



STATE OF NEVADA
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DIVISION OF MINERALS
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RICHARD PERRY
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COMMISSION ON MINERAL RESOURCES
 Bishop Manogue High School
 110 Bishop Manogue Dr. Reno, NV 89511

Thursday November 5, 2015

1:00 P.M.

Agenda

CALL TO ORDER

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

ROLL CALL

PLEDGE OF ALLEGIANCE

COMMENTS BY THE GENERAL PUBLIC

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

I. MINUTES

- A. Approval of the August 27, 2015 meeting minutes **FOR POSSIBLE ACTION**

II. NEW BUSINESS

- A. Update on Sage Grouse issues in Nevada as they pertain to mining. **FOR DISCUSSION ONLY**
 Allan Biaggi
- B. Nevada Land Withdrawals from Mineral Entry **FOR DISCUSSION ONLY**
 Presentation of historical land withdrawals by Dennis Bryan
- C. Discussion of the Nevada and NE California Greater Sage Grouse Land Use Plan Amendment and the 2014 Nevada Greater Sage Grouse Conservation Plan (State Plan). **FOR DISCUSSION ONLY**

III. OLD BUSINESS

- A. Education, Public Awareness and Eagle Scout Service Project Presentation **FOR DISCUSSION ONLY**
 - Bill Durbin and Lucia Patterson
- B. NDOM Forecast and Reserve balance - Mike Visher **FOR DISCUSSION ONLY**

C. Findings of task force to review NDOM budget and forecast.

FOR POSSIBLE ACTION

At the August 27th CMR meeting, Chairman DeLong assigned a task force to review the budget and forecast. The task force will present findings.

D. Mining Claim Fees and Surface Disturbance Fee.

FOR POSSIBLE ACTION

The mining claim fee task force presented findings to the Commission at the December 11, 2014 meeting. At that meeting, the Commission chose to delay any action on increasing claim fees until after oil/gas and geothermal regulation changes and fees were completed, or early 2016. The current Dangerous Condition in Non-Operating mine fee was last set by the Commission in May, 2008, at \$2.50 per claim, with a statutory cap of \$4.00 per claim (NRS 513.094). The claim filing fee, per NAC 517.200, is currently at \$6 per claim filing, last set by the Commission in May, 2008, with a statutory cap of \$6 per claim (NRS 517.185). The Commission can direct the Division to begin rule-making to increase the Dangerous Condition in Non-Operating Mines fee. The fee for approved surface disturbance on public lands is currently \$20 per acre (NAC 519A.634) with a statutory cap of \$30 per acre (NRS 519A.250). This fee was last adjusted by the Commission in 1999. The Commission can direct the Division to begin rule-making to increase the Surface Disturbance fee. By statute, this fee must be used for AML hazard securing and education of the general public concerning the dangers of AML hazards.

E. Findings of task force to evaluate regulations changes to NAC 513.

FOR POSSIBLE ACTION

At the August 27th CMR meeting, a task force was formed by Commissioner DeLong to review possible changes to NAC 513 that relate to definitions of abandoned mine lands (AML) securing fences, AML rankings, AML warning signs and periods of notification of AML hazards. The task force will present findings to the CMR, which may choose to direct the Division to move forward with developing language to begin rule-making.

IV. STAFF REPORTS

- 1) Mining/Reclamation Bond Pool – Mike Visher
- 2) Oil, Gas, and Geothermal – Lowell Price (Oil and geothermal drilling update)
- 3) Administrator’s report- Rich
- 4) Correspondence –

COMMISSION BUSINESS

- A. Determination of time and place of next CMR meeting

COMMENTS BY THE GENERAL PUBLIC

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ADJOURNMENT

NOTICE TO PERSONS WITH DISABILITIES

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

I. MINUTES



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RICHARD PERRY
 Administrator

COMMISSION ON MINERAL RESOURCES
 Elko Convention Center
 700 Moren Way, Elko, Nevada 89801

Thursday August 27, 2015

1:00 P.M.

Meeting Minutes

CALL TO ORDER

Chairman Rich DeLong called the meeting to order. Mr. Perry took roll call. There were six members present creating the quorum.

ROLL CALL

Richard DeLong: present
Dennis Bryan: present
Fred Gibson: present
Art Henderson: present
John Mudge: absent
David Parker: by phone
John Snow: present

PLEDGE OF ALLEGIANCE

COMMENTS BY THE GENERAL PUBLIC

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ACTION WILL NOT BE TAKEN

Mr. Henderson made a public comment in wanting to discuss a program in Reno at the high school level for future mining engineers called Miner Academy. It's being held at Bishop Manogue High School. A scholarship for women has been set up called Women in STEM for the Miner Academy. We're going to give scholarships for the students that would like to be in the Miner Academy next year to apply for these scholarships. Will keep the Members informed of the various developments.

Mr. Gibson made a public comment to acknowledge the passing of friend and colleague Peter Hummel.

I. MINUTES

A. Approval of the May 1, 2015 meeting minutes

FOR POSSIBLE ACTION

Mr. Bryan commented that the minutes were comprehensive and recommended breaking up the pages a bit to have better readability.

Chairman DeLong had a couple of editorials. Page 2, needs a name to whoever made the statement. He also referenced that Chairman and Chairperson was used and he preferred Chairman.

ACTION TAKEN: Fred Gibson moved to approve the May 1, 2015 meeting minutes with changes. Dennis Bryan seconded the Motion. Motion carried unanimously.

II. NEW BUSINESS

- A. Presentation on 2014 Nevada Mineral, Oil and Geothermal Production **FOR DISCUSSION ONLY**
Production data from operators in Nevada has been compiled and will be presented. Rich Perry

Mr. Perry stated that this presentation is fresh off the press really because we just finished compiling all of the production numbers for 2014.

He continued to state, as many of you know, we sent flyers out early in the year requests, and after the first quarter, I think by April the companies that produce in Nevada are required to report all of their production analysis, pounds, tons and ounces. So we compiled that, and this starts sort of a cycle of talks for the year.

Gross Revenue Slide by Year for all mineral commodities produced in the State of Nevada. And you'll recognize this one from our annual report, and it's also used in the Nevada Bureau Mines and Geology report for minerals exploration. I just note here, as you can see the growth that we've seen in Gold is by far a major commodity, copper is second, and we saw a pretty significant decline in gross revenues in 2014 versus 2013. And I've done just kind of a quick breakdown on that, 16% decline in gross value, of which 9.2 were attributed to actual gold production in ounces and 10.3 was gold price decline. Now, we'll go through the actual - actual commodities.

So those are our metal production numbers for 2014, up against the 2013: 4.940 million ounces of gold, 10.9 ounces of silver, 132 million pounds of copper.

Gold production per - you can see here this is gold production in ounces, versus the price of gold here. I'll just make one note up there that over 30% of the gold is produced in the State of Nevada now is produced from underground.

Many of you remember when there was no gold produced from underground mining in the early 90s, so underground production has grown significantly to exceed 30% of ounces produced in Nevada. I'm hoping this next year to have a percent which is refractory treated versus oxide ores.

Mr. Henderson asked, why when the price went higher the production - why would that be, I'm just curious?

Mr. Perry believes having been in this business, it's because most of the production facilities, the downstream plants are fixed capacity plants. I can tell you because I was here then that almost all of this was oxide ore coming out of the tops of the gold deposits, and it was pretty much unlimited how much you could put on leach pads back then. Because this was a lot of leach pad production. But as the oxide ran out and mines were mining deeper, and dewatering came into being, you know, in much and more so this year, those years, now you have roasters and autoclaves. There hasn't been a new one built in many, many years. They're fixed capacity plants, so production largely becomes a function of grade.

So all you could really do is affect by ounces is a grade, that's why I was trying to come up with refractory versus oxide, because I got a hunch, we're probably in the 50% range at this point. Most of all of Newmont and Barrick production is refractory. Nevada's silver production, this really reflects Midas and Coeur Rochester which are the two biggest silver producers in the State. And particularly Rochester had much higher silver numbers back then and you can see that they have come down and into 10 million ounce range and it was actually this last year. Silver is mainly a by-product of gold in the State of Nevada. There's not one mine that you can say is a primary silver producer. Coeur Rochester is about as close to it comes, but when you look at the actual revenues from it, it's even slightly higher on the gold than it is on silver. The other mine, Midas which is now a Klondex operation, has a lot of silver along with the gold, it's an underground mine.

Copper production, copper is our second largest gross revenue now for the State, staying pretty flat, two producers Newmont and KGHM. You know the big change there in early 2013, or late 2013 was the first solvent extraction electro-winning plant in the State which is at Phoenix. Now, that mill was originally a mill that was built for flotation and they had a lot of oxide, and they decided that they would add that.

So there's actually an SX/EW plant. So you can see copper plates transported on the highway now, sheets of copper plates heading to the Midwest, which is where they are ultimately processed into final products.

Nevada has one copper mine that's under construction now in the Yerington district that will really impact this positively.

Mr. Perry continued to state, two of the gold operations in the state are in bankruptcy so gold production may decline again.

Now, we'll go into some industrials minerals: barite production is on a steady climb here. Seven mines, four operators. Gypsum production on a steady increase and that's mainly from the mines down in Clark County, but we also have one there in Lyon County that produces, the Art Wilson Mine. Industrial minerals such as gypsum and lime are largely driven by construction. So whereas we see metal production down, we see production in industrials going up. This is the first time we're reported on Limestone production. We've added it to the list here and as you can see this has gone up by literally double from where we were before. The major producers there are Pilot Peak and also Lhoist's Apex Mine which is down in Clark County.

Mr. Bryan asked, in Clark County there's a lot of Limestone that's mined for aggregate. Is that included in this?

Mr. Perry said that it would be, if it's listed as limestone and then asked Mike to confirm. Mike confirmed.

Mike also added, if it's being submitted by an operator that mines a product that is not for construction aggregate, they report it separate. You know the actual end use, they don't break that out.

Mr. Perry continued to state, we sent out flyers on that, we looked at USGS numbers, because we don't get all the reporters back.

Other production of industrial - lithium compounds and magnesium carbonate which is the longest operating mine in the State of Nevada in Gabbs; it's been operating since 1941 and still plugging away, diatomaceous earth, salt and zeolites.

Active claims in Nevada versus gold price by year took another decline in 2014, and we have some other graphs here that we'll go through then and take a look at where that's actually at. This is the number 2014 through 2015, and that's a little different than what you saw there on chart before 2013, '14. 2015 is the assessment year that started last September. So 2016 will be what people are filing on in the next few months. So it's out-phased a little bit there, but that's how you get the numbers from the BLM SR- 2000 System. So you can see the decline in actual claims, number of claims in those two years. It's a little different than our claim revenue numbers because our revenue numbers run calendar year.

Number of new claims staked in 2014, once again a decline occurred - so the difference between - and these are new claims, a little than 10,000, so most of the claims are existing claims that people are holding onto that they're filing on.

This is a breakdown of claims by owner, which shows producing mining companies hold half of the unpatented claims, and exploration companies hold the other half. And then these are claims by county, Elko County being the largest which is kind of surprising because it's not one of the bigger producers of metals.

Fluid mineral drilling activity, this is from the beginning of 2014 to now, so it's over a year. You can see the first thing that jumps out is geothermal is mostly on the west side of the state here those are the blue dots, and those six production wells drilled, these are not permits issued, the permits issued is higher, but these are actual wells

drilled and eight oil exploration wells, four conventional wells found here and these are the wells that were drilled in hydraulically fractured in Elko County and the one in Eureka County was hydraulically fractured as well.

Geothermal power production was on a steady increase. There was one plant that went on line that was phase two of McGinness Hills this last year, finished it's ramp up. The power production in the state exceeded 2.7 million megawatt hours, which is enough to power about 247,000 homes in the State of Nevada, at the average use of the home which is 10.9 megawatts per home.

You can see the light graph here is actually the cents received per kilowatt, and we derived that number from net proceeds of mines calculations.

Mr. Henderson asked Mr. Perry, do you know how many homes there are in Nevada, what percent that is?

Mr. Perry stated that he didn't know. **Mr. Henderson** asked, how many can there be, 247,000 homes is a lot of homes? Mr. Snow and Mr. Perry discussed a potential number and said maybe 1,000,000 homes or 25%.

Mr. Perry went on to say, these are the locations of the power plants that are operating. This is actually from a paper that Lisa Shevenell recently did, and she sent it - she allowed me to use her - her graph or her chart on here. These are the 24 plants in Nevada going down here by year of when they went into production. Of course, the one closest to us here in Elko is the one in Tuscarora.

Oil production declined again in 2014 to 316,000 barrels, and we were hoping that would be up. Nevada oil production peaked in 1991 at four million barrels. Most of that production is from Railroad Valley.

So a little summary for 2014: Gold and silver are around 85% of the gross mineral revenue of \$7.57 billion US. Nevada fell to number two in gross revenues for mining commodities behind Arizona last year

Nevada has a lot of production upside in base metals as we know from the exploration in the Yerington District. Smelting capacity is lacking as there are no smelters around with much capacity in the US. Both of the Nevada producers of copper concentrated in Nevada are shipping out of the country for smelting, which is very expensive from a freight standpoint.

Industrial minerals and material production was up with the rebound of construction, all those things used in construction. Geothermal is on a steady increase, but there is some consolidation and there was some sales of assets this last year going on in that industry.

And on the oil side we declined again, but we saw the first shale target in Elko County, and the hydraulic fracturing technology used, and the first oil produced from that technology in 2014.

On our website, we post the most recent presentations. So I encourage everybody to visit it and stay current, because we change it weekly.

Mr. Henderson stated that here were 1.2 million homes in Nevada, that production number from geothermal would make it about 20%.

Mr. Henderson commented that the NDOM logo looks better and better every time he sees it and that it was a good job in putting that together. Mr. Perry stated that he would pass the word on to Rachel. He also commented on how important branding is to the Division.

B. **Oil and Gas code (NAC 522) proposed update.**

FOR POSSIBLE ACTION

Rich Perry - A new fee structure which was enabled by S.B. 44 in the 2015 legislative session was developed by staff which also includes general cleanup of the code. The proposed changes were submitted to LCB for legal review on July 15. The Division is requesting the Commission provide direction prior to the required public workshop and business impact statement process.

Mr. Perry started the presentation with a bit of history. Last year the Commission gave direction to develop some recommendations on changes in oil and gas fees, and there was a Subcommittee formed that came back and

reported February 2014, and that ensued ultimately in Senate Bill 44 which gave the division and the commission the ability to change things because there was a permit fee cap on of \$200.

So with that done, we formed a team comprised of three of us at the Division, and Commissioner Henderson, our Oil and Gas Commissioner and DAG Bryan Stockton, and we sat down and we went through Chapter 522. We added the framework of the new fee structure here, but we also took the time to go through the Chapter and clean up and update some other language.

So the first part of that 522.212 are permit fees which basically scratches out the \$200 fee that was in there before, and it inserts what the commission had envisioned for a fee schedule for conventional wells based on depth of the well, much like our geothermal code. And a different fee for wells intended for hydraulic fracturing on public land, and wells intended for hydraulic fracturing on private or State land.

Now I should say, I took the changes here and submitted them to LCB, so that we could be doing this at the same time. And what we're looking for from the Commission today is any changes or recommendations if you want to move forward with workshops. LCB has come back with some questions that we've worked through, and they'll be some changes in language here, because they wanted something different on public land, versus private/State, because it's basically going to say federal or non-federal. So they worked through those, but it's minor stuff, nothing that is substantive on the intent.

The application to reclassify a well or convention to a well is intended for hydraulic fracturing shall pay the difference, and so someone can't permit a conventional well and come back and want it to be a hydraulic fractured well. This is allowed for in our code if they do certain things.

And number three there, I want to just make note of this. Once a well is completed any subsequent applications to change the terms of a permit must be submitted. There's not a bunch of additional sundry fees while the well is being drilled. And a sundry application, or a change application would not require a fee until after the well is completed and hydraulically fractured and is in production, because that - that was really the clarification.

And that's why that wording is in there. \$100 for an administrative change or \$300 for all other changes, and there's a list of what defines those later on here. And then we took the opportunity to clean up some other things like tentative approvals by telegraph, because we didn't want to have companies have to install a telegraph.

Mr. Perry went on to state, on the next page, NAC 522.342 our current fee is 15 cents, the statutory limit that was approved by the legislature is 30 cents, so we have proposed to move that to 20 cents.

Mr. Henderson wanted to talk about this, we're still not funded the oil and gas program in the Division. So for the Commissioners to consider this as five cents more on 30,000 barrels, its \$15,000 I believe. **Mr. Perry** confirmed, 316,000 barrels, yes. **Mr. Henderson** stated, but it's \$15,000 right? **Mr. Perry** confirmed. **Mr. Henderson** asked, \$15,000 is what this adds to our budget, and that's still a deficit in funding our oil gas program, so just a comment as you see that increase.

Chairman DeLong asked that everyone state their name when speaking to help Valerie and the transcription service.

Mr. Perry continued onto NAC 522.380, the construction of a well-intended for underground disposal, and the - really the notation here is permit by the Division of Environmental Protection because that's a UIC permit, and that wasn't clarified before so that's why we added that.

Chairman DeLong had a couple questions on some existing wording there. Number one, it ends with the 'administrator'. Is that defined in the regulations? Because it could be the Administrator of NDEP versus the Administrator of the Division; and I think it means Administrator of the Division.

Commissioner Snow agreed and went on to say, I think the main point here is the construction of the well, intended for underground disposal. **Mr. Perry** explained, we still have to permit a UIC well, because we permit the drilling and completion. **Chairman DeLong** understands that, it's just - we should check and see if it's - if we define administrator other places in the Reg as you. **Mr. Perry** agreed to check.

Chairman Delong stated that if not, maybe we should add a definition. And under number three there's a term, must be verified by the applicant. What does that mean?

Mr. Perry stated, for the construction of a well to dispose of salt water, brackish water, or other water unfit for domestic use, so a reinjection well, irrigation or other use must be verified by the applicant. The applicant is simply filling out the application and verifying. The applicant still has to obtain a UIC permit from NDEP. **Mr. Henderson** added, what type - whether it's brackish, salt, whatever it is.

Mr. Perry continued, 522.430, permanent and temporary abandoned of well.

Mr. Parker excused himself, but had one other interjection here. It's probably a neophyte sort of question, but on "H" the top of the page 3, the estimated minimum injection pressure. Don't we also want to know what the maximum injection pressure would be?

Mr. Snow replied, the maximum injection pressure on Class II UIC Wells is prescribed by NDEP in accordance with the EPA's formula.

Mr. Perry continued, each well without production casing must be immediately and permanently plugged. We added the term 'permanent' in there to ensure that it is a permanent plug and not a temporary plug.

The administrator may for good cause grant extensions up to one year. We had six months there before, but realistically, you know, we think a year is more consistent with what the BLM has and these are very common. So we proposed a year.

Mr. Bryan comment, number one, it says 'immediate' and this says you can have a year. Is that kind of a - is that government immediate? **Mr. Perry** asked Bryan Stockton (DAG) to comment. Bryan stated, no, immediate means it needs to be plugged in, but if you need an extension for good cause you can get an extension, right.

Mr. Henderson agreed that the intent of this is if there's no production casing inside of a well, and there's no operation for 30 days, then there's a chance of contamination. So that's why we want an immediate plug.

Mr. Perry rereads the second line that states, if there's no production casing it has to be plugged.

Mr. Henderson states, yes, that's the key. And then if you have production casing, if you're shut in and you're testing pressures, waiting for oil prices to go up, whatever reason, you can get extensions from the administrator.

Mr. Perry goes on to say, extensions shall be requested on a sundry notice on report on wells, which is - NDOM Form 4 and those are on our website. All of our forms are on our website with a description.

So going to NAC 522.450, this was water wells. This was part of the statute that was in there before that basically allowed the Division of Minerals to grant a water right by allowing them to finish a well with - and if it was a dry oil well, they could permit it as a water well, but that's in conflict with our water law. Because we can't grant a water right, I think, nor do we want to grant the use of that - that should entirely be in the State Engineer's shop. So if someone drills an exploring well, they case it, and they decide they want to make it a water well, they need to adhere to the tenants of Chapter 534, the State Engineers. So we removed all that language.

Mr. Henderson stated, it's not our intent to say if you drill a well, it cannot become a water well. We're just taking the responsibility out of the division of minerals. **Mr. Perry** agreed adding, because it was in conflict with other statutes.

Mr. Snow asked, how do you avoid your plugging obligation? How could it ever become a water well if you don't use the affidavit process, and the waiver of the plugging? That's why that has always been in there so you can—you take it from an oil well up to the water well depth, and you ensure that it's plugged properly and abandoned for the life of the oil permit for those intervals. And then the procedure was that you would get an affidavit from the State Engineer's Office for the liability to continue it as a water well. They're rare and far between but they do come in handy in some of these arid basins that the ranchers need the water.

Mr. Perry responded, we could do that with the plugging and abandonment report, if it's worked out between the State Engineer's Office.

Mr. Stockton asked for confirmation and stated, I didn't understand you, plug it up to the depth of water well and then just from there...

Mr. Snow then added, let's say the last one I remember was in Lincoln County and you've got a good aquifer at 1,800 feet in hard rock, and you'd plug back a 7,000 foot oil well to 2,000 feet, and from the 2,000 feet to the 7,000 feet it would be plugged in accordance with our rules and regulations. Then we would allow that well to be transferred underneath the State Engineer's rules to be completed as a water well for that 2,000 feet. And it's still in the federal rules anyway. You can still do it on the federal rules and most of them are federal, so this probably isn't...

Mr. Henderson clarifies, I think what you're saying is this approval says that the next agency can take confidence in us that we have said that the well is properly plugged. So if you do make it a water well there was no contamination between the oil and gas zones. Is that what you're saying?

Mr. Snow confirms, yes, that's right, and then it would be on whoever was taking liability for the well to have the adjudicated water rights to utilize it.

Mr. Henderson feels that, we probably should discuss this again with the workshop team, the task force team again, we can review this again, outside of this meeting.

Mr. Perry adds, my interpretation of this is that it was there, and it was probably a relic or something from some years past and then it allowed the Division to grant the ability to use the well as a water well and that is in conflict with Nevada water law.

Mr. Snow says, no, it was an actual custody change over to the State Engineer's rules. They added that there's an affidavit that you fill out. **Mr. Perry** said, we might be able to do that with the waiver form. They have to acquire the water right from the State to do it, at which point we would say, you have to plug this well to this depth. **Mr. Snow** then commented, sometimes they're used for wildlife improvement like the one in Lincoln has been used for animals I believe and it's a combination of the BLM and NDAL as well. They're not always just Ag it can be range improvement.

Mr. Perry continued to the next one—here are forms required by the Chapter. The provision to this Chapter requires forms to be filed. The forms listed inclusive may be filed. Apparently there must been in the past a form by the US Geological Survey. In place of Forms 4, 5 and 7a. So we've got those on our website. And an application for a permit to drill an oil and gas well.

Mr. Snow wanted to add that what that meant is on a federal well, the USGS used to have jurisdiction before the BLM did in 1984, that's why that's there. So that would allow you to accept BLM EPD Form or Sundry Notice Form. That's the intent of that.

Mr. Perry continued, a person who desires to drill any oil or gas well must file a Form 2, properly complete with the Division. That's a drilling form. There's a separate form for plugging the well and deepening the well, and the \$50 fee was scratched out, because that's now part of the regular fees up front that we've got in there.

Number one through seven are - one through seven and 14 are classifications for a \$300 all other changes that we have on Page 1. And number eight through 13 are defined as administrative changes. Administrative changes meaning just permit extensions, change of location of a well, so the well is not drilled yet, and they want to change it because they've concluded they've got some new geology and want to move it around. And major work over or cleaning of a well, change in status of a well, administrative changes on the name of the owner and operator, so those administrative ones. So those are pretty consistent with what we have at Geothermal there, that's where we got most of that from the administrative changes and then we just defined the others as all other changes. The all other changes are the ones that require some time to sit down, look at, evaluate and put some technical time into them.

Now, onto that form five down here must be filed within 30 days after the completion of drilling operations. Scratching out when the well is placed into production. Mr. Perry asked Mr. Price to comment.

Mr. Price commented, yes, the - on this particular aspect is 30 days after the completion of drilling, a Completion Form or Form 5 needs to be filed with the Division. If they do complete the well, say two months later and bring it on production, they would need to file the same form again

Mr. Perry asked what a Form 5 was. **Mr. Price** answered, it's the Well Completion Report. And then 5A is really just the subsequent reporting of it. It's not a different form, it is the same form. So 5A - the A may need to be struck basically because it would be the same form that they'd actually be filing.

Chairman DeLong asked, at the beginning of 522.510 you inserted 5A in the title, now you're striking 5A from...

Mr. Perry said, it will be when the LCB is done with it, that would be by my interpretation because 5A doesn't exist. **Mr. Price** added, and Item Number 3 is actually Form 12 which is the well plugging. And they submit that along with Form 4, the sundry notice.

Mr. Perry asked **Mr. Price** if he wanted to comment on Form 8A, change of owners.

Mr. Price stated, there's really no need for Form 8A.

Mr. Perry added, well records, in the past we've had confidential for six months and with an extension in practice would extend it another six months. The BLM has confidential records for one year, so we have proposed we're going to be consistent with that. And that means the company doesn't have to come in and file a request for an extension after 6 months.

Mr. Snow asked, on the definition of completion of drilling operations, is that what you really want to say there? **Mr. Price** explained, basically we've been looking at it as when the rig is released as the completion of the drilling operations, you know, the initial, they may later bring in a work order rig to actually complete the well, but we're talking about the initial rig release throughout the drilling operations.

Mr. Perry asked **Mr. Snow** if he was okay with it and **Mr. Snow** responded, yes, I mean it's not date on the completion report though. Because the completion report is something you can get your hands around and this is something - your rig release date is something that's in your daily reports or whatnot, you can't get your hand around it. So you'd have to somehow put I guess on your drilling logs a notation of when you considered the proprietary clock to start.

Mr. Henderson added, if we do that, the first completion report is issued 30 days after this point and then the subsequent completion reports can be anytime in the future, whenever they decide to perforate or frack, so it's a moving target for us. Rig release also has its problems because they could keep the rig on the hole for a long period of time, so you know we're open to any suggestion. We talked about this a long time in the task force. There wasn't a very clear, good answer exactly when we should do it, so this is what we decided to go with, but we're welcome to hear your comment.

Mr. Snow commented, well in the past this Commission and Division formed a task force to look at this very issue, probably 15 years ago, and the conclusion of that group's report was that you would consider the proprietary and confidentiality clock to start on the date that you considered the well completed, when the completion rig left the rig. But that was that group's effort, and it's kind of solid, because there could be a delay between drilling operations, particularly now with the new activities.

Mr. Price, agreed, yes, there could be a significant delay. Mr. Perry agreed as well.

Mr. Henderson also agreed and further stated, of course, I think - let me look at this again, that they can also - there's still a clause in here, it may not be written here where they can apply for additional confidentiality at the - at your grace.

Mr. Snow added, I guess my only comment would be is you're going to have to have a consistent way of putting the date on the drilling logs, so that you're technicians in the office know when to start the one-year period.

Mr. Price explained, well, what we do basically, Linda and I, we document when the rig release was. And so that's when that clock starts to tick is when they release that, the initial drilling rig. And we document that day.

Chairman DeLong asked, would that date then be documented in Form 5 that is being filed under .510?

Mr. Price replied, no, the rig release date would not be on form 5.

Mr. Henderson stated, we can add that to the form. **Mr. Price** said, we document it through the date of the reports that come into us.

Mr. Henderson further said, well you say 30 days after they have to file the completion report. So you should - maybe we should add the Form Five, the date the rig was released, so we make sure they file the report within 30 days.

