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

Seventy-Third Session
March 21, 2005

The Committee on Natural Resources, Agriculture, and Mining was called to order at 1:39 p.m., on Monday, March 21, 2005. Chairman Jerry D. Claborn presided in Room 3161 of the Legislative Building, Carson City, Nevada. Exhibit A is the Agenda. All exhibits are available and on file at the Research Library of the Legislative Counsel Bureau.

COMMITTEE MEMBERS PRESENT:

Mr. Jerry D. Claborn, Chairman
Mr. Kelvin Atkinson, Vice Chairman
Mr. John C. Carpenter
Mr. Mo Denis
Mr. Pete Goicoechea
Mr. Tom Grady
Mr. Joseph M. Hogan
Mrs. Marilyn Kirkpatrick
Mr. John Marvel
Ms. Genie Ohrenschall
Mrs. Debbie Smith

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Amber Joiner, Committee Policy Analyst
Mary Garcia, Committee Attaché
Matthew Mowbray, Committee Assistant

OTHERS PRESENT:

Allen Biaggi, Director, Nevada Department of Conservation and Natural Resources
Hugh Ricci, State Engineer; Administrator, Division of Water Resources, Nevada Department of Conservation and Natural Resources

Chairman Claborn:
[Meeting called to order. Roll called.] Today Allen Biaggi and Hugh Ricci will present information on water in the state of Nevada, and then we'll have a work session. We had three bills scheduled, but we're only going to take two today. Would you please start your presentation?

Allen Biaggi, Director, Nevada Department of Conservation and Natural Resources:
[Testified from prepared statement (Exhibit B).] With me today is Hugh Ricci. Today we will discuss those water quantity-related studies that have taken place in Nevada and those that are planned for the future. As we are all aware, water resource issues are a major topic of discussion during this legislative session.

Nevada is the fastest-growing state in the nation and also the most arid. Water has been, and will continue to be, our most precious natural resource and must be used wisely, not only to protect our booming economy but also our precious natural resources and our western lifestyles. Often, the water resource is in a different location from where the need exists.

The State Engineer is charged with the enormous responsibility of allocating our surface and groundwater resources for the benefit of all Nevada citizens and visitors. State Engineers have been doing this with great success for over 101 years. Wisely, the Nevada Legislature has clearly defined his duties and responsibilities in terms of protection of the public interest, environmental concerns, water conservation, and overall economic development.

In making these extremely difficult decisions, the State Engineer must have sound scientific information related to water availability, quantities, existing uses, and future needs. In the last 40 years, a tremendous amount of work has been done in quantifying the state's water resources, and a lot of work is ongoing. Our presentation today will provide you with an overview of that body of information and give you a flavor of the wealth of knowledge the State Engineer has at his disposal in making water decisions.

[Allen Biaggi, continued.] [PowerPoint presentation (Exhibit C).] First, I'll give you a little background on how groundwater is managed in the state of Nevada. Obviously, it would be a daunting task to take the state of Nevada as a whole and attempt to allocate our water resources on a statewide basis. Consequently, the state has been broken down into 232 discrete basins, which generally define our water resources (page 2 of Exhibit C).

The water in these basins is not static. It flows from one basin to another and often expresses itself as springs. Nevertheless, we have found that, in general, this is a very good tool for planning our water resources.

The critical tool the State Engineer must have in determining the available water is the perennial yield of the basin; in other words, how much water is available for use inside that basin without mining the groundwater—dropping the static water level dramatically within those basins.

These (page 2 of Exhibit C) are all 232 basins within the state of Nevada. I am going to overlay many of the studies that have been done on these basins over the past few years. The first overlay (page 2 of Exhibit C) shows all 232 basins. These are the results of the original U.S. Geological Survey (USGS) reconnaissance reports and bulletins that were published in the 1940s through the late 1970s, which outlined the perennial yields of those basins.

Newer USGS studies, published in the late 1990s to the present, equated to 74 additional basins, so this (page 3 of Exhibit C) is additional work on top of the original 232 basins. Then, on top of that, 46 basins have been studied by others. These were published in the 1990s through the present. Some of these studies are for some of the same basins that were studied in the older USGS reports.

Given that we had the original studies in the 1960s, plus additional studies later on, what happened to our estimates of perennial yield (page 3, Exhibit C)? Fifty-four basins showed recharge estimates higher than were originally provided in those 1960s studies. Twenty basins were determined to have recharge estimates lower than the original. Of those 20 basins, 15 were located in the Death Valley Flow System, indicated by the red line.

What does that mean in terms of our water resources? Seventy-four budget basins were re-estimated by the USGS since the original reconnaissance reports. Twenty are estimated to have less recharge than in the original reconnaissance reports. Fifteen that have lower estimates are located in the Death Valley Flow System, but, overall, the total recharge for the 74 re-estimated basins is

1,354,000 acre feet a year versus the 755,000 acre feet a year in the original reports (page 4 of Exhibit C).

Assemblyman Marvel:
How much is being done in the California side of the Death Valley Basin?

Hugh Ricci, State Engineer; Administrator, Division of Water Resources, Nevada Department of Conservation and Natural Resources:
I really don't have an idea of what's being pumped down there, but probably most of what's being pumped is along the California/Nevada border down by Amargosa. The USGS has developed a groundwater model for that particular region, but I really don't keep records of how much is pumped in that area.

Assemblyman Marvel:
Then you know what's in them on the Nevada side? Could there be some over-pumping from California that would detract from our reserves, since they don't have the underground water law?

Hugh Ricci:
It's possible, yes. I can't tell you how much.

Assemblyman Marvel:
That always concerns me. We try to control ours, and they don't control theirs.

