

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

**Seventy-Ninth Session
April 6, 2017**

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Heidi Swank at 1:36 p.m. on Thursday, April 6, 2017, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4404B of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada, and to Room 107, Health Science Building, Great Basin College, 1500 College Parkway, Elko, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/79th2017.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Heidi Swank, Chair
Assemblywoman Lesley E. Cohen, Vice Chair
Assemblyman Chris Brooks
Assemblywoman Maggie Carlton
Assemblyman John Ellison
Assemblywoman Sandra Jauregui
Assemblywoman Lisa Krasner
Assemblywoman Robin L. Titus
Assemblyman Justin Watkins
Assemblyman Jim Wheeler
Assemblyman Steve Yeager

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

Assemblyman Richard Carrillo, Assembly District No. 18
Senator Tick Segerblom, Senate District No. 3



STAFF MEMBERS PRESENT:

Susan E. Scholley, Committee Policy Analyst
Randy Stephenson, Committee Counsel
Nancy Davis, Committee Secretary
Cheryl Williams, Committee Assistant

OTHERS PRESENT:

James R. Lawrence, Deputy Director, Department of Conservation and Natural Resources
Gina Greisen, Nevada Voters for Animals, Las Vegas, Nevada
Warren B. Hardy II, representing The Humane Society of the United States
Brian O'Callaghan, Government Liaison, Office of Intergovernmental Services, Las Vegas Metropolitan Police Department
Erika Greisen, Nevada Voters for Animals, Las Vegas, Nevada
Kristin Erickson, representing Nevada District Attorneys' Association
Victor R. Baker, Regents' Professor of Hydrology and Water Resources at The University of Arizona
Erik Balken, Executive Director, Glen Canyon Institute, Salt Lake City, Utah
Bahoyouma (Howard Dennis), Private Citizen, Second Mesa, Arizona
John Weisheit, Private Citizen, Moab, Utah
David Gibson, representing Powered by Sunshine
Howard Watts III, representing Great Basin Water Network
Anne Macquarie, representing Toiyabe Chapter, Sierra Club
Bob Fulkerson, Executive Director, Progressive Leadership Alliance of Nevada
Kyle Davis, representing Nevada Conservation League
Leslie James, Executive Director, Colorado River Energy Distributors Association
Omar Saucedo, representing Southern Nevada Water Authority; and Las Vegas Valley Water District
Jayne Harkins, Executive Director, Colorado River Commission of Nevada

Chair Swank:

[Roll was called and standard rules of the Committee were reviewed.] We are going to take things out of order today and start with Assembly Bill 489.

Assembly Bill 489: Revises provisions relating to the Revolving Account for Land Management. (BDR 26-907)

James R. Lawrence, Deputy Director, Department of Conservation and Natural Resources:

I am here today on behalf of the Division of State Lands, which is an agency of the Department of Conservation and Natural Resources. Assembly Bill 489 is an agency-generated bill I support that amends the language for the Revolving Account for

Land Management to expand eligible expenses for this account. Environmental and cultural planning work, necessary for the transfer or lease of federal lands, is not currently an eligible expense under existing legislation.

Historically, the Bureau of Land Management (BLM) provided many of these services without charge when the state was securing a Recreation and Public Purpose (RPP) lease. However, the BLM has shifted to cost recovery for these services. Without funds to pay for these activities or the ability to hire a contractor, transfers and leases can languish. Additional eligible activities or professional services being proposed include land surveys, biological surveys, cultural resource assessments, and mitigation measures. This revolving account would not be limited to the management of lands, but would also be eligible for the acquisition of lands used for state purposes.

In recent years with this shift from the BLM, the Division of State Lands has relied on the involved state agency to secure or provide the funds for many of these tasks. Sometimes the agency has had the funds, and sometimes that agency has not been able to secure the funds. The result has been the cancelling of a reservation for the lands or abandoning the efforts to secure the lands for the agency at that time.

Section 1, subsection 6, also changes the threshold below which replenishment of the revolving fund can be sought from the contingency account in the State General Fund. This bill changes that threshold from below \$5,000 to below \$20,000. Section 2 provides for the appropriation to the account ([Exhibit C](#)). Finally, we have provided an amendment that would strike section 2, subsection 2, in order to maintain the revolving nature of the fund ([Exhibit D](#)).

Assemblywoman Titus:

Why did you strike the revolving nature of the fund?

James Lawrence:

We are proposing to maintain the revolving nature and strike the bill language that requires the money to revert at the end of the biennium. Currently, it is a revolving account. The original language of the bill had the money reverting back and was contradictory to the revolving nature.

Assemblywoman Titus:

In section 2, subsection 2, you struck that it would revert back to the General Fund. I see that now, thank you.

Chair Swank:

Is there anyone here in support of A.B. 489? [There was no one.] Is anyone in opposition? [There was no one.] Is there anyone in neutral? [There was no one.] Are there any closing remarks? [There were none.] With that, I will close the hearing on A.B. 489. I will take a brief recess [at 1:41 p.m.].

I will reconvene [at 1:46 p.m.] and open the hearing on Assembly Bill 391.
Assembly Bill 391: Creates the crime of bestiality. (BDR 15-29)

Assemblyman Richard Carrillo, Assembly District No. 18:

Assembly Bill 391 creates the crime of bestiality and sets forth punishment for the crime. The bill is fairly straightforward. I have one of my constituents, Gina Greisen, in Las Vegas. She will walk you through the bill.

Gina Greisen, Nevada Voters for Animals, Las Vegas, Nevada:

I am representing Nevada Voters for Animals. We are a 501(c)(4), a social welfare organization. We are six generations of Nevadans who focus on common sense legislation to protect animals and, ultimately, people and those most vulnerable among us, meaning children or victims of domestic violence, et cetera.

I think this bill is pretty straightforward. I authored most of the language in this bill. If there is not substantial bodily injury or torture to the animal, we put it as a gross misdemeanor. When we were putting this bill together, we drew the language from about five states. I will say that Nevada is one of about ten states that do not have specific language outlawing the crime of bestiality. It is time and it is common sense to make this happen. I believe Ohio just put their law into effect two weeks ago, and Texas is also considering legislation as we speak. About half of the states that have this law make it a misdemeanor. The other half make it a felony.

We wanted to go with a gross misdemeanor if there was not serious harm, torture, or pain to the animal. Some states define this as sexual assault of an animal. There are very abhorrent situations of heinous crimes, such as a gang rape of a dog. We believe that should be a category C felony.

We had a lot of testimony during the passage of Cooney's Law in 2011, which made animal cruelty a felony in Nevada. We know, and it is well documented, that people who hurt animals will likely graduate to hurting people. Many of the well-known serial killers started out by harming small animals. We believe that if you have the ability to do that, what would stop you from harming a small child who is voiceless. We hope you will agree with a category C felony if you have been charged previously or have caused serious bodily injury, torture, or pain to the animal. We believe that the rest of the requirements, such as a psychological evaluation and referral for any additional counseling, if needed, are very important. Again, the bill is self-explanatory; we ask that you support this.

