Biological Diversity
Sheila Bray, Community Partnerships Coordinator for Clark County, University of Nevada, Reno
Jaina Moan, External Affairs Director, The Nature Conservancy
Nikolai Christenson, representing Toiyabe Chapter, Sierra Club
James Settelmeier, Director, State Department of Conservation and Natural Resources
Nikki Bailey-Lundahl, Director of Government Affairs, Nevada Mining Association
Joseph Riney, Vice President of Operations, Nevada Mining Association
Kyle Davis, representing Nevada Mining Association
Allen Biaggi, representing Nevada Mining Association
Robert Stepper, Process Operations Director,ioneer
Tim Crowley, Vice President of Government Affairs and Community Relations, Lithium Americas
Meredith Bandy, Vice President, Investor Relations and Sustainability, Albemarle Corporation

Chair Cohen:

[Roll was called. Rules and protocol of the Committee were reviewed.] We are going to go out of order today. We are going to start with Assembly Bill 109, then we will have the presentation from the Nevada Mining Association and then the presentations on lithium mining. Members, there is an updated amendment [[Exhibit C](#)], which has been uploaded to the Nevada Electronic Legislative Information System. I will now open the bill hearing on Assembly Bill 109, which establishes provisions relating to soil health.

Assembly Bill 109: Establishes provisions relating to soil health. (BDR 49-571)

Assemblywoman Selena La Rue Hatch, Assembly District No. 25:

I am here to present Assembly Bill 109. I will allow my copresenters to introduce themselves as well.

Joe Frey, Private Citizen, Fallon, Nevada:

I am the owner of Rambling River Ranches in Fallon, Nevada.

Jake Tibbitts, representing Eureka Conservation District; and Nevada Association of Conservation Districts:

Many of you may know me, I am also the Natural Resource Manager from Eureka County.

Assemblywoman La Rue Hatch:

I will now give you a little bit of background. I grew up on a ranch, so I have a deep interest in agriculture. I also teach geography, which is the human relationship with the earth, and that is what brought me to the soil health work. I am going to allow Mr. Frey and Mr. Tibbitts to give you a little bit of background as to their knowledge about soil health before we dive into this important issue [page 2, [Exhibit D](#)].

Joe Frey:

I am a fourth-generation farmer; I grew up ranching and farming in Fallon. I started a hemp company about five years ago, Western States Hemp. I think I am about seven to ten years into my journey of regenerative agriculture. I am here today to explain a little bit of what I have done and the things I have learned along the way.

Jake Tibbitts:

As you can see from my photo on the presentation [page 2], I am not a very good fisherman. I am a farm and ranch kid from eastern Idaho, born and raised on a farm and ranch there. I have been in Nevada for 15 years. I have a strong interest in sustainable agriculture and really benefiting our rural communities. I am very involved with the conservation districts and a strong proponent of that locally led, incentive-based conservation model. That is why I am excited about this bill today.

Assemblywoman La Rue Hatch:

This bill creates the Healthy Soils Initiative. This initiative will help promote regenerative agriculture within Nevada. There are some examples on the presentation. Mr. Frey is a practitioner of regenerative agriculture, and he is going to walk you through a little bit of what it entails.

Joe Frey:

The first thing that regenerative agriculture does is reduce chemical inputs. Much of this is a result of what some of these subsequent items are on page 3 [\[Exhibit D\]](#). Personally, I reduced the chemical and fertilizer inputs on my operation by about 85 percent. I am hopeful to see that number become 100 percent reduction, maybe not this year, but possibly by next year. Some of the things that we do to accomplish that is reduce the soil disturbance. Agriculture is typically a very disturbing event. We go through with plows and rippers and things like that. Conventionally, we like to see nice bare earth that makes what we would call a seed bed. We have converted to all no tillage, which is where we go through and plant the seed into what is already there. That is the biggest way to reduce the physical soil disturbance. The chemical soil disturbance reduction comes from reducing the chemical and synthetic fertilizer inputs.

Rotational grazing is a huge aspect of regenerative agriculture. There is a lot of amazing microbiology that happens inside of a cow's stomach that basically ends up moving down into the soil and allowing things to happen. Rotational grazing, or intensive grazing as it is called, is where you mass a lot of cattle and try to simulate nature—how buffalo might have moved across the plains. You put a lot of cattle on one area for a short period of time, you move them on, then you let that land rest and let the soil do its work.

Cover crops are another technique that we highly implement that was probably about our third step in the journey. This technique covers the soil and it allows for a much cooler and more moist environment, which everybody has probably noticed is where worms and bugs like to live—in a cool, moist environment. Having cover crops provides that environment. Increased plant diversity is huge. There is a major symbiotic relationship that happens in the soil with multiple different types of species: grasses, forbs, legumes, things of that nature. That has been very instrumental and is probably one of our final steps in the journey. I do not have a lot of experience with agroforestry, but we do plant woody species into our fields, at times, for grazing that stays small and provides that sort of biology under the soil.

Assemblywoman La Rue Hatch:

Now for the important part of this bill, why does it matter [page 4]? Why do we want to increase our soil health? There are many benefits that come from increasing our soil health. Again, Mr. Frey is experiencing this firsthand, so I will let him walk you through some of those.

Joe Frey:

Food quality is paramount in regenerative practices. I believe that by having the microbiology and the soil nutrition level for the food that we are producing is far superior than anything that you would get from synthetic fertilizers. I am sure we have all been disappointed when we have picked up an expensive organic tomato from Whole Foods and had it be pretty much tasteless. That is because there is no biology happening in the soil. The tomato is beautiful, it is big, it is ripe, but it just tastes like a little bit of lightly flavored water. Regenerative agriculture is very much more focused on quality over quantity. That is a benefit that happens because of regenerative agriculture.

Depending on where I am at in my journey, I have seen anywhere from a 10 percent to a 30 percent reduction in water consumption. That is also dependent on my water use at the time. For every 1 percent increase in soil organic matter, you will see an increase of 20,000 gallons of water holding capacity in one acre of land. Regenerative agriculture really boosts the organic matter contained in soil.

Regenerative agriculture sequesters carbon and it keeps the carbon cycle moving, but when stuff starts from an out-of-balance state, you can sequester a lot of carbon into the soil out of our atmosphere with soil conservation practices. Regenerative agriculture also increases farm profits. So far on my farm, I have been focused on building my soil health. I have not yet seen the increased profits, but I have not lost any money either. I know that in a heartbeat I could see increased profits from what I have been doing.

Assemblywoman La Rue Hatch:

Page 5 [\[Exhibit D\]](#) shows what A.B. 109 does. It creates the Healthy Soils Initiative because we have many different groups that are tangentially touching on soil health within our state agencies. We do not have one place that is focusing on improving soil health. It creates an initiative that is entirely voluntary and consent-based. Our goal is to help our farmers and ranchers who want to transition to these regenerative practices have education and support with which to do so. Many times, it requires upgrades of equipment, and it requires changes in practices; that is a scary thing to undertake, if you do not have some sort of support. It will be overseen by the State Conservation Commission. Mr. Tibbitts will speak in just a moment as to why we put it in that specific location. We are also going to give them a dedicated staffer to work solely on soil health. Soil health is under the purview of the Conservation Commission as it stands, but in talking to them and talking to their staff, there is so much under that Commission that soil health tends to fall by the wayside. The Commission needs this dedicated focus in order to work on it.

Just as importantly, we are creating an advisory board which will consist of nine voting members. The makeup is within the bill text itself, but it includes producers that are on the ground. It specifically lays out the kind of ranchers or farmers, there is a tribal representative, there are representatives from the State Department of Agriculture, the Division of Environmental Protection, and the Division of Public and Behavioral Health, so we have that diverse experience included.

Perhaps one of the most important reasons that we need this program is it helps us access federal money. There are millions of federal dollars that we are not accessing because we do not have a healthy soils program. Those dollars are required to be funneled through a healthy soils program. This would allow us to have a full-time staff member who is focused on getting that grant money and passing it along to our farmers and ranchers as a method of support. Mr. Tibbitts is now going to talk about the conservation districts, explaining a little of what they do and why we house them in this specific location.

Jake Tibbitts:

The State Conservation Commission and the conservation districts that fall below it are the best place to hold this initiative. You can see the Legislature has already put this declaration in statute about the importance of local community stepping up to the plate and leading those efforts for that locally led conservation—that is already in place. The *Nevada Revised Statutes* Chapter 548 has some broad authorities, a lot of great enabling language, and it is a natural fit to fall within that framework. The map on the left of page 7 [\[Exhibit D\]](#) shows the various conservation districts; there are 28 conservation districts covering the entirety of the state. They touch every square inch of Nevada, and they are built on the mantra of locally led, voluntary, incentive-based conservation. They have existing relationships of trust already with farmers and ranchers and other people in their communities.

The board members for each conservation district are a mix of elected and appointed officials, depending on where you are at. There are very formalized relationships that conservation districts already hold with many agencies and other entities, including the Natural Resource Conservation Service (NRCS). This formalized relationship is actually outlined in federal regulation and federal manuals where conservation districts lead the effort to develop what are called "local work groups." These groups get together to identify natural resource needs and concerns. They funnel them through a formalized process to put some priorities up through the state, NRCS, and even on to the national level to help narrow down and be surgical on certain programming and funding that can be then brought back down to the ground to our agricultural producers to do good work on the ground. That relationship already exists. There is a big need for capacity to help that process work more. We are hoping this bill can help us move that way. You may ask the question, Can this be done without this legislation? I guess that the short answer is maybe. The reality is, establishing a formalized soil health initiative will do just as the Assemblywoman mentioned, and it will help to provide that longevity and durability through the conservation districts and give them a path for that capacity to actually deliver on the things that they are trying to do.

