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

Seventy-Sixth Session
February 15, 2011

The Committee on Natural Resources, Agriculture, and Mining was called to order by Vice Chair Joseph M. Hogan at 1:36 p.m. on Tuesday, February 15, 2011, in Room 3161 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 at www.leg.state.nv.us/76th2011/committees/. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblywoman Maggie Carlton, Chair
Assemblyman Joseph M. Hogan, Vice Chair
Assemblyman Paul Aizley
Assemblyman Elliot T. Anderson
Assemblyman David P. Bobzien
Assemblywoman Irene Bustamante Adams
Assemblyman John Ellison
Assemblyman Ed A. Goedhart
Assemblyman Ira Hansen
Assemblyman Kelly Kite
Assemblyman Pete Livermore
Assemblyman Harvey J. Munford
Assemblywoman Peggy Pierce

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Senator Dean A. Rhoads, Rural Nevada Senatorial District

STAFF MEMBERS PRESENT:

Amelie Welden, Policy Analyst
Randy Stephenson, Committee Counsel
Judith Coolbaugh, Committee Secretary
Sherwood Howard, Committee Assistant

OTHERS PRESENT:

Doug Busselman, representing Nevada Farm Bureau Federation
Wes Henderson, representing Nevada Association of Counties
Joseph Guild, representing National Cattlemen's Beef Association
Jake Tibbitts, Manager, Department of Natural Resources, Eureka County
Kyle Davis, representing Nevada Conservation League and Education Fund
Shawn Espinosa, Upland Game Staff Specialist, Department of Wildlife
Judy Stokey, Executive, Government and External Affairs, NV Energy
Joanne S. Marchetta, Executive Director, Tahoe Regional Planning Agency
Julie W. Regan, Chief, Communications and Legislative Affairs, Tahoe Regional Planning Agency
Patricia Mulroy, General Manager, Southern Nevada Water Authority

Vice Chair Hogan:
[Roll was called.] We have quite an array of presentations this afternoon, all of which are very interesting and worthwhile. It should be a very profitable day for all of us. First on the agenda is an overview of activities of the Legislative Committee on Public Lands from the 2009-2010 Interim. It will be presented by Senator Dean Rhoads.

Senator Dean A. Rhoads, Rural Nevada Senatorial District:
Thank you for inviting me to give an overview of the activities of the Public Lands Committee. I have been honored to serve as a chair of the Public Lands Committee for nearly 25 years starting in 1985. Senator Lee, Senator Parks, Assemblyman Aizley, and Assemblyman Bobzien were also members of the Public Lands Committee this past interim. The other members were termed out.

Nevada's Legislative Committee on Public Lands is a permanent committee of the Nevada State Legislature whose duties are set forth in *Nevada Revised Statutes* (NRS) Chapter 218E. Created in 1983, the Public Lands Committee is responsible for monitoring policies and laws affecting the 61 million acres of federally managed lands in Nevada. As you know, approximately 87 percent of

Nevada is public land. The Committee offers us an opportunity to discuss a wide range of public lands issues with federal, state, and local officials, representatives of special interest organizations, and members of the public. We cover issues ranging from grazing, mining, and recreation to wild horses, endangered species, and wildlife.

The Committee is also required to review the programs and activities of the Division of Water Resources State Engineer, along with regional and local water authorities throughout the state.

In order to reach the people most affected by federal land management issues, the Committee has a tradition of holding as many meetings as possible in rural cities and towns. This past interim, budget constraints limited us to only three road trips to the cities of Winnemucca, Tonopah, and Ely. Each interim, the Committee usually travels to Washington, D.C. to meet with Nevada's congressional delegations and federal agencies such as the Bureau of Land Management (BLM) and the United States Forest Service. This interim, the Committee only made one trip to Washington, D.C., and due to the restrictions on out-of-state travel, we paid our own way.

At our final meeting in Ely, the Committee voted to request 10 bill draft requests (BDR) for consideration by the 2011 Nevada Legislature. I have provided you a list of the Committee's bills which cover grazing and rangeland health protection, sage grouse, revenue sharing from activities on federal lands, off-highway vehicles, and water (Exhibit C). In addition, the Committee voted to send letters to the Nevada congressional delegation and others on opposition to the agreement between El Paso and the Western Watersheds Project, opposition to federal legislation redefining navigable waters, and reconsideration of hot weather grazing restrictions. The Committee asked the State Engineer to work on regulations defining "environmentally sound." Letters were also sent to the BLM supporting Carson City's application for Southern Nevada Public Lands Management Act funds and supporting Lincoln County's proposed biomass demonstration project.

The Committee's final report, *Bulletin No. 11-13*, contains policy statements on a wide range of public lands issues.

Vice Chair Hogan:
I see you have with you Assemblyman Bobzien. He is also quite familiar with Assembly Concurrent Resolution 3. This is one of the bills developed by the Public Lands Committee for our eventual consideration. We would like to take advantage of your presence for a summary of what you would like to achieve with A.C.R. 3.

Assembly Concurrent Resolution 3: Urges proactive protection and restoration of the population and habitat of the greater sage grouse in Nevada. (BDR R-214)

Assemblyman David Bobzien, Washoe County Assembly District No. 24:
As Senator Rhoads mentioned, I was a member of the Public Lands Committee this last interim. Assembly Concurrent Resolution 3 urges proactive protection and restoration of the population and habitat of the greater sage grouse in Nevada. This was one of the items we dealt with during the course of the interim through our different meetings. We bring this for your consideration as an opportunity for the Legislature to promote this as a topic and issue that needs attention. It is my desire to see this move forward and receive support because I think this is a very important issue.

Certainly this legislative session, we have a lot of discussion about how we can move our state forward and get out of this economic situation we are in, and how we can bring jobs to Nevada. I have likened the sage grouse issue to one of a cliff being just over the horizon that we are hurdling toward. Just at the time when we can hopefully get the economy rolling again and have jobs come in, it would be unfortunate if a listing of this species would occur. It would mean incredible federal control over what happens as far as land management decisions are concerned. There would be impacts to recreation, ranching, mining, renewable energy, and all sorts of economic activity across the state.

I want to cover some key points about this issue. In March 2010, the United States Fish and Wildlife Service (USFWS), under obligations with the Endangered Species Act, looked at the greater sage grouse and decided a listing under the Act was warranted but precluded. Those are the two key terms you hear talked about. Essentially, it means the signs are there to indicate this bird is in trouble, but the USFWS is going to preclude a listing because it recognizes there are other candidate species that may currently have a higher priority for listing. This also sends a message to all those involved that we have some more time to put our house in order and figure out some better approaches to managing the species.

The *Greater Sage-Grouse Conservation Plan for Nevada and Eastern California* was issued in 2004 as the result of a bistate task force convened under former Governor Kenny Guinn. The plan set priorities and identified mitigation projects and data collection needs, but it lacked adequate funding. Throughout the interim, the Public Lands Committee heard from the USFWS, Nevada's Department of Wildlife (NDOW), and others about the issues and impacts related to the potential listing of the sage grouse. The Committee also heard from residents in rural communities concerned about the potential for

negative impacts on economic development and restrictions on the use of public lands if sage grouse were to be listed. We heard information regarding a study where geographic information system work was done. They looked at NDOW's data for where leks, the breeding grounds for the bird, are found, and they contemplated what would happen under a potential listing. In Wyoming, a three-mile to five-mile circle was drawn around each lek site to preclude any development or activity in that area. Any change meant going through a section aid consultation process with the federal authorities. County-by-county analysis across that state came up with startling percentages as to the amount of landmass that would be off-limits to development if a listing happened. It was very telling information.

Our efforts to promote renewable energy projects and transmission lines have the potential to impact sage grouse habitat and make implementation of the conservation plan a high priority for many interests in Nevada. Again, just at the time when we are thinking about bringing renewable energy jobs and projects to our state, this stands in the way as a potential obstacle.

Protection of sage grouse and prevention of its listing as an endangered species has been an ongoing concern of the Public Lands Committee over the past decade. Over the past several interims, the Committee has sent letters supporting efforts to protect and preserve sage grouse and their habitat and sponsored an earlier resolution in 2005 addressing many of the same issues presented here.

Assembly Concurrent Resolution 3 will serve as an important reminder to everyone at the federal, state, and local level of the importance of working together to find the necessary funding to implement the programs needed to prevent listing of the sage grouse. Rural communities and users of public lands throughout the state will be severely impacted if sage grouse are listed and restrictions are placed on access for development in and around public lands. Finally, the protection of sage grouse and their habitat is critical to the success of Nevada's effort to pursue renewable energy projects and become a leader in green energy.