I know there is a friendly amendment provided by The Humane Society of the United States ([Exhibit E](#)). Anything that would enhance this bill and make it safer, we would support. I briefly looked over the amendment and do not see any issues with it. We did leave out the crime against a child only because it is already a category A felony to engage in this type of behavior with anyone under the age of 18. The only other concern I have is that we would like to see this in the animal cruelty statutes, in *Nevada Revised Statutes* (NRS) Chapter 574. We appreciate your support.

Warren B. Hardy II, representing The Humane Society of the United States:

I want to thank Assemblyman Carrillo for bringing this bill forward. This is not an easy topic to discuss. The fact that there are only ten states without these prohibitions is indicative of the fact that it is a very difficult, painful issue to discuss. It takes a great deal of courage to bring it forward. We have an amendment ([Exhibit E](#)) that I would like to walk through.

The suggestion we have is one that Ms. Greisen has already spoken to, that this should probably, rightfully, be in NRS Chapter 574, which deals with animal cruelty, instead of the current NRS Chapter 201, which deals with crimes against morals. Part of the reason for that is this is a statute that law enforcement is familiar with. We hope that law enforcement can use this to enhance penalties against bad actors.

We also feel that there ought to be a specific mention in this statute to the practice of forcing children to engage in or to watch this activity. It is heartbreaking for me, as a father and a grandfather, to have to report that it happens. It happens as an enhanced punishment for child abusers. It is a very sickening thought. We think that should be included specifically.

Ms. Greisen has a great point regarding the penalty. We do feel that this should be a felony. We have statistics that show this kind of activity is so closely related to pedophilia, rape, and sexual homicide that a felony is appropriate. In many of these cases, law enforcement can use this as an enhanced penalty to go after people who are acting inappropriately. Those are the three amendments that we have. Again, thank you for hearing this bill.

Assemblywoman Cohen:

In section 1, subsection 3(a), where it discusses the psychological evaluation, is there any consideration for adding a section with drug addiction treatment?

Gina Greisen:

I would not be opposed to adding that. It does say any recommended counseling. I am not sure if drug counseling would be included in that. If not, we can add drug counseling.

Assemblywoman Cohen:

I saw the section on counseling; I just want it to be very clear. I just think that drug issues may play a part in this.

Assemblywoman Jauregui:

Section 1, subsection 2(b) states this would be a category C felony if previously charged with animal cruelty. Is there any way we could change that to say, if they have previously been charged with any type of crime, not just animal cruelty? I do not know why we would want to limit this specifically to an animal cruelty crime.

Gina Greisen:

I am not sure if we should criminalize all behavior, but definitely, if it is sexual in nature, I do think it would be important to add that in here.

Assemblywoman Jauregui:

I just do not want to limit this to animal cruelty. If someone has another crime such as lewd conduct in public or indecent exposure, coupled with animal cruelty, maybe that would be reason enough to move it from a gross misdemeanor to a category C felony.

Gina Greisen:

If it is a nonviolent felony, it might not fit here. If it was sexual in nature, we would not be opposed to that.

Assemblyman Wheeler:

Section 1, subsection 3(b), says, once adjudicated, the person would have to relinquish and permanently forfeit all animals. There are many ways to do that listed here, but there are some animals that are worth quite a bit of money. As we all know, animals are considered property in Nevada. I am wondering if they would be able to sell an animal, along with the other ways listed in the bill.

Gina Greisen:

I am not sure if I would be qualified to answer that question. Maybe an animal control professional or law enforcement can answer that. Certainly, as animal welfare folks, we like to see animals adopted. I know there was some discussion of trafficking of animals, especially for these purposes. If there was a particular kind of animal that was being trafficked, I do not know if I would like to see that animal sold to someone else.

Warren Hardy:

There are a couple of other amendments that we will be proposing. I spoke to three of the substantive ones, but I would like to put the other three on the record. To address Assemblyman Wheeler's question, in a lot of cases, the people do not own these animals. I started to do some research online last night, and I am going to have to reformat my computer. In many cases, these animals are traded. There is an active trafficking market where you order these animals and trade them back and forth. We are proposing in section 1, subsection 3(a) to read, "Relinquishing and permanently forfeiting ownership or possession of all animals"

Assemblywoman Titus:

In my area of living, with cattlemen, et cetera, we artificially inseminate (AI) most of the cattle and many other food species, sheep, et cetera, as opposed to live coverage. Section 1, subsection 4(d)(3), has animal husbandry and veterinary medicine. Frankly, this is not done by veterinarians when we AI our mares. Can we make sure that is spelled out?

Gina Greisen:

I believe that the amendment may have some more specific language. I consider that to be covered already. We know that there is animal husbandry that happens on ranches that city folk may not know about. If you want to spell that out further, we have no objection to that.

Warren Hardy:

I will continue to walk through the amendment ([Exhibit E](#)). This is something the Humane Society of the United States deals with all over the country. We know the best practices and the issues that trip these types of legislation up nationally. Our amendment is designed to address that. Section 1, subsection 1(d) speaks to any sexual contact with an animal for commercial or recreational purposes. We are concerned that many of these situations do not fit in that category. We believe in a stronger definition, so we are suggesting the removal of that language. It is a blanket prohibition of this type of activity with an animal. To answer Assemblywoman Jauregui's question, we feel this should be a category D felony across the board. In regard to Assemblyman Wheeler's question, that is covered in section 1, subsection 3(a). To answer Assemblywoman Titus's question, we believe it is important that there is very specific indication of what does constitute sexual conduct with an animal. We have a number of changes to make that clear and bring it into alignment with best practices.

Specifically to Assemblywoman Titus's question, we think it is equally important that we are very clear about what this does not include. We think a stronger definition of what sexual conduct does not include is appropriate. We are suggesting language that states: "(a) Accepted veterinary medical practices performed by a licensed veterinarian engaging in the practice of veterinary medicine or his or her staff acting at the direction of a veterinarian; (b) Insemination of animals for the purpose of procreation; (c) Accepted animal husbandry practices that provide care for animals; or (d) Accepted practices related to confirmation judging." These are things that we think really make the bill better in terms of helping law enforcement and everyone else understand what it does apply to and what it does not apply to. [Also provided but not mentioned is ([Exhibit F](#)).]

Brian O'Callaghan, Government Liaison, Office of Intergovernmental Services, Las Vegas Metropolitan Police Department:

We also want to thank Assemblyman Carrillo for bringing this forward. I just got off the phone with one of our detectives. They handle these types of cases about once a month. It can go from putting a substance on the genitalia and having the animal lick it off, up to where the husband films the wife having sex with a Great Dane and putting it on video. When these are reported, there is no law against it. It kind of shocks the conscience, and I think this is a needed bill.