The last thing I will mention on this is that I spent much of last week at the National Association of Conservation Districts annual meeting. I asked everyone I knew who had state-level soil initiatives through statute how it was going. Were there any hurdles that we need to be aware of if we are looking to do the same? Every person I talked to mentioned the importance of having these formalized initiatives helping them within their states. It has helped them to identify the funding pools and being able to get those funding pools on the ground, in the right places, with the producers who have the readiness and the willingness to get that work done. Conservation districts are that natural linkage.

In the fall of 2019, the Nevada Association of Conservation Districts held their annual meeting in Winnemucca. The focus of that meeting was soil health. It was around this topic we are talking about today. There were a lot of agencies—state agencies, federal agencies, conservation districts, other stakeholders, and ag producers—in the room at that meeting. There was a desire to actually stand up a soil health program or soil health initiative in the state. Here we are, 3 1/2 years later, and the need for the capacity, durability, longevity, and

the formality of the soil health initiative is very important to help us to continue to move forward. There is a lot of interest among people in this state for this process.

Assemblywoman La Rue Hatch:

We talked about those economic benefits. Here are just some of the federal programs that we can access if we had this Soil Health Initiative [page 8, [Exhibit D](#)]. I am going to pass it right back to Mr. Tibbitts who is going to talk a little bit about those programs.

Jake Tibbitts:

There are a handful of programs that are available. There is a big push towards these new pools of funds and trying to get them on the ground. Those entities, states, and agricultural producers that are ready—it is all about readiness—those agricultural producers who have the ability to implement these practices are going to be able to bring some of this funding to assist them to put in place some of these practices. We are also helping with their bottom line. That is why this is needed. These funds are coming, and we need to be able to have the ability to focus working through our agricultural producers. That is what these funds are intended to do, to get them on the ground to help our agricultural communities in this state.

At the meeting I was at last week, I received presentations on many of these opportunities listed on page 8. I will not call it a buzzword, but the new focus is climate-smart agriculture. Many of our agriculturists in this state are doing good practices already that would meet the intent of climate-smart agriculture. There are additional things they could do if they had the help to do it. As the Assemblywoman mentioned, there are a whole host of things, and we need to be ready and have all the pieces in place, have that framework in place, so we can access these funds, bring them home to Nevada, and get good work on the ground to help all of our state, especially our rural communities.

Assemblywoman La Rue Hatch:

Page 9 [[Exhibit D](#)] shows that this is not just a Nevada thing. Talking about soil health is becoming a national conversation. You can see many states are starting to pass soil health legislation. I would like to point out that this is something that both California and Utah agree on, which does not always happen, but I think it shows how critical this issue is. In fact, Nevada did pass soil health legislation last session, but it was a resolution which said we value soil health. Now I am asking us to take the next step and take action on that resolution, showing that we do value soil health, and we are willing to put this effort behind it. That finishes our presentation. I am sure there are questions because soil health is absolutely riveting, and we are here to answer them.

Chair Cohen:

Before we go to questions, will you walk us through the bill and the conceptual amendment?

Assemblywoman La Rue Hatch:

We have one small amendment which is on section 59 [[Exhibit C](#)], which is on the second to last page of the bill. The language in the bill said the fund and the money would go to the

State Conservation Commission. We realized it needs to go specifically to the Conservation District Program. We made that small change so that it is actually getting to the correct place.

Chair Cohen:

Will you walk us through the rest of the bill?

Assemblywoman La Rue Hatch:

Assembly Bill 109 essentially starts on page 2, which includes many definitions that you will find within the bill, including the "commission" and the "government" that we are referring to. It creates the Soil Health Advisory Board in section 6, subsection 1, which consists of nine voting members. These are a representative from the State Department of Agriculture; a representative from the Division of Environmental Protection; and a representative from the Division of Public and Behavioral Health. I received a question asking why we included public health. Public health deals with soil issues because that, in fact, affects our food supply. They wanted to have a seat at the table because of the food chain. Then we have six members who are appointed by the State Conservation Commission: a dairy farmer, a rancher, a specialty crop or small farmer, an irrigated crop producer, a tribal representative, and a person engaged in research related to soil health. We wanted to have that diversity of representation.

The bill goes on in section 6, subsection 2, to say that the members of the Soil Health Advisory Board should be geographically diverse so that we are representing the diverse parts of this state. The rest of section 6 lays out the terms, the vacancy, and the salary, which are all standard for this Commission. That is not something I created independently. We just took it right from that language.

The bill then talks about the Healthy Soils Initiative. Section 7, subsection 1 references the goals of the initiative, including the following: encourage widespread adoption of soil health practices by agricultural producers; promote and advance the understanding of the environmental and economic benefits of soil health; and support and advance scientific research into soil health. Section 7, subsection 1(c) goes on to mention the existing conditions of agricultural soils and the carbon storage potential, the economic benefits, and the environmental benefits. Section 7, subsection 2, says what the Commission may do. It may provide incentives to help our ag producers transition; conduct educational and outreach programs on the benefits of soil health; evaluate and develop soil health sampling and testing protocols; facilitate stakeholder collaboration to advance the understanding of the science of soil health; and collaborate with agricultural producers. There is a list of all the people they have to collaborate with and enter into agreements or contracts with. Essentially, it is everything that they need to make soil health get off the ground here in Nevada.

Section 8 says that the Commission may establish a program to distribute, within limits of legislative appropriations and other available money, grant money to eligible entities. That is the grant program we are talking about for the ag producers. The bill goes on to say in section 8, subsection 1(a)(1), the Commission "Shall prioritize distributing such grants to

conservation districts that are working with agricultural producers." That is referring to conservation districts that are working well with local farmers and ranchers. We want to make sure the money is passed along to those farmers and ranchers. The Commission may prioritize the needs of historically underserved producers to make sure that this is an equitable bill as well. The bill goes on to give them other things that the Commission can do that it deems appropriate.

Section 8, subsection 2, is very important as it establishes that this is voluntary and incentive-based. We are not forcing this on anyone. The ag producers have to want to participate in this program. The Commission cannot mandate anything, and they cannot bind anyone to specific standards. This is based on education and support in order to make that transition. The bill then lists requirements for the grant recipients in section 8, subsection 3. They have to conduct outreach and education activities, they cannot just get money and do nothing with it. They have to at least be trained on it, know what they are doing, and then share what they are doing.

Section 9 creates the Fund for Soil Health and allows the Commission to accept and apply for gifts, grants, services, and donations. They are not run entirely on state money; the goal is not to be run on state money. The goal is to access those federal funds that we are missing out on. There is also a section that stresses that this is private and confidential information. We are not sharing the information of our ag producers. There are a whole lot of sections updating to ensure it carries through the rest of the chapter. That is the bulk of the bill. The last change is in section 59, which I already discussed.

Chair Cohen:

Thank you. I do have questions from the Committee.

Assemblywoman Bilbray-Axelrod:

I noticed the pay is \$80 a day. People are clearly not getting rich on this. How often are you anticipating the meetings to happen?

Assemblywoman La Rue Hatch:

I did not put that in statute because I did not want to be overly prescriptive. I believe that the Conservation Commission currently meets quarterly. I would imagine this advisory board would do the same, but I want to leave that up to the Commission and the staff member for that flexibility.

Assemblywoman Bilbray-Axelrod:

Your presentation showed a map that carved Nevada into the regions [page 6, [Exhibit D](#)]. We heard from different parts of Nevada, but specifically have you seen successes in southern Nevada? I know that we do not have great soil; it is clay, sand, and caliche. Have you seen successes? What does that look like? Is that ultimately what you are trying to find?

Assemblywoman La Rue Hatch:

I will pass that question to Mr. Tibbitts because he is the expert on the conservation districts.

Jake Tibbitts:

There is the Conservation District of Southern Nevada (CDSN), which also covers areas like Moapa Valley, which has a pretty diverse agricultural community. I know at one time there was a board member of the CDSN from the Moapa Valley area who was working specifically on those agricultural soils. There is also Mesquite and a lot of other areas within that district with agricultural areas. There is also the urban agriculture component. The Zion Community Garden Park in Las Vegas is an urban garden that was partially developed with some grant funding that came from the National Association of Conservation Districts. The CDSN worked with the Zion Community Garden Park to help establish some of the garden. This initiative can run the gamut from large agricultural production to small backyard gardens and urban tree plantings. Soil health matters, and every acre counts. Even for those small acres, soil health can be a big deal.

Assemblyman Watts:

I appreciate the reference to past legislation. I believe Mr. Tibbitts was involved in incorporating some of that soil health language last session. My first question is related to seizing these federal grant opportunities that are provided. Can you provide a little bit of additional context on that? It sounds like there are many grants out there. Some may be for different things; some we probably are not really positioned to apply for. Do you have any sense of the potential amount of money that could be leveraged through the establishment of this initiative? What new funds could we be looking at bringing to the state? Do you have any additional information you can provide in terms of that?

Assemblywoman La Rue Hatch:

That was one of my first questions when we started looking at these federal opportunities. We have had a very hard time tracking down a firm number because it is so nebulous and there are so many programs. I think Mr. Tibbitts is able to speak to at least an approximate dollar amount for some of these programs.