With that, I close my remarks. On behalf of the Public Lands Committee, I appreciate your consideration of this resolution.

Senator Dean A. Rhoads, Rural Nevada Senatorial District:
Could I add a little bit to Assemblyman Bobzien's testimony?

Vice Chair Hogan:
Of course.

Senator Rhoads:
The people down in Las Vegas went through this with the desert tortoise, and in the Northwest, they went through this with the spotted owl. You have seen nothing yet if the sage grouse becomes an endangered species. It is something we need to keep watch on.

Assemblyman Bobzien:
To add to that, I believe the testimony we heard recently in the Assembly Committee on Ways and Means from the NDOW director was that the sage grouse listing would be like the spotted owl times ten.

Assemblyman Ellison:
Elko County has spent hundreds of thousands of dollars on Question 1, and some of the other projects tried to get ahead of this and be proactive rather than reactive. You looked over this bill, and you feel comfortable with the way this is written?

Senator Rhoads:
We came out a lot better than we ever expected when we made that final decision. Many people thought we would make the list. They are making a big challenge to gather statistics to keep them off of the list. So far we have done everything right.

Assemblyman Ellison:
One of our problems was predator control. We had issues with the eggs and leks. I know NDOW is working with some of the other hunting groups. If we do not get predator control, we will never get the sage grouse under control.

I watched your committee meeting in Ely, and we had some of the issues come up regarding the pipeline. You did a great job and hit the ground running and stayed focused all day. We were trying to resolve the issues which are still ongoing.

Assemblyman Hansen:
On page 2, line 19 of the resolution, it says, "limited federal assistance to owners of land who wish to join in efforts...offers financial and technical assistance to eligible farmers, ranchers and landowners to install or carry out approved conservation practices." Is this money all going to be used on private ground?

Assemblyman Bobzien:
I want to congratulate the members of our Congressional delegation looking at this issue in Washington, D.C. A major pot of money has been secured through

the Natural Resources Conservation Service (NRCS). They are concerned primarily with private land, so they have a fund remittance that is dedicated to trying to deal with, and get ahead of, the sage grouse issue. Yes, that is funding for private lands. We have a huge percentage of land in this state that is not private. Of course, that is where the real issue still lies and remains.

Assemblyman Hansen:
I have watched this issue for many years and spent a lot of time in the hills and observed sage grouse populations. The greatest concentrations have always been around ranches. Yet we are seeing a continual rollback in the amount of cattle grazing. As we see that decline, we also see a corresponding decline in the sage grouse population. I read the studies back in the 1970s, which clearly indicated there was a direct correlation between the amount of grazing and the amount of sage grouse populations. Is there any effort being made to expand the amount of livestock grazing to cut back on grass fires and to expand the habitat for sage grouse?

Senator Rhoads:
We have indicated to the authorities that more grazing is one way to cut down on fires. However, we have not gotten far with this administration, but maybe it will change in the future. We have to live with what we have.

Assemblyman Goedhart:
I applaud the efforts that have gone into keeping the sage grouse from being listed on the endangered species list. Is there anyway to put in the resolution a need for greater predator control? We can do all the work we can about preserving the habitat, but if we do not have a corresponding effort to establish predator control, I am afraid anything we are going to gain on the one side we are going to lose on the other. On page 3, lines 5 and 6, it says, "to mitigate any future damage to that habitat and population in Nevada." To mitigate any future damage leaves it wide open.

Senator Rhoads:
I feel comfortable with the language.

Assemblyman Bobzien:
One of the things we have heard over and over again is the whole portfolio of the threats and the impacts to sage grouse are vast. When we have some of the land managers and wildlife officials here, we will ask them to cover this issue. Yes, there are predator issues, and wildfires are a huge component to this question. We certainly dodged a bullet the last couple of seasons. Wild horses are part of the impact, but basically we are talking about anything that is a large landscape disturbance. I would have some hesitancy about getting too

prescriptive in the language of trying to play scientist as to what is happening here. This is more of a recognition that everyone should work together to try to find those solutions.

Assemblywoman Pierce:
The Greater Sage-Grouse Conservation Plan is the plan or strategy for making this happen.

Senator Rhoads:
Former Governor Guinn created that committee, and it has been ongoing ever since.

Assemblywoman Pierce:
We know what direction we are going in, and what we are going to do.

Senator Rhoads:
Yes. They have done a good job.

Assemblyman Anderson:
I am sure you had to work many long hours and take many long drives, and I appreciate your service. I like the resolution, and I think we could look at this as economic development because if we do not get our house in order, we could get into trouble. Is it just habitat disappearing that is causing the sage grouse to decline, or are there other factors? Can we do anything policy-wise to help?

Assemblyman Bobzien:
The habitat is a major piece of it. I commented earlier about the impacts being so wide and so diverse, but it really does come down to habitat. I will also say there is some predator action and interaction that could happen and can be promoted if certain projects go forward and certain changes in land use happen. If you talk to a wildlife biologist, you will get a picture of just how complex this really is. As far as the policy is concerned, it goes back to the conservation plan that lays out a whole suite of tools of what it is going to take to get ahead of this. I would also make the point, as we are dealing with all of the various species we have in this state, whether those are used for hunting or just have their own value for being on the planet. Activities in the plan will benefit the sage grouse and will also benefit for good management of the range, the livestock industry, but also for other species like mule deer. There is a ripple effect. Generally, the actions you see in the plan benefit more than just the sage grouse. There is a lot of value that can be spread across a number of constituencies if we are proactive.

Vice Chair Hogan:
Are there any other questions?

Have you solicited testimony from the public?

Assemblyman Bobzien:
I believe we do have some. I do not know if anyone has signed in yet.

Doug Busselman, representing Nevada Farm Bureau Federation:
We are here to speak in support of A.C.R. 3. The Nevada Farm Bureau, and I personally, have been involved since August 2000. I have been a member of the Governor Guinn's Sage Grouse Conservation Team since its inception. I have not only been involved in the ongoing process, but I have been involved in the local efforts in the Mono Basin area. All of the other sage grouse across the range are listed as warranted but precluded and rated a category eight with the exception of the Mono Basin population. It is listed as a distinct population and rated a category three. This is a concern for Lyon, Mineral, and Esmeralda Counties as well as the counties on the other side of the line in California. It is a bistate area that has been involved with that particular population.

Earlier there was mention made that certain problems exist, and those problems exist in certain areas. One of the strengths of the plan, which was developed for the sage grouse management, was the aspect of including local planning groups in developing the plan. We are going through that process now and revising those local plans to update the new threats and challenges that exist in specific areas. We are developing specific ideas to address those areas. It is not a top-down, one-size-fits-all approach but ground-up attention given to the specific needs of certain areas. We need funding and activities. This resolution will draw attention to the critical nature of what we need to be doing, and what we need to continue to do. We urge your support for the resolution, and we look forward to working proactively on trying to resolve the issues facing the sage grouse across Nevada. As has been pointed out, if the endangered species button gets pushed on this one, we are in big trouble.

Vice Chair Hogan:
We have further requests to testify.

Wes Henderson, representing Nevada Association of Counties:
I had the pleasure of following the Public Lands Committee around the state during the last interim. I know the local communities are very appreciative that the Committee comes to them. The potential sage grouse listing is a statewide issue, and Assemblyman Bobzien is correct in saying it is a cliff. It is an

economic cliff. If the bird is listed, it is going to damage the economy of many of Nevada's rural counties. We support this resolution.

Joseph Guild, representing National Cattlemen's Beef Association:
I am here to support the resolution on behalf of the Nevada Cattlemen's Association. I am the Federal Lands Committee chairman and past president of the Nevada Cattlemen's Association. I have dealt with this issue for the past 12 years. I am familiar with and have worked with the sage grouse working group. Under former Governor Guinn's leadership, a plan has been established. The National Cattlemen's Association supports this resolution. In response to Assemblyman Hansen's question, on page 2, line 17, he pointed out the resolution only deals with private land ownership and federal assistance to that. There is Natural Resources Conservation Service money now available for federal land conservation projects to help the sage grouse in its rehabilitation efforts. That is one minor part of this resolution. We urge your support of this resolution.