Allen Biaggi:
Mr. Marvel brings up a very good point. Nevada controls its groundwater resources very tightly through a system of allocation, but California doesn't have such a system. California is more of a free-for-all, with no regulatory requirements. You can install a well and pump and pump.

Assemblyman Hogan:
I just wanted clarification on the term "recharge." Is recharge the amount of new water that might be acquired in a basin in a normal year, and therefore the amount that could be taken out and used because it would be replaced?

Hugh Ricci:
The calculation of recharge is done by a relatively simple method. Precipitation numbers are used, and there are coefficients for certain areas of a certain amount of that particular precipitation that will infiltrate into the groundwater basin and be available for use. Not all of the recharge becomes available groundwater for development.

Assemblyman Hogan:
It is your calculation of the amount of water that will be added to the underground water resource in a normal year.

Hugh Ricci:
Yes. All the calculation for every one of those basins Mr. Biaggi showed you does exactly that. Calculating the precipitation and the recharge coefficients shows the amount of water that recharges that groundwater basin.

Allen Biaggi:
So, in summary, reexamination of the 74 basins actually shows that there's additional water available, versus the original 1960s studies (page 4, Exhibit C). One of the things the Division of Water Resources does is monitor groundwater pumpage and what's happening to that water. I'll let Mr. Ricci talk about their efforts and activities.

Hugh Ricci:
This particular slide (page 5, Exhibit C) shows some of the work that is done by members of my staff in the Division of Water Resources throughout the state. We monitor 55 different basins for what we call crop inventories and pumpage inventories. The difference between those two is that the 30 crop inventories are done mostly in the northern part of the state in areas where there is highly developed agricultural water use.

The pumpage inventories look at every single water use within that groundwater basin. Those are done mostly in the highly developed areas such as Las Vegas and the Truckee Meadows. We visit each particular well site, whether we read it through a meter or do an estimate on the field investigation as to the amount of water used. That information is then put into a database, which will give us the amount of water used by each individual use and the total.

Within most of those basins where we do inventories, we also take annual water level measurements in the spring, before any water use is done, to monitor how the groundwater level is changing. Different things, such as drought and water development within the basin, are obviously going to have impacts on the groundwater level.

Other basins we inventory maybe two or even four times a year so we can get good information. We also monitor our precipitation gauges throughout the state. That data is then sent to the State Climatologist and the other agencies that collect precipitation data, where it becomes part of the overall data picture. We also require approximately 400 permittees throughout the state to give us individual pumping data on an annual or a monthly basis, depending on the type

of use and how we get that particular information. That information is also stored in our database.

[Hugh Ricci, continued.] From all of that information, we have developed a database for each of those 232 groundwater basins. This particular sheet (page 6 of Exhibit C) shows an abstract of Groundwater Basin 184. It lists the application and a great deal of information associated with that application. It also gives its status. Every single application we have ever received is on a database such as this and is associated with one or more of those 232 unique groundwater basins.

From that information, we can run a number of queries to access the particular information we want. This particular one (page 7 of Exhibit C) is an example of groundwater use by miners. Irrigation for this one is a particular number. There is a whole series of types of uses there, how many acre feet we have allocated to that particular use, and then any pending applications.

Using that same database, we can also get this type of report (page 8 of Exhibit C), which shows water from a certain source, geothermal or groundwater, for a particular application, whether it is permitted, whether it has a certificate, or whether it is pending. We can query any number of things for any question someone asks.

Assemblyman Goicoechea:
As I look at Hydrographic Basin Spring Valley, are there no vested, no reserve, and no water rights in that basin?

Hugh Ricci:
We have no annual duty for vested or decreed, but we do have every single claim for a water right in these particular summaries if there is a number associated with that.

Assemblyman Goicoechea:
Haven't you said in previous testimony that, with your new numbers from the USGS, you feel there are 1.7 million acre feet of total precipitation in the state of Nevada?

Hugh Ricci:
The 1.7 million acre feet to which you refer is the perennial yield of those 232 groundwater basins, which is different from the total estimated recharge.

Allen Biaggi:
We've talked about the ongoing studies and what the State Engineer does with the data he collects. We want to touch briefly on two major ongoing studies and some less significant but no less important studies. The first is the Lincoln County Conservation Recreation Development Act. The actual study coming out of that is called Basin and Range Carbonate Aquifer Systems Study (BARCASS; page 12 of Exhibit C). The Lincoln County Conservation Recreation Development Act of 2004 (page 10 of Exhibit C) was enacted on November 30, 2004. It amended the Southern Nevada Political Land Management Act of 1998 to provide $6 million for the development of water study for Lincoln and White Pine Counties and portions of Utah.

The study will be conducted by the U.S. Geological Survey, the Desert Research Institute, and a designee from the state of Utah. The study will focus on a review of all the existing data from all those studies done by USGS in the 1960s and the follow-up studies. It will determine the approximate volume of groundwater stored in the aquifers and come up with a value estimate of the amount of water stored, determine the discharge and recharge characteristics of each of those aquifer systems, determine the hydrogeologic and other controls that govern the discharge and recharge of each of those aquifers, and develop maps at a consistent scale depicting aquifer systems and the discharge and recharge areas.

That's a very large task, and what makes this an even greater task is that the draft of this study must be available, by federal law, not later than 30 months from the date of enactment. That means this study must be available, in draft, by May 31, 2007. By law, the final report shall be submitted to Congress no later than 36 months from the date of enactment, or December 31, 2007.

Chairman Claborn:
Does that mean they won't be pumping any water out of those aquifers until the survey is over?