Jake Tibbitts:

I do not want to go out on a limb and overstate what the opportunities are. If you have followed the bipartisan infrastructure law, and the Inflation Reduction Act, and we are bumping up against a new farm bill right now, there are a lot of efforts in Congress to reauthorize the farm bill. There are literally billions of dollars, not all to come to Nevada, but available through farm bill programs and some others for the climate-smart agricultural opportunities. I think the sky is the limit for us, for agriculture, and for helping some of our agricultural producers in this state through some of this programming and helping them to leverage some of the things that they are already doing and just push it to the next level. It is all about readiness. Some of these funding pools are there right now, but we are missing opportunities because we simply do not have the capacity to determine where they should be and finding those producers who have the willingness and the readiness right now to get those things on the ground. I think if this were in place today, we would be well ahead in determining those areas, applying for those funds, and working with some of our federal partners, state agencies, and even some other nongovernmental organizations to get some of this on the ground. I hope, in a few years when this moves forward, I can come back and say

that we were right and that we were able to leverage millions of dollars in resources to help our agricultural producers in our state and our rural economies.

Assemblyman Watts:

I understand trying to find out how much is out there, and the amounts can vary, and I know that in many cases there is competition. I appreciate your providing that additional information. The concept is to initially get money in for that capacity. Will most of the funding go to staffing and a little bit go to grants at the outset with the hope that we can then position ourselves to pull in additional resources that can really add to what is going on on the ground?

Assemblywoman La Rue Hatch:

You hit the nail on the head of exactly what we are trying to do. We are trying to stand up enough for one staff member, and maybe have between \$20,000 and \$50,000 left over for education and grants, growing that with time as they are leveraging more federal funds.

Assemblywoman Brown-May:

Thank you for the visual for how regenerative agriculture takes a group of cows to fertilize the land. My question is relative to the makeup of the six members appointed by the Commission. I am curious to know about representation and percentages. What percent of our farmers are dairy farmers? What percent are ranchers? What percent are small farmers or specialty crops? Is there adequate representation in this Commission to account for each one of those specific industries within agriculture?

Assemblywoman La Rue Hatch:

We did not look at specific percentages. We wanted to ensure that anyone who was in this space had a voice within this Commission. While we may have many more ranchers than dairy farmers, the dairy farmers should still have a say. We looked at this not necessarily percentage-wise proportionality, but just making sure that each of the groups that we think have a say in soil health had a seat at the table.

Assemblyman DeLong:

I will start with a comment: What you are describing is very similar to my experience from the 1980s in Palouse in eastern Washington, and what they were doing with the wheat farming, and how they tried to maintain the soils and improve the conditions. As far as the position being hired, it sounds not like a soil specialist, it sounds like a grant writer. Is that what is being envisioned?

Assemblywoman La Rue Hatch:

I do not know that it is just a grant writer. We did not specifically prescribe the requirements for that position. I think we would leave that up to the discretion of the conservation districts. However, the candidate would do grant writing. He would also assist the Board in their meetings and in carrying out whatever the Board wanted as far as initiatives. He would assist in the education and putting together the symposiums or whatever else the board

decided to do. I do not know that the candidate would need just a grant writing specialty. He would also assist in the overseeing the program.

Assemblyman DeLong:

Section 8, subsection 3(c)(1) discusses one of the requirements of anyone who is receiving a grant. Farmers have a very busy schedule, from dawn to dusk or longer, since they usually have headlights on the tractors. I am a little concerned about that section saying if someone gets a grant, they have to conduct outreach and education along with trying to run their farm. How are you envisioning that happening?

Joe Frey:

I currently do some of that. I guess it is just how I staff the farm and make sure that I allow time to do educational seminars and outreach-type events. I would imagine it is conceivable to say that money could be allocated to staff farms properly to allow that education to be conducted or maybe some of that could not necessarily be the individual farmer, but maybe a group of farmers or an association that were to do educational outreach in an area.

Assemblywoman La Rue Hatch:

I would also add that I do not know that it has to be extensive outreach or education. It could be as much as saying to your neighbor, I am trying to no-till drill and here is how it is going for me. I will say that it was also in the Utah legislation; we adopted some best practices from Utah. The reason it is in there is a lot of our agricultural community operates on word of mouth. We can have a soil scientist come in and tell the farmer how great it is to use a no-till drill. If that farmer has been farming the same way for the last 50 years and no one around him is changing, he is going to be as open as if Joe comes down the street and says, Here is what I am doing, it has not hurt my profits, here is why I like it, and it might actually save you money in the long run.

Jake Tibbitts:

Earlier in that same section about funding, that is why there is the priority to distribute those grants to conservation districts that are working with agricultural producers. Those districts have the ability to assist agricultural producers in meeting the intent of those grants. It is almost like a pass-through, where the district helps the producer but also helps with those obligations. Many conservation districts do manage grants and also receive some overhead to help meet those obligations. I feel it is very important for the districts to be linked here because it can help these producers in meeting some of those obligations that are outlined in the bill.

Chair Cohen:

I have a question regarding the makeup of the board and the number of members. Some of our boards have trouble making a quorum. When I read the nine-member board, it did give me some concern. Do you have any way that you are going to be able to address that?

Assemblywoman La Rue Hatch:

We do not specify that the board has to meet in person. We are hoping that if they cannot meet a quorum in person, they can meet virtually, or use other methods. I believe Mr. Tibbitts can speak to the Conservation Commission and their difficulties, or not, with meeting quorum.

Jake Tibbitts:

Farmers and ranchers are very busy people. Your concern is not unfounded in that way, but those who are engaged in this space are very active. The hope is to get individuals who represent the broad diversity of agriculture and the tribal interests and others on this advisory board. They have ownership, have skin in the game, and have the willingness to see this program go forward. I myself tend to show up at things when I feel there is progress being made. I think it is on the conservation districts and the State Conservation Commission, through this initiative, to make sure that it is something we are showing up for. I really do not think there will be much difficulty in keeping a quorum, keeping everybody together, and attending if we are all pushing towards doing good things on the ground.

Assemblyman Gurr:

I am a little concerned about creating another bureaucracy inside government and where that money is coming from. There is no fiscal note on this. What impact, if any, will this have on current grazing allotments on public land? Are there any strings attached to those grants?

Jake Tibbitts:

The bill very clearly says that it is to be voluntary and incentive-based and in no way can dictate any kind of standards for anybody. That is the mantra. That is why I am such a believer in this program; it is about working with people, using carrots rather than sticks. I do not see any impact this will have on grazing allotments other than helping people make any changes that are necessary in a voluntary way. This is for willing people who want to come to the table, and if they want to help, great, but this is not going to be imposed on anybody. I would not be standing here today testifying on this bill if I felt that it would go otherwise.

Assemblywoman La Rue Hatch:

Will you repeat the second question?

Assemblyman Gurr:

What, if any, strings are attached to these grants when they come out?

Assemblywoman La Rue Hatch:

Section 8, subsection 3(b) says if the grant recipient does not have expertise in soil health practices or project management, he needs to work with a technical assistance agency or organization. Again, he cannot just get money and not do any regenerative agriculture. If he is getting this money, he will have to consult with someone that is an expert in this. Like we said, the recipient would have to talk to his neighbors or do some kind of outreach to say what he is doing. He would need to disclose information relating to what he is doing to the

Conservation Commission. The recipient needs to be looking at the most accurate and current scientific evidence relating to soil health. There are limitations, and it is voluntary. We are not forcing this on anyone, but we are also not just giving out free money for the recipient to continue doing what he has been doing the whole time. He needs to consult, and it will be overseen by the Healthy Soils Initiative, which will check to make sure he is following the practices that he said he wanted to practice. [Assemblywoman La Rue Hatch also provided but did not discuss an informational flyer [Exhibit E.](#)]

Chair Cohen:

Seeing no other questions, I will move on to support. As a reminder, support is for the bill as it is drafted with the conceptual amendment [[Exhibit C](#)]. Even if you love the bill, but there is a little something that you want to change or that you want to talk to the presenter about, you will have to comment in opposition. You can come in as opposition and let us know you love the bill, but you just have a little change. Also keep in mind, neutral is if you are just providing information. With that, we are going to start with support in Carson City.

Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation:

Nevada Farm Bureau policy, adopted at our most recent annual meeting, states that we support educational sessions and workshops for the purpose of helping and understanding regenerative agriculture, both the practices and the principles. This position is at the core of [A.B. 109](#) and is the reason for our support for passage of this legislation.

Farm Bureau's philosophy of soil conservation is based on voluntary and incentive-based approaches. This is another concept within the direction called for in [A.B. 109](#). We also welcome the direction provided through the bill for support in advancing research that is oriented to Nevada's local soil conditions and our environment. Our agriculture, soils, and environment are different than the midwestern model and most of the commodities that are produced and are most recognized across the country.

[Assembly Bill 109](#) clearly directs prioritization of distribution of grants through Nevada's conservation districts, another foundational principle which we support. We support conservation practices which fit in the operational plans of agricultural producers. We encourage our members to engage with their local conservation districts to promote sound conservation.

Passage of [A.B. 109](#) with the funding for operation as well as the ability to use donations and grants, which flow through the fund for soil health, are important elements which can assist in building this program. We encourage your support for passage of this bill in the Committee, as well as discussions on where Nevada's next biennium budget should be spent in this area.