Jake Tibbitts, Manager, Department of Natural Resources, Eureka County:
We support this resolution. Assemblyman Hansen spoke about the reductions, and grazing is happening on federal lands. One thing to keep in mind is any more prohibitions that happen to federal permittees shift the burden to private landowners. In Nevada, much of the prime sage grouse habitat is associated with spring sources, wet meadows, or other meadows on private land. Placing restrictions on federal land under the justification of protection for sage grouse does not address the issue, but rather shifts the burden to private landowners.

Kyle Davis, representing Nevada Conservation League and Education Fund:
We strongly support this resolution. I want to give you a little background about some of the partnerships we are undertaking. We are partnering with the Nevada Pinyon-Juniper Partnership. We were instrumental last session in creating the position within NDOW that has put together the Partners in Wildlife Program, which has been successful in starting the work on this and working with the states around us in order to get some of these conservation programs going. We have also been proactive in working with large-scale energy projects, so we make sure the projects are being sited in an appropriate manner to protect critical habitat. This is very important for our state, our wildlife, and the economic development that will come from renewable energy.

To underscore the importance of finding funding for sage grouse conservation projects, we have made this issue one of our top priorities this session. We need to get money to the groups that are working on sage grouse issues and prevent a listing from happening.

Vice Chair Hogan:
Do we have someone from NDOW who is prepared to speak on this subject?

Shawn Espinosa, Upland Game Staff Specialist, Department of Wildlife:
I want to express our support for the resolution and thank the Committee for putting it together. Over the years, we have been striving to work together with our sister agencies as well as the federal land management agencies in trying to do appropriate management actions and conduct projects to benefit sage grouse. To give some perspective on where we are in 2010, population numbers are about 30 percent below the long-term average. We are getting ready to start our survey season for 2011. We have seen a few things that are somewhat positive. The sage grouse habitat covers 22 million acres throughout Nevada. From 1999 through 2007, about 2.5 million acres burned, which affected 12 percent of their habitat. When you do not have sagebrush, you do not have sage grouse. We need to be more proactive on our federal lands with wildfire management. Some of those habitats will recover within 10 years, but there are many more of those habitats that will be lost for the long term. The burned habitats are winter ones at lower elevations. When those are gone, it will affect not only sage grouse but also mule deer and other species. The pygmy rabbit has been petitioned for a listing many times because without sagebrush you do not have any pygmy rabbits. Sagebrush is as important as anything else.

To put things in perspective regarding the Endangered Species Act, the USFWS wants to have assurances that sage grouse habitat will be protected for the long term. We are working hard to identify the most important habitats throughout the state and put those on a map. It will be given to the federal agencies as well as the USFWS. It will be up to someone other than NDOW to determine what protections are provided on those public lands.

Assemblyman Hansen:
A couple of members of this Committee have mentioned predator control. Is NDOW supportive of predator control when it comes to sage grouse?

To my understanding, the bulk of this money is going to be spent on private land. What projects do you have that NDOW will be involved with that deal with changes on private land?

Shawn Espinosa:
The funding from NRCS and their sage grouse initiative through their equipment funding is available for public land projects. On private lands, we have identified several pieces of property that should be conserved for the long term. If people are interested in conservation easements on those private lands, which

we support, more funding is available now for those types of things than has been in the past. Trying to keep those properties from becoming subdivided and developed is important for sage grouse in the long term.

As for your question relative to predator control, NDOW has been involved with raven control for several years now, and each year USFWS conducts those projects for NDOW in certain areas throughout the state. The thing you have to remember with species like the raven is that it is subsidized by stuff we do on the landscape: highways, transmission lines, and any type of structure on the landscape serves as a subsidy for ravens. You must look at raven control differently. We must construct power lines differently and construct structures so that nesting is not easy for ravens. There is a much bigger picture we need to look at than just killing ravens every year.

Assemblyman Hansen:
If I understand you right, you are saying the monies are going to be used to purchase private lands and transfer them into public ownership to protect them as habitat for sage grouse?

Shawn Espinosa:
No. There are monies available to do improvements on private land. It could be used as conservation easements, or it could be used for improvements on private lands. It would not be transferred into public ownership per se as that would be up to the land owner.

Assemblyman Hansen:
Is a conservation easement public or private? Who owns that?

Shawn Espinosa:
The private person continues to own that land, but they continue to benefit from it. It is a major tax write-off as well.

Assemblyman Kite:
Is the NRCS under the United States Department of Agriculture?

Shawn Espinosa:
Correct.

Assemblyman Kite:
They just cut their budget enough that they have gotten rid of the conservation districts, and the managers of those will be out of a job by October. How long is this money going to flow through the NRCS if they are cutting conservation districts? The people on the ground put that money to work, and it would not

do much good to put that money out there just to plow it under. When that money comes in, do you have any idea what the vehicle of getting the work done on the ground will be?

Shawn Espinosa:
I cannot speak to that. You would have to ask an NRCS representative what is currently going on, but I do know they are serious about this initiative. They are actually funding three additional positions for Nevada to implement this sage grouse initiative within the state.

Assemblyman Ellison:
One of the things we got in Elko County after we lost that 2 million acres in Elko and Humboldt Counties is the NRCS took an aggressive approach to not only the public lands but also to the private lands. We had to go back to Washington, D.C. and change some of the language in the program of disaster relief to where we could get funding back to the ranchers and get some of these areas that were burned out on both the private and public sides. We have been aggressive in Elko County, but it will take a lot more. We need Washington, D.C. to step to the plate to say if people like Western Watershed Project file fraudulent lawsuits, they must be held accountable. The BLM cannot do their job because they are tied up, and those are some of the problems we are having. We need BLM out there as a partner and not constantly tied up in litigation. Maybe you can hit on that.

Shawn Espinosa:
The Nevada Department of Wildlife does have a Partners in Conservation and Development Program, which is a fledgling program and is based on Utah's partners program. The purpose is to pool resources as agencies and come together to get everybody up to speed on the forefront on what is done on the landscape, so it makes it difficult for some outside group like Western Watersheds to be able to sue. If everyone is on the same page from the beginning, it is difficult for lawsuits to be filed, and they found this in Utah.

Assemblyman Goedhart:
You talked about some practices, and I am from Amargosa Valley. We have to worry about the pupfish and the Amargosa big dune beetle, but we do not have to worry about the sage grouse. I guess every area has its particular species.

On these conservation practices you are talking about and public and private partnerships on private land, could you give us a list or an example of a couple of different conservation practices that could help make a healthier sage grouse population?

As a conservation easement, what type of easement are you talking about specifically? I believe that would be in a public domain once you sign that easement over to a government entity.

Shawn Espinosa:
When we talk about those habitat improvement projects, we are really talking about functional sagebrush habitats. It depends on what part of the state you are in. If you are in central or eastern Nevada, many of the problems center on pinyon and juniper encroachment in the sagebrush habitat. We have been engaged with several pinyon and juniper projects over the last ten years or so, whether they involve chaining or cutting. Any time you can enhance a metal or spring system, we have quite a few of those that are damaged throughout the state due to various reasons. We have worked with private landowners to improve those. We have removed some fencing projects. Restoration from wildfire is a big one, and we have worked with the BLM across northern Nevada to try to restore sagebrush habitats to some of these burned areas. I think we are starting to reap some of the benefits from these types of efforts. If you have ever been east of Midas, you can see some improvements that are taking place. We have sagebrush that has come back into these burned habitats, but it is not to the level that we need to make landscape scale changes necessary because sage grouse are used to such a diverse array of habitats throughout their lifecycle.

In terms of conservation easements, there have not been many of them done in Nevada specifically for sage grouse or other species. It is a new thing. What happens is an agreement between the NRCS or NDOW and a private land owner.

Vice Chair Hogan:
We have had some excellent contributions to the general knowledge of what is being done and what can be done and where the funding may come from. There is still room for thought and suggestions. Let me ask if there is anyone who has information they want to give us right now before we turn our attention to a couple of other items on the agenda. Do we have any more contributions?

Judy Stokey, Executive, Government and External Affairs, NV Energy:
We understand the sensitivity of the environment and the sage grouse issue. As others have testified, there are numerable power projects that will hopefully be built. We know we need to address this. I am not going to say where the funding should come from because we are not going there today. We do understand there must be something done.

Vice Chair Hogan:
We must have the chairman present to act on an approval vote. On that technical basis, we have to wait until the next meeting to take action on this.

At this point, to make sure we devote some attention to other subjects that need to be dealt with, the Tahoe Regional Planning Agency (TRPA) and the Southern Nevada Water Authority (SNWA) are both here to testify. Is there a spokesperson for the TRPA ready to testify?