Hugh Ricci:
There is no pumping associated with this study except maybe for some small-scale pump tests on existing wells. As you'll notice, the time frame is very short. In fact, four or five months have already gone by since the enactment of that law, and they are going to be under the gun just to complete those tasks Mr. Biaggi showed you (on page 11 of Exhibit C). There will be no large-scale pumping on this.

Assemblyman Carpenter:
So if there's no actual pumping being done, it's just going to be a matter of somebody picking numbers?

Allen Biaggi:
The intent of this study is to further refine the numbers for available water so as to better understand the availability of water within the subject area.

Assemblyman Carpenter:
It seems to me that if you don't have pumping so you can actually measure what's going on, it's not a very good deal.

Allen Biaggi:
We agree that, in order to truly understand the availability of water, you have to stress the system. You have to pump water to see, on the ground, in the field, what the impacts are and if those impacts match your model results. Before we actually know what's going to happen to that system, we have to stress it and ground truth it.

Assemblyman Carpenter:
The USGS made these studies here (page 2 of Exhibit C), then they came back and redid them, and now they say there's a lot more water. I'd say it's probably an educated guess.

Allen Biaggi:
I think you're correct to some extent. We'll never come up with a definitive number for the amount of water available in a basin. What we find happening is that the technologies and the ability to model these systems has changed dramatically from the 1960s to the present. With those changes in technology, we're getting better estimates on what the most appropriate number is and what a safe number is for the State Engineer to base decisions on.

Assemblyman Goicoechea:
As we look at that section of the deep carbonate aquifer that you're inventorying (page 13 of Exhibit C), why did you not take in the Amargosa Fork? I assume this is just the White River Fork. Clearly, the carbonate aquifer extends farther west than what's plotted there. Also, how are you going to plot the connection between the carbonate and the alluvial?

Hugh Ricci:
The area for this particular study came out of federal law, and we had nothing to do with it. This study will, however, try to identify some of those very things you mentioned, the connection between the surface, the alluvium, the

carbonate, and also determine the hydrogeologic and other controls that govern the discharge and recharge of each aquifer. They are also going to determine the interbasin flow between those two basins.

Assemblyman Goicoechea:
I understand that federal law drew the line at what they were going to look at. It probably had something to do with the plans for those basins in Lincoln and White Pine Counties. However, that's like trying to quantify how much water is in the center of your bathtub. The deep carbonate extends clear around the edges of that.

Hugh Ricci:
I have no comment about that.

Assemblyman Marvel:
Is there actually a recharge to this carbonate aquifer? I've been under the impression that this water is just there, and when you start pumping, you're mining it.

Hugh Ricci:
The recharge Mr. Biaggi was talking about in the original studies includes all of the aquifers. It's not that there's a separate component of recharge for the carbonates or a separate component for the alluvial. The recharge recharges all of these various aquifers. In the beginning, there was some thought that this water was probably very old, but it is still continually being recharged simply because there's precipitation.

Assemblyman Marvel:
The precipitation is a component of the recharge, is that right? I was always under the impression that this water was just there like gold or any of the minerals. Once you mine it, it's gone.

Hugh Ricci:
No. It is recharged by precipitation.

Assemblyman Goicoechea:
Isn't it true that none of the water in the deep carbonate shows that it was ever exposed since the 1950s and the atomic age?

Allen Biaggi:
I think it's a matter of timing. When Mr. Ricci says precipitation is recharging the carbonate aquifer, it's a matter of how long it takes to actually do that recharge. In our shallow aquifers, obviously, that's a very short time period on

the order of weeks, months, or years. In the carbonate aquifers, which are very deep and ancient water, it takes a very long time. Consequently, the thought is that many of those isotopes that are the result of atomic testing have not yet found their way down into those deeper aquifers.

Assemblyman Goicoechea:
So we've already established that recharge to the carbonate hasn't occurred in the last almost 60 years.

Allen Biaggi:
This (page 13 of Exhibit C) shows the extent of the BARCASS study. You can see it extends up through many of the groundwater basins in northeastern Nevada and into western Utah.

Hugh Ricci:
This (page 14 of Exhibit C) is another study that will be going on at the same time as BARCASS. This is the BLM Corridor Study, or BLM Environmental Impact Statement (EIS). The Southern Nevada Water Authority (SNWA) proposed to construct this whole system of facilities bringing water from White Pine and Lincoln Counties to Las Vegas. They submitted a right-of-way application to the Bureau of Land Management (BLM). BLM then determined that these proposed facilities and their associated rights-of-way are required to go through the National Environmental Policy Act (NEPA) [42 U.S.C. 4321-4347, January 1, 1970], and the EIS had to be prepared, since most of these proposed facilities are going to be on BLM land.

This EIS (page 15 of Exhibit C) will consider the environmental impacts associated with groundwater withdrawals as well as the ground disturbance for those proposed facilities, including any wells, pump stations, pipelines, et cetera. However, the BLM states that they do recognize the primacy of the Nevada water law in dealing with the appropriation of the water. The BLM is hands-off as far as the amount of water that will be associated with this.

Detailed monitoring, mitigation, and management measures will also be developed as part of the EIS. This is going to be done at the same time as BARCASS, and I suspect the data generated by the USGS and the Desert Research Institute, as well as information gathered by the team put together by BLM, which will incorporate a great deal of SNWA's data, will all be utilized by both studies, EIS and BARCASS. This (page 16 or Exhibit C) is a map depicting the approximate location of the study. The map to the right of that shows the proposed pipeline as it was in the EIS.

[Hugh Ricci, continued.] This particular description of the project and the associated maps can be found on BLM's website, <www.nv.blm.gov\Ely>. The Ely District is responsible for this particular project. The website will be updated as they get more information on the project.