Davy Stix, Chair, Legislative Affairs Committee, Nevada Cattlemen's Association:

Our organization represents producers that run livestock, both on public and private grazing. I would like to sum up, in a plain and simple way, how important and how glad we are about this bill today. Finally, there is some light being shed on a very positive thing that can come

from cattle, with the sequestering of carbon dioxide. I am going to literally show you how it works and how simple it is. My friend, Mr. Frey, produces feed that we feed our cattle. What comes out of our cows is processed, put into a truck, and hauled to Mr. Frey's facility. That same truck brings the raw feed product back to feed our cattle. That is how cool this is. I hope that this will shed some light on proper grazing—no matter what species of livestock is grazing—proper grazing and management of that resource is a positive with this type of initiative.

Kelli Kelly, Private Citizen, Fallon, Nevada:

The opinion that I am expressing today is my own, but it is informed by over a decade of working with small scale agricultural producers through my roles as the director of the Fallon Food Hub and as the agricultural adviser for the Nevada Small Business Development Center. The farmers and ranchers that I work with grow plants in the unique high desert climate of the most arid state in the country. There is increasing interest in the integration of regenerative agricultural practices in order to cultivate better soil health, to retain more water, which, as we all know, is our most precious and our most limited natural resource, and to reduce costly chemical inputs on our land through cover cropping, crop rotation, rotational grazing, and the use of no-till systems. One of our farm partners, Mr. Frey, recently hosted a regenerative agriculture and soil health workshop in Fallon in partnership with the Cooperative Extension of the University of Nevada, Reno, which was attended by over 70 producers wanting more information. These producers need help. They need more educational opportunities; they need access to experts who are working in partnership to integrate better soil health techniques; they need access to additional resources to put into place regenerative systems; and they need a system to monitor and measure the improvements in their soil composition.

Assembly Bill 109 creates the program that will be this needed resource for farmers. The Healthy Soils Initiative will position the state to be able to take advantage of federal pass-through funding opportunities to fund grants for Nevada farmers. A formalized system of measuring soil health improvements will help Nevada farmers take advantage of incentives that are coming in the upcoming farm bill. This is going to help our farmers move past just the early adopters of regenerative agriculture techniques and incentivize more focus and concern for soil health in our state. I encourage you to pass A.B. 109.

Douglas Martin, President, Nevada Association of Conservation Districts:

I have been associated with conservation and conservation districts for quite a while. I also serve as a commissioner on the State Conservation Commission, and I serve on my local conservation district board. As you heard from Mr. Tibbitts, who is a member of our board, the Association supports this bill. I would like to add two things to what Mr. Tibbitts already said in support of this bill. First, go back to 1972 when I took soils at the University of Nevada, Reno in the College of Agriculture. Our professor, Freddie Peterson, said that the stuff without organic material is called dirt. The stuff with organic material is called soil. You can grow things in soil, you cannot grow things in dirt. When we talk about regenerative, it is a new buzzword for what farmers and producers have been doing forever: understanding the importance of organic matter in their soils and continuing on with it. We

are not asking somebody to do something that is not what is in their heart anyway. Going to all nonorganic or all produced fertilizers is not good in the long run—producers know that. They want to do the right thing; they want to learn the right things.

The second thing I want to do is go back to the Nevada Association of Conservation Districts' annual meeting just four months ago. We had a panel made up of one of your members, Assemblyman Watts, and two Senators, Senator Titus and Senator Goicoechea. In that meeting, a couple of things happened. One, we got to showcase farmers who are doing amazing things with soils in their lands. We got to hear from a farmer in Fallon who is producing teff, which is important to soil. He is saving water, he is growing more with less, and he is able to make a profit.

We also heard from a gentleman who did a soil health demonstration. This demonstration showed two soil types having the same physical composition, one having 1 percent organic matter, the other having 4 percent organic matter. When he filtered water through the soil with 4 percent organic matter, the soil held up. The soil with 1 percent or less than 1 percent fell apart. The water just ran off, and the soil ran off, so you lose the soil. Farmers are the best conservationists in the world. They want to do what preserves what they do for their grandchildren. That is what conservation and conservation districts do, present practices that will make it so your farm will be there a generation, two generations, even three generations from now. Just as a reminder, back in the Dust Bowl, science and locally led conservation got together and created the Soil Conservation Service, now the NRCS and conservation districts. We are created by an act of Congress and an act of the Legislature. We are a locally led subdivision of the state of Nevada that works with farmers and works with producers. Our goal is to share information. When we did our tour, we got to go to the Frey Ranch. They grow their own crops and they produce some of the best sipping whiskey, for drinking, not for fighting.

Melissa Gilbert, Board Member, Reno Food Systems:

Reno Food Systems is a nonprofit in Reno. We lease five acres of land and we are practicing regenerative agriculture. In the last four years, we have planted hundreds of fruit trees, shrubs, and pollinators. We are a beautiful project, and we are in full support of this bill. I welcome you to come for a tour.

Christi Cabrera-Georgeson, Deputy Director, Nevada Conservation League:

We are here in support of A.B. 109. Soil is vital for plants, animals, people, and the planet as a whole. Ensuring soil health can improve air and water quality, food security, and carbon sequestration, helping us tackle the climate crisis. Additionally, creating a Healthy Soils Initiative will allow the state to gain access to federal funds that we may not currently have access to. So long story short, we urge the Committee's support.

Patrick Donnelly, Nevada State Director, Center for Biological Diversity:

We are in support of this bill.

Chair Cohen:

Seeing no more support in Carson City, I will go to those in support in Las Vegas.

Sheila Bray, Community Partnerships Coordinator for Clark County, University of Nevada, Reno:

The University of Nevada, Reno would like to express support for Assembly Bill 109, which speaks to the continuation of increased awareness of soil health and agricultural practices in Nevada, and aligning our communication with agriculture producers to support agriculture as a top industry in our state. The University of Nevada, Reno would like to thank the sponsor and presenters for bringing forth this bill and for including members of higher education within the established advisory board to bring the latest scientific research and communication to our communities in this effort. I appreciate your time. We would urge your support for Assembly Bill 109.

Chair Cohen:

Is there anyone else in Las Vegas in support? Seeing no one, is there anyone in support on the phone?

Jaina Moan, External Affairs Director, The Nature Conservancy:

The Nature Conservancy supports A.B. 109 to establish a soil health advisory board initiative and fund. Healthy soils cycle and store carbon, improve water security, and play a critical role in helping us both mitigate and adapt to climate change. As many others have pointed out, there are abundant opportunities on the table right now to leverage state funds with federal and private funds to improve soil health. We submitted written testimony with specific examples [[Exhibit F](#)]. The establishment of a formal advisory board to monitor soil health and administer the funds would demonstrate Nevada's readiness to leverage these federal funding and assistance opportunities. Additionally, as a nonprofit conservation organization that works nationally and internationally to conserve the lands and waters on which all life depends, The Nature Conservancy has been working on soil health for a number of years. Our written testimony offers links to resources that The Nature Conservancy has developed relating to soil health. In closing, we want to suggest that if the state is looking for places to spend surplus revenue, feeding the soil health funds would be a good investment for both our agricultural producers and our climate.

Nikolai Christenson, representing Toiyabe Chapter, Sierra Club:

On behalf of the Sierra Club and our more than 30,000 members and supporters statewide, I am speaking in support of A.B. 109 on the creation of the Healthy Soils Initiative. Soil health is an essential tool in our efforts to combat climate change, decrease soil erosion, sequester carbon, and protect our water resources. Soils have strong carbon sequestration properties, and we believe this is an understudied benefit of our soil in Nevada, one that should be included in the work of the Soil Health Advisory Board. Many states have created similar institutions to help their citizens and farmers understand and implement the latest science for helping farming and grazing. Maryland, Utah, and Colorado are just a few of these. The state of Colorado recently received a \$25 million grant from the Saving Tomorrow's Agricultural Resources program from the United States Department of Agriculture through the Partnerships for Climate-Smart Commodities Project. This investment for Colorado's farmers, ranchers and agricultural communities means a significant influx of funds to help producers handle the financial risks of adopting new climate and

rangeland practices that advance soil health and climate resilience. There is the potential for Nevada to receive these or similar funds; however, we feel it is far more likely to obtain these if such an advisory board and its leadership as envisioned by this legislation is in place. For these reasons, we urge you to support this bill. [Written testimony was also provided, [Exhibit G.](#)]

Chair Cohen:

Seeing no further testimony in support, is there anyone wishing to provide testimony in opposition? Seeing no one, is there anyone wishing to testify in neutral?

James Settlemeyer, Director, State Department of Conservation and Natural Resources:

Melany Aten, Conservation District Program Manager, sends her regrets. She was not able to attend today. I will give my comments to the bill as amended, and I can delete half the testimony. Ms. Aten did reach out to the sponsor of the bill. She graciously agreed with the changes and amendments and, therefore, those do not need to necessarily be discussed. We look forward to the passage of the bill with the amendment and also with the funds. Without the funds, it is very problematic. We are neutral to the bill; we are supportive of the concept, but we will have to wait and see what the final language of the body comes out, and then we could implement it accordingly to the legislative intent. I would speak to one of the questions that was put forward by Assemblyman Watts, regarding how much money would be spent on travel and things of that nature. For reference, the conservation district program pays the State Conservation Commission members an average of \$13,213 for each board member, which is daily pay, travel expenses, and per diem over the last few years. The amount A.B. 109 would cover is for the advisory board and pay the associated travel and per diem costs, but coupled with additional employee salary, that money then would be left over for the implementation of seeking grants. That gives a general ballpark of what those funds would do. Again, without those funds, it would be very problematic to try to have the bill go forward.

