MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES, AGRICULTURE, AND MINING

Seventy-Eighth Session
February 26, 2015

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Robin L. Titus at 1:32 p.m. on Thursday, February 26, 2015, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda (Exhibit A), the Attendance Roster (Exhibit B), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website: www.leg.state.nv.us/App/NELIS/REL/78th2015. In addition, copies of the audio or video of the meeting may be purchased, for personal use only, through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblywoman Robin L. Titus, Chair
Assemblyman Jim Wheeler, Vice Chair
Assemblyman Nelson Araujo
Assemblywoman Maggie Carlton
Assemblyman Richard Carrillo
Assemblywoman Victoria A. Dooling
Assemblyman Chris Edwards
Assemblyman John Ellison
Assemblyman David M. Gardner
Assemblyman Ira Hansen
Assemblyman James Oscarson
Assemblywoman Heidi Swank

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Susan E. Scholley, Committee Policy Analyst
Jim Penrose, Committee Counsel
Donna J. Ruiz, Committee Secretary
Cheryl L. Williams, Committee Assistant

OTHERS PRESENT:

John J. Entsminger, General Manager, Southern Nevada Water Authority and Las Vegas Valley Water District
David L. Johnson, Deputy General Manager, Engineering and Operations, Southern Nevada Water Authority and Las Vegas Valley Water District
Mark W. Foree, P.E., General Manager, Truckee Meadows Water Authority
Geno Martini, Mayor, City of Sparks; and Chairman, Truckee Meadows Water Authority
Michael A.T. Pagni, General Counsel, Truckee Meadows Water Authority
Jim Smitherman, Water Resources Program Manager, Northern NevadaWater Planning Commission, Western Regional Water Commission

Chair Titus:
[Roll was taken. Committee policies and procedures were explained.] Welcome to everyone. We are going to start with overviews of different water commissions in our state. We will start with the Southern Nevada Water Authority.

John Entsminger, General Manager, Southern Nevada Water Authority and Las Vegas Valley Water District:
With me today is Julie Wilcox, Deputy General Manager for Administration, and Dave Johnson, Deputy General Manager, Engineering and Operations. The first thing I would like to cover is what the water authority does [page 2, (Exhibit C)]. We are the agency charged with providing water supply to the Las Vegas Valley and Boulder City. We have the capacity to serve 900 million gallons of water a day to about seven out of every ten people who call Nevada home. We have five primary missions. The first is regional water supply planning. We are the agency charged with working with the other six states, the federal government, and even the country of Mexico, that share the Colorado River with us. We work to ensure that we will always have a secure 50-year water resources plan to guarantee that the community has a sufficient water supply for those next five decades. We are also the agency

that coordinates conservation efforts. We are not a regulatory agency and we do not have any authority to tell people how to use water. The function that we serve is to coordinate all of the local government entities. We have developed a uniform conservation plan that was subsequently embedded in Clark County's code, and in the city ordinances of Henderson, North Las Vegas, and Boulder City. Everyone in southern Nevada has the same rules of the road when it comes to the use of water. Thirdly, we do water quality. We have a world-class water quality laboratory on the shore of Lake Mead. It is through those efforts that we ensure compliance with federal laws, such as the Clean Water Act and the Safe Drinking Water Act, ensuring a safe water supply to the community.

We are also the agency charged with facility construction. Over the last 20 years the water authority has built approximately $3 billion worth of new capital infrastructure in order to serve the new parts of our community. In Las Vegas and Henderson the communities of Anthem, Summerlin, and in North Las Vegas, Aliante are served by new plumbing that simply did not exist 20 years ago. That is where those capital infrastructure dollars have gone, to build that new water supply delivery infrastructure. Lastly, having built that kind of infrastructure, we are the agency that operates that regional water supply infrastructure. It is part of our evolving mission. With a few major exceptions we are not building as much capital infrastructure anymore. We are evolving into more of an operation and maintenance organization and taking responsibility for keeping those infrastructure projects in good shape.

This slide simply shows an outline of the hydrographic basin boundaries of the Colorado River [page 4, (Exhibit C)], again shared between seven states, and the country of Mexico. Out of the legal entitlements on the river, I think it is pretty well known that Nevada got the short end of the stick. In 1922, when the Colorado River Compact was negotiated, the population of Clark County was about 7,500 people. As a result of that, if you take Mexico's Treaty of February 3, 1944 allocation into account, Nevada has a total of 1.8 percent of the legal entitlements to the Colorado River. That 1.8 percent constitutes 90 percent of the supply for those 2 million people in southern Nevada, the other 10 percent being groundwater from the native aquifer that underlies the Las Vegas Valley.

The Colorado River is a system that has been experiencing significant drought just as you folks up north are experiencing on the Truckee. This is a drought where a picture is really worth a thousand words. In 1999 Lake Mead was basically full, and in the first 14 years of this century the lake has declined by about 130 feet. This is a satellite image from the late 1990s, and that is where we are today [page 7, (Exhibit C)]. You can see that the

marina is completely gone and we have fallen to where the lake is now less than half full. What this slide shows is the probabilities for Lake Mead continuing to decline [page 8, (Exhibit C)]. The real point I want to make with this slide is we have 106 years of measured flow records on the Colorado River. We actually have a pretty good idea of what the Colorado River has looked like for the last 1,200 years through reconstructed tree ring records. What that 1,200-year record tells us is that the 20th century was one of the two wettest centuries in the last 1,200 years. If we are fortunate enough to get another wet century like the 20th century, we still have significant probabilities that the Lake Mead elevations could dip below our current ability to pump water. Right now, with the infrastructure we have in place, we can pump water down to 1,000 feet. If the lake were to drop another 84 feet from where it is today, we would lose the ability to pump water out of Lake Mead.

What are we doing about it? We are coming at this from three different perspectives: infrastructure, conservation, and bolstering and assuring our resource portfolio. On the infrastructure side, in the last several years we have been constructing a third intake into Lake Mead. This graphic shows that from its starting point, with a 600-foot shaft on the shore of Lake Mead, we have now completed a 20-foot diameter tunnel three miles out underneath Lake Mead interfacing with an intake riser literally at the bottom of the lake [page 10, (Exhibit C)]. Where the Colorado River was before Hoover Dam was built, that river channel is now where we have installed the intake riser. In December of last year the tunnel boring machine intersected with that intake riser. We are in a position where this project should be up and operational by midsummer of this year.