Chair Swank:

I will now move to support of [A.B. 391](#).

Erika Greisen, Nevada Voters for Animals, Las Vegas, Nevada:

I want to touch on some actual cases. This happens more times than people would think. We want to ensure that this bill passes for when it does happen. As was mentioned, Las Vegas Metropolitan Police Department does get a lot of these cases. We are aware of a case in Ohio involving online sex acts with a dog. On February 27, 2017, there was a sex act with a woman and an animal in Arizona. The video was sent to her husband, and then police were called to the home because of a domestic violence issue. There was also a case

in North Carolina, where Wendy Kasper had sex with an animal, which turned into her videotaping a child in the bathroom. That turned into child pornography. This does go from animal to children.

We have been asked multiple times, why make laws for animals instead of children. There are a lot of people advocating for children. We personally advocate for animals because we would like to stop this when it is happening to the animals, so that it does not get to the children. This is more common sense than anything. We hope everyone will support this. We need this law. These people do need help. We believe this is a mental illness or because of substance abuse.

Kristin Erickson, representing Nevada District Attorneys' Association:

Unfortunately, there are quite a few of these cases coming across our desks. This legislation fills an important gap in existing law. We urge your support.

Chair Swank:

Is there anyone else in support? [There was no one.] Is there anyone in opposition? [There was no one.] Is there anyone in neutral? [There was no one.] I will close the hearing on Assembly Bill 391. With that, we are going to move into a work session, starting with Assembly Bill 159.

Assembly Bill 159: Prohibits hydraulic fracturing in this State. (BDR 46-593)

Susan E. Scholley, Committee Policy Analyst:

Assembly Bill 159 was heard in this Committee on February 21, 2017. It is sponsored by Assemblyman Watkins, along with Assemblywoman Swank, Assemblyman Brooks, and Senator Ratti. Quite simply, it prohibits the practice of hydraulic fracturing, also known as fracking, in Nevada. No specific amendments were proposed at the hearing. Subsequent to the hearing, Assemblyman Watkins has proposed an amendment to grandfather in the four existing permits as set forth in the attached mock-up prepared by Committee Counsel. It would allow the Administrator of the Division of Minerals to grant extensions up to a period of five years after the original date of the expiration ([Exhibit G](#)).

Chair Swank:

I will entertain a motion to amend and do pass.

ASSEMBLYWOMAN JAUREGUI MOVED TO AMEND AND DO PASS
ASSEMBLY BILL 159.

ASSEMBLYMAN BROOKS SECONDED THE MOTION.

Is there any discussion? I think we will be limiting any questions.

Assemblyman Wheeler:

I am wondering if this amendment applies to both federal and state lands.

Randy Stephenson, Committee Counsel:

The Division of Minerals may be the best person to answer this, but there is nothing in the law right now that distinguishes between federal or state lands. It is just if you have an existing permit to drill. Wherever you have the permit, that is where this will apply. I would assume that is on state land.

Assemblywoman Titus:

I will be a no on this vote. I appreciate the amendment that allows for those who we have made a promise to already. Unfortunately, I also feel the concept of limiting future exploration is not wise for the state to do when the needs may be great at some point. I think we are saying no to an industry that we do not understand. I feel we need to stay open-minded on this.

Assemblyman Ellison:

I worked with the sponsor of the bill and tried to figure out a way, but I am going to vote no on this bill. I can tell you the Bureau of Land Management is still selling leases to this day, yet we are restricting it.

Chair Swank:

We will vote.

THE MOTION PASSED. (ASSEMBLYMEN ELLISON, KRASNER, TITUS, AND WHEELER VOTED NO.)

Chair Swank:

I will assign the floor statement to Assemblyman Watkins. The next bill to hear in this work session is Assembly Bill 385.

Assembly Bill 385: Requires the issuance, without charge, of an annual pass for state parks and recreational areas to certain persons under certain circumstances. (BDR 35-656)

Susan E. Scholley, Committee Policy Analyst:

Assembly Bill 385 is sponsored by Assemblyman Yeager along with several others, as noted, and several senators. It was heard in this Committee on March 28, 2017. This bill would require the Administrator of the Division of State Parks to issue an annual permit to students enrolled in fifth grade in Nevada, giving them free entrance to state parks and recreational areas. At the hearing, some conceptual amendments were discussed but nothing in writing. In response to the issues raised at the hearing, Assemblyman Yeager has proposed an amendment as set forth in the attached mock-up, prepared by Committee Counsel. Quite simply, the intent of the amendment is to give flexibility to the Administrator of State Parks in the implementation of the program and also to clarify that the annual pass would apply only to entrance fees and not camping or boating fees. The fiscal note has been received ([Exhibit H](#)).

Chair Swank:

I will entertain a motion to amend and do pass A.B. 385.

ASSEMBLYWOMAN COHEN MOVED TO AMEND AND DO PASS
ASSEMBLY BILL 385.

ASSEMBLYMAN WATKINS SECONDED THE MOTION.

Any discussion on the motion?

Assemblyman Wheeler:

I think this bill is a good idea. I am definitely going to vote it out of Committee. I just want to look at the amendment a little closer before I make a decision on the floor.

Chair Swank:

We will vote.

THE MOTION PASSED UNANIMOUSLY.

I will assign the floor statement to Assemblyman Yeager. I will close the work session.
[Assemblywoman Cohen assumed the Chair.]

Vice Chair Cohen:

We are in recess [at 2:20 p.m.]. I am calling the meeting back to order [at 2:22 p.m.] and will open the hearing on Assembly Joint Resolution 4.

Assembly Joint Resolution 4: Requests the National Research Council of the National Academy of Sciences to conduct an independent scientific and economic analysis of the current management practices of the Colorado River, the impact of these practices on water security, flood protection and biodiversity recovery, and alternative management options, including draining Lake Powell and decommissioning and destroying the Glen Canyon Dam. (BDR R-101)

Assemblywoman Heidi Swank, Assembly District No. 16:

I am here to introduce Assembly Joint Resolution 4. I think there are some important discussions that we are having this session around water. I keep saying that we are trying to fix some of the decisions that were made by generations before us. I think having a good discussion about the impact of dams in the West is part of that discussion. I will turn this over to Senator Segerblom for the presentation.

Senator Tick Segerblom, Senate District No. 3:

Assembly Joint Resolution 4 is a simple issue in that it is a resolution that calls for the creation of a study to evaluate the Colorado River Basin and how much water is actually out there. There have been studies before, and the current thinking is there is plenty of water, but we believe that those studies are false and that there is a shortage. Obviously, with global

warming it is not going to get any better. All A.J.R. 4 does is call for a study; it does not request any funding for the study; it does not do anything other than raise the issue. I think it is a very serious issue to raise, which is why I wanted to bring it to this Committee's attention.