Chair Cohen:

Is there anyone else in Carson City or Las Vegas in neutral? Seeing no one, is there anyone on the phones in neutral? Hearing none, Assemblywoman La Rue Hatch, would you like to make a closing statement?

Assemblywoman La Rue Hatch:

Thank you to all of my colleagues who listened to our presentation on soil health and why it matters. I would just like to stress that clearly there are a large number of people and stakeholders who believe this is worthwhile, who believe this is something that we need in our state. I would like to point out this is one of those bills that has Cattlemen's Association, Nevada Farm Bureau, Sierra Club, and Nevada Conservation League on the same page. I do not know how much more bipartisan we can get. I will leave you with that. [Also provided but not discussed in support of Assembly Bill 109 are [Exhibit H](#), [Exhibit I](#), and [Exhibit J](#).]

Chair Cohen:

I will close the hearing on A.B. 109 and go into our presentations. We are going to start with our presentation from the Nevada Mining Association.

Nikki Bailey-Lundahl, Director of Government Affairs, Nevada Mining Association:

Alongside me is Joseph Riney, Vice President of Operations, and Kyle Davis, our environmental consultant. Also here is Alan Biaggi, who does not fit at this table, but he will be here for any questions after the presentation.

The Nevada Mining Association's (NVMA) mission is to unite, advocate, and serve as the public voice of Nevada's modern mining industry [[Exhibit K](#)]. We are 500-plus member companies representing every part of the mining supply chain: operators, exploration suppliers, and individuals all throughout the state, including the urban cores. Modern mining in Nevada—10.3 percent of all U.S. nonfuel mineral production comes from this state. We produce 20 essential minerals critical to our daily lives, and 15 of Nevada's 17 counties have active mine operations. The mining supply chain has a presence in all 17 counties, and we generate about \$14.8 billion in annual economic activity.

Page 5 [[Exhibit K](#)] is a map that shows you where our mines are in Nevada. Yellow is obviously metals, red is industrial materials, purple is gemstones, black and white are oil and gas, and green is geothermal.

Right now we are not 37,000 families strong as shown on page 6, we are 38,000 families strong across Nevada who rely on mining supply chain for our employment, with an average salary of about \$94,000 a year, including benefits, health care, retirement, and sick leave—not just for our employees, but for the entirety of their families.

Page 7 shows that we are an essential Nevada industry. We have 1 percent of employment in the state; 1.9 percent of all sales and use tax; 3.1 percent of the State General Fund, which will be changing with the mining education tax; and 4.1 percent of the state's gross domestic product.

Page 8 is a graph showing where we have come from 2013 to where we were in the first quarter of 2022. The next pages show our total estimated major taxes paid. In 2021, we were at \$348.4 million. This does not include the mining education tax, which I will talk a little bit about.

Mining education tax came out of the 2021 legislative session. Within its inaugural year, half of that tax is the mining education, and the other taxes in the net proceeds of minerals that would now be combined. That is \$344 per annual pupil contribution. Within 10 years, that will be \$3,441. When we aggregate that to our ten-year contribution, it is \$1.7 billion going into education. I will now pass the presentation over to Mr. Riney.

Joseph Riney, Vice President of Operations, Nevada Mining Association:

I am here to talk to you a little bit about safety and health [page 11, [Exhibit K](#)]. In 2021, the mining industry worked over 28 million hours. We have some of the lowest injury rates in the state as well as in the nation. Our safety standards are very high. We look at regulatory standards as the basis, and we like to go above and beyond that. Most mine operators are going far above and beyond. We also are very collaborative when it comes to working with state and federal regulators as far as safety and health goes. We are always looking at how can we improve safety and health, not just for Nevada, but nationally.

Page 12 shows some of the training that we do with our mine response teams. There is a lot of preparation for emergency response. Most of our emergency response teams do not actually get to use their skills and abilities at work. Most of the time, where they use those skills and abilities is when somebody on Interstate 80 traveling between Reno and Elko is in a car accident. As our emergency responders are driving to and from work, they are often the first ones on the scene, rendering aid on the highway. The response team is a volunteer position. In addition to their normal job, they are doing many hours of training a year. The mine rescue teams are trained in surface, underground, firefighting, and hazardous materials response as well as most are carrying EMT certifications.

Kyle Davis, representing Nevada Mining Association:

Page 13 is an appropriate page for me to come in on. Nevada has been a leader in the advancement of clean energy over many years. I have had the pleasure of working with many of you in this body to expand those opportunities and see places where we can continue to make strides. The fact is that the minerals that are produced in Nevada are crucial for the expansion of the clean energy industry. There are many projects that are happening here in Nevada. They are very exciting and are going to continue to help us be that leader as we move to decarbonize our economy.

A lot of people talk about the amount of land that is required for a mining operation. Nevada is a very large state; we are in the top 10 in terms of total size even though our population fits into a much smaller area. As you can see on the map [Page 14, [Exhibit K](#)], total permanent mining acres are only about 200,000 acres, so it is about 0.3 percent of the state's land mass. Water is also an important issue. We are seeing that this session, there have already been a number of water bills filed and we have heard a lot of talk about how our state is dealing with drought. When you look at overall water consumption in Nevada, the graph on page 17 spells that out for you. You can see that mining and milling is only about 8 percent of groundwater use. When we talk about the water that is consumptively used by the industry, we are only talking about groundwater.

What you see on page 18 is what happens in open pit mining. We have had a graphic in previous presentations, but a lot of times the ore body that the metals exist in that we are trying to get at exists below the water table. In order to get at that, we have to dig a pit below the water table and, obviously, we need to get the water out of the way to be able to access that ore body. When mining and dewatering ends, we dewater the pit, pump the water out, and essentially put it right back into the ground. When we finish the mining operation,

groundwater seeks to return to prepumping levels. As you can see, there are a couple of different types, but essentially that water fills back into the original groundwater level. That is still groundwater and is still available under Nevada's water law and can be appropriated under existing water law. One other thing that I would point out is that does become an issue of evaporation from that water. The State Engineer did take action on that. Every new pit that is created now must have a water right for that evaporative component.

At the end of a mining operation, you end up with these pit lakes, as shown on page 19 [Exhibit K]. Some pits are backfilled through the process of mining, but some are not. In some cases, backfilling a pit could create concerns. It is not done in all cases. Sometimes the issue of public access comes up, and public access may not be appropriate in all cases. In some cases, the pit may have steep walls and the potential for rockslides and erosion. In other cases, it may make sense. The bottom picture on page 19 is the Sparks Marina, which is a great example of what was a gravel pit and now is a great recreational resource for people in northern Nevada.

The issue of pit lake access came up in a previous session. I had the pleasure of working on Assembly Bill 346 of the 77th Session with then Assemblyman David Bobzien. That required an evaluation of potential public access for existing and future pits. That has been done. At this time, pits that do not have access were deemed not acceptable for public access given the conditions. That can always be reevaluated as well. There was an issue that came to the Legislature, the industry worked in concert with organizations to figure out a solution and have that framework in place for the future.

Reclamation is an important part of every mining operation. It is required by law, and the industry worked with the state of Nevada in the eighties to put these provisions into place. Nevada leads the nation and the world in terms of having statutes in place that govern reclamation. The companies are responsible for doing so, oftentimes concurrently, while they are still mining. To ensure that this happens, they must post financial instruments in the event of a default. If the mining company goes away, the state holds that money to be able to complete the reclamation. Currently the state of Nevada holds about \$3.4 billion in bonding to ensure that reclamation is completed.

In addition to what I have talked about as it relates to water and reclamation, there are a number of other regulatory environmental programs that the industry is subject to and works with the state to ensure that these programs are followed. These include programs dealing with air pollution, solid and hazardous waste, protection of wildlife, cultural resources, vegetation management, as well as cleanup of any spills or land contamination that may occur.

Page 15 [\[Exhibit K\]](#) is a list of state agencies that have mining oversight responsibilities. As you can see, we work with a good portion of our state government to ensure that mining operations follow all applicable laws and do things that protect the environment. These are just the state responsibilities. There are federal agencies that we work with as well, such as the Mine Safety and Health Administration (MSHA), the Environmental Protection Agency,

the Bureau of Land Management, and Forest Service come immediately to mind. There are a broad range of state and federal agencies that we work with to make sure that all regulations are followed.

Joseph Riney:

I want to talk a little bit about some of the programs that we have at the Nevada Mining Association. Three of them are on page 22 [[Exhibit K](#)]. The first one is Hope for Heat. For every day over 100 degrees in the Las Vegas area, we donate \$100 to a local school. Additionally, Granite Construction supports that and adds an additional \$30. We do the same thing in the north, but it is a much lower temperature. Mining Vegas for Talent is an exceptional program that we started about two years ago. It came out of an Assembly bill a few sessions ago. The bill was to create opportunity for low-income communities. What we created in North Las Vegas is a way to reach the community and really bring the jobs to them. We hold workshops where folks can come in, learn about the mining industry, and then we fast-track them right into the industry, providing housing at several mine operations. We have had great success with the program. We are looking at scaling it up and adding more operators, but as of today we have had about 20 people go through the program. Obviously, this creates exceptional change in that community. These families went from making minimum wage to \$100,000 a year. A lot of that is going back to Las Vegas; some have moved up north. We are very proud of this program.