Chair Titus:
It may be up and operational by midsummer of this year, but do you plan on actually using it by midsummer?

John Entsminger:
As soon as we are able to commence operations with that lower intake, we will, even though we do not need it because our top two intakes will still be operational. There is a significant water quality benefit from pulling the water from the bottom of the lake. There is a lot less dissolved organic material at the bottom of the lake. The temperature is much colder, and that is a tremendous benefit to our treatment operations to treat that colder water rather than the warmer water at the surface of the lake.

This graphic shows our three existing intakes and where the lake was [page 11, (Exhibit C)]. At 1,224 feet the lake is completely full. It is about 1,083 feet today. If we lose another 33 feet in the lake, we would no longer be

able to pull that water from the upper intake. There are federal projections that as early as 2017, the lake could reach that level. If it drops another 50 feet from there we lose our second intake. Really importantly, the lake cannot go below the 897-foot elevation and that is because the bypass tubes at Hoover Dam are above that level. Regardless of the drought conditions, we are guaranteed to always have 40 feet of water over our lowest intake. Our pumps will still be at 1,050 feet, so what our board directed us to begin in December of last year was the design and construction of a low lake level pumping station. This is a significant new piece of capital infrastructure for us. We project about a year for design and four years for construction. When that low level pumping station is complete, married with the third intake, we will be able to access the communities' water supply even in the very worst hydrologic conditions.

Now turning to conservation, southern Nevada is by any measure a world leader in urban water conservation. In the last 14 years, our community has decreased its consumptive use off the Colorado River by almost 40 percent. That by itself would be a tremendous achievement, but it was also accomplished in the same time period when our population increased by 25 percent. Taken together, those conservation achievements allow us to plan into the future to have less water. Our water portfolio goes down dramatically if you look at the chart on the screen [page 15, (Exhibit C)]. The red line shows what our demands would look like through 2060 without those conservation achievements. With those conservation achievements, our demand line moves down to the black line. We will need significantly less water to fill in that water resource portfolio for our community over the next 45 years. Our conservation efforts focus on outdoor use and that is because of our historic disadvantages on the Colorado River in terms of our legal entitlement to the river. The one blessing we have is our geographic proximity upstream of the dam. One of the benefits of that geographic proximity is that we can basically recycle all of our indoor water. If it hits a drain in Las Vegas, it is treated, put back into the lake, and the same amount of water can be taken back out. It is counterintuitive, but you could leave every shower and every faucet on the Strip running 24 hours a day, seven days a week, 365 days a year, and it would not increase our net depletion from the Colorado River. There are good reasons not to do that: your electrical power costs of moving that water, your chemical costs of treating the water, and you want to encourage indoor conservation; but indoor conservation does not extend our resource. Only eliminating outdoor use of water actually extends our water resources.

This graph simply shows what I told you before [page 17, (Exhibit C)]. The darker line there, the descending water use, that 40 percent decline, and the lighter blue line being the population growth over the same time period.

I think this is an important slide because very often we tend to correlate economic development with increased water use. What the Las Vegas experience tells us is that economic development and a diversified economy and growing your economy does not mean using more water. You can grow your economy and use less water at the same time.

Assemblyman Ellison:
I have a question regarding swimming pools in Las Vegas. Do they recycle their water? Is there going to be a moratorium on the water? What are you going to do?

John Entsminger:
We have a rebate program for swimming pool covers to try to limit the amount of evaporation. Interestingly, the amount of evaporation off of swimming pools is actually less than the amount of evaporation off of spray-irrigated landscaping because there is no photosynthesis. The most important thing is what people do when they drain their swimming pool. It is a requirement of both the county and the municipal codes that you hook that into the sewer system when you drain your swimming pool. We get the same return flow credits for the draining of a swimming pool that we do for the draining of a shower. Swimming pools are actually a fairly efficient use of water in southern Nevada.

John Ellison:
So there is no way to filter that and bring it back into the pool? At car washes they run it through a filtering system.

John Entsminger:
Usually by the time someone drains a pool the concentration of chemicals over a number of years has gotten to a point where it would not be economical to treat it onsite. Since it is put into the sewer system, treated at the regional sewer plants, put into Lake Mead and brought back out, we are essentially conserving 100 percent of that water when the pools are drained.

The last topic I would like to cover is regional water supply planning [page 19, (Exhibit C)]. I have already mentioned our 50-year resource plan. That 50-year water resource plan under the cooperative agreement that formed the water authority has to come back to our board every single year. It is not a static plan. It is a plan that is always rolling forward so that we can assure ourselves of having a sufficient water supply. Our water resource portfolio is made up of three different kinds of water: permanent, temporary, and future supplies. In terms of permanent resources, the Colorado River constitutes the bulk of our supplies [page 21, (Exhibit C)]. Even within that class we are diversified. We have our basic entitlement from the federal government, but we

have the ability to take water off of the Virgin and Muddy Rivers and move that through Lake Mead. We have the ability to put Nevada groundwater into Lake Mead and take that out. We also have the return flow credit methodology that I mentioned earlier that multiplies every gallon by .75 to let us use it again. In terms of temporary supplies, these are really our banked resources. We spent the last 20 years building up these bank accounts. We have injected water into the Las Vegas aquifer, and we have paid the state of Arizona to bank their unused water in their aquifers; that we can get back at a future date. We have banked our unused water with the state of California. If you take all of these in total, we have about ten years of water supply in these bank accounts. We have a very robust reserve within our water portfolio. Lastly, in future resources we have options for our instate groundwater project, for desalination opportunities in coastal California and Mexico, and for additional transfers and exchanges on the Colorado River.

Assemblyman Carrillo:
You mentioned the banked water. I had heard somewhere that Lake Mead was going to be used for banking water.

John Entsminger:
In 2007, there were federal guidelines adopted that allow for intentionally created surplus, which is a fancy way of saying Lake Mead banking. Under that program, municipal entities like ours can invest in getting more water into Lake Mead and then using it as a banking account. Most of the Virgin and Muddy River water that I was talking about earlier we do not have a direct need for right now, so we have been using that to build up our Lake Mead account. Now there are pros and cons to doing that. It is there in Lake Mead and it is easy to take out, but you do pay a 3 percent evaporation charge each year to bank it in Lake Mead. You may also have read recently about a system conservation agreement where Southern Nevada Water Authority, Los Angeles, Phoenix, and Denver have started a program to make investments to put more water into Lake Mead with no one's particular name on it. This is simply to bolster the elevations of Lake Mead due to the historic drought that we have been facing. You see regional municipalities making those same kinds of investments to bolster those elevations.