Assemblyman Carpenter:
Is this right-of-way just for water, or are there going to be other rights-of-way or other utilities in this corridor?

Hugh Ricci:
As I understand it, there are going to be some power lines associated with these particular locations in order to pump the water from those wells.

Assemblyman Carpenter:
But not a pipeline to carry electricity from Idaho to Las Vegas or Southern California?

Hugh Ricci:
Not that I'm aware of.

Assemblyman Hogan:
Whose EIS is this? Which agency will be responsible for defining the EIS process, conducting it, or paying for it?

Hugh Ricci:
The Ely District of the BLM is the party responsible for getting the information and drafting the EIS. Most of the information and the payment for that are going to be from the Southern Nevada Water Authority.

Assemblyman Goicoechea:
I believe the utility corridor is, in fact, in place for any utility such as power, gas lines or whatever. It is not just water.

Chairman Claborn:
I think you're right.

Assemblyman Marvel:
Was any consideration given to whether, if all these applications are approved, this will inhibit future growth in the areas the water will be drawn from?

Hugh Ricci:
If you'll recall, in 1999, there were some additional criteria added to that section of water law, NRS 533.370, that required the State Engineer to review the

future development and future needs of a particular basin of origin to determine that it would not take all the water out of there and prevent future growth.

Assemblyman Marvel:
How much margin are you allowing?

Hugh Ricci:
I can talk to you in specifics about the only time these criteria were utilized, and that was in an area southwest of Las Vegas in Sandy Valley where there was an application to transport water out of that valley to another groundwater basin. The request was for 1,400 acre feet. After a hearing and subsequent analysis of those criteria, as well as determining whether there was an appropriated water and whether it would have any other impacts on existing rights, an amount of 415 acre feet was granted. That particular decision was appealed by both the applicant and the protestant, and that appeal is now being briefed at the Supreme Court. So I really can't tell you if that decision is going to be upheld for looking at the very specific criteria I used.

Assemblyman Marvel:
Are those the criteria you're going to use in all these water applications?

Hugh Ricci:
I think it's going to have to be on a case-by-case basis because there may be some specific condition associated with one particular basin that may not manifest itself in another.

Assemblyman Goicoechea:
How comfortable are you with the USGS's estimates for total recharge in these basins?

Hugh Ricci:
The USGS has been doing this for a long time. They're very reputable, and most of the decisions made by the State Engineer over the last 40 or 50 years have utilized information from them. They are a completely impartial scientific organization, and bias has absolutely nothing to do with whether they find more water, don't find more water, or what they determine the impact would be if something were to happen. They have a very good reputation with many other scientists and the courts throughout the state. I'm very comfortable with them.

Assemblyman Goicoechea:
I'm glad to hear that, but, in conversations with some people from USGS, they admit it's kind of a shot in the dark by the time you take the alluvium down to the carbonate.

Assemblyman Carpenter:
What's going to happen to all the other water uses in these valleys, for instance, all of the springs, creeks, and such, unless somebody wants to sell their water rights to them? There are all kinds of other waters out there on the BLM, Forest Service, and private land that are not appropriated. What kind of safeguards will be in place to make sure we don't just dry up the whole country to the point there's nothing left for anything else?

Hugh Ricci:
If I could defer answering that question to the end of the presentation, I think I can show you what can be done.

Next, I want to discuss some of the studies that have gone on with the U.S. Geologic Survey. This particular slide (page 20 of Exhibit C) goes back to FY1992. I have this broken down between the cooperators outside of Nevada. There are any number of mining companies, utility companies, and other cooperators. In the last 14 or 15 years that this tracks, there has been a total of about $26.5 million spent in studying various things. This does not just study recharge and discharge equations; it does all kinds of other things. I wanted to show that a great deal of information is generated year to year. This money represents some of those studies.

The next slide (page 21 of Exhibit C) shows the State of Nevada's contribution to that $26.5 million from 1992 to 2005. That represents about $4.5 million, which is about 17 percent of the total, and comes from various sources such as the General Fund and direct services. The USGS will allow direct services, which is work we have done from our office or information we give them, which they discount at whatever it would have cost them to collect that particular information. In 1997, we got some money from the Federal Emergency Management Agency (FEMA) after the January 1 flood.

The next couple of pages show some of the ongoing activity. PRISM (page 22 of Exhibit C) is a study to quantify this error. A new map was done by some researchers up at Oregon State University as a proprietary model of rainfall that occurred over the state of Nevada. What USGS is now trying to identify is whether there is any error within those bands of precipitation used in that particular area, where they are, and if there is a need for any additional sites being added to that particular model.

This one (page 23 of Exhibit C) is the Diamond Valley Regional Flow System, which is going to start this year. It's a five-basin study. Easternmost is Diamond Valley. The northern part of Monitor Valley is also included. It will

include all of recharge-discharge relationships, estimates of subsurface groundwater flow from one basin to another, interactions between the waters in these aquifers, and the possible impacts of future groundwater withdrawals.

[Hugh Ricci, continued.] We also have the Southern Nevada Groundwater Data Network. This was started in 1984, and this slide (page 24 of Exhibit C) just shows the most recent tabulation of the funds associated with it. The Objectives section reads that there are 75 to 100 wells in the alluvium and 28 wells within the regional carbonate aquifer system. The one furthest north that I am aware of is the one in southern Steptoe Valley.

The next slide (page 25 of Exhibit C) is the Southern Nevada Surface Water Network. These basins show you where these water level measurements were made. There is continuous monitoring on these 8 or 9 particular areas [indicated the bottom of the slide]. There are also 22 additional sites that measure spring discharge on a biennial basis within those particular areas.