We also have the 360° Internship Program, which is a collaboration between us and the Bureau of Land Management (BLM), where students come out of the university with geoscience careers and they are able to spend a number of weeks at BLM learning the regulatory side, the government service side, and then they work at a mine operation. That really helps us bridge the gap when we talk to the federal agencies about some of the challenges with permitting or some of the delays. We really have a way to identify those issues.

The last one is our annual teacher workshops, which we have done for over 30 years. We do two teacher workshops a year. We average about 100 attendees in the north and about 140 in the south. Teachers get a continuing education credit. It does not cost them anything and we take them out to the mines and teach them about rocks and minerals.

Chair Cohen:

I have some questions from Committee members.

Assemblywoman Anderson:

In other committees, I hear about a large percentage of vacancies in employment. I am wondering if you are at capacity or if you are also continually looking for more people to come into the mining industry. I really like the Mining Vegas for Talent. I think that is really an important area, but I do not know if there is a certain percentage of individuals who are still trying to get hired into the mining industry at this time.

Joseph Riney:

We always have openings available; I think we are averaging about 300 openings day to day, across all our mine sites.

Assemblywoman Anderson:

Has there been any outreach at all for the high school students who can start considering this profession earlier, as opposed to waiting until they are at the university level?

Joseph Riney:

We do have outreach at the high schools. Most of that comes in the form of reaching out to the guidance counselors throughout the state and sharing information. We have career pathway documents that we share, really highlighting what a student needs to achieve a goal in the mining industry, whether he wants to be a metallurgist, an engineer, or a haul truck driver. We have that all together based on the top 11 jobs in the industry. A heavy portion of that is career and technical education programs where we also link them to some resources of the available trade schools and the opportunities available and how to achieve those goals.

Assemblyman Watts:

Building off my colleague's question, in general, we are talking about geographic diversity but also the diversity of the industry. I was just wondering if you could speak a little bit to that and any recent initiatives or progress in terms of the diversity of the industry,

Nikki Bailey-Lundahl:

That is constantly an issue for us. We are always looking to diversify. There is a long-standing organization, Women's Mining Coalition, that works to endorse and show that women in the industry are important and that they need to be in more roles. I think that diversity is something that each one of the operations is definitely looking to grow.

Assemblyman Watts:

I have had the opportunity to visit several mining operations across the state and have learned a lot through that. I have had the opportunity to see some of the legacy environmental issues and efforts to address those and seeing some of the safety protocols. I know there have also been a couple of safety incidents. Will you speak at a high level to some of the current challenges and innovations in the industry, related both to safety and also to environmental sustainability?

Joseph Riney:

I will take the safety side of your question, and then somebody else can answer the environmental side. We have a lot of exciting things going on. One of the projects we are currently working on at the NVMA is what we call "first aid for mental health." We are putting together a program that will teach supervisors how to spot mental illness signs in their employees to be able to create that dialogue, and maybe create that interaction point that will change the pathway. That is one thing we are working on.

Technology is very important. Unfortunately, MSHA is not quick to adopt new technology. Implementing new technology that improves safety and health for miners is a fairly challenging endeavor. We have a lot of mine operators who are introducing various components of autonomous mining equipment. Most of what you see on the mine sites are Pit Vipers, which are drill rigs in the pits. A lot of those are autonomous or semiautonomous. We will see semiautonomous equipment underground. We did have one of our members do a pilot program with large retrofit haul trucks. It was a great program. To highlight the challenge with MSHA, the first thing out of their mouth was, This is a great program, but this regulation says the parking brake has to be on if there is no driver in the seat, which defeats the point of autonomy. We are always looking at new and innovative ways to promote health and safety and remove the miner from the hazard. However, it is not always easy to get that path.

Kyle Davis:

In regard to the second part of your question, the biggest challenge that we are seeing right now from the environmental regulation perspective is something you have certainly heard about in other committees. I know that the Governor mentioned it in the State of the State address as well: that is staffing levels of the state. In order for mines to be permitted and operated, there are a number of regulations that the operators need to follow, and for good reason. That requires permit processing and staffing at agencies to be able to do that. It is very important to us to do something to bring down the vacancy level of the state because that is an important component of overall operations.

Chair Cohen:

I would like to ask about reclamation. I know the stated goal is restoration of the land for productive postmining land use, but there are situations where the land is just fenced off, correct? What are the numbers? I understand you do not necessarily have that at hand, but, generally, how much is able to be reused versus how much is just cordoned off and left alone?

Kyle Davis:

I can give you a short answer. I think the general philosophy behind the regulations is that the owner of the mine does restore it some degree, not what was seen before, but something that can be used. There are situations that do create safety concerns. That is where you might see something that is fenced off, because it creates a safety concern. Generally, that is not the large portion of the operations, but sometimes does happen. If there is a safety issue, we do want to make sure that is not something that it is going to cause any problems.

Joseph Riney:

When you think of the fenced-off abandoned mines, we are looking at some of the legacy sites. Those are mines that predate many mining regulations, if any. We are talking in the sixties and seventies. Those are fenced off because they provide some type of a warning for the public. As the public are traveling through the area, maybe exploring, stay out and stay alive. I know we have the Division of Minerals here, and they do a great job of securing those. There are about 49,000 abandoned mines identified in Nevada.

Allen Biaggi, representing Nevada Mining Association:

Obviously, the pits are areas where it is not safe for the public to recreate or be near. There are steep walls, there is deep water, and sometimes there are eroding slopes. I think it is fair to say that there are times when the pits themselves will need to be cordoned off and out of public access. That is exactly what Assemblyman Bobzien's bill was getting at a number of sessions ago. For the majority of the rest of the mines, however, there are opportunities for reclamation. Some of the most exciting things we are seeing are opportunities for renewable energy, be that wind or solar. Much of the infrastructure is already in place at the mines for power lines, access roads, that sort of thing. While the tradition has been revegetation and wildlife habitat, there are new opportunities for renewable energy: solar, wind, geothermal, and other things.

Assemblywoman La Rue Hatch:

I have a similar question regarding restoration. I noticed in the presentation that reclamation has to be returned to productive postmining land use. Who defines "productive"? What does that mean? Is there a regulatory agency that oversees that? I think there is a very big difference between returning the wildlife that was there versus nothing can grow there, but we have a bunch of solar panels. I just would like a little bit more description.

Allen Biaggi:

Reclamation is not done solely by the mine. It is a requirement that has to be planned ahead of time. Sometimes even before the mine begins operation they are planning for reclamation. It is up to an oversight role by the Bureau of Mining Regulation and Reclamation, within the Division of Environmental Protection, as well as the federal land manager. Most Nevada mines have some portion of federal land, the Bureau of Land Management or the Forest Service would also be consulting within those reclamation plans.

Joseph Riney:

I would like to address the wildlife piece. The seed mixture used in the reclamation process is actually more diverse than what grows naturally in Nevada. You will find an additional amount of wildlife on those reclaimed areas.

Assemblywoman La Rue Hatch:

That is really interesting, that the site is more diverse than what was there before. Does that mean that we are bringing invasive species into these areas?

Allen Biaggi:

The seed mixture cannot have invasive species, but at times it can have nonnative species. That is a difficult issue sometimes in terms of reclamation. Crested wheatgrass is a perfect example. Sometimes that is used because of succession species for natives. It allows you to get something on the ground and growing, retaining soil, moisture, and water, but then that plant species secedes into more natives such as Great Basin Wildrye, sagebrush, et cetera. Invasives are never encouraged or applied.

Chair Cohen:

Seeing no other questions, we are going to move on to a presentation and overview of lithium mining operations, in whichever order you choose.

Robert Stepper, Process Operations Director,ioneer:

We are here to talk about the lithium-ion battery to electric vehicle (EV) supply chain [[Exhibit L](#)]. It is really a big topic when we talk about the availability of lithium for a green energy source revolution. The chart on page 3 shows that in stage one mining, the United States produces 1 percent of lithium. China produces nothing on stage one. Stage two, the United States produces 4 percent of the chemical processing, China produces 59 percent. In stage three, cathodes and anodes production, the United States produces zero percent, while China produces 61 percent and 83 percent of the materials that go into our batteries. In stage four, lithium-ion battery cell manufacturing, the United States has 10 percent, and China has 73 percent, which goes to the point of lithium mining in the state of Nevada. Our current production is at 4 percent.

Page 4 shows global lithium market trends. Current production worldwide simply cannot meet the supply of the EV revolution. There is not enough lithium to generate the cars that we want to generate. It does not exist; it is not being mined and we have to reverse that. We have to get to a place where the batteries for the cars can be made; otherwise, it is not going to work.

If you look at the Gigafactory capacity and demand [page 5, [Exhibit L](#)], in 2021 there were 56 gigawatt hours, and number of Gigafactories, 4. We move out to 2026, 588 gigawatt hours; Gigafactories, 26. The demand will be 504 kilowatts. In 2031, 965 gigawatt hours; 26 Gigafactories. Actual domestic supply in 2021 was 5,000 tons per annum lithium carbonate. The 2025 forecast projects a need of 122,000 tons lithium carbonate. You can see that the supply does not meet the demand.

Page 6 shows lithium deposits in the U.S. Lithium can be derived from conventional brine and spodumene, or sedimentary resources. America is severely constrained in its capacity to produce lithium from conventional deposits. There are only two known conventional deposits in America: the active Silver Peak in Nevada and a potential lithium mine from spodumene in the Carolinas. South America dominates brine production today and seems poised to continue to do so, given quantities of economical developed resources. Australia has a competitive advantage with spodumene-based production: it is higher grade, easier to mine, and less challenging to move materials to China. All spodumene raw ore production is sent to China for processing and refining.