Let me close the hearing on the sage grouse issue and A.C.R. 3.

Joanne S. Marchetta, Executive Director, Tahoe Regional Planning Agency:
I have about a 15- to 20-minute PowerPoint presentation for you today. Speaking of the Tahoe Basin, most of you are familiar with it, and many of you know it well and love it as I do. The Tahoe Basin is 525 square miles of sensitive alpine lake environment, nestled high in the Sierra Nevada, straddling the Nevada and California state lines.

[Continued to read from prepared testimony (Exhibit D).]

I have with me today my External Affairs Chief, Julie Regan.

Assemblyman Livermore:
Can you explain where the revenue is committed? Is that not in a slide?

Joanna Marchetta:
We were not prepared today to provide you with the details of our budget. I can certainly provide that for you.

Assemblyman Livermore:
I wonder why California contributes 52 percent. Was that part of the compact that created TRPA?

Joanne Marchetta:
Indeed. The compact sets forth the requirement that our requests in the two states should come in a one-third Nevada and two-thirds California share. That is a requirement of the compact itself, but over time, because of several sessions of budget cuts, that proportionate share has shifted. California is now providing a larger share than the State of Nevada.

Assemblywoman Pierce:
I have been on the Legislative Committee for the Review and Oversight of the Tahoe Regional Planning Agency and the Marlette Lake Water System for a

number of sessions. This was a nice review. The other morning I heard on the radio about a bacterium that may kill quagga mussels and zebra mussels. What is that about?

Julie W. Regan, Chief, Communications and Legislative Affairs, Tahoe Regional Planning Agency:
There is some promise. There is a brand new news story that we too were researching. Our scientists at the TRPA have been looking into it. It is not ready for us to use at this point, but we are certainly encouraged, and we will be following that as it evolves.

Assemblywoman Pierce:
That would certainly be a wonderful thing. It is such a huge problem.

Julie Regan:
Absolutely.

Assemblyman Aizley:
Where is the Truckee Marsh area?

Joanne Marchetta:
The Upper Truckee River Marsh is on the south shore of Lake Tahoe. It is in the proximity of South Lake Tahoe, just about at the Nevada state line. If you are familiar with Pope Beach or Baldwin Beach, it is close by.

Assemblyman Aizley:
South of Emerald Bay?

Joanne Marchetta:
North of Emerald Bay. It is at the very tip of the south end of the lake.

For the record, the Upper Truckee River is the largest contributor of fine sediment to Lake Tahoe. It contributes 40 percent overall of the sediment in Lake Tahoe. All of our restoration efforts on the south shore are related to the Upper Truckee River and are among the highest priorities of our Environmental Improvement Program. That is why we thought it was important for you to have an image of what that sediment load looks like when it is entering the lake.

Vice Chair Hogan:
Thank you for your very full explanation. It is quite an impressive story you have to tell.

In the interest of time, and since your presentation was very complete, we should take advantage of some of the senior executives of the Southern Nevada Water Authority (SNWA) who have a great deal of influence of water in southern Nevada.

[Chair Carlton arrived and assumed Chair.]

Patricia Mulroy, General Manager, Southern Nevada Water Authority:
Seated on my right is Mr. Phil Speight who is the Deputy General Manager of Administration. Sitting on my left is Mr. John Entsminger who is the Assistant General Manager for the SNWA. There are many of you for whom this is my first opportunity to appear before and introduce you to the SNWA, so I will briefly go through the history of the SNWA, who we are, and who we represent (Exhibit E).

The SNWA was created in 1991 through a joint powers agreement among all the water and wastewater agencies in southern Nevada. It came about as a result of an escalating problem of water shortage due to rapid growth and development in southern Nevada. In recognition of that fact, without the highest level of cooperation and coordination between the agencies, we would all run out of water as early as 1995. The responsibilities given to SNWA by its founding agencies were to manage the regional water supplies, implement conservation programs, build and operate regional facilities, embark on long-term water resource planning, and meet all state and federal water quality standards as they relate to water being delivered from Lake Mead through the Southern Nevada Water System.

The water resources for southern Nevada are diffuse. Unfortunately, at this point we rely predominately on two resources: Colorado River resources and groundwater resources as they exist below the valley in southern Nevada. We are one of the few, if not the only, entities in the United States that actually recycles 100 percent of its wastewater and puts it back to beneficial use in the community. We have become one of the most aggressive areas of conservation in the United States.

The Colorado River represents 90 percent of southern Nevada's water resources. Therein lies our blessing and our challenge. The Colorado River is probably the most litigated and the most contentious river system in the United States. Its history amongst the seven states began in 1922 when the seven states entered into a compact that was ratified by the Congress of the United States and ratified by the legislatures of each one of the states bordering the Colorado River. The states that belong to this compact are Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada, and California. The run-off that

has been used as normal run-off for the Colorado River system has been a figure of 15 million acre-feet. Even if you assumed a steady 15 million acre-feet as a run-off, in 1922, the river was divided in half. There are four states that comprise what is called the Upper Basin of the Colorado River watershed and three states that comprise the Lower Basin of the Colorado River watershed. Each of the two basins was given 7.5 million acre-feet to divide between themselves. In 1944, the United States entered into a treaty with Mexico, and one of the provisions of that treaty is the United States obligated itself to deliver 1.5 million acre-feet to the country of Mexico. The Colorado River system has an annual evaporation of around 2 million acre-feet off all its reservoirs, streams, and inflows. You can tell even with a 15 million acre-foot annual run-off, the system is 3.5 million acre-feet in deficit from the beginning.

The system's main storage components are Lake Mead and Lake Powell. Each one of these two reservoirs holds 26 million acre-feet. In 1929, when Congress passed the Boulder Canyon Project Act of 1928, it established the building of Hoover Dam and the creation of Lake Mead. At that time, the four Upper Basin states were insistent on a reservoir that was not intended for delivery for Lower Basin demands but to protect Upper Basin interests be included in that system development, hence the building of Glen Canyon Dam and the creation of Lake Powell. Under the compact, one of the risks the Upper Basin bears is it must deliver to the Lower Basin 75 million acre-feet over 10 years. If it fails to do so, the Lower Basin can place a call on the Upper Basin. That means the Upper Basin has to cut off all its uses until it has delivered to the Lower Basin the prerequisite amount of water required by the compact. Lake Powell is the Upper Basin's savings account. Everyone has always known the Colorado River has high and low flow periods. To get through those low flow periods, the Upper Basin wanted the creation of Lake Powell to meet its Lower Basin delivery demands without having to cut off its users in the Upper Basin. As the Upper and Lower Basins developed, water started bleeding out of the Colorado River watershed. In fact, we are probably the only city that actually sits on the Colorado River.

In the State of Colorado, water is moved through a massive aqueduct through the Rocky Mountains across the Continental Divide from the west slope of the Rockies to the Front Range cities of Denver and all the other Front Range users, the Colorado-Big Thompson Project, other agricultural users, and any number of communities have emerged on the east slope. In the State of Utah, the Colorado River is moved across the desert of Utah to the Wasatch Front, fueling the cities of Salt Lake City and Provo and the urban development as well as any number of agricultural users along the Central Utah Project. In the State of New Mexico, the Colorado River is diverted out of its watershed into the Rio watershed and delivered to Albuquerque, which lies exclusively in the

Rio watershed, so again water leaving the Colorado River system. In the State of Arizona, water travels 360 miles across the Arizona desert from Lake Havasu through many agricultural communities to not only the city of Phoenix and the larger Phoenix metropolitan area, but as far south as Tucson. In the State of California, the largest number of diversions out of Havasu occurs leaving the Colorado River watershed. It travels through the All-American Canal to the Imperial Valley, which has the largest single share of the Colorado River, and through a massive aqueduct built by the Metropolitan Water District across 600 miles to the coastal cities of California.

The cities and the economy represented by these seven states are one quarter of the economy of the United States. Twenty-five percent of the entire gross domestic product of the United States rests in these seven states, hence changes on the Colorado River system, and changes to agreements and modifications to how water is managed in the system, have serious consequences. As the Colorado River went into drought, we and the Colorado River system have become the focal point of all the world's markets. Any community, whether it is Dubai, the European investors, or the Asian investors, and there is a lot of that in southern Nevada, if they have it invested in California, Colorado, or in any one of the mega-west cities, they watch very closely what happens with the Colorado River. It is one of the three top issues of economic liability or exposure they weigh when making a decision as to whether or not to invest in any of these areas.