The Colorado River Basin is composed of seven states, the upper basin states and the lower basin states [page 2 of ([Exhibit I](#))]. The upper basin states are entitled to 7.5 million acre-feet a year. The lower basin states are entitled to 7.5 million acre-feet a year. There are two major dams, Glen Canyon Dam at Lake Powell and Hoover Dam at Lake Mead. The question that this study would propose is whether there is enough water in the basin to sustain both of those dams. With the current drought, what is happening is the reality that there is not enough water for both dams. That is what we want to fully evaluate with this study.

We are calling for the National Research Council of the National Academy of Sciences, which is an independent body, to conduct an evaluation of management practices, evaluate the current biodiversity, conduct an economic analysis of the river, assess flood protection, assess water availability, and options for decommissioning and destroying Glen Canyon Dam (page 3 of ([Exhibit I](#))). We think at the end of the analysis we will see that the Glen Canyon Dam, which is in the upper basin, is either dangerous because of the possibility of massive floods which would cause it to erode, or the flip side is there will not be enough water for both dams.

Currently, there are many independent studies that are finding that the Colorado River Basin is overallocated. Water districts are looking at this and saying, "Do not worry, we have plenty of water for both," but we do not really have that.

When the river was first looked at, before these dams were built, the water flowed freely and there was no problem. In the course of the past 50 years, we are taking water from eastern Colorado and diverting it to western Colorado, so the total amount of water is going down. In addition, with global warming, there is less water available. We are getting less water in the southern states, including Nevada.

That brings the focus to Glen Canyon Dam, which causes the loss of about 6 percent of the annual river flow because of seepage into Lake Powell and also through evaporation. This is a major issue.

The other issue is the fact that Glen Canyon Dam almost collapsed in 1983 when the water was so high. One of the problems with global warming is, there are droughts, but there are also times when there are massive floods. What is called the 100-year flood could happen more frequently.

Page 5 ([Exhibit I](#)) shows what would happen if the Glen Canyon Dam collapsed. There would be a wall of water going over Hoover Dam, 70 feet high for 11 days. If that happened, it would wipe out all of the water for Las Vegas, because the infrastructure would be gone.

Down the river, it would wipe out all the dams below us. This is not something to take lightly. As you saw just this winter, Oroville Dam, which everyone assumed was fine, was not fine. It almost collapsed.

This is a remote threat, but it is also a very real threat. Given the climate change that we are experiencing, this is something we need to worry about. We are calling for a study. We are not saying tear the dam down. If the study proves what we are thinking, which is there is not enough water but there is also a chance for these massive floods between the two of those, we could have a real problem.

We have on the phone the world's expert in hydrology from the University of Arizona. He will describe the possibility of the flood and its consequences.

**Victor R. Baker, Regents' Professor of Hydrology and Water Resources at
The University of Arizona:**

My specialty is floods, particularly the rarest and most extreme floods that we know about, for which we have evidence from the past. This kind of science tells us, with certainty, the largest floods that are possible. This is a little different than what the engineers do for floods. Engineers try to design for a probabilistic method. They do this economically to achieve maximum benefit. The problem with the Colorado River is that the conventional record of floods, which was done with stream gauges, is not adequate to tell about the rarest, largest floods. The method that has to be used for this is to look to see what nature is actually presenting to us in regard to deposits of ancient floods.

My research team has found in the upper Colorado basin, with our initial studies near Moab, Utah and is also suggested by studies down close to Glen Canyon Dam, that the floods of the past several thousand years are immensely larger than what has been experienced recently. In 1983, the Glen Canyon Dam was almost lost because the reservoir was full at that time. A flood much smaller than the ones that we know nature is capable of producing almost destroyed the dam.

If, in future planning for droughts, the dams are holding a large amount of water in preparation for the kinds of droughts that have been experienced recently, then those dams are at extreme risk from large floods that we know have happened in the past. As you heard, there is a concern that floods of this type could get even larger and more common because of the effects of global warming. That is something that needs more science to document, but what I am talking about with my experience on this is what nature absolutely does, because we have the evidence of it from the past. This is an ongoing scientific process.

My concern is that we need to have a study considering the importance of this for the economy of the whole southwestern United States. As a scientist, I feel that we should have the best kind of scientific study of this issue, so the economy and the well-being of the people of the Southwest can be assured that they are not at significant risk from this hazard. [Also provided written testimony ([Exhibit J](#)).]

Erik Balken, Executive Director, Glen Canyon Institute, Salt Lake City, Utah:

As Senator Segerblom said, the Colorado River is facing a water supply crisis being exacerbated by global warming. It is also facing an environmental crisis. On the water supply side, we have seen Lake Mead dip to record-low levels several times in the last few years. Combined storage between the two reservoirs has dropped to the lowest level since Lake Powell began filling in the 1950s. Every recent climate study that has been done has shown that it is likely going to get worse. The Colorado River we know today is not the same Colorado River we knew 50 years ago. The river is facing an environmental crisis. Many of these adverse effects are a direct result of the Glen Canyon Dam. This includes the inundation of Glen Canyon itself, a place that was once the biological heart of the entire river system, and it was a proposed national park. Since its completion in 1963, we have lost hundreds of miles of wildlife habitat. We now have three endangered fish species. We have seen a steady decline of the Grand Canyon ecosystem from unnatural flows from the dam. In no uncertain terms, Glen Canyon Dam is one of the most environmentally destructive projects in our nation's history.

It is easy to make the argument that, even if Glen Canyon Dam was a mistake, it is there and we should make the most of it. The primary purpose of the dam is water storage. In this new era of reduced flows on the river, this dam may actually be undermining that very purpose because it loses so much water to evaporation and ground seepage. A recent analysis from John C. (Jack) Schmidt, who is the former Director of Grand Canyon Monitoring and Research Center, has shown that combining the reservoirs into Lake Mead would reduce overall surface area and would likely reduce losses to seepage and evaporation.

In his study, he concludes that further research should be done to assess the potential benefits and drawbacks of the Fill Lake Mead First Project. The idea of draining Lake Powell might seem ludicrous in a world where both reservoirs are full, but currently, you could completely drain Lake Powell into Lake Mead and Lake Mead would still not be full. The previous assumptions of water supply that shaped Colorado River management have proven to be wrong. It is even conceivable that Lake Powell may dip below power pool within a decade or less and some variation of the Fill Mead First idea may happen by default.

To address the water supply and environmental concerns, the federal government should proactively explore every option available. Thus far, the Bureau of Reclamation and other government agencies have ignored the Fill Lake Mead First Project in every management process that has taken place, including a recent management plan environmental impact study as well as the Bureau of Reclamation's Supply and Demand Study.