Mr. Price stated, that's something we could easily do.

Mr. Henderson asked that it be considered. That way it's documented and no questions.

Mr. Perry agreed, there's no perfect answer.

Mr. Henderson replied, yes, there's trouble - trouble with everything and to distinguish that. Because if you run electric logs, they may or may not be done with the drilling rig there. You don't know. I know sometimes you run them, then you have to drill deeper. Sometimes you know - there's a lot of things that can happen.

Mr. Snow's personal preference would be to have it tied to the completion date. He stated, that seems most logical, but that's just me.

Mr. Perry asked, do you want to ask opinions from industry folks that are here? **Mr. Snow** replied, sure.

Chandler Newhall with Noble Energy, Nevada Asset Manager for Exploration Project here in Nevada, and if you're talking about confidentiality status in the time period of which that clock would start, you know I mean, the idea you could always file an extension, so the time period from when the drilling rig commences to when the completion is, that could vary. I know we've got a well that we have yet completed. So if you would have time-stamped confidential when the rig left, you know, it would still be there versus from the completion, because we haven't completed that well yet.

Mr. Price states, that's been approximately eight months.

Mr. Newhall continues, so you could easily do it from the time period that the rig finishes off the location, because you know that one year of confidentiality status and then the operator could have the opportunity to extend that another year, at that end of that year period, it would kind of coincide with your P&A of the well, where you know if a well is cased you have one year to make a determination on what you would like to do or you have to extend. So, both of that would both coincide there as well.

Mr. Henderson explains, I understand what you're saying but eight months for you to complete a well to keep confidentiality for 18 months in that - or 20 months - it would be 20 months after the rig was released is a long time and I think we have people on the other side that would be not very happy to hear we're doing that, because they're already people that want no confidentiality allowed. So I think when we consider this change, we have to consider not only industry, but other people who may come and oppose us. Of course we're going to go to workshops, and we'll hear what they have to say, so this will be - if we all agree we go to workshops of course, but this is something that can be discussed in the workshops as well, and be changed by industry, by the other sides of the discussion. Okay, so please come to the workshops.

Mr. Bryan wants to make a point of clarification. On each section you have in parenthesis or brackets, where some of these things come from, do we have to add - if you're changing them, you'll have to add new dates on these?

Mr. Perry confirmed, yes, they will be added by LCB when they're codified, yes. They're responsible for doing that. Those just ended up in there because we imported just those sections that we were changing.

Chairman DeLong stated, I assume you're looking for a motion from the Commission to move it forward.

Mr. Perry confirmed, yes, Mr. Chairman. What we were asking for is, is this in direction of where do you want to go? Can the Division proceed with workshops? With you know what comes out of LCB, which is substantially the same, just wordsmithed. Ultimately, after workshops, we then have to do our Small Business Impact Statements, go through that process. We have to address comments from the workshops and you would see this before you again for a final approval, after all of that is done.

I think we're on a fairly compressed schedule and that's something that I'll talk about at the end with regards to the next Commission meeting, because this comes back from LCB the week of the 7th. We will probably go to posting it, you have to post 30 days before a workshop, and we will want to try and get this I think by the end of the year if we can is my thinking right now.

Chairman DeLong clarified, we have these regs in front of us, however, it sounds like you're going to go back and review, potentially keeping some of 522.450.

Mr. Perry confirmed, we will go back and review that, yes.

ACTION TAKEN: Art Henderson moved to approve to proceed with the procedures that was just discussed by Mr. Perry and proceed to workshops and Small Business Impact, and all the other discussions that have already been held.

John Snow seconded the Motion. Motion carried unanimously.

C. Geothermal code (NAC 534A) proposed update.

FOR POSSIBLE ACTION

A draft update of the geothermal code including proposed increases in some fees was developed by staff, and submitted to LCB for legal review on July 15. The Division is requesting the Commission provide direction prior to the required public workshop and impact statement process. Rich Perry

Mr. Perry began, in parallel to updating the Oil and Gas Code the commission reviewed the fees for geothermal earlier in 2014, and much of this was driven by you know looking at how much we were collecting for the combined oil, gas and geothermal fees, and a realization that we were not covering the cost of the program so some minimal increases should be considered.

So in geothermal we formed a team of staff and Geothermal Commissioner Snow and we reviewed Chapter 534A, that component which relates to the Division of Minerals and made these proposed changes that we'll walk through here.

534A.205, number one, the Geothermal Code originally was part of Water Resources State Engineers, that's what Chapter 534 is, and it's split off in about 1983, as I can tell from history. The State Engineer requires a licensed water rights surveyor to survey a water well. We have proposed that it simply be a licensed surveyor, because that's what BLM requires also, and that then allows industry to not have two different surveyors when they're filing for a federal permit to do that.

534A.214: Annual fee for a geothermal commercial/industrial, injection, observation or thermal gradient well. An industrial well is a geothermal well that is used to generate electricity. So that's for the 24 power plants that you saw earlier. A commercial geothermal well is a heating well. And this building here is heated by a geothermal commercial well from a business enterprise that is run by the Elko County School District, the wells are the other side of that junior high up there. And they sell hot water to city buildings. So that's what a commercial well is. But they make a profit off of it, it's not a well that's heating a home. A well that is heating a home is a geothermal domestic well, and there's no proposal for an annual fee on those. There's no fee other than \$50 fee to permit one of those.

So our proposal here is to increase the annual fee for a commercial and industrial well from \$475 to \$600 each in order to cover the Division's cost of the program.

In addition it is proposed that a new \$100 fee for an observation or a thermal gradient well that is in use and not plugged. Those are two classifications of well, that are defined in permits that are used for observation and thermal gradients. There's unfortunately more of them and no requirement to plug them when they are no longer useful. We have to still inspect them.

What we're really trying to do here is promote the plugging of those wells because in our geothermal regulations we have no requirement to plug an observation or thermal gradient well, unlike State Engineers Regs where if you don't use it for a certain number of years you have to plug it. So this makes sure that we inspect them, and if someone doesn't want to pay that fee, they can plug it. That's the alternative.

Okay, operator shall within 60 days after the completion or cessation of drilling file with the Division, the electrical logs required to be kept. And we changed some of the wording here, asked for two printed copies, one digital copy and one laser or LAS file format copy which is the way they're doing that now.

Mr. Henderson asked, can't you say one laser or LAS—**Mr. Perry** interjected, or similar format—**Mr. Henderson** continued on to ask, or if the new technology evolves, what did we say before? Not subsequent but what did we say before in other regulations? Not predecessor, but the one in the future - successor.

Mr. Perry agreed that we could. Discussion ensued on the definition of the acronym. **Mr. Perry** explained that it was a file format, like the PDF format. Further explained that the format allows you to import it into interpretive software and utilize the data rather than just view it like a PDF. So what we don't want is just a PDF.

Mr. Price added, and I've had requests several times for LAS files for wells that have gone out of confidentiality, and being owners, a lot of them, we just don't have them, but we can see the need for future exploration of having them would be a good thing.

Mr. Bryan asked, but down the road if they change that to another file format, and that's the only change in these regulations, are you going to have to go to workshops?

Mr. Perry confirmed, we can add what Commissioner Henderson said there, or successor file format.

Brian Stockton stated, I found what it stands for. It's Log ASCII Standard, ASCII standard so that's the acronym within an acronym. **Mr. Price** added, it's the standard output format that the service company gives whoever paid to run the log.

Mr. Perry continued on, 534A.410 Monthly Reports. Asked **Mr. Price** to comment.

Mr. Price stated, Linda spends a lot of time every January sending out or mailing out forms to the various domestic users in geothermal energy and the reply rate is just very minimal. We looked at it that it is really more or less a waste of Linda's and the Division's time to keep requiring this from essentially the same individuals every year, or sending this form every year to them and really not getting a reply out of it. And so if you're not going to get the information essentially, do we continue on sending that form out every year to the domestic user.

Chairman DeLong asked, is the data that's received on those forms necessary to implement the Geothermal Program.

Mr. Perry and **Mr. Price** answered, no.

Chairman DeLong then asked, then why collect it?

Mr. Perry agreed, and said, that's it, that's why we scratched it out. He explained, there is no fee.

Mr. Snow stated, a few years ago, the Commission passed a resolution that dealt with this issue with a temperature cut-off, a limiter. California for example, says that anything below 175F is a domestic well, or a ground source well, a loop, a pond well, and will be handled by the construction and water people. What our resolution says is that for the Division of Minerals that we will regulate wells that have an anomalous heat source associated with it, not necessarily ground source heat pumps and/or other wells. Didn't decide on the actual temperature cut off, but we did try to hand these off to NDEP or the State Engineer or the local Construction Authority, which is probably where they really belong, unless there is anomalous heat source, and then we should - we should actually record it, if they're going to be anomalous and hot.

Mr. Price explained, the last few permits that we've issued, the water is not hot. The water is being brought to the surface, run through a heat exchange or will be, run through a heat exchanger and then reinjected into the ground. This is the Incline Village area. Essentially, during the winter, the water being extracted is warmer than the outside temperature, so it's being utilized. The heat from that water is being utilized to supplement the heating of this home. During the summer, you know, the water is cooler than the outside temperature, so the reverse is happening. So we looked at it as to seeing how they're bringing the fluid to the surface, running it through a heat exchanger and then reinjecting it, that we would consider it in a sense a geothermal heat source.

Mr. Perry asked to comment, I was actually involved early on with one of the first ones of these when I was working for the State Engineer here in Elko. And it's kind of unique to Nevada in how a geothermal domestic well, in this case the one that somebody wanted to drill was in Spring Creek. They wanted to drill a geothermal domestic well, and put in a closed loop, like all systems do, just as Lowell described.

Under the State Engineer's rules, you can't drill a well in an area that's serviced by a water purveyor. And under our rules it's a geothermal well, so you can. So what we did, it was Tom Gallagher at the time and I that worked this out is two permits had to be issued. One for geothermal well that we enabled that allowed for the owner of a home to show the driller, who is a licensed water well driller that they have a permit to drill a well, even if it might be in the middle of a city, where your serviced by a licensed water purveyor.

And the State Engineer's Office had to be appraised of that, because they license those drillers, and they you know had to issue something that made - that clarified that there can be no appropriation of water from that. They have to be only heat removed. You can't - you can bring the water up as long as you put it back down, or you can put the glycol system and recirculate it.

But without the ability to issue a geothermal permit, no one would ever be able to drill a geothermal domestic well in a city in the State of Nevada.

Mr. Snow said, that's precisely the issue that we had. You can do that same system with a backhoe in ditches and then you don't need geothermal well. It's really not an anomalous heat source. .

Mr. Price added, but we also have a class of true domestic geothermal wells, particularly in Churchill County at ranches that are hot. They're 200, 210 degrees.

Mr. Perry continued, we are down to 534A.480 Abandonment of Thermal Gradient. So we scratched out observation, just a thermal gradient well. We moved it down because it fell under a different classification. So, abandonment of geothermal production, injection or observation well. So that's where observation is now, and that's plugging of a well. So an observation well can be plugged in a much more simple, simple fashion with mud and a cement plug, because it doesn't penetrate the geothermal resource, right.

Mr. Perry stated, and then the rest just follows the same language that's there, and then we go onto the next page, 534A.540. This is a definition of an application for permit to engage in any one of the following to the \$300 sundry. We scratched out 'abandoning and plugging a well', and put that under the \$100 fee in Number 4 because we want to promote that and not charge higher for it. And I think that's pretty much it for geothermal.

Mr. Faulds asked to comment. Jim Faulds, for the record, Director Nevada Bureau of Mines and Geology. All right, I have a question in regards to reporting on the first page, required - filing logs and other records. And there's no mention in here of the cuttings and skeletonized core that are required. Should there be in this context?

Mr. Perry asked to answer. It's still in there Mr. Faulds. All that you see here are the Sections of 534A where there are proposed changes. Because 534A is much bigger than this, we just put those that we proposed to modify.

Mr. Price also confirmed, yeah, we still require two sets.

ACTION TAKEN: John Snow moved to approve to proceed with the proposed changes for 534A regarding geothermal wells for consideration for an upcoming workshop. Art Henderson seconded the Motion. Motion carried unanimously.

D. Possible modifications to NAC 513.370 and 513.390

FOR POSSIBLE ACTION

The Division is seeking approval by the Commission to proceed with drafting new language for fencing standards and location rating. Rob Ghiglieri

Mr. Ghiglieri, introduced himself for the record. So what I'm going to do today is inform you guys that there is some language in NAC 513 which controls the AML Program that needs some updating. Start with fencing, current standards, ranking of location, and the timeframe of securing this. I'm going to go through them one by one.

So NAC 513.260, Fence is defined as having the meaning ascribed to it in Subsection 5 of NRS 207.200. NRS 207.200 is unlawful trespass upon land, warning against trespasser, Subsection 5, fence means a barrier which is sufficient to maintain - to restrict a human ingress, including, but not limited to, a hedge, chain link fence, or wire net. The term does not include a barrier made of barbed wire.

What do we have using the AML Program? Barrier is usually made of barbed wire. This was included and changed in 2007. My guess is because of range fences throughout Nevada. They wanted that to stop, saying that these range fences are trespass fences. That's my own guess, I mean, I don't know if that's what it is, but we define our fence as in referring to this. So a possible solution, with reference to NRS 207.200 and then define a fence under our NAC 513.260.

The next one 513.330, Ranking of the Location. This goes through how we rate 1-5 for location. With 1 being minimal, at least five miles away from an occupied structure or road maintained by a government entity. With a 5 being within 100 feet of an occupied structure or publicly maintained road.

The issue is nowhere that allows an Administrator or his/her representatives to adjust location ranking due to physical circumstances on site. So it may be a half hour away, but it's literally on top of a cliff that you can't access, or difficult access, it's only hiking accessible now, but it's still a mile away.

Or the offset is ATV tracks right next to it, it's a highly used ATV route or obviously a high visitation site. So we can maybe subtract one when it's on top of a cliff, but you can't get to it, or add one to it when there is possible tracks, there's nowhere in the regulations that actually allows us to do this.

The high visitation types of stuff, I would really like to add something too, because that makes it a higher hazard, it makes it more of a priority for everybody to get secure.

Said posting of a warning sign, a dangerous condition regarding of its ranking must be posted with a warning sign mounted on an orange post. The sign must be posted 30 days after the responsible person is notified by the County Sheriff of the existing conditions.

We don't use an orange post. We use the orange signs. This was looked after, we talked with Doug Driesner, and it apparently was thought fixed at one point. We know Bryan looked into it a little bit and he couldn't really find anything on it. So we need to readdress that.

And that also brings out the posted sign within 30 days' notice by sheriff. So what we'd like to do is remove the word "orange" out of that. Posting of the sign on - mounting a warning sign on a post. The 30 days, though, that doesn't coincide with the notification.

Mr. Parker had a question on why isn't the wording with an orange sign mounted on a post.

Mr. Ghiglieri replied, we could do that as well. I believe that's what they probably meant to put down, and it got put in front of post instead of sign.

So 513.380, securing within 180 days of rated below hazard, 120 for moderate and 60 for high. One of the things this doesn't address is minimal hazards is another one. But nowhere in here does it actually address minimal hazards.

Since the late 80s, just before Bill started with the program, the only one here in this room that was here during the decision was Fred. It was posting a sign in front of a minimal hazard maybe 30 days. It was an internal policy passed by the Commission. Mike went back, he tried finding the minutes for these meetings, and we could find no evidence of this policy decision.

The big concern is we've been telling claimants or owners that the posting in front of minimal is sufficient adherence standards, according to the NAC - and we actually have this in our reply to claimant sending us information. It's nowhere in our NACs. Very select cases we also use it to where a posting is considered a securing for other places like when it's not secured to put - build a fence all the way around it, or it's an open pit, so we post around edges of that.

This can come down to worst case scenarios where actually there is a fatality in minimal hazard on someone's claim, that we did tell them, they followed NAC, somebody comes back, and finds it's not an NAC, comes back to us saying that we told they were good, but they were actually never covered by the NACs.

In our database right now, there's 1,400 minimals and 500 mainly low, but a couple of higher ranking hazards are considered secure by posting on the database. Resolution would be to add posting as a securing method for a minimal hazard, maybe posting for the internal policy condition, do nothing to the coding and consider all posting hazards that are not secured, so everything needs a fence around it. Give the Administrator or his/her representative, the ability to make a decision on a case by case scenario, there's a couple options right there.

So a solution, I recommend the Commission create a task force to review NAC 513 and propose it at another Commission meeting for approval of language update.

TASK FORCE CREATED: Dennis Bryan, Robert Ghiglieri, Mike Visher, David Parker and Garrett Wake.

E. Review of cost and bonding requirements for plugging wells.

FOR DISCUSSION ONLY

The Commission requested a status update at the May 1, 2015 meeting regarding the cost of plugging of oil, gas, and geothermal wells. Lowell Price

Mr. Perry asked Mr. Price to begin.

Mr. Price described how a well is plugged and abandoned using a workover rig, then presented an estimate for plugging wells based on depths and diameters. The cementing costs are roughly \$32,700 and the rig including its mobilization costs are roughly \$30,000, totaling \$62,700. And as we go down the page here, if we use a larger diameter hole to plug an abandoned well, such as Noble Energy that they drill larger diameter holes, the cementing costs would be roughly \$32,200, the rig cost of around \$30,000 for to a total of \$62,200.

For geothermal wells, the totals are actually in error. They were based on 100-foot plugs, whereas in geothermal we do require 200-foot plugs. And so basically the cementing costs will increase. In the geothermal industrial category the cementing costs will increase approximately \$16,500 and the total cost to plug an industrial sized well in geothermal would be roughly \$89,600.

With our moving the observation well, the plugging of an observation well from a TG hole observation category moving the observation to the industrial category, it would increase the plugging costs for an observation well from roughly \$51,000 to close to \$54,000. I have it at \$53,782.

Mr. Henderson asked, so for years these people can pay \$100 a year and not plug the well. So if we want the well plugged, we're going to have to make a regulation that says they have to plug them, because nobody will plug a well for \$50,000 if they only have to pay \$100 a year.

Mr. Price replied, I'm not sure if we can do that through a regulation or if we have to go through the legislature and actually have a statute created for that.

Mr. Perry said we could do it through regulation.

Mr. Henderson replied, I think so. I mean we require an oil and gas well to be plugged. So this is my comment on that. If I owned an observation well, I'd give you \$100 every year for 500 years before I'd spend \$50,000.

Mr. Price agreed, but went on to say, I put together this page just to give you an idea and these again are general estimates of what it would cost to plug a well. If there are issues in plugging, like if the diameter of a hole is greater than what they think it is, say in an open hole, obviously it will take more cement. I did have them incorporate up to 50% excess of cement for open holes, so that should cover it. But these are current day or relatively current day costs, they come from last spring. So as you can see they are quite expensive.

And this is just leading into a bonding discussion of where we may in the second page I put together more or less bonding requirements from the western states, and this - and which Nevada is in there. We have a \$10,000 minimum bond for a single well, and a \$50,000 minimum for a state-wide.

If you look over the other states you can see that there is a wide range; anywhere from Alaska at \$100,000 per well, which is I believe the most expensive, but yet they'll offer a \$200,000 blanket bond. So an operator might need to drill two wells and he can drill another hundred for that \$200,000 blanket bond. But they do vary from state to state. Some are actually bonded by foot. And so if the variety of the type of bonding I think it would probably be prudent again if we put together a work group or a task force to look at what bonding requirements may be needed in the future.

Under our current operators and for producers, I don't really see any issues. However if we do get an uptick activity in either oil or gas or geothermal, companies that we are not familiar with come into the state, we may want to require higher bonding which Rich can already do, but yet I think it would be great if we could put together a work group in which we decide categories as to the types of bonding that we may need.

Mr. Henderson asks, is Nevada the only state that allows the Administrator to increase the fee, or did you just put that because we do allow it.

Mr. Price stated, I put that because we do allow that.

Mr. Henderson agreed, we should probably have a task force, but I think in thinking about bonding, we probably should allow the Administrator to set any bond that he deems necessary for the situation, however I would consider raising the minimum so that the Administrator has a higher base to start from. I mean we're talking about \$10,000 and every well costs \$60,000 to plug, why are we starting at \$10,000. So this is something that should be discussed in a task force, just for discussion today I say that, that's one of the reasons...

Mr. Price said he would like to see items like this discussed within a task force and then we can bring it to the Commission the results of our work or discussions, bring it to the Commissions to decide on minimums.

Mr. Henderson added, and for further discussion I might say one of the reasons that this is brought up for discussion is because we recently had a well that was difficult to have plugged. And we recognize that \$10,000 bond is just way too low and troublesome for the Division.

Mr. Price confirmed that was correct.

Mr. Snow agreed with Commissioner Henderson, Lowell and you haven't addressed it here, but we have a lot of redundancy bonding in that of the 97ish or so oil wells that are in producing status in the state, all but five of them are bonded by federal bonds as well.

Mr. Price confirmed that was correct. This is more directed on the oil side, basically, we have three wells that are producing that are on fee land.

Mr. Price continued, the majority of the liability rests with the BLM, which we honor the BLM bond. On the geothermal side of things, approximately 60% is on fee land and 40% is on federal.

Mr. Snow said, for your cost estimates, Nevada being a little unique and having been involved in plugging a lot of these wells that have been plugged off here, I wanted to ask you if you took into account, you know the rules require that you have drilling mud of 10 pounds per gallon density between when you're doing balance plugs. And these legacy wells were not oftentimes, that means you have to bring in and shear mud, and mix mud properly which is a pretty expensive item to do correctly, and I don't know if you integrated that into your estimates, but...

Mr. Price stated, no that isn't integrated into it, basically increasing viscosity of the mud and that's why the work over rate is in there.

Mr. Snow added, but you have that cost. You have to bring mud and you have to mix it and you have to shear it, and the other thing that costs with all the loss...

Mr. Price said, that's not incorporated in that. The actual shearing of it which would be done by the work over rate, I would assume, that would be incorporated in the cost, but the actual cost of having mud...

Mr. Henderson confirmed, you said these are the costs, which shows that we are out of balance.

Mr. Price confirmed that was correct.

Mr. Snow stated, you also have a lot of lost circulation zones that are out of gauge and whatnot and open hole plugs, they almost are not there, the first time, so we have tagging requirements which require additional rig time to go back in and...

Mr. Price confirmed that was correct. So that's why we included a minimum of two days for the work over rig, on site, just because of those tag requirements.

TASK FORCE CREATED: Art Henderson, John Snow, Lowell Price and Rich Perry.

III. OLD BUSINESS

A. NDOM FY-2015 Closeout and FY-2016-2017 Forecast

FOR POSSIBLE ACTION

Fiscal year 2015 has been closed and the Division reserve entering FY 2016 will be available. A forecast of FY '16 and '17 with assumptions on claim fees and Division activities will be presented. Mike Visher

Mr. Visher, introduced himself. I was asked to run through the financials for Fiscal Year '15 through '17 and so we did a fiscal '15 forecast, it made it easier to look at in your booklet here. And I've got them kind of summarized into groups to identify the revenue categories, as well as the expenditure categories. We spent more than we brought in. I mean, that's the issue. We've got declining revenues.

But on the pie chart there on the right you can see kind of our distribution, where the bulk of the money comes from, mining claim fees and the bulk of our expenditures is personnel, without a doubt. Next, is special projects, then our operating expenses. AML support that's all of the AML work except for the actual personnel and salary costs. So fuel, trucks, per diem, travel costs, which obviously go up during the summer, when you have the interns. You'll see the Sagebrush Transfer there at 6%, thankfully that goes away in '16. And then AML enhancements, those are our contracts, contracted AML expenditures.

And then for reference, here's our mining claim revenue from 2010 to 2015, this is by fiscal year. And understand that this is mining claim filings, not mining claims. There is a difference. When you file with the County, there are times when we're going to collect an additional \$8.50 per claim, and that's if there is a change

to it, right. So we actually received slightly more income than the total number of claims times \$8.50. So that's why there's disconnect there between the numbers that you might recall from Rich's presentation.

The big take-away here I think is what's happening year over year, right. So it declined significantly from 2012 and the red line is last year, right. So we're actually below in our total mine claim filings for any of the prior five years. And this obviously has impacts as we move forward, but keep in mind, when our money comes in. We have counties that report quarterly, and so that's where we've got big spikes here in September and December. Those monies are actually received anywhere in the next 30 days, so we won't know that number here for December until the end of January, right.

Our reserve balance is something that we obviously have to pay attention to when you consider that our money comes in later in the year; we don't get all of it at the beginning. And so our fiscal reserve always starts out low, and then mimicking that graph, then it finally comes up and then it levels off and our expenditures keep coming in and pull down our reserve.

For reference there is the \$750,000 reserve guidance limit. So we're back up to our 750 guidance limit right now, but you can see what typically happens. If we stay here until we get those September monies come in. The revenue from the mining claim fees, those are the big jumps that we see three. Four, BLM and Forest Service monies for AML. Those come in when they come in. It depends on the BLM, the availability of money, the timing of the transfer, timing of when we can accept it. For the Forest Service it's probably reimbursements. We actually have to do the work, before we get the money to come in.

And then the geothermal production fees that's five, that's this bump here that comes in at the end of the year, so we start getting those in January. And then the Mackay payment is six, that's the drop off here, remember that's the \$2.00 from the \$8.50, and that's why that such a big drop here. And then seven, it was just this past year when we had an increase here due to some money that came in from the BLM.

Mr. Bryan had two questions, the Sagebrush Ecosystem in 2015 and that's number two, back in your graph. What is the graph for 2016 going to look like without that two. I mean that's going to go up, our reserves are going to go up substantially during these few months, is that...

Mr. Visher stated, no, because this is actually something that goes away. So you won't see an increase. So what you're not going to see are the dips due to the number two's. So it doesn't change our reserve balance in that it no longer takes money away from our reserve, but it doesn't add anything to our reserve either.

On the revenue side, this is for '14, '15, '16 and '17. So I've actually got the actual numbers for '14 for comparison, '15 at the actuals as of our close, and then '16 and '17 are forecasts. And then any remarks on the far right side you'll see some of the assumptions that I've made. The first, and I'll go down these, the first assumption is that the BLM Cooperative Agreement continues and that we get at least \$50,000 a year. I think that's pretty stable, John Callan with the BLM spoke at the last Commission meeting. He's very positive about our AML program, and that's kind of our floor. I think we can count on that. The Forest Service Assistance Agreement we have a little more money now than the \$71,000, that's available for reimbursement. We have to spend the money, before we get the money back. So we have to be careful about how we spend that and whether that comes out of 18, or whether it comes out of Category 39, Contracts.

The oil production fee, that's based on continued decline production in barrels of oil. So I've got a forecast of 298,000 barrels and have 298,000 in '16 at 15 cents a barrel, 293 in FY '17.

Mr. Bryan asked, the US Forest Service, why haven't we used the 71?

Mr. Visher responded, that's the capacity that's in the box.

Mr. Bryan asked, that's not per year?

Mr. Visher explained, no, that's total and that expires at the end of May 2017th.

On the oil permit fees, you know we're seeing continued decline in activities, so it kind of ratcheted back our assumptions. Four permits in FY 16...

Mr. Henderson asked, you cannot forecast any increase in fees while you're doing this study, correct?

Mr. Visher confirmed.

Mr. Henderson asked, so if we do increase fees this could be improved?

Mr. Visher confirmed and noted that he'd be going over that later. So this next one is the one that matters the most. And it's the one we have to be the most careful about. We saw a 4.4% decline in FY '15 in mining claim fees. We're projecting an additional 5% in '16 and '17. I don't really hear anything out there to say any different, except maybe it could be worse.

And that's a little worrisome, and I'll show you what happens when we get to that point. The geothermal fees we're actually seeing a little bit of an increase in activities. So we've got a 2.5% increase for FY '16 with 9 additional fraction wells, and a 5% increase for FY '17.