The other study that is ongoing now is the Humboldt River Basin Assessment (pages 26 and 27 of Exhibit C). Senator Rhoads' committee gave $40,000 for this study. What is being studied right now is the central region of the Humboldt River system. Eventually, they will have a groundwater/surface water interactive model that will attempt to predict what will happen to water levels in one area when you pump in another area. This was a very ambitious project, and it is winding down right now.

There is also a study trying to develop a new water budget for Ruby Valley (page 28 of Exhibit C), which is also winding down right now. As you can see, there are all kinds of different studies.

Assemblyman Goicoechea:
Wasn't it Dave Nichols' [former USGS hydrologist, now deceased] estimate of the perennial yield of the Ruby Valley? Do you have that, or do you remember what it was, right offhand?

Hugh Ricci:
No, I don't have that number with me. I do believe, in the estimates done by Dave Nichols in the late 1990s, there was another number for that. This is just trying to redefine that number a little more closely.

Assemblyman Goicoechea:
When will you have that number available?

Hugh Ricci:
The number from Dave Nichols' report is already out.

Assemblyman Goicoechea:
I know what it is.

Hugh Ricci:
We track this study, but, if you'll notice, this was done just between the Fish and Wildlife Service and the U.S. Geological Survey. I believe this report is probably in the process of being under peer review right now.

Assemblyman Goicoechea:
Thank you. I'd be interested in getting a copy of that when it comes out so I can compare those two numbers.

Hugh Ricci:
Mr. Biaggi and I have tried to show you what the original estimates were, what the new estimates were, what information we have, and, putting this all together, what happens at the very end if it really becomes indeterminate what to do.

In 2001, there was a request for a hearing on some additional water to be pumped out of Coyote Springs Valley. There had already been an appropriation made by prior state engineers of 16,000 acre feet within Coyote Springs. As a result of that request, I set a hearing, and we had about four weeks of testimony from various experts representing applicants and protestants. During those four weeks of hearings, it became evident that some additional information needed to be established.

Provisions of the water law enacted by the Legislature in 1991 allowed the State Engineer to conduct additional studies at the expense of the applicant to make a determination before a permit could be issued for that requested water. Pursuant to that statute, Order 1169 was issued (page 29 of Exhibit C). This case involved three applicants: Southern Nevada Water Authority, Coyote Springs Investment, and Nevada Power Company. They were the three parties who held an interest in the 16,000 acre feet.

In order to try to determine the impacts of pumping not the additional water requested, but any water, this order required pumping, monitoring, and reporting. The pumping required at least 50 percent of the 16,000 acre feet for at least 2 consecutive years. Therefore, there had to be some established baseline to determine, from that pumping, if the impacts could be determined at that 8,000 acre feet.

[Hugh Ricci, continued] What you see here, on this slide (page 30 of Exhibit C) is some of the monitoring points that are required to be monitored under this particular order. Not all of the locations are shown on this map. This (page 30 of Exhibit C) is Pahranagat Valley. Highway 93 runs from the vicinity of Coyote Springs down to Interstate 15. In all, there are 66 wells measured in this particular area, 5 precipitation gauges, 9 spring gauges, and 6 stream gauges. This particular area is blown up [indicated map inset], which is the headwaters of the Muddy River. There is an endangered species, the Moapa dace, that exists in one of these springs.

This is the kind of information available to the State Engineer in making a determination as to what the impacts are going to be. This information then is going to be taken and placed back into that model to try to make a determination as to what the impacts will be as a result of that pumping.

Assemblyman Goicoechea:
Do you have all water sources in that area (map, page 30, Exhibit C) documented and monitored, along with every water source and what it's flowing?

Hugh Ricci:
Yes, we believe we do. We even have it to the point where a few years ago we actually found some diversions above a particular stream gauge measurement in this area where the Muddy River was, and that wasn't good. We have tried to fix all those things to be sure we have a good baseline in which we can make a determination of what impacts may occur.

Assemblyman Goicoechea:
So then you feel you have documented every water source in that area, whether it's appropriated or been applied for, those small springs and seeps that might be beneficial to wildlife or livestock.

Hugh Ricci:
One thing I can tell you is that, from the information we have for every single application, we can determine what water right exists at what location. I'm not going to say that there is 100 percent coverage on every single source out there and that they all would be measured.

Assemblyman Goicoechea:
This is a big area, but it's a fairly small area compared to the total distances we're talking about inventorying in White Pine and Lincoln Counties over the next 36 months. Do you feel you can come up with the same kind of coverage

in that time frame to ensure you do have all water rights or water sources protected?

Hugh Ricci:
I'm assuming the question in there is whether we are going to do the inventory in BARCASS?

Assemblyman Goicoechea:
No, I'm not talking about BARCASS. With BARCASS, we're talking about deep carbonate, right? That has nothing to do with the alluvial?

Hugh Ricci:
I'm sure they're going to try to determine the interaction between those two. I can't see how they would be able to see just what the carbonate is doing without looking at what the overlying alluvium is.

Assemblyman Goicoechea:
I would agree, but it looked like BARCASS was really focused on the carbonate. No, I meant the alluvium and deep carbonate in the area where we're headed in the next round. The bottom line is, how long would it take to do a comparable inventory over that Lincoln/White Pine—the five basins: Delamar Dry, Cave, et cetera?

Hugh Ricci:
Are you're asking me how long it would take us to identify and measure each one of these sources?

Assemblyman Goicoechea:
Yes. I think we have to establish what the existing discharges are before we can ever talk about how much is available for future withdrawal.