Assemblyman Carrillo:
Regarding the return flow credits on swimming pools, there have been times I have seen pools being drained in the streets. I was under the impression that it was because of the chemicals in the water. I would rather educate somebody instead of saying, You know you can get fined for this. I have had to call the health district. They seem to be the ones that are in charge of letting people know that they are not supposed to just drain their pools on the street. The

last time I tried to do that it was like jumping through hoops, and after a while I just got tired of making phone calls. Maybe you can clarify that for me and the listening public as well.

John Entsminger:
I know the health district sometimes play a role, but the Las Vegas Valley Water District, Clark County, Henderson, and North Las Vegas all have enforcement capability. The requirement to drain swimming pools through the sewer system is part of those water districts' service rules and city and county codes. In terms of education, we spend a significant amount of money every year trying to educate the public about the return flow credits and about why we focus on outdoor use rather than indoor use. We do inserts in bills, we are on Twitter and on Facebook, and we have our website that has an entire conservation page dedicated to it. We are doing everything we can to do that kind of outreach. We are always looking for opportunities to coordinate with elected officials. We would be happy to get in touch with you and provide information for those resources that you can share with your constituents.

Assemblyman Edwards:
Can you talk a bit about the groundwater project in Moapa? What is the status and how is that going?

John Entsminger:
I believe you are referring to Coyote Spring Valley upgrading a little bit of the Moapa Valley. The water authority owns 9,000 acre-feet of water in the Coyote Spring Basin. We have completed an operational pipeline from Coyote Spring that hooks into a regulating tank of the Moapa Valley Water District. We can then take the water from there through their system and dump it into the Muddy River where it will be conveyed by gravity into Lake Mead. That is on our list of permanent resources. We can utilize that water to bolster our Lake Mead bank account or we can take direct delivery of that water.

Assemblyman Edwards:
Is that a completed project?

John Entsminger:
It is a completed project that we can utilize when we need it.

Assemblyman Edwards:
I have had some questions about Gold Butte. Are we able to develop that as a resource? It would give us 5,000 acre-feet of water that could be sold to the water district, other states, or Mexico, and get some money into my district.

John Entsminger:
The only water I have been approached about is on the Arizona side. Hydrographic Basin 222 is the aquifer that underlies the City of Mesquite, but it is also a tristate water basin. The state line between Arizona, Nevada, and Utah transects that hydrographic basin. The 5,000 acre-feet I think you are talking about are Arizona groundwater rights. It had been suggested that it be sold to the Virgin Valley Water District. The state of Arizona, through the Arizona Department of Water Resources, denied that permit. Arizona has an interstate prohibition on the transfer of groundwater. I think the primary impediment to moving forward with something like that is Arizona state law.

Assemblyman Oscarson:
Since Coyote Spring is in my district, I am very interested in the status of that basin as well. Could you give me an update on where that is and what the progress is there?

John Entsminger:
The State Engineer has permitted 16,100 acre-feet of water in the Coyote Spring Basin. The Southern Nevada Water Authority owns 9,000 acre-feet, and I have described our ability to move that into Lake Mead. Coyote Spring Investment owns 4,600 acre-feet. That is the water they are using to water the existing golf course and at least the initial block of water they are looking at to use for development of that community. NV Energy owns the remaining 2,500 acre-feet of water. Last year the State Engineer acted and denied any further groundwater permits in the basin. At least for the foreseeable future, it looks like the water that is available in Coyote Spring is that 16,100 acre-feet.

Assemblyman Oscarson:
Do you have a status of the water that the Moapa Band of Paiute Indians has there?

John Entsminger:
Seventy thousand acres of their reservation overlies the California Wash hydrographic basin, and they have 2,500 acre-feet of groundwater permitted by the State Engineer for development in the California Wash. They also have, via settlement agreement with the Water Authority and the Muddy Valley Irrigation District, a surface water right on the Muddy River of approximately 3,500 acre-feet.

Assemblyman Oscarson:
Are all those basins stable at this point?

John Entsminger:
Those basins are stable at this point. There are seven basins that historically have been administered on surface water boundaries, but because of the interconnected nature of the inter-basin flow of the groundwater level, the State Engineer is now going to start administering them as one basin.

Chair Titus:
I have a question on your future resources. I understand you have bought a lot of the water rights in Clark, Lincoln, and White Pine Counties for future development. How far away are you from actually taking water from those areas?

John Entsminger:
We are at a minimum ten years away and probably further. I actually have three more slides in my presentation that might help address that exact question. Taking those permanent, temporary, and future resources together, this slide shows a couple of key assumptions [page 24, (Exhibit C)]. The first assumption is that growth in southern Nevada will follow the arc described by the Center for Business and Economic Research (CBER) at the University of Nevada, Las Vegas (UNLV). We are taking their population projections and multiplying them by our per capita day demands and filling in the resources. We are assuming that there is never a shortage on the Colorado River. Under those circumstances, you see that we do not need new resources in southern Nevada until the mid-2060s. However, if we change some of those key variables, first we double the population growth that CBER is currently projecting and assume a shortage on the Colorado River every single year. Not only do we assume that every single year, we assume that it would be double what federal law currently calls for. You can see at the top it says 40,000 acre-feet [page 25, (Exhibit C)]. Under current federal law, the biggest shortage Nevada is supposed to take is 20,000 acre-feet. We double that to 40,000 acre-feet and again have a shortage every single year. Even in those conditions, our water portfolio is solid through the mid-2030s. That is why I gave you an answer of a minimum of ten years before we would have any substantial movement towards bringing that groundwater project into our portfolio.

Lastly, this is the same slide as before, shortage every year, double what we are currently expected to take [page 26, (Exhibit C)]. If our community can use 14 gallons of water per person less, going from 199 gallons per capita per day (GPCD) to 185 GPCD, instead of needing new water by the mid-2030s, we can push that off into the mid-2040s. We will continue to look to diversify our portfolio, but the first option in our portfolio will always be conservation.

Assemblyman Ellison:
We talked about the Nye County mussels that you have in Lake Mead. You said you have some way to remove the mussels from the intake structures. How do you do that?