As you can see from the next chart, the river was then further subdivided between the various states. Nevada received the smallest sliver, and from the time I took this job in 1989, it has been the single biggest bone of contention. Let me remind you of what I said earlier. The Colorado River Compact, as stringent as some would believe it is, at its foundation, allowed seven states to do anything seven states can agree to. No one state can roll any of the other states, and it creates absolute equality, whether you are a populous state or a less populous state. That was the whole intention of the compact. In 1922, when these negotiations occurred in Santa Fe, southern Nevada was a whistle-stop on the Union Pacific Railroad. We had very few people living in southern Nevada, and no one ever imagined that a metropolitan area the size of Las Vegas, Henderson, and North Las Vegas would ever emerge in the Mojave Desert.

As I said earlier, for us it represents 90 percent of our water supply. This meager 300,000 acre-feet we can supplement. Thanks to some creative agreements that were entered into in the 1980s and were then solidified when the SNWA was created, we have the ability to treat an extraordinarily high level of wastewater and return it to Lake Mead. We can take an additional gallon of

water out of the system, so at the end of the year we look at the number we net used, and how much we brought in, and how much we returned. You can take an allocation of 300,000 acre-feet and increase it to 470,000 acre-feet. The more we conserve outside, where we only use the water once, and the more we use inside, the more that multiplier increases.

When SNWA begins its resource planning, we do two things. We look at what the population projections are for southern Nevada, and then we overlay, as our first source of supply, a conservation line. The dotted line you see on this graph is what southern Nevada's demand would be sans conservation. We have been extremely successful in the area of conservation. With the onset of the drought at the beginning of this century, we began to submit to the State Engineer two sets of water resource plans: one under normal river conditions, and one under drought conditions. They are very different plans. We will start by looking at if we have a healthy Colorado River, and by that, it means we have not reached critical elevations in Lake Mead, it would trigger shortages in the Lower Basin. We have filled in the line assuming conservation and brought the demand down to the solid red line, which that filled with resources we have negotiated both on the river and we have invested in the State of Arizona, and obviously our in-state project. As you can see, the in-state project, especially with the reduction of growth, has pushed out significantly under normal river conditions.

We have a series of temporary resources. During the 1990s, we spent all our time focused on the Colorado River. We were beginning to loosen up that choke hold that had been called the "law of the river" in order to allow for certain creative solutions between various partners, especially in the Lower Basin. Today, we have an agreement with the State of Arizona. We are paying the State of Arizona $350 million, and for that, they are banking 1.2 million acre-feet of their unused apportionment in their groundwater basins for our future use. How would we use it? The Central Arizona Water Conservation District manages the aqueduct and is the banker. It simply puts our stored water in the central Arizona aqueduct for delivery to the cities in Arizona and in exchange would not take delivery out of Lake Mead. We would take the water from Lake Mead instead. There is no profit being made by the State of Arizona. We are simply covering their cost for what it costs them to recharge those basins. With California, we have a virtual water bank. That is water we have conserved in southern Nevada. We are allowing our partner, the Metropolitan Water District of Southern California, to use our conserved water today and we will then get it back in the future when we need it. They have had an excruciatingly difficult five to six years with what has been going on in the Bay Delta in California and the droughts that have hit. We have partnered with them. We are helping them today, and in the future, we will get that back.

In southern Nevada, we began banking our own overdrafted groundwater basin because the southern Nevada water system was not completed until 1971, and until then, the State Engineer was issuing temporary water rights causing the basin to become extremely overdrafted over time. We began recharging that basin in 1985. We take treated Colorado River water during the winter months when our demands are down, and we reverse the pumps and wells and inject that water into our groundwater basin. Today, we have 330,000 acre-feet we have stored in the groundwater basin and have the ability, within certain limitations on an annual take, to recover that water in the future.

Finally, one of the more creative agreements we entered into was with Metropolitan Water District of Southern California and the Central Arizona Water Conservation District in Arizona. We paid for a reservoir on the All-American Canal. The way the system operates, we were annually over delivering to Mexico significant amounts of water because if it rains during a period where water is travelling from Hoover Dam down to the Imperial Dam, they do not take it in California, so it is not debited against their allocation, and it travels into Mexico. We invested in the construction of that dam, and for that, we got a onetime savings account in Lake Mead of 400,000 additional acre-feet we can take unless the system goes into shortage.

Many of these changes came about as part of the 2007 agreement the states entered into with the federal government. We now have the ability to create what is called intentionally created surplus. This is a fancy name, and one of the rules on the Colorado River is if you do not like the concept of wheeling, call it something else and it becomes possible. We have had water rights on the Virgin River and wanted to be able to lease or purchase water rights that had a water right date preceding the compact from farmers and irrigators on both the Muddy and Virgin Rivers. We have done that to date, and we are allowed to store that water in Lake Mead or have it simply travel through the lake and take it at our intake at Saddle Island. The other intentionally created surplus comes through system deficiencies where we conserve water and can store that in Lake Mead.

We have been extremely active in the area of desalination. I know desalination has been a hot-button discussion, especially in light of the in-state water project. We have to first recognize we are an inland state. We lack coast. There are one or two desalters that are moving to final permitting in southern California. The California Coastal Commission is not particularly keen on dotting the landscape with desalters and power plants next to them. There are enormous environmental concerns regarding both intake and outfall of the brine that results from desalination, but we have been particularly active with partners in Mexico. Mexico has a different attitude toward desalination than

California. Their coastline is not as developed as the United States coastline. We, together with the Metropolitan Water District and the Central Arizona Water Conservation District, have invested in feasibility studies in Rosarita Beach, and we are also looking at possible locations on the Rocky Point side of the Mexican coast. The idea would be that we invest in desalters and would exchange water with the country of Mexico. We would take it as Colorado River water, and they would keep the desalted ocean water. The difficulty you run into is the minute the system goes into stress, there is nothing to exchange. There is nothing left in the Colorado River system to exchange. At one point, we did a feasibility study of what it would cost us to desalt water on the coast and pipe it into Las Vegas. The annual power bill alone would be $400 million a year. It is an enormous energy intense project to desalt water. Energy intenseness has gone down some, but the technology is not where it needs to be yet. Then, there are the pumping costs all the way to the coast across those mountain ranges to the inland.

The Metropolitan Water District, the Central Arizona Conservation District, and the SNWA are in an important three-party partnership. It is probably more important than anything else because we decided over the last ten years to lay down our guns to stop fighting. We have recognized that if it hurts Metropolitan, it hurts southern Nevada. And if it benefits Arizona, it benefits everyone else. We are doing everything in tandem, and we are not competing with one another. We are jointly investing in research and trial projects. The one we are doing domestically is a desalting facility that was built and completed during the 1990s in Yuma, Arizona. It treats agricultural runoff from the Wellton-Mohawk Irrigation and Drainage District, and the purpose of that is to meet the water quality standard that is dictated by our treaty with Mexico. It is a salinity issue. That desalter had been shut down. It was run for 48 hours and turned off because, during the time it was being constructed, those very saline flows from the Wellton-Mohawk Irrigation District were diverted away from the river. It crossed the border into Mexico, and they created the Cienega de Santa Clara, which is one of the most pristine bird habitats and one of the most important pieces of the Pacific Flyway that has been accidentally created. It has an outflow, so unlike the salt and sea, which is going to go hypersaline, it is a pristine habitat and is in the middle of nowhere with no development around it. The large national environmental groups, both on the United States and Mexican side, have been particularly keen on protecting that. Among the three of us, and with the cooperation with the U.S. Department of the Interior, we were able to buy and fund enough water acquisition in Mexico, to protect the Cienega and to run the Yuma desalter to test a facility the United States has already invested in heavily to see what opportunities it presents to us.

Finally, 2007 also saw the wake of an augmentation study. When I said earlier the Colorado River system is 3.5 million acre-feet in deficit, that is of utmost concern to all seven states of the Colorado River watershed. We are funding, in partnership with the Department of Interior, a basin-wide augmentation study to look at any and all possibilities of how the system as a whole can be augmented. In that agreement, Nevada was able to persuade its neighbors that the first 75,000 acre-feet of augmented supply, be it through desalting or other measures taken to bring water into the Colorado River watershed, would come to Nevada. We will be the first beneficiary of any augmentation.