For 20 years, our organization has commissioned numerous studies exploring the biological, economic, legal, and water supply issues of filling Lake Mead first. We have limited resources as a small nonprofit. Because of the scale and importance of this issue, a full research effort is something that can only be done by the federal government and the National Research Council. For those reasons, we urge the Committee to support this proposal in encouraging the National Research Council to conduct an analysis on the

Colorado River management and alternative options like draining Lake Powell and filling Lake Mead first. [Also provided written testimony ([Exhibit K](#)).]

Senator Segerblom:

The reality is, given the water shortage, the probability is that we cannot support both Lake Powell and Lake Mead. Sometime in the next twenty years, the decision is going to be made on which lake to keep. That is why I think this is a very important issue for Nevada. In southern Nevada, Lake Mead is important to our economy. If we are going to start that decision-making, I think, as Nevadans, we need to stand up and say, let us keep Lake Mead and get rid of Lake Powell. I think from a scientific point of view that is also the best way to go because of the possibility of the flood and the dam breaking. There are a lot of reasons, but I wanted to start the conversation from Nevada's point and from the scientists' point. Again, all we are doing is asking for a study. We are not paying for the study; we are just throwing it out there as a national debate, saying that, on behalf of the state of Nevada, we would like to have this issue studied further by an independent scientific investigation.

Assemblywoman Titus:

I am curious; you testified that the Glen Canyon Dam is at risk of rupture. The debate about decommissioning Glen Canyon Dam has been going on for a long time. What I am hearing new is perhaps the vulnerability of the dam and the risk. This is a new dam, built in the 1960s. In fact, Lady Bird Johnson broke a bottle of champagne on it. Is it in worse shape than Hoover Dam?

Senator Segerblom:

It is built into a different structure, sandstone, where the Hoover Dam is built into a rock wall. The Hoover Dam is not going to break. The water might go over the top, but it will not break. The Glen Canyon Dam is the kind of dam where it could pull out of the sandstone and collapse, which would create a 70-foot wall of water.

Assemblywoman Titus:

You are requesting that the National Research Council of the National Academy of Science conduct this independent study. Have they accepted this? Do they have the funds to do the study? Is there someone here to testify on their behalf?

Senator Segerblom:

Not this time. This is the second time I have had this bill. Two years ago, we had someone say they would like to do this. Realistically, this is to start a national dialogue. As you said, the conversation has been going on for a long time. We just feel that given both climate change and the change in the country, we think this is an appropriate time to energize the conversation.

Assemblywoman Carlton:

I am trying to put the pieces of the puzzle together. Dams are basically for storage, electricity, and to control the flow of the river. The Colorado was a very wild river at one time. Regarding the storage component, I am wondering, because we had that storage in Lake Powell while we were going through storage from Lake Mead, if we had not had that in the past, what would the impact have been to Lake Mead?

Senator Segerblom:

Nothing. We do not need that dam to store the water. Given the amount of water that is in the river, there is not enough water over the long run to support both of the dams. When it was originally proposed, the dam itself was a mistake. It was the last major dam built in the United States and was part of an era where we were just building dams. In retrospect, everyone agrees that it should not have been built. The fact is, it was based upon a certain amount of water in the river, and it turns out it is not there. As Colorado starts to take more and more of their portion and ship it over to Denver, there is less water. Ultimately, there is just not enough water for that. Lake Mead could actually hold the water in Lake Powell and Lake Mead at the same time, most years. There is some help with evening out the flow, but it is not critical to the supply that we need in the lower basin states.

Victor Baker:

I would add a comment about the dams and the Colorado River. Many people are not aware that dams, while having a multipurpose, the purposes work against one another. The purpose of the dam to store water and generate hydropower is maximized by the reservoir being full. The purpose of the dam to protect against floods is maximized by the reservoir being empty. No dam is designed for the largest flood that could occur because it would be too expensive to do that. For every dam that is built, there is a risk of the dam failure from a larger flood for which the dam has been designed. That would make a flood larger than anything that happens naturally on that river. That is a real hazard.

In the case of the Glen Canyon Dam, it was built in the bottom of a sandstone canyon, so it cannot have a conventional spillway, as was the case in the Oroville Dam, which had a flow that entered a spillway. The Glen Canyon Dam has an underground spillway. In 1983, the tunnel that was carrying the emergency water started to erode catastrophically. It was eroding so fast that it would have ripped out the abutment of the dam. Fortunately, the flooding stopped. The spillway for Glen Canyon Dam is still that kind of spillway. It is incapable of carrying even the design flood, which is called a probable maximum flood for the reservoir. What I am saying is that, with inadequate scientific understanding of the flood risk to Glen Canyon Dam, there is a potential problem if we are going to try to use Lake Powell as a buffer for future droughts, which we seem to be concerned about. That means we are going to try to keep that reservoir full. We would have to do that even more so because of the evaporation that is generated off that reservoir and the immense amount of water losses that are produced by it.

All of this, in my opinion, is something that would benefit from a thorough, objective, outside, scientific evaluation by individuals. This is what science is all about. It is not about giving people facts that are supposed to tell them what to do. What science is about is investigators who are very experienced doing the hardest thing they can do to discover the truth of how nature is working. That is what the National Research Council would do. As a citizen, I feel this is something that we would want to have for an issue as important as the operations and effectiveness of these dams and the water issues that are critical to the southwestern United States. I strongly support the measure that you are considering.

Vice Chair Cohen:

I will now move on to support.

Bahoyouma (Howard Dennis), Private Citizen, Second Mesa, Arizona:

Hello, my name is Bahoyouma, which means "water running on Mother Earth." I am a religious leader, a Flute Chief, and a clan leader from the village of Mishognonvi of the Hopi Tribe. We are the original caretakers and first users of the Colorado River. I also represent the emerging indigenous organization Native Waters Rising.

The damming of the Colorado River submerged our sacred sites and burial grounds. We were not consulted prior to the building of Glen Canyon Dam. I am so happy that Assemblywoman Swank and Senator Segerblom are trying to correct the wrongs of the past with this resolution to support a review of the Colorado River by the National Research Council.

The Hopi would very much appreciate that the review include the water resources of the Little Colorado River basin that flow into Grand Canyon National Park, because groundwater depletion has seriously impaired the Sipapuni, which is the most sacred shrine to the Hopi.

The current water policies are flawed because the native people were not consulted in the beginning, and this must change if we are to accept the challenges of the future. The river should be allowed to run freely into the Grand Canyon. Water is the blood veins of Mother Earth. By damming and capturing water, we hurt the natural flow of life for all living things. Every living thing wants to survive, but without water, we will face devastating consequences.