David L. Johnson, Deputy General Manager, Engineering and Operations, Southern Nevada Water Authority and Las Vegas Valley Water District:
We have two methods we use. The most expedient way for us to be able to deal with that is still physical removal. We have a diver who goes down and will basically take high pressure and remove the mussels off of the screens. For the remainder of the infrastructure from the point past the intake all the way to the treatment plant we actually use a chemical treatment on the water that prevents the growth of the quagga mussels and the attachment to our infrastructure. That has been very effective and worked well for us.

Assemblyman Ellison:
When you get down to the bottom part of the lake, you cannot dive down that far, so how do you do that?

David L. Johnson:
For our third intake structure we have a similar approach with the exception of how we clean the exterior. We actually designed the intake structure to have separation and velocity equivalents that were sufficient to prevent them from accumulating and blocking the water flow going into the intake itself. After it goes in the intake, once again, we add chemicals to it to help prevent any settling or accumulation inside the pipeline all the way to the treatment plant.

Assemblyman Ellison:
I remember seeing last session the pictures of how these vents were clogged solid. It was amazing how these mussels from Nye County just clogged these pipes up. I guess if you have a way to keep them out of there, that is all right. It seems like there has got to be another way to do this and get them out of the lake.

David L. Johnson:
We found the first infestation in 2007, so we have had the benefit of a number of years now to come up with a good strategy. It is a strategy that is being used in other municipalities as well. It is a matter of dealing with them and trying to find the best effective solution because removing them completely out of Lake Mead is a very, very difficult endeavor.

Chair Titus:
It is my understanding that you have different types of water users in southern Nevada. The Southern Nevada Water Authority provides water for domestic water and city use and so forth, but there are some groundwater rights holders separate from your authority. Is that correct?

John Entsminger:
That is correct. The Las Vegas Valley groundwater rights are administered just like any other basin in the state and the regulatory agency is the Nevada State Engineer. There are probably about 70,000 acre-feet of permitted groundwater rights in the Las Vegas Valley. About 44,000 acre-feet are owned by either the Las Vegas Valley Water District or the City of North Las Vegas. That difference of maybe 25,000 acre-feet are owned by private individuals who take their water out of a well and do not receive water from a municipal purveyor. For example, the fountains at the Bellagio are private groundwater rights that predate or date back to a golf course on that site. Most people think that is city water in those fountains, but it is actually Nevada groundwater rights administered by the state.

Chair Titus:
It was new information to me, and I wanted to be clear that some of the things that we see as gross waste of water are not at all. There is a lot of recycling of that water and it is a separate water system. I appreciate that. Thank you.

Assemblyman Edwards:
You mentioned a 3 percent evaporation rate fee. I am not exactly sure how that plays into things. How does that relate to the amount of evaporation at Lake Mead?

John Entsminger:
Lake Mead evaporates approximately 560,000 acre-feet a year. That is close to double the annual use of Las Vegas.

Assemblyman Edwards:
There is nothing that we can do to reduce that?

John Entsminger:
Lake Mead is a very big area. I think we have reduced it some by taking water off-stream, by banking it in our aquifer, by banking it in Arizona's aquifer. That obviously cuts down evaporation on those quantities but reservoirs, especially at that latitude, have significant evaporation. Storing more water in Lake Powell is one thing that has been discussed because of the temperature

delta between Lake Mead and Lake Powell. You have a lower evaporation rate off of Lake Powell than you do off of Lake Mead.

Assemblyman Carrillo:
I want to know if there is a role for gray water. I know in some jurisdictions throughout the country gray water is being used. Can you still get the return flow credits if you use it?

John Entsminger:
We do see a role for gray water in southern Nevada. In the bulk of our service territory, if it gets to a drain, it is a return flow credit, so it expands our resource. We have wanted to keep that in the return flow resource category. There are outlying areas, even within the Las Vegas Valley, where they are on septic tanks and they do not have sewer interconnection. We provide water service in Searchlight, Blue Diamond, and some of the outlying areas of Clark County, and those areas do not have that hydrologic communication with Lake Mead. Gray water is absolutely a viable mechanism for extending the water resource. We would be very supportive of using it in those venues.

Assemblyman Carrillo:
What about non-potable water? A lot of times people assume that because we have golf courses that they are just wasting water. They do not realize that the water used on some golf courses is not safe to drink and is basically a form of wastewater.

John Entsminger:
We have two pretty large regional wastewater treatment plants. Southern Nevada Water Authority has partnered with Clark County Reclamation District and the City of Las Vegas. They are in the west and northwest part of the valley. With those reuse facilities, we can provide that reclaimed water to large turf applications, golf courses, parks, and even schools, to extend the use of that water. Importantly, we could get return flow credits for that water, but in the northwest and western part of the valley, it makes financial sense to do it with onsite treatment because we are not pumping that water back uphill another 2,000 feet. We are not paying for the chemicals, so in some cases it makes economic sense to use reclaimed water even if it is the same net benefit as using the return flow credits.

Assemblyman Oscarson:
There is a bill on gray water that I have been working on closely with the Water District. We are optimistic about bringing that forward again. We had it last session and had some blips in it, but I think we have got it worked out now.

Chair Titus:
The Truckee Meadows Water Authority will now make a presentation.

Mark W. Foree, P.E., General Manager, Truckee Meadows Water Authority:
With me today is the Chairman of Truckee Meadows Water Authority, the Mayor of the City of Sparks, Geno Martini, and General Counsel for Truckee Meadows Water Authority, Michael Pagni. Another important team member is Steve Walker, our lobbyist. Geno Martini is going to start.

Geno Martini, Mayor, City of Sparks; and Chairman, Truckee Meadows Water Authority:
Quickly, just a history of how we got started [page 2, (Exhibit D)]. In 2000, Sierra Pacific Power decided to divest themselves of their water. We decided it was a good idea for the public to be the curators of that water. The City of Sparks, the City of Reno, and Washoe County got together and put in a bid and were successful in forming some revenue bonds and purchasing the water system from Sierra Pacific Power. The source of revenue for the Water Authority is user fee charges only, and it is an enterprise fund. Governance is by a joint-powers authority under Chapter 277 of *Nevada Revised Statutes.* The current members of the Truckee Meadows Water Authority board are myself; Ron Smith, Sparks City Council; Neoma Jardon, Naomi Duerr, and Jenny Brekhus, Reno City Council; Vaughn Hartung and Jeanne Herman, Washoe County Commission.