If those are our permanent resources, nothing has been more defining to the Colorado River water system than the drought. It started in 2000 as a low flow year, and we saw 62 percent of normal run-off. Even though it raised our eyebrows, we were not overly concerned. We had seen high flow years and low flow years before. By the time 2002 hit, we saw a 25 percent of normal run-off into the Colorado River watershed. Lake Powell crashed and subsequently Lake Mead began to plummet dramatically. Our concern became extremely heightened. That was then compounded by studies that were beginning to emerge from both the National Academy of Sciences and from the global climate science effort that has been ongoing. The Colorado River watershed would be one of three or four watersheds around the world that would be severely impacted by drought as a result of climate change. I am a pragmatist, and in many circles, climate change is a function of religion rather than science. I choose not to embark on it. We have a community of two million people who rely on a stable and secure water supply. We are looking over the last ten years at a 69 percent of normal run-off. To show you how dramatic the change can be in the watershed from month to month, on the left side you see what made us cautiously optimistic in December. We had an extraordinarily wet December after a long period of nothing. On the right is the January run-off. It is that volatile. Had it not been for some extraordinary measures we have taken, we would have been either in shortage conditions in 2011 for the first time in the history of the Colorado River watershed, or we would have begun to see recovery. Lake Mead has plummeted down to 1082 feet, and it is full at an elevation of 1220 feet. Over the course of ten years, this last year we saw it drop as far as an elevation of 1082 feet. Between some of the cyclical uses in the winter months where the agricultural users use less in the Lower Basin, the precipitation we enjoyed in December has restored Lake Mead to an elevation of 1093 feet. That is not anything to start celebrating over, but it is a recovery.

Over the course of the last year, the U.S. Department of the Interior, the U.S. Department of State, the seven basin states, and the counterparts in Mexico have been negotiating with Mexico to find a path for them to be able to

leave water behind in Lake Mead. In December of last year, Department of Interior Secretary Salazar signed an agreement whereby between now and 2014, as a result of the earthquake that destroyed much of the infrastructure last Easter in the agricultural area in Mexico, Mexico will leave behind in Lake Mead as much as 280,000 acre-feet. That would make a big difference. When Lake Mead was a little fuller, the average was about 100,000 acre-feet equaled a foot of elevation in Lake Mead, it is now 80,000 acre-feet for a foot of elevation. You have to remember it is a V shape. The further you go down, the faster the rate of decline.

These extraordinary measures, along with a conscious decision by both the Metropolitan Water District and SNWA to not take water off the system in off-system reservoirs around water banks but leave that water behind in Lake Mead, will hopefully prop this system up. Even if we have a minimum release from Lake Powell this year, we will not cross the 1075 foot threshold in 2011. Catastrophic evaporation during the spring could still happen, but it is highly unlikely. We are prepared, and we now know we have done everything we can to leave as much water in the system to avoid that shortage declaration.

When you look at southern Nevada's infrastructure, there are some key elevations in Lake Mead. As you can tell, the first elevation that is of major concern to us is at elevation of 1050 feet. The original southern Nevada water system completed in 1971 had the intake at an elevation of 1050 feet. If we break that elevation, southern Nevada loses its upper intake. Losing that upper intake means we lose 40 percent of our capacity to move water from the lake into southern Nevada. Our second intake, which was completed in the 1990s, sits at an elevation of 1000 feet. If we assume a continuation of an average of 69 percent runoff in the system, we will break the elevation of 1000 feet in the year 2015. From a planning perspective, we hope for the best but have to be ready for the worst. Simply saying it will not happen is something neither the investment community, residents in southern Nevada, nor the State Engineer, who must sign subdivision maps for southern Nevada, nor we as resource planners, can accept. For that reason, we are building the third intake. It is an extremely difficult project. It encompasses one of the most complicated tunneling and mining excavation projects that have been embarked on anywhere in the world. In it, we are going down 700 feet and boring 3.5 miles underneath Lake Mead to come up at an elevation of 860 feet.

Recently in the press, there has been much reporting on the cave-in we experienced. We went through massive geotechnical explorations before the contractor started his work, but anybody in the mining business can tell you, until you are actually down there, you do not know what you will encounter.

They encountered a fault line that brought water and loose materials into the cavern. After many tries, even though the contractor tried to work through that problem, geologists have determined that area is too unstable to continue, so we are bypassing that fragile area and reconnecting with the original alignment.

We have talked about resource cutbacks in the Lower Basin. In 2007, the states agreed to a three-tiered cutback. When Lake Mead hits elevation 1075, the Secretary of Interior will declare a shortage in the Lower Basin. When that shortage is declared, southern Nevada will not be allowed to take 13,000 acre-feet off its base elevation. Arizona's share is 320,000 acre-feet. You might ask why California is not part of this shortage picture. That belongs to the history and myth of the Colorado River. In retaliation for having lost a U.S. Supreme Court decision, the states of California and Arizona went to Congress for funding for the Central Arizona Project and subordinated the entire water supply of the Central Arizona Project to all of California's uses. In theory, the way it exists today in federal law is the entire Central Arizona Project would be bone dry before the State of California would have to reduce a single gallon. My guess is that will not happen in the next round of shortage discussions, but for these first three tiers, Arizona was willing to accept that.

At tier two, Nevada, which had a share of the shortage going into that confrontation between California and Arizona, still had a share of the shortage coming out of it. Nevada takes 17,000 acre-feet of shortage and Arizona takes 400,000 acre-feet of shortage on an aqueduct that carries 1.2 million acre-feet and is the main water supply for both the Phoenix and Tucson areas. At elevation 1025, we encounter the severest cut. Nevada will take a 20,000-acre-foot cut, and the State of Arizona will take a 480,000 acre-feet cut, which is almost half of all the water in the Central Arizona Project. You can see by the time we get to elevation 1025, we have only cut 500,000 acre-feet of use out of this system. We have been persistent in our efforts over the last several years to get the basin states to begin to talk about what we are to do below elevation 1025. My guess is once we break elevation 1075, those discussions will be in full force.

In order for Nevada to protect elevation 1000, you have to cut 3 million to 5 million acre-feet of use out of the system. There is no way you can do that without touching California's allocation, and there is no way to do that without maximum cooperation between all seven states. For Nevada, that comes with the question of what happens to our water supply. We can absorb all three layers of cut. Southern Nevada has already conserved that amount of water. I can sit here and confidently assure you that even if we were to break elevation 1025 tomorrow and would have to take a 20,000-acre-foot cut, southern Nevada's economy would be unaffected. We saw it coming and knew we

would have to take cuts. We proactively began to drive conservation in 2003 to where it is today. For southern Nevada, it means a very changed resource plan. We still have some limited ability to take water from the California or Arizona bank. Our agreement with Arizona states when and if the Arizona cities go into shortage, and are restricted in how much they can take from bank, we will take a like reduction in annual delivery from the bank. We have our bank in Nevada, and we can still use the water we are leasing and have purchased on the Muddy and Virgin Rivers. It becomes virtually impossible to meet the demands of southern Nevada without the inclusion of the in-state project. It pushes the time frame for the need of that project much closer to today.

Conservation is not only southern Nevada's cheapest resource, but it is also our first tier of defense from the scourges of the drought. Our conservation measures have predominantly focused outside. Why is that? As I told you, we recycle everything we use inside. There is no additional resource to be garnered there. The only place southern Nevada creates additional resources is by conserving outside. We began to pay our customers as high as $2 a square foot to remove turf, and today we are paying them $1.50 a square foot because we discovered the golf courses were actually making money on this proposition, and we did not want to subsidize golf in southern Nevada. The whole time we were growing by leaps and bounds, we increased our population by 400,000 inhabitants, and we were able to reduce the amount of water we are using by 26 billion gallons. When in 2002 we were delivering 325,000 acre-feet from the Colorado River, this last year we will come in around 245,000 acre-feet.

Before I get into the importance of the in-state project, let me show you once more this chart of our exposure should Lake Mead continue to drop. It is both an exposure on a facility side and on a resource side. We know, if 5 million acre-feet of use must be cut out of the system, southern Nevada is going to get hit. That has also been the incentive for why, despite the fact there is an economic slowdown in southern Nevada, we cannot stop pursuing the in-state project. We spent a significant amount of time looking at any and all alternatives to that, but in the final analysis, we need to diversify. Just like an electrical generator diversifies its sources of energy for a community, we have to begin to diversify where our water resources come from. Everywhere in the world there are discussions around climate change and how to combat the effects of severe protracted drought, whether it is here, the Middle East, or Australia. Part of that solution has been, and can only be, diversification of where your resources come from, so you can adapt to changes as they occur.