Hugh Ricci:
I don't know how long that would take. If somebody from our office were to go to every single permitted site within this carbonate region, I don't know how long that would take. Many of these claims of vested right aren't even filed. The ones that are filed may have a name that's different from what you see on a map. That's fraught with all kinds of difficulties. I'm not sure how long it would take to have every source identified and measured.

Assemblyman Goicoechea:
My question to you and Allen, then, would be, if you don't have a measurement, or at least those plotted, how would you know if they were impacted?

Hugh Ricci:
We have a location based on the application.

Assemblyman Goicoechea:
And a measurement, no matter who it belongs to? You do have a measurement and a location?

Hugh Ricci:
No, we don't have a measurement on every single one. They have a water right associated with that particular permit.

Assemblyman Goicoechea:
I'm just trying to establish what the status is today and then quantify that amount. We have to have a measurement first and foremost before we start withdrawing groundwater from those areas, or how are we to determine what the impacts are, where they are, and how much they will be? How will we be able to determine how much water is available for future discharge or withdrawal?

Allen Biaggi:
I think we're talking past one another. We're talking the difference between what is actually being used on the ground versus what the water right is. The State Engineer has a very good idea of what the rights are within those basins and what the maximum amount of water is that can actually be utilized within those basins. I think what you're talking about is how much is actually being used, how much is actually being discharged, and if all the springs are identified.

Those are very different things. For the State Engineer's purposes, he knows the amount of water that is available legally. That's usually less than the water that is actually being used, and those are the types of things where he makes his decisions. He's very conservative in his decision making, and he makes sure that water is left for environmental purposes, development purposes for the future, the Endangered Species Act of 1973 (ESA), and all of those other quantities we want to keep in those basins of origin.

Assemblyman Goicoechea:
Thank you, I appreciate that. My concern is that if we don't know what is available, then how do we know what the impacts are? I have a tremendous amount of respect for you and the State Engineer, and I know you're going to try to do what's best. My biggest concern is over-appropriation, which we've seen in some other basins, where there actually have been water right holders

whose rights were vested and filed, and still the guy ran out of water. How do you determine how much he lost and what the value of that was?

Allen Biaggi:
Let me sum up what we've covered this afternoon. First, there are 232 groundwater basins within the state of Nevada. Of those, the USGS did reconnaissance reports through the 1940s to the late 1970s on each one of those basins. There are newer studies published by the USGS in the late 1990s through the present. There have been any number of studies by others published in the late 1990s to the present. There is a large ongoing study, called BARCASS, through the Lincoln County Lands Act, and there is the Lincoln Corridor EIS, which are both studying some of those same areas.

In summary, many water resource studies have been conducted in Nevada that provide the State Engineer with a basis for making water allocations decisions. A number of studies are ongoing in areas of critical concern to gather additional information and to better refine those numbers. Studies have been conservative in terms of water availability, and, similarly, the State Engineer is conservative in his rulings. The State Engineer has the authority to require the applicant to conduct additional studies to fill in any data gaps that may exist. Finally, the State Engineer requires monitoring and ground truthing to ensure predicted impacts reflect actual impacts.

Assemblyman Carpenter:
It seems to me, with all the studies and estimates you may have at your disposal, you still have to be very careful of what you actually allocate and let them start pumping. If something is not right out there and these studies prove to be not as helpful as they think they are, some of these valleys can be mined in a short period of time. We see it in the valleys up there where there is irrigation. It looks to me like they are a drop in the bucket compared to what other people are asking for. I think you have to go really slow or rural Nevada could become desolate.

Chairman Claborn:
Thank you. That was a good presentation.

We're going to start the work session with A.B. 32.

Assembly Bill 32: Makes certain information collected by State Department of Agriculture confidential. (BDR 50-657)

Amber Joiner, Committee Policy Analyst:
The first bill in the Work Session Document (Exhibit D) is A.B. 32. [Read from Exhibit D.] It was sponsored by the Assembly Committee on Natural Resources, Agriculture, and Mining on behalf of the State Department of Agriculture. It was heard on March 2, and a subcommittee subsequently heard it on March 15. The subcommittee consisted of Chairman Atkinson, Assemblyman Carpenter, and Assemblyman Goicoechea.

This bill expands the audience for whom the State Department of Agriculture collects and disseminates information to include the general public. It also makes all proprietary information and information relating to a natural person or other entity that is collected by the Department confidential, unless the director of the Department determines that the release of the information will not be detrimental to the person or other entity.

A brief summary of the issues raised includes: During the original hearing on March 2, representatives from the State Department of Agriculture explained that this measure is necessary in order to maintain public safety and guard against acts of terrorism. Opponents raised concerns over the definition of "proprietary information" and the portion of the bill that made other information confidential. The concern was that these phrases were too broad and may limit information that the public has a right to know. Opponents also thought the director of the State Department of Agriculture would be given too much discretion under A.B. 32, which might lead to unequal treatment.

A subcommittee was formed to consider these concerns. The subcommittee recommendation was that the Assembly Committee on Natural Resources, Agriculture, and Mining consider and approve a motion to amend and do pass A.B. 32. A mock-up of the final amendment voted on by the subcommittee and agreed to by the State Department of Agriculture, the Nevada Farm Bureau, and the Nevada Press Association is attached to the back of this Work Session Document (page 5 of Exhibit D).

As for proposed conceptual amendments, this amendment defines "proprietary information" as any information that provides details on the number of animals, production outputs, fiscal or tax-related matters, or matters pertaining to facility security. It also deletes the section of the bill that makes other information confidential, and it deletes the portion that gives the director discretion.