America has significant opportunities to produce large quantities of battery-grade lithium materials from sedimentary deposits. There are approximately 26 sedimentary lithium projects in various stages of development in Nevada. There are two significant large-scale sedimentary projects in late-stage development in Nevada. Combined, stage one development can produce lithium materials to supply production of greater than one million

electric cars per year for 50 years. The United States risks near-term domestic shortages of materials essential to its clean energy transition without these projects.

Page 8 [\[Exhibit L\]](#) shows additional extraction technology opportunities. Possible opportunities for direct extraction from fluids with elevated amounts of lithium include brines in Nevada. There are approximately 35 lithium brine projects in various stages of development in Nevada. The active mine in Nevada is a conventional brine operation with solar evaporation ponds. We are also talking about hot fluids from Arkansas oil brines and Salton Sea's geothermal wells. More testing and proof of concept is needed, and it could take decades.

Page 10 is a map showing the Rhyolite Ridge location in Esmeralda County just outside of Dyer. Page 11 is a fact sheet that shows Ioneer has a bankable feasibility study as of April 2020. Products are lithium carbonate; resources are 146.5 million tons; and annual production is 22,000 tons per annum of lithium and 174,400 tons per annum of boron. Capital expenditure P50 is \$785 million. All in, sustaining cash costs are \$2,510 a ton.

As for our highlights, we like to say we are the most advanced lithium project in the United States, and it is a world-scale resource; it is a unique lithium boron deposit. We have a 26-plus year mine life with significant upside from based resource. We are an expected low-cost lithium producer, fully funded to final investment decision. We have binding lithium and boron offtake agreements, and we have conditional debt and equity in place for approximately \$1.2 billion.

Page 12 is a little comparison. You can see the lithium boron searlesite core on the left, and on the right is lithium clay.

Page 13 shows Ioneer's commitment to sustainability, starting with low emissions. The majority of onsite power were met with carbon dioxide-free energy production, low greenhouse gas emissions, and mobile equipment meeting all tier four EPA standards. Next is low water usage. Project design implements best-in-class water utilization while recycling the majority of water usage. We spent a lot of time on water recycling technologies to ensure we utilize that water to the best of our ability. Next is a small mine footprint. With no evaporation ponds or tailings dam, we are able to keep the footprint pretty small. As for efficient equipment, generating all power on-site and having a fully automated autonomous mine haul fleet. Our commitment to sustainability, all baseline studies for the environmental impact statement completed over two years. We have an ongoing commitment to the environment, and protection and conservation of Tiehm's buckwheat, and implementation of the Towards Sustainable Mining Initiative and the Environmental, Social, and Governance Program.

Page 14 shows a little bit of what we are doing with the Tiehm's buckwheat. We have been actively collecting seeds, planting and propagating the Tiehm's buckwheat at our greenhouse, and it is doing fabulous. Fish and Wildlife Service listed the buckwheat as an endangered species effective December 2022. The plant exists in the Silver Peak Range, the area

restricted to approximately 10 acres, a three-square mile area. At the same time, Fish and Wildlife Service designated critical habitat for the species on approximately 910 acres in Esmeralda County. On multiple occasions, Ioneer has modified its mining plan to avoid direct impacts and minimize indirect impacts to the plant. The project will be subject to section 7, consultation under the Environmental Protection Agency. Our ongoing efforts for the Tiehm's buckwheat are aimed at addressing current and future threats to the species, including climate-related threats. Under the supervision of a full-time botanist, Ioneer is conducting scientific research to further increase knowledge of the species and has spent over \$2 million on Tiehm's buckwheat research and conservation efforts to date. Ioneer is operating a dedicated greenhouse near Gardnerville where plants are being successfully grown from seed collected from known populations. Ioneer continues to work with Fish and Wildlife Service, BLM, and the State Department of Conservation and Natural Resources to accommodate issues raised and remains confident that the coexistence of Rhyolite Ridge and Tiehm's buckwheat is achievable.

Page 15 [[Exhibit L](#)] shows the process facility at Rhyolite Ridge: crushing, lithium carbonate circuit, batch leeches, evaporation, sulfuric acid plant, power plants, plant utilities, boric acid circuit, and reagents. There is also a very good explanation of the plant on YouTube if anyone is interested.

Chair Cohen:

Before we have questions, I think we are going to do all of the presentations.

**Tim Crowley, Vice President of Government Affairs and Community Relations,
Lithium Americas:**

We are building a project that we are quite proud of and look forward to highlighting it for you. I will start my PowerPoint presentation on page 3 [[Exhibit M](#)]. Take a look at the map on the right just to orient yourself to where we are. The Thacker Pass project is about 60 miles north of Winnemucca. If you look at the state, you would head due north up U.S. Route 95 and hang a left at Oroville. The long dark blotch labeled Thacker Pass is our plan of operations footprint. That is not the footprint of the mine itself; within that plan of operations footprint is 6,000 acres for the mining facility. Within those 6,000 acres is a mine and a chemical manufacturing plant. Our expertise as a company is in chemical manufacturing and producing high-purity lithium carbonate for the battery industry. I want to focus on some of the highlights today, and then drill into a little bit more with some of the other pages. We recently, in the last couple of weeks, formed a partnership with General Motors. They are now our largest shareholder. It is a strategic partnership that allows them to have all of our offtake for at least the next ten years, possibly longer, and they provide the capital to help us move forward.

We have also received a favorable ruling on an appeal to our record of decision (ROD). A ROD is the federal government going through the National Environmental Policy Act process, which started years ago when we started collecting data and analyzing our project. We submitted a plan of operations to the BLM. They took that plan of operations and conducted an environmental impact statement. That impact statement was completed a

couple of years ago. It was appealed. We have come out of that appeal very favorably just in the last ten days.

All of our state permits have been completed and we are ready to go into construction. Construction is expected to begin this year. We have hired an engineering, procurement, and construction management firm to carry out the construction. We have successfully completed a community benefits agreement with the Fort McDermitt Paiute Shoshone Tribe. The town of McDermitt is about a 50-mile drive, it is about 35 miles as the crow flies. Adjacent to the town of McDermitt is Fort McDermitt. They are the closest tribe to our project. We also recently completed and released a new feasibility study that shows when we are fully up and scaled, we will produce 80,000 tons of lithium carbonate. To put that in perspective, the United States currently produces 5,000 tons of lithium carbonate; that is the 1 percent that Mr. Stepper referenced. We are going to increase that by 16 times. We will scale up; our first phase will be 40,000 tons. Once we complete phase two, we will produce 80,000 tons. We also completed the construction and we are operating a lithium technical development center in Reno. It is essentially a pilot lab for us to make sure that we are innovative and continuing to find efficiencies in how we process our lithium, but also in how we plan for the future and accommodate future technologies in batteries. We are going through the loan process with the Department of Energy. We have applied for a loan and on Friday, we got a letter of substantial completion to our application. That means that we go into the next phase, which is due diligence, and we hope to be awarded a loan from the Department of Energy in the near future.

Mr. Stepper talked a lot about supply and demand. I will not dwell on page 4 [\[Exhibit M\]](#), but as Mr. Stepper pointed out, you can see that there is a gap in supply. We will, in the next couple of years, hit a gap. This is world supply and demand, and it is possible that we could procure, as a country, the materials we need. Those assurances are becoming less and less dependable. Onshoring the raw materials we need to have a very efficient energy system, and electrification of our economy is essential. The Biden Administration sees it that way and has put a tremendous amount of attention and resources into making sure that we onshore that piece. As this gap happens—it is coming—we have the materials we need to be successful.

Page 5 reviews a little bit more about the deal with General Motors. What they have agreed to do is invest \$650 million in common shares in our company. The first payment of that commitment was made last week, which is \$320 million. They are now our largest shareholder. With that commitment comes a guarantee that we will sell them all of our offtake for the next 10 years with an option to go a bit longer. That is enough material for General Motors to make upward of a million vehicles a year.

Let me leave you with a notion or a fact that we are really striving to have a low carbon footprint. We are doing that by self-generating 45 megawatts a year of our power by capturing heat in a chemical process at our plant. We will be a very low water-consuming operation, which is done by recycling 86 percent of all the water we use. Processing will

take place indoors and we will recycle that water. We are minimizing our environmental impact.

One of the things I want to point out because, Madam Chair, you asked this question earlier, is that we are reclaiming our site to a point where you can use the whole thing afterward. The way we do that is we are backfilling as we go. We are going to do concurrent backfilling. After year five, we will have enough space opened up in our pit to be able to start putting material back in that we will not be processing. We have done great cultural clearance and great community engagement. I want you to see this school that we have committed to build in Orovada [page 10]. We are also building a community center and daycare facility at Fort McDermitt. We are improving the intersection of U.S. Route 95 and State Route 293, which is being done at our expense.

We are going to go into construction right away. Bechtel is going to do that construction. They did the recent terminal at the Harry Reid International Airport; they built the Hoover Dam; they are a very reputable, world-class, very safe, and environmentally responsible company. I will leave it with that, and I look forward to questions.

Chair Cohen:

Thank you. Next is a presentation from Albemarle.