The in-state project is a series of groundwater wells, pipelines, pump stations, regulatory tanks, treatment facilities, power lines, and support facilities. Previously, the State Engineer had awarded southern Nevada 78,755 acre-feet of ground water to be developed in Lincoln and White Pine Counties. As a result of the Supreme Court decision, that was a procedural issue between the Supreme Court and the State Engineer. We will spend another $3 million to $5 million this fall to rehear these water rights in front of the State Engineer. At the same time, we will also be completing a multimillion dollar environmental impact statement with the recorded decision hopefully being completed by early 2012.

In order to protect the groundwater resources, and I know environmental protection is first and foremost on everybody's mind, we embarked on acquiring a series of ranches in Spring Valley. Spring Valley is our anchor basin. As you can see from the map the city of Ely does not lie within Spring Valley. There is no town there. It was a series of ranches. These ranches are owned and operated by us. Our intent in buying these ranches was to procure surface water rights, which will allow us to manage the groundwater basin. It is our intent, as the spring runoff hits the Spring Valley, to build infiltration basins at the base of the mountains in order to force that water back into the ground and not let it evaporate on the playa. We now also have all the landmass we need to provide the necessary habitat for the endangered species that exist in Spring Valley and to protect those critical environmental resources. We entered into a management of mitigation and monitoring agreement with all federal agencies. That was sufficient for them to withdraw their protests on those valleys. Those agreements are with the BLM, the National Park Service, USFWS, and the Bureau of Indian Affairs. We will forever jointly manage those basins. We will never have the ability to go in and pump at will whatever water we want to pump out of that system. We will have to balance it every year with the environmental needs and have gone into an expensive and very diligent groundwater management program with those federal agencies in that area. If you were to see the volumes that document represents, they are quite thick and extensive. Through those acquisitions, we acquired 34,000 acre-feet of surface water rights, 7,000 acre-feet of groundwater rights, and 23,000 acre-feet of supplemental water rights.

At issue for a long time have been our filings in Snake Valley. Those have not been adjudicated by the State Engineer, and they have been the subject of much controversy between us and our neighbors in Utah. There was a process that was embarked on by the two states several years ago, and an agreement that was signed by the State of Nevada and us is sitting on the desk of the Governor of Utah, which provides equal protections and mitigation plans for the Utah users. It is more than they would ever get if we end up in front of the

U.S. Supreme Court in an equitable apportionment case. The water for Snake Valley originates in Nevada. It is the exact opposite of the Colorado River system, where the water originates in the state of Utah and ends up in Nevada. Here the water starts in Nevada and goes to Utah. This agreement, which is politically volatile in Utah, is one that has immeasurable protections and dollars committed by SNWA to protect those areas. When we go back to rehearing in September, we are not looking at Snake Valley but only at the other basins. To be very frank, there are other ways Utah can protect the southern Nevada water interests, but it will require them going to users farther north in Utah. In regards to how they manage and use the Colorado River system, they are planning a pipeline from Lake Powell to St. George to deliver 120,000 acre-feet out of Lake Powell, further stressing the Colorado River system. They have some abilities to be partners on the Central Utah Project, and we have offered this to the representatives from Utah. Today, they are simply waiting for Nevada to kill this project, so they do not have to embark on any discussions and come out winning on both ends.

The single biggest issue we have in front of the Legislature this session is funding. As all other entities, we have been extremely stressed when it comes to funding sources. We divide how we pay for our system into various categories. We charge our member agencies a wholesale delivery charge for water we deliver to them from the southern Nevada water system. This pays for operations. Back in the 1990s, a large community group made up of business interests, residential interests, and community interests developed a funding formula for capital that included a regional connection charge that every developer pays no matter what jurisdiction they develop in. There is also a regional commodity charge that is tagged on to every single water bill in southern Nevada. In 1995, the voters approved a quarter-cent sales tax with a 73 percent margin. We received 10 percent of all the proceeds from the sales of land under the Southern Nevada Public Land Management Act of 1998. When you look at what that does to our funding sources, you have to look at the relative size of the two pies. The regional connection charge came in at a much higher level than we expected and was to comprise 57 percent of our revenues. The next chart will show you exactly what has happened to that regional connection charge. It has gone from a high collection of $188 million in 2006 to hopefully $3.2 million in 2010. We first went to the bankers when the SNWA built the first $2.5 billion worth of facilities for southern Nevada for the second intake, and second tunnel through the mountains, second large transmission lines through the valley. The bankers were extremely concerned about our reliance on this volatile revenue source. They required we carry a very large reserve. It is that reserve that has prevented us from defaulting on our bonds over the last several years, as the collections have not come in. It has put an extraordinary amount of importance on the commodity charge,

which SNWA Board of Directors raised for 2010 and 2011. It used to be 10 cents per thousand gallons, and it went up another 10 cents in 2010, and it went up this January another 10 cents.

Unlike many local government agencies, we are not a service organization. We are a utility. As all utilities, we are extremely capital intensive. As you can see from this, an overwhelming portion of our revenue goes to construction and debt service. The reserves we have are fully committed, and the reliance on whatever income can come in to bolster up those reserves becomes very important. The third intake is a project that will cost us almost $1 billion. It is one thing to build that kind of infrastructure as we did in the 1990s when you have new customers hooking onto the system in order to pay for those facilities. It is quite another when you must go to a flat or receding customer base and build facilities you never imagined you would have to build due to extenuating circumstances that have nothing to do with growth. When the Legislature allowed the county commission to impose the quarter-cent sales tax and allowed all counties in Nevada to impose a like quarter-cent sales tax for water and wastewater projects, only Clark County had a cap imposed on how much revenue it was allowed to collect from that sales tax. Today, we must go back to Wall Street and sell another $400 million in bonds. When we run out the models on how we are going to repay that debt, there is a cliff in 2025 when that sales tax expires. It makes it very difficult for us to be able to sell bonds at a reasonable rate or instill enough security in an already very shaky financial community in lending that kind of money when the revenue source expires and disappears. Over the last decade, southern Nevada has collected $800 million from that sales tax, and only $496 million has come to SNWA. The rest has gone to other communities and wastewater agencies for their projects. We are going to be asking the Legislature to lift that sunset on that sales tax and put us on par with every other county in Nevada, allowing those revenues to continue to come in and give us the breathing room we need to be able to bond for the money we need to finish the third intake.

Chair Carlton:
Thank you for your presentation. You went in-depth with it, but it is one of those things that needs to be out there and talked about in this Committee, the Committee on Government Affairs, and the other committees that will be dealing with some of these issues. We have talked many times about many of the issues going on. I will go ahead and open it up to the Committee if they have any questions.

Assemblyman Goedhart:
I do buy alfalfa along the Colorado River, and I deal a lot with the Colorado River Indian Tribes (CRIT). It is amazing because I talked to one gentleman who said

they have to put more farm ground in because we had to let tens of thousands of acre-feet go down the river. We do not have enough land to flood it on. Are you able to enter into any type of leasing agreements with them instead of letting them have it flow past their crop land? Are you able to enter into talks with them or California farmers to leave the water in Lake Mead?

Patricia Mulroy:
As you can imagine, crossing state lines in talking to farmers becomes an extremely volatile issue. In fairness to the Metropolitan Water District of Southern California and the Central Arizona Project, they are in the same boat we are. They are looking at water from those agricultural areas as their backup supply. Metropolitan has a service area of over 20 million people with the fifth largest economy in the world. It is extremely nervous about southern Nevada coming in and leasing water within California. In fact, there is an agreement between the various takers of Colorado River water and California that ignores any unused Colorado River water by the agricultural pumpers to Metropolitan. They already get it for free, and we would be stealing it from Metropolitan. There have been some creative endeavors by Metropolitan and the Palo Verde Irrigation District, where they are paying Palo Verde farmers to rotationally fallow their fields. I am an optimist. Given the close relationship we have forged with Metropolitan, I think by using the vehicle of Metropolitan as the transference of that water, we might be able to temporarily share some of that supply depending on what California's resource picture looks like at that time.

Assemblyman Goedhart:
Thank you for a good explanation. Have you also engaged in any discussions with any of the CRIT folks down the river?

Patricia Mulroy:
It gets even more difficult under federal law dealing with tribes. The use of Indian water, off reservation, is a hot-button issue. Let me just say, no.

Assemblyman Goedhart:
These folks are just watching the water pass the reservation because they do not have enough ground to put it on. It would be an extra revenue stream for them. It may not be long-term, but any water you can bank would be water you can interject into a greater supply for us.