I hope that's not too optimistic, but it seems to be what may be in the pipeline and coming forward. It doesn't really make a huge difference in the big scheme of things unfortunately.

Surface Disturbance Fees, this is the \$20 per acre on public land approved disturbance that the mine operators have to pay to us as a one-time fee. And we've done pretty well the last few years, certainly better than what was in the original work programs, and we're forecasting \$100,000 to come in this year and \$90,000 next year. We've already received over a third of that this year. So that's a positive. And it's one of those things that's in disconnect with the commodity price, because they get their permit, they may not actually start mining, but they got the permit. And the law says they have to pay us within 30 days of getting that permit. End of story. They've put in for these permits years ago, in some cases. So they're not going to stop that, and they always over permit and under disturb, so that they don't have to keep doing this over and over again.

Mr. Parker asked, on the service fee and what it means when the Operation is on private land. I take it they don't have to pay the \$20 an acre disturbance service fee then.

Mr. Visher confirmed.

Mr. Parker then asked, what about Mount Hope.

Mr. Visher stated that they already paid. We received payment for Long Canyon and Mount Hope. Mount Hope was three years ago, when they thought they had financing, so that one's already out of the picture.

The transfer from Reclamation Bond Pool continues to decline, and that's tied to exploration activity. We continue to get more requests for refunds and reductions in the bond amounts. We've gotten a couple new ones and that's optimistic but overall, this is tied to the activity, and the three percent cap that's in the bond amounts in the bond pool.

With regards to expenditures, we are forecasting for 11 FTEs, seven interns, the elimination of furloughs which came through out of the last legislative session, and the approved salary increases of 1% and 2% in '16 and '17 respectively, and because we kind of need to proffer these things and not get surprised, we've got payouts for two staff that may retire in the next two years, and we need to account for that, because it's not a small amount of money.

Out of state travel, it's a 3% increase that's largely tied to inflation. In-state travel we have a 20% increase for '16 and I've done that for our additional hire, Garrett Wake, in Las Vegas as Bill trains him and gets him up to speed, there's going to be more travel costs associated in the in-state travel for not just AML, which would actually Category 18, but education and outreach trips up north, such as the Commission meeting. And so I increased that amount there—

Mr. Perry asked Mr. Visher to comment, you increased over our '15 numbers where we significantly cut back from the year before. We took it to the bone.

Mr. Visher agreed. Our Carson operating expenses just a 3% annual increase. Our CMR travel, 3% annual increase again, we're not expecting any big changes on those.

For Special Projects, the biggest expense out of this category is again the \$2.00 claim fee to Mackay. And so that's tied to the anticipated decreases. We pay to Mackay \$2.00 based on what we received the prior fiscal year. So we know what that payment will be for '16, because we received it in FY '15, but you'll see there, there is no money to NBMG accounted for in this forecast. There is the \$15,000 per year contribution for the teacher's workshops that we do with mining association that the commission approved, and then \$10,000 per year for publication of maps, other things that come up, largely the posters, major mines, that kind of stuff.

Las Vegas expenses, 3% increase, but I threw in a couple extra thousand dollars, and that's largely to help Garrett's office get brought up to an actual office from a storage closet. And just the additional expense of having a third employee in that office.

Oil, gas, and geothermal, 3% increase over last year. Category 18, six interns through FY '17. We know what their costs are, there's \$10,000 in there for swag, that's all of our Stay Out, Stay Alive promotional items. A ten percent increase in FY '16 expenditures for Garrett's activities. We expect him to be doing a lot with Bill on AML in '16.

We're forecasting or budgeting for four interns to work three weeks in the winter in Clark County to try to get some additional work done in Clark County over the winter break and hire back those interns that excelled over the last several years.

We have a replacement truck budgeted and approved for in FY '17, and we have just a 3% annual increase that I've applied to this category as well.

The computer and IT that's just straight what was approved by the legislature, because all that stuff, that's a pretty hard number.

AML Enhancements, it's assuming \$100,000 contracted annually, plus \$20,000 in materials to support that contract. So that's the fence posts, the barbed wire, foam if necessary, and you'll see there's zeros for the Sagebrush Ecosystem transfer.

One thing to note on this last row is the cost allocations. And you'll ask why is there such a big jump in '17. Actually there's not a jump in '17 as much as there was an omission that was purposefully done for FY '16 and for whatever reason they took out nearly \$50,000 in cost allocations to give agencies a break, but that \$112,000 is still considerably higher than what we actually paid in '15 and a lot of that is the delayed collection that comes from the AG's Office for Bryan's work and assistance with all the work groups, with the fracking regulations, and they try to smooth out that expense, so they don't go in the very next year and hand you a bill that you can't afford. Instead they have a calculation that backwards calculate it and smooths it out over a few years hoping that one year was an exception and you don't have to pay it all at once.

That number we don't have any control over those three allocations, they just come and take those. But the bottom line is, we would exit FY '16 with \$706,000. And if all these assumptions come true, we would exit FY '17 with \$423,000.

Mr. Bryan asked, what about the insurance for the totaled truck?

Mr. Visher stated, that's coming up in the presentation. He confirmed, that's not in there. This is the Forecast Summary - you see the pie chart really doesn't do too much. There's a slight change because we don't have the Sagebrush deduction out of our expenditures. So it looks like personnel cost has gone up and it has but just slightly compared to the total, it's a percentage.

This is one thing that I wanted to bring attention to you, and that's our marquee program our AML program. And so I wanted to show what our expenses were for AML as a percentage of the total expenses and what we actually put out there.

So the purple line is the AML percent of total expenditures. I'm going back to 2000. Our revenue you can see went up quite a bit, gradually went up and then you see we did so some special projects and the SNPLMA money that came in for Clark County was significant. That was actually just a pass through from the BLM that came in. It hit our AML, so it's kind of artificial, because it was just pass through to facilitate work that the BLM would have done through their SNPLMA funding, but they couldn't grant it quick enough. And so it came through our office instead.

The other big chunk that we took on was Clark County Revisit Program. So we had had one for Reno and Carson which was much smaller, but we had a larger one for Clark County where we wanted to actually go out and look at all of those ones that were inventoried by the prior work, and what's the status, and get those updated. And that was a significant expense. And that's what those two bumps are, the 26% and 22%. But on average, you know since 2006, closer to between 12% and 16% is normal, but we're exiting '15 at just 11%. So I think that's something important to note.

Now with regards to - I don't have in your book, because this is new since the packets were sent out, considerations for the FY '16 forecast. We've got a \$28,700 refund from DCNR for unused Sagebrush monies that were transferred in 2015.

Mr. Bryan asked, that's not reflected?

Mr. Visher replied, no, it's not reflected in the forecast, so that's a positive. You've heard we totaled a truck, fortunately nobody was hurt. We actually are receiving a payout on the insurance of \$21,000 which is amazing, considering the cost of the truck to the State was about \$27,000 in 2008, but that's due to the really good deal that the State gets on vehicles. So the depreciation wasn't as much as we would've thought it was, those are positives. Now, we're down a truck. We've got to replace the truck.

Mr. Bryan asked, you already had that in the other one?

Mr. Visher stated, in FY '17. In FY '17 we're budgeted to purchase a truck.

Mr. Bryan asked, that's another truck.

Mr. Visher stated, because we exceeded one truck. So we have one additional truck that could be exceeded right now. It's got over 80,000 miles on it. We're holding on to that, and we would replace that in FY '17. Okay, so we need to get another truck in the fleet, if we're going to have six interns. If all of the OGG fee changes were adopted that are being proposed, it would add \$50,000 to the numbers that you saw. They would have to be enacted by the end of 2015 to actually impact us largely and that's because the geothermal fees come in in January.

Mr. DeLong asked, calendar or fiscal?

Mr. Visher confirmed, calendar year. Calendar 2015.

Mr. Henderson asked, walk us through how it can get enacted by the end of the year? What do we have to do and maybe you can tell us real quick what has to happen?

Mr. Perry agreed. The LCB approved version would be out as the first week of September. We would then take that and we would post it for workshops, it takes 15 days to do a workshop, so that puts us in October.

So we do the workshop, one workshop in Carson City presumably and then we go back with comments that we get from industry and anyone else from the workshop, we address those and finish the Small Business Impact Statement which we can start really at any time at this point, and we should.

So I was looking at the date of the next meeting would be - I would want to have that all together, and I'm thinking, okay, let me add another step to that. Because after the Commission looks at it and say they approve, then it has to go to MOAC and then it has to go the Interim Legislative Commission which has not yet set a date, but if you look at it historically, it's usually the first or second week of December. It is a tight schedule.

You know the one that's most important is the geothermal one because it's on a calendar. The oil one can actually slip, it's not going to hurt us financially, but I'd like to do them all at the same time.

Mr. Henderson asked, what is the last date that we have to make a decision, that allows you to finish by the end of the year, that...

Mr. Perry stated, I honestly was going to propose at the end that the next Commission meeting be towards the end of October.

Mr. Henderson confirmed, that will give you two months to get all the rest of the work done.

Mr. Perry agreed, because I think we can get through MOAC and the Legislative Commission. As opposed to the December 3rd date that we had discussed.

Mr. Henderson stated, yes, it's late.

Mr. Visher added, the last bullet there is so what happens if mining claims go down 10%, rather than 5%, and that's \$80,000.

Mr. Henderson stated, more.

Mr. Visher confirmed, more. 5% equates to an additional \$80,000.

Mr. DeLong added, all that together just about zeros out.

Mr. Visher agreed, yes, it's \$9,000 in the hole.

Mr. Henderson asked, but you forecast 5%.

Mr. Visher confirmed, right, I forecast 5%.

Mr. Visher went on to say, if the forecast holds, the rest of that stuff is there and in place, we would add \$70,800 to what you see for FY '16 end of year. Which would then carry over to FY '17, right, but there would be an additional \$50,000 that should show up again, plus because of the OGG fees in '17, right.

So then you'd have \$120,000 potentially. If mining claims don't decrease more than 5% a year. And that's the hardest part is, our biggest revenue comes from one thing and we can't forecast it. So that's the one you've got to look at the most and we've cut back on, like Rich pointed out, we've cut back on just about everything we can to get things back to that 750 guidance number and we're still slipping below it.

Mr. Henderson asked, what other things can we do to raise revenue?

Mr. Perry stated, there's really only one that stands out and that is raise mining claim fees. We're at \$8.50 now. Anything that we would do that would allow us to raise a new fee would require the Legislature to approve. And so that's two years away.

Mr. Henderson asked about new industries. **Mr. Perry** stated, the only thing we have the ability to do now is raise geothermal fees, oil fees, up to the limit that we were approved and mining claim fees up to \$10.

Mr. Henderson asked, but should we consider things like introducing to people Thorium? Should we introduce new business ideas? Should that be something that we take on as a strategy to try to increase our income in the future, that says okay look we're - as a Commission we say to the Division, you need to spend 5% of your time

working on new things that could increase our revenue in the future. And Thorium is one that we've already talked to some Senators, we've talked about to other people. Maybe we make a program where we actually start doing this in a step-by-step manner that in the future could increase our revenue. Some of them - they're long term, they're not going to happen in the next two years but you see where our reserves are going \$700,000, \$400,000, where are they going to go. So in the future we need to do something, I think. And what can that be? No decision today, but we need to think about it I think.

Mr. DeLong added, we could certainly have a meeting that's a strategic planning meeting just to talk about that.

Mr. Henderson agreed, yes, brainstorm.

Mr. Perry stated - the fourth one is the surface disturbance fee which has a cap of \$30 and it's currently at \$20.

Chairman DeLong asked for any other thoughts from the Commissioners.

Mr. Snow stated, I'd just like to add for those of you that haven't heard me say this before that the oil and gas and geothermal industries pay the federal government bonus, rental, and royalty payments of which 50% of that kicks back to the State of Nevada, which goes to the State Distributed School Fund. And I know it's not popular to mess with the Stated Distributed School Fund, but it is mineral industry's monies coming back to Nevada and it's a source.

I've said it again. I'll say it probably in five years. No one touches it. But it's a significant amount of money that the oil and gas and geothermal industries pay that come back to the State that's not used to help regulate.

Mr. Perry asked to comment. It's very different in every state as we learned when we had to go in with legislators and discuss why we needed fee increases in oil, gas and geothermal. Because many states fund their oil, gas and geothermal through their equivalent of extraction fees, their equivalent of their net proceeds, their general fund. We don't. Nevada is a fee state. Almost all of the natural resource agencies operate off fees, and almost no one gets any money out of the general fund. I think if we ever went in and proposed it, we'd be unsuccessful.

Mr. Bryan added, I think I've discussed with others, and we've discussed it before. The \$155 fee per claim that goes to the feds, into the general fund and disappears in Washington, our Congressional Delegation could support giving part of that money back to the State, I would think. And you know not the whole thing, but a portion of that. I mean any portion could contribute very significantly and could take the weight off of the AML program. That could completely fund the AML program if we got \$2.00 of that \$155, and hopefully we could get more and expand the AML program, that would be one way to help the Division. But we'd have to talk to Heller, you know I don't know where we'd go, but why not. Every other state would get on board with that I would think. And why should it disappear in a black hole in Washington, DC.

Mr. Bryan asked, how much authority is left in the mining claim, \$2.00?

Mr. Perry asked to respond. I agree with you Dennis, absolutely, it's a big bite for us to do, but they do, I mean they do give us some back, I mean we are getting, what \$70,000 from the Forest Service, and \$100,000 last year from the BLM, and I mean that's in essence to me something.

Mr. Bryan stated, no, no, that's true, but that \$155, I mean that's a tremendous amount of money.

Mr. Bryan said, if we got \$4.00 back from \$155, they wouldn't have to give us the \$70,000. I mean it's a long-term thing and I think that you know - I think we should go talk to somebody.

Chairman DeLong replied, I think there are a number of good ideas as far as long-term that we should consider, but we also need to be looking at what Mike just told us, and we have short-term issues that we really need to deal with and we can talk about long-term solutions all we want, which I do think is a good idea but we need to get practical and look at our short term issues. To help deal with I think that I want to create another task group to look at options to move forward, either with revenue enhancement or decreases in expenses.

Mr. Bryan, Mr. Henderson, Chairman DeLong, Mr. Perry and Mr. Visher were selected for the task force.

Mr. Perry asked to comment. The way I see this, the big unknowns are the mining claim fees, and that's really what's going to drive what we do. There's really nothing between now and the end of December that's going to change with regards to major expenditures - it's just salaries. So really the critical time to make a decision is January.

Chairman DeLong added, I will say I talked to Commissioner Mudge about this issue since I knew he wasn't going to be at the meeting. And his suggestion was to increase the claim fee.

Mr. Gibson stated, well, you ought to do - you ought to repeat what we did with Raggio. And instead of - we went to him for, what was it \$25 payment so that we could increase the fee without going back through the legislature. If you do anything else if you do \$5.00, then next year you'll have to go back to the legislature. So if you could get somebody that would support that legislation. If there's some number that you could live \$40 or \$50 something like that.

Further discussion ensued about the fee increase. It was said that someone empathetic was needed in the Legislature.

Mr. Gibson said to Mr. Perry, I think you're really - you're going to increase your fee, that's just the way - that's what's going to happen over time. And if you don't do it this way, then every time you want to raise it you've got to go through a session of the legislature.

Mr. Henderson asked, \$1.50 is 10% more or less?

Mr. Perry said, it's at \$8.50 now and the cap is at \$10. So there's \$1.50 left before hitting the cap.

Mr. Henderson confirmed, so it's 10%.

Mr. Perry stated that would bring in about \$250,000 in a year.

Mr. Bryan asked, now we did have a task force last year that looked into this, and we came back with, hold it off...

Mr. Perry said, Yes, the Commission at a regular meeting recommended holding a fee increase in claims off until you've done the oil, gas and geothermal fee changes because we wanted to fix that first.

Mr. Bryan added, now the only people that I've - that really have a pushback are the exploration community at this point, but you know, I think if we talk to them and then they might understand.

Chairman DeLong asked for additional questions. There were none.

TASK FORCE CREATED: Dennis Bryan, Art Henderson, Rich Perry and Mike Visher

B. Update of Mining Claim Forms

FOR POSSIBLE ACTION

Staff and legal counsel have updated all 17 mining claim forms that are described in statutes (NRS 517) and available on the NDOM web site. Inside and outside legal review is complete and recommendations from the Nevada County Recorders were included in the updates. The updates are ready for Commission consideration.
Rich Perry

Mr. Perry began, we started seven months ago with reviewing the mining claim forms as Commissioner Bryan had brought forth a couple of forms that there were questions in the language. And this actually became a very healthy exercise for all of us that hadn't been through these, because as we found, we did have some inconsistencies in language.

We went through a number of task force meetings, looking at these we enlisted pro bono help from two mineral attorneys, Richard Harris and Tom Erwin, who gave us some good comments and legal advice. Brian Stockton

and staff sat down and we went through our regulations and then looked at each form versus the code to make sure it had what it needed to have.

I might note these requirements are part of Chapter 517, the chapter that deals with mining claims forms and what constitutes a mining claim in the State of Nevada. A chapter that goes back to 1873 I might note, so it's good that we're kind of looking at that. And we then took the forms that we had and sent them out to the County Recorders, who I had given a talk to in June in Virginia City, when they had their annual meeting, and asked them if they would review them and they said yes, we'd love to, in fact, we're happy that somebody has asked us to look at it.

Mr. Bryan stated, that was a great move to go to the counties.

Mr. Perry continued, and they had some very valid requests that we added to them that wouldn't have been there 50 years ago, but now since everything is computerized, they needed to have PLSS on certain ones that didn't so that they could put it into their system and needed to know who to mail it to, if it's an association, placer claim, or something like that.

So we've done those simple fixes. There's not huge major language changes in here. The major ones really were clarifying on the annual notices what year this was specifically for, because it was very confusing before.

So at this point, you now have all 17 different forms in front of you as draft that have been reviewed, and Debbie Selig down at our Las Vegas office who is very detailed oriented also went through them with minor edits, to make sure they were all consistent.

If adopted, Debbie will prepare them as fillable PDF's that would be on our website

Mr. Bryan clarified, they've always been online but not fillable.

Mr. Perry answered, nearly all of our forms are fillable online now. Debbie's done a wonderful job at doing that.

Mr. Bryan stated, I think this is a great step forward. It's been quite a few years that - since that the Commission looked at this. And especially the Affidavit of Annual Assessment Work. It's much clearer now, I think. And it's a little more wordy, but it's easier to understand. I think you guys did a great job. And Bryan you went through these and it was okay with you?

Mr. Stockton confirmed, yes. During the task force meeting who went through the statute and made sure we covered all the requirements that are in the statute and so they're all in there.

Mr. Bryan made a motion that we approve the forms that are presented and - how many did you say?

Mr. Perry replied, seventeen.

ACTION TAKEN: Dennis Bryan moved to approve our new proposed forms. David Parker seconded the Motion. Motion carried unanimously.

C. Presentation of projects performed by the Nevada Bureau of Mines and Geology (NBMG) for NDOM for FY 2015,
NBMG Director Jim Faulds

FOR DISCUSSION ONLY

Mr. Faulds started, hopefully you all got a copy of this, because I didn't get my presentation ready in time enough for Valerie to put it into a packet. And there's more copies right there if you'd like to see a copy.

So what I'm doing is reporting on the, what we produced from the support from Nevada Commission on Mineral Resources over the past year, but I'll do a quick summary of the support that we've received really over the last three years.

And I'd like the Commission to really pat yourself on the back because that was absolutely critical bridge funding to keep the doors open for example in the Great Basin records library for the past three years. And we've made it over a bit of a hump, not completely, but without your support those doors would have been closed. So we really, really appreciate it. There we go, so this summarizes the support for the first two years, and so the first year was the big one. That's when mining claim fees were rolling in at a sufficient pace, and luckily the Division did support this, but in the first year, Fiscal Year '13, we received \$300,000, of which we do have \$27,000 left in one grant.

The second year we received \$100,000 that was Fiscal Year '14, we spent every cent of that, and then this is the last fiscal year, the year that ended July 30th, Fiscal Year '15, we received another \$100,000 and we do have a small amount of remaining funds left in that. And thanks to Rich's support we were able to extend those grants one year.

So what we're into now with our - are these three grants and also I'll talk about the one from Year One, which we have \$27,000 left. So basically, sample curation, the mineral industry reports and mineral databases and all of these we've been able to produce quite a bit and things. What we've been able to do for three years, because the history of this for those of you who may not have - due to the recession in the Fiscal Year 2012, the Bureau took a very severe cut a 53% cut after a few incremental cuts prior to that. All total, we probably dropped funding - state funding by more than 60% over a period of a couple years.

And so what was in jeopardy then is closing the doors on this, possibly disbursing our cartographic and GIS group and not essentially being able to perform the basic functions of a State Geological Survey.

So these are the basic responsibilities, you're probably all quite aware of that, this was visitation in 2014, actual physical visitation and then of course most the visitation these days is through the website of 40,000-50,000 visits per year.

What we've been able to do recently and as of March, we finally released our new shopping cart, which we're actually seeing an uptick in publication sales as a result of that. And also easier access to some of our other collections and so on. So this is just a portal into it. And this is a horrible looking diagram. This is hot off the press. We're just continuing to play with this, and sort of getting statistics for Google if you will, but this is just to, sort of, indicate the international reach of the Bureau. This is just one month of activity on our website. And these are the hits we're getting, okay. Dozens of countries across the entire US of course, and so on. So this plot starts August 1st basically and ends a few days ago.

An **unknown speaker** asked, what's the one in Africa? Is that Ghana? Maybe Nigeria?

Mr. Faulds replied, that's a good question. Yes, I guess that's Ghana, unless it's an off shore oil rig somewhere. I haven't figured out every little aspect of this yet. In fact, this is hot off the press yesterday morning, I asked Charlotte to sort of play around with this and we obviously need to refine these figures and clarify a few items like that. And then we actually, you can see - look at the hits on individual pages, individual publications and so on. So this will give us an idea of sort of how far our reach is, what our impact is, and maybe what we emphasize in the future. So we've got all continents covered here, and dozens of countries and then multiple publication types and I know you can't read that. The next time I come, this will be in better format.

So sample curation Fiscal Year '15 we received \$35,000. We expended \$28,000, we have \$7,000 left then. It helped to maintain staffing at - we call this the Gold Building affectionately, and manager, fiscal curator, student workers, curating samples, general web maintenance, developing, maintaining, etc., web applications.

I should add that receiving this funding also allowed us to match for some federal grants, and so we turned this around and received \$48,000 as it's a 100% match. So we received - we have a little bit of funds in other areas to match, but basically we received \$48,000 from the National Geologic and Geophysical Data Preservation Program. This was a special year where more money actually came in from Congress for a one-time deal. Typical grants in this program are about \$20K. But at least one year we were able to sort of turn this and thanks to the funding from the Division get more than typical.

So these are the details of the sample curation from Fiscal Year '15, greater than 600 mining district files were added with 105 of those scanned or digitized. The Fourth Ward School, 42 of those mining district files were

scanned and added. We retrieved a large collection from Allied Nevada Gold that was donated to us, we still need to ascension that and scan it and so on. And we also moved 1,500 boxes from storage into the repository basically so that they're more easily accessible. We realized the building opened in 2009, starting to do that type of thing, budget cuts hit, and we really didn't have the manpower for a while to actually continue to transfer some important collections to the gold room.

On the oil and gas - so that summarizes minerals, oil and gas. We had records, sets of samples and living well samples, 63 files with logs for scan, bringing things up to date since 2011, we had fallen a bit behind. I think John Snow had mentioned that at one of the meetings and we brought that back up to date. We scanned dozens of released sample results bigger than 500 pages, arrange for a large donation that we're arranging, that's in progress for a large donation of well data from a company that will go unnamed in Denver, dating back to the 1960s. Also, I arranged for a large donation of seismic reflection data from Exxon Mobil. This is 2D data, not the modern day if you will, but still it's from 70s and 80s, but it still allows us to understand basic geometries, resource issues, groundwater issues and so on, so it's important for us to have that Exxon Mobil didn't really care about anymore updating spreadsheets, web applications for oil and gas etc.

On the geothermal front added 21 new records, 13 sets of new studies. We've had three well samples, this means actual individuals in industry coming in sampling our collections. So, that kind of interaction. 105 sets of cuttings are now eligible for release, okay, so we're starting to release those, because they're proprietary for five years, and so there's always a lag in that. Updating spreadsheets, flood applications and air totals, we have large collections of air photos and we're trying to both digitize them so that they're universally accessible and move them off of old storage media that is prone to deteriorate. So we did move 18,000 photos from DVD to a new storage bank.

The MI reports, this is the second grant funded in FY '15, \$30,000 was allocated, we only expended \$16K. And this was thanks to the college at the last minute, completely supported David Davis, which they also did for another year. So we've actually pulled funds from that, we did this next fiscal year and it should be all expended in this fiscal year. So there's no promise by the way - Dave Davis is our Information Specialist. The college has said that's the last year they can support him.

But at least we got - and we have him supported for one more year, and we have some savings here to expend on producing these reports over the next year. And of course these are in collaboration with the Division. The Division primarily produces that and we sort of design and put it together into a publication format. But then it gives us the data, a lot - most of the data for this report and we can write that and put it together. And actually added a couple more copies if people don't have a copy of this, but obviously tracking for historic production is very important from year to year.

Mineral databases, the third grant for FY '15, we received \$35K. We expended \$31K. A small amount of savings left for this fiscal year expended on the staff in the Gold Building in the Cartographic and GIS staff. Those are the list of the accomplishments, general web maintenance and development. This involved in the last year of migrating our server over to the UNR larger server. Migrating our website. Our website had, in terms of, it's a long story but have become obsolete in the software that would be supported and UNR was requiring all of the elements within UNR to be sort of part of the - their major - their main website. So we retain autonomy under that, but when you click on NBMG now, you don't know it, but you're actually going through the main UNR website. Previously you were going directly into NBMG website, and with all the issues of security, hacking and so on, it was far better for us to simply migrate completely over to the UNR website.

We've also in the last year under this support produced maps for the governor's office, on mineral resources associated with the Sage Grouse Habitat. We developed a new mining district web application, and it's in the handout there, right there. We updated the 43-101 report file, added topographic basis to all of our maps on the website.

For some reason a lot of our geologic maps got put on the website, when you know we started to go digital 10 years or so ago, a lot of them didn't have the topo base. So we made sure that all of them do, and that actually was fairly sizable task and developing these in the shopping cart. So this is just - sort of this is our mining district web applications the 43-101 report web application. And now we also have a topographic map of web applications as well.

Geologic framework studies in northeast Nevada. This is the one grant from Year One that we've carried over, and I won't go through the history of this except that ultimately it was directed toward northeast Nevada and started building new projects, creating collaborations with industry, and we sort of picked out this box across Northeast Nevada that extends from just north of Elko here and some folks in this room are probably quite familiar with this area, and started doing some new mapping in here. Also supporting publications of some very good mapping that had been done previously are supporting publications that were - and then so from the Star and Mary's River basins in this region here oil and gas potential over to the Pequop Mountains over here including the Long Canyon Deposit and of course significant mineral potential there.

So these are just some of the products. This is the Lamoille Creek map sort of the southern part of the Mary's River Basin. There is the East Humboldt Range for the mountains over here. One of the Noble Wells I believe is right about down here. And then we're actually mapping now in this quadrangle here. And that map is pretty much fully supported by the Division funds. This is the - moving south now, a beautiful map produced by Sean Long and others, sort of a strip map across the southern Eureka mining district, a very detailed and balanced - and processed, nicely balanced, and this is a map of the central Robinson Mountains .