There is no fiscal impact.

Assemblyman Goicoechea:
The mock-up we have on A.B. 32 isn't the ultimate language we agreed to, is it? Remember, we talked about security of facilities?

Amber Joiner:
Facility security is on line ten.

> ASSEMBLYMAN GOICOECHEA MOVED TO AMEND AND DO PASS ASSEMBLY BILL 32 WITH THE AMENDMENT DEVELOPED BY THE SUBCOMMITTEE (EXHIBIT D).
>
> ASSEMBLYMAN ATKINSON SECONDED THE MOTION.
>
> THE MOTION CARRIED UNANIMOUSLY.

Chairman Claborn:
Now we're going to get into A.B. 116.

Assembly Bill 116: Revises provisions governing eligibility of person to apply for tag to hunt mule deer. (BDR 45-866)

Amber Joiner, Committee Policy Analyst:
[Read from Work Session Document (Exhibit D).] Assembly Bill 116 was sponsored by Assemblyman Jerry D. Claborn, Assemblywoman Genie Ohrenschall, Assemblyman Bob McCleary, and Assemblywoman Ellen Koivisto. It was heard on March 14, 2005. A.B. 116 provides that a person who obtains a tag and is successful in harvesting a mule deer will not be eligible to apply for another tag the following year. This provision does not apply to a person who is issued a tag to hunt deer as compensation for damage caused by the deer to the person's property.

A summary of issues raised: The supporters of A.B. 116 believe that requiring hunters to wait a year after successfully harvesting a deer will allow others the opportunity to enjoy the sport of deer hunting. Additionally, several of Nevada's hunting programs, such as those for elk and bighorn sheep, have such limits on eligibility with positive results. Private citizens testified that they had stopped applying for tags because they were discouraged by never being successful in the drawings but that if they knew the odds were better, they would be encouraged to apply again.

Opponents believe that the county advisory boards to manage wildlife should be the source of such policies, not the Legislature. Another concern is that there

will be a loss in revenue from application fees due to the decrease in the number of hunters eligible to apply. The bill, as it is currently worded, would also limit holders of youth tags in the same way, who might be discouraged if they could not apply every year. Concern about how this measure would affect the bonus program was also voiced. There were no proposed conceptual amendments, and there was no fiscal impact.

[Amber Joiner, continued.] In addition, Assemblyman Claborn has asked me to go over the memorandum (Exhibit E) on deer tag waiting periods. The memorandum is in response to Assemblywoman Smith's question regarding whether other states have implemented this policy. As an LCB employee, I'm never in favor of or opposed to any legislation, so I'm just going to present the information as Mr. Claborn has requested me to do.

It's difficult to find comparable states related to deer populations because many states actually have an overpopulation problem. However, of comparable states, I did find that Idaho has a program where they require people to wait a year for certain of their tags. Those tags include limited tags for certain controlled hunts in certain areas. The Idaho waiting period, however, is stricter than the one proposed in A.B. 116. It requires a person who draws a tag to wait a year before applying for another tag regardless of whether he actually harvests a deer.

I did speak with the Wildlife Chief at the Idaho Department of Fish and Game, and you can see (page 2 of Exhibit E) what he considered the advantages and disadvantages of the program. He felt it had been successful in decreasing the perception of favoritism in the draw, that some people kept drawing year after year. He could not think of any disadvantages.

Since I drafted this memo, I have been able to find one other state with a similar program, and that is Utah. For some of their premium hunts, which are usually buck hunts, they also have a two-year waiting period. That would be similar to our programs here in Nevada for elk and bighorn sheep, which is that if you obtain one of those tags, you have to wait 5 years.

Assemblyman Jerry D. Claborn, Assembly District No. 19, Clark County:
This bill was first brought to me by one of my constituents, Gary Reese, the Mayor Pro Tempore of Las Vegas. There is a Mule Deer Survey Executive Summary from Research and Polling and done by the Nevada Board of Wildlife Commissioners. I gave you just a part of it (Exhibit F). On the second page (page 2 of Exhibit F) is a bar chart with the heading, "Willingness to Wait One Year After Being Drawn for a Tag Before Being Eligible to be Drawn Again." It says all hunters were asked if they would be willing to wait out one year to be

eligible to be drawn again if they were successful drawing a tag one season. The majority of them, 54 percent, said they would be willing to wait a year if they were successful in drawing a tag one season. However, 38 percent were unwilling to wait before they were eligible again, while 5 percent said it depended.

[Assemblyman Claborn, continued.] I am quoting from a poll that the Wildlife Commissioners conducted. I think they sent 30,000 of these out, but they only got 1,028 back. If you go to some of the Wildlife Commissioners' meetings, and they don't listen to your input, the next best thing is a poll.

This is their poll, and this is what their constituents are saying they want. This is what 54 percent of the hunters want. When I presented A.B. 116 here, there must have been 20 people here to testify against the bill, and most of them were either wildlife commissioners or advisory board members who put this poll together. My bill is shown in that poll to be what the public wants. Let's do what the constituents want.

Assemblyman Goicoechea:
I polled my county advisory boards. One of the biggest issues raised in my district was that of the juvenile tags and whether we would require the young people to sit out a year. My constituents are concerned that if you ask juvenile hunters 12 or 13 years of age to sit out, they might lose interest.

Assemblyman Claborn:
I can understand that, but I'd like to hunt every year, too. Senior citizens would also like to hunt every year. However, we have to make sacrifices whether we're young or old. If a junior or a senior has to sit out a year, then he sits out a year.

There's always something. When 54 percent of the people say they want something, we're not listening to the public.