Assemblywoman Pierce:
I am looking at slide 8 of the PowerPoint, and it mentions outdoor consumption of 300 acre-feet. So, 300 acre-feet a year is used for outdoor consumption?

Patricia Mulroy:
Oh heavens, no. We have the ability to bring into southern Nevada 300,000 acre-feet of use. It goes through the system, and if we were to put all our diversions into southern Nevada, it is 300,000 acre-feet. Above you see the return flow number of 200,000 acre-feet. We use around 65 percent of the water outside, but it used to be well over 75 percent of the water outside. Despite the economic downturn, we have stayed true to our commitment to conservation and are continuing to refund and pay for turf removals in southern Nevada.

Assemblywoman Pierce:
How much of this is swimming pools? Is that a significant number, or is it almost nothing?

Patricia Mulroy:
Compared to grass, it is nothing. Grass is the number one user of water in southern Nevada.

Assemblyman Ellison:
About seven or eight years ago, I was part of a meeting where we talked about the larger cities dealing with the Colorado River. Are they looking at moratoriums for building and expansion? I brought this up eight years ago, and we are still building.

Patricia Mulroy:
It is happening all over the country. Conservatively, the United States is estimating the population will increase by 130 million to 300 million people by 2050. The economic consequences of a moratorium would bankrupt Nevada. It is one thing to have growth controls in bedroom communities like Boulder City, which has a strict growth control, but nobody works there. They work in southern Nevada, Las Vegas and Henderson. Most of the jobs are outside of Boulder City. It is another issue if you were to take the economic engine and declare a moratorium and allow a business or house to be built and allow no one else to move in. I do not know how you would do that under federal land laws. We are not the State Land Use Planning Agency. There is a lot of discussion in southern Nevada right now about smart growth and incorporating water conservation measures and water practices into land use planning. To simply declare a moratorium, you would find resistance in any city. There are Denver, Salt Lake City, Los Angeles, San Diego, Phoenix, and other large metropolitan areas with 25 percent of the country's gross domestic product. To put a hammer on that would have significant national consequences.

Assemblyman Ellison:
You have done a great job on conserving what you have. I hope we can figure out what to do in the future because it affects northern Nevada as well.

Patricia Mulroy:
Absolutely. Hence, I would remind you we talked about this augmentation study. This is not a Nevada-only issue. It is an issue for the whole basin about finding a way to augment the entire Colorado River system and securitize that water supply. We have moved water from the west to the east for a hundred years. If climate scientists are right and the west is getting dryer and the east is getting wetter, why can we not start rethinking how we move water around in the country? I think before everything is said and done, this will be an issue Congress will have to grapple with. It cannot afford to allow those seven states to crater. Something is going to have to give. With the flooding I expect to see ravage the Midwest again this year, I think there will be some discussions about protecting those transportation ways. Transportation is the number one issue on some of those larger river systems that sit to the east side. We have been bleeding water out of the Colorado River watershed. Why can we not take some of those areas that sit on the eastern side and replace where that water comes from and allow the water in the Colorado River watershed to stay on the west side of the Continental Divide and not bleed into all these other watersheds? For example, the Mississippi River has 33 states in it. It will be a long conversation.

Chair Carlton:
I am from that part of the country and can imagine what that conversation would be like.

Patricia Mulroy:
I am really looking forward to it.

Assemblyman Hansen:
It is $1 billion to do the third intake. What is the estimated cost to do the pipeline from northern Nevada to southern Nevada?

Patricia Mulroy:
Tell me when we are going to build it. Right now, we have a number of $3.5 billion embedded in our documents, but let us see what happens. If Lake Mead hits 1075 feet, our resource planning calls for us to begin designing construction. It becomes a risk analysis. How much risk are you willing to bear given the time frame it will take to build it? We would envision beginning phase one, which would be in Lincoln County.

Assemblyman Hansen:
Is that phase already on the drawing board?

Patricia Mulroy:
No, we have to go back to hearing. The U.S. Supreme Court eradicated the water rights. If we have the water rights reinstated, and we get a favorable record of decision on the environmental impact statement by the spring of 2012, then this project will sit on the shelf until Lake Mead hits those critical elevations and it becomes the project of last resort.

Assemblyman Hansen:
With such high levels of unemployment in the construction industry, it would be nice to have something to look forward to.

Patricia Mulroy:
It is thousands of jobs. In fact, we have a project labor agreement on this project should it ever move forward, and that includes both the northern and southern unions. The White Pine and Lincoln boundary line is the dividing line between the two unions. We have a project labor agreement on our third intake. On those large projects, we get international conglomerates. To avoid them bringing in workers from all over the country, we force them to use predominately Nevada workers.

Assemblyman Hansen:
Good. Thank you very much.

Chair Carlton:
If you could put one quick thing on the record, it is something we talked about before. As the lake goes down, the solids go up and the quality of the lake gets worse. That is not something we have touched upon.

Patricia Mulroy:
Whatever contaminants are in the lake will increase. We have one of the most sophisticated water quality labs in the country. That was part of our 1990s expansion efforts. Our scientists are leading the country in research into endocrine disrupters and pharmaceuticals. I know there was a report issued by the Environmental Working Group that came out recently. We give as much credence to the Environmental Working Group as the fourth graders in Reno do. There are national efforts being embarked on to challenge their science. This is not peer-reviewed science. The mission of the Environmental Working Group is not a bad one. They want the Environmental Protection Agency (EPA) to look at contaminants and begin to identify health risks of newly discovered contaminants. They want thresholds set for that. The driving issue in the

discussion is the chromium 6 issue. In Lake Mead, our testing has shown 0.02 parts per billion (ppb) to 0.04 ppb detection of chromium. The current California health guideline is 0.06 ppb, and they want to drive it down to 0.02 ppb. Where we are finding higher levels of chromium 6 is in our rural communities including Searchlight, Blue Diamond, and Mount Charleston. Anywhere there is a mining operation there is a risk of elevated chromium 6 levels. Mount Charleston has us stumped, and we do not understand why the chromium 6 level is higher there. The cleanest source of water is in Lake Mead right now. There is no heavy industry upstream. The reason we got dinged by the Environmental Working Group is because we can test to parts per quadrillion. We can detect things most utilities in the country cannot test to. The minute you test to it, Nevada says it wants to know, so we must report it. Those become public documents. Because we found it, we had a longer list of contaminants, but these are at infinitesimal levels.

We meet and exceed federal water quality standards in all of our deliveries, and the Clark County Reclamation District is going to begin ionizing its wastewater to remove pharmaceuticals and endocrine disrupters from the reused water leaving our wastewater agencies. A lot of that treatment must occur at that level. It is some of the cleanest wastewater in the country. It is high-quality reused water that is going back into Lake Mead. We have a water quality management agreement with Metropolitan and Central Arizona Project and we have a Boulder Basin adaptive management plan. We test constantly in Lake Mead. We have the largest ozonize facility in the United States. At the southern Nevada water system, we ozonate all the water, which is extremely power intensive, and our annual power bill is $50 million. We are committed to watching it very carefully as this lake recedes.

Assemblyman Goedhart:
I believe the largest water consumer in southern Nevada is probably the public sector and governmental agencies. Is that the largest? Who is the largest?

Patricia Mulroy:
Residential.

Assemblyman Goedhart:
I think the linen industry is probably one of the top five as far as the big users.

Patricia Mulroy:
No, number one is residential, and number two is golf courses.

Assemblyman Goedhart:
I think it is one of the top five from what I have seen in the paper.

Patricia Mulroy:
They are a large user from the city of North Las Vegas. Remember that every drop that hits the sewer system is not lost. That is why the Las Vegas Strip uses 3 percent of our water. They do not peak and use very little, in relative terms, and it all goes back to the sewer system. They are our best customer.

Chair Carlton:
Thank you for being with us today. I am sure if there are other questions, we will contact you or your staff.

Is there any public comment that needs to be made? [There was none.]

Meeting is adjourned [at 4:09 p.m.].

RESPECTFULLY SUBMITTED:

_____
Judith Coolbaugh
Recording Secretary

RESPECTFULLY SUBMITTED:

_____
Julie Kellen
Transcribing Secretary

APPROVED BY:

_____
Assemblywoman Maggie Carlton, Chair

DATE:_____

EXHIBITS

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

Date: February 15, 2011 Time of Meeting: 1:36 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
	C	Senator Dean A. Rhoads	Legislative Committee on Public Lands list of BDRs.
	D	Joanne S. Marchetta	PowerPoint presentation and prepared testimony.
	E	Patricia Mulroy	PowerPoint presentation.