We have 370,000 retail connections and about 15,000 wholesale connections [page 3, (Exhibit D)]. Surface water from the Truckee River makes up about 80 percent of our water supply, and groundwater from 92 wells makes up 20 percent of the supply. We have upstream storage of approximately 22,250 acre-feet, and that is in Independence Lake and Donner Lake. These lakes are west of Washoe County. We also have three operating hydroelectric power plants that provide renewable energy. Annual revenue of the water company is $97 million in water sales and about $3.5 million in hydroelectric sales.

We started monitoring customer satisfaction in 2002, and it was 78 percent favorable [page 4, (Exhibit D)]. I think there was a little bit of a trust factor there. It was a controversial issue when we got started about the government owning the water. There were some people who did not think we should, and there were a few problems at first, but as people got more trusting of the water company and the politicians running it you can see how the favorable percentages have grown. It is now very strong at 93 percent. I would think any politician who had a favorable rating of 93 percent would be very happy. We have 400 residential customers and 100 commercial customers each year

with a 4.4 percent error factor, so we think it is very good. We are very proud of our water company, and I think it is a very well-run company. If you have any questions I will be happy to answer them, or I will turn it over to our general counsel.

Michael A.T. Pagni, General Counsel, Truckee Meadows Water Authority:
I have been asked to provide some background on water consolidation. In 2007, the Nevada Legislature adopted the Western Regional Water Commission Act [page 5, (Exhibit D)]. Among other things, the act required that the four public water conveyors in Washoe County evaluate whether it would be feasible to consolidate one or more of those publicly owned systems to improve the management of water resources and reduce costs to customers. After some extensive studies and infrastructure evaluation and a number of public meetings, in January of 2010, the Truckee Meadows Water Authority and Washoe County entered an interlocal agreement providing for the merger of the county system into the Truckee Meadows Water Authority system. An extensive due-diligence process followed. Two hundred and seventy-five or so tasks were identified that needed to be completed for the merger. A team of about 100 people got together and spent the next five years doing due diligence, financial assessments, and legal analyses—all the things you need to do for a merger of this size, the fundamental goal being to avoid any adverse impacts on customers.

During that process, it was recognized that another public system in the South Truckee Meadows General Improvement District system was interdependent and was intertwined with the county system such that they believed it would be in the public interest to include that system in the merger as well. In December of 2013 another interlocal agreement was entered between the Truckee Meadows Water Authority and the South Truckee Meadows General Improvement District to include that system in the merger concurrent with the county merger. The consolidation of both the county system and the South Truckee Meadows General Improvement District system into Truckee Meadows Water Authority was successfully completed on December 31, 2014. What you see here is a map of the system as it existed before consolidation [page 6, (Exhibit D)]. The Truckee Meadows Water Authority system at the time is in blue, and then you see a number of other colors. The green represents county, both retail and wholesale areas; the pink is the Sun Valley General Improvement District system; and the yellow at the bottom is the South Truckee Meadows General Improvement District system. This is what the service area looks like today after consolidation with the Truckee Meadows Water Authority [page 7, (Exhibit D)].

As I indicated, there are a number of benefits to the consolidation [page 8, (Exhibit D)]. The guiding principle throughout was to make sure that no customer group of the Truckee Meadows Water Authority or of the entities merged into it would be adversely affected. That goal was achieved. The other guiding principle was to lower the cost of service while allowing for conjunctive use management to improve area water resource efficiencies. The benefits include: improved management in use of the water resources; more efficient use of the infrastructure and improved development; reduced cost of system maintenance; better service to customers because of the coordinated efforts; and long-term efficiencies and economies of scale. As I said, we were able to complete the merger without any increase to customer water rates. Based on customer satisfaction surveys that we have conducted, both entities either maintained or improved their level of customer satisfaction as a result of the merger.

Mark Foree:
I feel the biggest benefit of the consolidation is improved management of water resources. The consolidated system is sort of tailor-made for better water management because the county systems in the South Truckee Meadows General Improvement District system are groundwater systems generally around the perimeter of the Truckee Meadows Water Authority system. Of those 18 different little water systems that combined into Truckee Meadows Water Authority, a dozen of those are actually connected to the Truckee Meadows Water Authority system, so we have a better opportunity to do conjunctive use management. In our region, conjunctive use to us means to maximize the use of Truckee River water and minimize groundwater pumping. We are already starting to move surface water into some of those groundwater areas. When we have available surface water, Truckee River water, we want to maximize the use of that and minimize groundwater pumping.

Let us look at the water resources in terms of surface water: the Truckee River supply [page 9, (Exhibit D)]. The utility owns the first 40 cubic feet per second coming down the Truckee River, which is about 29,000 acre-feet of water. We own all of the water rights in Hunter Creek, which is about 10,000 acre-feet of water. The vast majority of the Truckee River rights that are held by the utility have come from conversion of irrigation rights to municipal and industrial use. That is about 70,000 acre-feet of water. That adds up to over 100,000 acre-feet of Truckee River rights. To put this in perspective, in 2013, which was a pretty normal year, we only utilized 68,000 acre-feet of Truckee River rights for our water supply. In terms of groundwater supply, that grew a lot with the consolidation of Washoe County and the South Truckee Meadows General Improvement District.

We now have about 42,000 acre-feet of groundwater rights for use in non-drought years in multiple groundwater basins. To add some perspective, in 2013, only 17,000 acre-feet were utilized. In drought years, we could add an additional 6,150 acre-feet in the Truckee Meadows basin, and that is based on an order and an agreement from the State Engineer. We also have a very active artificial recharge program like you heard about in southern Nevada. In the winter months when we have excess surface water, we treat that and inject that into the groundwater aquifer. With the addition of the consolidated areas and the drought situation, we are stepping that up. Today we are injecting about 10 million gallons per day into the groundwater aquifer in various basins.

Upstream storage is very important to us. Mayor Martini mentioned that Independence Lake is one of our drought supply reservoirs. It is our largest and best drought supply reservoir, and it holds 17,500 acre-feet. The Truckee Meadows Water Authority, or the community I like to say, owns all of the water rights in Independence Lake. That water is only used for drought supply. We own half of the water rights in Donner Lake, again only using that for drought supply. The other half is owned by the Truckee-Carson Irrigation District. We also have an interim storage contract with the Bureau of Reclamation, U.S. Department of the Interior, to store up to 14,000 acre-feet of water in the federal reservoirs upstream, primarily Stampede Reservoir.