So that's kind of a summary then of what we've produced. And that's really all in the last year, okay. From that last increment of the \$100,000 as well as sort of that one legacy fund if you will that we've been able to carry over that's focused on northeast Nevada.

And then just to, very quickly, summarize our funding situation, if you're interested. The blue bar is the important one to pay attention to. That's the State funding for the Bureau. It comes through UNR, and so this was the big drop into the 2012 Fiscal Year and see we're starting to climb out of that hole, and these are other - the other bars and colors associated with other types of funding, such as, we do bring some revenue through our publication sales.

And now actually as part of the reorganization in 2012, we had to take on some teaching obligations, which was probably a good idea and it also is bit of a safety net for us in terms of being tied a little bit to the teaching mission at UNR. Some of us did teach before, the graduate students, but now pretty much that's required of all Bureau Faculty. It helps protect us a little bit for future cuts, and it also helps - engages us more - we actually have now about one-third of the graduate students in the Geology Program. So and most of those are in applied areas of the geoscience such as minerals, geothermal, etc.

So we actually now as of last fiscal year, a portion of each FTE of our faculty is covered under the instructional accounts, okay. So in a way that's a little bit of a boost in our funding, and it's also taking—the university sort of accepted if you will kind of required teaching of a state-wide agency, who should at least partially pay for that. So that was significant sort of win if you will and we've gained two faculty positions in the last couple of years. Both in the general realm of economic geology. One mineral specialist Mike Ressel, many of you know who we hired last year and we just hired a new Geothermal Specialist who will take over as director for the Great Basin Geothermal Center.

And I'll tell you that name now, Bridget Ayling. She'll be coming to us from Australia, actually a New Zealand citizen. She specializes in reservoir characterization, not reservoir engineering, but characterization with geochemistry tracers and that type of thing. So very important on the geothermal side of things. And the Center is coming back under the Bureau, which is I think very good. So now the Bureau has the Geothermal Center and we have CREG run by John Muntean.

So if you will the applied side of the geo sciences has sort of come into the Bureau at UNR, and that was I think one of the wins if you will, by us sort of accepting them, will play a greater role and teaching mission. And just real quick, this is where we are from - this is where we are in funding for a State Geological Survey. The important sort of bar to pay attention to is the blue bar and that's actually the state funding, okay.

So this is total funding which includes federal grants. And so basically we're about Number 28, 29 in the country in terms of state allocated funds for our State Geological Survey. I don't think that's very good. But we actually turned that around and we attracted a fair amount of federal funding with that, and we're actually about Number 8

or 9. We can't compare to Illinois and Texas in terms of the amount of federal funding we're bringing in okay, but we're actually about Number 8 or 9 in terms of State Geological Surveys in terms of bringing in federal funds.

Mr. Henderson stated, excuse me, can you tell me what those four are?

Mr. Faulds answered, that's federal that's the red bar, that's non-federal. So like for Texas a lot of oil and gas money, for us we have a tiny amount. They actually did about \$80,000 a year for something called the Mining Coop Fund. The only sort of fee type thing the Bureau gets - it's not really a fee, it's a little bit, it's legislation, it's by state statute. It's a little bit of the interest on the bonds not reclaimed by mining. So the active mines, those bonds, okay, we—the Bureau actually gets a tiny amount of interest. So that's that little green bar right there. So that's nonfederal. Other non-recurring state funds and that blue is the recurring state appropriations. Prior to the big cuts you know we didn't look too bad. We've regained a little bit on the geology side, the faculty side, we've added two new positions, in the last couple years, that's good, that's positive, where we're still really hurting is on the support staff side. Okay, - so this just breaks down our state allocation into the different elements. That's professional salaries, that's staffer's salaries. But our classified salaries are about \$109,000 - about 10% or so.

So our support staff we have one half of one position state funded at the Gold Building. We have one half of one position in our Cart GIS group, both of those outfits require about \$300K to \$350K a year, if we have fully staffed them, and the state funding for those are about 10%. So that's our big portion now is to try to convince the administration—that the UNR Administration that we need some funding back into that support staff.

And I would say - yeah, so we can talk, maybe sort of off the record on that, but I think we got good support from the Dean of the College now. I think he really understands our mission and is supportive of bringing some funding back into support staff as well as opportunities for adding more geologists, faculty.

Anyway, so that's a quick summary. So things are looking better. Thank you very much. You got us through a very, very critical time, I think this is the first time in three or four years that I'm not asking—and actually I know you couldn't give it. But you were there when we needed you and hopefully we've produced some good things.

Chairman DeLong asked, if my numbers are correct, it looked like you still about \$52,000 that you're carrying forward into this fiscal year.

Mr. Faulds replied, \$27K plus, I don't think it's quite that much, but I think it's - but yeah, it's \$27K on the Northeast Nevada project, plus \$14K - yeah, actually almost that, yeah, okay.

Chairman DeLong confirmed, good. Thank you very much.

IV. STAFF REPORTS

1) Minerals Education update – Bill Durbin

Mr. Durbin introduced himself and began by welcoming Garrett Wake to our little family down there in Las Vegas, Debbie Selig and I are very happy to have Garrett here with us. I look forward to working with him on education and public outreach and AML programs.

I just wanted to do a quick review of our latest teacher workshop that was held July 14th through 16th at Manogue High School in Reno. Really fun and successful workshop, although the numbers were really low. For I guess a number of reasons, we had about 84 teachers signed up and 68 attended. So there were some who just flat decided not to show up. We had some that were contacted and we put limitations on the numbers of people that can attend each session, and some of them were disappointed that they didn't get the classes they wanted, so they just didn't show up.

These are a few pictures from the classroom activity sessions. One of the things that we did the - this activity right here is we're actually extracting the iron filings out of Total cereal and other cereals. There's actually metallic iron in that which is one of the nutrients in cereals. So the teachers mixed up a slurry and we had the little

popsicle sticks with magnets on them and they get in there and they stir it up and this is one of the fun little activities. We had a great tour of Art Wilson Gypsum and Virginia City, including this is a visit to our big bat cupola out there across the street from the Fourth Ward School.

Our next workshop will be down here or down in Las Vegas in March. I believe it's the 22nd and 23rd of March, again during the Spring break, at Faith Lutheran School. So if any of you are in the area, we'd love to have you come and pay us a visit.

I think this probably might have come up during the last meeting which I did not attend. We celebrated our 90,000th student visitor to the McCaw School of Mines; that was on March 2nd. Not a real good picture of the little guy, but I guess he was in total shock, but pretty thrilled to be the 90,000th student, he got a t-shirt and a swag bag, and we had some press there. We had a couple of the TV stations and the local Henderson News down there.

Mr. Perry asked, could you explain McCaw?

Mr. Durbin explained, it is a tour destination for Clark County school kids. It's built adjacent to Gordon McCaw Elementary School which is right behind the downtown business center there in Henderson. It's about an acre and a quarter property that is - it's actually built on school district property.

We have a 4,800 square foot simulated underground mine there with exhibits and all the hardware, a lot of old mining equipment in there. We have a Visitor's Center with a Gift Shop and a Conference Room. Exhibits all over the surface area showing historic mining, and current mining equipment that's used.

We target fourth grade classes; there are 810 fourth grade classes in Clark County. So we offer tours to fourth graders, because they get a little bit of science, but a lot of Nevada history at that grade level. So we provide-- there's a Foundation that raises funds for this. We provide tour bus or bus transportation. We actually pay for Clark County School District buses to bring the kids in. They get to learn gold panning, and there are several hands-on activities throughout the tours that they take. It's about a two and a half to three hour tour.

So we'll bring one class in at a time in the morning and they go around and visit all the different exhibits. Selected fourth and fifth graders, and I'll show you the next slide, are chosen as our Mighty Miners, they're actually trained to help give the tours. So the day after our 90,000th student came in, Henderson City Council and the Mayor invited us to bring the Mighty Miners in for a little recognition ceremony and they got a nice little proclamation and got a picture of them, that's Andy Hafen the Mayor of Henderson right there in the center. Jennifer Borne the Principal at McCaw and Gerry Schroeder who is a City Councilwoman and also on our Foundation Board.

So that's really briefly it in a nutshell, certainly invite you to contact us, if you're ever down in that area and you haven't been there, and you'd like to have a tour, I think you'd be quite impressed. It's really a beautiful facility. Not a penny of school district money or tax money has gone into any aspect of that. All of the buildings, everything were provided through money or through donations and equipment, materials, just a totally awesome thing.

And the nice thing about having the McCaw School of Mines there, they have just named Gordon McCaw Elementary a new STEAM school, Science, Technology, Engineering, Arts and Math magnet school. And it's primarily because of the McCaw School of Mines that we have that honor at that school.

We had an annual fundraiser, this was on April 18th. We had a Mexican theme. It was held at the Henderson Convention Center, always have a golf tournament with that. Everyone had a great time at the golf tournament. We had about 20 foursomes, so everybody had a good time. So our income this year from the gala and golf tournament was about \$58,500, expenses a little over \$12,000. So our net income for this year was \$46,000 plus. That is about 46% of our budget, our operating expenses, the three salaries that we pay, the buses, they get to pan for gold and silver, so we have - we have to buy the gold and silver. So our budget is about \$100,000 a year. So we did about 46% of that this year, and that's up about, I think we made \$33,000 and something last year, so we're up a little bit.

Our Executive Director is just doing everything he can to get out and shake the ground down there. He's got a lot more of the smaller companies down there and some of the like Olin and Tronox and some of these companies down there are getting more and more on board.

So I want to thank those of you who generously contributed to that this last year. Mr. Gibson, the Mining Association, and it's a wonderful thing. I invite you to come down anytime you're in the area, that's a great tour. I was just re-elected Treasurer of the Foundation for another two-year term, and Garrett was just initiated as a new Board Member. So we're getting him right in on all the goodies.

One of the things that we do for our AML program in Southern Nevada is our Eagle Scout Program. Now we've kind of been on summer break this year because we don't put them out there in the field in August and July. So our summer hiatus is June 1st through October 1st. We'll be starting things up here pretty soon. We have nine projects pending. I've actually got two site visits and two projects scheduled beginning in October and November. And when I was out we had to cancel a few things in the spring so I'm calling around to reschedule projects that were cancelled.

Looking forward to working with Garrett, we're going to be - as soon as - now school is back in session, we'll be getting calls from teachers, we've already got a couple of public outreach things in the works, including Pioneer Days at Spring Mountain Ranch State Park. That's going to be September 19th. So, things are rolling along and things will be picking up here as we get into October.

One other late breaking thing. I got a report and a bunch of pictures from the Tonopah Mining Park, some of you may know Mimi Rodden, she's the Former Chairman of the Mining Park Foundation, but we met with her earlier this week and she had some pictures of the completion of the rehab of the Mizpah Shaft. That's the old original Jim Butler Discovery Shaft. It's the first steel headframe shaft west of the Mississippi in 1903. The timbers set right under the collar and three sets below that had come apart and had fallen in, so they hired Guy F. Atkinson Construction Company to go in and rebuild those sets.

And the reason I bring that up here is that part of the funding for that - the total was about \$175,000 to do that. Part of that funding was money that we had given them originally for fencing and they asked to divert that, I think it was \$27,500 and it was about what two, three years ago, that they asked for the okay to allocate that from the fencing project to the repairs. So I have a few pictures here, we can pass around this information came to me after I had sent everything to Valerie. So good things going on up there. And that's it, any questions?

Mr. Perry asked Mr. Wade to stand up and tell us a little bit about himself, his history and where he came from.

Mr. Wade introduced himself and went on to say, I've met most of you. I was born and raised in Michigan, and I went to the University of Michigan for about three semesters and quickly realized that I didn't have enough money to pay for school. So I joined the military, I did four years in the Air Force which brought me out here to Nellis. I got out in 2010, went back to school at UNLV and got my degree in Geology. And I worked in a little bit of junior mining, Castle Mountain which was Viceroy before. I did a little bit of mud logging in the oil industry, and a little bit of consulting for an engineering firm. Now, I'm here. I did six months overseas in Iraq, and I'm in the Air Force Reserves now as a videographer and public affairs person. I am married, I have a wife and a dog. I live in Las Vegas obviously, in Henderson. My wife's name is Stephanie, Bella is the dog. I graduated from UNLV in December of 2010. And I studied under Jean Cline. I did an independent study and I worked for about eight months. And I appreciate the opportunity afforded by all of you and I look forward to you know getting my hands in and doing my part.

2) Mining/Reclamation Bond Pool – Mike Visher

Mr. Visher continued, right after Bill's section there in the staff reports there's a little green separator, and there's a bond status report with a little graph on it. The take away you want is in middle, the percent funded is 128.5%. So we're 28.5% above what our obligations are. And you can look at the graph there and see the decline in activities, since 2011. Kind of a steady decline. The red are the reductions, so that's people exiting the bond pool, and the number of new bonds or increase is relatively low.

The bond pool is very healthy, we have \$845,000 in capacity that we could take on for liabilities. Remember most of this is the plan level operations, they put up around 50% to 55% of the bond amount, we take on the rest immediately. And then over the course of the next five years, they pay down that additional amount and the bond becomes whole.

So we only have two bonds that are not wholly funded, TNT's Big Canyon placer project outside of Yerington and then Dun Glen Placer Mine in Pershing County and that one they're actually interested in replacing that with a surety. That would be done through NDEP, it's on private property. We would have to coordinate that. We do not refund money until the NDEP receives a replacement amount. So they're working on that, they've changed names and operators a few times. They have not paid their quarterly payment that was due by the end of June 30th, and I've sent them their 30-day notification letter. If they do not pay by September, I think, it's 14th, they exit the bond pool and they don't get their deposit back, which means they do not get \$192,000.

So there's an incentive for them to either replace it or pay up and they only need to pay \$1,000 to get that current. So that's the only one that I'm really concerned about. Everything else is moving along just fine. And again, we sent over about \$86,000 as an administrative fee back over to the general fund for the Division.

Mr. Bryan started a discussion about \$845,000 that could be put into the fund. He asked, can't we put that to AML or something?

Chairman Delong stated, no, that would require legislation.

Mr. Visher continued, again if somebody wanted to come in and they wanted to bond the maximum amount, a brand new start-up. We would limit it at \$3,000,000. And the formula would be such that they'd put down about 50-80% of that. If the Commission wanted to issue that big, we'd put it in front of the Commission, but if the Commission decided to do that, we would be on the hook for the remainder. So \$1.4M, and that would eat away that \$800,000 would go away right away, now we'd be in the negative.

That is a what if, but the pool was set up to make it easier for those that don't have any cash flow or history to go get a bond and get started and then once they have cash flow, or can demonstrate or purchase a surety, then they could exit the bond pool.

Mr. Perry added, we had the same discussion actually there about - what are the limitations there, because you know if I could ask—like I'm done when? There's the bonding amount which is from the calculations, 359 right, they put 192 and paid 30 in premiums, so they're 61.9% whole.

But what Mike didn't say there is, if they quit paying and go bankrupt, then we're on the hook for the remainder of the 359. That's why there's a reserve. In notice level bonds, they pay 100%. In plan level, we start at some number and they work up to it, so we have risk, and currently have some capacity.

Mr. Visher confirmed. So right now if Dun Glen terminated and left the bond pool and if NDEP called the money, we're just the bank, if they called the money, then we have \$136,000 we have to come up with. And that would come out of that \$800,000.

But when the bond pool was set up, it's got its own budget account number; it's got its own set of rules. It's a nonexecutive budget. Again, it's kind of like - it's a bank that operates under banking rules, a little bit different. The next page is what Linda gives to us every week. It's the budget recap report and you're used to seeing this, but you have to bear in mind that the work program is what was submitted to the State. You put in an amount, and you put it in a little high and you hope you don't exceed it. You have to put in an amount that you think you're going to receive. We do this every week, and then I'll take these numbers to generate the current reserve amount. But the forecast amounts are probably more accurate than the work program numbers. And so that's the takeaway.

The next two pages are just the total of Special Projects; you can see what you've authorized historically and where we stand with those things, and we've only \$28,000 out there that was left approved, but never spent. \$20,000 on the white paper on permitting time lines and \$8,800 with the Bureau which, I need to actually see if they've finished the work or not. So I can see that half of the work was done in for a Nye County project, but I

can't see if the remainder was ever done and if we were billed for that. So I would just need to clear that one up and I'll share this with you.

Mr. Perry stated, this goes back to 2006. It's been carried on the books. We just cleaned that one out, but we do need to clean the one on white paper on permitting time.

Mr. Bryan asked, where's that money?

Chairman DeLong confirmed, it's in the reserve.

Mr. Bryan asked, but it's part of the other figures in the reserve?

Mr. Visher stated, no. My forecasts do not include any of these obligations because...the permitting one we never did. Any questions on the bond pool or those numbers?

3) Oil, Gas, and Geothermal – Lowell Price (Oil and geothermal drilling update)

Mr. Price started. I'll just quickly go through this, the permitting aspect and then the recent activity. So far this year, we've had a total of 22 Geothermal Permits issued, seven of which have been drilled. Oil and gas, three permits have been issued this year and one has been drilled. Of the geothermal permits, actually eight of those are domestic, so it doesn't really indicate any kind of an uptick or whatever within the actual geothermal industry in terms of electrical type generation.

For activity, only two companies have really been active in terms of drilling and that's Ormat Nevada, where they recently finished a six well drilling program, four production wells, two injection wells at Wild Rose and I'm happy to report that next week, they'll fire up at Wild Rose, or actually they refer to it as Don Campbell now. They'll fire up their second plant next week. And I believe it's a 26 and a half megawatt facility, possibly 22 and a half megawatts. But they've just receive approval from UIC to use the two new injection wells and so they'll be firing up the plant to test the facility. And within about 30 days or so, it will just go online, assuming they don't have any major problems.

US Geothermal is the other company that's been active in drilling. They're drilling TG Wells at San Emidio. They've drilled two out of five. They've already indicated they may want to reclassify those two wells as observation wells, which they would have to go through NEPA with the BLM. They've actually designed these TG holes a much bigger size than the normal TG hole.

Cyrq Energy, they're acquiring the Patua Power Plant in Hazen, along with all the associated wells with that plant. And that happened actually in the first into the...

Mr. Faulds asked, who acquired it?

Mr. Price replied, Cyrq Energy, C-Y-R-Q.

Mr. Parker asked, what other properties that Gradient has - is Gradient still on the hook for - are they even in business?

Mr. Price replied, I'm assuming they're in business. They still - the properties that they have would be Patua 2, which I believe there's three or four wells there. There would be the Salt Wells Project which I just inspected 13 wells there. The Fallon 1 project and I believe that's it. Fallon 1 has one well.

Mr. Parker asked I know most of the wells are around 10,000 feet aren't they?

Mr. Price replied, no, well, at Patua yes. In these other areas they're probably, I would say 5,000 feet or less. I'd need to double check that just to make sure.

Mr. Parker and Mr. Price continued discussion about the well depths. Mr. Price said he would verify.

Mr. Price continued, on the oil side of things, Makoil is still pursuing an APD from the BLM, and of course from us for their Murphy Gap 1423 Well, which is in Lincoln County and is within this new national monument area. Basically, I think that those operators who had existing leases are grandfathered in and they still are pursuing the permitting of that well.

We did permit two wells to Makoil, two out of the three that we permitted had been to Makoil. And they were in-field wells within the Munson Ranch area of the Trap Springs field.

Let's see, Noble Energy they put the K1L-1B Well down by Jiggs on production in April, however, they shut it in in July to start performing some workover work on that particular well.

Tetuan Resources, they drilled the Marie Agnes 12-29 Well, however, after testing, they decided to plug and abandon it. And the most recent activity within oil is Bright Sky Energy and Minerals. They're currently drilling a well in White River Valley, about 24 miles south of Lund, and I just got an email from the company man and they're down around 4,700 feet and they have an approved total down to 12,500 feet.

Why don't we move on just to the inspections. I've been out this week as well, inspecting wells. I'm trying to do my part in cutting expenses, and I've been able to inspect 49.7% of the wells that were needed this year for around a few hundred bucks. So rather than the \$9,800 or whatever was allocated, so - but anyway to update you on the inspection sheet to incorporate the new figures, the wells inspected under geothermal are now 63. The oil wells that have been inspected now are 34, total wells inspected are 97. Total wells needed for Fiscal Year '16 are approximately 195, that will increase as wells are drilled. And of that total I've inspected 49.7% of the wells needed and the number of wells remaining would 98.

I've only found one what I would consider a serious issue. I found it on Wednesday - I mean, excuse me, Tuesday. I found an oil well that had standing oil in it - in the cellar. I definitely expressed my opinion of finding that in that cellar, and I told them that it had to be cleaned up immediately and that the oil needed to be pumped out and that the dirt in the cellar they needed to dig down until they basically ran out of oil in there. And that that was going to the soil farm. But other than that, I've had that one instance but other than that I found water in oh, probably maybe one quarter of the well cellars of geothermal, and which probably overnight a percent of that has already been corrected.

Mr. Henderson and Mr. Snow both commented that it was all the rain that we got this year.

Mr. Price agreed, but added, t we're enforcing no fluids in cellars, just to try to help prevent corrosion.

Mr. Henderson asked, but signs and placards are all put together from your previous experience?

Mr. Price confirmed, I think I've come across one well that did not have a sign. They've definitely gotten the message by now. Ormat was - and they have the vast majority of the wells in the state. And they were probably down the ladder in terms of proficiency in getting signs up. But however, I have to commend them that they have really done a good job bringing things up to speed and on multi-well pads, which was one of my biggest gripes and they didn't label each well that on all of their fields now they've gone through and they're on multi-well pads, they're labeling every well. I have to commend them for that. They've really responded in a very positive fashion there. I guess that's really about it, unless you have some specific questions.

John Snow stated, I have a question on Tungsten Mountain, is that the next potential project?

Mr. Price replied, from what I hear, yes. They're currently doing a tracer test at Tungsten Mountain to look at the communication in between two particular wells, how fast things are moving through the reservoir, and from what they've told me that that is their next target, for a power plant basically. They feel that they have the resource there to develop - to go and develop the field. Of course a tracer test would give them more of an idea.

Mr. Perry started, I just have a few notes here to read off and I'll start with personnel issues. And as most of you are aware Eric Langenfeld left the Division and went to work for Stantec last month. And we have been recruiting for this position and we actually have an offer out right now and should find out next week if the person we offered it to is going to take it.

Rob mentioned that we were planning for four interns for three weeks this winter, that's something different, but we felt that we really needed to focus on some work in Clark County, because in the summer we never get a chance to do that. It's too hot and Bill's been doing it with boy scouts forever, and there's a lot of AML features.

So we not only wanted to do that down there, but there was some legislators that were very interested in the program and we'd probably bring them out at that time, so that they could see. Bill responded to several of them, and they're interested in seeing what we do down there.

September 13th is a Sunday and it's the second annual NDOM family picnic at Washoe Lake State Park, so you're all welcome to that. Again, September 13th, we rent the pavilion out there and everybody kicks in ten bucks. I pay for the pavilion and we play horseshoes and have a good time. It was a great time last year. And our Las Vegas staff is coming up. There's some work that following week, so they'll be able to participate, so we'll have them, the whole organization here.

We had the Excellence in Mine Reclamation Award Committee meeting yesterday. That's an annual award that we give for mine reclamation examples in the State that we think are exemplary and we made four awards. I think I put a copy of the announcement after the meeting yesterday there and there's some up here for those of you who might be interested, and I sent it out too. I think you probably got it via email Dana, I know I sent it, because this is something that we award at the Annual Mining Association meeting, they graciously let us do this award at the very end - after the safety awards.

We had a new classification that we did on the very last one of those because it was an award for actually doing an abandoned mine closure area that in this case. Newmont had AML hazards on unpatented claims near Battle Mountain that had created a public safety hazard, people were going out there recreating in some of these, so they did a really nice job of closing those hazards. We didn't have a classification for that work, but we do now.

The Awards Committee is made up of members from the Department of Wildlife, BLM, US Forest Service and NDEP. So it has really good representation, and awards have to be a unanimous vote. And the other participants have been really good about looking at them and going out and visually seeing things and commenting back.

On the public outreach side, this is going to be a busy two months for us I know Bill and Garrett have got a big list that they go by but I'll just list some of the ones here that I'm aware of that we have in the next couple months.

Nevada Mining Association will hold a meeting in Tahoe and I'm going to a similar presentation to this shorter version at the invitation of NMA on the Nevada Mining Association on the Regulators Panel, so thank you for the invite for that.

We have a booth at the Geothermal Resource Conference which is meeting in Reno, September 21st through 23rd and Commissioner Snow and some people in the Division that worked on the theme of 30 years of Geothermal Power in Nevada. We obtained an approval from the Governor's office that the Nevada Geothermal and Petroleum Society had requested to mint a commemorate medallion. And we're doing a presentation that we're putting together, that John and I were working on this morning at the keynote session that I'll be giving, so that's rather exciting.

We've got IOGCC in Oklahoma City. I'm going to go this one, Mike and I have been trading off, he's been going to the mid-year and I've been going to this one, so we have only one person going to hold down our expenses. I know that on their docket is bonding; they want to talk about that. This meeting will be the results of the well spacing subcommittee that they that you know we provided data but didn't participate directly into so that will be interesting to see what came out of that, and I know their next one is going to be bonding with regards to their subcommittee work.

I'm going to give a talk to GSN Southern Nevada on October 8th at the request of Joshua Bonde and we'll be down there doing some work.

Earth Science Week Field Trip Assistance that the Nevada Bureau of Mines and Geology puts on every year. We've helped in the past on that, and I'm assuming we probably will this year, if you need some assistance during that weekend.

October 22nd through 24th is the National Science Teachers' Association Educators Conference, and it's in Reno this year. And that's a big deal, and the staffing of the booth has been organized by SME, and John Price is taking a big lead in that. We are going to have probably three people there. We've gone to some of the mines and collected some mineral specimens, because it was 10 of them that they wanted. Our assignment was barite samples, and I know the University is doing some other ones so it would be a big teachers' conference.

Mr. Durbin asked to add that the Southern Nevada Science Teachers' Association is doing classroom activity sessions on Friday of that conference and they're ending their day with a rock raffle. And they contacted me to see if anyone might have any interesting specimens, pieces of drill core or whatever that might make pretty samples for their rock raffle, which is one of their big fundraisers of the year. So just putting that out. If anybody has something they'd like to donate, get in touch with me. Thank you.

Mr. Perry continued, the American Water Works Association and the Nevada Water Resources Association is having a joint meeting in Las Vegas and they've asked me to give a talk on hydraulic fracturing. So I've agreed to do that, kind of quiet time in oil activity, but I agree to give the talk. And November 6th is the NMEC annual meeting in Reno. And I'll be on an airplane going on vacation, so Mike is going to give a talk on how the Division of Minerals assists the exploration community. That's the next two months. It's pretty busy for talks and presentations.

With regards to MOU updates, we started down this path some time back. Memorandums of Understanding, we have two of them: one with NDEP, one with the BLM. They're pretty old. We are down to the final draft of the NDEP/NDOM MOU, kind of had a hiatus there through the legislative session, but NDEP finished their part. We're going to meet on Monday on that. We've pretty much threw out the old one and did a new one. So once we get to a point where we're comfortable with it, then we're going to hand it to Brian for a legal review and NDEP will do the same. But it's really just a much more simple one that says here's what we do, here's what you guys do with regards to drilling and oil well and the UIC permit, to make sure that we're meshing together on permitting and compliance issues. I'm real happy with it.

The BLM has done a draft of their MOU and are real eager to get one, because none of the other states in the west will talk to them except us. So we're going to pick that up as we get closer in time and have a little time to work on it, we'll update that one too. And that's what wells we're going to inspect and how we react to emergencies if we have somebody in the field, they have somebody in the field close to them, you know that kind of thing. So it's practical.