We need to revisit our water policies, as well as our current laws with input from the 29 native tribes of the Colorado River basin. I am one of many native voices, and we appreciate this opportunity to share our water wisdom. [Also provided written testimony ([Exhibit L](#)).]

John Weisheit, Private Citizen, Moab, Utah:

I am also known as the Colorado Riverkeeper. I am affiliated with the Waterkeeper Alliance. There are over 300 waterkeepers throughout the world. I have also been a river guide for 40 years. I have done over 350 river trips through Canyonlands National Park and 50 river trips through Grand Canyon National Park. I have floated in Lake Powell and Lake Mead

throughout my childhood. I have asked Senator Segerblom's staff to put these two documents on NELIS ([Exhibit M](#)) and ([Exhibit N](#)). Some of the questions that you have been asking were actually talked about in an official meeting.

The person who brought up some of the issues about building reservoirs and dams in the Colorado River was named Northcutt Ely. Northcutt Ely was the Deputy Secretary of the Interior during the Hoover Administration. He served Ray Lyman Wilbur, who was the Secretary of the Interior. Those two gentlemen are the people who built Hoover Dam and fulfilled the obligations of the Boulder Canyon Project Act. This document is titled *Light on the Mexican Water Treaty from the Ratification Proceedings in Mexico* ([Exhibit M](#)). I think it is also important that you realize that this was done in an official meeting in Salt Lake City, Utah with all the current water managers of the Colorado River basin present. That organization is still alive and is in Las Vegas, Nevada. It is called the Colorado River Water Users Association.

Northcutt Ely addressed the seven members and said, we do not have enough water in the Colorado River as was negotiated in 1922 by the Colorado River Compact. That Compact gave 7.5 million acre-feet to the upper and lower basin. There are also 1 million acre-feet of surplus that can be delegated to the state, and to Mexico. Mexico was guaranteed 1.5 million acre-feet. That is a total of 17.5 million acre-feet. Northcutt Ely said that we are going to have huge shortages in the future, and we should readjust the Colorado River Compact, and we should revise our planning documents. That was the invitation to the seven states. That happened in 1946. That was 71 years ago, and nothing has happened since then. It has never been readjusted. The planning documents that were used are the ones that built Hoover Dam and Glen Canyon Dam.

More importantly, you must read this testimony from the state of California ([Exhibit N](#)). Again, it is by Northcutt Ely. This is dated July 3, 1954. Northcutt Ely, by this time, was a private citizen and attorney. He represented the state of California in the famous U.S. Supreme Court case called *Arizona v. California*, 373 U.S. 546 (1963). These are the hearings that authorized Glen Canyon Dam ([Exhibit N](#)).

Mr. Ely was there to tell the Natural Resources Committee that we, as the state of California, do not approve the building of Glen Canyon Dam or of Echo Park Dam, which would have been built in Dinosaur National Monument. The reason why the state of California opposed Glen Canyon Dam is in this document. They are the same arguments that have been brought up today. Northcutt Ely said that if you build Glen Canyon Dam, you are both going to have empty reservoirs by the year 2000, because by that time the consumption of the Colorado River will be maximized. Neither Hoover Dam nor Glen Canyon Dam would be able to produce hydroelectricity.

We have all of these studies that have been done by the Bureau of Reclamation and the seven states that tell us everything is going to be fine. But here was a gentleman who, 71 years ago, said this system is going to fail, first because you do not have enough water, and second because you are building too much infrastructure. There will be too much evaporative loss

and too much seepage loss. He pleaded that a study be done in 1954. I would also point out that in the late 1970s, there was a lawsuit about the impacts of building yet more dams on the Colorado River. The courts agreed with the plaintiff. Actually, the Bureau of Reclamation said we would enjoy an entire basin-wide study. The point is, a study is consistent with previous testimony in state and federal legislative branches. [Also provided but not mentioned is ([Exhibit O](#)).]

David Gibson, representing Powered by Sunshine:

I would like to voice my support for A.J.R. 4. It is important to assess, research, and understand our water ecosystems and energy resources. As many of you know, more water evaporates off of Lake Powell and Lake Mead each year than Nevada is allocated from the Colorado River. I would like to encourage that the study include analysis of the feasibility, benefits, and impacts of floating solar arrays on Lake Mead. Floating solar arrays have been deployed in the United Kingdom, India, Japan, and in vineyards in California. This technology could both reduce evaporation and generate valuable clean energy. My analysis indicates that floating solar arrays on Lake Mead could produce more energy than the Glen Canyon Dam.

Howard Watts, III, representing Great Basin Water Network:

We support A.J.R. 4 and appreciate Assemblywoman Swank and Senator Segerblom for bringing the measure forward. I want to reinforce that the key provision of this is a study to look through the language. It is a very short proposal that includes a lot of very important information around the sufficiency and sustainability of the river, other water supplies, and the risks from flooding.

One thing that has not been brought up is aquifer recharge, storing water underground. We often refer to it as smart storage because when it is possible to do that, the water is not subject to evaporation like it is on a reservoir.

The measure also calls for an evaluation of the decommissioning of Glen Canyon Dam. There has been a debate about this. You have heard from folks who are proponents of it. There are others who are opponents of it and believe that the dam provides for hydropower, managing the river, and for the environment. There are different sides to this. I think the best way to come to a conclusion and advance our knowledge in this area is to call for this independent study. That is exactly what this measure does. It does not express an opinion toward what should be done.

I will say, anyone who has ever been to the Grand Canyon, the water is colder, the beaches have eroded with time, and there are also problems with the fish. There is a 2015 paper by a biology professor that says no other action can bring more ecological integrity back to rivers as effectively as dam removal. I think this is something that we should study. Also, based on the results, we should have additional discussions on modifying policy on the river as needed.

Anne Macquarie, representing Toiyabe Chapter, Sierra Club:

Over 50 years ago, in November 1966, the Sierra Club's National Board of Directors formally supported draining Lake Powell behind Glen Canyon Dam to recover the lost canyons and river course inundated since the reservoir began to fill in 1963. We are happy to see A.J.R. 4, and we thank Assemblywoman Swank and Senator Segerblom for introducing this bill. We think that in the face of ongoing drought in the upper and lower basin, the increasingly recognized potential for catastrophic flooding, changing land use, population growth throughout both basins, and above all climate change, it is past time to carry out a sober, careful, and responsible evaluation of the management of this river upon which the health and future of the communities and ecosystems of the greater southwest depend.

Bob Fulkerson, Executive Director, Progressive Leadership Alliance of Nevada:

Thank you Assemblywoman Swank and Senator Segerblom for your leadership in calling for this study on the Colorado River and decommissioning the Glen Canyon Dam. Nevadans deserve to make fully informed decisions on issues that affect our lives and state, and we offer our enthusiastic support for this resolution.