Here is a chart that shows Washoe County population versus total water production at Truckee Meadows Water Authority over approximately the last 100 years [page 10, (Exhibit D)]. If you look at 2001, that is about when Truckee Meadows Water Authority was formed. We reached a peak in water production of about 86,000 acre-feet. If you look over the next decade at a time when the population grew by about 20 percent, our water demand dropped about 20 percent. This is due to various factors, but the main one has been metering the system. When Truckee Meadows Water Authority was formed only about half of the residences had meters. We have had a very good meter conversion process to where now over 99 percent of all services are metered. That is the primary reason that the usage has dropped off. There has also been better conservation over the last 15 years. We have also had assigned-day watering for about 20 years in the region.

Chair Titus:
Are you able to catch the same amount of water that Clark County seems to be doing an amazing job at, to reuse it?

Mark Foree:
The indoor use, like southern Nevada water, goes to a wastewater treatment plant that is owned and operated by Reno and Sparks. After treatment, it is returned to the river and goes to downstream users.
Here is a slide of the Truckee River system and the Carson River system [page 11, (Exhibit D)]. We are fortunate here in this region to have such a large reservoir at the top of the Truckee system. That is Lake Tahoe; it holds 744,000 acre-feet of storage in the top six feet. Going downstream from that, you see where Donner Lake feeds in and Independence Lake; those are our drought supply reservoirs. Stampede Reservoir is where we also have that contract for drought storage with the Bureau of Reclamation. The river flows through Reno and Sparks, and just before the river turns north and heads to its terminus at Pyramid Lake, the Truckee Canal takes off and provides water to the Truckee Carson Irrigation District system and Lahontan Reservoir. In terms of flows, if you look at the numbers to the right, the average flow on the Carson River is about half the average flow on the Truckee system. The big difference between the two systems is that the Carson River has no upstream storage, so that is why droughts are typically more severe on the Carson River.

Here is a slide that shows who uses what out of the river [page 12, (Exhibit D)]. In normal years you can see that Pyramid Lake gets 80 percent of the flow in the Truckee River, Truckee Carson Irrigation District gets 10 percent, and Truckee Meadows Water Authority only uses 3 percent; that is after water is returned at the wastewater plant. In dry years or drought years things change quite a bit. Truckee Carson Irrigation District gets about half of the water flowing down the Truckee, Pyramid Lake about a third, and Truckee Meadows Water Authority goes up to about 8 percent.

Here is a slide [page 13, (Exhibit D)] that shows Truckee Basin snowpack for the last 30 years. This is very important for our water supply. If you focus your attention on the 1987 through 1994 period you will see an eight-year drought. It was the longest drought on record in the Truckee system. What we do in our planning is we take that eight-year drought and we add another dry year. We plan for a nine-year drought cycle. We not only plan for that but we have those water supplies to back that up, and that comes primarily from that upstream storage and additional groundwater pumping. You can see the last three years, and now it is a fourth year that we have had very subpar snowpack. The last three years shown here are similar to 1990 through 1992, in that eight-year drought.

Here is 100 years of flows on the Truckee River [page 14, (Exhibit D)]. It goes from the lowest or the worst years to the highest, and the dark blue bars are

that eight-year drought. The red bars are the most recent three years not including the current year we are in. You can see where the last three years stack up. They are not the worst of the worst, but they are toward the bad end of the graph. We have not given up on this year yet. We hope we still get some snow and rainfall to make it a decent year.

In terms of Lake Tahoe elevation, this pretty much tells the whole story about regional water supply [page 15, (Exhibit D)]. You can look at the current elevation of Lake Tahoe and determine where we are in terms of water supply. There is that top six feet identified on the graph. The natural rim is at the 6,223 foot elevation. When the lake is below that elevation, no water is flowing into the Truckee River at Tahoe City. The full elevation is 6,229.1 feet. Again, that is 744,000 acre-feet of storage. You can see where it was below the rim in the worst drought on record in the 1980s and 1990s. That elevation was below the rim for four and a half years out of a five-year period.

Here is a variability of Truckee River flow at the state line in Farad, California [page 16, (Exhibit D)]. It looks a lot like the snowpack graph. Here again is the Lake Tahoe elevation, and it shows three different dry cycles [page 17, (Exhibit D)]. The blue line is the worst drought on record. You can see where I had mentioned that for four and a half years of a five-year period, it was below the rim. The green line is the 2006 through 2011 period, and the red line is 2011 to the present. You can see these all have a similar pattern of a few to several poor snowpack years resulting in dropping lake levels. What happens more often than not in this system is that we have a big year or a big couple of years that fills everything up. You can see that happened coming out of the worst drought on record when we were two feet below the natural rim. Two years later, Lake Tahoe was full, as were the other reservoirs in the system. With this drought, we did have to rely on some upstream drought supplies for the first time in 20 years.

On July 30, 2014, the federal watermaster closed the outlet gates at Boca Reservoir because storage was depleted [page 18, (Exhibit D)]. The river flow dropped from the decreed requirement of 500 cubic feet per second (cfs) down to 220 cfs and was falling pretty quickly. Irrigation ditches were shut off at that time. Why is that? That is because irrigation companies do not own any upstream storage on the Truckee system, with the exception of Truckee Carson Irrigation District owning half of Donner Lake. If you look at the Truckee Meadows Water Authority (TMWA) Water Resource Plan 2010-2030, it says if reduced river flows occur before Labor Day, TMWA will be impacted, and that is what happened last summer. We will likely need to do something similar this summer, maybe about the same time, and perhaps a little earlier. Truckee Meadows Water Authority used upstream drought reserves for the

first time in 20 years and called for a 10 percent voluntary conservation on outdoor use from customers.

Here is a graph showing water use in 2013, a more normal year [page 19, (Exhibit D)]. The blue is Truckee River supply; we maximize the use of Truckee River supplies when we have it. The green is groundwater pumping and we minimize that. Also, you can see that is generally focused around the summer months. What did we do last summer, and how does that change in a drought situation [page 20, (Exhibit D)]? Around August 1, we thought we were going to have to start using upstream drought reserves, but it actually rained for about 2 weeks and gave us a brief reprieve. We started using drought reserves in the middle of August. That light blue color is our federal storage contract water coming out of Stampede Reservoir. We used that first, along with additional groundwater pumping, which is the green, then we went to the white, which is Boca Reservoir. We had about 800 acre-feet we could use in Boca Reservoir. The darker blue is our half of Donner Lake, all the while pumping more groundwater. If you look at the legend, Independence Lake is in the pink. We did not have to use Independence Lake drought storage last year. That is our biggest and best upstream reservoir, so that is a good thing.