I think with that, I just was going to note correspondence at the end of this, I put in there, Valerie put in there the letters from the Governor on his Consistency Review for - well, the first one actually is our letter to IMCC from the Governor that we voted on last time for us to drop out of that. When I spoke with them before the letter was sent, they were not happy, but they understand that we had some financial issues at the time. They still include us in on calls if we want to be. So, they've been very gracious.

And then following that are the letters from the Governor's Consistency Review and the response from the BLM. If you haven't read those, they're in your book.

- 5) Correspondence – Governor's Consistency Review letter and BLM Response letter on the Nevada and Northeastern California Greater Sage Grouse Proposed Land Use Amendment and FEIS

Chairman DeLong started, I would like to say, just point out to me the Governor in his Consistency Review Letter to the BLM, he obviously utilized some of the information we provided in our letter to him so I think that was a worthwhile exercise for the Commission.

Mr. Perry confirmed that the letter was not in the packet but added, I think it did have an impact. He wanted the Commission to be a part of the process and actually said that in his response, in his letter. It was well received by the Governor's office.

Mr. Henderson asked, could I say something else just about things coming up, the Petroleum and Geological Society has a career prep day for engineering and sciences on Wednesday, September 9th. It's the Nevada Petroleum Geothermal Society, are you still on the Board?

Mr./ Snow replied, I'm the President.

Mr. Henderson stated, that's what I thought, so that's why I'm confused. Also we have a - we want to have the 58 people in the Miner Academy sign up as student members. And we have someone that's going to pay their fees.

Mr. Snow, stated, no this is from Mackay, Mackay is putting this on. NPGS just forwarded this.

Rich Perry led a discussion regarding dinner participation and field trip on subsequent day.

Mr. Price stated, I'd like to point out one thing that's going on. I'm halfway through what they call a TopCorp course. TopCorp is the University of Texas, University of Pennsylvania, and Colorado School of Mines. They offer courses to State Regulators in which all expenses basically are paid by the industry. And it's to educate the educators on various aspects of petroleum, geology and petroleum engineering. I've taken half the course so far, the online course, the online portion of it, and which I received a certificate of that, and then in September, I'll be going to go to Colorado for September 8th through the 12th for the actual field portion of the course.

I feel that it would definitely - there wasn't a whole lot of new material for me, but I think that whoever comes in and replaces Erik, I think in the future it would be great to have that individual take this course, because it covers a wide area of the oil field.

COMMISSION BUSINESS

A. Determination of time and place of next CMR meeting

Mr. Perry stated that Commissioner Henderson has suggested that we have the next meeting at Bishop Manogue High School so that the group that you've been mentoring, the Miner Academy can come to the meeting. They're very interested in doing that. And as long as the public can go there, we're good to do that. So, I'm going to suggest that we look at the last week of October between the 26th and 29th. I know that's a little quick, but again, I'm trying to have those things, and if we could maybe keep it kind of fluid, such that if it has to change, if we're not ready, we can let it slip.

So whereas we usually put concrete dates in the past, I'm going to ask for a little flexibility here, on this one. We'll set a tentative date, so that we can look and see if there's one available at the high school, because they have to provide us with a room.

Mr. Henderson said, they told us that we just tell them the date, they'll make it available. One note on that Rich, I think is important is that last year the Nevada Supreme Court held court at Bishop Manogue also, and there were several rulings that came out of that, their court hearings there. So, they're used to handling this type of situation.

It was decided that the next meeting would be at Bishop Manogue High School on November 5, 2015 from 9:00 AM to 1:00 PM.

COMMENTS BY THE GENERAL PUBLIC

Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter

itself has been specifically included on a successive agenda and identified as an item for possible action. All public comments will be limited to 5 minutes for each person. **ACTION WILL NOT BE TAKEN**

There were no comments to be made by the General Public.

Chairman DeLong asked the room to introduce themselves. Room introduced themselves.

ADJOURNMENT

Chairman DeLong asked for a motion to adjourn. Motion made by **Mr. Bryan**. Meeting adjourned.

NOTICE TO PERSONS WITH DISABILITIES

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

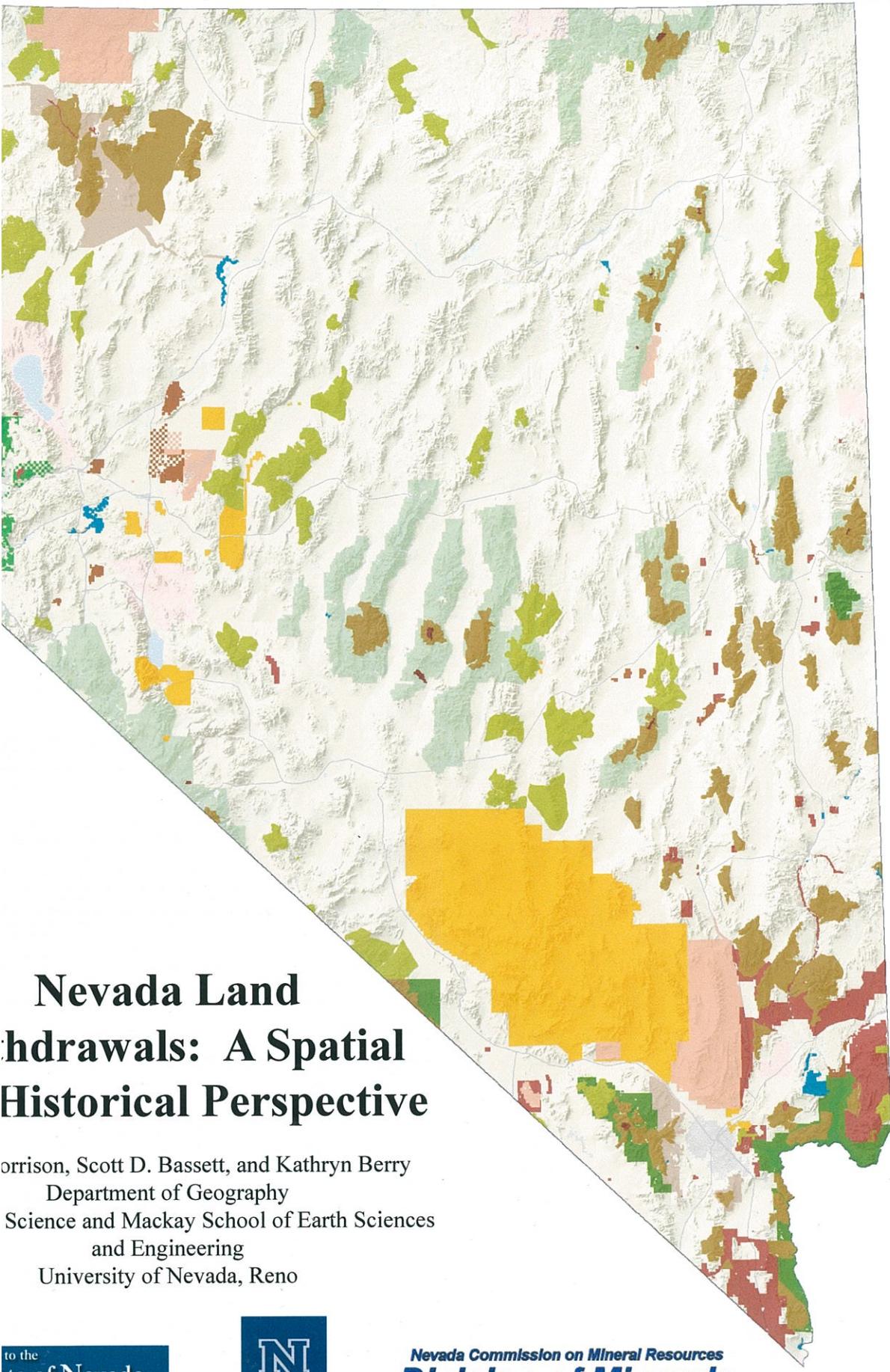
The Commission will be attending a field trip on Friday, August 28, 2015 to visit two sites: Noble Energy's Huntington K1L Well at 8:00 AM and a tour of General Moly's Mt. Hope project north of Eureka at 1:00 PM. Members of the public may attend but must provide their own transportation and safety equipment. Advanced notification is required. Please call Valerie Kneefel at (775) 684-7043.

II. NEW BUSINESS

II. A. Update on Sage Grouse issues in Nevada as they pertain to mining

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

II. B. Nevada Land Withdrawals from Mineral Entry



Nevada Land Withdrawals: A Spatial Historical Perspective

Corrison, Scott D. Bassett, and Kathryn Berry
Department of Geography
Science and Mackay School of Earth Sciences
and Engineering
University of Nevada, Reno

to the
State of Nevada
"The Silver State!"



Nevada Commission on Mineral Resources
Division of Minerals

**II. C. Discussion of the Nevada and NE
California Greater Sage Grouse Land
Use Plan Amendment and the 2014
Nevada Greater Sage Grouse
Conservation Plan (State Plan).**

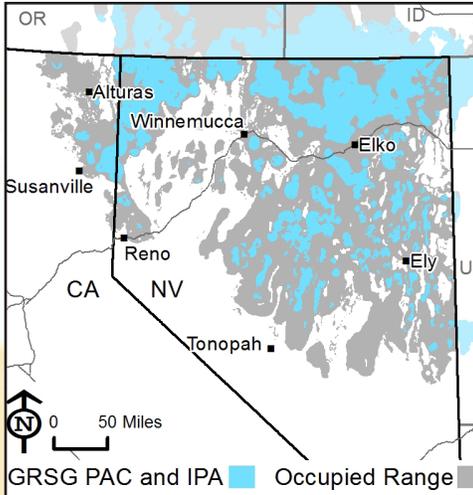
Natural Resource Impacts to Nevada

Due to the Greater Sage Grouse Conservation Plan

- BLM's Greater Sage Grouse Land Use Plan Amendment (LUPA) creates 3 new habitat management areas in Nevada affecting 22 million acres (of the 70 million encompassed by the state) with travel restrictions in 16 million acres.
- Sagebrush Focal Areas (SFA)
 - 2.9 million acres; 15 times larger than the total footprint of existing mining activities in Nevada
 - OGG leasing can continue however with No Surface Occupancy (NSO) stipulation and no exceptions, rendering them effective withdrawals
- Proposed Mineral Withdrawals within Sagebrush Focal Areas 
 - Up to 2 year segregation period, during which time no new location and entry of mining claims allowed.
 - A decision on withdrawal determined after public process
 - Existing mining claims remain valid; however accessibility and construction of new roads will be determined on a case by case basis.
- Priority Habitat Management Areas (PHMA) 
 - ~10 million acres, inclusive of SFA's
 - Managed to avoid and minimize further disturbance
 - 3% disturbance cap with requirement of net conservation gain
 - Oil and gas leasing with NSO - effective withdrawals
 - Geothermal leasing outside of SFA's, but cannot have any cumulative effect to greater sage grouse or habitat
 - Surface energy and mineral development is limited
 - Solar and wind projects excluded
 - Saleable and non-leasable minerals – excluded
 - Right-of Way avoidance
 - Travel limited to existing roads, with expectation that some existing roads will be closed in the future
- General Habitat Management Areas (GHMA) 
 - ~6 million acres
 - Impacts from development are avoided, minimized and mitigated
 - OGG leasing with limitations on surface impacts and timing of activities
 - Solar projects excluded, wind projects avoided
 - Travel limited to existing roads, with expectation that some existing roads will be closed in the future.
- Other Habitat Management Areas (OHMA) 
 - ~6 million acres
 - Preserve and restore seasonal and connectivity areas



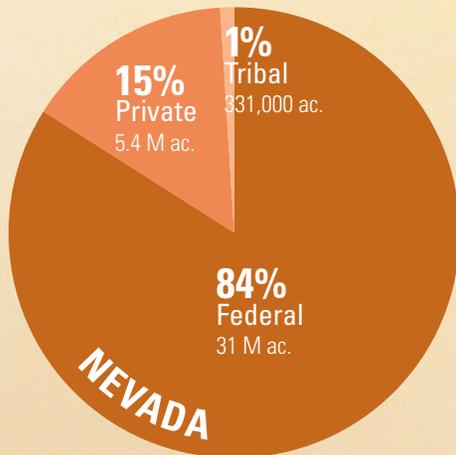
Greater Sage-Grouse Conservation in Nevada and Northeastern California



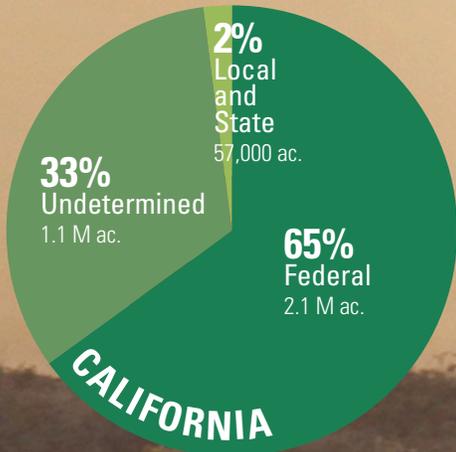
Important Conservation Areas and Occupied Range for Greater Sage-Grouse in Nevada and California

Land Ownership

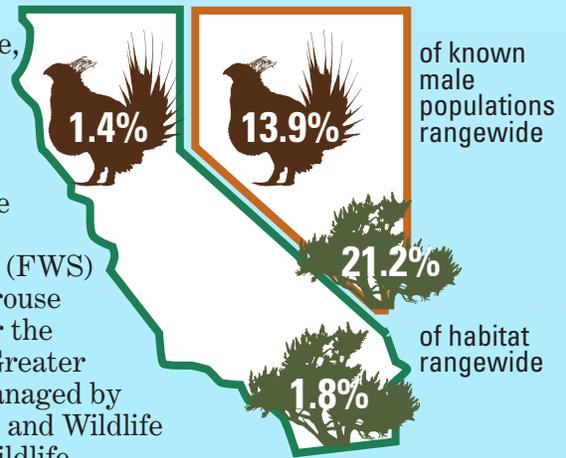
Total Occupied Range: 36.8 million acres



Total Occupied Range: 3.21 million acres



Nevada and California have been active partners in the collaborative, science-based conservation campaign to protect the greater sage-grouse and the sagebrush ecosystem. Due to the collective efforts of federal, state and private partners across the range, the U.S. Fish and Wildlife Service (FWS) has found that the greater sage-grouse does not warrant protection under the Endangered Species Act (ESA). Greater sage-grouse will continue to be managed by the California Department of Fish and Wildlife and the Nevada Department of Wildlife.



Greater Sage-Grouse in Nevada and Northeastern California

The state of Nevada, along with a small portion of eastern California along the state boundary, is a key region to the conservation of greater sage-grouse. Nevada has more area recognized as Priority Areas for Conservation for the species as outlined by the Conservation Objectives Team Report than any other state except Wyoming. In addition to the greater sage-grouse, the region's sagebrush ecosystem is the home to more than 350 wildlife species thought to be locally or regionally imperiled, such as Brewer's sparrow and the pygmy rabbit. Trends in greater sage-grouse numbers since the mid 1960's have shown long term declines in most populations.

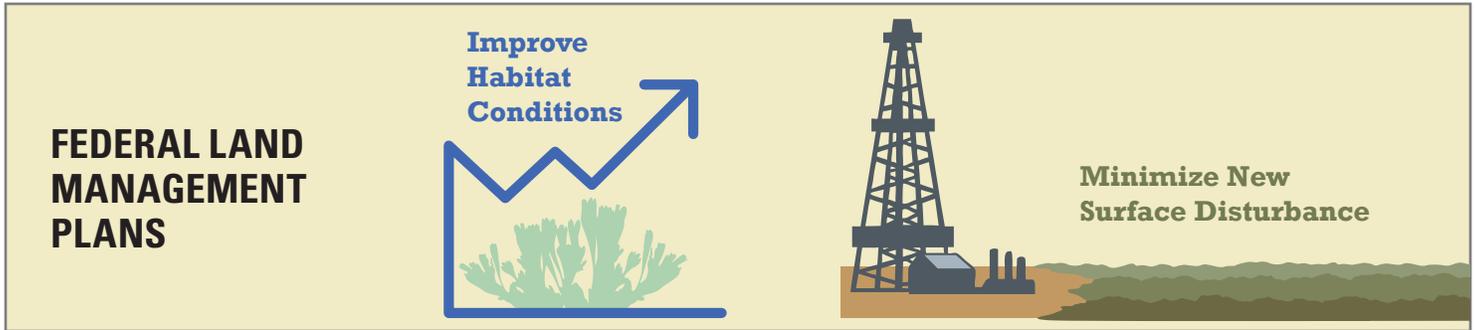
Invasive plant species and wildfires are the primary threats to the bird in the Great Basin region and are a leading cause of sagebrush habitat loss. Because 86 percent of Nevada's population is managed by the federal government, federal agencies are working collaboratively to take appropriate action to proactively manage these threats.

Primary Threats

Loss and fragmentation of sagebrush due to:

- Invasive species and wildfire,
- Conifer expansion,
- Improper grazing, and
- Mining and energy development.

Greater Sage-Grouse Conservation Strategy in CA/NV



STATE AND PRIVATE LAND CONSERVATION

Overview of State Actions

- California does not have a state greater sage-grouse conservation plan. However, California has designated greater sage-grouse as a state-listed species of special concern that should be considered during the state's environmental review process.
- California was an active partner in the successful effort to address threats to the Bi-State Distinct Population Segment of greater sage-grouse.
- Nevada's approach relies on executive orders in support of a goal of no net loss of sage-grouse habitat to human disturbance. Nevada's Sagebrush Ecosystem Council finalized the Nevada Greater Sage-grouse Conservation Plan in 2014. The Nevada plan creates the Conservation Credit System, which creates a compensatory mitigation program that requires developers to purchase credits to offset unavoidable impacts in sage-grouse habitat.
- Nevada's plan requires that any development that affects greater sage-grouse habitat in Nevada will need to acquire credits to compensate for those effects before the development proceeds. In 2015, the Governor created Rangeland Fire Protection Associations to add capacity and resources to support fire suppression.

NRCS Sage Grouse Initiative

The Natural Resources Conservation Service's Sage Grouse Initiative (SGI) has been a catalyst for sagebrush conservation across the West. SGI's vision of wildlife conservation through sustainable ranching provides win-win solutions for ranchers, greater sage-grouse and 350 other species. With more than 1,120 participating ranches in 11 western states, SGI and its partners have invested \$424.5 million in greater sage-grouse conservation on 4.4 million acres of private ranchlands.

In April 2015, the FWS withdrew the proposal to list the Bi-State Sage Grouse population along the California/Nevada border as threatened under the ESA as a result of voluntary conservation.

Through SGI, NRCS placed:

- 12,000 acres of priority habitats under easement,
- Cut 5,450 acres of encroaching conifer,
- Pledged another \$12 million in SGI 2.0 to finish the job.

Candidate Conservation Agreements with Assurances (CCAA)						
Name	Location	Covered Area Size	Acres Enrolled	Acres Committed	Land Uses	Date of Completion
Smith Creek Ranch	NV	2,200	2,200			

RANGELAND FIRE STRATEGY

The California and Nevada plan will help reduce the threat of rangeland fire by placing added priority on the prevention, suppression and restoration of sagebrush landscapes threatened by rangeland fire through improved federal-state-local collaboration and coordination.



Nevada received \$638,000 in targeted Fire and Invasives Assessment Tool funding for projects, such as mowing along roadways to create fuel breaks and seeding native plants for sagebrush habitat improvement. The funding also allows for treatment of invasive cheatgrass.



Northeastern Nevada landscape

BLM-USFS Greater Sage-Grouse Conservation Plans in CA/NV

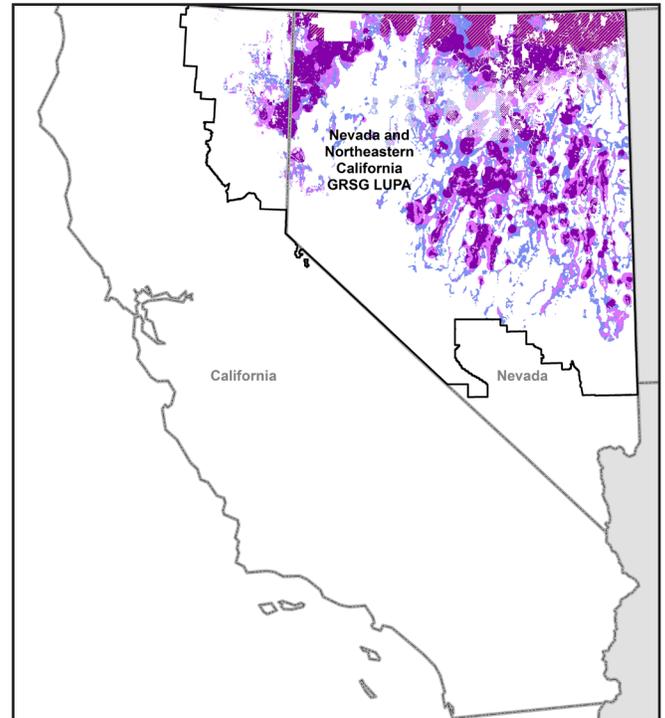
- The Bureau of Land Management (BLM) and the U.S. Forest Service (USFS) have amended land-use plans in California and Nevada to address threats to the greater sage-grouse. The BLM-USFS plans provide a layered management approach that focus protections on the areas of highest importance to the species:

- ▶ The highest levels of protections are applied to Sagebrush Focal Areas (SFA), which are landscapes with high breeding population densities of sage-grouse, high-quality sagebrush habitat, and a preponderance of federal ownership or protected areas that serve to anchor the conservation value of the landscape. These areas are prioritized for habitat improvement and vegetation management efforts and proposed for locatable mineral withdrawal.
- ▶ Priority Habitat Management Areas (PHMA), equivalent to Core Areas, are managed to avoid and minimize further disturbance. Surface energy and mineral development is limited in these areas. Development is capped with limits on the amount and density of disturbance allowed. All of the SFAs are incorporated within PHMA.
- ▶ General Habitat Management Areas (GHMA) provide greater flexibility for land use activities. Mitigation and required design features ensure that impacts from development are avoided, minimized and mitigated in GHMA.
- ▶ Other Habitat Management Areas (OHMA) help preserve and restore seasonal and connectivity areas.

- The BLM and USFS will work closely with the State of Nevada to utilize the Conservation Credit System in mitigation.

- The plans respect valid, existing rights, including those for oil and gas development, renewable energy, rights-of-way, locatable minerals and other permitted projects.

- During grazing permit renewals and modifications on lands within sage-grouse habitat, the BLM will incorporate locally developed management objectives for sage-grouse habitat and rangeland health standards, consistent with ecological potential. The BLM and USFS will prioritize monitoring for compliance, review and processing of grazing permits in the areas most important for sage-grouse first, SFA, followed by PHMA, with a focus on lands containing riparian areas and wet meadows.



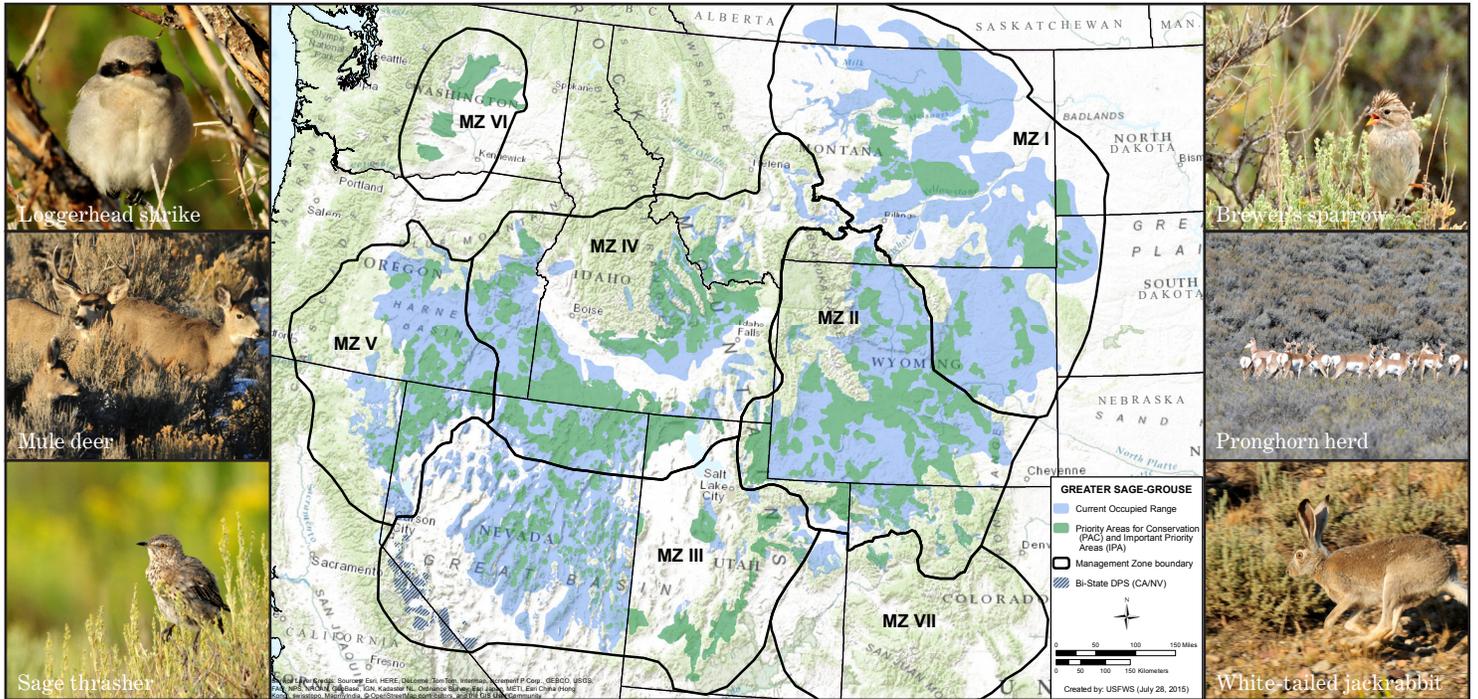
SFA Acres in CA	SFA Acres in NV	PHMA Acres in NV and CA	GHMA Acres in NV and CA	OHMA Acres in NV and CA
None	2.9 million acres	10.3 million acres	6.5 million acres	6.5 million acres

About 96 percent of federal lands with high and medium oil potential in Nevada are outside of federally managed priority conservation areas. There is no high and medium gas potential within the state.

All of the federal lands with high to medium oil and gas potential in California are outside of federally managed priority conservation areas.

Acres of High & Medium Oil and Gas Potential and Lease Status on Federal Lands and Minerals within PHMA								
State	High/Medium Oil Potential				High/Medium Gas Potential			
	Within PHMA Already Leased	Within PHMA Subject to BLM/USFS RMP Decisions for Priority Habitat	Outside of PHMAs	Total High/Medium Oil Potential	Within PHMA Already Leased	Within PHMA Subject to BLM/USFS RMP Decisions for Priority Habitat	Outside of PHMAs	Total High/Medium Gas Potential
Nevada	1,000	2,000	52,000	55,000	0	0	0	0
California	0	0	9,009,000	9,009,000	0	0	3,716,000	3,716,000

The Future for Greater Sage-Grouse in CA/NV



Redefining the Future of Conservation

FWS is confident that the unparalleled conservation effort by federal, state, and private partners has addressed the major threats to greater sage-grouse by putting the right protections in the most important places. A sustained commitment to sagebrush conservation is needed to ensure effective conservation for greater sage-grouse and the hundreds of other wildlife that depend on sagebrush habitat.