What does a massive dam in Utah have to do with Nevada? For one, its origins are in Nevada, as the Bureau of Reclamation was founded at the behest of Nevada Senator Francis Newlands. He had read with great fascination the diaries of John Wesley Powell and his courageous rafting exploration of the Colorado River. Ironically, after living on the river, Powell counseled treating the Colorado River as a living system, and not to divide it up into potentially competing and divisive political subdivisions.

Senator Newlands convinced President Roosevelt to create the Bureau of Reclamation, whose first project in the United States was building the Derby Dam outside of Reno, which caused Pyramid Lake to drop by 80 feet, the extinction of the Pyramid Lake cutthroat trout and completely wiped out Winnemucca Lake, where my grandfather used to hunt, and talked about limiting out on ducks before there were limits. Today Winnemucca Lake is just a dustbowl that nobody remembers. It is not only gone; it is forgotten.

Giant dams were championed as the panacea to the West's greatest challenge to rampant development, which is the shortage of water. Today climate change is making the West hotter and drier, with less water to store and more quickly evaporating the water that is stored. I will spare you the statistics that have already been shared about why it makes sense to remove Glen Canyon Dam.

The time of big dams is over. In 2015 alone, six dams were removed or deconstructed. California and Oregon have agreed to dismantle four more dams on the Klamath River, placing the economic and moral value of the salmon runs above outdated notions of ecological damage and controlling nature. Thank you for your leadership in restoring a sense of balance and harmony to the Colorado water system.

Kyle Davis, representing Nevada Conservation League:

We want to offer our support for this bill. We are in support of taking a look at this issue. We think that there are a lot of sound reasons, and we need to be taking a second look at the need for Glen Canyon Dam.

Vice Chair Cohen:

Is there anyone else in support? [There was no one.] I will move to opposition.

Leslie James, Executive Director, Colorado River Energy Distributors Association:

We submitted a resolution that the Board of the Colorado River Energy Distributors Association (CREDA) passed last week in opposition of A.J.R. 4 ([Exhibit P](#)). Principally, we were looking at the language referring to options for draining Lake Powell and decommissioning and destroying the Glen Canyon Dam. The Colorado River Energy Distributors Association is an organization of nonprofit hydropower purchasers and customers, including Colorado River Storage Project (CRSP), and customers that include about 52 tribes in the six-state region of the Colorado River.

The resolution that we passed identifies the authorized purposes of the CRSP, of which Glen Canyon Dam is the largest. We also attempt, in a very shorthand form, to provide some of the benefits that Glen Canyon Dam and the CRSP do provide, including the funding of environmental programs from power revenues from the dam, the Glen Canyon Dam adaptive management program, the upper basin endangered fish recovery program, and the salinity control program, among other things.

Given some of the testimony and the description of the joint resolution, I would take exception and say that this is really not a simple issue, very clearly. I would recommend to you the Jack Schmidt study that Mr. Balken referenced because I believe that there are also findings in there that take to task some of the assumptions and statements that have been made here today.

For your concern about dam breaching and dam failure, I would recommend that you have a briefing by the Bureau of Reclamation. They have a very robust dam safety program. My Board was just at Glen Canyon Dam last week. From a security standpoint, I would also recommend that you seek out briefings from the Department of Homeland Security. There is a dam inspector coordinating council that I participate on. There are certainly experts associated with those concerns that you have outlined today that could be helpful to inform you. We are certainly willing to provide any additional information that we can. We do oppose A.J.R. 4.

Omar Saucedo, representing Southern Nevada Water Authority; and Las Vegas Valley Water District:

We certainly appreciate Assemblywoman Swank for bringing forth this important issue for consideration. We are strongly in favor at looking at anything that can be done on the Colorado River to innovate and look creatively for solutions. We understand that groups may want to look to a study.

I can tell you that numerous studies have been conducted in the Colorado River Basin. In 2012, the Colorado River states, in conjunction with the Bureau of Reclamation, completed a basin-wide study that looked at many scenarios, including the impacts of climate change-driven models for the next several years, which demonstrated significant gaps between the supply and demand on the Colorado River. Those issues are important to southern Nevada. We have worked very hard to find solutions to those issues, and we are supportive of any effort to solve those issues.

We are concerned that this study does not really get to what we are trying to accomplish. In 2012, the major municipalities in the lower basin joined with Denver and the Bureau of Reclamation to launch a pilot program that is designed to save a considerable amount of water and to store it in Lake Mead. That is a considerably important thing for southern Nevada because that water will prop up the lake level. The elevation level at Lake Mead will determine where and how we can pull water for the residents of southern Nevada.

While we understand why this bill is being brought, we are concerned the bill attempts to duplicate efforts that have already been done at the Bureau of Reclamation, and that it will not add to the body of the knowledge we already have. We understand the perspective that this study is attempting to address; however, we would like to continue to focus on the immediate need we have, which is how to deal with the drought and keep communities along the river supplied with water.

Negotiations on the river are delicate, and we have enjoyed tremendous cooperation with the Bureau of Reclamation and other states on the river. This bill has the potential to disrupt the collaborative atmosphere we currently are enjoying. The Southern Nevada Water Authority has less than 2 percent of the Colorado River water. Our strength has been presenting a united message in helping to push for solutions among the states. This bill has the potential to disturb what Nevada has worked long and hard to obtain, and could negatively impact the atmosphere that we currently have enjoyed moving forward.

I would also like to point out that negotiations on the river are very complex and involve seven states and two countries. I also want to address some of the points made in previous presentations. The low lake level pumping station and the third intake protect the Las Vegas Valley water supply even below dead pool level. If Lake Powell did not exist, Lake Mead would have been emptied during the drought. It is also the source of the storage for the upper basin states.

Vice Chair Cohen:

Is there anyone else in opposition? [There was no one.] Is there anyone neutral?

Jayne Harkins, Executive Director, Colorado River Commission of Nevada:

I have submitted my written testimony ([Exhibit Q](#)) I would like to hit some of the high points for you. I am here today to provide the Committee with some information for your consideration of A.J.R. 4, specifically regarding the existing management of the Colorado River.

To clarify, the Colorado River Commission (CRC) of Nevada is the state agency that holds and protects the rights of the state of Nevada to its share of Colorado River water under federal law and contracts. It also represents the state before federal agencies, other states, and other countries in a wide range of issues affecting the management and operation of the river. *Nevada Revised Statutes* (NRS) Chapter 538 provides us broad statutory authority to establish policy for the management of Nevada's allocation of electrical power and water resources from the Colorado River. The CRC is the exclusive state agency with authority over the Colorado River. We partner with the Southern Nevada Water Authority, the wholesale provider of water in southern Nevada, in working with all of our Colorado River stakeholders in a collaborative effort to efficiently and effectively manage the river. Also, to address the current drought, future water imbalances that we have determined through a basin study that was done with the Bureau of Reclamation and all seven states, and species and habitat needs with the Colorado River system.