In terms for our call for conservation, we actually saw a 7.5 percent reduction in overall water use compared to 2013 [page 21, (Exhibit D)]. That saved 350 million gallons or 1,100 acre-feet of water. When we looked at more data, the residential customers did reduce their consumption by about 11 percent during those two months. What this enabled us to do was to only use enough drought reserves that we are fairly certain that we will fill up this year. We will have pretty much full drought reserves to start with this year as well. Of our 27,500 acre-feet upstream drought storage, we ended up using about 4,900 acre-feet, or only 19 percent of that amount, and we believe that will be replenished this spring [page 22, (Exhibit D)]. Even in very bad snowpack years Donner Lake and Independence Lake typically fill. We do have to ask for early fill authorization from the California State Dams Division. Every year that we have asked, they have granted that request.

There is something called the Truckee River Operating Agreement (TROA) that changes the operation of the Truckee River to provide for multiple benefits [page 23, (Exhibit D)]. One of those benefits is that the community's upstream drought storage will more than double with the TROA. It has not been implemented yet, but the TROA parties feel that we will be able to implement TROA in 2015. You can see the current pre-TROA upstream reserves, and the next slide is the post-TROA upstream reserves [page 24, (Exhibit D)]. With TROA, we will be able to grow from a little over 30,000 acre-feet of upstream

storage to about 70,000 acre-feet of storage. I will be happy to answer any questions.

Chair Titus:
Are there any questions?

Assemblywoman Carlton:
I am curious about your long-term plans for conservation. Southern Nevada has the turf conversion program because we lose the water with outside watering. You said your customers voluntarily cut their use by 10 or 11 percent, but is there any actual long-term plan as far as conservation goes? The metering really helped, but what is the next step?

Mark Foree:
We have had assigned-day watering for 20 years in the region, and that has helped a lot. In terms of the Truckee River Operating Agreement, water saved through conservation goes to upstream storage. That is probably the main reason that we do not have something like the cash for grass program that you have seen in the Las Vegas Valley. We have free water audits that we provide for our customers to give them ideas about how to reduce water use. That is basically our conservation plan—a little bit different rules up here than in southern Nevada.

Assemblywoman Carlton:
Upstream is where your storage is, so whatever you conserve goes into storage for the future. Is that correct?

Mark Foree:
That is correct. It goes to drought storage.

Assemblywoman Carlton:
What percentage of the storage capacity are you at right now?

Mark Foree:
We feel we will start the summer with full drought supplies stored. That is about 27,500 acre-feet.

Assemblywoman Carlton:
I am just concerned that when the water does not go over the edge at Lake Tahoe, you have a whole lot of people on the other side. Voluntary is nice, but I think this is the new norm. Some long-term planning should probably be going on.

Chair Titus:
You have no rights to—and you are unable to ever—pump out of Lake Tahoe. Is that correct? When it is below its natural rim that is it, unlike Lake Mead?

Mark Foree:
That is correct. We cannot pump out of Lake Tahoe. I would also like to add to the previous question. We do have a landscape retrofit program as well that I forgot to mention. It is typically focused at commercial properties and school district properties where they can remove their turf and get compensated and replace with artificial turf.

Chair Titus:
When you do the groundwater recharge after you have pumped it out, have you been measuring that? Is that static?

Mark Foree:
We have worked on that with the State Engineer, and I am not sure of the formula, but I know that it depletes at a certain percentage each year. It does not stay there forever if you do not use it. I think there is a depletion amount; I am not sure of the percentage per year. You have to keep adding to it because the State Engineer considers some of that to be depleted without use.

Chair Titus:
I live in an area where we are in constant litigation and fighting between our local Shoshone-Paiute Tribes over the water from my basin into Walker Lake. Are there any issues with the Pyramid Lake Paiute Tribe at this point?

Mark Foree:
We are actually partners with the Pyramid Lake Paiute Tribe in the Truckee River Operating Agreement. Those five parties that signed on to the agreement are the Pyramid Lake Paiute Tribe, Truckee Meadows Water Authority, the State of Nevada, the State of California, and the United States. Those five parties are the moving parties on TROA. We are very much a partner with the Pyramid Lake Paiute Tribe.

Assemblyman Carrillo:
You mentioned your retrofit program. Does it include showerheads and water closets as well? Some people may have the original toilet that their home came with, and it works great but the conservation is not there. Do you offer rebates that will help the homeowner in that manner?

Mark Foree:
Yes, that was a program that was operated by the Western Regional Water Commission. It was a toilet retrofit program and that went on for a number of years and thousands of toilets were retrofitted under that program. That was not done under Truckee Meadows Water Authority.

Chair Titus:
Next we have the Western Regional Water Commission.

Jim Smitherman, Water Resources Program Manager, Northern Nevada Water Planning Commission, Western Regional Water Commission:
The Commission was created by a special act of the Legislature, which is Chapter 531 of *Statutes of Nevada* 2007, to do water planning (Exhibit E). Member agencies are local governments, the City of Reno, the City of Sparks, Washoe County, Truckee Meadows Water Authority, Sun Valley General Improvement District, and Truckee Meadows Water Reclamation Facility owned jointly by the cities of Reno and Sparks.

The 2007 legislation also created the Northern Nevada Water Planning Commission, which is the technical advisory committee to the Western Regional Water Commission. It was required to develop a comprehensive plan not only for water supply for municipal and industrial uses, but also water quality, wastewater, treated wastewater, effluent management, storm water drainage and flood control. The initial plan was adopted in 2011, and delivered to the Legislature on time, and a five-year review and update required by the statute is underway as I speak. That is due January 2016. I will highlight just a couple of activities that will factor in to the water plan update.