Meredith Bandy, Vice President, Investor Relations and Sustainability, Albemarle Corporation:

For those of you who do not know Albemarle, we are a leading specialty chemicals company. We have about 7,000 employees around the world. We serve about 1,900 customers across 70 countries. This year we had just over \$7 billion of net sales, about two-thirds of that was in our core energy storage business. That is the business that includes our battery grade and industrial lithium assets [page 2, [Exhibit N](#)]. We are a Virginia corporation headquartered in Charlotte, North Carolina, and listed on the New York Stock Exchange.

Today I want to talk a little bit about our sustainability and innovations as well as the production that we are doing. Like the other presenters tonight, with our position in clean transportation, clean energy transformation, sustainability is really core to everything we do at Albemarle. It is part of our purpose, it aligns with our core values, and it is a pillar of our strategy. I will highlight two items on page 3. One is the work that we are doing with the Initiative for Responsible Mining Assurance (IRMA). The great thing about IRMA is that it is a multistakeholder model. It is not just producers coming together and saying, this is what is right for the industry, but it is also our customers, businesses like Ford, General Motors, and Tesla. It is labor unions like the United Steelworkers, and nongovernmental organizations like Human Rights Watch. I will also highlight that this year our asset in Silver Peak, Nevada, received two different responsible care awards from the American Chemistry Council for energy usage and water conservation.

As everyone else has said here today, we see tremendous growth in the lithium market. Our expectation is for lithium demand of 3.7 million tons by 2030. We believe that even with extensive growth in supply, we will see a supply shortage by 2030 of around 800,000 tons. This would be about a 20 percent shortage, even with things like recycling and nontraditional resources.

Page 5 [\[Exhibit N\]](#) is Albemarle's energy storage global footprint. There are two things I will highlight for you here: we do have a global footprint and we are vertically integrated. That means we have access to world class resources and conversion sites all around the world, including in the United States: at Silver Peak, of course, but also in Kings Mountain, North Carolina, and Magnolia, Arkansas. We are really well positioned to help build the EV supply chain here in the United States.

Page 6 shows the two main processes, very overly simplified, but two main processes we use today all around the world to convert lithium resources into battery-grade materials. You can see that in Silver Peak, we are using the same brine concentration processes we use in Chile as well. Our Clayton Valley brine is four times saltier than seawater. It is a mineral resource. It cannot be used for freshwater or for irrigation, and we do not use any chemicals in our extraction process. We use passive solar energy to concentrate the brine and that allows us to avoid the emission of 1.4 million tons of greenhouse gasses every year. Once the brine is reaching an ideal lithium concentration, we transfer it to our lithium production facility. We convert it to lithium carbonate and in some cases, we ship it to Kings Mountain for further processing into lithium hydroxide. That is not the only process we use. There are a lot of different processes for converting lithium into battery-grade materials. We look at a lot of them. You can see the yellow boxes on page 7, they are the ones that we are currently using and the gray boxes are areas where we are currently doing research. For example, direct lithium extraction is an area that we get a lot of questions about.

Direct lithium extraction (DLE) is an umbrella term for a lot of different technologies that can be used for difficult to process brine, or in areas where solar evaporation is not possible, perhaps at a lower elevation or in a more humid climate. We do look at DLE for a lot of our processes, for example, in Magnolia, Arkansas. The challenge with DLE is you are basically producing a synthetic brine. It does require quite a bit of fresh water, it requires energy, it also requires the addition of solvents or chemicals to create that synthetic brine. It is in use in some areas today, like in Argentina, but it is not one size fits all. Every brine is different, and every one has to be carefully calibrated for that resource. Typically, it is quite difficult to go on from the bench scale in the lab to an industrial scale.

That is not the only area where we are doing innovation. For example, we work closely with our customers around new battery materials. In North Carolina we have a battery materials innovation center, which allows us to take our lithium products and test them in real world manufacturing conditions so that we can get better alignment with our customers about how our materials will interact with their manufacturing process and allows us to accelerate development of new lithium materials.

Page 9 [[Exhibit N](#)] shows what this means for Nevada and Silver Peak. Albemarle and our predecessor companies have operated in Silver Peak since 1966. Today we produce around 4,000 tons of lithium carbonate equivalent. We have announced plans to expand to 7,500 tons. At that point, as some of your other presenters have pointed out, that would be the equivalent of around 170,000 battery electric vehicles per year. Silver Peak material is used in a broad range of applications, supporting a lot of different innovations.

In January of 2021, we announced an expansion of our Silver Peak facility and I am happy to present that this is going really well. We are planning to invest \$80 million to expand Silver Peak, and we have spent about half of that so far. We have completed 22 new wells, so our well program is complete. We have also completed the supporting infrastructure for those wells. Our new liming plant is under construction. We have submitted the authorization to construct our new pond enhancement. We submitted that in February 2023. We would expect to begin that in the spring of 2023. We are also in engineering studies for our carbonate plants.

Page 11 highlights some of the socioeconomic impacts from our Silver Peak site. We currently employ around 67 people directly at our site. The average compensation for those folks is just over \$100,000 a year, which is 42 percent higher than the Nevada average. Most of our employees are coming from the direct communities around the site: Silver Peak, Goldfield, Tonopah, and some come as far as Las Vegas and Reno. We are also very proud of the work that our foundation has done providing emergency services for the local community, schools, and health care. I will point out that a significant amount of these economic contributions are staying locally in Nevada and also in the local Esmeralda County region.

I will end on our avian protection program. We have worked very closely with Nevada's Department of Wildlife and the U.S. Fish and Wildlife Service on our avian protection program. We spent about \$2 million on this program to date. Basically, the evaporation ponds where we work, some of them are perfectly fine for birds, but some of them, when the brine gets more concentrated, are not healthy for birds. We take steps to keep the birds off of those ponds. In cases where we cannot do that, we have the ability to rescue those birds and send them to our state-of-the-art rehabilitation facility until they can be released.

That is a very high-level view of Albemarle and our operations in Nevada. I am very happy to take your questions.

Chair Cohen:

Thank you very much. Again, I am very sorry about the time issue. I am going to make sure that all the Committee members get your contact information and have the Committee members send their questions offline. We do appreciate the presentations and I know that there will be some questions coming your way. With that, I will close the presentations and will move on to public comment. Is there anyone wishing to provide public comment? [Public comment was heard.]

With that, I will close this meeting. We will have another meeting at 4 p.m. on Wednesday.
Thank you very much, this meeting is adjourned [at 6:34 p.m.].

RESPECTFULLY SUBMITTED:

Nancy Davis
Committee Secretary

APPROVED BY:

Assemblywoman Lesley E. Cohen, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is an amendment for [Assembly Bill 109](#) presented by Assemblywoman Selena La Rue Hatch, Assembly District No. 25.

[Exhibit D](#) is a copy of a PowerPoint presentation titled "Nevada Healthy Soils Initiative: AB109," dated February 20, 2023, presented by Assemblywoman Selena La Rue Hatch, Assembly District No. 25; Joe Frey, Private Citizen, Fallon, Nevada; and Jake Tibbitts, representing Eureka Conservation District, and Nevada Association of Conservation Districts.

[Exhibit E](#) is an information flyer titled "Nevada Healthy Soils Initiative: AB109," submitted by Assemblywoman Selena La Rue Hatch, Assembly District No. 25.

[Exhibit F](#) is a letter dated February 20, 2023, submitted by Mauricia M. M. Baca, Nevada State Director, The Nature Conservancy, in support of [Assembly Bill 109](#).

[Exhibit G](#) is a letter dated February 16, 2023, submitted by Tracy Puckett, Co-Chair, Legislative Committee, Toiyabe Chapter, Sierra Club, in support of [Assembly Bill 109](#).

[Exhibit H](#) is a letter dated February 18, 2023, submitted by Steven A. Shane, Private Citizen, Reno, Nevada, in support of [Assembly Bill 109](#).

[Exhibit I](#) is a letter dated February 20, 2023, submitted by Maggie Orr, Vice-Chair, Lincoln County Conservation District, in support of [Assembly Bill 109](#).

[Exhibit J](#) is a letter dated February 20, 2023, submitted by Joelle Gutman Dodson, Government Affairs Liaison, Washoe County Health District, in support of [Assembly Bill 109](#).

[Exhibit K](#) is a copy of a PowerPoint presentation titled "Introduction to Nevada's Modern Mining Industry," dated February 2023, presented by Nikki Bailey-Lundahl, Director of Government Affairs, Nevada Mining Association; Joseph Riney, Vice President of Operations, Nevada Mining Association; and Kyle Davis, representing Nevada Mining Association.

[Exhibit L](#) is a copy of a PowerPoint presentation titled "ioneer: Providing Material for a Sustainable & Thriving Planet," dated February 2023, submitted by Nikki Bailey-Lundahl, Director of Government Affairs, Nevada Mining Association; and presented by Robert Stepper, Process Operations Director, ioneer.

[Exhibit M](#) is a copy of a PowerPoint presentation titled "Lithium Americas Thacker Pass Project," dated February 2023, submitted by Nikki Bailey-Lundahl, Director of Government Affairs, Nevada Mining Association; and presented by Tim Crowley, Vice President of Government Affairs and Community Relations, Lithium Americas.

[Exhibit N](#) is a copy of a PowerPoint presentation titled "Powering Clean Energy," dated January 23, 2023, submitted by Leo Drozdoff, representing Albemarle, and presented by Meredith Bandy, Vice President of Investor Relations and Sustainability, Albemarle Corporation.