Implementation

Partners will now begin to implement their commitments whether under state and federal plans, individual conservation agreements, or the Rangeland Fire Strategy. The BLM and USFS plans will be implemented in close coordination with state and local partners, as well as through continued collaboration with the Sage Grouse Task Force and local working groups. FWS will remain an active partner in the sagebrush conservation effort, funding new research, providing on-the-ground support for private landowners, as well as federal, state, industry and conservation partners.

Enduring Benefits for All

Restoring the greater sage-grouse will benefit hundreds of other native plants and animals and communities across the West. What's more, these conservation efforts are led and strengthened by effective partnerships – ensuring that the gains we make for the greater sage-grouse will endure.



WAFWA wildfire restoration field trip in Nevada

All photos credit to and courtesy of the U.S. Fish & Wildlife Service unless specified otherwise.

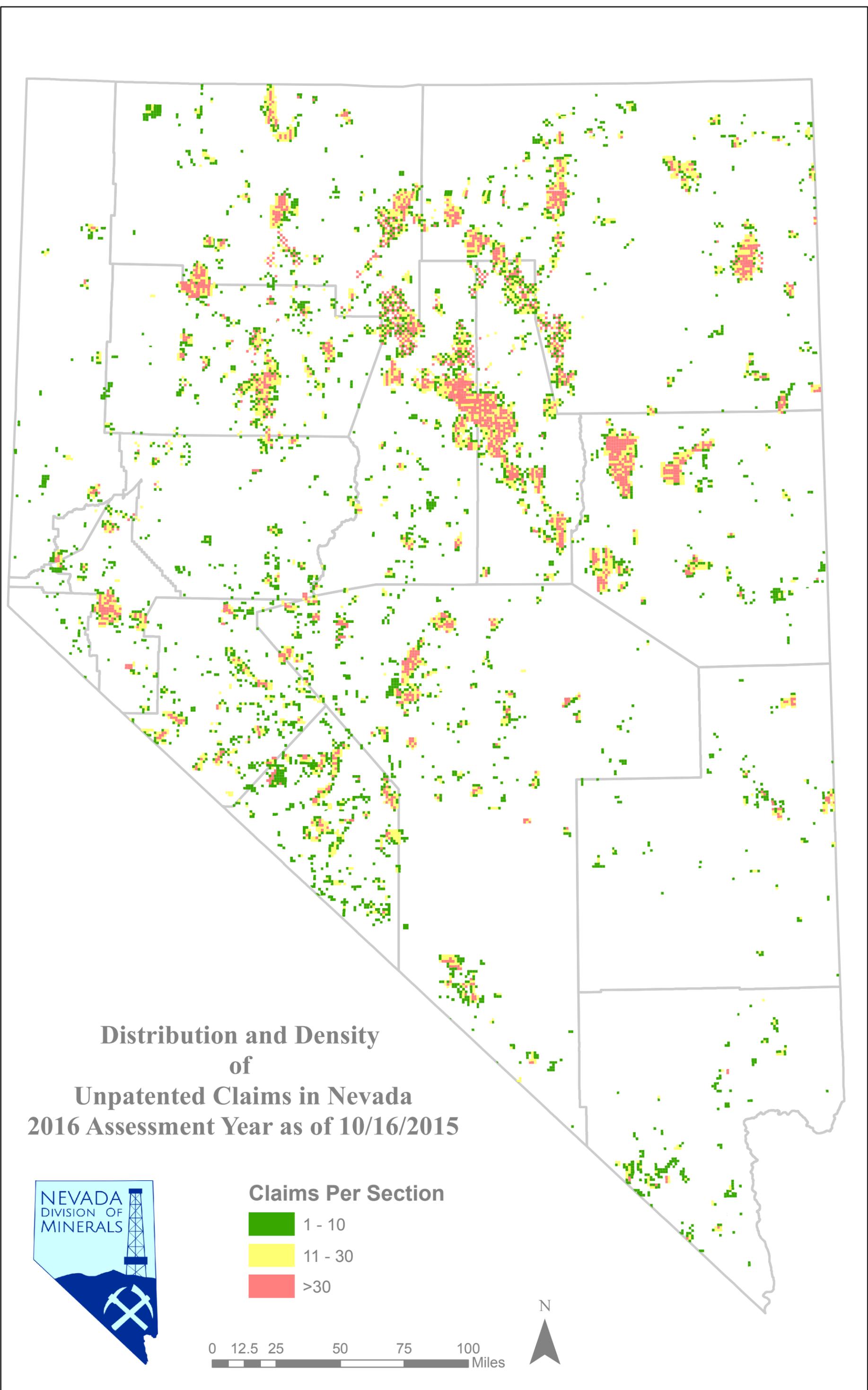
Sage Grouse Initiative 2.0

Since 2010, SGI has focused on arresting habitat loss in the highest priority areas for conservation from ex-urban development and conifer encroachment, and on reducing greater sage-grouse collisions with high-risk fences.

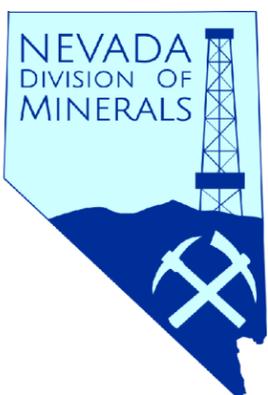
NRCS has committed to invest another \$211 million in SGI 2.0, with an expanded mission of addressing the synergistic problems of invasive weeds and wildfires, on slowing the loss of sagebrush to agricultural conversion and on protecting wet meadow habitat critical for brood-rearing. The program's goal is to bring the total amount of private land under conservation to 8 million acres.

In California, SGI 2.0 will alleviate the conifer threat within priority areas for the Klamath Basin population by 2018.

Nevada is expanding its easement portfolio to protect another 3,400 acres of intact grazing lands as brood habitat. Nevada is coupling protective measures with wet meadow restoration to help increase populations.



**Distribution and Density
of
Unpatented Claims in Nevada
2016 Assessment Year as of 10/16/2015**



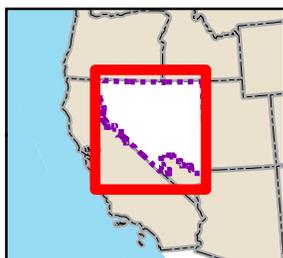
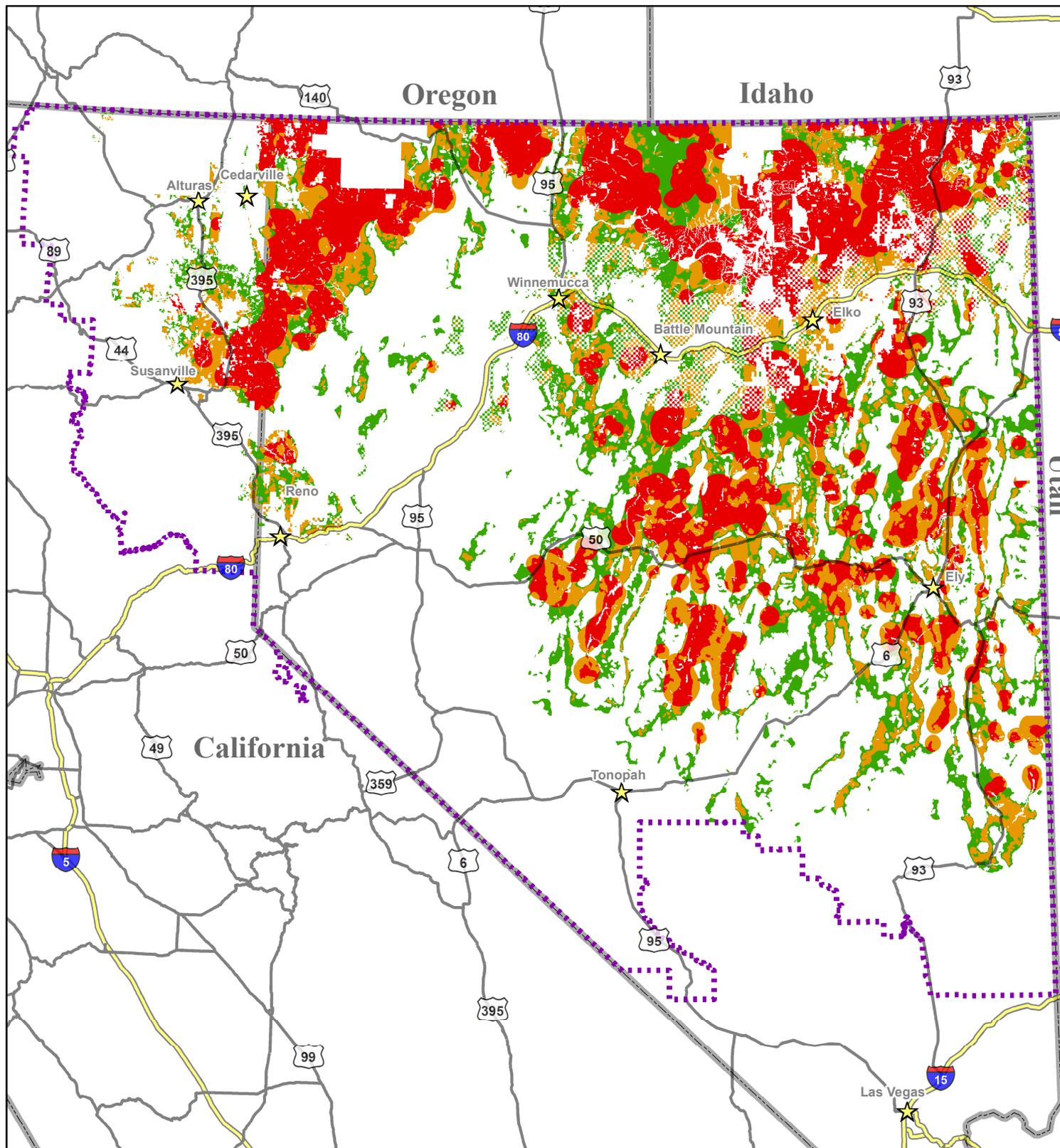
Claims Per Section

- 1 - 10
- 11 - 30
- >30

0 12.5 25 50 75 100 Miles



GRSG Proposed Plan Habitat



Legend

- ★ City/Town
- Interstate
- US Route
- ▤ NV-NECA Planning Area
- Priority Habitat Management Area (PHMA)
- General Habitat Management Area (GHMA)
- Other Habitat Management Area (OHMA)
- States

0 15 30 60 Miles

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

III. OLD BUSINESS

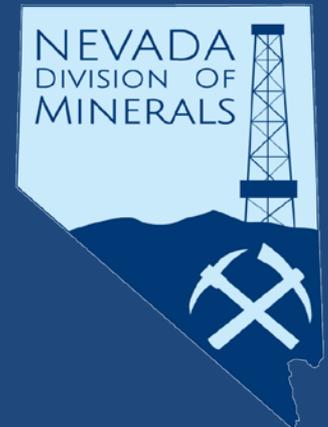
**III. A. Education, Public Awareness and
Eagle Scout Service Project Presentation**

EDUCATION AND PUBLIC AWARENESS and EAGLE SCOUT SERVICE PROJECTS

**Commission on Mineral Resources Meeting
November 5, 2015
Reno, Nevada**



**Bill Durbin
and
Lucia Patterson**



STAFF PRESENTATIONS - AUGUST 27 TO PRESENT

- **27 PRESENTATIONS MADE AT 19 VENUES – 2,080 people**
 - **12 CLASSROOM PRESENTATIONS MADE TO 355 STUDENTS**
 - **5 PRESENTATIONS AT PUBLIC VENUES**
 - **NEVADA MINING ASSOCIATION CONVENTION**
 - **SO. NV. GSN**
 - **GEOHERMAL RESOURCES COUNCIL**
 - **ROTARY – ELKO**
 - **CFOA CONFERENCE – RENO**
 - **NATIONAL EARTH SCIENCE TEACHERS ASSOCIATION (NESTA) - RENO**
 - **SPRING MOUNTAIN RANCH PIONEER DAYS**
 - **GREAT BASIN OUTDOOR SCHOOL TRAINING**
 - **ADVENTURE DAY CAMP**
 - **AML DURING SCOUT PROJECT RECONS AND SECURING PROJECTS**
 - **NATIONAL SCIENCE TEACHERS ASSOCIATION CONFERENCE - RENO**

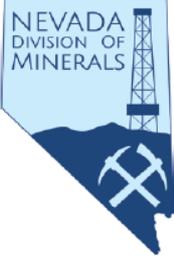
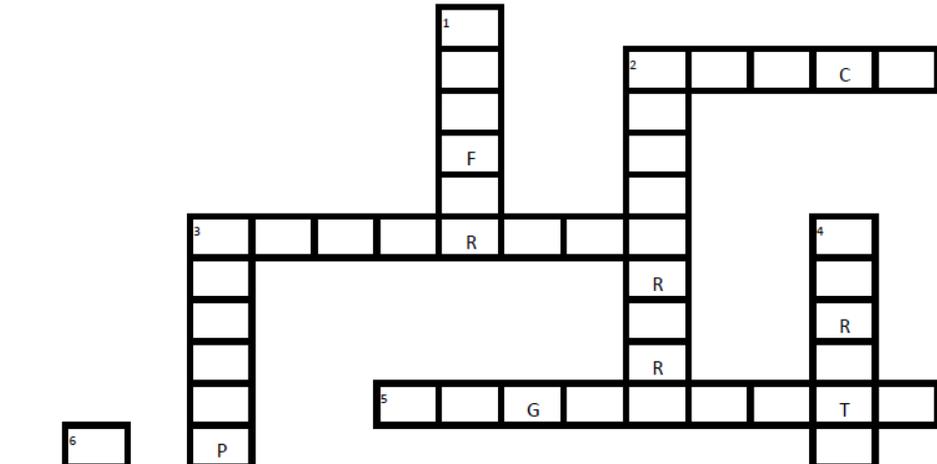
UPDATE OF EDUCATIONAL ACTIVITIES TO MEET CORE STANDARDS

"Having the core standards listed that the activity covered was the reason they allowed you to come present at our school" Alysa Jenson-Cormier 3rd grade teacher Mark Twain Elementary

2ND GRADE MINERAL IDENTIFICATION EXERCISE

2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. [Clarification Statement: Observations could include color, texture, hardness, and flexibility. Patterns could include the similar properties that different materials share.]

Mineral Property Crossword



Across

- 2 I fizz with vinegar!
- 3 I am purple and can be scratched by a nail!
- 5 I am magnetic!
- 7 My luster is metallic and I look like gold!!
- 8 I can scratch glass!

Down

- 1 I smell like rotten eggs!!
- 2 My streak is green to blue!
- 3 I look like a pearl a geologist would say my luster is pearly!
- 4 I am heavier than most other minerals but I am not magnetic!
- 6 I can easily be scratched by your fingernail!!

Activity By: Lucia Patterson Griffin Kilroy, Nevada Division of Minerals

2ND GRADE ROCK CYCLE WITH DELILAH EXERCISE

2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly [Clarification Statement: Examples of events and timescales could include volcanic explosions and earthquakes, which happen quickly and erosion of rocks, which occurs slowly.]

Delilah's Rock Cycle

I am a rock all shiny and new;
There are many different rock types that are important to you.

I am found almost everywhere, which means I am rife;
Come let me tell you about the cycle of my life.

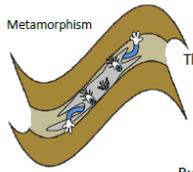
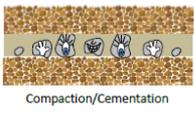
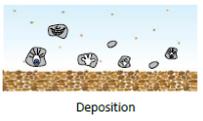
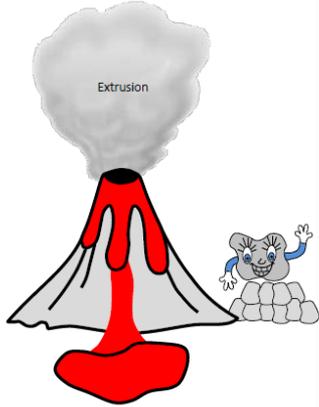
Right now I am igneous, I come from melted rock;
I'm erupted to Earth's surface because rocks cannot walk.

Surface wind and the rain will break me apart;
And that's where my life as a sedimentary rock will start.

Out to the ocean I'll be laid to rest
Burial and compaction my layers will be pressed.

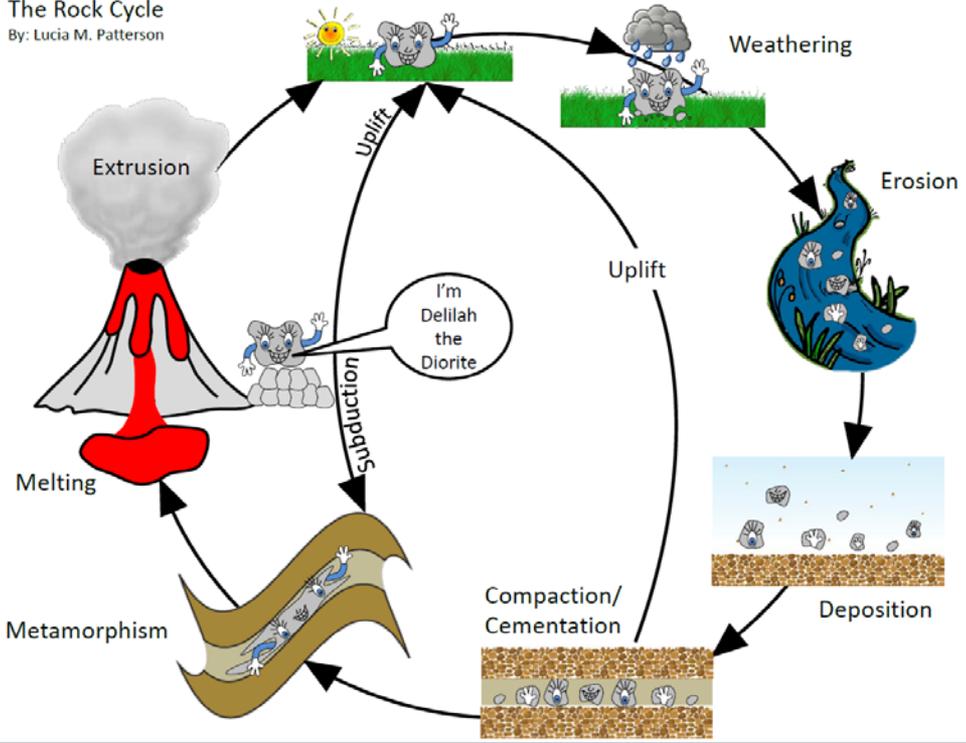
Then the day comes when I meet great heat and pressure
Which will make me metamorphic...what a refresher!!

But, then I could wait for millions to billions of years in idle,
Until again I'm melted down, and begin a brand new rock cycle.



The Rock Cycle

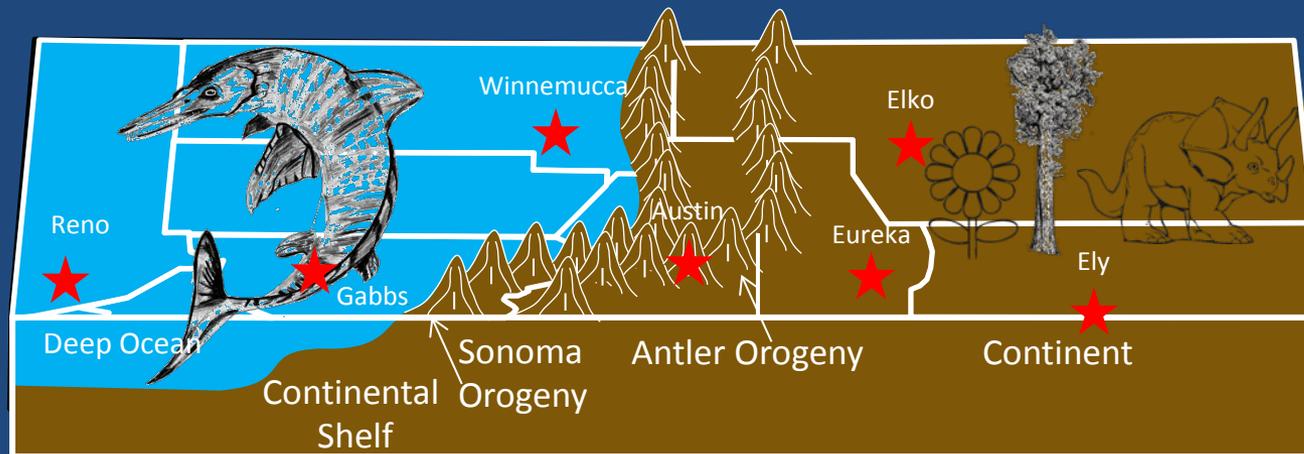
By: Lucia M. Patterson



3RD GRADE GEOLOGIC HISTORY EXERCISE

3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.

3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.



The Jurassic:

The Triassic reptiles would give rise to the dinosaurs. Dinosaurs would rule the land diversifying into many species large and small that we are familiar with like T-Rex, Triceratops, Ichthyosaur (ocean dwelling), and Stegosaurus. Snakes, turtles, flying reptiles, and crocodiles also made their debut. Many dinosaur fossils have been unearthed in Utah and there is a beautiful ichthyosaur fossil specimen at Berlin Ichthyosaur State Park right here in Nevada!!!! Specifically near Gabbs, Nevada.

So based on what we have been talking about, if dinosaurs have been unearthed right next door to us in Utah and we have an Ichthyosaur here in Nevada what did Utah look like during this time? It was land probably with lush vegetation with lots of dinosaurs roaming around. What did western Nevada look like? It was the ocean!!

4TH GRADE GEOLOGIC HISTORY EXERCISE

4-ESS1-1 Identify evidence from patterns in rock formations and fossils in rock layers to support and explanation in landscape over time.

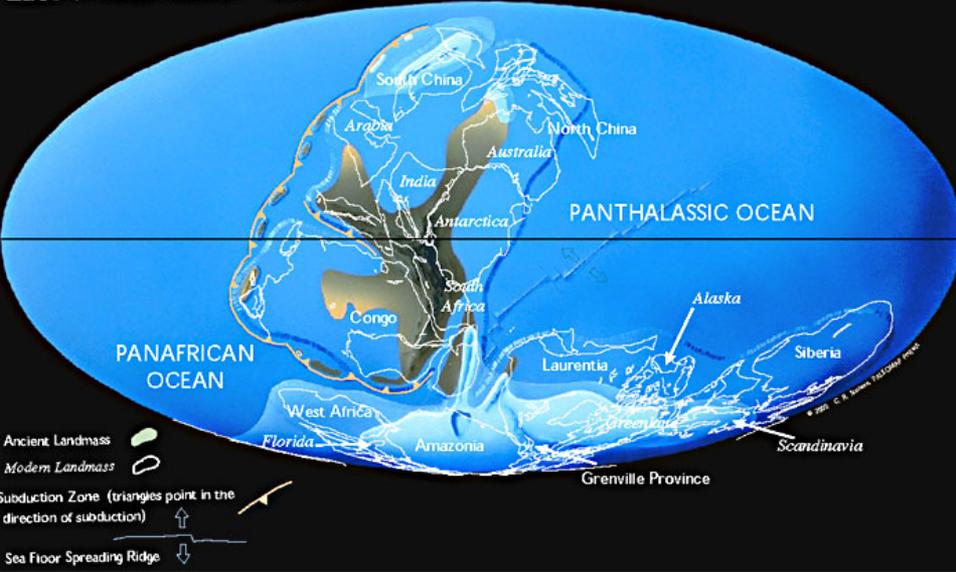
4-ESS2-2 Analyze and interpret data from maps to describe patterns of Earth's Features

ESS1.C: The History of Planet Earth

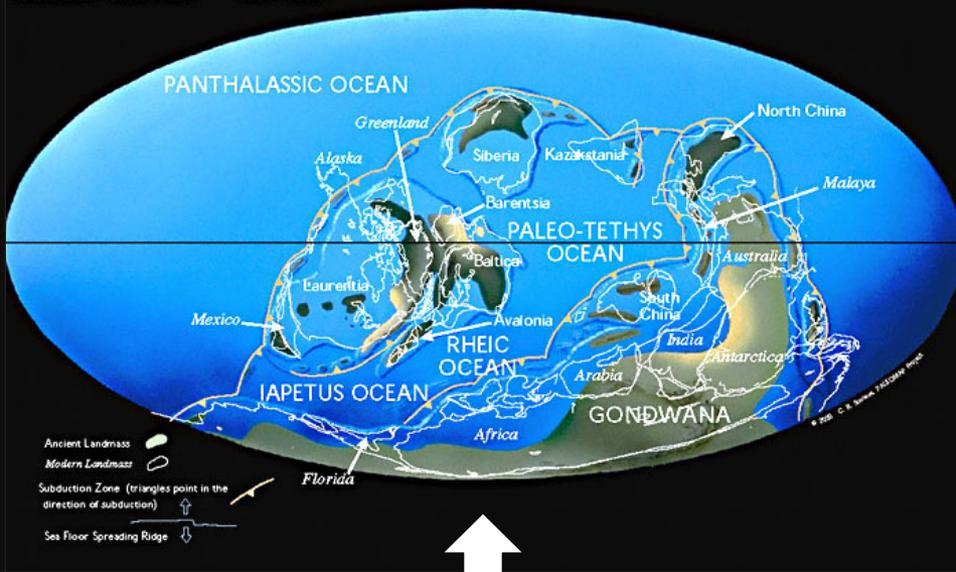
ESS2.B: Plate Tectonics and Large-Scale System Interactions

ESS3.B: Natural Hazards

Late Proterozoic 650 Ma



Middle Silurian 425 Ma



Modern World



During this time period there was a large extinction event. Can anybody tell me where plate tectonics situated the continents to cause this extinction.

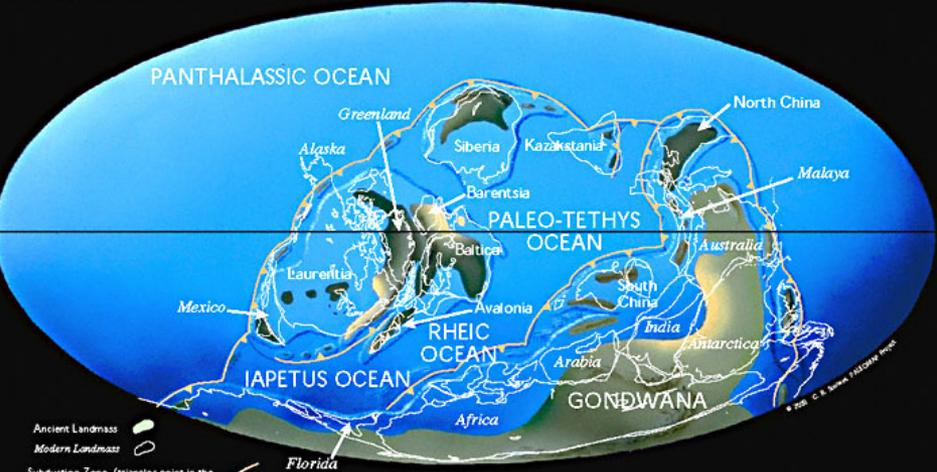
HINT: Look at where all the land mass is sitting and think about the weather!!