As was pointed out earlier, the river provides water supplies to 40 million people for municipal, industrial, and agricultural needs throughout the Colorado River Basin in the United States and Mexico. Water and power from the river are critical to the economy of Nevada. Approximately 2 million people in southern Nevada rely on the Colorado River for over 90 percent of their water supply. Water from the Colorado River is also used to generate hydropower—a clean, renewable, and low-cost source of energy. In 2016, the CRC purchased a little less than 94 million kilowatt-hours from the Salt Lake City Area Integrated Project, which includes power generated at Glen Canyon Dam.

As people have said today, including my colleague from the Southern Nevada Water Authority, issues on the Colorado River have been difficult, complex, and very intricate since we signed on to the Colorado River Compact in 1922. Nothing has gotten easier since then. Glen Canyon Dam was constructed to allow the upper Colorado River basin states to utilize their 7.5 million acre-feet and to provide for the releases to the lower basin for their allocated share of the river. That is in the Compact that all seven states have signed onto. To maximize management of the river, Lake Powell was created by Glen Canyon Dam, and Lake Mead was created by Hoover Dam. Currently, the operations have been working together to provide adequate storage throughout both basins. It has been particularly beneficial to us in times of drought. The droughts that we have seen over almost two decades have been severe and have had a tremendous impact on reservoir storage. When taking both reservoirs in aggregate, the prolonged drought has depleted the combined reservoir storage by 30 million acre-feet, which is more than the capacity of either reservoir. It seems history has demonstrated that one reservoir is not likely sufficient to sustain water deliveries over prolonged drought periods in the Colorado River Basin. We would have shortage declarations a number of years ago if we only had one reservoir on the system.

The proposed study that is being looked at in A.J.R. 4 would largely duplicate the Colorado River Basin Water Supply and Demand Study. My colleague from Southern Nevada Water Authority talked about that study, and I will not repeat the remarks I have that are similar to his.

The Bureau of Reclamation and a number of nonfederal partners continue to work on additional studies based on that basin study that was done in 2012. They are looking at other environmental factors and strategies for allowing us to work through the imbalances that we know that we have on the system, because it is an overallocated system. That study also looked at the climate change impacts that we would have in the system. We certainly take that very seriously. We at the CRC are committed to help protect the vital resources on the Colorado River and to help protect the state of Nevada by providing valuable input and participation in those state and federal programs that have responsibility for managing and conserving this resource.

In my testimony, I included some websites that the Committee might find useful in providing additional information regarding the Colorado River and Glen Canyon Dam ([Exhibit Q](#)).

Vice Chair Cohen:

Seeing no other testifiers, I will invite Assemblywoman Swank back up for conclusion.

Assemblywoman Swank:

I have a few comments in closing. I think all of us who live in Nevada know that there is no simple water issue. All of these issues are fraught with disagreement and take very long, if ever, to resolve. The argument is that this is just about a request for a study and that it would move us away from focusing on the immediate need, which we also know needs to be addressed. We also need to ensure we are looking at the issues long-term. Given the complexities of these issues, I do not see that having additional studies done by an independent scientific organization of the National Research Council could be detrimental to better understanding water on the Colorado River. [Also provided but not mentioned is ([Exhibit R](#)).]

Vice Chair Cohen:

I will close the hearing on A.J.R. 4 and open the meeting to public comment. Seeing none, this meeting is adjourned [at 3:18 p.m.].

RESPECTFULLY SUBMITTED:

Nancy Davis
Committee Secretary

APPROVED BY:

Assemblywoman Heidi Swank, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

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

[Exhibit C](#) is written testimony dated April 6, 2017, introducing [Assembly Bill 489](#), presented by James R. Lawrence, Deputy Director, Department of Conservation and Natural Resources.

[Exhibit D](#) is an amendment to [Assembly Bill 489](#) proposed by the Division of State Lands, Department of Conservation and Natural Resources, presented by James R. Lawrence, Deputy Director, Department of Conservation and Natural Resources.

[Exhibit E](#) is an amendment to [Assembly Bill 391](#) prepared by The Humane Society of the United States, presented by Warren B. Hardy II, representing The Humane Society of the United States.

[Exhibit F](#) is a letter dated April 6, 2017, in support of [Assembly Bill 391](#), written by Heather Carpenter, Western Regional Director, State Affairs, The Humane Society of the United States, presented by Warren B. Hardy II.

[Exhibit G](#) is a work session document for [Assembly Bill 159](#), dated April 6, 2017, presented by Susan E. Scholley, Committee Policy Analyst, Research Division, Legislative Counsel Bureau.

[Exhibit H](#) is a work session document for [Assembly Bill 385](#), dated April 6, 2017, presented by Susan E. Scholley, Committee Policy Analyst, Research Division, Legislative Counsel Bureau.

[Exhibit I](#) is a copy of a PowerPoint presentation for [Assembly Joint Resolution 4](#), presented by Senator Tick Segerblom, Senate District No. 3.

[Exhibit J](#) is a letter addressed to the Honorable Sally Jewell, Secretary of Interior, U.S. Department of the Interior, dated October 12, 2015, submitted by Victor R. Baker, Regents' Professor of Hydrology and Water Resources at The University of Arizona.

[Exhibit K](#) is a letter in support of [Assembly Joint Resolution 4](#), written and provided by Erik Balken, Executive Director, Glen Canyon Institute.

[Exhibit L](#) is written testimony in support of [Assembly Joint Resolution 4](#), presented by Bahoyouma (Howard Dennis), Private Citizen, Second Mesa, Arizona.

[Exhibit M](#) is a report titled *Light on the Mexican Water Treaty from the Ratification Proceedings in Mexico*, written by Northcutt Ely, and provided by John Weisheit, Private Citizen, Moab, Utah.

[Exhibit N](#) is a copy of "Hearings before the Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, United States Senate, dated June 28, 29, 30, July 1, 2, and 3, 1954, John Weisheit, Private Citizen, Moab, Utah.

[Exhibit O](#) are links to articles concerning the Colorado River provided by provided by John Weisheit, Private Citizen, Moab, Utah.

[Exhibit P](#) is a copy of the "Colorado River Energy Distributors Association (CREDA) Resolution 2017-01", submitted by Leslie James, Executive Director, Colorado River Energy Distributors Association.

[Exhibit Q](#) is prepared testimony dated April 6, 2017, in neutral position to [Assembly Joint Resolution 4](#) presented by Jayne Harkins, Executive Director, Colorado River Commission of Nevada.

[Exhibit R](#) is written testimony in support of [Assembly Joint Resolution 4](#) provided by Daniel P. Beard, Private Citizen, Columbia, Maryland.