Assemblyman Goicoechea:
I didn't have the opportunity to poll a lot of people in my district in the last ten days, but I did poll my county advisory boards. I was wondering if anyone else had done the same.

Assemblyman Grady:
Mr. Claborn, after reading the information you supplied us, my question is whether this applies to a trophy hunt or to hunting in general. It (page 2 of Exhibit F) says, ". . . additional amount willing to pay to hunt in a trophy area." This all talks about a trophy hunt. I just want to make sure we're not mixing a

trophy hunt with a regular hunt. If it's a trophy hunt, those folks who want to go to the Sheldon Range or wherever, that's one thing, but if it's a dad taking out his kid, that may be an altogether different issue.

Assemblyman Claborn:
I can understand that.

Vice Chairman Atkinson:
Mr. Grady, are you suggesting this survey concerns trophy hunts as opposed to regular hunting? [Assemblyman Grady responded in the affirmative.]

Assemblyman Hogan:
I just want to take note of one difference: It appears that the persons surveyed were responding to a situation in which they had successfully drawn a tag but had not necessarily harvested a deer. There would probably be somewhat more than 54 percent who, if they had actually been successful in harvesting a deer, might feel more willing to sit out. After the disappointment of not harvesting a deer, they might be even more eager to have a go at it. This survey seems to be broader than what we were talking about, but if it's a trophy survey, I don't know.

Assemblywoman Kirkpatrick:
If I remember correctly, they told us that very few youth tags actually go out. Ms. Joiner, do you have that number? I seem to remember it was less than 3 percent.

Amber Joiner:
I don't have that information right now, but I'd be happy to get back to you with that.

Assemblywoman Kirkpatrick:
My only concern is that there is not enough for kids to do as it is. If you're 12, and you have to sit out every other time, you would only get to hunt four times by the time you hit 18. Sometimes four times is not enough. We don't have enough for our youth to do. I would recommend a friendly amendment.

Assemblyman Marvel:
I have the same concern as Mr. Grady. This poll (Exhibit F) states, "Additional amount willing to pay to hunt in trophy area." I think we're talking apples and oranges here.

Chairman Claborn:
It's split right here. Right here (bottom of page 2, Exhibit F) it says, "As a way of improving hunters' chances of being drawn, all hunters. . ."

Assemblyman Marvel:
That's not what the survey is about, though. I think it's pretty well defined as the additional amount they're willing to pay to hunt a trophy. That's exactly what the information is here in front of us.

Assemblyman Carpenter:
I feel the same way as Mrs. Kirkpatrick. We worked for years to try to give the kids a better shot at drawing a tag. I would certainly be willing to support it if we could add a friendly amendment that it would not apply to juveniles.

Vice Chairman Atkinson:
Since A.B. 116 is up for a vote right now, and it sounds like Committee members want to put an age restriction on it and exclude anyone under the age of 18, how would we address that? It's something Mr. Claborn, as the sponsor of the bill, would have to agree to.

Assemblyman Claborn:
I would be amenable to that if we can work it out with the Committee.

> ASSEMBLYWOMAN KIRKPATRICK MOVED TO AMEND AND DO PASS ASSEMBLY BILL 116, WITH THE AMENDMENT TO EXEMPT PERSONS HOLDING A JUVENILE TAG.
>
> ASSEMBLYMAN CARPENTER SECONDED THE MOTION.

Assemblyman Goicoechea:
I'm going to have to vote against this bill today, but I reserve the right to vote for it on the Floor. I need to talk to my people. I think they'll be all right with the amendment, but I promised them I would get back to them. That amendment for the juveniles was what they were looking for. I think you have enough to pass it.

Amber Joiner:
For clarification for the Legal Department, is your intent to have anyone holding a junior tag be exempt? I believe the age limit on that is 17, but I'll have to look that up. Is that the intent, rather than 18?

Assemblywoman Kirkpatrick:
That is correct.

Vice Chairman Atkinson:
Maybe we should say "holding a juvenile tag" instead of an age limit. That would make it cleaner.

Assemblyman Claborn:
I just want to thank you. I want the Committee to know that I had no intention of ever taking kids out of hunting. It's a good thing for kids.

Assemblywoman Smith:
I had an overwhelming response from my constituents against this bill. With the amendment, I'll support it today because I'd like to get it out to the Floor, and then I'll find out what these same constituents feel about the amendment. However, I reserve the right to change my vote on the Floor.

Assemblyman Marvel:
Until I hear differently from my constituents, I will vote against the bill here. Like Mr. Goicoechea, I reserve the right to vote for it on the Floor.

Assemblyman Grady:
I am going to vote for the bill today, but I do reserve the right to change my vote.

THE MOTION CARRIED WITH ASSEMBLYMEN GOICOECHEA AND MARVEL VOTING NO.

Vice Chairman Atkinson:
Since it is Mr. Claborn's bill, he will handle it on the Floor. I'll take A.B. 32 on the Floor. Is there any new business to come before the Committee? Any old business? We are adjourned [at 3:09 p.m.].

RESPECTFULLY SUBMITTED:

_____
Mary Garcia
Committee Attaché

APPROVED BY:

_____
Assemblyman Jerry D. Claborn, Chairman

DATE: _____

EXHIBITS

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

Date: March 21, 2005 **Time of Meeting: 1:30 p.m.**

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B	Allen Biaggi/DCNR	Introduction of Presentation
	C	Hugh Ricci/Div. of Water resources, DCNR	PowerPoint Presentation
	D	Amber Joiner/LCB	Work Session Document
AB 116	E	Amber Joiner/LCB	Memorandum
AB 116	F	Assemblyman Jerry Claborn	Mule Deer Survey