5TH GRADE GEOLOGIC HISTORY EXERCISE

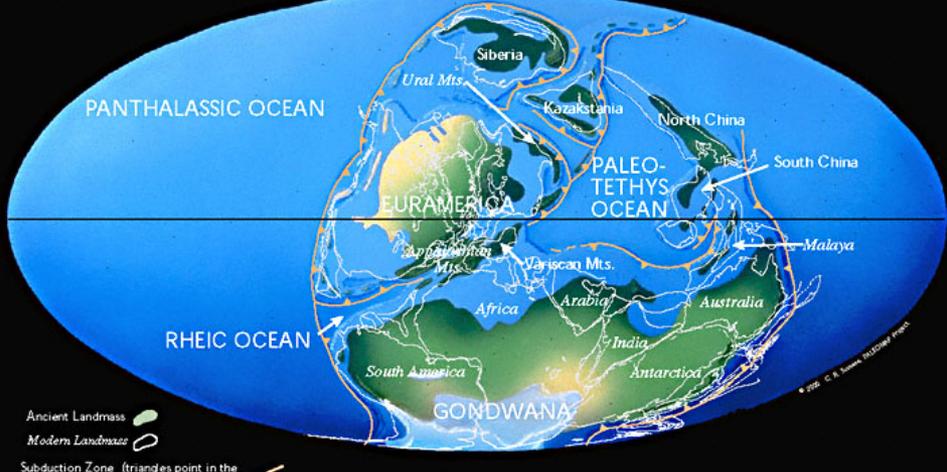
5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

ESS2.A Earth Materials and Systems

Middle Silurian 425 Ma



Early Carboniferous 356 Ma



Extinctions 2 & 3 happened at the end of the Ordovician and the end of the Devonian respectively. Both were due to global cooling. Tectonic activities happening in the geosphere had situated the landmasses geographically at the South Pole. This geographic positioning via the geosphere, caused a massive glaciation event (hydrosphere) which triggered a global cooling event (atmosphere). Cooling of the atmosphere and the hydrosphere caused the extinction event within the biosphere.

CLASSROOM PRESENTATIONS GORDON McCAW ELEMENTARY OCTOBER 12, 2015

- **EXAMPLES OF TOPICS:**

- **MINERAL AND ROCK IDENTIFICATION**
- **NEVADA MINING HISTORY**
- **MODERN MINING, MILLING AND RECLAMATION**
- **ANIMAL, VEGETABLE OR MINERAL: MINERALS AND ROCKS AS RAW MATERIALS**
- **EARTHQUAKE SAFETY**
- **HANDS-ON ACTIVITIES**
- **CAREERS IN THE MINING INDUSTRY**
- **ABANDONED MINE PUBLIC SAFETY**



PUBLIC VENUES

SPRING MOUNTAIN RANCH STATE PARK

PIONEER DAY – SEPTEMBER 19, 2015



Eagle Scout Service Projects

- **2015 So. Nv. summer hiatus ended October 1**
- **12 projects pending: 9 in Clark County, 2 in Lyon County, 1 in Washoe County**
- **1 recon and 1 project completed in Clark County – October 2015 – 1 recon and 4 projects scheduled in November and December, 2015 and January 2016**
- **2 recons completed in September in Lyon County; 1 project completed in Lyon County in October and one scheduled in November**
- **To-date: 160 projects have been completed – 725 hazards have been secured, 143 previously secured hazards have been re-secured**

Eagle Scout Service Projects Clark County

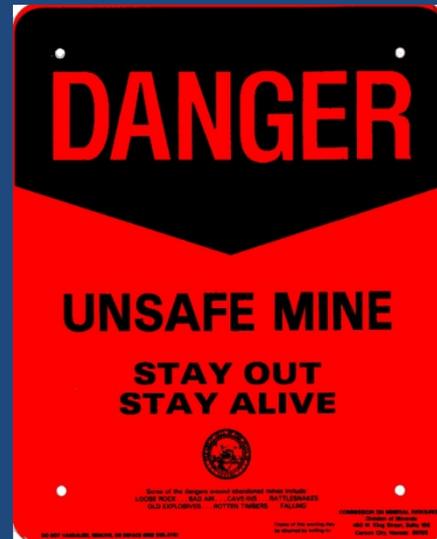
Project recons – Joshua Frizell and Tyler Perez

Project completion – Jared Brady



THANK YOU

QUESTIONS??

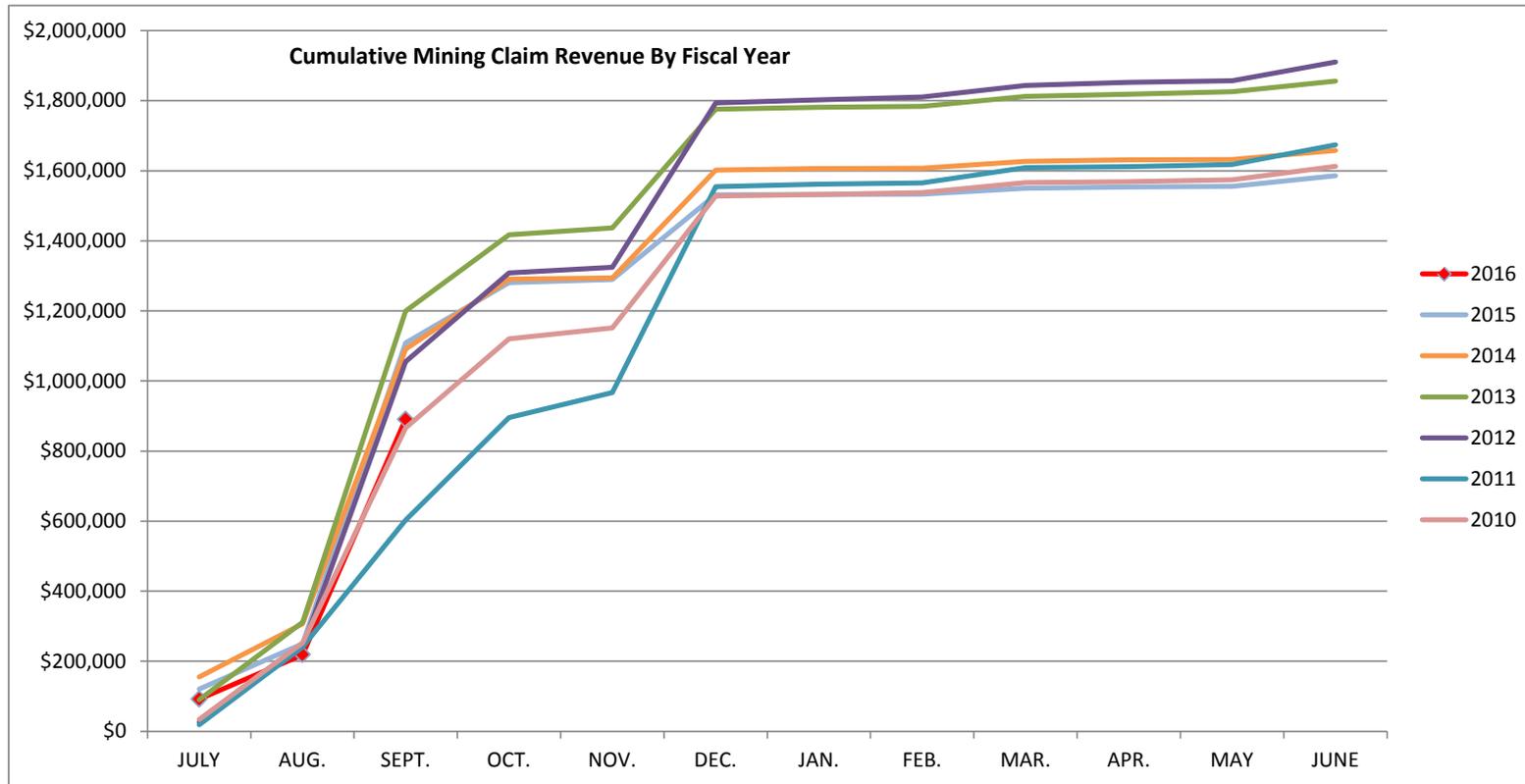


III. B. NDOM Forecast and Reserve balance

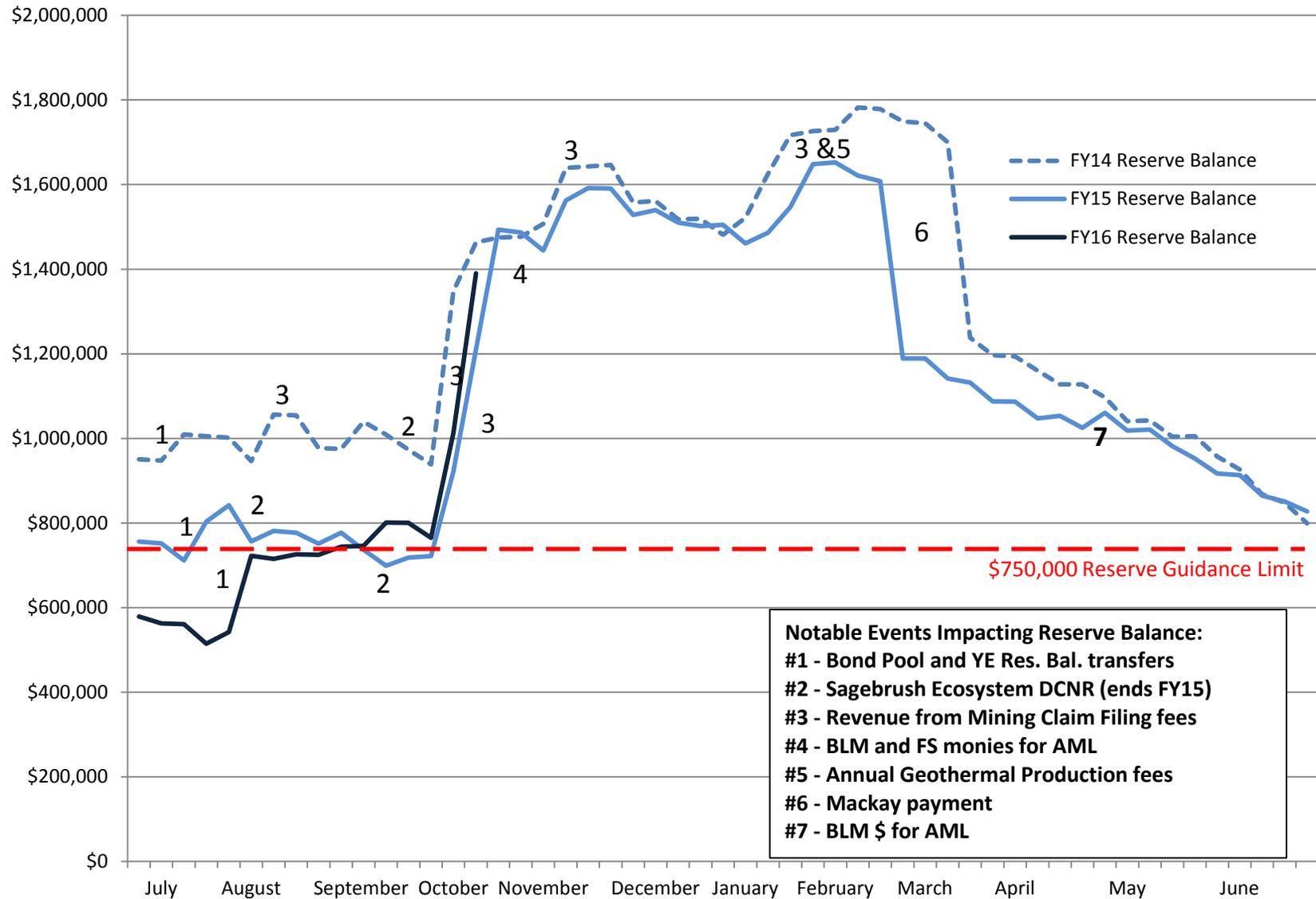
Fiscal Year Cumulative Mining Claim Revenue By Month

Fiscal Year	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	YOY	Total Claims
2016	\$92,072	\$219,020	\$890,817											
2015	\$120,352	\$250,079	\$1,108,417	\$1,280,687	\$1,290,241	\$1,531,683	\$1,532,431	\$1,533,349	\$1,550,247	\$1,553,571	\$1,555,211	\$1,585,539	-4.4%	186,534
2014	\$155,703	\$306,646	\$1,090,754	\$1,290,496	\$1,294,661	\$1,602,233	\$1,606,177	\$1,607,656	\$1,627,283	\$1,631,235	\$1,632,417	\$1,657,789	-10.7%	195,034
2013	\$90,253	\$311,806	\$1,199,622	\$1,417,171	\$1,437,104	\$1,775,803	\$1,781,575	\$1,783,870	\$1,812,217	\$1,818,745	\$1,825,571	\$1,856,460	-2.8%	218,407
2012	\$26,248	\$239,904	\$1,055,539	\$1,309,017	\$1,324,445	\$1,793,687	\$1,802,901	\$1,810,432	\$1,843,795	\$1,852,541	\$1,857,012	\$1,910,562	14.1%	224,772
2011	\$18,504	\$241,374	\$602,803	\$895,475	\$966,603	\$1,554,871	\$1,562,053	\$1,565,649	\$1,609,424	\$1,612,118	\$1,618,145	\$1,674,304	3.8%	196,977
2010	\$34,315	\$252,520	\$866,626	\$1,120,355	\$1,151,704	\$1,527,997	\$1,532,639	\$1,537,911	\$1,566,170	\$1,569,088	\$1,574,207	\$1,613,142		189,781

12 Counties pay quarterly: CC, CH, DO, ES, HU, LA, LI, LY, NY, PE, ST and WP
 FY16 data as of 10/23/15



NDOM Reserve Balance by Week for FY14 - FY16



DIVISION OF MINERALS - FORECAST OF REVENUE AND EXPENDITURES THROUGH FISCAL YEAR 2017

Division of Minerals - Forecast of Revenue and Expenditures Through Fiscal Year 2017 - as of 10/27/15						
Forecast does not include any proposed fee increases						
Revenue						
GL #	Description	FY14 Actuals	FY 15 Actuals	FY16 Forecast	FY17 Forecast	Remarks
2511	Balance Forward Previous Year	1,037,786	889,917	828,059	734,061	
3578	BLM Cooperative Agreement	50,000	110,000	50,000	50,000	Assumes we receive \$50k each year
3580	USFS Assistance Agreement	42,002	21,713	35,000	36,000	\$71,000 available for reimbursement through May 2017
3654	Oil Production Fee	32,162	38,640	44,700	43,950	Assumes \$0.15/bbl x 298k bbls in FY16 and 293k in FY17
3717	Oil Permit Fees	2,800	2,000	800	800	Assumes 4 permits in FY16 and FY17
3718 & 3727	Mining Claim Fees	1,657,789	1,585,539	1,474,551	1,371,333	4.4% decline in FY15, and 7% projected decline in FY16 and 17
3736	Geothermal Fees	120,750	107,525	114,488	120,213	2.5% increase for FY16 +9 additional production wells, 5% increase for FY17
3770	Surface Disturbance Fee (AML)	125,300	106,320	100,000	90,000	Yearly forecasts based on what's in the pipeline
4011	Copy Machines - Sales to Public	0	104	40	40	
4027	Publication Sales (AML signs)	2,757	2,390	2,000	2,000	
4311	Medallion Royalty Fee	1,550	616	200	200	
4326	Treasurer's Interest	3,076	3,947	3,000	3,000	
4620	Transfer from Recl. Bond Pool	90,859	86,498	81,000	76,000	Steady decline tied to exploration activity
	TOTAL	\$3,166,831	\$2,955,209	\$2,733,838	\$2,527,596	
Expenditures						
CAT #	Description	FY14 Actuals	FY15 Actuals	FY16 Forecast	FY17 Forecast	Remarks
01	Personnel (Sal.,WC, PERS,OT)	1,033,398	1,009,184	1,128,412	1,128,991	11 FTE's, 7 interns, elimination of furloughs, leg. appr. salary increases 1%/2%, 2 retirement payouts
02	Out-of-State Travel (Staff, CMR)	11,947	7,250	7,468	7,692	Assumes annual 3% increase
03	In-State Travel (Non-AML)	29,337	13,218	15,862	16,337	20% increase for FY16 (GW), then 3% annual increase
04	Carson Operating Expenses	105,893	100,628	103,647	106,756	Assumes 3% annual increase
08	CMR Travel (In-State)	2,911	2,381	2,452	2,526	Assumes 3% annual increase
09	Special Projects (Mackay, NBMG)	574,238	516,550	398,068	371,953	FY15-\$390,068 (Mackay),\$100k(NBMG), \$12k(NvMA Ed), \$11k (NWS), \$10k publ/other; FY16 and FY17 - \$372,941/\$346,953 (Mackay), \$15k (NvMA Ed), \$10k publ/other
14	Las Vegas Operating Expenses	33,541	34,658	37,698	38,829	Assumes 3% annual increase, +\$2k (GW)
17	Oil, Gas and Geothermal	0	8,943	9,211	9,488	Travel and equip. costs related to OGG; assumes 3% annual increase
18	AML Support (per diem, trucks, fuel, AML supplies and travel, SOSA supplies)	140,773	134,759	144,516	182,369	Assumes 6 interns thru FY17; each @ \$1,556/4 weeks; \$10k swag; 10% increase in FY16 (GW); 4 interns for 3 wks in winter; replacement truck in FY17 (\$28,850); 3% annual increase
26	Computer and IT	22,044	6,984	36,003	31,161	Legislature approved budget
39	AML Enhancements(contracts, equip.)	90,429	105,448	60,000	60,000	FY16 and FY17 -Assumes \$50k contracted annually, plus \$10k materials
69	Sagebrush Ecosystem Transfer	141,364	131,572	0	0	FY15 transfer was last one
87 & 88 & 89	Cost Allocations (State, Purchasing, AG)	91,040	55,575	56,442	112,160	Actuals per Leg. approved budget
	Total	\$2,276,915	\$2,127,150	\$1,999,778	\$2,068,262	
86	Reserve - Balance Forward to Next Year	\$889,916	\$828,059	\$734,061	\$459,334	

**III. C. Findings of task force to review
NDOM budget and forecast.**

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

III. D. Mining Claim Fees and Surface Disturbance Fee.

NRS 513.094 Additional fee; Administrator to establish program to discover dangerous conditions of nonoperating mines; employment of qualified assistant; regulations.

1. An additional fee, in an amount established pursuant to subsection 4, is imposed upon all filings to which [NRS 517.185](#) applies. Each county recorder shall collect and pay over the additional fee, and the additional fee must be deposited in the same manner as provided in that section.

2. The Administrator shall, within the limits of the money provided by this fee, establish a program to discover dangerous conditions that result from mining practices which took place at a mine that is no longer operating, identify if feasible the owner or other person responsible for the condition, and rank the conditions found in descending order of danger. The Administrator shall annually during the month of January, or more often if the danger discovered warrants, inform each board of county commissioners concerning the dangerous conditions found in the respective counties, including their degree of danger relative to one another and to those conditions found in the State as a whole. In addition, the Administrator shall work to educate the public to recognize and avoid those hazards resulting from mining practices which took place at a mine that is no longer operating.

3. To carry out this program and these duties, the Administrator shall employ a qualified assistant, who must be in the unclassified service of the State and whose position is in addition to the unclassified positions otherwise authorized in the Division by statute.

4. The Commission shall establish by regulation:

(a) The fee required pursuant to subsection 1, in an amount not to exceed \$4 per claim.

(b) Standards for determining the conditions created by the abandonment of a former mine or its associated works that constitute a danger to persons or animals and for determining the relative degree of danger. A condition whose existence violates a federal or state statute or regulation intended to protect public health or safety is a danger because of that violation.

(c) Standards for abating the kinds of dangers usually found, including, but not limited to, standards for excluding persons and animals from dangerous open excavations.

(Added to NRS by [1987, 1867](#); A [1993, 298, 1683](#); [1995, 579](#); [1999, 890, 3627](#); [2001, 66](#))

NAC 517.200 Filing fee. ([NRS 513.063](#), [517.185](#)) The amount of the filing fee that is imposed pursuant to subsection 1 of [NRS 517.185](#) is \$6 per claim.

(Added to NAC by Comm'n on Mineral Resources by R069-99, eff. 8-19-99; A by R080-01, 1-16-2002; R199-08, 8-26-2008, eff. 8-27-2008)

NAC 519A.634 Amount of fee. ([NRS 519A.250](#)) The amount of the fee that an operator must pay pursuant to subsection 1 of [NRS 519A.250](#) is \$20 per acre or part of an acre.

(Added to NAC by Comm'n on Mineral Resources by R069-99, eff. 8-19-99)

NRS 517.185 Fee for each document filed; disposition.

1. In addition to any recording fee, each filing pursuant to [NRS 517.050](#), [517.080](#), [517.110](#), [517.140](#), [517.170](#), [517.200](#) and [517.230](#) must be submitted with a filing fee in an amount established pursuant to subsection 2. The county recorder shall collect the filing fee and, on or before the fifth working day of each month, deposit with the county treasurer all such fees collected during the preceding month. The county treasurer shall quarterly pay the money collected to the Division. The Division shall deposit with the State Treasurer, for credit to the Account for the Division of Minerals created pursuant to [NRS 513.103](#), all money received pursuant to this section.

2. The Commission on Mineral Resources shall, by regulation, establish the filing fee required pursuant to subsection 1 in an amount not to exceed \$6 per claim.

(Added to NRS by [1985](#), [1494](#); A [1989](#), [1595](#); [1991](#), [1780](#); [1993](#), [298](#), [1686](#); [1995](#), [579](#); [1999](#), [891](#), [3629](#); [2001](#), [66](#))

NRS 519A.250 Operator to provide Division of Minerals copy of filing of plan of operation or amended plan of operation; fee; refunds; use of money collected; Division to file report with Governor and Legislature.

1. An operator who is required by federal law to file a plan of operation or an amended plan of operation with the United States Bureau of Land Management or the United States Forest Service for operations relating to mining or exploration on public land administered by a federal agency, shall, not later than 30 days after the approval of the plan or amended plan, provide the Division of Minerals of the Commission on Mineral Resources with a copy of the filing and pay to the Division of Minerals a fee in an amount established pursuant to subsection 5 for each acre or part of an acre of land to be disturbed by mining included in the plan or incremental acres to be disturbed pursuant to an amended plan.

2. The Division of Minerals shall adopt by regulation a method of refunding a portion of the fee required by this section if a plan of operation is amended to reduce the number of acres or part of an acre to be disturbed pursuant to the amended plan. The refund must be based on the reduced number of acres or part of an acre to be disturbed.

3. All money received by the Division of Minerals pursuant to subsection 1 must be accounted for separately and used by the Division of Minerals to create and administer programs for:

(a) The abatement of hazardous conditions existing at abandoned mine sites which have been identified and ranked pursuant to the degree of hazard established by regulations adopted by the Division of Minerals; and

(b) The education of the members of the general public concerning the dangers of the hazardous conditions described in paragraph (a).

Ê All interest and income earned on the money in the account, after deducting applicable charges, must be deposited in the Account for the Division of Minerals created pursuant to [NRS 513.103](#).

4. On or before February 1 of each odd-numbered year, the Division of Minerals shall file a report with the Governor and the Legislature describing its activities, total revenues and expenditures pursuant to this section.

5. The Commission on Mineral Resources shall, by regulation, establish the fee required pursuant to subsection 1 in an amount not to exceed \$30 per acre.

(Added to NRS by [1989, 1286](#); A [1989, 2063](#); [1991, 1780](#); [1993, 210, 211, 1687](#); [1995, 511](#); [1999, 891, 3631](#); [2001, 66](#))

III. E. Findings of task force to evaluate regulations changes to NAC 513.

CHAPTER 513 - COMMISSION ON MINERAL RESOURCES; DIVISION OF MINERALS

DANGEROUS CONDITIONS CREATED BY ABANDONMENT OF MINES

513.200	Definitions.
513.205	“Administrator” defined.
513.210	“Animal” defined.
513.220	“Commission” defined.
513.230	“Dangerous condition” defined.
513.240	“Division” defined.
513.260	“Fence” defined.
513.270	“Owner” defined.
513.280	“Person” defined.
513.290	“Responsible person” defined.
513.300	Scope.
513.310	Waiver of provisions.
513.315	Additional fee.
513.320	Assignment of points to dangerous condition.
513.330	Rating of location.
513.340	Rating of degree of danger.
513.350	Dangerous condition causing fatality or injury.
513.360	Rating of dangerous condition.
513.370	Posting warning sign.
513.380	Period after notification to secure dangerous condition.
513.390	Methods for securing dangerous condition.

REGISTRATION AND RECORDS OF MINING OPERATIONS

~~— NAC 513.260 “Fence” defined. (NRS 513.094) “Fence” has the meaning ascribed to it in subsection 5 of NRS 207.200.~~

~~— (Added to NAC by Comm’n on Mineral Resources, eff. 12-21-88)~~

NAC 513.330 Rating of location. (NRS 513.094) The location of a dangerous condition must be rated in the following manner:

1. One point must be assigned to a dangerous condition located at least 5 miles from an occupied structure or a public road maintained by some governmental entity.
2. Two points must be assigned to a dangerous condition located between 1 and 5 miles from an occupied structure or a public road maintained by some governmental entity.
3. Three points must be assigned to a dangerous condition located 1/2 to 1 mile, inclusive, from a town.
4. Four points must be assigned to a dangerous condition located not more than 1/2 mile from a town or not more than 1 mile from an occupied structure or a public road maintained by some governmental entity.
5. Five points must be assigned to a dangerous condition located within a town or within 100 feet of an occupied structure or a public road maintained by some governmental entity.

↪ The Administrator or his or her representative may assign a higher or lower degree of danger to a dangerous condition if other accessibility factors warrant the modification, but the degree of danger for a single dangerous location may not be scored higher than five points.

(Added to NAC by Comm'n on Mineral Resources, eff. 12-21-88)

NAC 513.370 Posting warning sign. (NRS 513.094) A dangerous condition regardless of its ranking must be posted with a warning sign *in a prominent location near the hazard. ~~mounted on an orange post.~~* The sign must be posted within 30 days after the responsible person is notified by the county sheriff of the existence of the condition.

(Added to NAC by Comm'n on Mineral Resources, eff. 12-21-88)

NAC 513.380 Period after notification to secure dangerous condition. (NRS 513.094) Upon notification of the existence of a dangerous condition, the responsible person shall:

1. Secure within 180 days a dangerous condition rated as a *minimal or* low hazard;
2. Secure within 120 days a dangerous condition rated as a moderate hazard; and
3. Secure within 60 days a dangerous condition rated as a high hazard,

↳ in the manner prescribed in [NAC 513.390](#).