In 2010, the Truckee Meadows Regional Plan, which is the regional land use plan created by a separate statute, was amended to identify the regional water commission as the entity in order to compare the biennial consensus population forecast to the sustainable water resources that have been identified in the Comprehensive Regional Water Plan. Long story short, this year's 20- year population forecast is for fewer people than it was two iterations ago and for a lower growth rate. When we did the comparison of a population of 590,500 people for the year 2030 in the year 2010, the water demand estimate was 142,000 acre-feet per year for that population. Since then, the population forecast has been for fewer people two years further out, so we have not had to revisit the comparison. That has happened the last two sessions, or four years. The last time we went through the process, we looked at some of the water resources that we had identified that would require an importation project to bring them into play. We determined that those water resources that are further north in Washoe County would not be

needed to serve the water demands of the 20-year population forecast until beyond the 20-year planning horizon. Fewer water resources are required for less population and a lower population growth.

The sustainable water resources that the plan identifies that we are counting on include: the Truckee River and its associated tributary creeks and reservoirs, managed according to the provisions of the negotiated settlement and the Truckee River Operating Agreement; local groundwater wells, which are regulated consistently by the State Engineer; and the existing Fish Springs Ranch water importation project, which has been constructed but has not yet delivered water to customers. That is 8,000 acre-feet per year that is waiting to serve future growth. Once that water is served to and used by the population, it must be dealt with as wastewater. We touched on that in the last presentation. Technical staff of the Western Regional Water Commission's member agencies are working together to map out a forward-looking strategy to manage treated wastewater effluent. This will not only prepare us for growth but protects water quality, uses water rights effectively, plans for new infrastructure, and allocates capital and operating costs equitably. That is a delicate balance, and it takes a lot of planning to get that done.

Lastly, the Commission staff is working closely with the Truckee Meadows Regional Planning Agency. To create data sets for a model, they have to look at population and employment into the future. What their model can do is disaggregate the population forecast down to the parcel level: which parcels are going to be developed and then what kind of a dwelling unit or what kind of an employment center is going to be located on each parcel. Then we can generate scenarios, if you will, based on different assumptions for the future. Using these new water-related data sets is something new to use in conjunction with the land use planning data sets. These will show not only where the population might live and work, but also what the water demands are likely to be. This way, we can determine what the infrastructure costs are for capitalizing and then also long-term carrying costs to operate and maintain the infrastructure. We are pretty excited to be able to run those kinds of scenarios with the detailed water data sets that we have right now. I think that these things will help to inform and put out a better regional water plan when we come out with the update early next year.

Chair Titus:
I am now going to open a work session on Assembly Bill 144.

Assembly Bill 144: Makes various changes relating to the Land Use Planning Advisory Council. (BDR 26-554)

Susan E. Scholley, Committee Policy Analyst:
Assembly Bill 144 makes various changes relating to the Land Use Planning Advisory Council, which is located in the State Department of Conservation and Natural Resources. It was heard in Committee on February 24, 2015. This bill provides a statement of intent that the members of the Executive Council of the State Land Use Planning Advisory Council, known as SLUPAC, should be representative of the geographic areas of the state. The bill also makes the SLUPAC, rather than the Executive Council as is currently in the statutes, responsible for making recommendations and adopting proposed regulations for land use planning involving areas of critical environmental concern. No amendments were proposed at the hearing; however, I would like to turn this over to Committee Counsel, who did have some drafting corrections that the Committee will want to consider. [Referred to work session document (Exhibit F).]

Jim Penrose, Committee Counsel:
The bill basically removes from the Executive Council of the Land Use Planning Advisory Council responsibility for making recommendations for land use planning in areas of critical environmental concern. I see those changes made in section 2 of the bill. In preparing for the hearing today, I discovered that there was existing language in section 1 of the bill. The proposed amendment is posted on NELIS, and I believe you have also been given a hard copy (Exhibit G). That should be deleted to be consistent with the rest of the bill. It is simply the deletion of basically all or part of three lines in subsection 1 of NRS 321.755 in section 1 of the bill. I am happy to answer any questions.

Assemblywoman Carlton:
In reading the original bill that we are talking about, it changes Executive to Land Use Planning Advisory Council. Is that correct?

Jim Penrose:
That is correct. The Executive Council is part of the larger body, the State Land Use Planning Advisory Council. The Executive Council is appointed by the full council from the members of that body. The basis for the bill was instead of the four member executive council proposing recommendations and proposed regulation for consideration by the Governor on this particular topic, this is something that should be done by the full body. That is the gist of the bill.

Assemblywoman Carlton:
By removing the language in the first section that the Executive Council will consider these things, that responsibility will go to the full body?

Jim Penrose:
That is correct.

Assemblywoman Carlton:
It reads counterintuitively.

Chair Titus:
We have contacted Assemblywoman Bustamante Adams, the sponsor of this bill, who has concurred that this is appropriate. I will entertain a motion to do pass Assembly Bill 144 with amendment.

> ASSEMBLYMAN ELLISON MOVED TO AMEND AND DO PASS ASSEMBLY BILL 144.
>
> ASSEMBLYMAN OSCARSON SECONDED THE MOTION.

Chair Titus:
Are there any comments?

Assemblywoman Carlton:
I am thankful for Legal to be able to answer the questions. Getting an amendment right as you are getting ready to vote on it makes you wonder if there is something else there that you have not had time to consider. We had a work session document in front of us, but the amendment was not included with that. I will support this, but if I find something else or another question, doing it within five minutes makes me a little uneasy. I wish I had this with the other document so that I could have researched it before I got here.

Chair Titus:
I concur.

Assemblywoman Swank:
I just want to reiterate that I will support it here, but I reserve my right to change my vote should I find something that is not quite right with it.

Chair Titus:
I will entertain a five minute recess if folks would like to do that. [No one wanted to recess.] I will call for the vote.

> THE MOTION PASSED. (ASSEMBLYMAN HANSEN WAS ABSENT FOR THE VOTE.)

I will close the work session on Assembly Bill 144 and open up for public comment. [There was none.] I will assign the floor statement to Assemblyman Edwards. The meeting is adjourned [at 2:56 p.m.].

RESPECTFULLY SUBMITTED:

Donna J. Ruiz
Committee Secretary

APPROVED BY:

Assemblywoman Robin L. Titus, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Natural Resources, Agriculture, and Mining

Date: February 26, 2015 **Time of Meeting: 1:32 p.m.**

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
	C	John Entsminger, Southern Nevada Water Authority	Presentation
	D	Geno Martini, Truckee Meadows Water Authority	Presentation
	E	Jim Smitherman, Western Regional Water Commission	Presentation
A.B. 144	F	Susan E. Scholley, Committee Policy Analyst	Work Session Document
A.B. 144	G	Jim Penrose, Committee Counsel	Proposed Amendment