(Added to NAC by Comm'n on Mineral Resources, eff. 12-21-88)

~~**NAC 513.390 Methods for securing dangerous condition. (NRS 513.094)** A dangerous condition must be secured by one or more of the following:~~

- ~~—1. A barricade made of wood, metal or plastic, set in place in a solid manner with an orange warning sign attached.~~
- ~~—2. A fence constructed to prevent a person or animal from accidentally exposing himself or herself to the dangerous condition.~~
- ~~—3. Permanently anchored seals constructed of material not subject to rapid decomposition and, if used to secure a vertical opening, strong enough to support the weight of any person or animal.~~
- ~~—4. Backfilling so that no void spaces remain.~~

NAC 513.390 Methods for securing dangerous condition. (NRS 513.094)

1. *Securing of all dangerous conditions, regardless of rank, must include the posting of at least one warning sign. Sites properly secured under subsections 2(b) and (c) will no longer be considered dangerous conditions and signage may be removed.*

2. *A dangerous condition ranked above a minimal hazard must be secured by one or more of the following:*

(a). *An enclosure or barricade, normally consisting of metal posts and four strands of barbed wire, or other durable materials, constructed in a manner to prevent a person or animal from accidental exposure to the dangerous condition.*

(b). *Permanently anchored seals constructed of material not subject to rapid decomposition and, if used to secure a vertical opening, strong enough to support the weight of any person or animal.*

(c). *Backfilling so that no void spaces remain.*

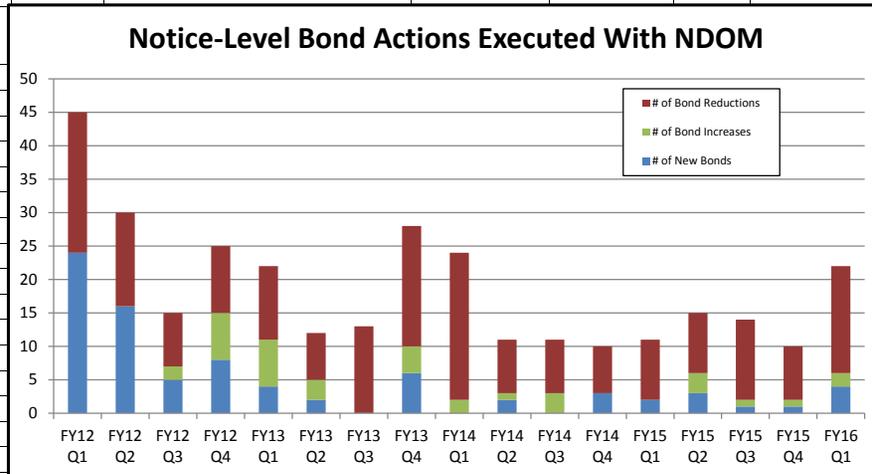
3. *Regardless of method, the owner or responsible person must maintain the integrity of the securing.*

4. *The administrator or designee may approve the modification of the method of securing to accommodate site-specific conditions.*

IV. STAFF REPORTS

Reclamation Bond Pool Status Report			Current to:	9/30/2015							
Plan-level Bonds -Company	Project	Entry Date	Bond Amount	% of Pool	Comments	Deposit	Premiums Paid	% Bond Whole	Premium Schedule	Current thru	
Custom Details	Bovie-Lew	11/17/2006	\$24,364.00	0.85%		\$ 12,217.11	\$18,661.25	126.7%	\$190.23 quarterly	12/31/2015	
Nevada Rae	Black Rock Canyon	4/15/2005	\$369,255.00	12.89%		\$ 197,937.54	\$229,037.88	115.6%	\$2,769.41 quarterly	12/31/2015	
So. NV Liteweight	Money Pit	5/21/2004	\$395,514.00	13.80%		\$ 213,055.61	\$222,620.02	110.2%	\$2,966.36 quarterly	9/30/2015	
Specialty Clays	Bentonite	12/11/1997	\$209,900.00	7.32%		\$ 31,485.00	\$182,500.44	101.9%	\$1,574.25 quarterly	9/30/2015	
Western Mine Dev.	Victorine Mine	5/24/2000	\$45,875.39	1.60%	terminated	\$ -					
Western Mine Dev.	Kingston Mill	5/24/2000	\$100,450.00	3.51%	terminated	\$ -					
Western Mine Dev.	Manhattan Mill	5/24/2000	\$114,288.77	3.99%	terminated	\$ -					
TNT Venture	Big Canyon	1/27/2010	\$78,161.00	2.73%		\$ 39,615.03	\$33,390.66	93.4%	\$1,931.75 quarterly	9/30/2015	
Dun Glen Mining	Dun Glen	8/11/2014	\$359,155.00	12.53%		\$ 192,159.52	\$46,918.51	66.6%	\$8,454.62 quarterly	12/31/2015	
Statewide Notice-Level	Various	various	\$1,168,679.00	40.78%	97 Notice-level bonds						
									Premiums due		
Total Bonded Amount			\$2,865,642.16	100.00							
Cash in Pool's Account (From BSR - 9/30/15)			\$3,725,967.13								
Unfunded Amount			-\$860,324.97								
Percent funded			130.0%								

Date	# of New Bonds	# of Bond Increases	# of Bond Reductions
FY11 Q1	17	0	12
FY11 Q2	17	0	3
FY11 Q3	10	0	7
FY11 Q4	13	0	5
FY12 Q1	24	0	21
FY12 Q2	16	0	14
FY12 Q3	5	2	8
FY12 Q4	8	7	10
FY13 Q1	4	7	11
FY13 Q2	2	3	7
FY13 Q3	0	0	13
FY13 Q4	6	4	18
FY14 Q1	0	2	22
FY14 Q2	2	1	8
FY14 Q3	0	3	8
FY14 Q4	3	0	7
FY15 Q1	2	0	9
FY15 Q2	3	3	9
FY15 Q3	1	1	12
FY15 Q4	1	1	8
FY16 Q1	4	2	16



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

FY16

October 23, 2015

**Week: 16
Year %: 31%**

REVENUES

	Work Program	Actual	% of Work Program	Balance Remaining
Balance Forward From Prev. Yr. (2511)	\$856,757	\$856,757	100%	\$0
Federal BLM Cooperative Agreement (3578)	50,000	0.00	0%	50,000.00
USFS Assistance Agreement (3580)	0	0.00	0%	0.00
Oil Assessment Fees (3654)	90,000	7,529.78	8%	82,470.22
Oil Permit Fees (3717)	6,000	0.00	0%	6,000.00
Mining Claim Fees (3718)	1,053,185	628,812.00	60%	424,373.00
Dangerous Mine Fees (3727)	438,827	262,005.00	60%	176,822.00
Geothermal Fees (3736)	120,751	3,600.00	3%	117,151.00
Abandoned Mine Securing Fees (3770)	79,480	39,940.00	50%	39,540.00
Printing Sales (4011)	300	0.00	0%	300.00
Publication Sales (4027)	2,757	534.52	19%	2,222.48
Excess Property Sales (4252)	21,144	21,144.00	100%	0.00
Medallion Royalty Income (4311)	1,550	97.50	6%	1,452.50
Treasurer's Interest Distribution (4326)	2,037	0.00	0%	2,037.00
Transfer frm Reclamation Bond Pool (4620)	80,500	0.00	0%	80,500.00
FY15 Revenues Received	\$1,946,531	\$963,662.80	50%	\$982,868.20
TOTAL REVENUES	\$2,803,288	\$1,820,419.80		

EXPENDITURES

	Work Program	Actual	% of Work Program	Balance Remaining
Personnel (01)	\$1,054,529	\$299,325.33	28%	\$755,203.67
Out of State Travel (02)	11,947	2,679.58	22%	9,267.42
In State Travel (03)	29,339	5,573.85	19%	23,765.15
Operating (04)	105,877	49,667.08	47%	56,209.92
Board Travel (08)	2,914	163.66	6%	2,750.34
Special Projects (09)	403,309	48.00	0%	403,261.00
Las Vegas Office (14)	35,602	15,464.25	43%	20,137.75
Oil, Gas Geothermal (17)	15,149	3,061.38	20%	12,087.62
AML Support (18)	134,606	35,865.78	27%	98,740.22
Bond Pool Expenses (19)	0	0.00	0%	0.00
County Royalty Grants (20)	0	0.00	0%	0.00
Computer H & S Ware, DOIT(26)	35,985	4,032.60	11%	31,952.40
AML Enhancement (39)	54,792	13,763.76	25%	41,028.24
SageBrush Ecosystem Trx to DCNR (69)	0	0.00	0%	0.00
Purchasing Assessment (87)	1,149	574.50	50%	574.50
State Cost Recovery (88)	0	0.00	0%	0.00
AG Cost Allocation (89)	55,293	0.00	0%	55,293.00
FY15 Expenditures	\$1,940,491	\$430,219.77	22%	\$1,510,271.23
Reserve Balance (86)	\$862,797	\$1,390,200.03	161%	(527,403.03)
TOTAL EXPENDITURES PLUS RESERVE	\$2,803,288	\$1,820,419.80		

This report reflects receipts and expenditures processed by the division to date.

OIL, GAS, AND GEOTHERMAL ACTIVITY

2015 Permitting and Drilling Activity (Through 3rd Quarter)

Permit Type	Issued 2012	Drilled 2012	Issued 2013	Drilled 2013	Issued 2014	Drilled 2014	Issued 2015	Drilled 2015
Geothermal - Ind Production	16	12	10	5	5	5	8	6
Geothermal - Ind Inj	8	1	2	2	2	2	1	2
Geothermal - Observation	18	8	7	6	10	3	1	1
Geothermal - TG	7	2	1	1	---	---	5	5
Geothermal - Com	---	---	---	---	---	---	---	---
Geothermal - Dom	---	---	1*	---	8**	4	8	---
Geothermal - Misc*	---	---	---	---	---	---	---	---
Geothermal - Project Area	2	---	---	---	1	---	1	---
Geothermal - Total	51	23	21	15	27	15	24	14
Oil & Gas	14	9	16	5	16	5	4	2

*Existing well, drilled in 1939; ** Includes 4 wells previously drilled and completed.

Active During 3rd Qtr 2015	Geothermal	Ormat Nevada	Completed a six well drilling program, two injection and four production wells. Don Campbell II Power Plant put online. A production well was permitted for the at Tungsten Mountain project.
		US Geothermal	Drilled 5 TG wells on the playa at San Emidio. Two of the TG wells converted to observation with current request to deepen.
	Oil	Makoil	Currently in the permitting process with the BLM for the Murphy Gap 14-23 in Lincoln County. NDOM waiting on BLM approval. Permitted the Munson Ranch 12-23X and 13-34 wells.
		Noble Energy	Drilling activities in the Marys River and Huntington areas have been suspended by the BLM for one year.
		Tetuan Resources	Tetuan Resources drilled the Mariagnes 12-29 between Duckwater and the Mount Hamilton area. The well was plugged and abandoned.
		Bright Sky Energy & Minerals	The 1-35 well is located in White River Valley. Completed drilling in September 2015. Plan to test well in October 2015.

Summary of Geothermal and Oil Well Inspections (Fiscal Year 2016)

Well inspections for Fiscal Year 2016 began in July 2015. Please refer to the charts below for inspections required and those inspections completed:

	Total Wells	Wells Needed for FY16	Wells Inspected	% of Total Needed	Wells Remaining
Geothermal	454	152	89		
Oil	127	43	34		
Totals	567	195	123	63%	72

Areas in which inspections took place:

Operator	Location	Wells Inspected
Ormat Nevada	Wild Rose (Don Campbell)	6
Ormat Nevada	Tungsten Mountain	3
Ormat Nevada	Tuscarora	12
Ormat Nevada	Jersey Valley	11
Ormat Nevada	McGinness Hills	5
Ormat Nevada	Dixie Hope	1
Terra-Gen	Dixie Valley	4
Enel	Stillwater	31
Elko School District	Flagview Middle School	1
Gradient Resources	Carson Lake/Salt Wells/Fallon1	14
Truckee Geothermal	Big Smoky Valley	1
Noble	Humboldt	2
Noble	Huntington	1
Noble	Marys River	1
Kirkwood/Wesco	Eagle Springs/Ghost Ranch	24
Bright Sky Energy	White River Valley	1
Geyser Petroleum	Pipeline Canyon	1
Geyser Petroleum	Railroad Valley	1
VF Neuhaus	Railroad Valley	1
VF Neuhaus	Railroad Valley	1
Makoil	East Inselberg	1
Total Inspections		123

INTERLOCAL CONTRACT COOPERATIVE AGREEMENT BETWEEN PUBLIC AGENCIES

NEVADA DIVISION OF MINERALS
(400 West King Street, Suite 106, Carson City, Nevada 89703)

AND

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
(901 South Stewart Street, Suite 4001, Carson City, Nevada 89701)

WHEREAS, Nevada Revised Statute (NRS) 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform,

WHEREAS, this document supersedes all prior Interlocal Contract Cooperative Agreements between the State of Nevada, Division of Minerals (NDOM) and the State of Nevada, Division of Environmental Protection (NDEP),

WHEREAS, Senate Bill No. 390, as approved in the 77th (2013) Nevada Legislative Session, requires that NDOM and NDEP jointly, develop a hydraulic fracturing program,

WHEREAS, NDOM and NDEP each have specific statutory and regulatory responsibilities concerning the injection of spent geothermal fluids after they are used for a variety of activities, including, but not limited to, power generation, aquaculture, food processing and space heating; and concerning the protection of the quality of water of the state,

WHEREAS, NRS 445A.415 reads as follows: "Waters of the State" means all waters situated wholly or partly within or bordering upon this State, including but not limited to:

1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and
2. All bodies or accumulations of water, surface and underground, natural or artificial,

WHEREAS, NRS 445A.465 provides that injection of fluids through a well or discharge of pollutant into a water of the State without a permit is prohibited,

WHEREAS, the U.S. Environmental Protection Agency has delegated primary enforcement authority of the Underground Injection Control (UIC) and Clean Water Act Programs to NDEP,

WHEREAS, NDOM currently regulates certain aspects of Class II and certain Class V injection wells,

WHEREAS, NDEP has the responsibility of ensuring all Class II, Class III, Class V injection wells are properly constructed to ensure integrity and maintain integrity during its life to prevent degradation of the Waters of the State,

WHEREAS, the purpose of this agreement is to establish procedures that

1. Reduce duplication of effort,
2. Ensure efficient regulatory oversight,
3. Ensure a flow of communication and promote interagency cooperation, and
4. Allow both agencies to fulfill their legal responsibilities,

WHEREAS, NDEP relies on NDOM knowledge of well construction to ensure the proper construction of wells to protect Waters of the State,

NOW, THEREFORE, to consolidate and simplify the permitting process the agencies mutually agree as follows:

1. NDOM

- a. NDOM has the authority under NRS 522 to issue oil and gas drilling permits.
- b. NDOM oil and gas drilling permits are issued in accordance with requirements defined within NAC 522.
- c. NDOM has the authority under NRS 534A to issue geothermal drilling permits.
- d. NDOM drilling permits shall be issued in accordance with requirements within NAC 534A.

2. NDEP

- a. In accordance with NRS 445A, NDEP is responsible for the issuance of permits to prevent the degradation of Waters of the State.
- b. NDEP UIC, groundwater and surface water discharge permits are issued in accordance with requirements defined within NAC 445A.

3. General Coordination Responsibilities

- a. Each agency is responsible for the enforcement of its own statutes, regulations, permits, and permit conditions.
- b. NDOM and NDEP will inform permit applicants of the requirement to obtain a permit from the other agency in applicable cases, including referring all applicants to NDEP that propose to or have potential to discharge to surface waters, ground waters or injection.
- c. During NDOM review of an application for permit to drill an oil or gas well, if it is determined that a well may be used as an injection well:
 - i. Both NDOM and NDEP will review the well design prior to the drilling permit being issued and NDOM shall direct the applicant to NDEP's UIC Completion Report and Injection Well Requirements at <http://ndep.nv.gov/bwpc/index.htm>.

- ii. NDOM will provide a current copy of NDEP's UIC Completion Report and Injection Well Requirements to the permit applicant or well driller prior to spudding the well. Questions and concerns shall be referred to NDEP.
 - iii. NDOM will ensure the operator is informed of the UIC pressure testing criteria.
 - iv. NDOM and NDEP will provide each other with all written authorizations pertaining to injection wells and will work cooperatively in the technical review of all new and renewal permit applications, as applicable.
 - v. Provided that NDEP determines that the temperature of injection is unlikely to conflict with the intent of NRS 445A.305, NDEP will not include temperature of injection as a condition of a UIC permit for injection related to a geothermal operation.
- d. At the request of NDOM, technical assistance for evaluating the required pre- and post-hydraulic fracturing well water analyses will be provided by NDEP.
- e. NDOM and NDEP will work together to evaluate any potential contamination of groundwater that might occur from oil, gas and geothermal drilling and production.
- f. For any non-UIC permitted well to undergo conversion to injection well, NDOM will send a copy of the operator's Sundry Notice to NDEP for review to ensure no additional UIC requirements are necessary. For all workovers on existing UIC permitted wells, NDOM will inform the operator that they must submit an operational plan directly to the UIC Program. Questions and concerns regarding discharge water quality shall be referred to NDEP.
- g. The following well injection test requests may be approved by NDOM without NDEP involvement:
 - i. Injection testing up through seven (7) days with or without rig on-site. For testing exceeding three (7) days, NDEP will establish a general permit.
 - ii. Acid stimulation procedures
 - iii. Flow tests to drilling sumps
 - iv. Tracer testing at non-UIC permitted projects.
- h. A well is determined to be completed when the total drilling depth (TD) is reached and the rig is moved off the well.
- i. NDOM and NDEP will exchange copies of inspection reports completed for injection wells operating under each agency's jurisdiction.
- j. NDOM and NDEP will, to the extent practicable, coordinate field inspections of facilities holding permits from both agencies to minimize duplication.
- k. NDOM and NDEP will provide each other with reasonable access to files and other information necessary for program administration.

- l. **Confidentiality of Well Records:** Confidential documents protected through NAC 522.540 and NRS 534A.031 shall be protected by NDEP. Upon a request for a copy of a protected document, NDEP will refer the requestor to NDOM.
- m. NDOM and NDEP will exchange information on idle/abandoned injection wells as it is received. NDEP will assist with the technical review of idle/abandoned injection wells, if requested.
- n. NDOM will require injection wells to be plugged and abandoned in accordance with all relevant NDOM regulations and the UIC bond requirement as applicable.

4. Collecting Pits and Surface Impoundments

- a. A "Collecting Pit" is utilized for the recirculation of drilling fluids and collection of rock cuttings during the drilling and active completion of an oil, gas or geothermal well. Collection Pits may also be referred to as: Sumps, reserve pits or drilling pits.
- b. "Surface Impoundments" are utilized to collect and contain fluids such as flow-back and flow testing solutions.
- c. Collecting pits are not intended for long-term use in managing fluids or testing wells.
- d. During the drilling of an oil, gas or geothermal well, NDOM may approve the use of a Collecting Pit, with no approval from NDEP.
- e. NDOM will inform the operator that its approval of the construction of a Collecting Pit may not satisfy NDEP Surface Impoundment construction requirements or discharge criteria.
- f. NDEP permits are issued in accordance with requirements defined within NAC 445A.
- g. For Surface Impoundments, NDEP may require a permit per NAC 445A.
- h. The "Collection Pit / Surface Impoundment Process Table," below, describes the process and timeline for NDOM or NDEP approval.
- i. Surface Impoundments shall meet NDEP's guidance policy found at <http://ndep.nv.gov/bwpc/index.htm>.

Collection Pit / Surface Impoundment Process Table

Type of Containment	<u>Description</u>	Type of Approval
Collection Pit	During drilling of an oil, gas or geothermal well.	NDOM approval through Permit or Sundry Notice; NDEP no involvement
Surface Impoundment	To collect and contain fluids such as flow-back and flow testing solutions from completed wells.	NDEP approval through Permit; NDOM no involvement

5. Regulatory Definitions

- a. NAC 445A.846. A Class II well is an injection well for the production and storage of oil and gas and includes a well which injects fluids:
 - 1. Which are brought to the surface in connection with the conventional production of oil or natural gas;
 - 2. For enhanced recovery of oil or natural gas; and
 - 3. For storage of hydrocarbons which are liquid at standard temperature and pressure.

- b. NAC 445A.847. A Class III well involves a special process which injects fluids for the extraction of minerals or energy, except geothermal energy, and includes:
 - 1. Mining of sulfur by the Frasch process;
 - 2. In situ production of uranium or other metals from bodies of ore which have not been conventionally mined;
 - 3. Solution mining of salts or potash; and
 - 4. In situ recovery of fossil fuel, which includes coal, tar sands, oil shale and any other fossil fuel which can be mined by this process.

- c. NAC 445A.849. A Class V well is any injection well not included in Classes I, II, III and IV, including, without limitation:
 - 1. Wells used to inject the water for heating or cooling by a heat pump;
 - 2. Cesspools or other devices receiving wastes which have an open bottom and sometimes have perforated sides;
 - 3. Wells used to inject water previously used for cooling;
 - 4. Wells used to drain surface fluid, primarily the runoff from storms, into a subsurface formation;
 - 5. Wells used for the injection of fluids accumulated from dewatering operations;
 - 6. Drywells and wells used for the injection of nonhazardous wastes into a subsurface formation;
 - 7. Wells used to replenish the water in an aquifer;

8. Wells used to inject water into an aquifer of fresh water to prevent the intrusion of water of a lower quality into the fresh water;
9. Wells used to inject a mixture of water and sand, mill tailings or other solids into subsurface mines;
10. Wells used to inject domestic sewage for facilities other than single-family residences and having a volume capacity of more than 3,000 gallons per day which are regulated as on-site sewage disposal systems pursuant to NAC 445A.950 to 445A.9706, inclusive;
11. Wells used to inject fluids into a zone, other than an oil or gas producing zone, to reduce or eliminate subsidence associated with the overdraft of fresh water;
12. Wells used for the storage of hydrocarbons in a gaseous state at standard temperature and pressure;
13. Geothermal injection wells used in contact and noncontact heating and aquaculture, and in the production of energy;
14. Wells used for solution mining of ores or minerals in conventional mines, such as stope leaching;
15. Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;
16. Injection wells used in experimental technologies;
17. Injection wells that are approved under a federal or state cleanup program and used to reinject pumped and treated contaminated groundwater, other than hazardous waste, back into the same formation;
18. Injection wells used to inject fluids for the chemical or microbiological treatment of contaminated groundwater or soil; and
19. Motor vehicle waste disposal wells.

6. NDOM/NDEP Process Table

- a. The NDOM/NDEP process table, below, defines a permittees requested activity, the time frames required prior the start of the desired start dates, the process the permittee is required to comply with to obtain approval, and the required action by either NDOM or NDEP for approval of the request. The process table can be changed upon mutual written agreement between NDOM and NDEP. The Permittee shall notify the appropriate agency in accordance with the Notification Table below:

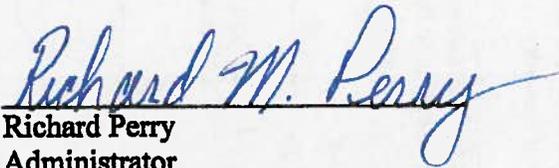
NDOM/NDEP Process Table

Activity	Time Frame	Required Action	Approval required
Request for construction of new, or conversion of existing well to injection well	---	Submit Sundry Notice to Nevada Division of Minerals (NDOM), see NDEP website for any required documentation, or contact NDEP with questions about MIT testing. Provide approved Sundry Notice to NDEP.	NDOM approval contingent upon NDEP issuing UIC Permit
Request for Initial injection into a well	30 days prior notice to NDEP	UIC Completion Report, including mechanical integrity test, and submit water sample results.	NDEP approval to inject after submission of Completion Report.
Request for any modification of injection well	Before work-over	Submit Sundry Notice to NDOM, see NDEP website for any required documentation, or contact NDEP with questions about MIT testing.	NDOM approval with copy to NDEP
	Before placing well back into service.	Submit Completion Report to NDEP, water sample if necessary.	NDEP approval
Request to allow for testing of injection well / MITs	30 days prior notice	Submit proposal to NDEP and Sundry Notice to NDOM.	NDEP and NDOM approval
After construction of production well	Within 60 days after completion of work	Submit Completion Report to NDOM.	n/a
After a major modification of production well	Within 60 days after completion of work	Submit updated Completion Report to NDOM. (examples: deepening, perforate casing, etc.)	n/a
After a minor modification of production well	---	Summary of work (examples: pump work, casing scraping, etc.) Operator to submit a Sundry Notice report to NDOM	n/a
Request for Chemical Treatment of water or Tracer tests on UIC wells	30 days prior notice	Submit U240 form with chemical information including product name, amount and concentration to be used, location of use, etc. to NDEP.	NDEP approval
Request for Well Stimulation/Acidization	---	Submit Sundry Notice to NDOM	NDOM approval
To report Chemical or petroleum spills greater than 25 gallons or 3 cu-yds of affected soil or spills greater than Reportable Quantity listed in 40 CFR 302.4	As soon as possible, but no later than the end of one working day	Contact Division of Emergency Management (775-688-2830) and Division of Environmental Protection (888-331-6337)	n/a
Request to add additional Chemicals that come in contact with, or are added to the injectate	30 days prior notice	Submit U240 form to NDEP	NDEP approval

AGREEMENT TERM: This Agreement shall be effective upon approval by the parties and shall continue in force and effect until terminated by either party.

TERMINATION: The parties agree that this Agreement may be terminated for any reason upon 30 days written notice.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and intend to be legally bound thereby.



Richard Perry
Administrator
Nevada Division of Minerals

Date 9-23-2015



David Emme
Administrator
Nevada Division of Environmental Protection

Date 9-29-2015

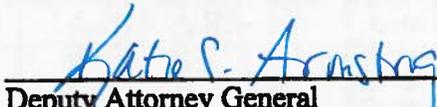
Approved as to form by:



Deputy Attorney General
Nevada Division of Minerals

On 24 SEP 15

Approved as to form by:



Deputy Attorney General
Nevada Division of Environmental Protection

On 9/30/15

114TH CONGRESS
1ST SESSION

H. R. 3734

To amend the Surface Mining Control and Reclamation Act of 1977 to provide support to mining schools, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 9, 2015

Mr. HARDY (for himself and Mr. PERLMUTTER) introduced the following bill; which was referred to the Committee on Natural Resources

A BILL

To amend the Surface Mining Control and Reclamation Act of 1977 to provide support to mining schools, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Mining Schools En-
5 hancement Act”.

6 **SEC. 2. SUPPORT FOR MINING SCHOOLS.**

7 Section 721 of the Surface Mining Control and Rec-
8 lamation Act of 1977 (30 U.S.C. 1309b) is amended—

1 (1) by striking “The Office of Surface Mining
2 Reclamation and Enforcement” and inserting the
3 following:

4 “(a) IN GENERAL.—Subject to subsection (b), the
5 Office of Surface Mining Reclamation and Enforcement”;
6 and

7 (2) by adding at the end the following:

8 “(b) MINING PROGRAM SUPPORT.—

9 “(1) Of the amounts made available under this
10 Act for activities authorized under this section, the
11 Director of the Office of Surface Mining Reclama-
12 tion and Enforcement shall ensure that at least 70
13 percent is expended to enhance and support mining
14 and mineral engineering programs in the United
15 States by funding activities at mining schools.

16 “(2) In expending funds under this section, the
17 Director shall consult with relevant stakeholders and
18 ensure a significant opportunity for participation by
19 undergraduate and graduate students at mining
20 schools.

21 “(3) The Director shall ensure that the activi-
22 ties conducted under this section relate to conven-
23 tional fuel resource development and production, and
24 include—

1 “(A) studies of mining, mineral extraction
2 efficiency, and related processing technology;

3 “(B) mineral economics, reclamation tech-
4 nology, and practices for active mining oper-
5 ations;

6 “(C) the development of remining systems
7 and technologies that facilitate reclamation that
8 fosters the recovery of resources at abandoned
9 mine sites;

10 “(D) investigations of mineral resource ex-
11 traction methods that reduce environmental and
12 human impacts;

13 “(E) reducing dependence on foreign en-
14 ergy supplies; and

15 “(F) enhancing the competitiveness of
16 United States energy technology exports.

17 “(c) MINING SCHOOL DEFINED.—In this section the
18 term ‘mining school’ means a mining or mineral engineer-
19 ing program or department accredited by the Accredita-
20 tion Board for Engineering and Technology, Inc., that is
21 located at an institution of higher education (as that term
22 is defined in section 631(a) of the Higher Education Act
23 of 1965 (20 U.S.C. 1132(a))) in the United States.”.

○

2010-2015

Carson City

8/17/2012-Tour in Yerington
12/11/2014

Virginia City

Elko

08/29/14-Newmont LeeVille Mine
08/27/15-Noble Energy's Huntington
K1L Well & General Molly Mt. Hope

Reno

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

Las Vegas

2/11/2010 – Tour of the McCaw
School of Mines - Henderson
2/7/2011 – Tour of Molycorp Mine
2/27/2012 – Searchlight Area
2/21/13
2/14/14- Tule Springs Park
2/24/15

Battle Mountain

July 30, 2010 – Tour of Newmont
Phoenix Mine

Tonopah

8/15/13 - Solar Reserve Plant
8/16/13 - Tonopah Mining Park

